

Draft Initial Study and Mitigated Negative Declaration

for

San Diego Gas & Electric Company Tie-Line 637 Wood-to-Steel Project (Application No. 13-03-003)

October 2013

Prepared for: California Public Utilities Commission Energy Division 505 Van Ness Avenue San Francisco, California 94102

Prepared by: DUDEK



TABLE OF CONTENTS

Section

Page No.

ACRO	NYMS	AND AI	BBREVIATIONS	Acr-i
MND				MND-1
1.0	Initial	Study I	Environmental Checklist Form	1-1
	1.1		t Title	
	1.2	Lead A	Agency Name and Address	1-1
	1.3		ct Person and Phone Number	
	1.4	Projec	t Location	1-1
	1.5	Projec	t Sponsor's Name and Address	1-1
	1.6	Genera	al Plan Designation	1-1
	1.7	Zoning	J	1-2
	1.8	Descri	ption of Project	1-2
	1.9	Surrou	Inding Land Uses and Setting	1-2
	1.10	Other	Public Agencies Whose Approval is Required	1-2
2.0	ENVIR		NTAL FACTORS POTENTIALLY AFFECTED	2-1
3.0	ENVIR		NTAL DETERMINATION	3-1
4.0	EXPA	NDED F	PROJECT DESCRIPTION	4-1
	4.1	Introdu	uction	
	4.2	Project	t Objectives	
	4.3	-	t Location	
	4.4	Project	t Components	
		4.4.1	Wood-to-Steel Pole Replacement	
		4.4.2	Conductor Installation	
		4.4.3	Substation Improvements	
		4.4.4	Fiber Optic Line Installation	
	4.5	Land a	and Right-of-Way Requirements	4-5
	4.6	Constr	uction Activities	
	4.7	Operat	tion and Maintenance	4-8
	4.8	Applica	ant Proposed Measures	4-9
5.0	EVAL	JATION	OF ENVIRONMENTAL IMPACTS	5.1-1
	5.1	Introdu	uction	5.1-1
		5.1.1	Environmental Setting	5.1-1
		5.1.2	Regulatory Setting	5.1-1
		5.1.3	Environmental Impacts	5.1-1
	5.2	Aesthe	etics	5.2-1
		5.2.1	Environmental Setting	5.2-1
		5.2.2	Regulatory Setting	5.2-5
		5.2.3	Environmental Impacts	5.2-8

Section

Page No.

5.3	Agricu	ulture Resources	5.3-1
	5.3.1	Environmental Setting	5.3-1
	5.3.2	Regulatory Setting	5.3-2
	5.3.3	Environmental Impacts	5.3-5
5.4	Air Qu	uality/Greenhouse Gas Emissions	5.4-1
	5.4.1	Environmental Setting	5.4-1
	5.4.2	Regulatory Setting	5.4-10
	5.4.3	Environmental Impacts	5.4-19
5.5	Biolog	jical Resources	5.5-1
	5.5.1	Environmental Setting	5.5-1
	5.5.2	Regulatory Setting	5.5-27
	5.5.3	Environmental Impacts	5.5-35
5.6	Cultur	al Resources	5.6-1
	5.6.1	Environmental Setting	5.6-1
	5.6.2	Regulatory Setting	5.6-4
	5.6.3	Environmental Impacts	5.6-9
5.7	Geolo	gy and Soils	5.7-1
	5.7.1	Environmental Setting	5.7-1
	5.7.2	Regulatory Setting	5.7-3
	5.7.3	Environmental Impacts	5.7-4
5.8	Hazar	ds and Hazardous Materials	5.8-1
	5.8.1	Environmental Setting	5.8-2
	5.8.2	Regulatory Setting	5.8-3
	5.8.3	Environmental Impacts	5.8-11
5.9	Hydrol	logy and Water Quality	5.9-1
	5.9.1	Environmental Setting	5.9-2
	5.9.2	Regulatory Setting	5.9-6
	5.9.3	Environmental Impacts	5.9-10
5.10	Land l	Use and Planning	5.10-1
	5.10.1	Environmental Setting	5.10-1
	5.10.2	2 Regulatory Setting	5.10-3
	5.10.3	3 Environmental Impacts	5.10-5
5.11	Minera	al Resources	5.11-1
	5.11.1	Environmental Setting	5.11-1
	5.11.2	2 Regulatory Setting	5.11-1
	5.11.3	3 Environmental Impacts	5.11-1

Section

Page No.

	5.12	Noise	5.12-1
		5.12.1 Environmental Setting	5.12-1
		5.12.2 Regulatory Setting	5.12-3
		5.12.3 Environmental Impacts	5.12-7
	5.13	Population and Housing	5.13-1
		5.13.1 Environmental Setting	5.13-1
		5.13.2 Regulatory Setting	5.13-2
		5.13.3 Environmental Impacts	5.13-2
	5.14	Public Services	5.14-1
		5.14.1 Environmental Setting	5.14-1
		5.14.2 Regulatory Setting	5.14-2
		5.14.3 Environmental Impacts	5.14-2
	5.15	Recreation	5.15-1
		5.15.1 Environmental Setting	5.15-1
		5.15.2 Regulatory Setting	5.15-1
		5.15.3 Environmental Impacts	5.15-2
	5.16	Transportation/Traffic	5.16-1
		5.16.1 Environmental Setting	5.16-2
		5.16.2 Regulatory Setting	
		5.16.3 Environmental Impacts	5.16-5
	5.17	Utilities and Service Systems	5.17-1
		5.17.1 Environmental Setting	5.17-1
		5.17.2 Regulatory Setting	5.17-2
		5.17.3 Environmental Impacts	5.17-3
	5.18	Mandatory Findings of Significance	5.18-1
6.0	MITIG	ATION IMPLEMENTATION AND MONITORING PLAN	6-1
	6.1	Minor Project Changes	
	6.2	Dispute Resolution	6-3
7.0	List of	Preparers	7-1
	7.1	Lead Agency	7-1
	7.2	Preparers	7-1
8.0	REFE	RENCES	8-1

Page No.

FIGURES

4-1	Regional Map	4-15
4-2	Project Vicinity Map	4-17
4-3	Helicopter Landing Zones and Staging Yards	4-19
5.2-1	Key Observation Point Locator Map	
5.2-2	Existing View and Visual Simulation from Creelman Lane East of Keyes Road Looking West (KOP1)	5.2-15
5.2-3	Existing View and Visual Simulation from Simon Preserve Trail Looking East (KOP2)	5.2-17
5.2-4	Existing View and Visual Simulation from Mount Gower Preserve Trail Looking West (KOP3)	5.2-19
5.2-5	Existing View and Visual Simulation from Inaja Memorial Picnic Ground Looking West (KOP4)	5.2-21
5.2-6	Existing View and Visual Simulation from Hwy 78/79 in Santa Ysabel Looking Northwest (KOP5)	5.2-23
5.3-1	Farmland Mapping and Monitoring Program Designations (FMMP)	5.3-9
5.5-1	Vegetation Community Index Map	5.5-57
5.5-1A	Vegetation Communities - Map 1 of 10	5.5-59
5.5-1B	Vegetation Communities - Map 2 of 10	5.5-61
5.5-1C	Vegetation Communities - Map 3 of 10	5.5-63
5.5-1D	Vegetation Communities - Map 4 of 10	5.5-65
5.5-1E	Vegetation Communities - Map 5 of 10	5.5-67
5.5-1F	Vegetation Communities - Map 6 of 10	5.5-69
5.5-1G	Vegetation Communities - Map 7 of 10	5.5-71
5.5-1H	Vegetation Communities - Map 8 of 10	5.5-73
5.5-11	Vegetation Communities - Map 9 of 10	5.5-75
5.5-2	CNDDB and USFWS Critical Habitats within 5-Mile Buffer	5.5-77
5.8-1	Fire Hazard Severity Map	5.8-17
5.9-1	Pole Structures Located within Jurisdictional Hydrologic Features	5.9-17
5.10-1	Existing Land Uses	5.10-13
5.12-1	Sensitive Receptors	5.12-15

Page No.

TABLES

MND 1	Applicant Proposed Measures	MND-3
MND 2	Mitigated Negative Declaration Mitigation Measures	MND-9
1-1	Required Permits and Approvals	
4-1	Project Alignment Locations by Jurisdiction	
4-2	Total Temporary and Permanent Acreage Requirements	
4-3	Construction Equipment	
4-4	Proposed Construction Schedule	
4-5	Applicant Proposed Measures for Each Issue Area	
4-6	Applicant Proposed Measures	4-9
5.4-1	San Diego Air Basin Attainment Classification	5.4-6
5.4-2	Ambient Air Quality Data (ppm unless otherwise indicated)	
5.4-3	Frequency of Air Quality Standard Violations	5.4-7
5.4-4	Greenhouse Gas Sources in California	5.4-10
5.4-5	Ambient Air Quality Standards	5.4-11
5.4-6	GHG Sources in San Diego County	5.4-19
5.4-7	County of San Diego Significance Thresholds	5.4-20
5.4-8	Proposed Project Construction Air Emissions	
5.4-9	Total Estimated Construction Greenhouse Gas Emissions	
5.5-1	Existing Vegetation Communities	
5.5-2	Anticipated Impact Summary Table	
5.5-3	Anticipated Impacts by Vegetation Community Type	
5.5-4	Anticipated Mitigation Summary Table for Preserve Areas	
5.6-1	Identified Cultural Resources	
5.7-1	Geologic Units Located on Project Site	5.7-2
5.7-2	Pole Locations in Sedimentary Geology	
5.8-1	Hazardous Materials Sites Adjacent to the Proposed Project Alignment	
5.9-1	Surface Waters Traversed by the Proposed Project	
5.10-1	Existing and Designated Land Uses within Project Alignment	
5.10-2	Local Plan and Policy Consistency Analysis	
5.12-1	San Diego County Noise Ordinance Sound Level Limits	
5.12-2	Maximum Sound Level (Impulsive) Measured	
5.12-3	Guidelines for Determining the Significance of Groundborne Vibration and	
	Groundborne Noise Impacts	5.12-6
5.12-4	Construction Equipment Noise Levels at Adjusted for 8-Hour Day	5.12-9
5.12-5	Helicopter Landing Zones/Staging Areas and Sound Levels	5.12-10
5.12-6	Vibration Source Levels for Construction Equipment at 50 feet	5.12-12
5.16-1	Key Roadways Adjacent to the Project Alignment	5.16-2
5.16-2	Potential Roadways Impacted During Construction Activities	5.16-5
5.17-1	Landfill Capacity in Proposed Project Area	
5.18-1	Cumulative Projects	5.18-5
6-1	Mitigation Monitoring Program Table	6-4

Page No.

ATTACHMENTS

A Detailed Alignment Maps

APPENDICES

- 1 Biological Resources Tables
 - 1-A Sensitive Plant Species with Potential to Occur
 - 1-B Sensitive Wildlife Species Observed or with Potential to Occur

ACRONYMS AND ABBREVIATIONS

, 3	
µg/m³	micrograms per cubic meter
AAQS	ambient air quality standards
AB	Assembly Bill
ACOE	U.S. Army Corps of Engineers
ADRP	Archaeological Data Recovery Program
Amsl	above mean sea level
APCD	air pollution control district
APM	applicant proposed measure
AQMD	air quality management district
BGEPA	Bald and Golden Eagle Protection Act
BLM	Bureau of Land Management
BMP	best management practice
CAAQS	California Ambient Air Quality Standards
CAFÉ	Corporate Average Fuel Economy
CAGN	California gnatcatcher
CalARP	California Accidental Release Prevention Program
CalEPA	California Environmental Protection Agency
CAL FIRE	California Department of Forestry and Fire Protection
Cal/OSHA	California Occupational Safety and Health Administration
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CAP	Climate Action Plan
CAT	California Climate Action Team
CBC	California Building Code
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
CFSP	Community Fire Safety Program
CH₄	methane
CHRIS	California Historical Resources Information System
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNF	Cleveland National Forest
CNPS	California Native Plant Society
CO	carbon monoxide
	carbon dioxide
CO ₂ E	carbon dioxide equivalent
CPUC	California Public Utilities Commission
CRHR	California Register of Historic Resources California Rare Plant Rank
CRPR	

CWA dB	Clean Water Act decibel
dB dBA	
-	A-weighted decibel (adjusted for human frequencies)
DOC	California Department of Conservation
EMF	electromagnetic field
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
ESA	environmental site assessment
FAA	Federal Aviation Administration
FEMA	Federal Emergency Management Agency
FMMP	Farmland Mapping and Monitoring Program
FSS	USFS Sensitive
FTA	Federal Transit Administration
GHG	greenhouse gas
GIS	geographical information system
GPS	Global Positioning System
GWP	global warming potential
H ₂ O	water vapor
HFC	hydrofluorocarbon
HP	Horsepower
IPCC	Intergovernmental Panel on Climate Change
IS	Initial Study
kV	kilovolt
KOP	key observation point
Leq	Equivalent Sound Level
LID	low-impact development
LOS	level of service
LRA	Local Responsibility Area
Ldn	Day-Night Level
Lmax	Maximum Sound Level
Lxx	Percentile Exceeded Sound Level
MBTA	Migratory Bird Treaty Act
MHPA	Multi-Habitat Planning Area
MIS	Management Indicator Species
MLD	most likely descendant
MM	mitigation measure
MMCRP	mitigation monitoring, compliance, and reporting program
MMTCO ₂ E	million metric tons of carbon dioxide equivalent
MND	mitigated negative declaration
Mpg	miles per gallon
MRZ	Mineral Resource Zones
MSCP	Multiple Species Conservation Program
MW	megawatt
N ₂ O	nitrous oxide
1120	

NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NCCP	natural community conservation plan
NEPA	National Environmental Policy Act
NF ₃	nitrogen trifluoride
NHPA	National Historic Preservation Act
NHTSA	National Highway Traffic Safety Administration
NO	nitric oxide
NO ₂	nitrogen dioxide
NO _x	oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
O ₃	ozone
OPR	Office of Planning and Research
OSHA	Occupational Safety and Health Administration
PAL	project activity level
PEA	Proponent's Environmental Assessment
PCR	Post-Construction Report
PFC	perfluorocarbon
PG&E	Pacific Gas & Electric
PM	particulate matter
PM _{2.5}	particulate matter less than 2.5 microns
PM ₁₀	particulate matter less than 10 microns
Ppm	parts per million
PRC	Public Resources Code
PPV	Peak Particle Velocity
PSR	Preactivity Study Report
PTC	Permit to Construct
RAQS	Regional Air Quality Strategy
RCP	Regional Comprehensive Plan
RCRA	Resource Conservation and Recovery Act
RFS	Renewable Fuel Standard
RMWD	Ramona Municipal Water District
ROG	reactive organic gas
ROW	right-of-way
RPS	Renewable Portfolio Standard
RWQCB	Regional Water Quality Control Board
SANDAG	San Diego Association of Governments
SARA	Superfund Amendments and Reauthorization Act
SB	Senate Bill
SCAQMD	South Coast Air Quality Management District
SCIC	South Coastal Information Center
SDAB	San Diego Air Basin

SDAPCD SDG&E SDWA SF6 SHPO SMARA SO2 SR SWPPP SWRCB TAC TCPS TMDL TL USTs/ASTS USDA USFWS USFS USFS USGS VOC	San Diego Air Pollution Control District San Diego Gas & Electric Company Safe Drinking Water Act sulfur hexafluoride State Historic Preservation Office Surface Mining and Reclamation Act sulfur dioxide State Route Stormwater Pollution Prevention Plan State Water Resources Control Board toxic air contaminant traditional cultural properties total maximum daily loads tie-line Underground or aboveground storage tanks U.S. Department of Agriculture U.S. Fish and Wildlife Service U.S. Forest Service U.S. Forest Service U.S. Geological Survey volatile organic compound
WPO	Discharge Control Ordinance

PUBLIC UTILITIES COMMISSION 505 VAN NESS AVENUE SAN FRANCISCO, CA 94102-3298



MITIGATED NEGATIVE DECLARATION

SAN DIEGO GAS & ELECTRIC COMPANY (SDG&E) Permit to Construct A.13-03-003 TIE-LINE 637 WOOD-TO-STEEL REPLACEMENT PROJECT

INTRODUCTION

Pursuant to the California Public Utilities Commission's (CPUC's) General Order 131-D, San Diego Gas and Electric Company (SDG&E) has filed an application with the CPUC for a Permit to Construct for the SDG&E Tie-Line (TL) 637 Wood-to-Steel Replacement Project (proposed project). The application was filed March 13, 2013, and includes the Proponent's Environmental Assessment (PEA) prepared by SDG&E. The proposed project consists of fire-hardening of approximately 14 miles of the TL 637 corridor connecting SDG&E's existing Creelman and Santa Ysabel Substations. Primary project components include the replacement of 156 existing wood poles with fire-safe steel poles, minor improvements to the Creelman and Santa Ysabel Substations, and the installation of a new fiber-optic line that would be co-located on the new TL 637 steel poles. The 14-mile span of the TL 637 route proposed for fire-hardening is located on private and public lands within a central portion of unincorporated San Diego County, California, specifically within the Ramona and Santa Ysabel communities. Under the CPUC's General Order 131-D, approval of this project must comply with the California Environmental Quality Act (CEQA).

Pursuant to CEQA (California Public Resources Code, Section 21000 et seq.), the CPUC must prepare an Initial Study (IS) for the proposed project to determine if any significant impact on the environment would result from project implementation. The IS uses the significance criteria outlined in Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.).

Article 6, Section 15070, Decision to Prepare a Negative Declaration or Mitigated Negative Declaration, of the CEQA Guidelines states the following (14 CCR 15070):

A public agency shall prepare or have prepared a proposed negative declaration or mitigated negative declaration for a project subject to CEQA when:

- a) The initial study shows that there is no substantial evidence, in light of the whole record before the agency, that the project may have a significant effect on the environment, or
- b) The initial study identifies potentially significant effects, but:
 - Revisions in the project plans or proposals made by, or agreed to by, the applicant before a proposed mitigated negative declaration and initial study are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur, and
 - 2) There is no substantial evidence, in light of the whole record before the agency, that the project as revised may have a significant effect on the environment.

Based on the analysis in the IS, it has been determined that all project-related environmental impacts could be reduced to a less-than-significant level with the incorporation of feasible mitigation measures. Therefore, adoption of a Mitigated Negative Declaration (MND) will satisfy the requirements of CEQA.

The information contained in the project's PEA and additional information requested by the CPUC during the PEA review were fully considered during the preparation of this Draft IS/MND.

Copies of the project application, PEA, and supporting technical studies are available on the project website at:

http://www.cpuc.ca.gov/environment/info/dudek/WoodtoSteel/WoodtoSteel.htm.

PROJECT DESCRIPTION

Following is a summary of the project that SDG&E has proposed; the attached IS presents more details on the proposed project in Section 4, Expanded Project Description.

The project proposes to fire-harden approximately 14 miles of the existing 69-kilovolt (kV) wood pole power line (TL 637) between the Creelman and Santa Ysabel Substations. SDG&E's purpose for the project is to increase fire safety and service reliability of the 69 kV power line in a high fire risk area of San Diego County. As proposed by SDG&E, the project would fire-harden the existing system by replacing the existing 69 kV wood pole structures with weathered steel pole structures. The weathered steel pole structures would develop a weathered patina on the surface of the pole that would resemble the existing wooden pole structures that make up the existing TL 637 line. Work would also be conducted at the Creelman and Santa Ysabel Substations to allow for the wood-to-steel conversions of TL 637. Further, SDG&E is proposing to install a new SDG&E-owned and operated fiber-optic cable between the substations on the new TL 637 steel poles.

Project construction is expected to require approximately 9 months to complete.

PROJECT OBJECTIVE

SDG&E provides electrical power services throughout San Diego County. In providing these services, SDG&E maintains tie-lines throughout the service area for the transmission of electricity. Along the proposed project route, these tie-lines are currently supported by wood structures that are susceptible to fire damage in the event of a wildland fire. The proposed project site is located in a highly fire-prone area of San Diego County with frequent high winds.

According to SDG&E, the primary objective of the proposed project is to replace the existing wood structures with weathered steel poles in order to reduce the likelihood of service disruption along the TL 637 route in the event of a wildland fire, as well as prevent electrical power lines from igniting, particularly during extreme weather conditions. Implementation of the proposed fire-hardening improvements would help ensure SDG&E service reliability during wildfire events and improve fire safety conditions consistent with SDG&E's Community Fire Safety Program (CFSP), County of San Diego Fire Department goals, and fire safety objectives of the agencies and municipalities within the SDG&E service area.

APPLICANT PROPOSED MEASURES

The project includes a number of Applicant Proposed Measures (APMs) proposed by SDG&E as project design features that are designed to reduce or avoid potential environmental impacts associated with project construction and operation. SDG&E's APMs are considered part of the proposed project and are listed in Table 1.

APM Number	Description	
	General	
APM-GEN-1	Construction scheduling. SDG&E will coordinate construction of the proposed project such that construction activities will typically not overlap with other SDG&E construction projects in the immediate vicinity of the proposed project.	
APM-GEN-2	Helicopter use. Helicopter takeoffs and landings conducted at the Warnock and Santa Ysabel Staging Yards will be restricted to the approximate center of the staging area. Helicopter usage will conform to acceptable hours for construction activities, as outlined within the San Diego County Noise Code.	
	Aesthetics	
APM-AES-1	Visual screening of staging yards. The Warnock and Santa Ysabel Staging Yards will have opaque mesh installed along the fence that will soften the view of the <i>s</i> taging yard from public vantage points such as roads, residences, and public vantage points.	
APM-AES-2	Restoring appearance of temporarily disturbed areas. When proposed project construction has been completed, all temporarily disturbed terrain will be restored, as needed and as appropriate, to approximate pre-construction conditions. Re-vegetation would be used, where appropriate (re-vegetation in certain areas is not possible due to vegetation management requirements related to fire safety) to re-establish a natural-appearing landscape and reduce potential visual contrast between disturbed areas and the surrounding landscape.	
	Biological Resources	
APM-BIO-1	SDG&E Subregional Natural Community Conservation Plan (NCCP). The proposed project will avoid and minimize impacts to biological resources through implementation of the <i>SDG&E Subregional NCCP</i> . The <i>SDG&E Subregional NCCP</i> establishes a mechanism for addressing biological resource impacts incidental to the development, maintenance, and repair of SDG&E facilities within the <i>SDG&E Subregional NCCP</i> coverage area. The proposed project is located within the <i>SDG&E Subregional NCCP</i> coverage area.	
	The <i>SDG&E Subregional NCCP</i> includes a Federal Endangered Species Act (ESA) Section 10(A) permit and a California ESA Section 2081 memorandum of understanding (for incidental take) with an Implementation Agreement with the United States Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW – formerly the California Department of Fish and Game), respectively, for the management and conservation of multiple species and their associated habitats, as established according to the Federal and State ESAs and California's NCCP Act. The NCCP's Implementing Agreement confirms that the mitigation, compensation, and enhancement obligations contained in the Agreement and the <i>SDG&E Subregional NCCP</i> meet all relevant standards and requirements of the California ESA, the Federal ESA, the NCCP Act, and the Native Plant Protection Act with regard to SDG&E's activities in the Subregional Plan Area.	
	Pursuant to the <i>SDG&E Subregional NCCP</i> , SDG&E conducted pre-construction studies for all activities occurring off of existing access roads in natural areas. An independent biological consulting firm surveyed all proposed project impact areas and prepared a Preactivity Study Report (PSR) outlining all anticipated impacts related to the proposed project. The proposed project will include monitoring for all project components, as recommended by the PSR and outlined in the <i>SDG&E Subregional NCCP</i> , as well as other avoidance and minimization measures outlined in the NCCP's Operational Protocols. The PSR was submitted to the CDFW and USFWS, and no comments were received. Prior to the commencement of construction, a verification survey will be conducted of the proposed project disturbance areas, as required by the <i>SDG&E Subregional NCCP</i> .	

Table 1: Ap	plicant Proposed Measures
APM Number	Description
	Biological monitors will be present during construction to assure implementation of the avoidance and minimization measures. If the previously delineated work areas must be expanded or modified during construction, the monitors will survey the additional impact area to determine if any sensitive resources will be impacted by the proposed activities, to identify avoidance and minimization measures, and to document any additional impacts. Any additional impacts are included in a Post-Construction Report (PCR) for purposes of calculating the appropriate mitigation, which generally includes site enhancement or credit withdrawal from the SDG&E mitigation bank. When construction is complete, the biological monitor will conduct a survey of the entire line to determine actual impacts from construction. The PCR will determine how much site enhancement and credit withdrawal from the SDG&E mitigation bank will be required to address impacts from project-related activities. These impact and mitigation credit calculations are submitted to the USFWS and the CDFW as part of the NCCP Annual Report pursuant to requirements of the NCCP and the NCCP Implementing Agreement.
	Specific operating restrictions that are incorporated into the proposed project design to comply with the <i>SDG&E Subregional NCCP</i> include the following:
	• Vehicles would be kept on access roads and limited to 15 miles per hour (Section 7.1.1, 1).
	 No wildlife, including rattlesnakes, may be harmed, except to protect life and limb (Section 7.1.1, 2).
	• Feeding of wildlife is not allowed (Section 7.1.1, 4).
	• No pets are allowed within the ROW (Section 7.1.1, 5)
	 Plant or wildlife species may not be collected for pets or any other reason (Section 7.1.1, 7). Littering is not allowed, and no food or waste would be left on the ROW or adjacent
	 Littering is not allowed, and no food or waste would be left on the ROW or adjacent properties (Section 7.1.1, 8).
	 Measures to prevent or minimize wild fires would be implemented, including exercising care when driving and not parking vehicles where catalytic converters can ignite dry vegetation (Section 7.1.1, 9).
	 Field crews shall refer all environmental issues, including wildlife relocation, dead or sick wildlife, or questions regarding environmental impacts to the Environmental Surveyor. Biologists or experts in wildlife handling may be necessary to assist with wildlife relocations (Section 7.1.1, 10).
	 All SDG&E personnel would participate in an environmental training program conducted by SDG&E, with annual updates (Section 7.1.2, 11).
	• The Environmental Surveyor shall conduct preactivity studies for all activities occurring in natural areas, and will complete a preactivity study form including recommendations for review by a biologist and construction monitoring, if appropriate. The form will be provided to CDFW and USFWS but does not require their approval (Section 7.1.3, 13).
	 The Environmental Surveyor shall flag boundaries of habitats to be avoided and, if necessary, the construction work boundaries (Section 7.1.3, 14).
	 The Environmental Surveyor must approve of activity prior to working in sensitive areas where disturbance to habitat may be unavoidable (Section 7.1.4, 25).
	 In the event SDG&E identifies a covered species (listed as threatened or endangered by the federal or state) of plant within the temporary work area (10 foot radius) surrounding a power pole, SDG&E would notify the USFWS (for Federal ESA listed plants) and CDFW (for California ESA listed plants) (Section 7.1.4, 28).
	 The Environmental Surveyor shall conduct monitoring as recommended in the preactivity study form (Section 7.1.4, 35).
	• Supplies, equipment, or construction excavations where wildlife could hide (e.g., pipes, culverts, pole holes, trenches) shall be inspected prior to moving or working on/in them (Section 7.1.4, 37, and 38). Fugitive dust will be controlled by regular watering and speed limits (Section 7.1.4, 39).
	 During the nesting season, the presence or absence of nesting species (including raptors) shall be determined by a biologist who would recommend appropriate avoidance and minimization measures (Section 7.1.6, 50).

Table 1: Applicant Proposed Measures		
APM Number	Description	
	 Maintenance or construction vehicle access through shallow creeks or streams is allowed. However no filling for access purposes in waterways is allowed (Section 7.1.7, 52). 	
	• Staging/storage areas for equipment and materials shall be located outside of riparian areas (Section 7.1.7, 53).	
	Cultural Resources	
APM-CUL-1	SDG&E's practices are in accordance with Federal, State and local laws to protect and avoid cultural resources, including: Archaeological Resources Protection Act of 1979, as amended, National Historic Preservation Act of 1966, as amended (NHPA), California Penal Code 622 ½, PRC 5097.1 through 5097.6, PRC 5097.98, and CEQA. An independent Cultural Resource Management firm conducted pre-construction surveys under contract with SDG&E, prepared an inventory of cultural resources within the proposed project's Area of Potential Effect, and provided recommendations for avoidance and minimization to assist SDG&E in its compliance with CEQA requirements. SDG&E's Principal Cultural Resources Specialist worked closely with SDG&E design and engineering to move several of the poles during the design phase of the proposed project to avoid impacts to known cultural resources. Known cultural resources will be spanned or otherwise avoided through Project design and through routing during construction activities to the extent feasible. In addition, the micropile pole type will be used at many locations during construction to minimize ground disturbance, and decrease potential impacts to unknown buried deposits.	
APM-CUL-2	Cultural resources sensitivity training. Prior to construction or ground disturbing activities, all SDG&E, contractor, and subcontractor project personnel will receive training regarding the appropriate work practices necessary to effectively implement the project design features and ordinary construction restrictions relating to cultural resources, including the potential for exposing subsurface cultural resources and paleontological resources. This training will include presentation of the procedures to be followed upon the discovery or suspected discovery of archaeological materials, including Native American remains, as well as of paleontological resources. Known archaeological sites would be demarcated by a qualified archaeologist as Environmentally Sensitive Areas prior to the start of construction. Construction crews would be instructed to avoid disturbance of these areas.	
APM-CUL-3	Archaeological monitoring. A qualified archaeologist will attend preconstruction meetings, as needed, and a qualified archaeological monitor will monitor activities in the vicinity of all known cultural resources within the proposed project area. The requirements for archaeological monitoring will be noted on the construction plans. The archaeologist's duties will include monitoring, evaluation of any finds, analysis of materials, and preparation of a monitoring results report conforming to Archaeological Resource Management Reports guidelines.	
APM-CUL-4 ^a	Unanticipated discovery of cultural resources. In the event that cultural resources are discovered, the archaeologist would have the authority to divert or temporarily halt ground disturbance to allow evaluation of potentially significant cultural resources. The archaeologist would contact SDG&E's Cultural Resource Specialist and Environmental Project Manager at the time of discovery. The archaeologist, in consultation with SDG&E's Cultural Resource Specialist, would determine the significance of the discovered resources. SDG&E's Cultural Resource Specialist and Environmental Project Manager would have to concur with the evaluation procedures to be performed before construction activities would be allowed to resume. For significant cultural resources, preservation in place would be the preferred manner of mitigating impacts. For resources that could not be preserved in place, a Research Design and Data Recovery Program would be prepared and carried out to mitigate impacts. Cultural resources curation would be implemented if resources cannot be preserved in place, and are considered to be unique and important. All collected cultural remains would be cataloged, and permanently curated with an appropriate institution. All artifacts would be analyzed to identify function and chronology as they relate to the history of the area. Faunal material would be identified as to species.	
APM-CUL-5	Unanticipated discovery of human remains. If human remains are encountered during construction, SDG&E will comply with California State law (Health and Safety Code Section 7050.5; PRC Sections 5097.94, 5097.98 and 5097.99). This law specifies that work will stop immediately in any areas where human remains or suspected human remains are encountered. The appropriate agency and SDG&E will be notified of any such discovery. SDG&E will contact the Office of the	

Table 1: Ap	plicant Proposed Measures				
APM Number	Description				
Number	Description Medical Examiner. The Medical Examiner has two working days to examine the remains after being notified by SDG&E. Under some circumstances, a determination may be made without direct input from the Medical Examiner. When the remains are determined to be Native American, the Medical Examiner has 24 hours to notify the Native American Heritage Commission (NAHC). The NAHC will immediately notify the identified most likely descendant (MLD) and the MLD has 24 hours to make recommendations to the landowner or representative for the respectful treatment or disposition of the remains and grave goods. If the MLD does not make recommendations within 24 hours, the area of the property must be secured from further disturbance. If there are disputes between the landowner and the nearest likely descendants, the NAHC will mediate the dispute to attempt to find a resolution. If mediation fails to provide measures acceptable to the landowner, the landowner or his or her authorized representative shall re-inter the human remains and items associated with Native American burials with appropriate dignity on the property in a location not subject to further subsurface disturbance.				
APM-CUL-6	Paleontological monitoring. A paleontological monitor will work under the direction of a qualified project paleontologist and will be on site to observe excavation operations that involve the original cutting of previously undisturbed deposits for the eight poles located within paleontologically sensitive formations (i.e., Pomerado Conglomerate, Late Pleistocene to Holocene-age channel deposits). A paleontological monitor is defined as an individual who has experience in the collection and salvage of fossil materials.				
APM-CUL-7	Unanticipated discovery of fossils. In the event that fossils are encountered, the paleontological monitor would have the authority to divert or temporarily halt construction activities in the area of discovery to allow recovery of fossil remains in a timely fashion. The paleontologist would contact SDG&E's Cultural Resource Specialist and Environmental Project Manager at the time of discovery. The paleontologist, in consultation with SDG&E's Cultural Resource Specialist and Environmental Project Manager at the time of discovery. The paleontologist, in consultation with SDG&E's Cultural Resource Specialist and Environmental Project Manager at the time of discovery. The paleontologist, in consultation with SDG&E's Cultural Resource Specialist and Environmental Project Manager would have to concur with the evaluation procedures to be performed before construction activities would be allowed to resume. Because of the potential for recovery of small fossil remains, it may be necessary to set up a screen-washing operation on site. If fossils are discovered, the paleontologist (or paleontological monitor) would recover them along with pertinent stratigraphic data. In most cases, this fossil salvage can be completed in a short period of time. Because of the potential for recovery of small fossil remains, such as isolated mammal teeth, recovery of bulk sedimentary-matrix samples for off-site wet screening from specific strata may be necessary, as determined in the field. Fossil remains collected during monitoring and salvage would be cleaned, repaired, sorted, cataloged, and deposited in a scientific institution with permanent paleontological collections, and a paleontological monitoring report would be written.				
	Geology and Soils				
APM-GEO-1	Project plans and specifications take into account the potential for mass wasting and liquefaction. A geotechnical study was conducted by VO Engineering Inc. in 2011 to evaluate the pole locations along the proposed project power line route for the presence of geologic hazards. The geotechnical study indicated the presence of geologic conditions potentially susceptible to mass wasting or liquefaction at the locations of proposed Pole Nos. P103, R107, P110, P114, P129, P22, P23, P48, P49, and P51. The final project plans and specifications prepared by the responsible engineer have taken into account the geologic hazard conditions present at these locations and include appropriate engineering design and construction measures to minimize the potential for damage to proposed project structures in the event that there is an occurrence of these hazards.				
APM-GEO-2	Soil stabilization. Once temporary surface disturbances are complete, areas that would not be subject to additional disturbance will be stabilized to control soil erosion.				
Hazards and Hazardous Materials/Fire Safety					
APM-HAZ-1	Steel structures. New structures are designed utilizing steel to avoid potential adverse effects relating to fire and fire damage.				
APM-HAZ-2	TL 637 Project Fire Plan. The purpose of the proposed project is to improve the reliability of the power lines in fire-prone (very high to extreme fire threat areas) and wind-prone areas and minimize the risks associated with future wildfires. The proposed project is located within the Very High fire threat				

Table 1: Ap	plicant Proposed Measures			
APM Number	Description			
	designation, as indicated on SDG&E's 2012 Fire Threat Zone Map. The proposed project design includes fire-hardening techniques, including replacing wood poles with steel poles, increasing conductor spacing to maximize line clearances, installing steel poles designed to withstand an extreme wind-loading case and known local conditions, and installing longer polymer insulators. These design components of the proposed project minimize fire risk through enhanced safety and reliability of the power line system during extreme weather conditions. In addition to these design features, the proposed project will implement the <i>TL 637 Project Fire Plan</i> . The <i>TL 637 Project Fire Plan</i> exceeds fire prevention measures as stated in California Forestry Practice Rules, PRC 4:6. Avoidance and minimization measures to prevent wildland fires include training, oversight, and work controls in all phases of preparation and implementation of the proposed project. Training and briefings in fire prevention and suppression methods are key components of reducing the threat of a wildland fire on the proposed project. Additionally, suppression in the event of a fire starting will be facilitated by locating water tanks within two minutes of a work site, requiring firefighting equipment within 50 feet of any work/equipment site, and avoidance of construction activities during periods of declared Red Flag Warnings or other severe fire weather conditions as identified by SDG&E. Other avoidance and minimization measures may be employed, such as standby firefighters and fire engines. In addition, portions of the proposed project occurring within the Cleveland National Forest must abide by the <i>Cleveland National Forest Fire Plan</i> . The plan describes the project activity level (PAL) work restriction measures to employ while working on forest lands. Therefore, the proposed project design and construction avoidance and minimize fire risks as outlined in the <i>TL 637 Project Fire Plan</i> and the <i>Cleveland National Forest Fire Plan</i> .			
APM-HAZ-3	Electric Standard Practice 113.1 – Wildland Fire Prevention and Fire Safety. The proposed project will be constructed consistent with <i>Electric Standard Practice 113.1 – Wildland Fire Prevention and Fire Safety. Electric Standard Practice 113.1</i> outlines practices and procedures for SDG&E activities occurring within areas of potential wildland fire threat within SDG&E's service territory. The proposed project design includes replacement of wood poles with steel poles, increased conductor spacing to maximize line clearances, installation of steel poles to withstand an extreme wind-loading case and known local conditions, and undergrounding of a portion of the power line. These design components of the proposed project minimize the fire risk through enhanced safety and reliability of the power line system, particularly during extreme weather conditions. The standard practices in <i>Electrical Standard Practice 113.1</i> include avoidance and minimization measures to comply with state and local fire ordinances.			
APM-HAZ-4	Coordination and Measures within Parks and Preserves . Appropriate safety measures will be implemented where trails and construction areas are near each other within the Simon Preserve, Mt. Gower Preserve, and the Mt. Gower HLZ to provide a safety buffer between recreational users and construction areas. Construction schedule and activities will be coordinated with the authorized officer for the recreation area.			
	Hydrology and Water Quality			
APM-HYD-1	SDG&E Water Quality Construction BMP Manual. SDG&E's <i>Water Quality Construction BMPs Manual</i> (<i>BMP Manual</i>) was created to organize SDG&E's standard water quality protection procedures for various specific actions that routinely occur as part of SDG&E's ongoing construction, operations, and maintenance activities. The primary focus of most BMPs is the reduction and/or elimination of water quality impacts during construction of linear projects such as the proposed project. The BMPs described within the <i>BMP Manual</i> were derived from several sources, including the State of California guidelines as well as the Caltrans Water Quality BMPs. The <i>BMP Manual</i> will be utilized during construction (by way of preparation and implementation of the SWPPP), operation, and maintenance of the proposed project to ensure compliance with all relevant SDG&E and government-mandated water quality standards.			
Noise				
APM-NOI-1	Generators. Generator use will be limited to less than 50 horsepower (HP) at all staging yards. Any generators used at the staging yards will be located away from noise sensitive areas, and positioned on the property to comply with the San Diego County noise ordinance.			
APM-NOI-2	Mufflers. Functioning mufflers will be maintained on all equipment.			

Table 1: Applicant Proposed Measures APM						
Number	Description					
APM-NOI-3	Resident notification. Residents within 50 feet will receive notification of the start of construction at least one week prior to the start of construction activities within that area.					
APM-NOI-4 ^b	Construction noise. SDG&E will meet and confer with the County, as needed, to discuss any anticipated deviations from the requirements of the County Noise Code. If requested by the County, SDG&E will evaluate potential additional steps to reduce noise impacts, including relocation of residents and/or the use of portable noise barriers.					
APM-NOI-5 ^c	Blasting. In the unlikely event that rock blasting is used during construction, a noise and vibration calculation will be prepared and submitted to SDG&E Environmental Programs and Transmission Engineering and Design for review before blasting at each site. The construction contractor will ensure compliance with all relevant local, state, and federal regulations relating to blasting activities, as well as SDG&E's blasting guidelines.					
	Recreation					
APM-REC-1	Temporary trail detours. Where feasible, temporary detours will be provided for trail users. Signs will be provided to direct trail users to the temporary trail detours.					
	Traffic					
APM-TRA-1	Standard Traffic Control Procedures. SDG&E will implement a traffic control plan to address potential disruption of traffic circulation during construction activities and address any safety issues. The traffic control plan will be prepared by the project engineer or contractor and subject to approval by the County.					
APM-TRA-2	Encroachment permits. SDG&E will obtain the required encroachment permits from Caltrans for work near Highways 78 and 79, and will ensure that proper safety measures are in place while construction work is occurring near public roadways. These safety measures include flagging, proper signage, and orange cones to alert the public to construction activities near the roadway.					

Source: SDG&E 2013a.

^a MM CUL-4 below under Cultural Resources supersedes APM-CUL-4. ^b MM NOI-2 below under Noise supersedes APM-NOI-4. ^c MM NOI-3 below under Noise supersedes APM-NOI-5.

MITIGATED NEGATIVE DECLARATION MITIGATION MEASURES

Table 2 lists mitigation measures (MM) that are recommended to reduce project-related impacts to a less-than-significant level.

Table 2: Mitigated Negative Declaration Mitigation Measures					
Biological Resources					
MM BIO-1	Prior to construction, San Diego Gas & Electric (SDG&E) shall retain a qualified biologist approved by the California Public Utilities Commission (CPUC) to conduct a focused rare plant survey during the time period when the following special-status plant species are detectable: San Diego gumplant (July – October; east of Del Amo Road (P65 east to Santa Ysabel Substation) in the following habitat types: chaparral, grassland, oak woodland, riparian forest, disturbed wetland, and in agricultural land east of Oak Hollow Road (P75 east to Santa Ysabel Substation)), and Coulter's saltbush (March – October; within proposed project impact areas within the project area in the following habitat types: agricultural land, coastal sage scrub, grassland, oak woodland, and disturbed wetlands).				
	There is some potential for little mousetail to occur within vernal pool and wetland areas; these areas will be protected through implementation of MM BIO 7, the SDG&E Natural Community Conservation Plan (NCCP), and through avoidance of impacts to wetlands. However, there is a confined area (P103 through P107), where poles are situated within a wet meadow and will be cut down and removed by hand. Therefore, in this confined area, presence is assumed and SDG&E shall do the following: using pin flags, narrowly define footpaths for hand crews to and from the poles; crews will hand-cut the pole; and the cut poles will be removed by hand or by helicopter only.				
	Locations of special-status plants shall be identified and inventoried. The qualified biologist shall supervise construction activities within the vicinity of areas identified as having special-status plant species. Impacts to special-status plant species shall be avoided to the maximum extent possible by installing fencing or flagging, marking areas to be avoided in construction areas, and limiting work in areas identified as having special-status plant species to periods of time when the plants have set seed and are no longer growing.				
	Where impacts to special-status plant species are unavoidable, the impact shall be quantified and compensated though off-site land preservation and /or plant salvage and relocation as determined by the qualified biologist and approved by the CPUC. Alternatively, if the special-status plant species in question is a covered species within the SDG&E NCCP, mitigation consistent with measures established in the NCCP shall be provided.				
	The results of the focused plant surveys and measures outlined above that will be implemented by SDG&E in the event special-status plant species are identified within the biological survey area shall be provided to CPUC. CPUC will review and approve the rare plant survey report and recommended avoidance or mitigation approaches prior to issuance of a notice to proceed.				
MM BIO-2	San Diego Gas & Electric (SDG&E) shall retain qualified biologists and other qualified resource specialists, as necessary, to monitor all project construction activities that could reasonably result in impacts to biological resources. All monitor qualifications shall be reviewed and approved by the California Public Utilities Commission (CPUC) prior to conducting monitoring activities along the right-of-way. Monitors shall be responsible for preconstruction surveys, work area delineations (i.e., staking, flagging, etc.) to comply with SDG&E's Natural Community Conservation Plan, on-site monitoring and documentation of violations and compliance.				
	SDG&E shall submit a weekly report to CPUC that summarizes the biological monitoring activities that were completed during construction. The weekly report at a minimum shall include environmental training sign-in sheets, biological monitors assigned to project components, compliance issues/concerns and general wildlife observations.				

Table 2: M	litigated Negative Declaration Mitigation Measures
MM BIO-3	At the end of each workday, any open holes shall be fully covered, after they have been inspected by the on-site biologist, with steel plates, plywood, or other effective coverings to prevent entrapment of wildlife species. If fully covering the excavations is impractical, ramps will be used to provide a means of escape for wildlife that enter the excavations, or open holes will be securely fenced with exclusion fencing. If common wildlife species are found in a hole, the designated biological monitor shall immediately be informed and the animal(s) shall be removed. If the animal(s) is/are a sensitive species that require(s) special handling authorization, a qualified biologist (agency-permitted or approved to handle a specific species) shall remove the animal before resumption of work in that immediate area. San Diego Gas & Electric shall specify the requirement to cover all open holes, create ramps, or install exclusion fencing around open holes in its agreements with all construction contractors.
MM BIO-4	If construction activities including but not limited to tree trimming, road maintenance (i.e., re-establishing of existing access roads), grading, or site disturbance are to occur between March 1 and September 1, a nesting bird survey shall be conducted by a qualified biologist to determine the presence of nests or nesting birds within 100 feet of the construction activities. The nesting bird surveys shall be completed no more than 72 hours prior to any construction activities. The survey will focus on special-status species known to use the area as well as other nesting birds that are protected under the Migratory Bird Treaty Act. If an active nest (defined below) is identified grading or site disturbance within a 100-foot buffer of the nest shall be monitored on a daily basis by a qualified biologist until project activities are no longer occurring within 100 feet of the nest or until fledglings become independent of the nest. "Nest" is defined as: a structure or site under construction or preparation, constructed or prepared, or being used by a bird for the purpose of incubating eggs or rearing young. Perching sites and screening vegetation are not part of the nest. "Active nest" is defined as: once birds begin constructing, preparing or using a nest for egg-laying. A nest is no longer an "active nest" if abandoned by the adult birds or once nestlings or fledglings are no longer dependent on the nest.
	The monitoring biologist may increase the buffer radius if he or she determines it is necessary. The monitoring biologist may decrease the buffer radius upon receiving approval from California Public Utilities Commission (CPUC), if he or she determines that the construction activities are not disturbing the nesting activities and a smaller buffer is more appropriate. The monitoring biologist shall halt construction activities if he or she determines that the construction activities are disturbing the nesting activities. The monitor shall make practicable recommendations to reduce the noise or disturbance in the vicinity of the nest. This may include recommendations such as: (1) turning off vehicle engines and other equipment whenever possible to reduce noise, (2) working in other areas until the young have fledged, or (3) placing noise barriers to maintain the noise at the nest to 60 dBA Leq hourly or less or to the preconstruction ambient noise level if that exceeds 60 dBA Leq hourly. The on-site biologist will review and verify compliance with these nesting boundaries and will verify that the nesting effort has finished. Unrestricted construction activities can resume when no other active nests are found. Upon completion of the survey and any follow-up construction avoidance management, a report shall be prepared and submitted to the CPUC with the weekly report as identified in MM BIO-2.
	A nesting bird report, at a minimum, shall include the date, starting and ending time, general weather conditions (cloud cover, temperature, wind), name of biologist with affiliation, area surveyed including map, survey results (species, nest GPS location, nest stage [number of eggs, number of nestlings]), recommended compliance (e.g., 100-foot buffer recommended, buffer increased with explanation, recommended noise reduction, noise dBA Leq levels at nest), and compliance issues/concerns. The report shall also include the date and nesting outcome (e.g., depredated, nestling fledged, nest abandoned).
MM BIO-5	In the unlikely event that rock blasting is used during construction, a noise and vibration calculation will be prepared and submitted to the California Public Utilities Commission (CPUC) and the County of San Diego for review before blasting at each site. The construction contractor will ensure compliance with all relevant local, state, and federal regulations relating to blasting activities. This Blasting Plan would include a site-specific nesting bird survey to be conducted by a CPUC-approved biologist. The results of this survey would be communicated to the CPUC. If the CPUC-approved biologist observes an active nest (see definition below) for any special-status species (including federal, state, and county candidate, sensitive, fully protected, or special-status species) or species covered by the Migratory Bird Treaty Act that may be impacted by blasting activities, San Diego Gas & Electric would postpone any activity that may impact the success of the nest until the nest no longer meets the given definitions. "Nest" is defined as: a structure or site under construction or preparation, constructed or prepared, or being used by a bird for the purpose of incubating eggs or rearing young. Perching sites and screening vegetation are not part of the nest. "Active nest" is defined as: once birds begin constructing, preparing or using a nest for egg-laying. A nest is no longer an "active nest" if abandoned by the adult birds or once nestlings or fledglings are no longer dependent on the nest.

Table 2: Mitigated Negative Declaration Mitigation Measures						
MM BIO-6	In locations where Stephen's kangaroo rat habitat assessments were not conducted during the 2010 field survey, a pedestrian preconstruction survey for potentially occupied suitable habitat (open habitat with suitable soils, slope, and kangaroo rat burrows) and follow-up trapping to confirm species, will be conducted by a California Public Utilities Commission (CPUC) approved biologist to assess the potential areas for Stephen's kangaroo rat to occur within the proposed project area. Any burrows, utilized habitat, or signs of Stephen's kangaroo rat utilizing a habitat (e.g., track prints) will be flagged for avoidance during construction activities. The monitoring biologist shall halt construction activities if he or she determines that the construction activities are disturbing Stephen's kangaroo rat occupied habitat. If Stephen's kangaroo rat occupied habitat cannot be avoided during construction, the monitoring biologist shall make recommendations to ensure minimal impacts to the existing Stephen's kangaroo rat burrows during construction. Recommendations may include, but are not limited to: (1) re-routing access to project work area for complete avoidance of Stephen's kangaroo rat occupied habitat; or (2) placement of dirt piles or sediment to avoid occupied burrows. Upon completion of the survey and any follow-up construction avoidance management, a report shall be prepared and submitted to the CPUC.					
MM BIO-7	MM BIO-7 Prior to construction, qualified biologists approved by the California Public Utilities Commission shall flag all vernal pools (marginal or otherwise) and associated existing connectivity within the project footprint (water entering area during rain events) for avoidance during the proposed construction activities. Rain events are defined as "a precipitation event of 0.5 inch or greater." If work is conducted during the rainy season (October 1 through May 1), before scheduling project activitien in areas flagged as vernal pools, the weather forecast will be monitored. Work will not be scheduled in these areas if a greater than 40% chance of a rain event (as defined above) is forecasted during the time needed to complete project activities. If a rain event unexpectedly occurs during project activity, the site will be secured with appropriate best management practices as identified in APM HYD-1. Construction travel along public access roads where the road rut vernal pools have been identified will be flagged or otherwise marked prior to construction for minimal impact to these locations. Project related traffic in these areas will be kept to the minimum required to implement the project.					
	Cultural Resources					
MM CUL-1	During construction of the proposed project, all Avoidance Measures as identified in Table 4 of the project-specific cultural resources report conducted by ASM (ASM 2012) shall be implemented. All measures shall be implemented by a qualified archaeologist who is approved by the California Public Utilities Commission. Avoidance Measures as listed in Table 4 of the report include retention of a cultural resources monitor during pole relocation work; establishment of Environmentally Sensitive Areas (ESAs) where sensitive resources are present in the vicinity of work sites; and avoiding sensitive bedrock, historical features, or other identified features within established ESAs.					
MM CUL-2	Prior to commencement of construction associated with the Santa Ysabel Staging Yard, an Environmentally Sensitive Area (ESA) shall be established around the existing resource by the retained cultural monitor. Fencing shall be erected to demarcate the ESA to minimize the potential for impacts during construction.					
MM CUL-3	Where access roads traverse or are located near cultural resource sites as identified in the cultural resources report conducted by ASM (ASM 2012), vehicles shall be required to remain within existing access roads. No road grading shall be allowed within identified cultural resource site boundaries.					
MM CUL-4	In the event that any prehistoric or historic subsurface cultural resources are discovered during ground-disturbing activities, such as chipped or ground stone, historic debris, building foundation, or human bones, all work within 50 feet of the resources shall be halted, and a qualified archaeologist shall be consulted to assess the significance of the find. If any find is determined to be significant, representatives of San Diego Gas & Electric (SDG&E), California Public Utilities Commission (CPUC), and the qualified archaeologist shall confer to determine the appropriate avoidance measures or other appropriate mitigation, with the ultimate determination to be made by the CPUC. All significant cultural materials recovered shall be subject to scientific analysis; professional museum curation, as necessary; and a report prepared by a specialist according to current professional standards. In considering any suggested mitigation proposed by the CPUC and SDG&E shall determine whether avoidance is necessary and feasible in light of factors such as the nature of the find, project design, costs, and other considerations. If avoidance is infeasible, other appropriate measures (e.g., data recovery) shall be instituted. Work may proceed on other parts of the project site while mitigation					

Table 2: M	litigated Negative Declaration Mitigation Measures
	for historical resources or unique archaeological resources is carried out. If the CPUC, in consultation with the qualified archaeologist, determines that a significant archaeological resource is present and that the resource could be adversely affected by the proposed project, SDG&E will:
	 Attempt to redesign the project to avoid any adverse effect on the significant archaeological resources.
	 b. If the circumstances warrant an Archaeological Data Recovery Program (ADRP), such a program shall be conducted. The project archaeologist and the CPUC shall confer and consult to determine the scope of the ADRP. The archaeologist shall prepare a draft ADRP that shall be submitted to the CPUC for review and approval. The ADRP shall identify how the proposed ADRP would preserve the significant information the archaeological resource is expected to contain. That is, the ADRP shall identify the scientific/historical research questions that are applicable to the expected resource, the data classes the resource is expected to possess, and how the expected data classes would address the applicable research questions. Data recovery, in general, should be limited to portions of the archaeological resource that could be adversely affected by the proposed project. Destructive analytical methods shall not be applied to cultural materials if nondestructive methods are practical.
	Hazards and Hazardous Materials
MM HAZ-1	Prior to construction, all San Diego Gas & Electric, contractor, and subcontractor project personnel would receive training regarding the appropriate work practices necessary to effectively implement hazardous materials procedures and protocols and to comply with the applicable environmental laws and regulations, including, without limitation, hazardous materials spill prevention and response measures. A sign-in sheet of contractor and subcontractor project personnel who have received training shall be provided to California Public Utilities Commission on a weekly basis as indicated in MM BIO-2.
MM HAZ-2	During construction, construction best management practices (BMPs) shall be implemented to prevent impacts from release of hazardous materials during construction activities. Typical BMPs could include, but would not be limited to, construction practices such as the use of absorbent pads for spill containment, specified locations for construction vehicle refueling, and a daily vehicle inspection schedule designed to identify leaking fuels and/or oils as early as possible.
MM HAZ-3	In the event that rock blasting is used during construction, a noise and vibration calculation will be prepared and submitted to the California Public Utilities Commission and the County of San Diego for review before blasting at each site. The construction contractor will ensure compliance with all relevant local, state, and federal regulations relating to blasting activities. In addition to any other requirements established by the appropriate regulatory agencies, the pre-blast survey and blasting plan shall meet the following conditions:
	• The pre-blast survey shall be conducted for structures within a minimum radius of 1,000 feet from the identified blast site to be specified by San Diego Gas &Electric (SDG&E) or SDG&E's contractor. Sensitive receptors that could reasonably be affected by blasting shall be surveyed as part of the pre-blast survey. Notification that blasting would occur shall be provided to all owners of the identified structures to be surveyed prior to commencement of blasting. The pre-blast survey shall be included in the final blasting plan.
	• The final blasting plan shall address air-blast limits, ground vibrations, and maximum peak particle velocity for ground movement, including provisions to monitor and assess compliance with the air- blast, ground vibration, and peak particle velocity requirements. The blasting plan shall meet criteria established in Chapter 3 (Control of Adverse Effects) in the Blasting Guidance Manual of the U.S. Department of Interior Office of Surface Mining Reclamation and Enforcement.
	• The blasting plan shall outline the anticipated blasting procedures for the removal of rock material at the proposed pole locations. The blasting procedures shall incorporate line control to full depth and controlled blasting techniques to create minimum breakage outside the line control and maximum rock fragmentation within the target area. Prior to blasting, all applicable regulatory measures shall be met. The applicant, general contractor, or its subcontractor (as appropriate) shall keep a record of each blast for at least 1 year from the date of the last blast.

Table 2: M	itigated Negative Declaration Mitigation Measures
MM HAZ-4	Prior to flight operations for helicopter use during construction, San Diego Gas &Electric (SDG&E) shall coordinate with local air traffic control and comply with all Federal Aviation Administration regulations regarding helicopter use to prevent conflict with air traffic generated by the Ramona Airport. Documentation verifying SDG&E has coordinated with local air traffic control shall be provided to California Public Utilities Commission prior to use of helicopters for construction activities.
MM HAZ-5	Prior to flight operations for helicopter use during construction, a Helicopter Lift Plan shall be prepared if required pursuant to Federal Aviation Administration regulations. The Helicopter Lift Plan shall be submitted to the California Public Utilities Commission for review and approval.
	Hydrology and Water Quality
MM HYD-1	During routine operation and maintenance activities, if erosion is discovered along the proposed project alignment that would affect a surface water feature, including but not limited to a wet meadow, stream, channel or any other surface water body, San Diego Gas &Electric shall implement erosion control measures including but not limited to:
	 Periodic inspection and maintenance, including cleaning dips and cross-drains, repairing non- jurisdictional ditches, marking culvert inlets to aid in location, and clearing debris from culverts.
	 Avoid using roads during wet periods if such use would damage road drainage features. Grade road surfaces only as often as necessary to maintain a stable running surface and to retain
	the original surface drainage.
	 Place all excess material removed by maintenance operations in safe disposal sites and stabilize these sites to prevent erosion. Avoid locations where erosion will carry materials into a stream.
MM HYD-2	Herbicides shall not be applied within 100 feet of a surface water feature, including but not limited to a wet meadow, stream, channel or any other surface water body.
MM HYD-3	During pole repair work, mowing or trimming of vegetation shall be conducted to ensure that ground disturbance is minimized. Vegetation clearing shall be avoided where feasible. In the unlikely event that vegetation clearing or minor grading is required during operation and maintenance activities, San Diego Gas & Electric shall establish a temporary work site where work is to be conducted. Any topsoil or vegetation removed during this process shall be stored, and redistributed over the temporary work site when maintenance activities are completed, unless clearance is required around the poles.
MM HYD-4	San Diego Gas &Electric shall implement the terms and conditions as specified in the Regional Water Quality Control Board Clean Water Act Section 401 Certification (Certification No. 11C-114; May 16, 2012), which identifies the poles to remain in place and those to be relocated outside jurisdictional areas.
	Noise
MM NOI-1	At least 30 days before helicopter use and stringing operations are employed San Diego Gas &Electric (SDG&E) shall prepare and submit a public notice mailer to the California Public Utilities Commission for approval. The public notice mailer shall be prepared and mailed no less than 7 days prior to helicopter use and stringing operations along the proposed project alignment, SDG&E shall notify landowners, livestock facility owners, and residents within 50 feet of construction to provide adequate notice of potential helicopter and/or stringing activity within the project vicinity. If construction is delayed for more than 7 days, an additional notice shall be mailed to discuss the status and schedule of helicopter use and stringing operations.
MM NOI-2	In the event noise levels during construction activities are expected to exceed an 8- hour Leq of 75 dBA at the nearest property line or within 50 feet of the existing and proposed project alignment where noise sensitive areas are located, San Diego Gas &Electric (SDG&E) shall implement noise reduction measures to reduce noise levels below 75 dBA. Measures to be implemented could include: (1) portable noise barriers erected temporarily to reduce noise impacts at specific locations; or 2) if noise barriers would not reduce levels to below 75 dBA, depending on the location of residences and the level of construction noise, SDG&E shall offer to relocate affected residents.
MM NOI-3	In the unlikely event that rock blasting is used during construction, a noise and vibration calculation will be prepared and submitted to the California Public Utilities Commission and the County of San Diego for review before blasting at each site. The construction contractor will ensure compliance with all relevant local, state, and federal regulations relating to blasting activities.

ENVIRONMENTAL DETERMINATION

The IS has been prepared to identify the potential effects on the environment from implementation of the proposed project and to evaluate the significance of these effects. The IS is based on SDG&E's PEA filed on March 13, 2013, supplemental information supplied by SDG&E on May 21, 2013, May 31, 2013, and August 6, 2013 (SDG&E 2013b, 2013c), site inspections by the CPUC environmental team, and other environmental analysis for the project. Applicant Proposed Measures proposed by SDG&E as project design features s and ordinary construction/operating restrictions proposed by SDG&E in the PEA are incorporated into Section 4, Expanded Project Description, of this IS. Additional mitigation measures are provided as a result of the analysis conducted for the IS. SDG&E has agreed to implement these measures as well. Some of the additional mitigation measures are supplemental to the APMs; other measures supersede the APMs.

Based on the IS, the project as proposed by SDG&E would be mitigable to less-than-significant effects or have no impacts in the areas of aesthetics, agricultural resources, air quality/greenhouse gases, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, recreation, transportation and traffic, and utilities and service systems. Implementation of APMs and additional mitigation measures would avoid all potential impacts or reduce them to less-than-significant levels.

A Mitigation Implementation and Monitoring Plan (see Section 6 of the IS) has been prepared to ensure that the APMs and the additional mitigation measures are properly implemented. The plan describes specific actions required to implement each measure, including information on the timing of implementation and monitoring requirements.

Electric and Magnetic Fields

The IS/MND does not consider electromagnetic fields (EMFs) in the context of CEQA for determination of environmental impacts because there is no agreement among scientists that EMFs create a health risk and there are no defined or adopted CEQA standards for defining health risks from EMFs. EMF information associated with the project is presented for the benefit of the public and decision makers.

The proposed project will replace an existing power line and there will be no increase in the voltage used; therefore, there would be no significant change to EMF with implementation of the proposed TL 637 Wood-to-Steel Replacement Project.

Review Period

All comments regarding the correctness, completeness, or adequacy of this IS/MND must be received by the CPUC by no later than 5:00 p.m. on November 7, 2013.

The IS/MND, as well as SDG&E's application and PEA for the Tie-Line 637 Wood-to-Steel Replacement Project (March 2013) is available at the project's website:

http://www.cpuc.ca.gov/environment/info/dudek/WoodtoSteel/WoodtoSteel.htm.

Contact Person

W a

Lon Payne, Project Manager Energy Division California Public Utilities Commission 505 Van Ness Avenue San Francisco, California 94102 415.703.3175 October 3, 2013

Date

INTENTIONALLY LEFT BLANK

1.0 INITIAL STUDY ENVIRONMENTAL CHECKLIST FORM

1.1 PROJECT TITLE

San Diego Gas & Electric Company (SDG&E) – Tie-Line 637 Wood-to-Steel Replacement Project, Application No. 13-03-003

1.2 LEAD AGENCY NAME AND ADDRESS

California Public Utilities Commission (CPUC) Energy Division 505 Van Ness Avenue San Francisco, California 94102

1.3 CONTACT PERSON AND PHONE NUMBER

Lon Payne, Project Manager Energy Division 415.703.3175

1.4 **PROJECT LOCATION**

The approximately 14-mile span of the Tie-Line (TL) 637 route along which the proposed fire-hardening improvements are proposed is located on private and public lands within a central portion of unincorporated San Diego County, California, specifically within the Ramona and Santa Ysabel communities (see Section 4, Figure 4-1, Regional Map, and Figure 4-2, Vicinity Map). In addition to the County of San Diego (County), the proposed project alignment traverses federal and state jurisdictional boundaries including the U.S. Bureau of Land Management (BLM) on the Mount Gower Preserve, a segment of the Cleveland National Forest managed by the United States Forest Service (USFS), and the California Department of Transportation (Caltrans) on State Route 78 (SR-78) and State Route 79 (SR-79).

1.5 PROJECT SPONSOR'S NAME AND ADDRESS

San Diego Gas & Electric Company (SDG&E) 8330 Century Park Court San Diego, California 92123 Rebecca W. Giles 858.636.6876

1.6 GENERAL PLAN DESIGNATION

The County of San Diego General Plan does not include an agricultural land use designation; however, the proposed project traverses parcels designated Rural, Semirural, Open Space – Recreation, and Public Agency Lands.

1.7 ZONING

According to the County of San Diego's zoning designations, the existing zoning classifications on the project alignment include Limited Agriculture (A70), General Agriculture (A72), Open Space (S80), and General Rural (S92).

1.8 DESCRIPTION OF PROJECT

The Permit to Construct (PTC) application and accompanying Proponent's Environmental Assessment (PEA) identifies the proposed project, which consist of firehardening of an approximately 14-mile span of the Tie-Line (TL) 637 corridor connecting SDG&E's existing Creelman and Santa Ysabel Substations. Primary project components include the replacement of 156 existing wood tie-line support structures with fire-safe steel poles along approximately 14 miles of the TL 637 route, minor improvements to the Creelman and Santa Ysabel Substations, and the installation of a new fiber optic line that would be co-located on the new TL 637 steel poles. Implementation of the proposed fire-hardening improvements would help ensure SDG&E service reliability during wildfire events and improve fire safety conditions consistent with SDG&E's Community Fire Safety Program (CFSP), County of San Diego Fire Department goals, and fire safety objectives of the agencies and municipalities within the SDG&E service area.

For further discussion, see Section 4, Project Description.

1.9 SURROUNDING LAND USES AND SETTING

Land uses surrounding the project alignment include semi-rural residential development; agricultural; grazing, ranchland, and horse pastures; and several small commercial uses. Various permanent components and temporary staging areas under the proposed project are located on land zoned as Agricultural A70 and A72. The closest residences to the proposed alignment are located approximately 50 feet of the site (see Figure 5.12-1, Sensitive Receptors).

1.10 OTHER PUBLIC AGENCIES WHOSE APPROVAL IS REQUIRED

In addition to the PTC required by the CPUC for overall project approval and California Environmental Quality Act (CEQA) review, Table 1-1 describes additional permits that SDG&E will likely be required to obtain for project construction.

Table 1-1: Required Permits and Approvals					
Permit/Approval/Consultation	Agency	Jurisdiction/Purpose	Permit Status		
	Federal Agen	cies			
National Environmental Policy Act (NEPA) Compliance (Categorical Exclusion), Right-of-Way (ROW) Grant amendment	BLM	Construction on BLM- managed lands	Right-of-Way Grant Amendment approved June 1, 2012		
Clean Water Act Section 404	U.S. Army Corps of Engineers	Impacts to waters of the United States	Coverage under non-notifying Nationwide Permit No. 12		

Table 1-1: Required Permits and Approvals					
Permit/Approval/Consultation	Agency	Jurisdiction/Purpose	Permit Status		
	State Agencies				
National Pollutant Discharge Elimination System (NPDES)– General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities	State Water Resources Control Board	Stormwater discharges associated with construction activities disturbing more than 1 acre of land	Not yet applied for		
Section 401 Water Quality Certification	Regional Water Quality Control Board	Impacts to waters of the United States	Permit obtained		
Encroachment Permit	Caltrans	Construction, operation, and maintenance within, under, or over state highway ROW	Approval expired, an extension has been requested.		
Local Agencies					
Traffic Control Plan(s)	San Diego County	Construction within, under, or over county roadways	Not yet applied for		

Source: SDG&E 2013

INTENTIONALLY LEFT BLANK

2.0 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

Aesthetics	Agricultural and Forestry Resources	Air Quality
Biological Resources	Cultural Resources	Geology/Soils
Greenhouse Gas Emissions	Hazards and Hazardous Materials	Hydrology/Water Quality
Land Use/Planning	Mineral Resources	Noise
Population/Housing	Public Services	Recreation
Transportation/Traffic	Utilities/Service Systems	Mandatory Findings of Significance

INTENTIONALLY LEFT BLANK

3.0 ENVIRONMENTAL DETERMINATION

On the basis of this initial evaluation:

I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION (ND) will be prepared.

I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT (EIR) is required.

I find that the proposed project MAY have a "potentially significant impact" or "potentially significant impact unless mitigated" on the environment, but a least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An EIR is required, but it must analyze only the effects that remain to be addressed.

I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or ND pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or ND, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

a

October 3, 2013

Date

Lon Payne, Project Manager Energy Division California Public Utilities Commission

INTENTIONALLY LEFT BLANK

4.0 EXPANDED PROJECT DESCRIPTION

4.1 INTRODUCTION

San Diego Gas & Electric Company (SDG&E) has filed an application with the California Public Utilities Commission (CPUC) for a Permit to Construct for the SDG&E Tie-Line 637 Wood-to-Steel Replacement Project (proposed project). The application was filed March 13, 2013, and includes the Proponent's Environmental Assessment (PEA) prepared by SDG&E (SDG&E 2013a). The application and PEA describes the proposed project.

The proposed project would consist of fire hardening of an approximately 14-mile span of the Tie-Line (TL) 637 corridor connecting SDG&E's existing Creelman and Santa Ysabel Substations. Primary project components include the replacement of 156 existing wood tie-line support structures with fire-safe steel poles along approximately 14 miles of the TL 637 route, minor improvements to the Creelman and Santa Ysabel Substations, and the installation of a new fiber optic line that would be co-located on the new TL 637 steel poles. The approximately 14-mile span of the TL 637 route proposed for fire-hardening is located on private and public lands within a central portion of unincorporated San Diego County, California, specifically within the Ramona and Santa Ysabel communities.

4.2 **PROJECT OBJECTIVES**

SDG&E provides electrical power services throughout San Diego County. In providing these services, SDG&E maintains tie-lines throughout the service area for the transmission of electricity. Along the proposed project route, these tie-lines are currently supported by wood structures that are susceptible to fire damage in the event of a wildland fire. The proposed project site is located in a highly fire-prone area of San Diego County with frequent high winds.

According to SDG&E, the primary objective of the proposed project is to replace the existing wood structures with weathering steel poles in order to reduce the likelihood of service disruption along the TL 637 route in the event of a wildland fire, as well as preventing electrical power lines from igniting, particularly during extreme weather conditions. Implementation of the proposed fire-hardening improvements would help ensure SDG&E service reliability during wildfire events and improve fire safety conditions consistent with SDG&E's Community Fire Safety Program, County of San Diego Fire Department goals, and fire safety objectives of the agencies and municipalities within the SDG&E service area.

4.3 **PROJECT LOCATION**

The approximately 14-mile span of the TL 637 route along which the proposed fire-hardening improvements would occur is located on private and public lands within a central portion of unincorporated San Diego County, California, specifically within the Ramona and Santa Ysabel communities (see Figure 4-1, Regional Map, and Figure 4-2, Project Vicinity Map). In addition to the County of San Diego, the proposed project alignment traverses federal and state jurisdictional boundaries, including the U.S. Bureau of Land Management (BLM) on the Mount Gower Preserve, a segment of the U.S. Forest Service (USFS) Cleveland National Forest, and the California Department of Transportation (Caltrans) rights-of-way (ROW) at State Route 78

(SR-78) and SR-79. SDG&E was required to obtain a ROW grant amendment from the BLM for work proposed on the Mount Gower Preserve.

The ROW grant was approved and issued by the BLM on June 1, 2012. In addition to the Mount Gower Preserve, the proposed project alignment crosses the Simon Preserve. which is owned and managed by the County of San Diego. SDG&E's easement traversing the Simon Preserve was established prior to County acquisition of the preserve in 1959; therefore, no permits or approvals are required for work on this easement. SDG&E held a meeting on April 25, 2012, with BLM and County staff to determine work required in these areas so as not to inhibit public access to County land and associated trails. Additionally, two poles along the project alignment located within Cleveland National Forest jurisdiction (P115 and P116) have already been replaced (see photo inset); therefore, only reconductoring of the new tie-line associated with the proposed project would occur within the Cleveland National Forest jurisdictional boundaries (SDG&E 2013a). Additionally, an encroachment permit has been requested from Caltrans for work along SR-78 and SR-79.



TL 637 steel pole on Cleveland National Forest jurisdictional lands (P116 – micropile foundation)

Table 4-1: Project Alignment Locations by Jurisdiction				
Construction Component	Jurisdiction	Length (miles)	Description	
Wood-to-steel replacement	County of San Diego	12.30	147 poles	
	BLM	1.01	9 poles	
	USFS	0.37	2 poles (replacement complete)	
	Total	13.68	N/A	
Substation modifications	County of San Diego	N/A	N/A	
Fiber optic line installation	County of San Diego	12.3	N/A	
	BLM	1.01	N/A	
	USFS	0.37	N/A	

Table 4-1 shows the length of various alignment segments and the number of poles located within County, BLM, and USFS land.

BLM = Bureau of Land Management; USFS = U.S. Forest Service; N/A = not applicable

On the eastern end of the alignment, where TL 637 runs in a north–south direction and enters the Santa Ysabel Substation, the existing wood poles support a double-circuit configuration supporting both TL 637 and TL 629 (see photo inset). The proposed project would replace approximately 12 wood poles with 12 steel double-circuit structures in order to support TL 637 and TL 626 (see Attachment A, Detailed Alignment Maps, Map 10 of 10 (pole numbers P151 through P162)) (SDG&E 2013b).

Land uses surrounding the project alignment include semi-rural residential development; agricultural; grazing, ranchland, and horse pastures; and several small commercial uses. Various permanent components and temporary staging areas under the proposed project are located on land zoned as Limited Agriculture (A70), General Agriculture (A72), Open Space (S80), and General Rural (S92). The closest residences to the proposed project are located directly adjacent to the alignment.

4.4 PROJECT COMPONENTS

The proposed project would consist of fire hardening of an approximately 14-mile span of the TL 637 alignment connecting SDG&E's existing Creelman and Santa Ysabel Substations. The TL 637 route currently supports a 69 kilovolt (kV) power line and a 12 kV distribution facility. As shown in Attachment A, Detailed Alignment Maps, primary project components include the



Existing wood TL 637 and TL 626 double-circuit structure south of Santa Ysabel Substation (two structures in foreground supporting a double-circuit configuration)

replacement of 156 existing wood tie-line support structures with steel poles along approximately 14 miles of the TL 637 route, minor modifications to the Creelman and Santa Ysabel Substations, and the installation of a new fiber optic line that would be co-located on the new TL 637 steel poles. The following components would be included as part of the proposed project.

4.4.1 Wood-to-Steel Pole Replacement

Fire hardening of the TL 637 alignment would primarily consist of the removal and replacement of 156 wooden structures with a combination of 69 direct-embedded weathering steel poles and approximately 87 engineered weathering steel poles (see Attachment A, Detailed Alignment Maps). Direct-embedded poles would be installed at a depth of 7 to 16 feet, depending on pole location conditions, and engineered steel poles would be installed on a steel transition plate above a micropile foundation, which would minimize ground disturbance at these locations. Replacement pole locations would typically be situated approximately 6 to 8 feet from the original pole extraction points to reduce ground disturbance. On average, the steel poles proposed for installation would be spaced 480 feet apart and would range in height from approximately 43 to 110 feet above ground level.

Following removal, residual holes would be backfilled with soil from pole replacement within the alignment. Two poles under the proposed project would be cut at ground level to avoid impacts to sensitive resources that would occur if poles were removed completely.

As shown Attachment A, Detailed Alignment Maps, Poles 103–105 (Map 6 of 10), which currently traverse a wet meadow (an approximately 1,170-foot segment), would be relocated adjacent to and north of an existing access road out of the wet meadow. Pole R107, currently located in the wet meadow, would be removed from service and not replaced. One additional pole (P 114) would be removed and relocated approximately 200 feet from the original pole site. As part of the fire-hardening/pole-replacement process, underbuilt segments of the existing TL 637 alignment, along with existing distribution line circuits positioned on distribution-only structures, would be relocated to the new alignment in an underbuilt position. Consolidation of these alignment units would allow for the permanent removal of eight existing wood poles currently in use along the TL 637 alignment. The

majority of distribution lines would be installed overhead except in small areas where undergrounding of lines would be required (i.e., where underground circuits would be relocated).

Pole-top work at three existing structures and topping of one pole above existing communication infrastructure would also occur. Communication infrastructure includes cable TV and/or telephone infrastructure owned and maintained by non-SDG&E utilities.

4.4.2 Conductor Installation

The existing tie-line would be converted from 3/0 aluminum conductor steel reinforced/ alumoweld to 636 aluminum conductor steel support/alumoweld conductor. During reconductoring of the tie-line on the newly installed steel poles, SDG&E will evaluate the need to reconductor the TL 626 at the 12 pole locations where the TL 626 overlaps with the TL 637 alignment at shared-structure, double-circuit locations (see Attachment A, Detailed Alignment Maps, Map 10 of 10). If reconductoring of the TL 626 at these individual locations is not necessary at the time of project construction, SDG&E would reinstall the existing TL 626 conductors on the newly installed steel poles. If reconductoring is necessary, the TL 626 at these locations would be converted to a 636 aluminum conductor steel support/alumoweld conductor, similar to the proposed project conductor conversion.

4.4.3 Substation Improvements

Minor modifications to the existing Creelman and Santa Ysabel Substations would be required to accommodate the proposed project (see photo insets). Substation modifications would include installation of conduits, rewiring and rerouting of cabling, and equipment upgrades. All minor substation improvements would occur within the existing facility footprints and no expansion of either facility would result. An increase in voltage rating at the substations would not be required (SDG&E 2013b).

4.4.4 Fiber Optic Line Installation

As part of the proposed project, a new fiber optic cable would be installed along the TL 637 alignment connecting the Creelman and Santa Ysabel Substations. The cable would be an overhead appurtenance to the 69 kV line, with minor trenching proposed at two pole locations for interconnection with the substations. The proposed fiber optic line would improve relay coordination between the two substations, thus increasing relay efficiency and trip operations.



Creelman Substation



Santa Ysabel Substation

4.5 LAND AND RIGHT-OF-WAY REQUIREMENTS

Table 4-2 provides the estimated temporary and permanent land area required for construction of the proposed project.

Table 4-2: Total Temporary and Permanent Acreage Requirements				
Construction Component Temporary (acres) Permanent (acres)				
Micropile foundations	2.5	0.08		
Direct-embedded pole construction	1.1	0.02		
HLZs/staging areas	15.1	N/A		
Stringing sites	5.67	N/A		
Temporary guard structures	0.008–0.017	N/A		

Source: SDG&E 2013a

HLZ = helicopter landing zone; N/A = not applicable

The proposed project is considered a redevelopment and replacement project; therefore, no net increase in permanent land or ROW acreage would be required for operation of the proposed project, including pole replacements, substation improvements, and distribution line and fiber optic line installation. Table 4-2 shows permanent acreage requirements for proposed project pole installation; however, the proposed pole structures would replace existing TL 637 alignment structures, and would require fewer pole installations than those under existing conditions.

4.6 CONSTRUCTION ACTIVITIES

Construction of the proposed project would include removal of existing wooden poles; micropile construction for engineered steel poles; direct-embedded, weathering steel pole construction; guard pole installation; conductor stringing; dewatering at pole locations where groundwater is identified; blasting (only if rock is found during pole extraction); undergrounding of fiber optic cables; and establishment of temporary work areas. Temporary work areas would include staging and storage areas, helicopter landing zones (HLZs), stringing sites, pole sites, erection sites for 10 temporary guard structures, a temporary ROW, and access roads. Appropriate and applicable best management practices (BMPs) to prevent erosion and sedimentation would be implemented during construction activities such as dewatering and blasting, should such construction techniques be required at individual pole sites.

Soil Cut, Fill, and Excavation

Approximately 597 total cubic yards of soil would be excavated during construction activities, specifically during micropile and direct-embedded foundation construction (520 cubic yards) and trenching for the proposed fiber optic cable and underground distribution lines (77 cubic yards). Trenching activities associated with underground distribution systems would occur within a 10-foot radius of the pole, using approximately 5-inch conduits, with approximately 2 to 12 conduits per trench. Approximately 28 cubic yards of cut and 7 cubic yards of fill would be required during micropile platform preparation, as well as installation of a small retaining wall. In most locations, on-site reuse of soil would be feasible where extensive grading and excavation

is not necessary. Any excess soil generated during construction activities that cannot be reused on site would be transported to an appropriate recycling or ultimate disposal facility location.

Helicopter Use

Once the replacement steel poles have been erected, a mechanical pulling machine and/or helicopter would be used for tie-line installation. Helicopters would also be used to set new poles where ground access is limited. A light- or medium-duty helicopter such as a K-Max or A-star model would be employed, and helicopter use would only occur during daylight hours within the existing TL 637 ROW (except for takeoff and landing periods). Helicopter use would be compliant with all Federal Aviation Administration and Caltrans standards and regulations.

Temporary Construction Work Areas

During construction activities, four temporary staging areas would be required for storage of materials and equipment, refueling of vehicles and off-road equipment, staging of construction trailers and portable restrooms, construction worker parking, and lighting. Additionally, two HLZs would be established for takeoff and landing during flight operations (note that staging yards could also be utilized for incidental landing of helicopters). Locations of staging areas and HLZs are identified on Figure 4-3. Site preparation of the staging yards and HLZs may require minor vegetation clearing and mowing. No grading is anticipated. In addition to staging areas and HLZs, temporary work sites for stringing and pole installation would be required. Approximately 22 stringing sites, which would total approximately 5.47 acres, would be established for tie-line installation. No single stringing site would exceed 0.52 acre; however, additional or alternate stringing sites may be identified during construction based on field conditions. Similarly, pole installation would require temporary work spaces, which would largely be confined to previously disturbed areas around individual pole bases.

Access

Construction access would occur primarily within existing SDG&E ROW easements. No new access roads would be required during construction of the proposed project. Should construction equipment and/or vehicles be required to traverse a drainage during construction activities, equipment blades would be lifted 25 feet on either side of the drainage to avoid impacts during crossing.

All temporary construction work areas, as described previously, would be restored to preconstruction conditions once construction activities have ceased. Restoration efforts would include vegetation planting and propagation, reseeding, and replacement of previously erected structures, including fences.

Construction Equipment and Personnel

Table 4-3: Construction Equipment	
Equipment	Equipment Use
Two-ton flatbed trucks	Haul materials (including new poles)
Aerial bucket trucks	Access poles, string conductor, modify structure arms, and other various uses
Air compressors	Operate air tools
Backhoe	Excavate trenches
Boom truck	Access poles and other height-restricted items
Bulldozer	Repair access roads
Crane truck	Lift, position structures
Crane	Lift, position structures
Drilling rig/truck-mounted auger	Excavate for direct-embedded and micropile poles
Dump truck	Haul excavated materials/import backfill, as needed
Flatbed boom truck	Haul and unload materials
Forklift	Transport materials at structure sites and staging yards
Helicopter (light- and medium-duty)	Transport materials, string conductor, and install and remove travelers, set structures
Hydraulic rock-splitting/rock-drilling equipment	Drill through rock, as needed
Line truck	Install clearance structures
Mobile fueling trucks	Refuel equipment
Mower	Clear vegetation
Pickup trucks	Transport construction personnel
Portable generators	Operate power tools
Pulling rig	Pull conductor
Tool van	Store tools
Tractor/trailer unit	Transport materials at structure sites and staging yards
Water truck	Control dust
Wire truck	Hold spools of wire

Table 4-3 provides equipment and vehicle types required during construction.

Source: SDG&E 2013a.

It is anticipated that up to 140 workers will be employed during different construction phases of the project, consisting of multiple 4- to 6-person crews.

Construction Schedule

Construction of the proposed project would commence after securing all required approvals and permits. The construction of all project components would be expected to last approximately 9 months and would require using several crews working simultaneously on different project components. Table 4-4 provides SDG&E's proposed schedule for construction of the proposed project.

Table 4-4: Proposed Construction Schedule				
Proposed Project Segment	Duration (months)	Start Date		
Micropile foundation drilling and grouting	3	January 2014		
Capping and testing	0.5	March 2014		
Hole excavation (directly embedded poles)	4	January 2014		
Temporary pole installation	0.5	January 2014		
Power line construction (poles)	3	March 2014		
Pulling and tensioning	2.5	May 2014		
Sag work (overhead conductor)	2	June 2014		
Underground distribution lines	2.5	March 2014		
Demobilization	0.5	August 2014		
Cleanup	1	August 2014		

Source: SDG&E 2013a.

4.7 OPERATION AND MAINTENANCE

Following construction of the proposed project, operation and maintenance activities would consist of routine inspection, repair, and maintenance of the reconductored tie-line, pole structures, and associated appurtenances. Aerial inspections via helicopter and vehicular ground inspections would be performed annually, as currently performed for the existing transmission facilities. A small HLZ (approximately 100 feet by 100 feet) would be required for annual aerial inspections and flight operations in the event facility components need replacing. Four to ten operations/maintenance personnel, two helicopter staff, and a water truck would be required during these operations. Typical helicopter operations take approximately 1 day.

Additional operations and maintenance activities would include herbicide application, vegetation clearing, pole brushing, insulator washing, tree trimming, and ROW access and repairs, which would be performed on an as-needed basis.

Substation maintenance activities would be conducted as they are under existing conditions, including routine equipment monitoring, testing, and repair; preventive maintenance; vegetation clearing; and emergency and routine inspections to ensure service efficiency and continuity. One annual inspection would be performed over the course of 1 week.

Proposed project operations and maintenance activities would resemble those currently administered by SDG&E for the existing TL 637 alignment and activities would not increase in duration, intensity, or frequency following proposed project construction. SDG&E implements ordinary operating restrictions as described in Section 4.8.

4.8 APPLICANT PROPOSED MEASURES

Section 3.8 of the SDG&E PEA details the project protocols that will be followed during all projectrelated activities (SDG&E 2013a). Project protocols are specific to environmental issue areas, such as air quality, biological resources, cultural resources, or traffic impacts. SDG&E's protocols are herein termed Applicant Proposed Measures (APMs). Table 4-5 lists which APMs are applicable to each environmental issue area, and Table 4-6 lists the APMs proposed as project design features in the PEA.

Table 4-5: Applicant Proposed Measures for Each Issue Area			
Issue Area	APMs		
Project-wide/general	GEN-1 and GEN-2		
Aesthetics	AES-1 and AES-2		
Biological resources	BIO-1		
Cultural resources	CUL-1 through CUL-7		
Geology and soils	GEO-1 and GEO-2		
Hazardous materials	HAZ-1 through HAZ-4		
Hydrology and water quality	HYD-1		
Noise	NOI-1 through NOI-5		
Traffic	TRA-1 and TRA-2		
Recreation	REC-1		

Table 4-6: Applicant Proposed Measures			
APM Number	Description		
	General		
APM-GEN-1	Construction scheduling. SDG&E will coordinate construction of the proposed project such that construction activities will typically not overlap with other SDG&E construction projects in the immediate vicinity of the proposed project.		
APM-GEN-2	Helicopter use. Helicopter takeoffs and landings conducted at the Warnock and Santa Ysabel Staging Yards will be restricted to the approximate center of the staging area. Helicopter usage will conform to acceptable hours for construction activities, as outlined within the San Diego County Noise Code.		
	Aesthetics		
APM-AES-1	Visual screening of staging yards. The Warnock and Santa Ysabel Staging Yards will have opaque mesh installed along the fence that will soften the view of the <i>s</i> taging yard from public vantage points such as roads, residences, and public vantage points.		
APM-AES-2	Restoring appearance of temporarily disturbed areas. When proposed project construction has been completed, all temporarily disturbed terrain will be restored, as needed and as appropriate, to approximate pre-construction conditions. Revegetation would be used, where appropriate (revegetation in certain areas is not possible due to vegetation management requirements related to fire safety) to reestablish a natural-appearing landscape and reduce potential visual contrast between disturbed areas and the surrounding landscape.		

Table 4-6:	Applicant Proposed Measures				
APM Number	Description				
	Biological Resources				
APM-BIO-1	SDG&E Subregional NCCP. The proposed project will avoid and minimize impacts to biological resources through implementation of the SDG&E Subregional NCCP. The SDG&E Subregional NCCP establishes a mechanism for addressing biological resource impacts incidental to the development, maintenance, and repair of SDG&E facilities within the SDG&E Subregional NCCP coverage area. The proposed project is located within the SDG&E Subregional NCCP coverage area.				
	The SDG&E Subregional NCCP includes a Federal Endangered Species Act (ESA) Section 10(A) permit and a California ESA Section 2081 memorandum of understanding (for incidental take) with an Implementation Agreement with the United States Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW – formerly the California Department of Fish and Game), respectively, for the management and conservation of multiple species and their associated habitats, as established according to the Federal and State ESAs and California's NCCP Act. The NCCP's Implementing Agreement confirms that the mitigation, compensation, and enhancement obligations contained in the Agreement and the SDG&E Subregional NCCP meet all relevant standards and requirements of the California ESA, the Federal ESA, the NCCP Act, and the Native Plant Protection Act with regard to SDG&E's activities in the Subregional Plan Area.				
	Pursuant to the SDG&E Subregional NCCP, SDG&E conducted pre-construction studies for all activities occurring off of existing access roads in natural areas. An independent biological consulting firm surveyed all proposed project impact areas and prepared a Preactivity Study Report (PSR) outlining all anticipated impacts related to the proposed project. The proposed project will include monitoring for all project components, as recommended by the PSR and outlined in the SDG&E Subregional NCCP, as well as other avoidance and minimization measures outlined in the NCCP's Operational Protocols. The PSR was submitted to the CDFW and USFWS, and no comments were received. Prior to the commencement of construction, a verification survey will be conducted of the proposed project disturbance areas, as required by the SDG&E Subregional NCCP.				
	Biological monitors will be present during construction to assure implementation of the avoidance and minimization measures. If the previously delineated work areas must be expanded or modified during construction, the monitors will survey the additional impact area to determine if any sensitive resources will be impacted by the proposed activities, to identify avoidance and minimization measures, and to document any additional impacts. Any additional impacts are included in a Post-Construction Report (PCR) for purposes of calculating the appropriate mitigation, which generally includes site enhancement or credit withdrawal from the SDG&E mitigation bank. When construction is complete, the biological monitor will conduct a survey of the entire line to determine actual impacts from construction. The PCR will determine how much site enhancement and credit withdrawal from the SDG&E mitigation bank will be required to address impacts from project-related activities. These impact and mitigation credit calculations are submitted to the USFWS and the CDFW as part of the NCCP Annual Report pursuant to requirements of the NCCP and the NCCP Implementing Agreement.				
	Specific operating restrictions that are incorporated into the proposed project design to comply with the SDG&E Subregional NCCP include the following:				
	• Vehicles would be kept on access roads and limited to 15 miles per hour (Section 7.1.1, 1).				
	 No wildlife, including rattlesnakes, may be harmed, except to protect life and limb (Section 7.1.1, 2). 				
	• Feeding of wildlife is not allowed (Section 7.1.1, 4).				
	• No pets are allowed within the ROW (Section 7.1.1, 5).				
	• Plant or wildlife species may not be collected for pets or any other reason (Section 7.1.1, 7).				
	 Littering is not allowed, and no food or waste would be left on the ROW or adjacent properties (Section 7.1.1, 8). 				
	• Measures to prevent or minimize wild fires would be implemented, including exercising care when driving and not parking vehicles where catalytic converters can ignite dry vegetation (Section 7.1.1, 9).				
	Field crews shall refer all environmental issues, including wildlife relocation, dead or sick				

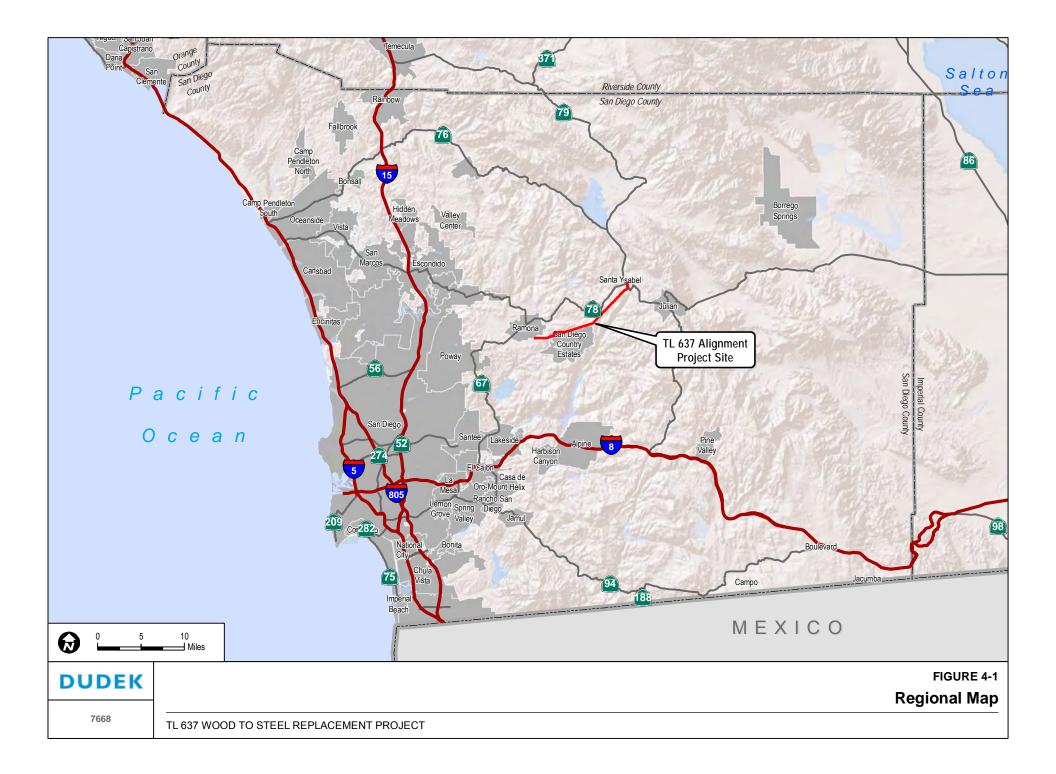
Table 4-6: A	Applicant Proposed Measures	
APM Number	Description	
	wildlife, or questions regarding environmental impacts to the Environmental Surveyor. Biologists or experts in wildlife handling may be necessary to assist with wildlife relocations (Section 7.1.1, 10).	
	• All SDG&E personnel would participate in an environmental training program conducted by SDG&E, with annual updates (Section 7.1.2, 11).	
	• The Environmental Surveyor shall conduct preactivity studies for all activities occurring in natural areas, and will complete a preactivity study form including recommendations for review by a biologist and construction monitoring, if appropriate. The form will be provided to CDFW and USFWS but does not require their approval (Section 7.1.3, 13).	
	 The Environmental Surveyor shall flag boundaries of habitats to be avoided and, if necessary, the construction work boundaries (Section 7.1.3, 14). 	
	• The Environmental Surveyor must approve of activity prior to working in sensitive areas where disturbance to habitat may be unavoidable (Section 7.1.4, 25).	
	• In the event SDG&E identifies a covered species (listed as threatened or endangered by the federal or state) of plant within the temporary work area (10-foot radius) surrounding a power pole, SDG&E would notify the USFWS (for Federal ESA listed plants) and CDFW (for California ESA listed plants) (Section 7.1.4, 28).	
	• The Environmental Surveyor shall conduct monitoring as recommended in the preactivity study form (Section 7.1.4, 35.).	
	• Supplies, equipment, or construction excavations where wildlife could hide (e.g., pipes, culverts, pole holes, trenches) shall be inspected prior to moving or working on/in them (Section 7.1.4, 37 and 38). Fugitive dust will be controlled by regular watering and speed limits (Section 7.1.4, 39).	
	• During the nesting season, the presence or absence of nesting species (including raptors) shall be determined by a biologist who would recommend appropriate avoidance and minimization measures (Section 7.1.6, 50).	
	• Maintenance or construction vehicle access through shallow creeks or streams is allowed. However, no filling for access purposes in waterways is allowed (Section 7.1.7, 52).	
	• Staging/storage areas for equipment and materials shall be located outside of riparian areas (Section 7.1.7, 53).	
	Cultural Resources	
APM-CUL-1	SDG&E's practices are in accordance with Federal, State, and local laws to protect and avoid cultural resources, including: Archaeological Resources Protection Act of 1979, as amended, National Historic Preservation Act of 1966, as amended (NHPA), California Penal Code 622 ½, PRC 5097.1 through 5097.6, PRC 5097.98, and CEQA. An independent Cultural Resource Management firm conducted pre-construction surveys under contract with SDG&E, prepared an inventory of cultural resources within the proposed project's Area of Potential Effect, and provided recommendations for avoidance and minimization to assist SDG&E in its compliance with CEQA requirements. SDG&E's Principal Cultural Resources Specialist worked closely with SDG&E design and engineering to move several of the poles during the design phase of the proposed project to avoid impacts to known cultural resources. Known cultural resources will be spanned or otherwise avoided through project design and through routing during construction activities to the extent feasible. In addition, the micropile pole type will be used at many locations during construction to minimize ground disturbance and decrease potential impacts to unknown buried deposits.	
APM-CUL-2	Cultural resources sensitivity training. Prior to construction or ground-disturbing activities, all SDG&E, contractor, and subcontractor project personnel will receive training regarding the appropriate work practices necessary to effectively implement the project design features and ordinary construction restrictions relating to cultural resources, including the potential for exposing subsurface cultural resources and paleontological resources. This training will include presentation of the procedures to be followed upon the discovery or suspected discovery of archaeological materials, including Native American remains, as well as of paleontologist as Environmentally Sensitive Areas prior to the start of construction. Construction crews would be instructed to avoid disturbance of these areas.	

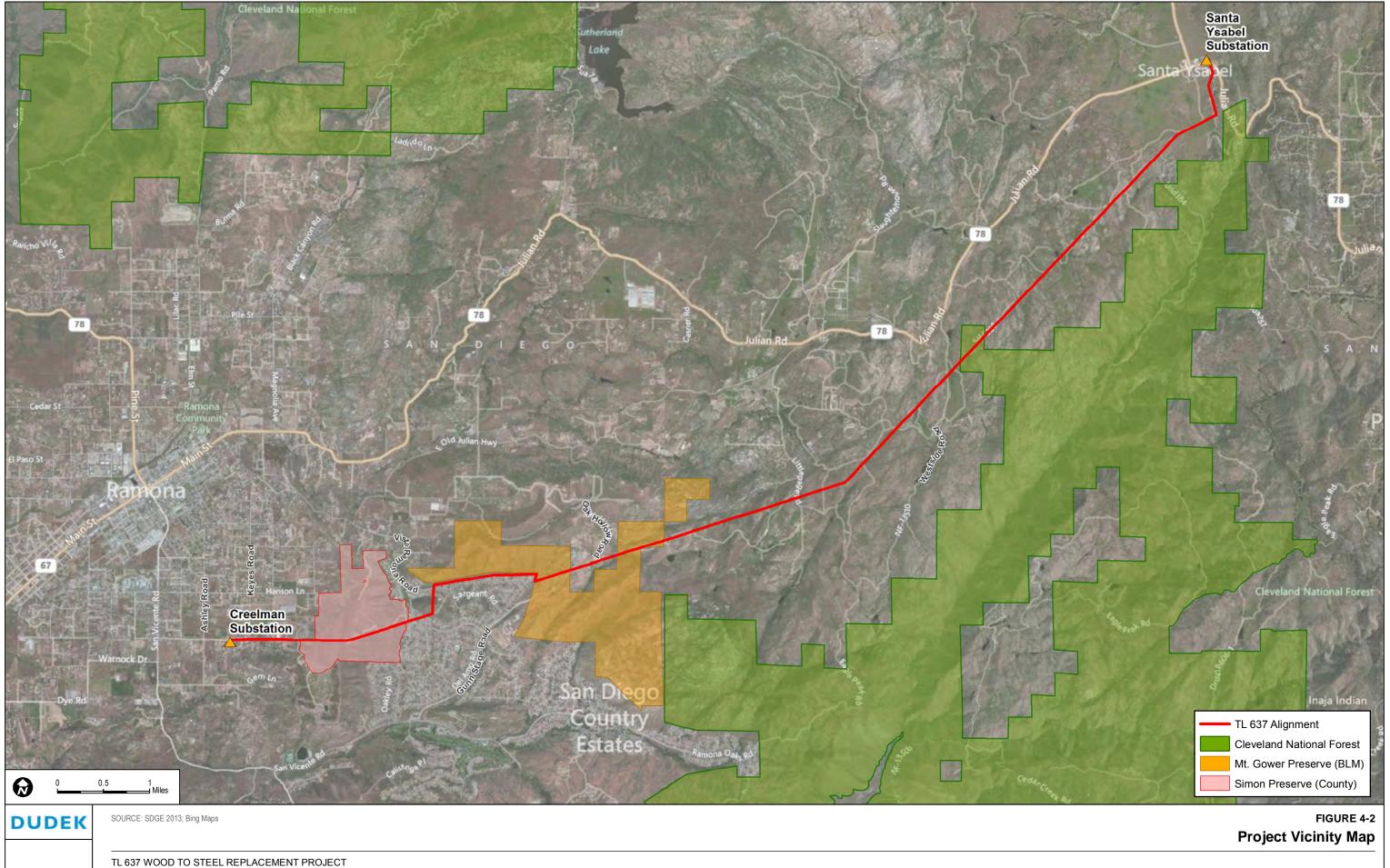
Table 4-6: A	Applicant Proposed Measures
APM Number	Description
APM-CUL-3	Archaeological monitoring. A qualified archaeologist will attend preconstruction meetings, as needed, and a qualified archaeological monitor will monitor activities in the vicinity of all known cultural resources within the proposed project area. The requirements for archaeological monitoring will be noted on the construction plans. The archaeologist's duties will include monitoring, evaluation of any finds, analysis of materials, and preparation of a monitoring results report conforming to Archaeological Resource Management Reports guidelines.
APM-CUL-4 ^a	Unanticipated discovery of cultural resources. In the event that cultural resources are discovered, the archaeologist would have the authority to divert or temporarily halt ground disturbance to allow evaluation of potentially significant cultural resources. The archaeologist would contact SDG&E's Cultural Resource Specialist and Environmental Project Manager at the time of discovery. The archaeologist, in consultation with SDG&E's Cultural Resource Specialist, would determine the significance of the discovered resources. SDG&E's Cultural Resource Specialist and Environmental Project Manager would be the significance of the discovered resources. SDG&E's Cultural Resource Specialist and Environmental Project Manager would have to concur with the evaluation procedures to be performed before construction activities would be allowed to resume. For significant cultural resources, preservation in place would be the preferred manner of mitigating impacts. For resources that could not be preserved in place, a Research Design and Data Recovery Program would be prepared and carried out to mitigate impacts. Cultural resources curation would be implemented if resources cannot be preserved in place, and are considered to be unique and important. All collected cultural remains would be cataloged, and permanently curated with an appropriate institution. All artifacts would be analyzed to identify function and chronology as they relate to the history of the area. Faunal material would be identified as to species.
APM-CUL-5	Unanticipated discovery of human remains. If human remains are encountered during construction, SDG&E will comply with California State law (Health and Safety Code Section 7050.5; PRC Sections 5097.94, 5097.98 and 5097.99). This law specifies that work will stop immediately in any areas where human remains or suspected human remains are encountered. The appropriate agency and SDG&E will be notified of any such discovery. SDG&E will contact the Office of the Medical Examiner. The Medical Examiner has two working days to examine the remains after being notified by SDG&E. Under some circumstances, a determination may be made without direct input from the Medical Examiner. When the remains are determined to be Native American, the Medical Examiner has 24 hours to notify the Native American Heritage Commission (NAHC). The NAHC will immediately notify the identified most likely descendant (MLD) and the MLD has 24 hours to make recommendations to the landowner or representative for the respectful treatment or disposition of the property must be secured from further disturbance. If there are disputes between the landowner and the nearest likely descendants, the NAHC will mediate the dispute to attempt to find a resolution. If mediation fails to provide measures acceptable to the landowner, the landowner or his or her authorized representative shall re-inter the human remains and items associated with Native American burials with appropriate dignity on the property in a location not subject to further subsurface disturbance.
APM-CUL-6	Paleontological monitoring. A paleontological monitor will work under the direction of a qualified project paleontologist and will be on site to observe excavation operations that involve the original cutting of previously undisturbed deposits for the eight poles located within paleontologically sensitive formations (i.e., Pomerado Conglomerate, Late Pleistocene to Holocene-age channel deposits). A paleontological monitor is defined as an individual who has experience in the collection and salvage of fossil materials.
APM-CUL-7	Unanticipated discovery of fossils. In the event that fossils are encountered, the paleontological monitor would have the authority to divert or temporarily halt construction activities in the area of discovery to allow recovery of fossil remains in a timely fashion. The paleontologist would contact SDG&E's Cultural Resource Specialist and Environmental Project Manager at the time of discovery. The paleontologist, in consultation with SDG&E's Cultural Resource Specialist, would determine the significance of the discovered resources. SDG&E's Cultural Resource Specialist and Environmental Project Manager would have to concur with the evaluation procedures to be performed before construction activities would be allowed to resume. Because of the potential for recovery of small fossil remains, it may be necessary to set up a screen-washing operation on site. If fossils are discovered, the paleontologist (or paleontological monitor) would recover them along with pertinent stratigraphic data. In most cases, this fossil salvage can be completed in a short period of time.

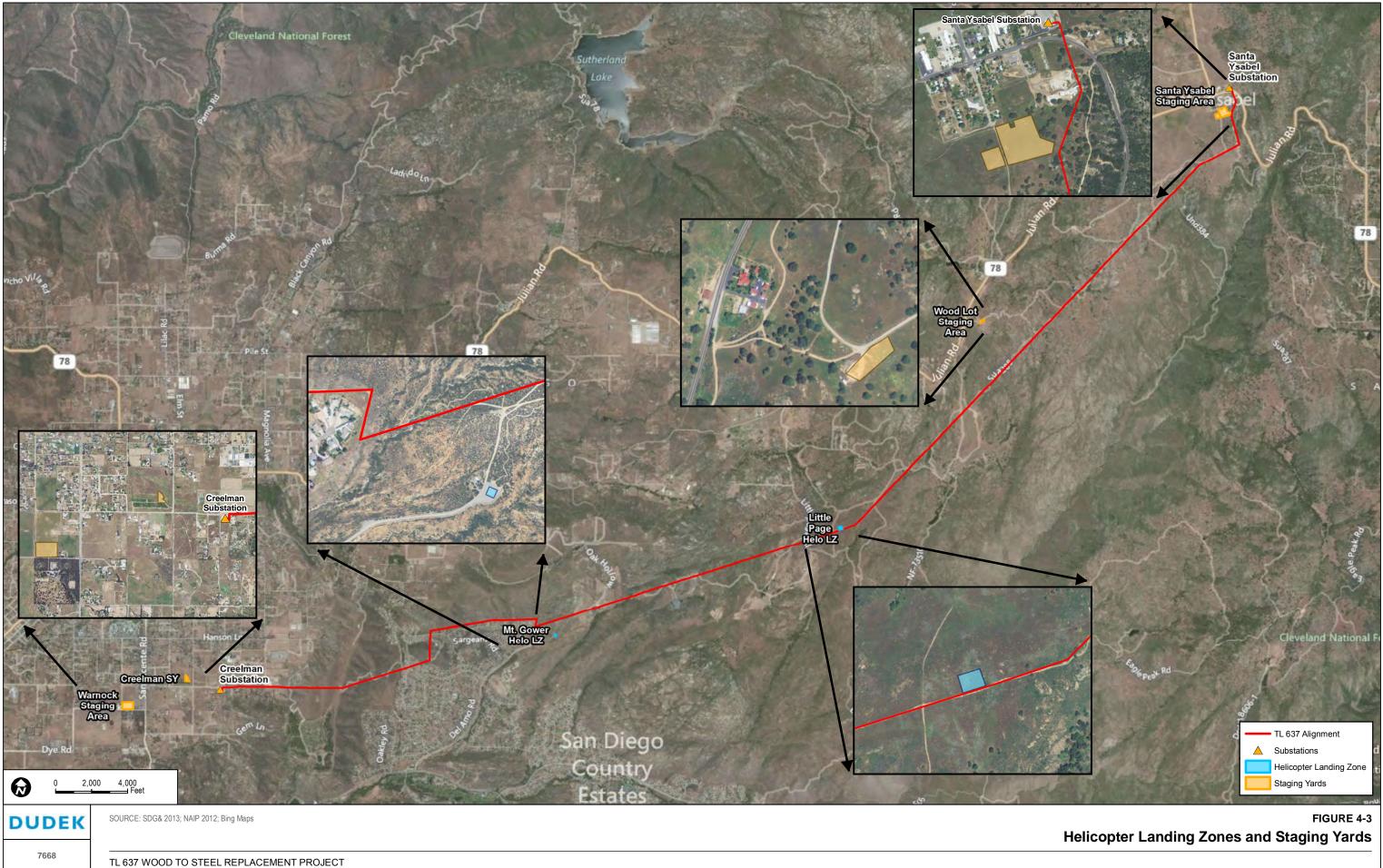
Table 4-6: /	Applicant Proposed Measures
APM Number	Description
	Because of the potential for recovery of small fossil remains, such as isolated mammal teeth, recovery of bulk sedimentary-matrix samples for off-site wet screening from specific strata may be necessary, as determined in the field. Fossil remains collected during monitoring and salvage would be cleaned, repaired, sorted, cataloged, and deposited in a scientific institution with permanent paleontological collections, and a paleontological monitoring report would be written.
	Geology and Soils
APM-GEO-1	Project plans and specifications take into account the potential for mass wasting and liquefaction. A geotechnical study was conducted by VO Engineering Inc. in 2011 to evaluate the pole locations along the proposed project power line route for the presence of geologic hazards. The geotechnical study indicated the presence of geologic conditions potentially susceptible to mass wasting or liquefaction at the locations of proposed Pole Nos. P103, R107, P110, P114, P129, P22, P23, P48, P49, and P51. The final project plans and specifications prepared by the responsible engineer have taken into account the geologic hazard conditions present at these locations and include appropriate engineering design and construction measures to minimize the potential for damage to proposed project structures in the event that there is an occurrence of these hazards.
APM-GEO-2	Soil stabilization. Once temporary surface disturbances are complete, areas that would not be subject to additional disturbance will be stabilized to control soil erosion.
	Hazards and Hazardous Materials/Fire Safety
APM-HAZ-1	Steel structures. New structures are designed utilizing steel to avoid potential adverse effects relating to fire and fire damage.
APM-HAZ-2	TL 637 Project Fire Plan. The purpose of the proposed project is to improve the reliability of the power lines in fire-prone (very high to extreme fire threat areas) and wind-prone areas and minimize the risks associated with future wildfires. The proposed project is located within the Very High fire threat designation, as indicated on SDG&E's 2012 Fire Threat Zone Map. The proposed project design includes fire-hardening techniques, including replacing wood poles with steel poles, increasing conductor spacing to maximize line clearances, installing steel poles designed to withstand an extreme wind-loading case and known local conditions, and installing longer polymer insulators. These design components of the proposed project minimize fire risk through enhanced safety and reliability of the power line system during extreme weather conditions. In addition to these design features, the proposed project will implement the TL 637 Project Fire Plan. The TL 637 Project Fire Plan exceeds fire prevention measures as stated in California Forestry Practice Rules, PRC 4:6. Avoidance and minimization measures to prevent wildland fires include training, oversight, and work controls in all phases of preparation and implementation of the proposed project. Training and briefings in fire prevention and suppression methods are key components of reducing the threat of a wildland fire on the proposed project. Additionally, suppression in the event of a fire starting will be facilitated by locating water tanks within two minutes of a work site, requiring firefighting equipment within 50 feet of any work/equipment site, and avoidance of construction activities during periods of declared Red Flag Warnings or other severe fire weather conditions as identified by SDG&E. Other avoidance and minimization measures may be employed, such as standby firefighters and fire engines. In addition, portions of the proposed project occurring within the Cleveland National Forest Fire Plan. The plan describes the project activity level (PAL) work r
APM-HAZ-3	Electric Standard Practice 113.1 – Wildland Fire Prevention and Fire Safety. The proposed project will be constructed consistent with Electric Standard Practice 113.1 – Wildland Fire Prevention and Fire Safety. Electric Standard Practice 113.1 outlines practices and procedures for SDG&E activities occurring within areas of potential wildland fire threat within SDG&E's service territory. The proposed project design includes replacement of wood poles with steel poles, increased conductor spacing to maximize line clearances, installation of steel poles to withstand an extreme wind-loading case and known local conditions, and undergrounding of a portion of the power line. These design components of the proposed project minimize the fire risk through enhanced safety and reliability of the power line system, particularly during extreme weather conditions. The standard practices in Electrical Standard Practice 113.1 include avoidance and minimization measures to comply with state and local fire ordinances.

APM				
Number	Description			
APM-HAZ-4	Coordination and measures within parks and preserves. Appropriate safety measures will be implemented where trails and construction areas are near each other within the Simon Preserve, Mt. Gower Preserve, and the Mt. Gower HLZ to provide a safety buffer between recreational users and construction areas. Construction schedule and activities will be coordinated with the authorized officer for the recreation area.			
	Hydrology and Water Quality			
APM-HYD-1	SDG&E Water Quality Construction BMPs Manual. SDG&E's Water Quality Construction BMPs Manual (BMP Manual) was created to organize SDG&E's standard water quality protection procedures for various specific actions that routinely occur as part of SDG&E's ongoing construction, operations, and maintenance activities. The primary focus of most BMPs is the reduction and/or elimination of water quality impacts during construction of linear projects such as the proposed project. The BMPs described within the BMP Manual were derived from several sources, including the State of California guidelines as well as the Caltrans Water Quality BMPs. The BMP Manual will be utilized during construction (by way of preparation and implementation of the SWPPP), operation, and maintenance of the proposed project to ensure compliance with all relevant SDG&E and government-mandated water quality standards.			
	Noise			
APM-NOI-1	Generators. Generator use will be limited to less than 50 horsepower (HP) at all staging yards. Any generators used at the staging yards will be located away from noise sensitive areas, and positioned on the property to comply with the San Diego County noise ordinance.			
APM-NOI-2	Mufflers. Functioning mufflers will be maintained on all equipment.			
APM-NOI-3	Resident notification. Residents within 50 feet will receive notification of the start of construction at least one week prior to the start of construction activities within that area.			
APM-NOI-4 ^b	Construction noise. SDG&E will meet and confer with the County, as needed, to discuss any anticipated deviations from the requirements of the County Noise Code. If requested by the County, SDG&E will evaluate potential additional steps to reduce noise impacts, including relocation of residents and/or the use of portable noise barriers.			
APM-NOI-5 ^c	Blasting. In the unlikely event that rock blasting is used during construction, a noise and vibration calculation will be prepared and submitted to SDG&E Environmental Programs and Transmission Engineering and Design for review before blasting at each site. The construction contractor will ensure compliance with all relevant local, state, and federal regulations relating to blasting activities, as well as SDG&E's blasting guidelines.			
	Recreation			
APM-REC-1	Temporary trail detours. Where feasible, temporary detours will be provided for trail users. Signs will be provided to direct trail users to the temporary trail detours.			
	Traffic			
APM-TRA-1	Standard Traffic Control Procedures. SDG&E will implement a traffic control plan to address potential disruption of traffic circulation during construction activities and address any safety issues. The traffic control plan will be prepared by the project engineer or contractor and subject to approval by the County.			
APM-TRA-2	Encroachment permits. SDG&E will obtain the required encroachment permits from Caltrans for work near Highways 78 and 79, and will ensure that proper safety measures are in place while construction work is occurring near public roadways. These safety measures include flagging, proper signage, and orange cones to alert the public to construction activities near the roadway.			

^a MM CUL-4 in Initial Study Section 5.6, Cultural Resources, supersedes APM-CUL-4. ^b MM NOI-2 in Initial Study Section 5.12, Noise, supersedes APM-NOI-4. ^c MM NOI-3 in Initial Study Section 5.12, Noise, supersedes APM-NOI-5.







5.0 EVALUATION OF ENVIRONMENTAL IMPACTS

5.1 INTRODUCTION

This Initial Study includes analyses of the16 environmental issue areas listed below by section number. These issue areas incorporate the topics presented in the California Environmental Quality Act (CEQA) Environmental Checklist (identified in Appendix G of the CEQA Guidelines).

5.2	Aesthetics	5.10	Land Use/Planning
5.3	Agricultural and Forestry Resources	5.11	Mineral Resources
5.4	Air Quality/Greenhouse Gas Emissions	5.12	Noise
5.5	Biological Resources	5.13	Population/Housing
5.6	Cultural Resources	5.14	Public Services
5.7	Geology/Soils	5.15	Recreation
5.8	Hazards and Hazardous Materials	5.16	Transportation/Traffic
5.9	Hydrology/Water Quality	5.17	Utilities/Service Systems

Explanations for the checklist findings, as well as existing conditions, are provided for each environmental issue area.

5.1.1 Environmental Setting

The Environmental Setting sections present a description of the physical environment for each of the 16 environmental parameters analyzed for the Tie-Line 637 Wood-to-Steel Replacement Project (proposed project). The discussion of environmental setting varies among the parameters. The content and level of detail of the environmental setting is relative to the parameter discussed and the extent of the potential impacts that could occur from project activities.

5.1.2 Regulatory Setting

Current regulatory settings are presented in the Regulatory Setting sections of the 16 environmental parameters. Federal, state, regional, and local regulations applicable to the project are identified.

5.1.3 Environmental Impacts

The results of the environmental analyses conducted for the proposed project are presented in these portions of Sections 5.2 through 5.17. Each of the environmental analysis discussions present:

- Significance criteria
- Impact discussion
- Levels of significance
- Mitigation measures.

The significance criteria are a benchmark for determining if a project would result in significant environmental impacts when evaluated against the baseline (i.e., existing conditions). Each of the environmental analysis sections presents discussions about the potential effects of the proposed project on the environment. Analyses are presented for each CEQA Environmental Checklist question, accompanied by a determination made as to whether or not the proposed project would result in a significant environmental impact based on the established thresholds of significance. Mitigation measures are identified, if warranted, that could reduce the impact to a less-than-significant level. The impact analyses are divided into the basic phases of the project (i.e., construction, operation, and maintenance) and further divided by component if warranted by the environmental parameter, significance criteria, or impact analysis.

5.2 AESTHETICS

Would the project:		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a)	Have a substantial adverse effect on a scenic vista?			\boxtimes	
b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				
<i>c)</i>	Substantially degrade the existing visual character or quality of the site and its surroundings?				
d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?				

5.2.1 Environmental Setting

This section of the Initial Study (IS) documents the visual setting of the proposed project alignment and surrounding landscape with respect to scenic quality and visual sensitivity. The visual analysis is based on the review of San Diego Gas & Electric's (SDG&E's) Proponent's Environmental Assessment (PEA) (SDG&E 2013a), and a review of relevant governmental plans and policies regarding visual resources. In addition, Dudek visited the project site on June 12, 2013, in order to accurately describe the existing landscape conditions and document views of estimated potential visual changes that could occur as a result of the proposed project. Visual simulations prepared by SDG&E as part of the PEA (and in response to data requests) have been reviewed and are incorporated into the visual analysis to document viewing conditions and changes to the existing landscape.

5.2.1.1 Description of Terms and Concepts

Scenic Quality is a measure of the intrinsic scenic beauty of a landscape and the positive responses it evokes. Scenic quality is described in terms of the composition of the built and natural environment, considering landform, vegetation, rocks, cultural features, and water features. The scenic quality of the project area was evaluated according to the following three classifications:

• **Distinctive:** Where the landscape composition combines to provide unusual, unique, or outstanding scenic quality. These landscapes have strong positive attributes of variety, unity, vividness, intactness, order, harmony, uniqueness, pattern, and/or balance.

- **Typical:** Where the landscape composition combines to provide scenic quality that is representative of the area, given the characteristic natural features and land use developments. These landscapes have generally positive, although commonly seen, attributes with respect to variety, unity, vividness, intactness, order, harmony, uniqueness, pattern and balance. They are representative of the region's natural and ecological qualities and land use patterns.
- **Indistinctive:** Where the landscape composition combines to provide low scenic quality. These areas typically have weak, degraded, or missing attributes of variety, unity, vividness, intactness, order, harmony, uniqueness, pattern, and balance.

Visual Sensitivity is a measure of an existing landscape's susceptibility to adverse visual changes, based on the combined factors of number and type of viewers, and potential visual exposure to the proposed project. Visual Sensitivity is evaluated according to high, moderate, and low visual sensitivity ranges. A landscape with a high degree of visual sensitivity is less able to accommodate adverse visual changes from the proposed project, than areas deemed to be of moderate or low sensitivity.

- **Viewer:** Type and Volume of Use. This factor considers the type of use and volume of use that various land uses receive that may be visually sensitive to the proposed project. Areas considered to be of potential high visual sensitivity include residential areas, park and recreation areas, and major travel and recreation routes.
- Viewer Exposure: Addresses the variables that affect viewing conditions from potentially sensitive areas. Viewer exposure considers the following factors: (1) landscape visibility (the ability to see the landscape where the project will be); (2) the viewing distance (i.e., the proximity of viewers to the project); (3) viewing angle—whether the project or alternatives would be viewed from above (superior), below (inferior), or from a level (normal) line-of-sight; (4) and extent of visibility—whether the line-of-sight is open and panoramic to the project area or restricted by terrain, vegetation, and/or buildings; and (5) duration of view.

5.2.1.2 Scenic Quality

Overview

The proposed project alignment spans approximately 14 miles in eastern San Diego County primarily characterized by undeveloped, rural landscape and rural residences. The majority of the proposed project alignment extends through hillside-laden topographic areas interspersed with open spaces and agricultural uses and through both public and private lands. Elevations along the proposed project alignment range from approximately 1,500–3,200 feet above mean sea level (SDG&E 2013a). Views of Tie-Line (TL) 637 would be available from State Route 78 (SR-78) and State Route 79 (SR-79), local roads, rural residences, and recreation areas. Along SR-78 and SR-79, existing vertical wooden poles and horizontal, slightly concave lines associated with TL 637 are prominent built features in the landscape. Other notable elements include the tall mounding form of row crop trees, the short, spreading form of grasses and low shrubs, and the relatively intermittent tall forms associated with landscape trees in the area. The

tall, vertical forms and regular lines displayed by wood support structures are visible across the flat landscape.

Nighttime lighting in the alignment area includes street lighting and lighting associated with scattered residential and commercial development throughout unincorporated eastern San Diego County. Lighting sources are widely dispersed due to the low-density, largely undeveloped character of the Ramona and Santa Ysabel communities.

Key Observation Points (KOPs)

The following discussion covers the five primary areas along the proposed project alignment where views of the alignment are afforded to motorists, residents, and visitors to the Mount Gower and Simon preserves (see Figure 5.2-1, Key Observation Point Locator Map). Depending on the distance and angle of views, location of the viewer, and intervening topography within each area, the proposed project may occur in foreground views, middle-ground views, and background views. Figures 5.2-2 through 5.2-6 show representative publically accessible project views along the TL 637 alignment where pole replacement and other improvements would be implemented as part of the proposed project.

Community of Ramona

The Ramona community is predominantly characterized by agricultural land uses including crop production, grazing land, open pastures, and livestock facilities, as well as semi-rural residential development scattered throughout the area. The existing Creelman Substation, located along Creelman Lane in Ramona, marks the starting point of the proposed pole replacement project including minor modifications to the substation. Figure 5.2-2 shows a representative view from Creelman Lane east of Keyes Road looking westerly (KOP 1). Views afforded to motorists along Creelman Lane include foreground views of existing wood pole structures, overhead power lines, and low-lying vegetation and mature trees on either side of the roadway. Open pastures occur to the north and south of the viewshed. Middle-ground and background views of existing wooden pole structures and power lines, as well as mature trees are afforded to motorists travelling down Creelman Lane.

Simon Preserve

The Simon Preserve, located 2 miles southeast of the unincorporated community of Ramona, encompasses approximately 617 acres of open space, recreational use trails, and Ramona Peak. Views within the preserve afforded to recreationalists include distant views of El Cajon Mountain, Cuyamaca Peak, mountains, and hillside geographic features within the Ramona area and panoramic views of open space containing interspersed mature trees, grasslands, and low-lying vegetation. Elevation along the portion of the proposed project alignment within the Simon Preserve ranges from approximately 1,500–2,000 feet (SDG&E 2013a). Figure 5.2-3 shows a representative view from the Simon Preserve looking east (KOP 2). Foreground views from this vantage point include open grassland, existing wood pole structures and power lines, and access roads. Middle-ground views afforded to recreationalists include rock outcroppings along hillsides and distant rural residences. Background views are populated by distant mountain ranges.

San Diego County Estates

The San Diego Country Estates are a low-density planned residential community located in the San Vicente Valley southeast of Ramona. The estates contain 3.451 lots with a population of approximately 10,000 people and two elementary schools (San Diego Country Estates Association 2011). Viewers in this area primarily consist of residents of the San Diego Country Estates and motorists travelling through the neighborhood. In the western area of San Diego Country Estates, east and west of Arena Way, SDG&E's right-of-way (ROW) is located between the residences (see photo inset). Views are also afforded to visiting recreationalists and pedestrians in the local area. Figure 5.2-4 shows views from the Mount Gower Preserve trailhead looking west along the proposed project alignment toward the San Diego Country Estates (KOP 3). Foreground views from this vantage point include low-lying vegetation and undeveloped land, two existing wooden pole structures on the project alignment and associated power lines, and a dirt access road. Middle-ground views consist of single-family residences within the San Diego Country Estates and additional wooden poles in front of hillsides to the north. Background views include a distant mountain range ridgeline. Pole structures from this vantage point generally blend in with existing topography and landscape features.



View looking west toward Arena Way in San Diego Country Estates along SDG&E's ROW between residences.

Cleveland National Forest, Mount Gower Preserve, Rural County Lands

The Cleveland National Forest, encompassing approximately 460,000 acres and managed by the U.S. Forest Service (USFS), is located primarily south of the proposed project alignment, through which a small segment of the project traverses. The Mount Gower Preserve encompasses approximately 1,574 acres and is located southeast of the Ramona community. Mount Gower primarily consists of mixed chaparral, oak woodlands, and open meadows along with numerous recreational trails and several stream systems. These areas are predominantly undeveloped and are characterized by low-lying grassland and scrub vegetation, rock outcroppings, and interspersed mature tree groupings. Elevations exceed 3,000 in some areas. Figure 5.2-5 shows the primary vantage point from the Inaja Memorial Picnic Ground located off SR-79 looking in a westerly direction onto the Cleveland National Forest (KOP 4). This vantage point is considered a designated scenic vista. Views include open grasslands and wooded hillsides, with middle-ground views of existing wooden pole structures and associated power lines along the alignment. From this distance, poles blend in with surrounding landscape and are not distinctly discernible.

Community of Santa Ysabel

The unincorporated Santa Ysabel community is located at the convergence of SR-78 and SR-79, north of Inaja Memorial Park and Julian in eastern San Diego County. The community area

predominantly characterized by agricultural land uses including crop production, grazing land, open pastures, and livestock facilities, as well as scattered commercial and low-density residential development, including rural residences. Figure 5.2-6 shows motorist views from the crossing of SR-78 and SR-79 looking northwest (KOP 5). Foreground views afforded to motorists include low-lying grasses along the roadway, mature tree and existing wooden pole structures and associated power lines. One power line traverses the viewshed at eye level in the foreground and middle-ground. Background views are occupied by low elevation mountain ranges and mature trees scattered over the landscape.

5.2.2 Regulatory Setting

State

California Department of Transportation: Scenic Highway Program

The California Scenic Highway Program was created in 1963 to preserve and protect scenic highway corridors from change that would diminish the aesthetic value of lands adjacent to California highways. The State Scenic Highway System includes both "designated" scenic highways and "eligible" scenic highways: an "eligible" state highway becomes "designated" after a local jurisdiction adopts a scenic corridor protection program, applies to the California Department of Transportation (Caltrans) for scenic highway approval, and receives the designation (Caltrans 2013). Within the project area, there are no designated State Scenic Highways; however, SR-78 and SR-79 are "eligible" State Scenic Highways.

Local

The proposed project alignment is located in unincorporated San Diego County, specifically within the Ramona and Santa Ysabel communities. The Ramona Community Plan (2011) and Central Mountain Subregional Plan (2011) under the County of San Diego General Plan dictate land use policies and guidance for the area's development. The County of San Diego General Plan does not include an agricultural land use designation; however, the proposed project traverses parcels designated Rural, Semi-Rural, Open Space – Recreation, and Public Agency Lands. According to the County of San Diego's zoning designations, the existing zoning classifications on the project alignment include Limited Agriculture (A70), General Agriculture (A72), Open Space (S80), and General Rural (S92). Pertinent land use policies and plans are discussed in Section 5.10, Land Use, of this IS. Applicable regulations and standards related to visual resources are described below and analyzed in Section 5.10, Land Use.

San Diego County General Plan - Conservation and Open Space Element

The San Diego County General Plan does not contain a separate element for visual or aesthetic resources; however, the General Plan does address visual and scenic resources including scenic corridors, scenic viewsheds, and dark skies, within the Conservation and Open Space Element. Generally, the Conservation and Open Space Element emphasizes the protection of scenic corridors and dark skies and the enhancement of community character within the built environment. Scenic corridors are discussed at length in the General Plan and the County has established a Scenic Highway System that, in addition to the officially designated State Scenic Highways, identifies interstates, highways, and roads with particularly scenic features and available views of natural landscapes (County of San Diego 2011a). In total, 53 roadways,

including a number of facilities in the project area, are included in the County Scenic Highway System. SR-78 and SR-79 are identified as County scenic routes.

County of San Diego General Plan

In addition to the County Scenic Highway System, the following policies of the Conservation and Open Space Element are relevant to the proposed project (County of San Diego 2011a):

- **Policy COS-11.1: Protection of Scenic Resources.** Require the protection of scenic highways, corridors, regionally significant scenic vistas, and natural features, including prominent ridgelines, dominant landforms, reservoirs, and scenic landscapes.
- **Policy COS-11.2: Scenic Resource Connections.** Promote the connection of regionally significant natural features, designated historic landmarks, and points of regional historic, visual, and cultural interest via designated scenic corridors, such as scenic highways and regional trails.
- **Policy COS-11.3: Development Siting and Design.** Require development within visually sensitive areas to minimize visual impacts and to preserve unique or special visual features, particularly in rural areas, through the following:
 - Creative site planning
 - Integration of natural features into the project
 - Appropriate scale, materials, and design to complement the surrounding natural landscape
 - Minimal disturbance of topography
 - Clustering of development so as to preserve a balance of open space vistas, natural features, and community character
 - Creation of contiguous open space networks.
- Policy COS-11.4: Collaboration with Agencies and Jurisdictions. Coordinate with adjacent federal and state agencies and local jurisdictions to protect scenic resources and corridors that extend beyond the County's land use authority, but are important to the welfare of County residents.
- Policy COS-11.5: Collaboration with Private and Public Agencies. Coordinate with the California Public Utilities Commission, power companies, and other public agencies to avoid siting energy generation, transmission facilities, and other public improvements in locations that impact visually sensitive areas, whenever feasible. Require the design of public improvements within visually sensitive areas to blend into the landscape.
- **Policy COS-12.2: Development Location on Ridges.** Require development to preserve and enhance the physical features by being located down and away from ridgelines so that structures are not silhouetted against the sky.
- **Policy COS-13.1: Restrict Light and Glare.** Restrict outdoor light and glare from development projects in Semi-rural and Rural Lands and designated rural communities to retain the quality of night skies by minimizing light pollution.

• Policy COS-13.2: Palomar and Mount Laguna, Minimize, to the maximum extent feasible, the impact of development on the dark skies surrounding Palomar and Mount Laguna observatories to maintain dark skies which are vital to these two world-class observatories by restricting exterior light sources within the impact areas of the observatories.

Ramona Community Plan

The Ramona Community Plan includes the following goals and policies related to visual resources relevant to the proposed project (County of San Diego 2011b):

- **Goal LU 1.1**: The rural atmosphere of the Ramona community is preserved and enhanced, while encouraging a balance of land uses that are compatible with a country lifestyle.
- **Policy 2.1.2**: Require all development proposals to demonstrate a diligent effort to retain the significant natural features of the areas landscape. Encourage existing topography and landforms, drainage courses, rock outcroppings, vegetation and views to be incorporated into the design of home sites.
- **Goal LU 2.2**: A variety of housing types in all economic ranges that encourages and promotes a rural/country residential atmosphere. Housing that is phased with adequate public facilities and infrastructure.
 - **Policy LU 2.2.4**: Encourage preserving homes in the town center that have historical value, preserve trees, landscaped streets, appropriate lighting, and water drainage courses.
- **Policy LU 2.3.7**: Encourage enhanced set-backs, plantings, including ground covers, shrubs, and street trees, artwork, surface treatment and other devices on pedestrian ways and streets where ground floor retail or office uses are inappropriate.
- **Policy CM 2.1.3**: Ensure that road design follows the natural contours thereby minimizing any impact upon the aesthetic and environmental character of the planning area.
- **Goal COS 1.2**: The preservation of Agriculture in the Planning Area.
 - **Policy COS 1.2.1**: Promote and preserve viable agricultural land uses and provide an attractive agricultural industry atmosphere within the Ramona Planning Area.

Central Mountain Subregional Plan

The Central Mountain Subregional Plan includes the following policies related to visual resources relevant to the proposed project (County of San Diego 2011c):

- **Community Character Policy 2:** Preserve mature healthy trees, whenever possible, in all public and private developments, except when recommended for removal by a professional forester or by a Fire Protection District to promote the health of the forest.
- **Community Character Policy 3:** Stands and forests of oaks, coniferous, and deciduous trees should be conserved to maintain the ambiance which defines the character of the communities in the Subregion.

- **Community Character Policy 4:** Grading shall be strictly limited so that structures conform to the natural terrain.
- Private Inholdings In or Lands Adjacent to U.S. Forest Service Lands and State Parks Policy 1: All development on private inholdings or adjacent properties shall aim to minimize impacts on adjacent public lands, especially with regard to visual, biological, noise, and dark sky resources.
- Scenic Highways and Visual Resources Policy 2: All development in scenic corridors shall be subject to the following policies and recommendations: e) All utilities shall be undergrounded whenever feasible unless undergrounding would significantly impact environmental resources; and q) Lighting shall be limited to the minimum necessary for safety. Scenic corridors are located along Interstate 8, State Route 79, and Sunrise Highway and around Lake Cuyamaca.

North Mountain Subregional Plan (County of San Diego 2011d)

• **Open Space Policy 1:** Encourage cooperation between all levels of government and private organizations in the areas of management, conservation, and protection of open space.

5.2.3 Environmental Impacts

Significance Criteria

Appendix G of the California Environmental Quality Act (CEQA) Guidelines (14 CCR 15000 et seq.) provides guidance for evaluating whether a development project may result in significant impacts. Appendix G suggests that a development project could have a significant impact on aesthetics if the project would:

- a) Have a substantial adverse effect on a scenic vista
- b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway
- c) Substantially degrade the existing visual character or quality of the site and its surroundings
- d) Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area.

Impact Discussion

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

The project site is surrounded by agricultural and open space land uses, as well as rural residences. Views to the site are primarily limited to middle-ground viewing distances due to the large span of pasture and/or grazing lands that characterize the project alignment area, and intervening topography including hilly slopes and taller ridgelines. The project alignment is visible from the Inaja Memorial Picnic Ground located off SR-79, which is designated as a scenic vista. Views from this vantage point include open grasslands and wooded hillsides, with middle-ground views of existing wooden pole structures and associated power lines along the alignment. From this distance, poles blend in with surrounding landscape and are not distinctly discernible. As discussed below, replacement of wooden poles with weathered steel poles would provide a

similar aesthetic in form, color, and positioning to that under existing conditions, which would not be discernible from this distance (see Figure 5.2-5). The proposed project would replace existing wood pole structures with new steel pole structures, in addition to minor substation improvements and installation of a co-located fiber optic line within the same ROW alignment as the existing TL 637; therefore, it would not introduce a new land use or new visually prominent features to the existing alignment. Temporary, intermitted visual impacts would occur during construction activities associated with the presence of construction equipment and crew members at individual pole sites. Construction work would continually mobilize along the existing alignment route and would not require extended periods of time in any one location that may result in significant impacts to visual resources.

Once operational, the weathered steel pole structures would develop a weathered patina on the surface of the pole that would resemble the hue and aesthetic of existing wooden pole structures that make up the existing TL 637 line. Therefore, following construction, views of the proposed project would resemble those experienced by viewers under existing conditions. Additionally, several poles along the alignment would be removed, resulting in fewer pole structures that would occur within key viewsheds along the alignment.

The proposed project would have a less-than-significant impact on a scenic vista. Additionally, the project would be consistent with County of San Diego General Plan policies COS-11.1: Protection of Scenic Resources and COS-11.3: Development Siting and Design.

As noted earlier, the Central Mountain Subregional Plan, Scenic Highways and Visual Resources Policy 2, suggests undergrounding all utilities whenever feasible. However, the undergrounding of TL 637 within the existing SDG&E ROW would result in greater environmental impacts compared to the proposed project. Therefore, the goal and recommendation to underground utilities is not applicable to the project.

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

The undeveloped portion of the surrounding area within unincorporated San Diego County primarily supports grassland and shrub vegetation, open spaces, pasture and grazing agricultural uses, and small and mature trees. However, none of these natural resources are unique or important as scenic resources. The existing scenic quality of the site and surrounding landscapes are assessed as "typical" of the region's natural landscapes and do not contain any unique or special scenic quality attributes.

According to the state and local plans for the project site, no State Scenic Highway or other state scenic resources exist in the project area or on site. Although there are no designated State Scenic Highways, SR-78 and SR-79 are "eligible" state scenic highways. Limited views of the proposed project from SR-78 and SR-79 include middle-ground views of the existing wooden pole structures and associated power lines that make up the TL 637 alignment, along with agricultural land uses including crop production, grazing land, open pastures, and intermittent semi-rural residential development. Figure 5.2-6 shows motorist views from the crossing of SR-78 and SR-79 looking northwest; however, the majority of views afforded to

motorists on these highways would be at a greater distance from the viewer, and views would be mobile. Because viewers travelling along SR-78 and SR-79 would be mobile, available views of the project would be intermittent and brief, and would not allow for a prolonged, detailed assessment of the project by the viewer. Additionally, as discussed in response 5.2.3 (a), replacement of wooden poles with weathered steel poles would provide a similar aesthetic to existing conditions along SR-78 and SR-79 which would not be discernible to motorists from this distance traveling on the roadway. As such, impacts would be less than significant. Because views along these highways would not be significantly impacted, the proposed project would be consistent with County of San Diego General Plan policies COS-11.1: Protection of Scenic Resources and Policy COS-11.2: Scenic Resource Connections, as well as Central Mountain Subregional Plan Scenic Highways and Visual Resources Policy 2.

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

Aesthetic and visual changes would result to the following five KOPs along the proposed project alignment where primary views of the project are afforded to motorists, residents, and recreationalists.

Community of Ramona

Figure 5.2-2 (KOP 1) shows a representative view afforded to local motorists and residents from Creelman Lane east of Keyes Road looking west within the Ramona community. This view shows existing power lines on both sides of the road. The visual simulation of the newly proposed pole structures and lines as shown in Figure 5.2-2 illustrates proposed facilities, which would include both micropile foundation and direct embed poles on the south side of the road. The simulation also illustrates the proposed height difference as would be experienced by viewers. Proposed pole structures in this area would be approximately 6-32 feet taller than existing wooden pole structures, and the proposed fiber optic cable line would be co-located with the newly conductored power line. Although poles would increase in height from existing conditions, this would not result in a substantial change in the identified viewshed. Additionally, proposed structures would be composed of materials resembling the wood of existing pole structures once the outer layer patina becomes "weathered." As such, the overall aesthetic of the proposed facilities would resemble existing conditions, and as shown in Figure 5.2-2, impacts to the surrounding landscape and visual character along Creelman Lane would be less than significant. As represented in Figure 5.2-2, no new prominent facilities would be introduced to local viewsheds as a result of project implementation, and implementation of the project would not degrade the existing rural community of Ramona. Along Creelman Lane specifically, the proposed new steel poles would be installed on only one side of the road (south side); therefore, views would improve upon existing conditions following proposed pole replacements. As such, the project would be consistent with County of San Diego General Plan policies COS-11.1: Protection of Scenic Resources and COS-11.3: Development Siting and Design; Ramona Community Plan Goal LU 1.1 (rural atmosphere of the Ramona community) and Policy 2.1.2 (retain the significant natural features of the areas landscape); and Central Mountain Subregional Plan policies regarding community character.

With regard to temporary establishment of the Warnock and Santa Ysabel staging yards, SDG&E has proposed Applicant Proposed Measures (APM)-AES-1 (see Section 4.8, Table 4-6

of this IS), which calls for the installation of opaque mesh fencing around the yards to reduce visual contrast of the yards with the surrounding landscape and reduce staging visibility from public vantage points. Implementation of APM-AES-1 would ensure impacts resulting from temporary staging yard use would be less than significant.

Simon Preserve

Figure 5.2-3 (KOP 2) shows a representative view from the Simon Preserve looking east as viewed by a recreationalist visiting the preserve. As shown in the visual simulation, proposed pole structures would be installed in the same general locations along the alignment where existing pole structures occur, and the weathered material proposed would resemble that of existing wood poles. Newly installed facilities would be 22–28 feet taller than existing poles at these locations, and thus occupy a greater height area in unobstructed middle-ground views afforded to recreationalists in the Simon Preserve within this viewshed. Increased pole heights, however, would not substantiate a significant impact to visual resources because the proposed project would replace existing wood pole structures with new weathered steel pole structures of similar appearance, and would not introduce a new land use or new visually prominent features to the existing alignment. Impacts within the Simon Preserve would be less than significant. As such, the proposed project would be consistent with Central Mountain Subregional Plan – Private Inholdings In or Lands Adjacent to U.S. Forest Service Lands and State Parks Policy 1.

San Diego Country Estates

Figure 5.2-4 (KOP 3) shows views from the Mount Gower Preserve trailhead looking west along the proposed project alignment toward the San Diego Country Estates. Unobstructed views of the undeveloped preserve land and pole structures along the alignment are afforded to recreationalists and residents in the foreground looking west; however, proposed pole replacement structures would blend with the existing landscape and mid-ground hillsides as experienced by viewers under existing conditions. Within this viewshed, the eight existing wood poles would be replaced with seven weathered steel poles, which would result in a minor improvement to the surrounding visual landscape and scenic resources provided by the preserve. The closest residences to the proposed alignment are located directly adjacent to the alignment within San Diego Country Estates where poles would be replaced within SDG&E's ROW. Newly installed poles in these locations would be approximately 9-33 feet taller than existing poles. Increased pole heights, however, would not substantiate a significant impact to visual resources because the proposed project would replace existing wood pole structures with new weathered steel pole structures of similar appearance. The overall visual composition within the viewshed would be maintained following proposed project implementation. Impacts would be less than significant. As such, the project would be consistent with County of San Diego General Plan policies COS-11.1: Protection of Scenic Resources and COS-11.3: Development Siting and Design; Ramona Community Plan Goal LU 1.1 (rural atmosphere of the Ramona community) and Policy 2.1.2 (retain the significant natural features of the areas landscape); and Central Mountain Subregional Plan policies regarding community character.

Cleveland National Forest, Mount Gower Preserve, Rural County Lands

Figure 5.2-5 (KOP 4) shows the primary vantage point from the Inaja Memorial Picnic Ground located off SR-79 looking in a westerly direction onto the Cleveland National Forest. The

proposed project alignment is visible from a distance along the lower levels of the valley spanning across the open grasslands. The viewshed is framed by mature trees on either side and a hillside ridgeline in the background containing scattered mature trees. Proposed pole structures along this portion of the alignment would be approximately 18 feet taller than existing structures. Although visible from this vantage point, views of the alignment are limited due to viewer distance from the facilities, and from this distance, newly installed weather steel poles would not result in a discernible change in the visual landscape from existing conditions. Additionally, replacement poles would be installed in the same general locations as existing poles. Moreover, motorists travelling along SR-78 and SR-79 would be travelling at speeds such that changes in the viewshed would be virtually imperceptible. Therefore, impacts would be less than significant. As such, the project would be consistent with County of San Diego General Plan policies COS-11.1: Protection of Scenic Resources and COS-11.3: Development Siting and Design; Ramona Community Plan Goal LU 1.1 (rural atmosphere of the Ramona community) and Policy 2.1.2 (retain the significant natural features of the areas landscape); and Central Mountain Subregional Plan – Private Inholdings In or Lands Adjacent to U.S. Forest Service Lands and State Parks Policy 1 and policies relative to community character.

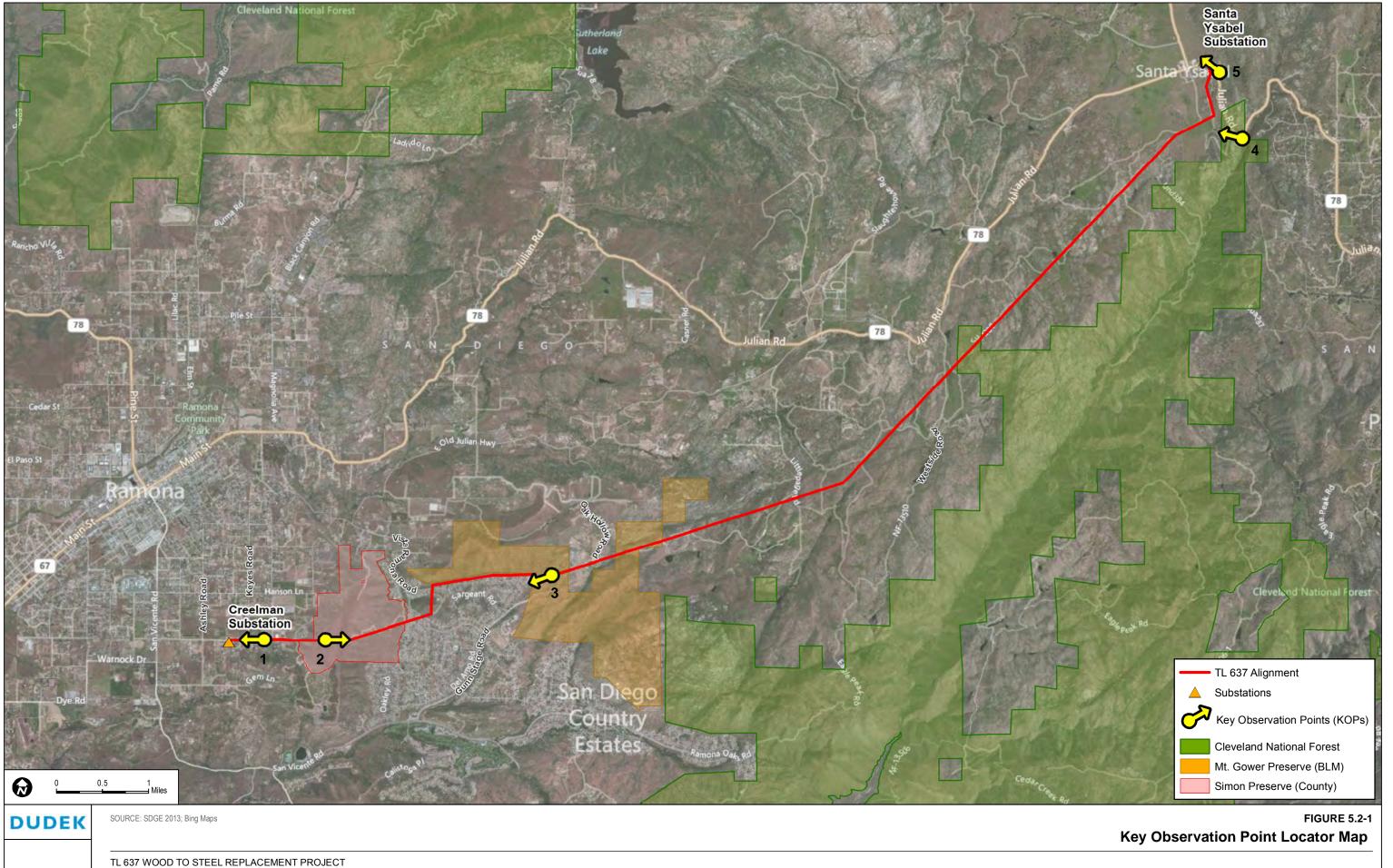
Community of Santa Ysabel

Figure 5.2-6 (KOP 5) shows motorist views from the crossing of SR-78 and SR-79 looking northwest. Two existing poles in this viewshed would be replaced with new weathered steel poles and associated power lines and co-located fiber optic line. Newly installed poles would be slightly taller with marginally larger diameters and micropile foundations, but would be similar to the existing poles in color and overall appearance. As views afforded to motorists along the roadway would not substantially differ from existing conditions, impacts would be less than significant. Because views along these highways would not be significantly impacted, the proposed project would be consistent with County of San Diego General Plan policies COS-11.1: Protection of Scenic Resources and Policy COS-11.2: Scenic Resource Connections, as well as Central Mountain Subregional Plan Scenic Highways and Visual Resources Policy 2.

As previously discussed, SDG&E has proposed APM-AES-1 (see Section 4.8, Table 4-6 of this IS), which calls for the installation of opaque mesh fencing around temporary staging yards to reduce staging visibility from public vantage points. Implementation of APM-AES-1 would ensure impacts resulting from temporary staging yard use would be less than significant.

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

The proposed project would not introduce new lighting to the project alignment that does not already occur under existing conditions, and materials used for the proposed weathered steel pole structures would produce a patina that would not reflect light during the daytime, and therefore would not result in a new source of glare. Because no new lighting or glare source would be introduced to the proposed project area as a result of project implementation, the project would be consistent with County of San Diego General Plan Policy COS-13.1: Restrict Light and Glare, and no impacts would occur.





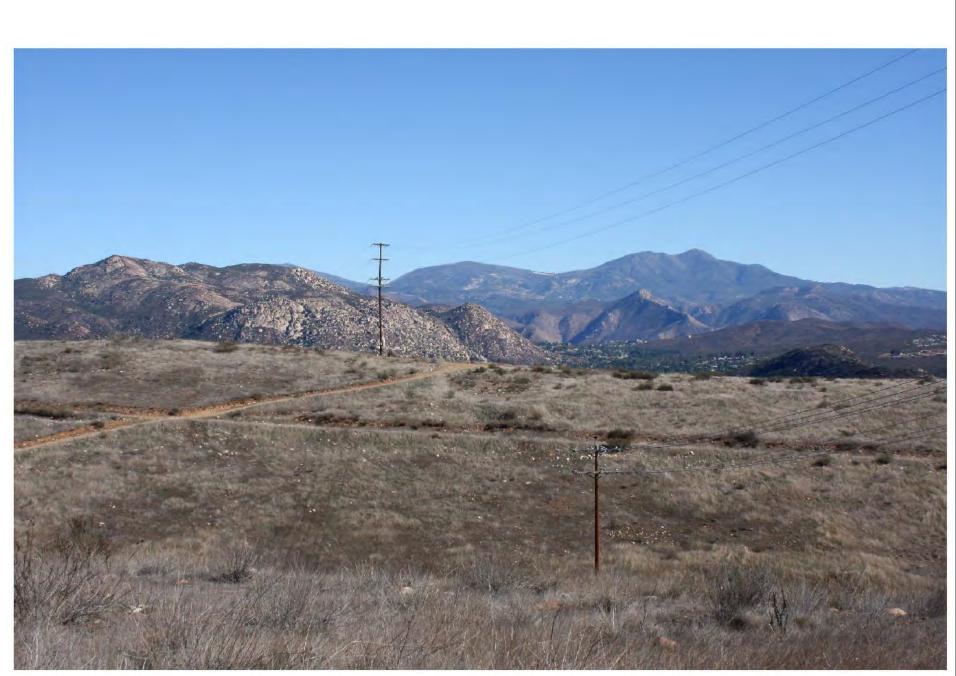
Above: EXISTING

Below: PROPOSED



	A THURSDAY				
					(Allana)
				18-1 28-1 28-1	
				Dir s il	IN ROUTING AMERICA
UDEK	SOURCE: SDG&E 2013 Existing View and Visual Simu	lation from Creelman La	ne East of Keves	Road Looking	FIGURE :

INTENTIONALLY LEFT BLANK



Above: EXISTING

Below: PROPOSED



	ELVEROIMEENTAL VISION
DUDEK	SOURCE: SDG&E 2013 Existing View and Visual Simulation from Simon Preserve Trail Looking East (KOP2)
7668	TL 637 WOOD TO STEEL REPLACEMENT PROJECT

INTENTIONALLY LEFT BLANK



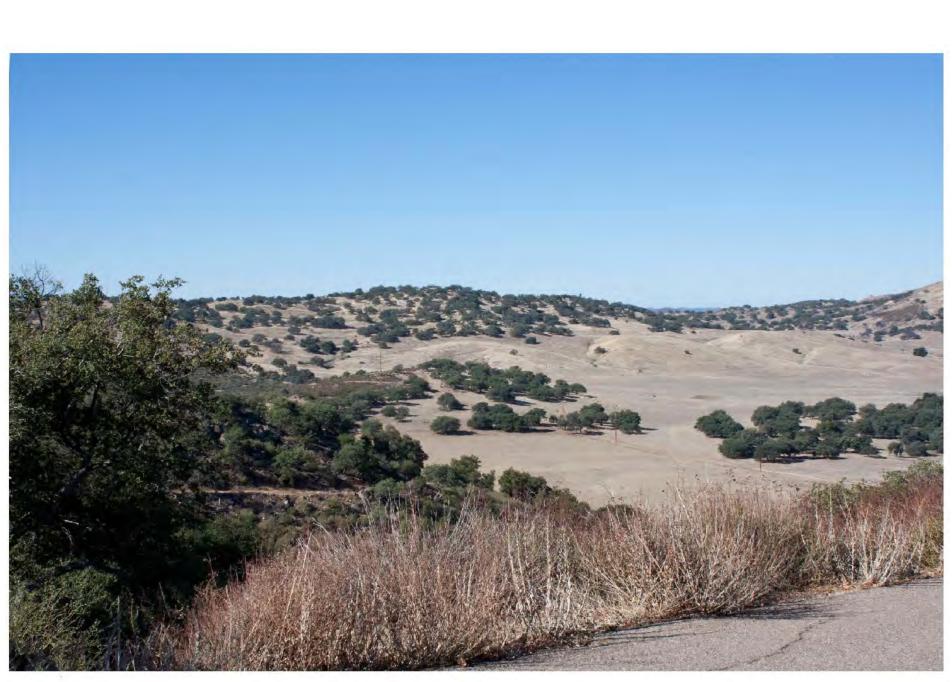
Above: EXISTING

Below: PROPOSED



DUDEK	SOURCE: SDG&E 2013 Existing View and Visual Simulation from Mt. Gower Preserve Trail Looking West (KOP3)
7668	TL 637 WOOD TO STEEL REPLACEMENT PROJECT

INTENTIONALLY LEFT BLANK



Above: EXISTING

Below: PROPOSED



DUDEK	SOURCE: SDG&E 2013 Existing View and Visual Simulation from Inaja Memorial Picnic Ground Looking West (KOP4)
7668	TL 637 WOOD TO STEEL REPLACEMENT PROJECT

INTENTIONALLY LEFT BLANK



Above: EXISTING

Below: PROPOSED



DUDEK	SOURCE: SDG&E 2013
7668	Existing View and Visual Simulation from Hwy 78/79 in Santa Ysabel Looking Northwest (KOP5) TL 637 WOOD TO STEEL REPLACEMENT PROJECT

INTENTIONALLY LEFT BLANK

5.3 AGRICULTURE RESOURCES

Wo	uld the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a)	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				
b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?			\boxtimes	
<i>c)</i>	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), or timberland (as defined by Public Resources Code Section 4526)?				
d)	Result in the loss of forest land or conversion of forest land to non-forest use?				\boxtimes
e)	Involve other changes in the existing environment that, due to their location or nature, could result in conversion of Farmland to nonagricultural use or conversion of forest land to non-forest use?				

5.3.1 Environmental Setting

This section of the Initial Study (IS) documents the agricultural resources located on and around the proposed project alignment and surrounding areas. The environmental analysis is based on the review of San Diego Gas & Electric's (SDG&E's) Proponent's Environmental Assessment (PEA) (SDG&E 2013). A segment of the project alignment traverses land designated by the California Department of Conservation's (DOC's) Farmland Mapping and Monitoring Program as Farmland of Local Importance (see Figure 5.3-1) (DOC 2010). The proposed project alignment does not cross lands currently under Williamson Act contracts. Additionally, two agricultural preserves are located within the proposed project alignment: the Ramona Preserve and the Rancho Santa Ysabel Preserve.

Land uses surrounding the project alignment include semi-rural residential development; agricultural; grazing, ranchland, and horse pastures; livestock facilities; recreational equine facilities; and several small commercial uses. No portion of the proposed project alignment traverses active

agricultural crop production areas or land used for intensive agriculture operations. Various permanent components and temporary staging areas under the proposed project are located on land zoned as Limited Agricultural (A70), General Agriculture (A72), Open Space (S80), and General Rural (S92). A small segment of the proposed project alignment, including two pole structures, is located within the Cleveland National Forest under U.S. Forest Service jurisdiction. Poles situated at these locations have been previously replaced; therefore, work within the Cleveland National Forest under the proposed project would be limited to reconductoring of the new tie-line, installation of the proposed fiber optic cable, and minor pole top work.

5.3.2 Regulatory Setting

5.3.2.1 Federal

Farmland Protection Policy Act of 1981

The U.S. Department of Agriculture (USDA) administers the Farmland Protection Policy Act of 1981, which is intended to minimize the extent to which federal programs contribute to the unnecessary conversion of farmland to nonagricultural uses. The act also requires federal programs to be compatible with state, local, and private efforts to protect farmland.

5.3.2.2 State

Department of Conservation Farmland Mapping and Monitoring Program

The Farmland Mapping and Monitoring Program (FMMP) produces Important Farmland maps, which identify the suitability of agricultural lands in the State of California on a county-by-county basis. The classification of important farmlands is based on both land use and soil. In order for land to be shown as Prime Farmland or Farmland of Statewide Importance, land must have been used for irrigated agricultural production at some point within 4 years of the Important Farmland map publishing date and must contain soils that meet the physical and chemical requirements for classification as Prime Farmland/Farmland of Statewide Importance, as determined by the USDA Natural Resources Conservation Service (NRCS). The NRCS evaluates soil based on a variety of criteria including available water capacity, soil temperature, acid-alkali balance, soil sodium content, and permeability rate (DOC 2007a). The FMMP maps are updated and released every 2 years.

The DOC identifies farmlands as follows:

- **Prime Farmland:** Land that has the best combination of physical and chemical properties for the production of crops
- **Farmland of Statewide Importance:** Similar to Prime Farmland, but with minor shortcomings (e.g., steeper slopes, inability to hold water)
- **Unique Farmland:** Land of lesser-quality soils, but recently used for the production of specific high-economic-value crops
- **Farmland of Local Importance:** Land of importance to the local agricultural economy, as determined by each county's board of supervisors and a local advisory committee.

Williamson Act

Formally known as the California Land Conservation Act of 1965, the Williamson Act permits local governments to restrict specific parcels of land to agricultural or related open space use by entering into voluntary contracts with private landowners. Upon entering into the contract, landowners are afforded lower-than-normal property tax assessments because the assessment is based on farming and open space uses as opposed to full market value. Williamson Act contracts are regulated by 10-year terms (DOC 2007b).

The county and city are also afforded the opportunity to establish agricultural preserves. Only land located in an agricultural preserve is eligible to enter into a Williamson Act contract. According to the DOC, an agricultural preserve must be no smaller than 100 acres, although smaller parcels of land may be combined to meet the minimum acreage requirement, provided the combined parcels are contiguous (DOC 2007b).

5.3.2.3 Local

San Diego County General Plan

The Land Use Element of the existing San Diego County General Plan (County of San Diego 2011a) contains the following goals and policies that are relevant to the proposed project:

- **Goal LU-2: Maintenance of the County's Rural Character**. Conservation and enhancement of the unincorporated County's varied communities, rural setting, and character.
 - Policy LU-2.9: Maintaining Rural Character. Consider levels of service criteria, in accordance with Policy M-2.1, to determine whether adding lanes to a Mobility Element road would adversely impact the rural character of a community or cause significant environmental impacts. In those instances, consider other options to mitigate LOS where appropriate.
- Goal LU-5: Climate Change and Land Use. A land use plan and associated development techniques and patterns that reduce emissions of local greenhouse gases in accordance with state initiatives, while promoting public health.
 - Policy LU-5.3: Rural Land Preservation. Ensure the preservation of existing open space and rural areas (e.g., forested areas, agricultural lands, wildlife habitat and corridors, wetlands, watersheds, and groundwater recharge areas) when permitting development under the Rural and Semi-Rural Land Use Designations.
- **Goal LU-7: Agricultural Conservation**. A land use plan that retains and protects farming and agriculture as beneficial resources that contribute to the County's rural character.
 - Policy LU-7.1: Agricultural Land Development. Protect agricultural lands with lower-density land use designations that support continued agricultural operations.
 - Policy LU-7.2: Parcel size reduction as Incentive for Agriculture. Allow for reductions in lot size for compatible development when tracts of existing historically agricultural land are preserved in conservation easements for continued agricultural use.

The Conservation and Open Space Element of the existing San Diego County General Plan (County of San Diego 2011a) contains the following goals and policies that are relevant to the proposed project:

- Goal COS-6: Sustainable Agricultural Industry. A viable and long-term agricultural industry and sustainable agricultural land uses in the County of San Diego that serve as a beneficial resource and contributor to the County's rural character and open space network.
 - Policy COS-6.1: Economic Diversity. Support the economic competitiveness of agriculture and encourage the diversification of potential sources of farm income, including value added products, agricultural tourism, roadside stands, organic farming, and farmers markets.
 - Policy COS-6.2: Protection of Agricultural Operations. Protect existing agricultural operations from encroachment of incompatible land uses by doing the following:
 - Limiting the ability of new development to take actions to limit existing agricultural uses by informing and educating new projects as to the potential impacts from agricultural operations.
 - Encouraging new or expanded agricultural land uses to provide a buffer of non-intensive agriculture or other appropriate uses (e.g., landscape screening) between intensive uses and adjacent non-agricultural land uses.
 - Allowing for agricultural uses in agricultural areas and designing development and lots in a manner that facilitates continued agricultural use within the development.
 - Requiring development to minimize potential conflicts with adjacent agricultural operations through the incorporation of adequate buffers, setbacks, and project design measures to protect surrounding agriculture.
 - Supporting local and State right-to-farm regulations.
 - Retain or facilitate large and contiguous agricultural operations by consolidation of development during the subdivision process.

These are relevant because the proposed project would consist of redevelopment of a tie-line in a relatively undeveloped portion of San Diego County, and the alignment site traverses existing agricultural zones.

Land uses surrounding the project alignment include semi-rural residential development; agricultural; grazing, ranchland, and horse pastures; and several small commercial uses. Various permanent components and temporary staging areas under the proposed project are located on land zoned as Limited Agricultural (A70), General Agriculture (A72), Open Space (S80), and General Rural (S92). Use regulations are intended to create and preserve areas for the raising of crops and animals. Processing of products produced or raised on the premises would be permitted, as would certain commercial activities associated with raising crops and animals.

Ramona Community Plan

The Ramona Community Plan includes the following goals and policies related to agricultural uses (County of San Diego 2011b):

- **Goal COS 1.2:** The Preservation of Agriculture in the Planning Area.
 - Policy COS 1.2.1: Promote and preserve viable agricultural land uses and provide an attractive agricultural industry atmosphere within the Ramona Planning Area.
 - Policy COS 1.2.3: Encourage the protection of areas designated for agricultural activities from scattered and incompatible urban intrusions. Greenbelts/buffers shall be encouraged in special cases between incompatible uses and high-intensity agricultural zoning.

Central Mountain Subregional Plan

The Central Mountain Subregional Plan includes the following goals and policies related to agricultural uses (County of San Diego 2011c):

• Policy 4: Clearing of the land of native vegetation should be discouraged; any land cleared should be limited to what is required; and land cleared and not used should be replanted to blend in with the natural surroundings.

North Mountain Subregional Plan

There are no policies related to agricultural resources provided in the North Mountain Subregional Plan (County of San Diego 2011d).

5.3.3 Environmental Impacts

Significance Criteria

Appendix G of the California Environmental Quality Act (CEQA) Guidelines (14 CCR 15000 et seq.) provides guidance for evaluating whether a development project may result in significant impacts. Appendix G suggests that a development project could have a significant impact on agriculture if the project would:

- a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use
- b) Conflict with existing zoning for agricultural use, or a Williamson Act contract
- c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by PRC Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))
- d) Result in the loss of forest land or conversion of forest land to non-forest use
- e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to nonagricultural use or conversion of forest land to non-forest use.

Impact Discussion

a) Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use?

Land uses traversed by and surrounding the project alignment include semi-rural residential development; agricultural; grazing, ranchland, and horse pastures; livestock facilities; recreational equine facilities; and several small commercial uses. Various permanent components and temporary staging areas under the proposed project are located on land zoned as Limited Agricultural (A70), General Agriculture (A72), Open Space (S80), and General Rural (S92) (SDG&E 2013).

Portions of the proposed project alignment would traverse land designated as Farmland of Local Importance as defined under the FMMP. The proposed wood-to-steel pole replacement firehardening project would replace existing poles with new steel poles, modify two SDG&E substations within the current substation fence lines and footprints, and co-locate a fiber optic on the new steel poles. No new facilities would be constructed. Additionally, fewer poles would be required for the proposed project than compared to the existing alignment. During construction, new poles would be located immediately adjacent to the existing poles, which would entail permanent conversion of these portions of agricultural land to non-agricultural use. However, because the amount of land that would be disturbed is so minor and so close to the existing pole locations, impacts to the ability of surrounding agricultural operations to continue agricultural activities within the project alignment would not change as a result of the proposed project. Because no new facilities would be constructed, and the proposed project would require fewer pole structures and facility space than under existing conditions, the proposed project would not convert farmland to nonagricultural uses.

Staging areas, helicopter landing zones and stringing sites have been identified for temporary use during construction, which would be located outside of SDG&E rights-of-way (see Figure 4-3). The Creelman Staging Yard site is currently owned by SDG&E and would be primarily located on undeveloped land designated for agricultural use; however, no active agricultural operations occur on the site. The Warnock and Santa Ysabel staging yards, and the Littlepage Road helicopter landing zone would be located on grazing land. The Wood Lot Staging Yard is located in a previously-disturbed storage lot off an access road. The Mount Gower helicopter landing zone is located in an unpaved parking area for the Mount Gower Preserve. Lastly, two stringing sites would be located adjacent to an existing equine facility (see Attachment A, Detailed Alignment Maps, Map 5 of 10) (SDG&E 2013). To ensure noise during helicopter operations would not disturb horses and other livestock at the facility, Mitigation Measure NOI-1, as provided in Section 5.12, would be implemented. Mitigation Measure NOI-1 calls for SDG&E to notify local landowners, residents, and livestock facility owners of scheduled helicopter use prior to flight operations near sensitive receptors, including the equine facility. Implementation of Mitigation Measure NOI-1 would reduce impacts at this site to a level that is less than significant. Additionally, no staging area, helicopter land zone or stringing site would be located on, or impact, existing crop production areas or areas of intense agricultural activity; therefore, no active agricultural operations would be interrupted from temporary use of these sites. Additionally, no

grading would be required for the establishment of these sites; however, temporary site limits would be mowed and cleared prior to use. Moreover, use of these sites would be short-term and would discontinue following completion of construction activities. Therefore, no permanent impacts to agricultural resources would occur. Impacts would be less than significant.

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

See response (a) above. The proposed project alignment currently traverses land zoned as Limited Agricultural (A70), General Agriculture (A72), Open Space (S80), and General Rural (S92). Additionally, portions of the proposed project would traverse land designated as Farmland of Local Importance as defined under the DOC's FMMP. The proposed pole replacement project would not result in a conflicting land use, as the project would replace existing wood pole structures with steel pole structures along the existing alignment and would not require a change in land use. Additionally, no portion of the project alignment is currently under a Williamson Act contract (DOC 2013).

Two agricultural preserves are located within the proposed project alignment: the Ramona Preserve and the Rancho Santa Ysabel Preserve. The proposed project would be exempt from land use restrictions relative to these preserve areas because the CPUC has sole and exclusive jurisdiction over the siting and design of the proposed project. Additionally, as defined in Government Code Section 51293 (c) the County zoning ordinance designates electrical facilities, including the proposed project, as Essential Services. Essential Services are allowed under all land use zones delineated in the County municipal code and County General Plan land use designations. Moreover, the project would be considered a redevelopment project, would follow the existing Tie-Line (TL) 637 alignment, and would require fewer facility space and land resources compared to that of the existing alignment. As such, the project would not conflict with an existing agricultural zone or Williamson Act contract. Impacts would be less than significant.

c) Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in PRC Section 12220(g)), or timberland (as defined by PRC Section 4526) or timberland zoned Timberland Production (as defined by Government Code Section 51104g))?

The proposed project is not located on land designated forest land or timberland, as defined by the California Public Resources Code (PRC). The proposed project is also not located on timberland zoned as timberland production, as defined by California Government Code or the City of San Diego General Plan. Thus, there is no potential for conflict with PRC Section 12220(g), PRC Section 4526, or Government Code 51104(g) and no impacts would result from the proposed project.

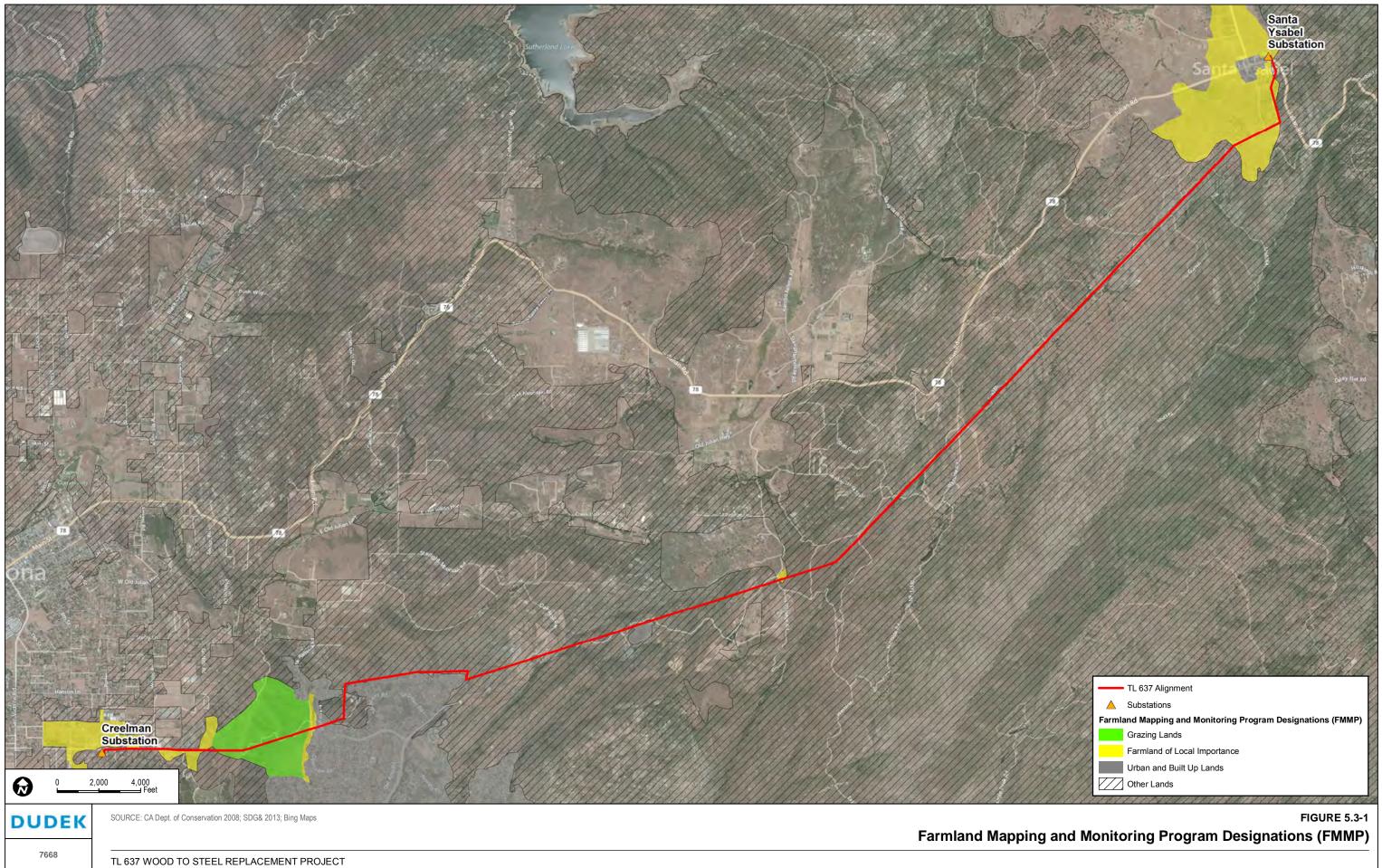
d) Would the project result in the loss of forest land or conversion of forest land to non-forest use?

See response (c) above. As previously discussed, a small segment of the proposed project alignment, including two pole structures, traverse a portion of the Cleveland National Forest (CNF) under U.S. Forest Service jurisdiction. The poles at these locations have been previously

replaced; therefore, work within the Cleveland National Forest under the proposed project would be limited to reconductoring of the new tie-line, installation of the proposed fiber optic cable, and minor pole top work. This minor work within CNF would not result in the loss of forest land or conversion of forest land to non-forest use. Therefore, no impacts would result from the proposed project.

e) Would the project involve other changes in the existing environment that, due to their location or nature, could result in conversion of Farmland, to nonagricultural use or conversion of forest land to non-forest use?

See responses (a) through (d) above. Once operational, implementation of the proposed project would resemble existing conditions. Implementation of the project would reduce the number of tie-line pole structures needed compared to the existing alignment, and result in greater system efficiency and reliability due to upgraded, fire-hardened facilities. Additionally, no conversion of farmland or impacts to forestry resources would occur during pole replacement processes, and no change or conflict in land use would occur. As such, impacts would be less than significant.



INTENTIONALLY LEFT BLANK

5.4 AIR QUALITY/GREENHOUSE GAS EMISSIONS

Wo	uld the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a)	Conflict with or obstruct implementation of the applicable air quality plan?				\square
b)	Violate any air quality standard or contribute substantially to an existing or projected air quality violation?			\boxtimes	
<i>c)</i>	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?				
d)	Expose sensitive receptors to substantial pollutant concentrations?			\boxtimes	
e)	Create objectionable odors affecting a substantial number of people?			\boxtimes	
Gre	eenhouse Gas Emissions				
f)	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?				
g)	Conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?				

5.4.1 Environmental Setting

This section of the Initial Study (IS) evaluates air quality impacts associated with proposed project implementation. The air quality analysis is based on the review of San Diego Gas & Electric's (SDG&E's) Proponent's Environmental Assessment (PEA) (SDG&E 2013a) and data responses (SDG&E 2013b), and estimated emissions were compared against SDAPCD thresholds to determine significance of project impacts.

Climate and Meteorology

The project site is located within the San Diego Air Basin (SDAB) and is subject to the San Diego Air Pollution Control District (SDAPCD) guidelines and regulations. The SDAB is one of

15 air basins that geographically divide the State of California. The SDAB is currently classified as a federal nonattainment area for ozone (O_3) and a state nonattainment area for particulate matter less than or equal to 10 microns (PM_{10}), particulate matter less than or equal to 2.5 microns ($PM_{2.5}$), and O_3 .

The SDAB lies in the southwest corner of California and comprises the entire San Diego region, covering 4,260 square miles, and is an area of high air pollution potential. The basin experiences warm summers, mild winters, infrequent rainfalls, light winds, and moderate humidity. This usually mild climatological pattern is interrupted infrequently by periods of extremely hot weather, winter storms, or Santa Ana winds.

The SDAB experiences frequent temperature inversions. Subsidence inversions occur during the warmer months as descending air associated with the Pacific High Pressure Zone meets cool marine air. The boundary between the two layers of air creates a temperature inversion that traps pollutants. Another type of inversion, a radiation inversion, develops on winter nights when air near the ground cools by heat radiation and air aloft remains warm. The shallow inversion layer formed between these two air masses also can trap pollutants. As the pollutants become more concentrated in the atmosphere, photochemical reactions occur that produce O_3 , commonly known as smog.

Light daytime winds, predominately from the west, further aggravate the condition by driving air pollutants inland, toward the mountains. During the fall and winter, air quality problems are created due to carbon monoxide (CO) and oxides of nitrogen (NO_x) emissions. CO concentrations are generally higher in the morning and late evening. In the morning, CO levels are elevated due to cold temperatures and the large number of motor vehicles traveling. Higher CO levels during the late evenings are a result of stagnant atmospheric conditions trapping CO in the area. Since CO is produced almost entirely from automobiles, the highest CO concentrations in the basin are associated with heavy traffic. Nitrogen dioxide (NO_2) levels are also generally higher during fall and winter days.

Under certain conditions, atmospheric oscillation results in the offshore transport of air from the Los Angeles region to San Diego County (County). This often produces high O_3 concentrations, as measured at air pollutant monitoring stations within the County. The transport of air pollutants from Los Angeles to San Diego has also occurred within the stable layer of the elevated subsidence inversion, where high levels of O_3 are transported.

Existing Air Quality

Pollutants and Effects

Criteria air pollutants are defined as pollutants for which the federal and state governments have established ambient air quality standards, or criteria, for outdoor concentrations to protect public health. The federal and state standards have been set, with an adequate margin of safety, at levels above which concentrations could be harmful to human health and welfare. These standards are designed to protect the most sensitive persons from illness or discomfort. Pollutants of concern include O₃, NO₂, CO, sulfur dioxide (SO₂), PM₁₀, PM_{2.5}, and lead. These

pollutants are discussed below.¹ In California, sulfates, vinyl chloride, hydrogen sulfide, and visibility-reducing particles are also regulated as criteria air pollutants.

<u>Ozone</u>

 O_3 is a colorless gas that is formed in the atmosphere when volatile organic compounds (VOCs), sometimes referred to as reactive organic gases (ROGs), and NO_x react in the presence of ultraviolet sunlight. O_3 is not a primary pollutant; it is a secondary pollutant formed by complex interactions of two pollutants directly emitted into the atmosphere. The primary sources of VOCs and NO_x, the precursors of O_3 , are automobile exhaust and industrial sources. Meteorology and terrain play major roles in O_3 formation, and ideal conditions occur during summer and early autumn, on days with low wind speeds or stagnant air, warm temperatures, and cloudless skies. Short-term exposures (lasting for a few hours) to O_3 at levels typically observed in Southern California can result in breathing pattern changes, reduction of breathing capacity, increased susceptibility to infections, inflammation of the lung tissue, and some immunological changes.

Nitrogen Dioxide

Most NO₂, like O₃, is not directly emitted into the atmosphere but is formed by an atmospheric chemical reaction between nitric oxide (NO) and atmospheric oxygen. NO and NO₂ are collectively referred to as NO_x and are major contributors to O₃ formation. High concentrations of NO₂ can cause breathing difficulties and result in a brownish-red cast to the atmosphere with reduced visibility. There is some indication of a relationship between NO₂ and chronic pulmonary fibrosis and some increase in bronchitis in children (2 and 3 years old) has also been observed at concentrations below 0.3 parts per million by volume (ppm).

Carbon Monoxide

CO is a colorless and odorless gas formed by the incomplete combustion of fossil fuels. CO is emitted almost exclusively from motor vehicles, power plants, refineries, industrial boilers, ships, aircraft, and trains. In urban areas, automobile exhaust accounts for the majority of CO emissions. CO is a non-reactive air pollutant that dissipates relatively quickly; therefore, ambient CO concentrations generally follow the spatial and temporal distributions of vehicular traffic. CO concentrations are influenced by local meteorological conditions; primarily wind speed, topography, and atmospheric stability. CO from motor vehicle exhaust can become locally concentrated when surface-based temperature inversions are combined with calm atmospheric conditions, a typical situation at dusk in urban areas between November and February. The highest levels of CO typically occur during the colder months of the year when inversion conditions are more frequent. In terms of health, CO competes with oxygen, often replacing it in the blood, thus reducing the blood's ability to transport oxygen to vital organs. The results of excess CO exposure can be dizziness, fatigue, and impairment of central nervous system functions.

¹ The following descriptions of health effects for each of the criteria air pollutants associated with project construction and operations are based on the Environmental Protection Agency's (EPA's) "Six Common Air Pollutants" (EPA 2012a) and the California Air Resources Board (CARB) "Glossary of Air Pollutant Terms" (CARB 2009) published information.

Sulfur Dioxide

 SO_2 is a colorless, pungent gas formed primarily by the combustion of sulfur-containing fossil fuels. Main sources of SO_2 are coal and oil used in power plants and industries; as such, the highest levels of SO_2 are generally found near large industrial complexes. In recent years, SO_2 concentrations have been reduced by the increasingly stringent controls placed on stationary source emissions of SO_2 and limits on the sulfur content of fuels. SO_2 is an irritant gas that attacks the throat and lungs and can cause acute respiratory symptoms and diminished ventilator function in children. SO_2 can also yellow plant leaves and erode iron and steel.

Particulate Matter

Particulate matter pollution consists of very small liquid and solid particles floating in the air, which can include smoke, soot, dust, salts, acids, and metals. Particulate matter can form when gases emitted from industries and motor vehicles undergo chemical reactions in the atmosphere. $PM_{2.5}$ and PM_{10} represent fractions of particulate matter. Fine particulate matter, or $PM_{2.5}$, is roughly 1/28 the diameter of a human hair. $PM_{2.5}$ results from fuel combustion (e.g., motor vehicles, power generation, and industrial facilities), residential fireplaces, and wood stoves. In addition, $PM_{2.5}$ can be formed in the atmosphere from gases such as sulfur oxides (SO_x), NO_x , and VOC. Inhalable or coarse particulate matter, or PM_{10} , is about 1/7 the thickness of a human hair. Major sources of PM_{10} include crushing or grinding operations; dust stirred up by vehicles traveling on roads; wood burning stoves and fireplaces; dust from construction, landfills, and agriculture; wildfires and brush/waste burning; industrial sources; windblown dust from open lands; and atmospheric chemical and photochemical reactions.

 $PM_{2.5}$ and PM_{10} pose a greater health risk than larger-size particles. When inhaled, these tiny particles can penetrate the human respiratory system's natural defenses and damage the respiratory tract. $PM_{2.5}$ and PM_{10} can increase the number and severity of asthma attacks, cause or aggravate bronchitis and other lung diseases, and reduce the body's ability to fight infections. Very small particles of substances, such as lead, sulfates, and nitrates, can cause lung damage directly or be absorbed into the blood stream, causing damage elsewhere in the body. Additionally, these substances can transport absorbed gases, such as chlorides or ammonium, into the lungs, also causing injury. Whereas PM_{10} tends to collect in the upper portion of the respiratory system, $PM_{2.5}$ is so tiny that it can penetrate deeper into the lungs and damage lung tissues. Suspended particulates also damage and discolor surfaces on which they settle, as well as produce haze and reduce regional visibility.

Lead

Lead in the atmosphere occurs as particulate matter. Sources of lead include leaded gasoline, the manufacturing of batteries, paint, ink, ceramics, and ammunition and secondary lead smelters. Prior to 1978, mobile emissions were the primary source of atmospheric lead. Between 1978 and 1987, the phase-out of leaded gasoline reduced the overall inventory of airborne lead by nearly 95%. With the phase-out of leaded gasoline, secondary lead smelters, battery recycling, and manufacturing facilities are becoming lead-emission sources of greater concern.

Prolonged exposure to atmospheric lead poses a serious threat to human health. Health effects associated with exposure to lead include gastrointestinal disturbances, anemia, kidney disease, and in severe cases, neuromuscular and neurological dysfunction. Of particular concern are

low-level lead exposures during infancy and childhood. Such exposures are associated with decrements in neurobehavioral performance including intelligence quotient performance, psychomotor performance, reaction time, and growth.

Toxic Air Contaminants

A substance is considered toxic if it has the potential to cause adverse health effects in humans, including increasing the risk of cancer upon exposure, or acute and/or chronic noncancer health effects. A toxic substance released into the air is considered a toxic air contaminant (TAC). Examples include certain aromatic and chlorinated hydrocarbons, certain metals, and asbestos. TACs are generated by a number of sources, including stationary sources such as dry cleaners, gas stations, combustion sources, and laboratories; mobile sources such as automobiles; and area sources such as landfills. Adverse health effects associated with exposure to TACs may include carcinogenic (i.e., cancer-causing) and noncarcinogenic effects. Noncarcinogenic effects typically affect one or more target organ systems and may be experienced either on short-term (acute) or long-term (chronic) exposure to a given TAC. CARB has identified diesel engine exhaust particulate matter as the predominant TAC in California. Diesel particulate matter is emitted into the air by diesel-powered mobile vehicles, including heavy-duty diesel trucks, construction equipment, and passenger vehicles. Certain ROGs may also are designated as TACs.

Local Air Quality

SDAB Attainment Designation

An area is designated in attainment when it is in compliance with the National Ambient Air Quality Standards (NAAQS) and/or the California Ambient Air Quality Standards (CAAQS). These standards are set by the U.S. Environmental Protection Agency (EPA) and CARB, respectively, for the maximum level of a given air pollutant that can exist in the outdoor air without unacceptable effects on human health or the public welfare.

The criteria pollutants of primary concern that are considered in this air quality assessment include O_3 , NO_2 , CO, SO_2 , PM_{10} , and $PM_{2.5}$. Although there are no ambient standards for VOCs or NO_x , they are important as precursors to O_3 .

The SDAB is designated by EPA as a maintenance attainment area for the 1997 8-hour NAAQS for O_3 and as a marginal nonattainment area for the 2008 8-hour NAAQS for O_3 . The SDAB has been designated attainment for all other criteria pollutants under the NAAQS with the exception of PM₁₀, which was determined to be unclassifiable. For CO specifically, the western and central portion of the SDAB is considered a "maintenance" area under the NAAQS attainment designation. The SDAB is currently designated nonattainment for O_3 and particulate matter, PM₁₀ and PM_{2.5}, under the CAAQS. It is designated attainment for the CAAQS for CO, NO₂, SO₂, lead, and sulfates.

Table 5.4-1, SDAB Attainment Classification, summarizes the SDAB's federal and state attainment designations for each of the criteria pollutants.

Table 5.4-1: San Diego Air Basin Attainment Classification						
Pollutant	Federal Designation	State Designation				
O ₃ (1-hour)	Attainment*	Nonattainment				
O ₃ (8-hour – 1997) (8-hour – 2008)	Attainment (Maintenance) Nonattainment (Marginal)	Nonattainment				
СО	Attainment (Maintenance Area)	Attainment				
PM ₁₀	Unclassifiable**	Nonattainment				
PM _{2.5}	Unclassifiable/Attainment	Nonattainment				
NO ₂	Unclassifiable/Attainment	Attainment				
SO ₂	Attainment	Attainment				
Lead	Unclassifiable/Attainment	Attainment				
Sulfates	(no federal standard)	Attainment				
Hydrogen sulfide	(no federal standard)	Unclassified				
Visibility	(no federal standard)	Unclassified				

Sources: EPA 2012b; CARB 2012a.

* The federal 1-hour standard of 0.12 ppm was in effect from 1979 through June 15, 2005. The revoked standard is referenced here because it was employed for such a long period and because this benchmark is addressed in State Implementation Plans.

** At the time of designation, if the available data does not support a designation of attainment or nonattainment, the area is designated as unclassifiable.

Air Quality Monitoring Data

The SDAPCD operates a network of ambient air monitoring stations throughout San Diego County, which measure ambient concentrations of pollutants and determine whether the ambient air quality meets the CAAQS and the NAAQS. The SDAPCD monitors air quality conditions at 10 locations throughout the basin. Due to its similar geographic and climactic characteristics, the Alpine – Victoria Drive monitoring station concentrations for all pollutants, except PM_{10} , CO, and SO₂, are considered most representative of the project site. The Escondido – East Valley Parkway monitoring station is the nearest location to the project site where PM_{10} and CO and concentrations are monitored. The Chula Vista monitoring station is the nearest location with representative geographic and climactic characteristics to the project site where SO₂ concentrations are monitored.

Ambient concentrations of pollutants from 2009 through 2012 are presented in Table 5.4-2, Ambient Air Quality Data. The number of days exceeding the ambient air quality standards is shown in Table 5.4-3, Frequency of Air Quality Standard Violations. The state 8-hour and 1-hour O_3 standards and the federal 8-hour O_3 standard were exceeded in 2009, 2010, 2011, and 2012. The state 24-hour PM₁₀ standard was exceeded in 2009. Air quality within the project region was in compliance with both CAAQS and NAAQS for NO₂, CO, PM₁₀ (NAAQS only), and SO₂ during this monitoring period.

Table 5.4	Table 5.4-2: Ambient Air Quality Data (ppm unless otherwise indicated)							
Pollutant	Averaging Time	2009	2010	2011	2012	Most Stringent Ambient Air Quality Standard	Monitoring Station	
O3	8-hour	0.098	0.088	0.093	0.084	0.070	Alpine –	
	1-hour	0.119	0.105	0.114	0.101	0.090	Victoria Drive	
PM ₁₀	Annual	24.6	21.0	18.8	18.1	20 µg/m³	Escondido –	
	24-hour	74.0	43.0	40.0	33.0	50 µg/m³	E. Valley Parkway	
PM _{2.5}	Annual ¹	12.2 µg/m³	10.8 µg/m³	10.6 µg/m ³	NA	12 µg/m³	Alpine – Victoria	
	24-hour	29.7 µg/m³	23.4 µg/m³	25.5 µg/m³	25.5 µg/m³	35 µg/m³	Drive	
NO ₂	Annual	0.008	0.007	0.006	NA	0.030	Alpine – Victoria	
	1-hour	0.056	0.052	0.040	0.047	0.180	Drive	
СО	8-hour	3.54	2.46	2.30	3.70	9.0	Escondido –	
	1-hour*	3.0	2.0	2.0	1.7	20	E. Valley Parkway	
SO ₂	Annual	0.002	0.002	0.001	0.002	0.030	Chula Vista	
	24-hour	0.004	0.003	0.002	NA	0.040		

µg/m³ = micrograms per cubic meter NA = data not available

Sources: CARB 2013a; EPA 2013a.

Data represent maximum values. Notes: A new 1-hour NAAQS for NO2 became effective in April 2010. Data reflect compliance with the 1-hour CAAQS.

* Data were taken from EPA 2013a.

¹ 2009, 2010, 2011, and 2012 data were taken from El Cajon – Redwood Avenue monitoring station.

Table 5.4-3: Frequency of Air Quality Standard Violations						
Monitoring			ays Exceeding Standard			
Site	Year	State – 1-Hour O ₃	State – 8-Hour O3	National – 8-Hour O ₃	State — 24-hour PM ₁₀ *	
Alpine –	2009	6	43	22	—	
Victoria Drive	2010	4	20	12	—	
	2011	4	30	10	—	
	2012	1	22	7	—	
Escondido	2009	_	—	_	5.6 (1)	
 – E. Valley Parkway 	2010	—	—	_	—	
	2011	—	—	_	—	
	2012	—	—	_	—	

Source: CARB 2013a. * Measurements of PM_{10} are usually collected every 6 days, respectively. "Number of days exceeding the standards" is a mathematical estimate of the number of days concentrations would have been greater than the level of the standard had each day been monitored. The numbers in parentheses are the measured number of samples that exceeded the standard.

Global Climate Change

Climate change refers to any significant change in measures of climate, such as temperature, precipitation, or wind, lasting for an extended period (decades or longer).

The Greenhouse Effect and Greenhouse Gases

Gases that trap heat in the atmosphere are often called greenhouse gases (GHGs). The greenhouse effect traps heat in the troposphere through a three-fold process as follows: shortwave radiation emitted by the Sun is absorbed by the Earth; the Earth emits a portion of this energy in the form of long-wave radiation; and GHGs in the upper atmosphere absorb this longwave radiation and emit this long-wave radiation into space and toward the Earth. This "trapping" of the long-wave (thermal) radiation emitted back toward the Earth is the underlying process of the greenhouse effect. Principal GHGs include carbon dioxide (CO_2) , methane (CH_4) , nitrous oxide (N₂O), O₃, and water vapor (H₂O). Some GHGs, such as CO₂, CH₄, and N₂O, occur naturally and are emitted to the atmosphere through natural processes and human activities. Of these gases, CO_2 and CH_4 are emitted in the greatest quantities from human activities. Emissions of CO_2 are largely by-products of fossil fuel combustion, whereas CH_4 results mostly from off-gassing associated with agricultural practices and landfills. Man-made GHGs, which have a much greater heat-absorption potential than CO₂, include fluorinated gases, such as hydrofluorocarbons (HFCs), perfluorocarbons (PFC), sulfur hexafluoride (SF₆), and nitrogen trifluoride (NF₃), which are associated with certain industrial products and processes (CAT 2006).

The greenhouse effect is a natural process that contributes to regulating the earth's temperature. Without it, the temperature of the Earth would be about 0°F (-18°C) instead of its present 57°F (14°C). Global climate change concerns are focused on whether human activities are leading to an enhancement of the greenhouse effect (National Climatic Data Center 2009).

The effect each GHG has on climate change is measured as a combination of the mass of its emissions and the potential of a gas or aerosol to trap heat in the atmosphere, known as its global warming potential (GWP). The GWP varies between GHGs; for example, the GWP of CH₄ is 21, and the GWP of N₂O is 310. Total GHG emissions are expressed as a function of how much warming would be caused by the same mass of CO₂. Thus, GHG gas emissions are typically measured in terms of pounds or tons of "CO₂ equivalent" (CO₂E).²

According to CARB, some of the potential impacts in California of global warming may include loss in snowpack, sea-level rise, more extreme heat days per year, more high O_3 days, more large forest fires, and more drought years (CARB 2006). Several recent studies have attempted to explore the possible negative consequences that climate change, left unchecked, could have in California. These reports acknowledge that climate scientists' understanding of the complex global climate system, and the interplay of the various internal and external factors that affect

² The CO₂ equivalent for a gas is derived by multiplying the mass of the gas by the associated GWP, such that MT CO₂E = (metric tons of a GHG) x (GWP of the GHG). For example, the GWP for CH₄ is 21. This means that emissions of 1 metric ton of methane are equivalent to emissions of 21 metric tons of CO₂.

climate change, remains too limited to yield scientifically valid conclusions on such a localized scale. Substantial work has been done at the international and national level to evaluate climatic impacts, but far less information is available on regional and local impacts.

The primary effect of global climate change has been a rise in average global tropospheric temperature of 0.2°C per decade, determined from meteorological measurements worldwide between 1990 and 2005. Climate change modeling using 2000 emission rates shows that further warming would occur, which would induce further changes in the global climate system during the current century. Changes to the global climate system and ecosystems and to California could include, but would not be limited to, the following:

- The loss of sea ice and mountain snowpack resulting in higher sea levels and higher sea surface evaporation rates with a corresponding increase in tropospheric water vapor due to the atmosphere's ability to hold more water vapor at higher temperatures (IPCC 2007)
- Rise in global average sea level primarily due to thermal expansion and melting of glaciers and ice caps, the Greenland and Antarctic ice sheets (IPCC 2007)
- Changes in weather that include widespread changes in precipitation, ocean salinity, and wind patterns, and more energetic aspects of extreme weather including droughts, heavy precipitation, heat waves, extreme cold, and the intensity of tropical cyclones (IPCC 2007)
- Decline of Sierra snowpack, which accounts for approximately half of the surface water storage in California, by 70% to as much as 90% over the next 100 years (CAT 2006)
- Increase in the number of days conducive to O₃ formation by 25% to 85% (depending on the future temperature scenario) in high O₃ areas of Los Angeles and the San Joaquin Valley by the end of the 21st century (CAT 2006)
- High potential for erosion of California's coastlines and seawater intrusion into the Delta and levee systems due to the rise in sea level (CAT 2006).

Contributions to GHG Emissions

United States

The United States is the second highest producer of GHG emissions after China, emitting 6,702 million metric tons (MMT) CO_2E in 2011 (EPA 2013b). The primary GHG emitted by human activities in the United States was CO_2 , representing approximately 84% of total GHG emissions. The largest source of CO_2 , and of overall GHG emissions, was fossil-fuel combustion, which accounted for approximately 94% of the CO_2 emissions and 79% of overall GHG emissions (EPA 2013b).

State of California

According to the 2010 GHG inventory data compiled by CARB for the California Greenhouse Gas Inventory for 2000–2010, California emitted 452 MMT CO_2E of GHGs, including emissions resulting from out-of-state electrical generation (CARB 2013b). The primary contributors to GHG emissions in California are transportation, electric power production from both in-state and out-of-state sources, industry, agriculture and forestry, and other sources, which include commercial and residential activities. These primary contributors to California's GHG emissions and their relative contributions in 2010 are presented in Table 5.4-4.

Table 5.4-4: Greenhouse Gas Sources in California					
Source Category	Annual GHG Emissions (MMT CO ₂ E)	Percentage of Total			
Agriculture	32.45	7.19%			
Commercial and residential	43.89	9.72%			
Electricity generation	93.30 ^ª	20.66%			
Forestry (excluding sinks)	0.19	0.04%			
Industrial uses	85.96	19.03%			
Recycling and waste	6.98	1.55%			
Transportation	173.18	38.35%			
High-GWP substances	15.66	3.47%			
Totals	451.60	100.0%			

Source: CARB 2013b.

^a Includes emissions associated with imported electricity, which account for 43.59 MMT CO₂E annually.

5.4.2 Regulatory Setting

Air Quality

Federal

The federal Clean Air Act, passed in 1970 and last amended in 1990, forms the basis for the national air pollution control effort. The EPA is responsible for implementing most aspects of the Clean Air Act, including the setting of NAAQS for major air pollutants, hazardous air pollutant standards, approval of state attainment plans, motor vehicle emission standards, stationary source emission standards and permits, acid rain control measures, stratospheric O₃ protection, and enforcement provisions. NAAQS are established for "criteria pollutants" under the Clean Air Act, which are O₃, CO, NO₂, SO₂, PM₁₀, PM_{2.5}, and lead.

The NAAQS describe acceptable air quality conditions designed to protect the health and welfare of the citizens of the nation. The NAAQS (other than for O₃, NO₂, SO₂, PM₁₀, PM_{2.5}, and those based on annual averages or arithmetic mean) are not to be exceeded more than once per year. NAAQS for O₃, NO₂, SO₂, PM₁₀, and PM_{2.5} are based on statistical calculations over 1-to 3-year periods, depending on the pollutant. The Clean Air Act requires the EPA to reassess the NAAQS at least every 5 years to determine whether adopted standards are adequate to protect public health based on current scientific evidence. States with areas that exceed the NAAQS must prepare a State Implementation Plan that demonstrates how those areas will attain the standards within mandated time frames.

State

The federal Clean Air Act delegates the regulation of air pollution control and the enforcement of the NAAQS to the states. In California, the task of air quality management and regulation has been legislatively granted to CARB, with subsidiary responsibilities assigned to air quality management districts (AQMDs) and air pollution control districts (APCDs) at the regional and county levels. CARB, which is part of the California Environmental Protection Agency (CalEPA),

is responsible for ensuring implementation of the California Clean Air Act of 1988, responding to the federal Clean Air Act, and regulating emissions from motor vehicles and consumer products.

CARB has established CAAQS, which are generally more restrictive than the NAAQS. The CAAQS describe adverse conditions; that is, pollution levels must be below these standards before a basin can attain the standard. The CAAQS for O_3 , CO, SO₂ (1-hour and 24-hour), NO₂, PM₁₀, and PM_{2.5} and visibility-reducing particles are values that are not to be exceeded. All others are not to be equaled or exceeded. The NAAQS and CAAQS are presented in Table 5.4-5, Ambient Air Quality Standards.

		California Standards ¹	National Standards ²		
Pollutant Averaging Time		Concentration ³	Primary ^{3,4}	Secondary ^{3,5}	
0	1 hour	0.09 ppm (180 μg/m ³)	_		
O ₃	8 hour	0.070 ppm (137 μg/m ³)	0.075 ppm (147 μg/m ³)	Same as Primary Standard	
со	1 hour	20 ppm (23 mg/m ³)	35 ppm (40 mg/m ³)		
CO	8 hour	9.0 ppm (10 mg/m ³)	9 ppm (10 mg/m ³)	—	
NO ₂ 6	1 hour	0.18 ppm (339 μg/m ³)	0.100 ppm (188 μg/m ³)	Como os Drimory Stondor	
NU2°	Annual Arithmetic Mean	0.030 ppm (57 μg/m ³)	0.053 ppm (100 µg/m ³)	Same as Primary Standar	
	1 hour	0.25 ppm (655 μg/m ³)	0.75 ppm (196 μg/m ³)	—	
	3 hour	—	_	0.5 ppm (1300 μg/m ³)	
SO ₂ ⁷	24 hour	0.04 ppm (105 μg/m ³)	0.14 ppm (for certain areas) ⁷		
	Annual Arithmetic Mean	_	0.030 ppm (for certain areas) ⁷	_	
	24 hour	50 μg/m³	150 μg/m³	Same as Primary Standar	
PM ₁₀ 8	Annual Arithmetic Mean	20 μg/m ³	_		
	24 hour	—	35 μg/m³	Same as Primary Standar	
PM _{2.5} ⁸	Annual Arithmetic Mean	12 μg/m³	12.0 μg/m ³	15.0 μg/m³	
	30-day Average	1.5 μg/m³	_	—	
Lead ^{9,10}	Calendar Quarter	_	1.5 μg/m³ (for certain areas) ¹⁰	Same as Primary Standard	
	Rolling 3-Month Average	_	0.15 µg/m ³		
Hydrogen sulfide	1 hour	0.03 ppm (42 μg/m ³)	_	_	
/inyl chloride9	24 hour	0.01 ppm (26 μg/m ³)	_	—	
Sulfates	24 hour	25 µg/m3	_	—	
Visibility reducing particles ¹¹	8 hour (10:00 a.m. to 6:00 p.m. PST)	See footnote 11			

ppm= parts per million by volume Source: CARB 2013a μ g/m³ = micrograms per cubic meter

mg/m³= milligrams per cubic meter

- ¹ California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM10, PM2.5, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
- ² National standards (other than O₃, NO₂, SO₂, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year. The O₃ standard is attained when the fourth highest 8-hour concentration in a year, averaged over 3 years, is equal to or less than the standard. For NO₂ and SO₂, the standard is attained when the 3-year average of the 98th and 99th percentile, respectively, of the daily maximum 1-hour average at each monitor within an area does not exceed the standard. For PM₁₀, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m³ is equal to or less than one. For PM_{2.5}, the 24-hour standard is attained when 98% of the daily concentrations, averaged over 3 years, are equal to or less than the standard.
- ³ Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this
- table refers to ppm by volume, or micromoles of pollutant per mole of gas.
- ⁴ National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
- ⁵ National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
- ⁶ To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.
- ⁷ On June 2, 2010, a new 1-hour SO2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.
- ⁸ On December 14, 2012, the national annual PM_{2.5} primary standard was lowered from 15 µg/m³ to 12 µg/m³. The existing national 24-hour PM 2.5 standards (primary and secondary) were retained at 35 µg/m³, as was the annual secondary standard of 15 µg/m³. The existing 24-hour PM10 standards (primary and secondary) of 150 µg/m³ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.
- ⁹ The ARB has identified lead and vinyle chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at leavels below the ambient concentrations specified for these pollutants.
- ¹⁰ The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 μg/m³ as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.
- ¹¹ In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

Local

San Diego Air Pollution Control District

While CARB is responsible for the regulation of mobile emission sources within the state, local AQMDs and APCDs are responsible for enforcing standards and regulating stationary sources. The project is located within the SDAB and is subject to SDAPCD guidelines and regulations. In San Diego County, O₃ and particulate matter are the pollutants of main concern, since exceedances of state ambient air quality standards for those pollutants are experienced here in most years. For this reason, the SDAB has been designated as a nonattainment area for the state PM₁₀, PM_{2.5}, and O₃ standards. The SDAB is also a federal O₃ nonattainment area and a CO maintenance area (western and central part of the SDAB only); the project area is in the CO maintenance area.

The SDAPCD and the San Diego Association of Governments (SANDAG) are responsible for developing and implementing the clean air plan for attainment and maintenance of the ambient air quality standards in the SDAB. The Regional Air Quality Strategy (RAQS) for the SDAB was initially adopted in 1991, and is updated on a triennial basis (most recently in 2009). The RAQS outlines SDAPCD's plans and control measures designed to attain the state air quality standards for O₃. The RAQS relies on information from CARB and SANDAG, including mobile and area source emissions, as well as information regarding projected growth in San Diego County and the cities in the County,

to project future emissions and then determine from that the strategies necessary for the reduction of emissions through regulatory controls. CARB mobile source emission projections and SANDAG growth projections are based on population, vehicle trends, and land use plans developed by San Diego County and the cities in the County as part of the development of their general plans.

The Eight-Hour Ozone Attainment Plan for San Diego County indicates that local controls and state programs would allow the region to reach attainment of the federal 8-hour O_3 standard by 2009 (SDAPCD 2007). In this plan, SDAPCD relies on the RAQS to demonstrate how the region will comply with the federal O_3 standard. The RAQS details how the region will manage and reduce O_3 precursors (NO_x and VOCs) by identifying measures and regulations intended to reduce these contaminants. The control measures identified in the RAQS generally focus on stationary sources; however, the emissions inventories and projections in the RAQS address all potential sources, including those under the authority of CARB and the EPA. Incentive programs for reduction of emissions from heavy-duty diesel vehicles, off-road equipment, and school buses are also established in the RAQS.

In December 2005, SDAPCD prepared a report titled *Measures to Reduce Particulate Matter in San Diego County* to address implementation of Senate Bill (SB) 656 in San Diego County (SB 656 required additional controls to reduce ambient concentrations of PM_{10} and $PM_{2.5}$). In the report, SDAPCD evaluates sources of particulate matter and potential source control measures, and focuses on the implementation of additional source-control measures that would reduce particulate matter emissions associated with residential wood combustion and fugitive dust from construction sites and unpaved areas (SDAPCD 2005).

As stated above, the SDAPCD is responsible for planning, implementing, and enforcing federal and state ambient standards in the SDAB. The following rules and regulations would apply to the construction of the proposed project:

- 1. **SDAPCD Regulation IV: Prohibitions; Rule 51: Nuisance.** Prohibits the discharge, from any source, of such quantities of air contaminants or other materials that cause or have a tendency to cause injury, detriment, nuisance, annoyance to people and/or the public, or damage to any business or property (SDAPCD 1969).
- SDAPCD Regulation IV: Prohibitions; Rule 55: Fugitive Dust. Regulates fugitive dust emissions from any commercial construction or demolition activity capable of generating fugitive dust emissions, including active operations, open storage piles, and inactive disturbed areas, as well as track-out and carry-out onto paved roads beyond a project site (SDAPCD 2009).

San Diego County

During construction of the project, the construction contractor would be required to comply with County Code Section 87.428 and implement appropriate dust control measures.

County Code Section 87.428, Dust Control Measures. As part of the San Diego County Grading, Clearing, and Watercourses Ordinance, County Code Section 87.428 requires all clearing and grading to be carried out with dust control measures adequate to prevent creation of a nuisance to persons or public or private property. Clearing, grading, or improvement plans shall require that measures such as the following be undertaken to achieve this result: watering,

application of surfactants, shrouding, control of vehicle speeds, paving of access areas, or other operational or technological measures to reduce dispersion of dust. These project design measures are to be incorporated into all earth disturbing activities to minimize the amount of particulate matter emissions from construction (County of San Diego 2004).

Greenhouse Gas Emissions

Federal

Massachusetts vs. EPA

On April 2, 2007, in *Massachusetts v. EPA*, the Supreme Court directed the EPA Administrator to determine whether GHG emissions from new motor vehicles cause or contribute to air pollution that may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision. In making these decisions, the EPA Administrator is required to follow the language of Section 202(a) of the federal Clean Air Act. On December 7, 2009, the Administrator signed a final rule with two distinct findings regarding GHGs under Section 202(a) of the Clean Air Act:

- The Administrator found that elevated concentrations of GHGs—CO₂, CH₄, N₂O, HFCs, PFCs, and SF₆—in the atmosphere threaten the public health and welfare of current and future generations. This is referred to as the "endangerment finding."
- The Administrator further found the combined emissions of GHGs—CO₂, CH₄, N₂O, and HFCs—from new motor vehicles and new motor vehicle engines contribute to the GHG air pollution that endangers public health and welfare. This is referred to as the "cause or contribute finding."

These two findings were necessary to establish the foundation for regulation of GHGs from new motor vehicles as air pollutants under the Clean Air Act.

Energy Independence and Security Act

On December 19, 2007, President Bush signed the Energy Independence and Security Act of 2007. Among other key measures, the act would do the following, which would aid in the reduction of national GHG emissions:

- 1. Increase the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard (RFS) requiring fuel producers to use at least 36 billion gallons of biofuel in 2022
- Set a target of 35 miles per gallon (mpg) for the combined fleet of cars and light trucks by model year 2020 and direct National Highway Traffic Safety Administration (NHTSA) to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for work trucks
- 3. Prescribe or revise standards affecting regional efficiency for heating and cooling products and procedures for new or amended standards, energy conservation, energy efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances.

EPA and NHTSA Joint Final Rule for Vehicle Standards

The EPA, in conjunction with the NHTSA, has adopted regulations to reduce GHG emissions and increase the Corporate Average Fuel Economy (CAFE) standards for new passenger cars and light-trucks (EPA and NHTSA 2010). Under the first round of regulations promulgated in 2010, new passenger cars, light-duty trucks, and medium-duty passenger vehicles must meet an estimated combined average emissions level of 250 grams of CO₂ per mile in model year 2016, equivalent to 35.5 mpg if the automotive industry were to meet this CO₂ level through fuel economy improvements alone. The CAFE standards for passenger cars and light trucks will be phased in between 2012 and 2016, with the final standards equivalent to 37.8 mpg for passenger cars and 28.8 mpg for light trucks, resulting in an estimated combined average of 34.1 mpg. In 2011, the EPA and NHTSA approved the first-ever program to reduce GHG emissions and increase fuel efficiency for medium- and heavy-duty vehicles (EPA and NHTSA 2011).

Effective November 14, 2011, the CO₂ emissions and fuel efficiency standards of this regulation apply to model year 2014–2018 combination tractors (i.e., semi-trucks), heavy-duty pickup trucks and vans, and vocational vehicles including transit and school buses. This regulation covers vehicles with a gross vehicle weight rating of 8,500 pounds or greater; medium-duty passenger vehicles are covered by the previous regulation for passenger cars and light-duty trucks. In addition, the EPA has adopted standards to control HFC leakage from air conditioning systems in combination tractors and heavyduty pickup trucks and vans as well as CH_4 and N_2O standards for heavy-duty engines, pickup trucks. and vans. In August 2012, the EPA and NHTSA approved a second round of GHG and CAFE standards for model years 2017 and beyond (EPA and NHTSA 2012). These standards will reduce motor vehicle GHG emissions to 163 grams of CO₂ per mile, which is equivalent to 54.5 mpg if this level were achieved solely through improvements in fuel efficiency, for cars and light-duty trucks by model year 2025. A portion of these improvements, however, will likely be made through improvements in air conditioning leakage and through use of alternative refrigerants, which would not contribute to fuel economy. The first phase of the CAFE standards, for model year 2017-2021, are projected to require, on an average industry fleet-wide basis, a range from 40.3 to 41.0 mpg in model year 2021. The second phase of the CAFE program, for model years 2022–2025, includes standards, which are not final due to the statutory requirement that NHTSA set average fuel economy standards not more than five model years at a time, projected to require, on an average industry fleet-wide basis, a range from 48.7 to 49.7 mpg in model year 2025. The regulations also include targeted incentives to encourage early adoption and introduction into the marketplace of advanced technologies to dramatically improve vehicle performance, including:

- Incentives for electric vehicles, plug-in hybrid electric vehicles, and fuel cells vehicles
- Incentives for hybrid technologies for large pickups and for other technologies that achieve high fuel economy levels on large pickups
- Incentives for natural gas vehicles
- Credits for technologies with potential to achieve real-world GHG reductions and fuel economy improvements that are not captured by the standards test procedures.

State

Assembly Bill (AB) 1493

In a response to the transportation sector accounting for more than half of California's CO_2 emissions, AB 1493 (Pavley) was enacted on July 22, 2002. AB 1493 required CARB to set GHG emission standards for passenger vehicles, light-duty trucks, and other vehicles

determined by the state board to be vehicles whose primary use is noncommercial personal transportation in the state. The bill required that CARB set GHG emission standards for motor vehicles manufactured in 2009 and all subsequent model years. CARB adopted the standards in September 2004. When fully phased in, the near-term (2009–2012) standards will result in a reduction of about 22% in GHG emissions compared to the emissions from the 2002 fleet, while the mid-term (2013–2016) standards will result in a reduction of about 30%.

Before these regulations could go into effect, the EPA had to grant California a waiver under the federal Clean Air Act, which ordinarily preempts state regulation of motor vehicle emission standards. The waiver was granted by Lisa Jackson, the EPA Administrator, on June 30, 2009. On March 29, 2010, the CARB Executive Officer approved revisions to the motor vehicle GHG standards to harmonize the state program with the national program for 2012–2016 model years (see "EPA and NHTSA Joint Final Rule for Vehicle Standards" discussed earlier). The revised regulations became effective on April 1, 2010.

Executive Order S-3-05

In June 2005, Governor Schwarzenegger established California's GHG emissions reduction targets in Executive Order S-3-05. The Executive Order established the following goals: GHG emissions should be reduced to 2000 levels by 2010; GHG emissions should be reduced to 1990 levels by 2020; and GHG emissions should be reduced to 80% below 1990 levels by 2050. The CalEPA Secretary is required to coordinate efforts of various agencies to collectively and efficiently reduce GHGs. The Climate Action Team is responsible for implementing global warming emissions reduction programs. Representatives from several state agencies comprise the Climate Action Team. The Climate Action Team fulfilled its report requirements through the March 2006 Climate Action Team Report to the governor and the legislature (CAT 2006). A second biennial report, released in April 2010 (CAT 2010), expands on the policy oriented in the 2006 assessment. The report provides updated information and scientific findings regarding the development of new climate and sea-level projections using new information and tools that have recently become available, and evaluates climate change within the context of broader soil changes, such as land use changes and demographics. The report also identifies the need for additional research in several different aspects that affect climate change in order to support effective climate change strategies. The aspects of climate change determined to require future research include vehicle and fuel technologies, land use and smart growth, electricity and natural gas, energy efficiency, renewable energy and reduced carbon energy sources, low GHG technologies for other sectors, carbon sequestration, terrestrial sequestration, geologic sequestration, economic impacts and considerations, social science, and environmental justice.

<u>AB 32</u>

In furtherance of the goals established in Executive Order S-3-05, the legislature enacted AB 32 (Núñez and Pavley), the California Global Warming Solutions Act of 2006, which Governor Schwarzenegger signed on September 27, 2006. The GHG emissions limit is equivalent to the 1990 levels, which are to be achieved by 2020.

CARB has been assigned to carry out and develop the programs and requirements necessary to achieve the goals of AB 32. Under AB 32, CARB must adopt regulations requiring the

reporting and verification of statewide GHG emissions. This program will be used to monitor and enforce compliance with the established standards. CARB is also required to adopt rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emission reductions. AB 32 allows CARB to adopt market-based compliance mechanisms to meet the specified requirements. Finally, CARB is ultimately responsible for monitoring compliance and enforcing any rule, regulation, order, emission limitation, emission reduction measure, or market-based compliance mechanism adopted.

The first action under AB 32 resulted in the adoption of a report listing early action GHG emission reduction measures on June 21, 2007. The early actions include three specific GHG control rules. On October 25, 2007, CARB approved an additional six early action GHG reduction measures under AB 32. The three original early-action regulations meeting the narrow legal definition of "discrete early action GHG reduction measures" include:

- 1. A low-carbon fuel standard to reduce the "carbon intensity" of California fuels
- 2. Reduction of refrigerant losses from motor vehicle air conditioning system maintenance to restrict the sale of "do-it-yourself" automotive refrigerants
- 3. Increased methane capture from landfills to require broader use of state-of-the-art methane capture technologies.

The additional six early-action regulations, which were also considered "discrete early action GHG reduction measures," consist of:

- 1. Reduction of aerodynamic drag, and thereby fuel consumption, from existing trucks and trailers through retrofit technology
- 2. Reduction of auxiliary engine emissions of docked ships by requiring port electrification
- 3. Reduction of PFCs from the semiconductor industry
- 4. Reduction of propellants in consumer products (e.g., aerosols, tire inflators, and dust removal products)
- 5. Requirements that all tune-up, smog check and oil change mechanics ensure proper tire inflation as part of overall service in order to maintain fuel efficiency
- 6. Restriction on the use of SF_6 from non-electricity sectors if viable alternatives are available.

As required under AB 32, on December 6, 2007, CARB approved the 1990 GHG emissions inventory, thereby establishing the emissions limit for 2020. The 2020 emissions limit was set at 427 MMT CO_2E . In addition to the 1990 emissions inventory, CARB also adopted regulations requiring mandatory reporting of GHGs for large facilities that account for 94% of GHG emissions from industrial and commercial stationary sources in California. About 800 separate sources fall under the new reporting rules and include electricity generating facilities, electricity retail providers and power marketers, oil refineries, hydrogen plants, cement plants, cogeneration facilities, and other industrial sources that emit CO_2 in excess of specified thresholds.

On December 11, 2008, CARB approved the Climate Change Proposed Scoping Plan: A Framework for Change (Scoping Plan; CARB 2008) to achieve the goals of AB 32. The Scoping Plan establishes an overall framework for the measures that will be adopted to reduce California's GHG emissions. The Scoping Plan evaluates opportunities for sector-specific

reductions, integrates all CARB and Climate Action Team early actions and additional GHG reduction measures by both entities, identifies additional measures to be pursued as regulations, and outlines the role of a cap-and-trade program.

The key elements of the Scoping Plan include:

- Expanding and strengthening existing energy efficiency programs as well as building and appliance standards
- Achieving a statewide renewables energy mix of 33%
- Developing a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system and caps sources contributing 85% of California's GHG emissions
- Establishing targets for transportation-related GHG emissions for regions throughout California, and pursuing policies and incentives to achieve those targets
- Adopting and implementing measures pursuant to existing state laws and policies, including California's clean car standards, goods movement measures, and the Low Carbon Fuel Standard
- Creating targeted fees, including a public goods charge on water use, fees on high global warming potential gases, and a fee to fund the administrative costs of the State of California's long-term commitment to AB 32 implementation.

<u>SB X1 2</u>

On April 12, 2011, Governor Brown signed SB X1 2 in the First Extraordinary Session, which would expand the Renewable Portfolio Standard (RPS) by establishing a goal of 20% of the total electricity sold to retail customers in California per year, by December 31, 2013, and 33% by December 31, 2020, and in subsequent years. Under the bill, a renewable electrical generation facility is one that uses biomass, solar thermal, photovoltaic, wind, geothermal, fuel cells using renewable fuels, small hydroelectric generation of 30 megawatts or less, digester gas, municipal solid waste conversion, landfill gas, ocean wave, ocean thermal, or tidal current and that meets other specified requirements with respect to its location. In addition to the retail sellers covered by SB 107, SB X1 2 adds local publicly owned electric utilities to the RPS. By January 1, 2012, the CPUC is required to establish the quantity of electricity products from eligible renewable energy resources to be procured by retail sellers in order to achieve targets of 20% by December 31, 2013; 25% by December 31, 2016; and 33% by December 31, 2020. The statute also requires that the governing boards for local publicly owned electric utilities establish the same targets, and the governing boards would be responsible for ensuring compliance with these targets. The CPUC will be responsible for enforcement of the RPS for retail sellers, while the California Energy Commission and CARB will enforce the requirements for local publicly owned electric utilities.

Local

The County of San Diego Climate Action Plan (CAP), adopted June 2012, documents the County's long-term strategy for addressing the adverse effects of climate change (County of San Diego 2012). The CAP outlines various mechanisms and measures for reducing GHG emissions at the County level, including those specific to water conservation, waste reduction,

land use, and adaptation strategies to fulfill the obligations delineated in AB 32. The CAP includes County goals previously established under the County General Plan and County Strategic Energy Plan, and establishes reduction targets at 15% below 2005 levels by 2020 and 49% below 2005 levels by 2035. The CAP builds on long-standing efforts, including state initiatives, County staff recommendations, and regional planning strategies, to enhance environmental sustainability and carbon neutrality, particularly in unincorporated segments of the County. As shown in Table 5.4-6, GHG Sources in San Diego County, unincorporated San Diego County emitted approximately 4.51 MMT CO_2E of GHGs in 2005. Similar to the statewide emissions inventory, the transportation sector was the largest contributor to GHG emissions in 2005, accounting for approximately 59% of total GHG emissions (more than 2.6 MMT CO_2E). Emission sources and emission estimates by sector are shown in Table 5.4-6.

Table 5.4-6: GHG Sources in San Diego County□			
Source Category	Annual GHG Emissions (MMT CO ₂ E)	% of Total	
Transportation	2.64	59%	
Agriculture	0.19	4%	
Solid Waste	0.14	3%	
Wastewater	0.05	1%	
Potable Water	0.24	5%	
Other	0.13	3%	
Energy	1.12	25%	
Totals	4.51	100.00%	

Source: County of San Diego 2012.

5.4.3 Environmental Impacts

Significance Criteria

Appendix G of the California Environmental Quality Act (CEQA) Guidelines (14 CCR 15000 et seq.) provides guidance for evaluating whether a project may result in significant impacts. Appendix G suggests that a project could have a significant impact on air quality if the project would:

Criteria Pollutants:

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

Greenhouse Gas Emissions:

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

Criteria Pollutants

As part of its air quality permitting process, the SDAPCD has established thresholds in Rule 20.2 requiring the preparation of Air Quality Impact Assessments for permitted stationary sources. The SDAPCD sets forth quantitative emission thresholds below which a stationary source would not have a significant impact on ambient air quality. Project-related air quality impacts estimated in this environmental analysis would be considered significant if any of the applicable significance thresholds presented in Table 5.4-7, County of San Diego Significance Thresholds, are exceeded.

For CEQA purposes, these screening criteria can be used as numeric methods to demonstrate that a project's total emissions would not result in a significant impact to air quality.

Table 5.4-7: County of San Diego Significance Thresholds					
Pollutant	Construction (pounds/day)	Operation (pounds/year)			
Criteria Pollutants Mass Daily Thresholds					
VOC	75*	13.7			
NO _x	250	40			
СО	550	100			
SO _x	250	40			
PM ₁₀	100	15			
PM _{2.5}	55	10			

Sources: County of San Diego 2007.

Notes: * VOC threshold based on the threshold of significance for VOCs from the South Coast Air Quality Management District for the Coachella Valley as stated in the San Diego County Guidelines for Determining Significance.

VOC - volatile organic compounds

NO_x – oxides of nitrogen

CO - carbon monoxide

SO_x – sulfur oxides

PM₁₀ – particulate matter less than or equal to 10 microns

 $PM_{2.5}$ – particulate matter less than or equal to 2.5 microns

The thresholds listed in Table 5.4-7 represent screening-level thresholds that can be used to evaluate whether project-related emissions could cause a significant impact on air quality. Emissions below the screening-level thresholds would not cause a significant impact. In the event that emissions exceed these thresholds, modeling would be required to demonstrate that the project's total air quality impacts result in ground-level concentrations that are below the CAAQS and NAAQS, including appropriate background levels. For nonattainment pollutants, if emissions exceed the thresholds shown in Table 5.4-7, the project could have the potential to result in a cumulatively considerable net increase in these pollutants and thus could have a significant impact on the ambient air quality.

With respect to odors, SDAPCD Rule 51 (Public Nuisance) prohibits emission of any material that causes nuisance to a considerable number of persons or endangers the comfort, health, or safety of any person. A project that proposes a use that would produce objectionable odors would be deemed to have a significant odor impact if it would affect a considerable number of off-site receptors.

Greenhouse Gas Emissions

Neither the State of California nor the SDAPCD has established CEQA significance thresholds for GHG emissions. The following significance criteria are based on the CEQA Checklist included in Appendix G of the CEQA Guidelines. Under CEQA, GHG impacts would be considered significant if the project 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 the emissions of GHGs.

The Governor's Office of Planning and Research (OPR) advises, "Even in the absence of clearly defined thresholds for GHG emissions, the law requires that such emissions from CEQA projects must be disclosed and mitigated to the extent feasible whenever the lead agency determines that the project contributes to a significant, cumulative climate change impact" (OPR 2008, p. 4). Furthermore, the OPR advisory indicates, "In the absence of regulatory standards for GHG emissions or other scientific data to clearly define what constitutes a 'significant impact,' individual lead agencies may undertake a project-by-project analysis, consistent with available guidance and current CEQA practice" (OPR 2008, p. 6).

The South Coast Air Quality Management District (SCAQMD) adopted an interim significance threshold of 10,000 metric tons (MT) CO_2E per year for industrial projects in December 2008. The SCAQMD threshold was adopted after rigorous public vetting. The same threshold value as that adopted by the SDAQMD is also reflected as the "stationary source" threshold in the County of San Diego CAP adopted June 2012 (County of San Diego 2012)³. To assess the impacts of the significance of the proposed project's GHG emissions with respect to CEQA, the CPUC will apply the SCAQMD significance threshold of 10,000 MT CO_2E /year, including all construction and operational emissions. In the absence of a rulemaking to establish a GHG emission threshold of significance to be applied uniformly throughout the state, the CPUC is assessing the impacts of GHG emissions on a case-by-case basis. In areas of the state in which the local APCD or AQMD has not adopted a threshold of significance, the CPUC will apply a threshold that has been adopted by CARB or another APCD or AQMD. In this instance,

³ The County of San Diego CAP was approved and adopted on June 20, 2012; however, on April 29, 2013, the Superior Court deemed the CAP inadequate and ruled the document was improperly adopted. Additionally, the updated Draft County of San Diego Guidelines for Determining Significance - Climate Change, which serves as the supporting documentation for the implementation of the CAP, has yet to be approved. As such, thresholds and measures described in the CAP as applicable to the project analysis are provided for informational purposes only.

the CPUC is using the SCAQMD threshold because neither CARB nor the SDAPCD has yet to adopt a threshold.

Impact Discussion

a) Would the project conflict with or obstruct implementation of the applicable air quality plan?

Regional planning efforts to improve air quality include a variety of strategies to reduce emissions from motor vehicles and minimize emissions from stationary sources. As discussed above, the SDAPCD is the agency principally responsible for comprehensive air pollution control in San Diego County. The SDAPCD develops rules and regulations, establishes permitting requirements for stationary sources, inspects sources, and enforces such measures through educational programs or fines, when necessary.

The applicable air quality plan for San Diego County is the RAQS. The RAQS is based on SANDAG growth forecasts for the region, and incorporates measures to meet state and federal requirements. Under this threshold, significance of air quality impacts is based on the degree to which the project is consistent with SANDAG's growth forecasts. If a project is consistent with growth forecasts, its resulting impacts were anticipated in the RAQS and are considered to be less than significant. Growth forecasts in the RAQS are based on approved General Plans, Community Plans, and Redevelopment Plans.

The wood-to-steel pole replacement fire-hardening project and associated SDG&E facility improvements are proposed to safeguard the Tie-Line (TL) 637 alignment from wildland fire impacts and to increase the reliability of electrical service to existing customers. As a redevelopment project, the proposed project would replace existing poles with new poles, modify two existing SDG&E substations, and install a fiber optic line on the new steel poles. The project is consistent with the current designated use of the site and would not alter or introduce new conflicts with land use designations. The project does not include development of new homes or businesses; therefore, as further discussed in Section 5.13, Population/Housing, it would not induce population growth in the SDAB. As discussed in response 5.4.3 (b) below, emissions during construction of the project would be less than the SDAPCD's thresholds of significance. and operation of the project would result in very minimal emissions from occasional vehicle trips to maintain the alignment facilities, similar to existing conditions. The types and quantities of construction equipment that would be used for the proposed project would be typical of the industry and would not be of sufficient magnitude in guantity to exceed those assumptions used in the preparation of construction equipment emissions in the RAQS. Because the RAQS has accounted for construction-related emissions, construction emissions generated by the proposed project would be consistent with those included in the emissions inventory of the RAQS; therefore, they would be consistent with construction-related emissions projected in the RAQS. Hence, the threshold of significance (i.e., conflict with or obstruct implementation of the applicable air quality plan) would not be exceeded and no impact would result.

b) Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Construction: Construction emissions would be short-term and temporary, and would be generated by heavy equipment, construction-related trips by workers, material-hauling trucks, and associated fugitive dust generation from clearing and grading activities. The principal pollutants of concern would be PM_{10} and ozone precursor emissions (ROG and NO_x). Table 5.4-8 provides estimated project emissions during construction.

Emissions were calculated using horsepower ratings, load factors, and emission factors from CARB's OFFROAD Model as provided in the CalEEMod User's Guide, Appendix D, for heavy construction equipment. Emissions estimates also used emission factors from CARB's EMFAC2011 Model for on-road vehicles. The year 2014 was analyzed for the purpose of construction emissions (SDG&E 2013a).

Table 5.4-8: Proposed Project Construction Air Emissions						
	Pollutant (pounds/day)					
Emissions Source	VOC	NOx	со	SO _x	PM 10	PM _{2.5}
2014						
Estimated Emissions	31.38	199.55	230.39	0.35	39.38	22.17
SDAPCD Thresholds	75	250	550	250	100	55
Exceed Threshold?	No	No	No	No	No	No

Source: SDG&E 2013b.

VOC = volatile organic compounds; NO_x = nitrogen oxides; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = particulate matter less than or equal to 10 microns; $PM_{2.5}$ = particulate matter less than or equal to 2.5 microns

As shown in Table 5.4-8, total daily construction emissions with incorporation of standard dustcontrol measures implemented to comply with SDAPCD Rule 55 would not exceed identified significance thresholds or result in a violation air quality standards; therefore, they are considered to be less than significant.

Operation

Once operational, the project would not create any air emissions beyond those associated with maintenance and repair of the project. Operations and maintenance would require routine and periodic equipment testing, pole brushing, herbicide application, and other related ongoing maintenance tasks, similar to those currently administered by SDG&E for the existing TL 637 alignment. These activities would not increase in duration, intensity, or frequency with implementation of the proposed project. Operational emissions are expected to decrease compared to existing conditions due to fewer poles required for the proposed alignment and increased reliability in the transmission facilities, which would necessitate fewer maintenance hours by SDG&E staff. Emissions resulting from operations and maintenance would not exceed the significance thresholds identified above; therefore, they would not contribute substantially to an existing or projected air quality violation and are considered to be less than significant.

c) Would the project result in a cumulatively considerable net increase in any criteria pollutant for which the project region is in nonattainment under an applicable federal or state ambient air quality standard?

The project's cumulative impacts are based on an analysis of the consistency of the project with the local general plan and the applicable air quality plan. As discussed previously under impact discussion question (a), the proposed project would not conflict with or obstruct the implementation of any federal, state, or local air quality attainment plans. As a result, the proposed project would not result in a cumulatively considerable net increase in any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard. Additionally, SDG&E has proposed Applicant Proposed Measure (APM)-GEN-1 (see Section 4.8, Table 4-6 of this IS), which states that construction of the proposed project would be coordinated with projects occurring in the immediate vicinity such that overlap of construction activities with surrounding projects would not occur. Therefore, cumulative impacts during construction would be less than significant. Moreover, the proposed project as a redevelopment, fire-hardening effort of existing facilities; therefore, operational emissions would not result in a cumulatively considerable net increase in criteria pollutants. Impacts would be less than significant.

d) Would the project expose sensitive receptors to substantial pollutant concentrations?

The SDAPCD defines sensitive receptors as residential areas, schools, playgrounds, health care facilities, day care facilities, and athletic facilities. The nearest sensitive receptors to the proposed project alignment include residences and two churches located approximately 500 feet from the alignment. Other identified sensitive receptors located within a 1-mile radius include residences; one high school, one middle school, and two elementary schools; places of worship; and Collier Park (SDG&E 2013a). Based on the current level of traffic on nearby roadways, the short-term construction activities associated with the proposed project modifications would not create traffic congestion that could create substantial CO hot spots. Furthermore, as discussed in response 5.4.3 (b), the operation of proposed project is not expected to release air emissions other than those associated with occasional site visits, and short-term emissions during construction are expected to be less than significant.

Air Toxics

Diesel exhaust particulate matter would be emitted from heavy equipment and trucks used in the construction process. Because diesel exhaust particulate matter is considered to be carcinogenic, long-term exposure to diesel exhaust emissions could result in adverse health impacts. Implementation of the proposed project would result in short-term, temporary emissions of diesel exhaust from construction equipment. The emissions would not occur 24 hours per day, 7 days per week, but would be more likely to occur during daytime working hours with varying uses over that time of equipment and vehicles dependent on diesel fuel. Because of the temporary short-term nature and frequency of construction emissions, diesel exhaust particulate matter would not expose sensitive receptors to substantial pollutant concentrations; therefore, exposure to sensitive impacts due to emissions of air toxics would be a less-than-significant impact. With respect to operations, no impacts associated with diesel

exhaust particulate matter would result due to the very infrequent activities; i.e., maintenance, patrolling inspection, and occasional repairs.

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

Construction activities could generate airborne odors associated with the operation of construction vehicles (i.e., diesel exhaust). Total construction would take up to 9 months (January 2014 to September 2014) and be distributed over approximately 14 miles. The emissions would be isolated to the immediate vicinity of the construction site and would be limited to a finite period of time that would be relatively short in duration. As noted previously, operation of the project would involve limited activities; thus, it would not create objectionable odors. As such, impacts related to creation of odors during construction and operation of the project would be less than significant.

Greenhouse Gas Emissions

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

Construction

GHG emissions associated with the construction phase of the proposed project would occur as a result of burning the fuel required to operate the on-site construction equipment, mobilize work crews to and from the proposed project site, and deliver steel poles and other materials to the proposed project site. Emissions of CO₂ were estimated using horsepower ratings, load factors, and emission factors from CARB's OFFROAD Model as provided in the CalEEMod User's Guide, Appendix D, for heavy construction equipment. Emissions estimates also used emission factors from CARB's EMFAC2011 Model for on-road vehicles. The year 2014 was analyzed for the purpose of construction emissions (SDG&E 2013a).

Table 5.4-9 shows the estimated construction-related GHG emissions associated with the proposed project.

Table 5.4-9: Total Estimated Construction Greenhouse Gas Emissions		
Emission Source	GHG Emissions (CO₂E)	
Off-Road Equipment	767.8	
Worker Trips	211.1	
Construction Trucks	75.1	
Helicopter Use	55.3	
Total	1,109.3	

Source: SDG&E 2013b.

As discussed in Section 5.4.3, the SCAQMD threshold of 10,000 MT CO_2E /year is being used to assess the impact of the project's GHG emissions. The total proposed project's construction emissions would equal approximately 1,109 MT CO_2E /year, and as discussed below, a decrease in operational emissions is anticipated following construction. Therefore, total construction and

operational emissions would be well below the SCAQMD threshold. Therefore, the impact of the project's GHG emissions during construction would be considered less than significant.

Operation and Maintenance

Operation of the proposed project would result in GHG emissions from vehicular traffic generated by worker vehicle trips for regular maintenance and inspections and annual helicopter use. No substantial change is anticipated in operational GHG emissions from those under existing conditions because the proposed project would be replacing existing pole structures, modifying existing substation facilities, and installing a new fiber optic line on the new TL 637 steel poles. Impacts would be less than significant.

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

Construction

As previously discussed, the County of San Diego adopted the County of San Diego Climate Action Plan (CAP) in June 2012, which documents the County's long-term strategy for addressing the adverse effects of climate change (County of San Diego 2012). The CAP outlines various mechanisms and measures for reducing GHG emissions at the County level, including those specific to water conservation, waste reduction, land use, and adaptation strategies to fulfill the obligations delineated in AB 32. The CAP includes County goals previously established under the County General Plan and County Strategic Energy Plan, and establishes reduction targets at 15% below 2005 levels by 2020 and 49% below 2005 levels by 2035. The stationary source significance threshold as described previously is reflected in the County's CAP. As total project emissions would be below the 10,000 MT CO_2E /year threshold, the proposed project would be consistent with the CAP, and impacts would be less than significant.

Operation and Maintenance

As previously discussed in response to impact question (f) above, operational GHG emissions would not increase compared to those under existing conditions because the proposed project would be replacing existing pole structures, modifying existing substation facilities, and installing a new fiber optic line on the new TL 637 steel poles. Because operation and maintenance activities would not increase GHG emissions, operation of the proposed project would not conflict with an applicable GHG plan, policy, or regulation. Impacts would be less than significant.

5.5 BIOLOGICAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?				
 b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service? 				
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				

5.5.1 Environmental Setting

Information in this section was gathered from review of San Diego Gas & Electric's (SDG&E's) Proponent's Environmental Assessment (PEA) (SDG&E 2013a), which incorporates Habitat Assessment Surveys and a subsequent Final Biological Technical Report (Chambers Group 2012a) prepared for the proposed project site. Additional literature reviewed includes focused surveys for the coastal California gnatcatcher (*Polioptila californica californica*; Chambers Group 2011a), quino checkerspot butterfly (*Euphydryas editha quino*; Chambers Group 2010), arroyo

toad (*Anaxyrus californicus*; Chambers Group 2011b), California spotted owl (*Strix occidentalis occidentalis*; Chambers Group 2011c), least Bell's vireo (*Vireo bellii pusillus*; Chambers Group 2011d), hermes copper butterfly (*Hermelycaena [Lycaena] hermes*; Chambers Group 2011e), southwestern willow flycatcher (*Empidonax traillii extimus*; Chambers Group 2011f), Stephen's kangaroo rat (*Dipodomys stephensi*; Chambers Group 2012b), a rare plant survey report (Chambers Group 2012c), and additional data request correspondence from May 21 and May 31, 2013 (SDG&E 2013b).

The following information summarizes biological resources information applicable to the biological survey area and the proposed project site.

5.5.1.1 Vegetation Communities

Thirteen general vegetation communities or land covers were mapped in the biological survey area. These communities include Mixed Oak Woodland, Southern Riparian Forest, Oak Savanna, Chaparral, Southern Mixed Chaparral, Southern Mixed Chaparral/Coastal Sage Scrub, Coastal Sage Scrub, Grassland, Freshwater Seep/Open Water, Wetland (Disturbed), Agriculture/Orchard, Urban and Developed/Ornamental Landscaping, and Disturbed (Ruderal/Barren). Plant communities were determined in accordance with the categories established in Holland (1986) or Gray and Bramlet (1992) and are described below. Additionally, plant nomenclature follows that of *The Jepson Manual: Higher Plants of California* (Hickman 1993). Vegetation communities in the biological survey area mapped in May 2013 are shown on Figures 5.5-1A through 5.5-1I, and listed in Table 5.5-1. The special-status plants with a potential to occur within the biological survey area are described below.

Table 5.5-1: Existing Vegetation Communities				
Vegetation Communities (with associated NCCP vegetation community classification)	Total in Biological Survey Area (acres)			
Forests and Woodlands				
Mixed Oak Woodland	7.37			
Coast Live Oak Woodland	1.12			
Open Engelmann Oak Woodland	23.15			
Southern Riparian Forest	2.31			
Oak Savanna	50.84			
Scrublands and Ch	aparral			
Chaparral	27.98			
Southern Mixed Chaparral	53.81			
Southern Mixed Chaparral (disturbed)	30.95			
Southern Mixed Chaparral/Coastal Sage Scrub	59.55			
Coastal Sage Scrub	37.56			
Coastal Sage Scrub (disturbed)	61.25			
Mixed Disturbed Coastal Sage Scrub/Chaparral	3.52			
Mixed Disturbed Coastal Sage Scrub/Grassland	11.49			

Table 5.5-1: Existing Vegetation Communities				
Vegetation Communities (with associated NCCP vegetation community classification)	Total in Biological Survey Area (acres)			
Grassland and Meadows				
Grassland (Includes Non-Native Grassland)	44.53			
Freshwater Seep/Open Water 1.31				
Freshwater Marsh				
Meadow/Seep				
Wetland				
Wetland (Disturbed)	11.20			
Other Areas				
Agriculture/Orchard	47.17			
Urban and Developed/Ornamental Landscaping	76.42			
Landscape/Ornamental	10.42			
Disturbed (Ruderal/Barren)	2.33			
Grand Total	553.86 ¹			

Source: SDG&E 2013a, 2013b

Notes: ¹ Calculation does not include paved roads

NCCP – Natural Community Conservation Plan

Forests and Woodlands

Forest and Woodland habitats consist of multilayered vegetation. Forest habitats typically have closed/dense tree canopies. Woodland habitats typically have a more open (20%) canopy.

Mixed Oak Woodland

Mixed Oak Woodlands are often found at elevations below 4,000 feet above mean sea level (amsl). This community usually varies from pure, closed canopies of more than one oak (*Quercus* sp.) species. The dominant species within the survey area includes coast live oak (*Quercus agrifolia*), scrub oak (*Q. berberidifolia*), Engelmann's oak (*Q. engelmannii*), Palmer's oak (*Q. palmeri*), canyon live oak (*Q. chrysolepis*), California black oak (*Q. kelloggii*), interior live oak (*Q. wislizenii* var. *frutescens*), desert scrub oak (*Q. cornelius-mulleri*), and oak hybrids including (*Quercus x acutidens*), and (*Quercus x morehus*). Trees in this community are approximately 32–82 feet in height. The herbaceous layer may be continuous and mainly consists of annual grasses and forbs. Poison oak (*Toxicodendron diversilobum*) is also present in the understory of certain Oak Woodlands within the biological survey area. Mixed Oak Woodland recover quickly from fire and can be found in canyon bottoms and steep, north-facing slopes within a variety of soil types. Approximately 7.37 acres of this community exists within the survey area.

The following two vegetation communities are Natural Community Conservation Plan (NCCP) vegetation classifications that are components of Mixed Oak Woodland.

Coast Live Oak Woodlands

Areas within and/or surrounded by this community consist of an evergreen woodland, dominated by coast live oak that may reach heights between 35–80 feet. The shrub layer may consist of toyon (*Heteromeles arbutifolia*), Mexican elderberry (*Sambucus mexicana*), fuchsia-flowered gooseberry (*Ribes speciosum*), and poison oak. A dense herbaceous understory generally consists of miner's lettuce (*Claytonia perfoliata* var. *perfoliata*) and chickweed (*Stellaria media*) as potentially dominant species. This community occurs along the coastal foothills of the Peninsular Ranges, typically on north-facing slopes and in shaded ravines. Approximately 1.12 acres of this community exists within the survey area.

Open Engelmann Oak Woodlands

Areas characterized by this community are dominated by Engelmann oak trees and may include other oak species such as coast live oak, black oak, and scrub oak (*Q. dumosa*). Trees are widely spaced in open Engelmann oak woodland. The understory is typically grassland or meadow. Approximately 23.15 acres of this community exists within the survey area.

Southern Riparian Forest

Southern Riparian Forests are most often found at elevations below 3,000 feet amsl. This type of community is dominated by tall, open, broadleaved, winter-deciduous riparian species such as willow (*Salix* spp.), cottonwood (*Populus* spp.), sycamore (*Platanus racemosa*), and alder (*Alnus* spp.) species. The understory is typically dominated by willow species or riparian shrubs. This community is found along rivers and streams or locations with a high water table. Dominant species require moist, bare mineral soil for germination and establishment and will begin to establish after flood waters recede. Approximately 2.31 acres of this community exists within the survey area.

Oak Savanna

Oak Savannas in San Diego County are typically found at elevations ranging from 200–2,300 feet amsl. This type of community consists of annual grasses or perennial needlegrass (*Nassella* spp.) species with widely scattered oak trees that provide less than 10%–20% of the canopy cover. The dominant oak species in this community is coast live oak. The Oak Savanna community usually intergrades with Open Oak Woodlands. Approximately 50.84 acres of this community exists within the survey area.

Scrublands and Chaparral

Scrubland and Chaparral are composed of a mix of the two vegetation communities. Scrublands consist of drought-deciduous, low, soft-leaved shrubs and herbs that are often gray-green in color (e.g., sagebrush, buckwheat, sage). They occupy gentle to steep slopes with shallow or heavy soils usually at elevations below 3,000 feet amsl. Chaparrals consist of evergreen, dark green, leathery-leaved, medium to tall shrubs that are adapted to occasional fires.

Chaparral

Chaparral communities are typically found at elevations below 3,000 feet amsl. This type of community is dominated by leathery-leaved, woody shrubs 5–10 feet in height, forming a dense

vegetation canopy typically dominated by chamise (*Adenostoma fasciculatum*), black sage (*Salvia mellifera*), sugar bush (*Rhus ovata*), California buckwheat, and ceanothus (*Ceanothus* spp.) species. Plants in this community are deeply rooted with little to no understory but may have an accumulation of leaf litter. Chaparral is adapted to repeated fires. After a fire, many species stump sprout from an underground root burl. Approximately 27.98 acres of this community exist within the survey area.

Southern Mixed Chaparral

Southern Mixed Chaparral communities are typically found at elevations below 3,000 feet amsl. This type of community is dominated by broad, leathery-leaved, woody shrubs 5–10 feet in height, forming a dense vegetation canopy typically dominated by scrub oak, chamise, several manzanita species (*Arctostaphylos* spp.), and ceanothus species with patches of bare soil. Plants are deeply rooted with little to no understory but have an accumulation of leaf litter. Growth occurs throughout the year, with the highest growth period occurring during the spring. Growth is reduced during the late summer–fall dry season or during winter at higher elevations. This community type is adapted to repeated fires. As mentioned previously, after a fire, many species stump sprout from an underground root burl. This community is typically found on dry, rocky, often steep slopes with little soil. This community can be found adjacent to Chamise Chaparral. Approximately 53.81 acres of this community exists within the survey area.

Southern Mixed Chaparral (disturbed)

Areas within and/or surrounded by this community are characteristic of Southern Mixed Chaparral that has been infiltrated and fractured by more than 20% non-native exotic species or is in the process of fire recovery. Approximately 30.95 acres of this community exists within the survey area.

Southern Mixed Chaparral/Coastal Sage Scrub

Southern Mixed Chaparral/Coastal Sage Scrub communities are most often found at elevations below 3,000 feet amsl. This type of community represents a gradation of southern mixed chaparral and coastal sage scrub (see description below). These communities represent ecotonal areas between chaparral and scrub communities with component species of both types. Approximately 59.55 acres of this community exists within the survey area.

Coastal Sage Scrub

Coastal Sage Scrub communities are typically found at elevations below 1,500 feet amsl. This community consists of low, soft-woody subshrubs up to 1 meter in height that are highly active in winter and early spring. Typically, vegetation in this community are drought-deciduous and include species such as various combinations of California sagebrush, California buckwheat, saw-toothed goldenbush (*Hazardia squarrosa*), laurel sumac, and black sage and to a lesser extent deerweed (*Lotus scoparius*), wild cucumber (*Marah macrocarpus*), chaparral yucca (*Yucca whipplei*), mission manzanita (*Xylococcus bicolor*), and California aster (*Corethrogyne filaginifolia*). Approximately 37.56 acres of this community exists within the survey area.

Coastal Sage Scrub (disturbed)

Areas within and/or surrounded by this community are characteristic of Coastal Sage Scrub that has been infiltrated and fractured by more than 20% non-native exotic species. Approximately 61.25 acres of this community exists within the survey area.

Mixed Disturbed Coastal Sage Scrub/Chaparral

Areas within and/or surrounded by this community are characteristic of Coastal Sage Scrub/Chaparral. This community represents ecotonal areas between mixed coastal sage scrub and chaparral communities with component species of both types infiltrated and fractured by more than 20% non-native exotic species. Approximately 3.52 acres of this community exists within the survey area.

Mixed Disturbed Coastal Sage Scrub/Grassland

Areas within and/or surrounded by this community are characteristic of Coastal Sage Scrub/Grasslands. This community represents ecotonal areas between mixed coastal sage scrub and grassland communities (described below) with component species of both types infiltrated and fractured by more than 20% non-native exotic species. Approximately 11.49 acres of this community exists within the survey area.

Grasslands and Meadows

Grasslands and Meadows are composed of two vegetation communities: grassland and freshwater seep/open water. Grasslands consist of low, herbaceous vegetation dominated by grasses. Grasslands grow in deep, well-developed soils on gentle slopes and flats. Meadows consist of seasonally flooded or saturated areas dominated by annual and perennial herbs. The following vegetation community is an NCCP vegetation classification that is a component of Grasslands and Meadows.

Grassland

Grasslands are most often found at elevations below 3,000 feet amsl. This type of community consists of a dense to sparse cover of annual grasses such as oats (*Avena* sp.), bromes (*Bromus* sp.), and ryegrass (*Lolium* sp.) with flowering culms up to 3 feet in height. This community is often associated with many species of showy-flowered, native annual forbs, and wildflowers such as California poppy (*Eschscholzia californica*), lupines (*Lupinus* sp.), and goldfields (*Lasthenia* sp.), especially in years of favorable rainfall. Germination occurs with the onset of the late fall rains; growth, flowering, and seed-set occur from winter through spring. Typically, plants are dead through the summer–fall dry season, persisting as seeds. Grassland can be found on fine-textured, usually clay soils, that are moist or even waterlogged during the winter rainy season and very dry during the summer and fall. Approximately 44.53 acres of this community exists within the survey area.

Freshwater Seep/Open Water

Freshwater Seeps in San Diego County are typically found at elevations ranging from 2,000–4,000 feet amsl. This community is composed mostly of perennial herbs, typically sedges and grasses, often forming complete vegetative cover that grows throughout the year. Soils are

permanently moist. This community was found on pasturelands on private property within the survey area. Approximately 1.31 acres of this community exists within the survey area. Freshwater marshes and meadows are also found within this community. The following two vegetation communities are NCCP vegetation classifications that are components of Freshwater Seep/Open Water. Descriptions of these two NCCP vegetation communities are found below.

Freshwater Marsh

Areas characterized by this community contain soil that is saturated by fresh water. Freshwater Marshes contain vegetation dominated by emergent herbaceous species such as rushes (*Carex* spp.) and spike rushes (*Eleocharis* spp.).

Meadow/Seep

Areas characterized as by this community include vegetation such as annual and perennial herbs, including wildflowers and bulbs such as mariposa lily (*Calochortus* spp.), lupine, bluedicks (*Dichelostemma capitatum*), and many others. Where seeps occur, groundwater keeps the soil moist longer, and vegetation often includes rushes and spike and other plants typically associated with wet areas.

Wetland

Areas characterized as a Wetland usually consist of alkali heath (*Frankenia grandiflora*), arroyo willow, black willow, hardstem bulrush (*Scirpus acutus*), mulefat (*Baccharis salicifolia*), and common cattail (*Typha latifolia*). The following vegetation community is an NCCP vegetation classification that is a component of Wetland communities.

Disturbed Wetland

This community consists of flooded or saturated native wetland sites that have been infiltrated and fractured by non-native exotic species, (e.g., giant reed (*Arundo donax*), oats, bromes, and ryegrass. Approximately 11.20 acres of this community exists within the survey area.

Other Areas

Areas that are not considered native, naturally occurring habitats are categorized as "Other Areas" for their lack of dominant native vegetation or because they have been highly disturbed or altered by humans.

Agriculture/Orchard

Agricultural habitat consists of vegetation that has been disturbed by agricultural management practices, including the removal of native vegetation, planting of crop species, and ground-disturbing activities such as grading and tilling. Agricultural activities range from crop production to livestock production and pasture land. Crops may or may not be present. This community type incorporates Agriculture/Pastureland best characterized as Dryland Field Crops consisting of planted, annual grasses and forbs harvested for livestock feed. These species include barley (*Hordeum* spp.), wild oat (*Avena fatua*), and clover or alfalfa (*Trifolium* spp., *Medicago sativa*) species. Soils consist of fine-textured, often clay soils that can be very moist in the winter and very dry in the summer. Approximately 47.17 acres of Agriculture/Orchard exist within the survey area.

Urban and Developed/Ornamental Landscaping

Urban and Developed areas consist of buildings, pavement, and highway right-of-ways (ROWs) throughout the county. Approximately 76.42 acres of Urban and Developed land or Ornamental Landscaping land exists within the proposed project survey area. The following vegetation community is an NCCP vegetation classification that is a component of Urban and Developed/Ornamental Landscaping.

Landscape/Ornamental

Areas characterized by this community are dominated by non-native species planted for landscaping and generally occur in residential neighborhoods or along roadsides.

Disturbed (Ruderal/Barren)

Disturbed often barren areas either lack vegetation because of clearing or grading (bare ground) or are dominated by pioneering herbaceous species that readily colonize disturbed ground, such as tocalote (*Centaura melitensis*), wild oat, black mustard (*Brassica nigra*), prickly sow-thistle (*Sonchus asper*), and wild lettuce (*Lactuca serriola*). Disturbed areas are also primarily dominated by various combinations of ripgut brome (*Bromus diandrus*), red brome (*Bromus madritensis* ssp. *rubens*), prickly Russian thistle (*Salsola tragus*), slender wild oat, tocalote, redstem stork's bill (*Erodium cicutarium*), lambsquarters (*Chenopodium album*), and hairy crabgrass (*Digitaria sanguinalis*) with scattered individuals or remnants of coastal sage scrub including California buckwheat, California sagebrush, and deerweed. Approximately 2.33 acres of this community exist within the survey area.

Sensitive Vegetation Communities

Several of the vegetation communities identified within the survey area as described above are considered sensitive or special status on account of their natural rarity and their decline in the area due to development and/or the number of sensitive plant or animal special dependent upon them. Sensitive communities also include those regulated by the federal government under the Clean Water Act (CWA) or the California Porter-Cologne Water Quality Control Act (i.e., jurisdictional waters including wetlands) and the Endangered Species Act (i.e., site-specific designated critical habitat areas for federally listed wildlife species), those regulated by California Department of Fish and Wildlife (CDFW) under Section 1600 of the California Fish and Game Code, and those considered sensitive by the SDG&E NCCP, and City of San Diego Multiple Species Conservation Program (MSCP) Subarea Plan. Sensitive vegetation communities within the survey area include Mixed Oak Woodland, Southern Riparian Forest, Oak Savanna, Chaparral, Southern Mixed Chaparral, Southern Mixed Chaparral/Coastal Sage Scrub, Coastal Sage Scrub, Grasslands, and Freshwater Seep/Open Water. Sensitive vegetation communities do not include disturbed community types, agriculture, bare ground, and landscape/ornamental communities.

Special-Status Plants

Special-status plant species analyzed for their potential to occur were based on USFS suitable habitat models, CDFW California Natural Diversity Database (CNDDB) and Critical Habitat database, the California Native Plant Society's (CNPS') Electronic Inventory (CNPS 2013), the

San Diego Natural Conservation Community Plan data, U.S. Fish and Wildlife Service (USFWS) National Wetland Index database, U.S. Geological Service (USGS) Soil Survey Map database, and field surveys. Specifically, the most recent records of the CDFW CNDDB and the CNPS Electronic Inventory of Rare and Endangered Vascular Plants of California were reviewed for the quadrangles containing and surrounding the proposed project (Santa Ysabel and Ramona, California, USGS 7.5-minute quadrangles used in 9-quad searches). In addition, species recorded within 5 miles of the project area by the CNDDB (CDFW 2013; SDG&E 2013a) are included. SDG&E (2013) performed a 3-mile search of the area; this was augmented by Dudek who increased the search area by 2 miles (CDFW 2013). Out of a total of 137 special-status plant species identified, 128 species were determined to have no or low potential to occur within the proposed project area (61 species were previously identified by SDG&E (2013a) and Chambers Group (2012a) while 67 were augmented by Dudek). Of the remaining nine species:

- Five special-status plant species are present
- Four special-status plant species have moderate potential to occur, where Dudek augmented three of these species.

Special-status plants observed during field surveys and those considered to be present or have a moderate potential to occur within the biological survey area are discussed in greater detail below. The extent of special-status plants with potential to occur in the biological study area is listed in Appendix 1-A, Sensitive Plant Species with Potential to Occur.

San Diego milk-vetch

San Diego milk-vetch (*Astragalus oocarpus*), a perennial herb, is a CNPS California Rare Plant Rank (CRPR) 1B.2, County List A, USFS Sensitive (FSS), and BLM sensitive species. It is associated with openings of chaparral and cismontane woodland, between 1,001 and 5,000 feet amsl in elevation. Its blooming period is between May and August. Within the project area, suitable habitat includes southern mixed chaparral, chamise chaparral, semi-desert chaparral, scrub oak chaparral, and montane forests. A total of 83 individuals were observed within the Tie-Line (TL) 637 ROW near pole R107 during protocol-level focused plant surveys conducted during the 2010 blooming period.

Orcutt's brodiaea

Orcutt's brodiaea (*Brodiaea orcuttii*), a perennial, bulbiferous herb, is a CRPR 1B.1, County List A, FSS, and BLM sensitive species and is within the NCCP. It is associated with closed-cone coniferous forest, chaparral, cismontane woodland, meadows and seeps, valley and foothill grassland, vernal pools/mesic, clay, and sometimes serpentine, between 98 and 5,551 feet amsl in elevation. Its blooming period is between May and July. Within the project area, suitable habitat includes southern mixed chaparral, chamise chaparral, semi-desert chaparral, scrub oak chaparral, montane forest, wet montane meadow, freshwater seep/open water, and native and non-native grasslands. A total of 1,020 individuals were observed within the TL 637 ROW near poles P26 and P28 during protocol-level focused plant surveys conducted during the 2010 blooming period.

Delicate clarkia

Delicate clarkia (*Clarkia delicata*), an annual herb, is a CRPR 1B.2, County List A, and FSS species. It is often associated with gabbroic in chaparral and cismontane woodland between 771 and 3,281 feet amsl in elevation. Its blooming period is between April and June. Within the project area, suitable habitat includes southern mixed chaparral, chamise chaparral, semi-desert chaparral, scrub oak chaparral, and montane forests. A total of 2,830 individuals were observed within the TL 637 ROW near poles P90, P91 P108, and R17 during protocol-level focused plant surveys conducted during the 2010 blooming period.

Coulter's saltbush

Coulter's saltbush (*Atriplex coulteri*), a perennial herb, is a CRPR 1B.2 and County List A species. It is often associated with coastal bluff scrub, coastal dunes, coastal scrub, valley and foothill grasslands in alkaline or clay soils between 10 and 1,509 feet amsl in elevation. Its blooming period is between March and October. Within the project area, suitable habitat includes coastal sage scrub and grasslands. This species has a MODERATE potential to occur within the ROW. Suitable habitat for this species is present within the ROW and historical occurrences of this species have been recorded approximately 4.2 miles west of Creelman Substation (CDFW 2013). Coulter's saltbush was not specifically surveyed for during the 2010 survey efforts. SDG&E will survey for this species during the project-wide verification survey prior to construction activities to avoid potential impacts to this species.

San Diego gumplant

San Diego gumplant (*Grindelia hallii*), a perennial herb, is a CRPR 1B.2, County List A, and BLM sensitive species. This species is found in chaparral, lower montane coniferous forests, meadows and seeps, and valley and foothill grassland habitats. San Diego gumplant grows at elevations between 607 and 7,525 feet amsl and is endemic to San Diego County. Threats to this species include grazing, road maintenance, invasive species, and development (CNPS 2012, as cited in Chambers Group 2012a). San Diego gumplant has a MODERATE potential to occur within the TL 637 ROW. Suitable habitat for this species is present within the ROW, and historical occurrences of this species have been recorded within 3 miles of the ROW. The San Diego gumplant was not specifically surveyed for during the 2010 survey efforts. SDG&E will survey for this species during the project-wide verification survey prior to construction activities to avoid potential impacts to this species.

Little mousetail

Little mousetail (*Myosurus minimus* ssp. *apus*), an annual herb, is a CRPR 3.1 and County List C species and is within the NCCP. It is associated with valley and foothill grasslands, wetland areas, and alkaline vernal pools between 66 and 2,100 feet amsl in elevation. Its blooming period is between March and June. Within the project area, suitable habitat includes grasslands. This species has a MODERATE potential to occur within the ROW. Suitable habitat for this species is present within the ROW and historical occurrences of this species have been recorded approximately 3 miles northwest of Creelman Substation. Little mousetail was not specifically surveyed for during the 2010 survey efforts. Presence of this species is assumed in suitable habitat in the vicinity of P103 through P107,and, therefore, verification surveys for this species will

not be conducted prior to construction activities. Implementation of mitigation measures (as further described in Section 5.5.3) will reduce potential impacts to this species.

San Bernardino aster

San Bernardino aster (*Symphyotrichum defoliatum*), a perennial, rhizomatous herb, is a CRPR 1B.2, BLM sensitive, and FSS species. It is associated near ditches, streams, and springs in cismontane woodland, coastal scrub, lower montane coniferous forest, meadows and seeps, marshes and swamps, and within vernally mesic soils in valley and foothill grassland habitat, between 7 and 6,693 feet amsl in elevation. Its blooming period is between July and November. Within the project area, suitable habitat includes montane forest, Diegan coastal sage scrub, wet montane meadow, and native and non-native grasslands. A total of 100 individuals were observed within the TL 637 ROW near pole P106 during protocol-level focused plant surveys conducted during the 2010 blooming period.

Parry's tetracoccus

Parry's tetracoccus (*Tetracoccus dioicus*), a perennial deciduous shrub, is a CRPR 1B.2, County List A, FSS, and BLM sensitive species and is located within the NCCP. This species often grows in chaparral and coastal scrub. Parry's tetracoccus can be found at elevations between 540 and 3,280 feet amsl. This species is threatened by agriculture and development (CNPS 2012). Parry's tetracoccus is considered a sensitive species by the BLM. A total of 181 individuals were observed within the TL 637 ROW near poles P46, P50, and P48 during protocol-level focused plant surveys conducted during the 2010 blooming period.

5.5.1.2 Wildlife Movement Corridors

Wildlife corridors are areas that connect fragmented habitats that may be caused by changes in vegetation communities, rugged terrain, and/or human disturbances. Wildlife corridors serve as linkage habitats where wildlife may travel between distributed habitats across the landscape. These linkages may consist of drainages, canyons, or ridgelines that provide access to foraging areas, water, breeding sites, and dispersal areas. In addition to movement, these corridors may also provide cover and shelter during travel. Wildlife movement areas also include game trails, dirt paths, hiking trails, and dirt roads—particularly through dense vegetation. Several drainage and ridgeline features adjacent to the proposed construction areas could potentially be used as a movement corridor for mammal and avian species. Several large open space areas, including parks, also occur within or adjacent to the alignment.

5.5.1.3 Wildlife

Special-status wildlife species were analyzed for their potential to occur based on USFS suitable habitat models, the CDFW CNDDB and Critical Habitat database, San Diego Natural Conservation Community Plan data, USFWS database, and field surveys performed by qualified and permitted biologists. Recent and past habitat surveys suggest a moderate to high diversity of wildlife species occurring within the proposed project site (refer to PEA Appendix 4.4-A, Appendix F, Wildlife Species Observed List).

Species-specific survey efforts were determined based on the ownership of the land on which the project work location is located. For example, for project work locations located within the

Cleveland National Forest FSS species habitat models were used to determine which species would be surveyed for and analyzed. For project work locations located on BLM land, BLM designated sensitive species were surveyed for and analyzed. For project work locations located on private lands, all Threatened and Endangered species with the potential to occur as well as all NCCP covered species were surveyed for and analyzed. The initial areas surveyed (Survey Area) consisted of a 150-foot buffer around the pole centerline, which was extended to a 250-foot radius around each pole where the overhead line makes an angle greater than 2 degrees. Focused Surveys for federal and state listed species surveys were performed in these areas, where suitable habitat was identified by permitted biologists. Detailed information can be found in the focused survey reports cited above.

During 2010 field surveys, two insects (including one butterfly) were observed. Observations of seven reptile species occurred within the survey area, including coastal rosy boa (*Charina trivirgata roseofusca*), Coronado Island skink (*Plestiodon skiltonianus interparietalis*), San Diego coast horned lizard (*Phrynosoma coronatum blainvillii*), and western fence lizard (*Sceloporus occidentalis*). Seventy-four avian species were detected during field surveys, including Cooper's hawk (*Accipiter cooperii*), Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*), coastal California gnatcatcher, and purple martin (*Progne subis*). Several species typical of urban communities observed include Anna's hummingbird (*Calypte anna*), black phoebe (*Sayornis nigricans*), house finch (*Carpodacus mexicanus frontalis*), and lesser goldfinch (*Carduelis psaltria hesperophilus*) and species associated with scrub or riparian communities, such as California towhee (*Pipilo crissalis*) and Bewick's wren (*Thryomanes bewickii*), were also detected during field surveys. Please refer to SDG&E (2013a and 2013b) and the various Chambers Group reports (2010, 2011a, 2011b, 2011c, 2011d, 2011e, 2011f, 2012a, 2012b, 2012c) for the specific habitat assessment and survey methods, results, and conditions.

Special-Status Wildlife

Special-status wildlife species include those: (a) listed by the USFWS or CDFW as endangered, threatened, proposed, or candidate species; (b) listed by CDFW as fully protected or species of special concern and species recorded within 2 miles of the project area by the CNDDB (CDFW 2013; SDG&E 2013a); (c) listed as a Regional Foresters' Sensitive Species (FSS; Winters pers. comm. 2013); or (d) listed as a BLM sensitive species. In addition, species recorded within 5 miles of the project area by the CNDDB (CDFW 2013; SDG&E 2013a) are included. SDG&E (2013a) provided a CNDDB search of 3 miles; this was augmented by Dudek (CDFW 2013) by an additional 2 miles. Out of a total of 97 special-status wildlife species identified, 61 species were determined to have no or low potential to occur within the proposed project area (29 species were previously identified by SDG&E 2013a/Chambers Group 2012a while 32 were augmented by Dudek). Of the remaining 36 species:

- Eight special-status wildlife species are present
- Twenty special-status wildlife species have moderate potential to occur
- Eight special-status wildlife species has a high potential to occur.

Special-status wildlife observed during field surveys and those considered to have moderate to high potential to occur within the biological survey area are discussed in greater detail below.

The extent of special-status wildlife with potential to occur in the biological study area is listed in Appendix 1-B, Sensitive Wildlife Species Observed or with the Potential to Occur.

Belding's Orange-Throated Whiptail

The orange-throated whiptail (*Aspidoscelis hyperythra beldingi*) is a California Species of Special Concern, San Diego County Sensitive Species (Group 2), and covered under the NCCP. It is located in southwestern California and Baja California, Mexico, from the southern edges of Orange County (Corona del Mar) and San Bernardino County (near Colton), southward to the Mexican border. This species is located on the coastal slope of the Peninsular Ranges and extends from near sea level to 3,412 feet amsl (northeast of Aguanga, Riverside County) (Jennings and Hayes 1994). It commonly occurs in California buckwheat, California sagebrush, black sage, white sage, chamise, and redshank (*Adenostoma sparsifolium*) sage scrub coastal sage scrub, chaparral, grassland, juniper, and oak woodland.

The Belding's orange-throated whiptail has a HIGH potential to occur within the TL 637 ROW. CNDDB lists four records of occurrence within 3 miles of the ROW, the closest occurrence being approximately 0.7 mile away, approximately 1.1 miles south of Ballena Valley at Hwy 78, 6 miles east of Ramona. In addition, the ROW contains good-quality habitat to support this species.

Coastal Whiptail

The coastal whiptail (*Aspidoscelis tigris stejnegeri*) does not have a designated status. However, this subspecies is located in coastal Southern California, typically west of the Peninsular Ranges, south of the Transverse Ranges, and north into Ventura County. This species range also expands south into Baja California. The species may be found between 0–7,000 feet amsl in elevation (Californiaherps.com 2013). This species may be found in variety of habitats which are primarily hot and dry open areas with sparse foliage, such as chaparral, woodland, and riparian areas (Californiaherps.com 2013).

The coastal whiptail has a HIGH potential to occur within the TL 637 ROW. The CNDDB lists four records of occurrence within 5 miles of the ROW, the closest occurrence being approximately 2.5 miles from the ROW (CDFW 2013).

Northern Red-Diamond Rattlesnake

The northern red-diamond rattlesnake (*Crotalus ruber ruber*) is a California Species of Special Concern, San Diego County Sensitive Species (Group 2) and covered under the NCCP. It is found in a variety of habitats from the coast to the deserts from San Bernardino County into Baja California, Mexico (below 5,000 feet amsl in elevation). It commonly occurs in rocky areas within coastal sage scrub, chaparral, juniper woodlands, and desert habitats (Lemm 2006), but can also be found in areas devoid of rocks, canyons, foothills, grasslands, chamise, or red shank-dominated associations.

The northern red-diamond rattlesnake has a HIGH potential to occur within the TL 637 ROW. Although CNDDB lists no records of occurrence within 3 miles of the ROW, the ROW contains good-quality suitable habitat.

San Diego Ring-Necked Snake

The San Diego ring-necked snake (*Diadophis punctatus similis*) is an FSS species, San Diego County Sensitive Species (Group 2), and covered under the NCCP. This subspecies of the ring-necked snake is confined to mountains and watercourses and is associated with moist woodlands, grassland, chaparral, mixed conifer forest, and riparian areas in southern California. This species is diurnal but seldom is seen in the open. It usually is found during the day under cover objects, such as rotting logs, bark fragments, boards, and rocks (Stebbins 2003). Prey items include earthworms, salamanders, small frogs, amphibian larvae, slugs, and other mesic-associated organisms. It is active at dusk and at night during warmer periods and, due to its secretive nature, is often difficult to detect. Ring-necked snakes may aggregate at dens for winter hibernation. Home range size is unknown (Zeiner et al. 1988). The San Diego ring-necked snake is believed to be declining due to loss of habitat. The San Bernardino National Forest and Cleveland National Forest are considered to be within the range of the San Diego ring-necked snake and are likely to have suitable habitat for the species (Lind 1998).

Few historical locations are known for this species in the vicinity of the proposed TL 637 construction, but suitable habitat is present along many areas of the coastal slope portion of the TL 637 ROW, including oak woodlands, dense chaparral, north-facing slopes, and riparian systems. The San Diego ring-necked snake has a MODERATE potential to occur on the TL 637 ROW. Although CNDDB lists no records of occurrence within 3 miles of the ROW, the ROW contains good-quality suitable habitat. However, this species is not a state sensitive species (not a designated SSC or listed species). The two poles located within Cleveland National Forest lands are P115 and P116. These two poles have already been replaced with steel poles and only pole top work will occur during the proposed project at these locations.

Coastal Rosy Boa

The coastal rosy boa (*Lichanura trivirgata roseofusca*) is FSS, San Diego County Sensitive Species (Group 2) and covered under the NCCP. It occurs from Southern California and southwestern Arizona, south throughout Baja California, Mexico, and northwestern mainland Mexico, avoiding the lowest deserts, which are mainly in agricultural production or open dunes (Stebbins 2003; Yingling 1982; Zeiner et al. 1988). The rosy boa in California ranges from Los Angeles, eastern Kern, and southern Inyo Counties, and south through San Bernardino, Riverside, Orange, and San Diego Counties (Spiteri 1988; Stebbins 2003; Zeiner et al. 1988). It occurs at elevations from sea level to 5,000 feet amsl in the Peninsular and Transverse Mountain Ranges.

The rosy boa inhabits rocky shrubland and desert habitats, and is attracted to oases and streams, but does not require permanent water (Stebbins 2003). In the desert it occurs on scrub flats with good cover (Zeiner et al. 1988). Holland and Goodman (1998) add that the species is known in a variety of desert and semi-desert habitats, that it may occur in oak woodlands intergrading with scrub or chaparral habitats, but is absent from grasslands.

This species is considered PRESENT within the TL 637 ROW. CNDDB lists 2 records of occurrence within 3 miles of the ROW and the ROW contains good-quality suitable habitat to

support this species. In addition, this species was observed on the ROW near poles P51 and P116. However, this species is not a state sensitive species (not a designated SSC or listed species). The two poles located within Cleveland National Forest lands are P115 and P116 (where this species was observed). However, no ground-disturbing activities would occur during construction. These two poles have already been replaced with steel poles and only pole top work will occur during the proposed project at these locations.

Coast Horned Lizard

The coast horned lizard (*Phrynosoma coronatum blainvillii*) is a FSS, BLM sensitive species, California Species of Special Concern, San Diego Sensitive Species (Group 2), and covered under the NCCP. It is found from the Sierra Nevada foothills and central California to coastal Southern California. The species is found in a wide variety of vegetation types with the requisite loose sandy soils, including California sagebrush scrub, annual grassland, chaparral, oak woodland, riparian woodland, and coniferous forest (Lemm 2006; Stebbins 1954). However, the key elements of these habitats are loose, fine, sandy soils, open areas for basking and low shrubs for cover and abundant food sources (i.e., native ants).

The coast horned lizard is considered PRESENT within the TL 637 ROW. CNDDB lists six records of occurrence for this species within 3 miles of the ROW, the ROW contains good-quality habitat, and this species was observed on the ROW near pole P116.

Coronado Island Skink

The Coronado Island skink (*Plestidon skiltonianus interparietalis*) is a California Species of Special Concern, BLM sensitive species, San Diego County Sensitive Species (Group 2) and covered under the NCCP. It is located in the coastal plain and Peninsular Ranges west of the deserts from approximately San Gorgonio Pass (Riverside County) southward to San Quintín (Baja California), Mexico. This species may be found in coastal sage, chaparral, oak woodlands, pinyon-juniper, and riparian woodlands to pine forests; but tends to prefer early successional stages and areas with adequate rocky cover.

The Coronado Island skink is considered PRESENT within the TL 637 ROW. CNDDB lists a record of occurrence within 1 mile of the ROW, and this species was observed on the ROW near pole R107. In addition, the ROW contains good-quality suitable habitat to support this species.

Cooper's Hawk

The Cooper's hawk (*Accipiter cooperii*; nesting) is a CDFW Watch List species, San Diego County Sensitive Species (Group 1) and covered under the NCCP. It is found throughout California in wooded areas. It inhabits live oak, riparian, deciduous, or other forest habitats near water. Nesting and foraging usually occur near open water or riparian vegetation. Nests are built in dense stands with moderate crown depths, usually in second-growth conifer or deciduous riparian areas. Cooper's hawks use patchy woodlands and edges with snags for perching while they are hunting (CDFG 2008). In general, suitable foraging habitat may include big sagebrush scrub, chamise chaparral, emergent wetland, non-native grassland, Peninsular juniper woodland and scrub, redshank chaparral, northern mixed chaparral, semi-desert chaparral, southern north slope chaparral, and shadscale scrub in addition to the nesting habitat.

The Cooper's hawk is considered PRESENT on the TL 637 ROW for foraging purposes and has a HIGH potential to nest on the ROW. Although CNDDB lists no records of occurrence within 3 miles of the, the ROW contains good-quality suitable habitat and this species was observed on the ROW near pole P156.

Southern California Rufous-Crowned Sparrow

The Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*) is a CDFW Watch List species, San Diego County Sensitive Species (Group 1) and covered under the NCCP. The rufous-crowned sparrow is a resident of the southwest region of the United States. The current distribution of the Southern California rufous-crowned sparrow is restricted to a narrow belt of semiarid coastal sage scrub and sparse chaparral from Santa Barbara south to the northwestern corner of Baja California, Mexico. The rufous-crowned sparrow occupies moderate to steep hillsides that are rocky, grassy, or covered by coastal sage scrub or chaparral. It is a secretive species, seeking cover in shrubs, rocks, grass, and forb patches. The species often occurs near the edges of denser scrub and chaparral associations, but usually does not occur within these associations.

The southern California rufous-crowned sparrow is considered PRESENT within the TL 637 ROW for foraging, with a HIGH potential to nest within the ROW. CNDDB lists three records of occurrence within 3 miles of the ROW. This species was observed foraging in several locations along the ROW, and the ROW contains good-quality suitable habitat.

Bell's Sage Sparrow

The Bell's sage sparrow (*Amphispiza belli belli*) is a federal Bird of Conservation Concern, WLBCC, CDFW Watch List species, and San Diego County Sensitive Species (Group 1). This species occurs in Coast Ranges from Northern California to northwestern Baja California, western slope of Sierra Nevada. This species utilizes a variety of habitats including low, dense stands of shrubs in chaparral dominated by chamise or coastal scrub dominated by sage.

The Bell's sage sparrow has a MODERATE potential to forage and nest within the TL 637 ROW within coastal sage scrub. CNDDB lists one record of occurrence within 5 miles of the ROW and the ROW may contain moderate quality suitable habitat (CDFW 2013).

Golden Eagle

The golden eagle (*Aquila chrysaetos*; nesting and wintering) is a federally protected species under the Bald and Golden Eagle Protection Act and is also fully protected by the State of California. It is a federal Bird of Conservation Concern, BLM sensitive species, CDF Watch List species, California Department of Forestry and Fire Protection Sensitive species, San Diego Sensitive Species (Group 1) and covered under the NCCP. This species is mostly located in western North America, from Alaska south to central Mexico. The golden eagle prefers mountainous or hilly terrain, hunting over open country for small mammals, snakes, birds, or carrion. It is a yearlong, diurnally active species that is a permanent resident and migrant throughout California. The species is sparsely distributed throughout California and it is found in Southern California occupying primarily mountain, foothill, and desert habitats. Foraging habitat for this species is very broad and in California includes open habitats with scrub, grasslands,

desert communities, and agricultural areas. This species nests on cliffs within canyons and escarpments and in large trees (generally occurring in open habitats) and is primarily restricted to rugged, mountainous country (Garrett and Dunn 1981; Johnsgard 1990). Most nests are located on cliffs or trees near forest edges or in small stands near open fields (Kochert et al. 2002). Nest locations tend to be more closely associated with topographic heterogeneity than with a particular vegetation type (Call 1978). This species may nest on cliff faces, walled canyons or in tall trees.

The golden eagle has a HIGH potential to forage within TL 637 ROW and can be considered ABSENT for nesting within the ROW. Although CNDDB lists no records of occurrence within 3 miles of the TL 637 ROW, a historic golden eagle nesting location was identified within 5 miles southeast of the proposed TL 637 construction site, known as the Gower Mountain site in the Cleveland National Forest. Wildlife Research Institute conducted golden eagle surveys and provided SDG&E with raw data to create the 4,000-foot exclusionary buffers for the Sunrise Powerlink Project. According to the Raptor Management page on the USDA Forest Service website (http://www.fs.usda.gov/ detail/cleveland/ landmanagement/ resourcemanagement), this nest was not active in 2012. Therefore, this species is considered to have a high potential to forage but is not considered to have a potential to nest directly within the ROW.

Ferruginous Hawk

The ferruginous hawk (*Buteo regalis*) federal Bird of Conservation Concern, CDFW Watch List species, San Diego County Sensitive Species (Group 1) and within the NCCP. This species is an uncommon winter resident at low elevations and open grasslands of Modoc Plateau, Central Valley, Coast Ranges and a common winter resident in southwestern California. This species utilizes open grasslands, sagebrush flats, desert scrub, low foothills surrounding valleys, and fringes of pinyon-juniper habitats.

The ferruginous hawk has a MODERATE potential to forage in grasslands and LOW potential to nest within riparian and woodlands in the TL 637 ROW. CNDDB lists one record of occurrence within 5 miles of the ROW and the ROW may contain moderate quality suitable habitat (CDFW 2013).

White-Tailed Kite

The white-tailed kite (*Elanus leucurus*; nesting) is a California Fully Protected Species and BLM sensitive species. In the United States, its range extends along the Pacific coast from southwest Washington through California and also includes south-central Arizona, south Texas, and south Florida. In California, it is a resident and localized migrant of the Central Valley and Pacific coast. The range of this species is believed to be increasing, although shifts in the distribution of this species are not uncommon. It inhabits low to moderate-elevation grasslands, savannas, agricultural areas, wetlands, oak woodlands, marshes, and riparian woodlands and usually breeds in open areas with scattered trees, often near water. This species is a medium-sized hawk with a white head; grey back; long, white tail; and large, black scapulars. It forages often by "kiting," or hovering in one area while scanning the ground for potential prey. Its diet includes primarily small mammals, but will also eat large insects, amphibians, and lizards. Degradation or

loss of grassland habitat to development or ranching is a significant threat to populations (Dunk 1995). Historical population declines may be attributed to chemical poisoning.

The white-tailed kite can be considered PRESENT on the TL 637 ROW for foraging in grasslands and has a MODERATE potential to nest within riparian and woodland areas adjacent to the ROW. CNDDB lists one record of occurrence within 1 mile of the ROW, and this species was observed on the ROW near pole P158. In addition, the ROW contains suitable foraging habitat.

Prairie Falcon

The prairie falcon (*Falco mexicanus*) federal Bird of Conservation Concern, CDFW Watch List Species, and San Diego County Sensitive Species (Group 1). This species occurs along southeastern deserts northwest through Central Valley and along inner Coast Ranges and Sierra Nevada. It utilizes grassland, savannas, rangeland, agriculture, desert scrub, alpine meadows and may nest on cliffs or bluffs.

The prairie falcon has a MODERATE potential to forage within grasslands and MODERATE potential to nest within riparian and woodlands within the TL 637 ROW within the grasslands. CNDDB lists one record of occurrence within 5 miles of the ROW and the ROW may contains moderate quality suitable habitat (CDFW 2013)

Coastal California Gnatcatcher

The coastal California gnatcatcher (*Polioptila californica californica*) is a federally listed as threatened species, a California Species of Special Concern, federal Bird of Conservation Concern, WLBCC, San Diego County Sensitive Species (Group 1) and covered under the NCCP. Historically, this species occurred from the coast and foothills of Ventura County and south through Los Angeles, southwestern San Bernardino, western Riverside, Orange, and San Diego Counties of California into northwestern Baja California, Mexico. However, populations have become more fragmented in recent history. This species permanently resides in Diegan, Riversidian, and Venturan sage scrub sub-associations found from 0 to at least 2,500 feet amsl in elevation.

The USFWS designation of critical habitat for the CAGN specifically excluded areas within functioning HCPs, such as SDG&E's SDG&E Subregional NCCP. The CAGN habitat owned by SDG&E (and covered under the SDG&E Subregional NCCP) was determined to have greater benefits to CAGN than from lands designated as critical habitat (Federal Register 2007). Habitat for the CAGN is found in several locations along the proposed project route as well as designated critical habitat. This species was observed nesting and foraging on the TL 637 ROW near poles P64 west to P52, P48 to P51, P44 to P43 to P47, and P46 during focused surveys conducted in 2010 (Chambers Group 2010). These CAGN occupied areas are outside the USFWS designated critical habitat. CNDDB lists two records of occurrence of this species within 2 miles of the TL 637 ROW. In addition, the ROW contains good-quality suitable habitat. The CAGN can be considered PRESENT on the ROW for both foraging and nesting purposes.

Purple Martin

The purple martin (*Progne subis*; nesting) is a California Species of Special Concern and San Diego County Sensitive Species (Group 1). The breeding range of this species covers most of eastern North America from southern Canada to northern Mexico to the eastern seaboard and throughout the Gulf Coast. Other localized breeding populations occur in scattered areas of the western United States and Mexico, including southwestern California. It winters mostly in South America to southeastern Brazil. Habitats include towns and farms in open or semi-open country near water. This species prefers to nest in man-made martin houses but will also nest in tree cavities and saguaro cactus. It tends to fly in circles while foraging for insects over water bodies but occasionally gleans insects from the ground. The purple martin is the largest North American swallow (wingspan up to 17 inches) and the only male American swallow with a dark belly. The female is light-bellied, with a grayish throat and breast and often a faint collar. A major cause for the decline of this species is competition from European starlings and house sparrows, which effectively out-compete purple martins for nest sites. Other factors include the felling of dead trees with nesting cavities.

The purple martin can be considered PRESENT on the TL 637 ROW for both foraging and nesting purposes. CNDDB lists a record of this species in 2007, nesting in a wood power pole east of Little Page Road and 0.5 mile south of Highway 78, at Collier Flat. In addition, a purple martin pair was observed nesting at pole P113.

Western Bluebird

The western bluebird (*Siala mexicana*) is a San Diego Sensitive Species (Group 2) and within the NCCP. It is a common species occurring throughout California excluding higher mountains and eastern deserts. This species may utilize a variety of habitats including open forests of deciduous, coniferous or mixed trees, savanna, or edges of riparian woodland.

The western bluebird has a HIGH potential to forage and nest within the TL 637 ROW within the mixed oak woodlands, southern riparian forest, or oak savanna. This species may also nest within eucalyptus trees occurring within the project site. Although no records in CNDDB, this species has an expanding distribution and breeding has been confirmed in the area (Unitt 2004).

Pallid Bat

The pallid bat (*Antrozous pallidus*) is listed as a California Species of Special Concern, an FSS species, a BLM Sensitive Species, San Diego County sensitive species (Group 2), and Western Bat Working Group High Priority species. It is widespread throughout the western United States; southern British Columbia, Canada; and mainland and Baja California, Mexico (Hermanson and O'Shea 1983; Hall 1981). Within the United States, it ranges east into southern Nebraska, western Oklahoma, and western Texas. The pallid bat is locally common in arid deserts (especially the Sonoran life zone) and grasslands throughout the western United States and also occurs in shrublands, woodlands, and forests at elevations up to 8,000 feet amsl (Hermanson and O'Shea 1983; Hall 1981). Although it prefers rocky outcrops, cliffs, and crevices with access to open habitats for foraging, it has been observed far from such areas (Hermanson and O'Shea 1983). The pallid bat has a MODERATE potential to occur

along the TL 637 ROW within grasslands, woodlands, forests and areas with rocky outcrops or areas for roosting.

Ringtail

The ringtail (*Bassariscus astutus*) is a California Fully Protected Species and San Diego County Sensitive Species (Group 2). The ringtail is widely distributed permanent resident in California with exception of the agricultural portion of the Central Valley. The ringtail is a nocturnal slender procyonid and is found in a variety of riparian and in forest and shrub habitats at low to middle elevation areas. Ringtails are usually not found more than 0.6 mile from permanent water. The ringtail is not much larger than a gray squirrel and is generally tan in color with black-tipped guard hairs on the dorsal, and yellowish white below. This species is known to eat rodents, rabbits, birds, reptiles, invertebrates, fruits and nuts. Ringtails nest in rock recesses, cavities in logs, and abandoned burrows (CDFG 2005).

The CNDDB does not provide records of this species. However, suitable habitat for this species exists within the riparian community that crosses the TL 637 ROW and it has been found in the vicinity during Dudek site surveys; therefore, the ringtail has a MODERATE potential to occur within this segment of the TL 637 ROW. No work is proposed in this area of suitable habitat, however; therefore, no impact to this species habitat is anticipated.

Dulzura Pocket Mouse

The Dulzura pocket mouse (*Chaetodipus californicus femoralis*) is a California Species of Special Concern, San Diego County Sensitive Species (Group 2) and covered under the NCCP. This species inhabits the western slope of the Peninsular Range of California from Riverside County into northern Mexico. Scattered locations are also known in the Marine Corps Base Camp Pendleton area. This species occupies chaparral, dense coastal sage scrub slopes, and, occasionally, desert grasslands.

The Dulzura pocket mouse has a MODERATE potential to occur within the TL 637 ROW. CNDDB lists three records of occurrence within 3 miles of the ROW, and the ROW contains moderate quality suitable habitat.

Pallid San Diego Pocket Mouse

The pallid San Diego pocket mouse (*Chaetodipus fallax pallidus*) is a California Species of Special Concern, San Diego county sensitive species (Group 2), and covered under the SDG&E NCCP. This species is found on the margins of the Mojave Desert in California, on the northern slopes of the San Bernardino Mountains, in high elevations of eastern San Diego County, and on the edge of the Colorado Desert, south to the Mexican boundary. This species is particularly known to inhabit arid, desert areas of southern California (e.g., Riverside County southwest of Palm Springs, in San Bernardino County from Cactus Flat to Oro Grande, and east to Twenty nine Palms). This species prefers dry environments in high elevation plateaus and can be located in areas up to 6,000 feet amsl in elevation (e.g., Cactus Flat, along the north slope of the San Bernardino Mountains). This species utilizes sandy, herbaceous areas, usually in association with rocks or coarse gravel (Grinnell 1933; Miller and Stebbins 1964). In general, this species can be found in many habitat types such as dry alluvial fans, dry desert slopes,

sparse scrublands and grasslands, grassland/chaparral/sage scrub ecotones, redshank chaparral, and pinyon-juniper woodlands. This species has a MODERATE potential to occur within the TL 637 ROW.

Townsend's Big-Eared Bat

The Townsend's big-eared bat (Corynorhinus townsendii) is a California Species of Special Concern and USFS and BLM Sensitive Species. It is considered high priority under the Western Bat Working Group, a San Diego county sensitive species (group 2), and covered under the San Diego MSCP. The Townsend's big-eared bat (Corynorhinus townsendii) (big-eared bat) ranges throughout the western United States, British Columbia, Canada, and Mexico (Kunz and Martin 1982). In the United States, it occurs in a continuous distribution in all the western states and east into western South Dakota, northwestern Nebraska, southwestern Kansas, western Oklahoma, and western Texas (Kunz and Martin 1982). The big-eared bat is primarily associated with mesic habitats characterized by coniferous and deciduous forests, although it also occurs in xeric areas (Kunz and Martin 1982). In California, this species was historically associated with limestone caves and lava tubes located in coastal lowlands, agricultural valleys, and hillsides with mixed vegetation; it occurs in all parts of California, with the exception of alpine and subalpine areas of the Sierra Nevada (Zeiner et al. 1990a, b). The species also occurs in man-made structures and tunnels (Kunz and Martin 1982), mines (López-González and Torres-Morales 2004) and it has been suggested that the big-eared bat has become more common in the western United States due to the availability of man-made structures (Kunz and Martin 1982). This species has a MODERATE potential to occur within the TL 637 ROW.

Stephens' Kangaroo Rat

The Stephens' kangaroo rat (*Dipodomys stephensi*) is a federally listed as endangered and state-listed as threatened species. It is a San Diego County sensitive species (Group 1) and within the NCCP. Current populations exist only in the San Jacinto Valley, western Riverside County, and northwestern San Diego County, California. This species may occur in either non-native annual and native perennial grasslands with sparse perennial vegetation. They may also occur in sparse coastal sage scrub and sagebrush communities with sparse canopy coverage. Some characteristic plant species in their habitats may include buckwheat (*Eriogonum* spp.), chamise, brome grasses, and filarees (*Erodium* spp.). This species prefers areas with well-drained, gravelly or sandy soils for digging its burrows. This species has a LOW to MODERATE potential to occur within the TL 637 ROW.

Western Mastiff Bat

The western mastiff bat (*Eumops perotis*) is listed as a state Species of Special Concern and a BLM Sensitive Species, high priority by the Western Bat Working Group, San Diego county sensitive species (group 2), and covered under the San Diego MSCP. The western mastiff bat (*Eumops perotis californicus*) is widespread in the southwestern United States; the northern portion of Baja California, Mexico; and south into central mainland Mexico (Hall 1981). In the United States, it occurs in northern, central, and Southern California; the southern portion of Nevada; the southwestern half of Arizona; and the extreme southwestern portions of New Mexico and Texas (Hall 1981). In California, its yearlong range includes the San Joaquin Valley, the coastal region from the San Francisco Bay area south to San Diego, and the

Transverse and Peninsular mountain ranges and Mojave and Colorado deserts of Southern California (Zeiner et al. 1990a, b). It is absent in California from the agricultural regions of the Central Valley, northwestern California, and the Great Basin Desert of northeastern California (Zeiner et al. 1990a, b).

The western mastiff bat occurs in a wide variety of chaparral, coastal scrub, coniferous and deciduous forest and woodland, and desert scrub habitats (Best et al. 1996; Zeiner et al. 1990a, b). Day roosts are established in crevices in rocky canyons and cliffs where the canyon or cliff is vertical or nearly vertical (Best et al. 1996) as well as in trees and tunnels (Zeiner et al. 1990a, b). This species has also adapted to roosting in buildings and has been observed hanging from various other kinds of man-made structures, including awnings, ledges over doors and windows, large cracks in masonry, and rafters (Best et al. 1996). Although western mastiff bats are yearlong residents in California and are known to shift day roosts throughout the year, whether they are seasonally migratory is unknown. This species has a MODERATE potential to occur within the TL 637 ROW.

Western Red Bat

The western red bat (*Lasiurus blossevillii*) is a state-listed Species of Special Concern, an FSS species, San Diego county sensitive species (group 2) and high priority under the Western Bat Working Group. The western red bat (*Lasiurus blossevillii*) occurs in California from Shasta County and Mendocino County in the north, and through the central coastal region and the Central Valley west of the Sierra Nevada/Cascade ranges to coastal Southern California (Cryan 2003; Zeiner et al. 1990a, 1990b), east into Arizona and New Mexico, and south into Baja California and mainland Mexico to South America (Cryan 2003). The species does not occur in desert regions. The western red bat is considered locally common. The species inhabits California year-round but makes seasonal movements within the state and, possibly, to Arizona and New Mexico (Cryan 2003). Red bats (*Lasiurus* spp.) typically roost in trees, occasionally in shrubs, and even on the ground (Shump and Shump 1982). They are usually solitary, but different bats may use different roosts on different days, and they occasionally form nursery colonies. Day roosts are commonly located in edge habitats adjacent to streams, open fields, and urban areas (Shump and Shump 1982). This species has a MODERATE potential to occur within the TL 637 ROW.

Hoary Bat

The hoary bat (*Lasiurus cinereus*) is considered medium priority by the Western Bat Working Group. This species is the most widespread North American bat and is detected at many California locations. This species is solitary and winters along the coast and in Southern California (CDFG 2008). This species breeds inland and north of its wintering range. Suitable habitats for bearing young include all woodlands and forests with medium to large-size trees and dense foliage. During migration in southern California, males are detected in the foothills, deserts and mountains whereas the females are detected in lowlands and coastal valleys (Vaughan and Krutzsch 1954). Hoary bats typically roost in dense foliage of medium to large trees and prefer open habitats or habitat mosaics, with access to trees for cover and open areas or habitat edges for feeding (CDFG 2008). This species has a MODERATE potential to occur within the TL 637 ROW.

Western Yellow Bat

The western yellow bat (*Lasiurus xanthinus*) is considered high priority by the Western Bat Working Group and is a California Species of Special Concern. This species is uncommon in California, known only in Los Angeles and San Bernardino Counties, south to the Mexican border. Unlike many other bats found in this region, this species is apparently found throughout the year in southern California. This species is recorded below 2,000 feet amsl in elevation in valley foothill riparian, desert riparian, desert wash, and palm oasis habitats. It can be distinguished from other bat species in California by its yellow fur, short ears, and medium size. Females also give birth to one to four pups between June and July. Threats to this species include its limited distribution, restrictive habitat requirements, and predation. The western yellow bat roosts and feeds in, and near, palm oases and riparian habitats. This species has a MODERATE potential to occur within the TL 637 ROW.

San Diego Black-Tailed Jackrabbit

The San Diego black-tailed jackrabbit (*Lepus californicus bennettii*) is a California Species of Special Concern, San Diego County Sensitive Species (Group 2) and within the NCCP. This species occupies a variety of habitats in southern California, including arid habitats with open ground, grasslands, coastal sage scrub, agriculture, disturbed areas, and rangelands. This species is found on coastal slopes from Kern County, California, south into Baja California, Mexico, between sea level and approximately 3,000 feet amsl in elevation. This species does not typically burrow but sits in depressions called forms at the bases of shrubs by day. It is primarily nocturnal and is an opportunistic forager, feeding on a variety of herbaceous matter (depending on availability). Reasons for decline include habitat loss, fragmentation, and disease outbreaks. This species has a HIGH potential to occur within the TL 637 ROW.

Western Small-Footed Myotis

The western small-footed myotis (*Myotis ciliolabrum*) is a BLM Sensitive Species and moderate priority under the Western Bat Working Group. This species occurs over much of the western U.S. into southern Canada and Mexico from 0 to over 8,900 feet amsl in elevation. The species is found along the California coast from Contra Costa County south to the Mexican border (Harris 1990a), on both the east and west sides of the Sierra Nevada, and in the Great Basin and desert habitats from Modoc County to San Bernardino County (Harris 1990). As such, this species is detected in a wide range of habitats including rock outcrops on open grasslands to canyons in the foothills to lower mountains with yellow pine woodlands. This species prefers humid roost sites and has a high tolerance for cold. During the day, this species may roost in cracks and crevices in cliffs, beneath tree bark, in mines and caves, and occasionally in dwellings of humans. At night, roots may vary from natural to human erected structures; however, this species is also found associating with other bat species (e.g., Townsend's big eared bat, Plecotus townsendii) and is found in their roots. This species hibernates in caves, mines, and tunnels, where individuals usually hang singly, often exposed. Maternity colonies of 12-20 females and young have been detected in buildings, caves, and mines (Harris 1990). This species has a MODERATE potential to occur within the TL 637 ROW.

Long-Eared Myotis

The long-eared myotis (*Myotis evotis*) is a BLM Sensitive Species and moderate priority by the Western Bat Working Group. This species is found across much of western North America, from British Columbia to southern California and New Mexico. Typically, this species is found in coniferous forests at higher elevations ranging from 7,000–9,600 feet amsl; however, this species has also been detected at sea level. Typically, this species roots in tree cavities beneath exfoliating bark in both living trees as well as in dead snags. Interestingly, this species is one of only two that may be detected roosting at ground level in, for example, fallen trees, tree stumps, and rock crevices. This species has a MODERATE potential to occur within the TL 637 ROW.

San Diego Desert Woodrat

The San Diego desert woodrat (*Neotoma lepida intermedia*) is a California Species of Special Concern, San Diego County Sensitive Species (Group 2), and covered under the NCCP. This species occurs in southern California from San Diego County to San Luis Obispo. It inhabits moderate to dense canopies in a variety of shrub and desert habitats, especially in rock outcrops, rocky cliffs, and slopes. The desert woodrat is often associated with large cactus patches (Montgomery 1998); within coastal sage scrub communities, it almost is invariably associated with prickly pear (*Opuntia littoralis*). This species is also found in rocky outcroppings and boulder-covered hillsides in chaparral or oak woodlands.

The San Diego desert woodrat (NCCP covered species) has a MODERATE potential to occur within the TL 637 ROW. Although CNDDB lists no records of occurrence within 3 miles of the ROW, the ROW contains moderate quality suitable habitat to support this species.

Big Free-Tailed bat

The big free-tailed bat (*Nyctinomops macrotis*) is a California Species of Special Concern and Western Bat Working Group moderate to high priority. It is widely but locally distributed from lowa and southwestern British Columbia in the north, southward through Mexico and the West Indies to Uruguay in South America. It is rarely detected in California, but a few records of its presence have been documented; however, no roosts for this species have been identified to date. This colonial nesting species, which may number up to 150 individuals, prefers to roost on rugged cliff faces, slopes, and outcrops. Roosts are typically associated with natural substrates and rarely found in human structures. This species has a MODERATE potential to occur within the TL 637 ROW.

Southern Mule Deer

Southern Mule Deer (*Odocoileus hemionus fulginata*) is a Cleveland National Forest Management Indicator Species for healthy diverse habitats, San Diego sensitive species (group 2), and covered under the San Diego MSCP and SDG&E NCCP. This species is common year-round resident (or elevational migrant) with a wide distribution throughout most of California (CDFG 2008). They occur in early–intermediate successional stages of most forest, woodland and brush habitats. They tend to prefer habitats which various-aged vegetation which provides woody cover, meadow, shrubby openings, and water (providing protective cover and

foraging/young bearing opportunities; CDFG 2008). Brushy areas and tree thickets are important for escape cover and important for thermal regulation. This species seeks out suitable habitat that consists of a mosaic of vegetation, providing an interspersion of herbaceous openings, dense brush or tree thickets, riparian areas, and abundant edge. This species has a HIGH potential to occur within the TL 637 ROW.

Jacumba Pocket Mouse

The Jacumba pocket mouse (*Perognathus longimembris internationalis*) is a California Species of Special Concern, San Diego county sensitive species (Group 2) and covered under the SDG&E NCCP. It inhabits arid coastal scrub and chaparral habitats where sandy soils area is present. It has been observed in desert wash, desert scrub, desert riparian, and sagebrush habitats. It occurs in central San Diego County south to Baja California, Mexico. This species has a MODERATE potential to occur within the TL 637 ROW.

Mountain Lion

The mountain lion (*Puma concolor*) is considered a Cleveland National Forest Management Indicator Species for fragmentation, a San Diego sensitive species (Group 2), and covered under the San Diego MSCP and SDG&E NCCP. It is also considered a Group 2 species by the County of San Diego (2010) and is considered a Specially Protected Mammal under California Fish and Game Code Section 4800. Its range throughout California extends from deserts to humid forests in the Coast Ranges and from sea level to 10,000 feet amsl, but mountain lions do not inhabit xeric regions of the Mojave and Colorado deserts. They are most abundant in habitats that support their primary prey, mule deer, and their seasonal movements tend to follow migrating deer herds. Mountain lions prefer habitats that provide cover, such as thickets in brush and timber in woodland vegetation (Zeiner et al. 1990b). They also utilize caves and other natural cavities for cover and breeding. They require extensive areas of riparian vegetation and brushy stages of various habitats, with interspersions of irregular terrain, rocky outcrops, and tree–brush edges. This species has a HIGH potential to occur within the TL 637 ROW.

American Badger

The American badger (*Taxidea taxus*) is a California Species of Special Concern, San Diego County Sensitive Species (Group 2), and covered under the NCCP. It is found throughout California in drier open stages of most shrub, forest, and herbaceous habitats; they require friable soils since they are fossorial species (CDFG 2008). This species ranges from western U.S and upper Midwestern U.S. south into central Mexico. This species may occupy a variety of habitats, especially grasslands, savannas, montane meadows, sparse scrublands, and deserts. Usually, this species prefers friable soils for burrowing and relatively open, uncultivated ground.

The American badger has a MODERATE potential to occur within the TL 637 ROW. CNDDB lists three records of occurrence within 3 miles of the ROW, the closest being approximately 0.5 mile from the ROW. In addition, the ROW contains moderate quality suitable habitat to support this species.

5.5.1.4 Critical Habitat

To the extent prudent and determinable (as dictated by the Endangered Species Act), the USFWS is required to designate critical habitat for endangered and threatened species (16 U.S.C. 1533 (a)(3)). Defined as areas of land, water, and air space containing the physical and biological features essential for the survival and recovery of endangered and threatened species, designated critical habitat includes sites for breeding and rearing, movement or migration, feeding, roosting, cover, and shelter. Critical habitat designation delineates all suitable habitats for the species, whether or not it is occupied. As described in the Final Biological Technical Report (Chambers Group 2012a), three USFWS designated critical habitat areas were identified as located within 3 miles of the proposed project alignment: CAGN (within the proposed project ROW), and Arroyo toad (*Anaxyrus californicus*) and San Diego fairy shrimp (*Branchinecta sandiegonensis*) (outside of proposed project ROW).

Although CAGN Critical Habitat Areas are located within 3 miles of the ROW (Figure 5.5-2), the USFWS designation of critical habitat for the CAGN specifically excluded areas within functioning HCPs (such as the SDG&E Subregional NCCP). As a result, the areas within the proposed project ROW were excluded from the Critical Habitat designation in narrative form in the Final Rule. Therefore, the proposed project ROW area does not constitute Critical Habitat. Designated critical habitat areas for arroyo toad exist within one to three miles outside the proposed project ROW in several locations. Although arroyo toad Critical Habitat Areas are located within 3 miles of the ROW, no suitable breeding habitat occurs within the ROW. Based on habitat survey results, pasture grazing and development have removed potential habitat for this species from the ROW. Critical habitat for the San Diego fairy shrimp exists outside the proposed project ROW just north of Ramona High School, approximately 1-mile west of the proposed project ROW.

5.5.1.5 Preserve Areas

The proposed project site is located within the boundaries of the following preserve areas: Mount Gower Preserve (BLM lands) Simon Preserve Resource Management Plan (County of San Diego) North County MSCP, and East County MSCP. It also occurs within the SDG&E NCCP Subregional Plan Area, but not within its designated preserve area.

The Mount Gower Preserve is located within BLM planning area and subject to the South Coast Resource Management Plan. The public lands within the Mount Gower Preserve are under a lease to the San Diego County Parks and Recreation Department. BLM retains ownership of these lands. The Simon Preserve Resource Management Plan guides activities within the Simon Preserve in order to protect the biological and cultural resources present in the preserve. The City of San Diego has prepared the North and East County MSCP to ensure the long-term survival of the California gnatcatcher and other sensitive coastal sage scrub-dependent plant and animal species in accordance with state-sanctioned NCCP program guidelines, as well as other species and habitats in the region.

5.5.1.6 Wetland and Jurisdictional Waters

A jurisdictional delineation conducted pursuant to guidelines set forth by the U.S. Army Corps of Engineers (ACOE) was performed by consulting biologists (Chambers Group Inc.) at potential jurisdictional wetland sites within the biological survey area in July 2011.

Four watersheds exist within the proposed project survey area: the Santa Maria, San Vicente, San Diego River, and Santa Ysabel watersheds (refer to PEA Appendix 4.4-A, Section 5.10). In addition, 67 drainages or features, potentially subject to ACOE, CDFW, and RWQCB jurisdiction are located within the proposed project area. Eleven poles (P148, P149, P150, P103, P104, P105, P106, R107¹, P114, P152, and P129) are located within wet meadows that have been determined to be jurisdictional by the ACOE and RWQCB. Six existing poles along Creelman Lane (east of Keyes Road) are located within an unvegetated streambed/waters of the U.S. that has been determined to be jurisdictional by CDFW, ACOE, and the RWQCB.

5.5.2 Regulatory Setting

Federal

Clean Water Act

The ACOE and the EPA have jurisdiction over "waters of the United States," which are generally classified as wetlands, navigable water, or other waters and include marine waters, tidal areas, stream channels, and associated wetlands.² Under federal regulations, wetlands are defined as "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas" (40 CFR 232.2).

Policies regulating the loss of wetlands generally stress the need to compensate for wetland acreage losses by creating wetlands from non-wetland habitat on at least an acre-for-acre basis. Projects that cause the discharge of dredged or fill materials in waters of the United States require permitting by the ACOE. Actions affecting small areas of jurisdictional waters may qualify for a Nationwide Permit, provided conditions of the permit are met (such as avoiding impacts to threatened or endangered species or to important cultural sites). Projects that do not meet the Nationwide Permit conditions or projects that disturb a larger area require an Individual Permit. The process for obtaining an Individual Permit requires a detailed alternatives analysis and development of a comprehensive mitigation/monitoring plan.

Endangered Species Act

The federal Endangered Species Act provides legislation to protect federally listed plant and animal species. Section 7 of the Endangered Species Act requires that all federal agencies must, in consultation with the USFWS or National Marine Fisheries Service, ensure that the lead agency's actions do not jeopardize the continued existence of a listed species, or destroy or adversely modify the listed species' "critical habitat." Section 9 prohibits the take of any fish or wildlife species listed under the Endangered Species Act as endangered. Take of threatened species also is prohibited under Section 9 unless otherwise authorized by federal regulations. *Take*, as defined by the Endangered Species Act, means "to harass, harm,

 $^{^{1}}$ R = pole to be removed.

² Visit the following website for further specification regarding non-navigable (i.e., wetlands) waters that are classified as waters of the United States: http://www.epa.gov/owow/wetlands/pdf/CWA_Jurisdiction_Following_Rapanos120208.pdf.

pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." *Harm* is defined as "any act that kills or injures the species, including significant habitat modification." Section 9 also prohibits removing, digging up, cutting, and maliciously damaging or destroying federally listed plants within the biological survey area under federal jurisdiction. Section 10 of the Endangered Species Act describes the process by which take permits are issued by USFWS/National Marine Fisheries Service for take of listed species incidental to an otherwise lawful activity.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) (16 U.S.C. 703 et seq.) is a federal statute that implements treaties with several countries on the conservation and protection of migratory birds. The number of bird species covered by the MBTA is extensive and is listed in 50 CFR 10.13. The regulatory definition of "migratory bird" is broad and includes any mutation or hybrid of a listed species and includes any part, egg, or nest of such bird (50 CFR 10.12). Migratory birds are not necessarily federally listed endangered or threatened birds under the Endangered Species Act. The MBTA, which is enforced by USFWS, makes it unlawful "by any means or in any manner, to pursue, hunt, take, capture, [or] kill" any migratory bird or attempt such actions, except as permitted by regulation. The applicable regulations prohibit the take, possession, import, export, transport, sale, purchase, barter, or offering of these activities, except under a valid permit or as permitted in the implementing regulations (50 CFR 21.11).

Bald and Golden Eagle Protection Act, as Amended (16 U.S.C. 668-668c)

The Bald and Golden Eagle Protection Act (BGEPA) of 1940, as amended, provides legal protection to bald eagles (*Haliaeetus leucocephalus*) and golden eagles (*Aquila chrysaetos*) in addition to protection afforded under the MBTA. The BGEPA prohibits the "take" (to pursue, shoot, shoot at, wound, kill, capture, trap, collect, molest, or disturb) of bald and golden eagles including their nests, eggs, or parts. "Disturbance" of bald and golden eagles is prohibited under the BGEPA, and "disturbance" relates to injuries to bald or golden eagles or a disruption to life cycles, productivity, and/or substantial interference of normal bald and golden eagle behavior. The BGEPA extends to potential impacts to bald and golden eagles are not present.

State

California Endangered Species Act

The California Endangered Species Act (CESA) provides legal protection for plants or wildlife species listed as rare, threatened, or endangered. The act prohibits the take of endangered and threatened species; however, habitat destruction is not included in the state's definition of take. Under CESA, *take* is defined as an activity that would directly or indirectly kill an individual of a species, but the definition does not include harm or harass. CESA Section 2090 requires state agencies to comply with endangered species protection and recovery and to promote conservation of these species. CDFW administers the act and authorizes take through Section 2081 agreements, except for species designated as fully protected.

Animal species considered endangered or threatened by the state are listed in 14 CCR 670.5, and the CDFW maintains lists of plant and animal species designated endangered, threatened,

and rare. The CDFW also maintains a list of "species of special concern" based on limited distribution, declining populations, diminishing habitat, or unusual scientific, recreational, or educational value. The CDFW is empowered by state law to review projects for their potential to impact state-listed species and species of special concern, as well as their habitats.

State Fully Protected Species

The State of California designated species as FP prior to the creation of CESA and federal Endangered Species Act. Lists of FP species were initially developed to provide protection to species that were rare or faced possible extinction/extirpation. Most FP species have since been state listed as threatened or endangered species. Under California Fish and Wildlife Code Section 4700, FP species may not be taken or possessed at any time. In September 2011, the California Legislature sent the Governor legislation authorizing CDFW to permit the incidental take of 36 fully protected species pursuant to a Natural Community Conservation Plan (NCCP) approved by CDFW (Senate Bill 618 [Wolk]). The legislation gives FP species the same level of protection as provided under the NCCP Act for endangered and threatened species (California Fish and Wildlife Code Section2835). The NCCP Act, enacted in the 1990s, authorizes the incidental take of species "whose conservation and management" is provided for in a conservation plan approved by CDFW.

California Fish and Game Code

The California Fish and Game Code governs state-designated wetlands, including riparian and stream habitat, and mandates that mitigation be implemented to replace wetland extent and value lost to development. Sections 1600–1607 of the Fish and Game Code regulates activities that would affect rivers, streams, or lakes by altering the flow; substantially changing or using any materials from the bed, channel, or bank of any river, stream, or lake; or disposing of debris. Activities that affect these areas, as well as associated riparian habitats, would require a Streambed Alteration Permit from the Fish and Game Code. Section 3503 of the Fish and Game Code prohibits impacts to actively nesting birds, their nests, or their eggs. Section 3503.5 prohibits killing of raptor species and destruction of raptor nests.

The Fish and Game Code provides protection from take for a variety of species, referred to as *fully protected species*. Fish and Game Code Section 3511 lists fully protected birds and prohibits take of these species. The code defines *take* as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." Except for take related to scientific research, all take of fully protected species is prohibited.

California Environmental Quality Act (Public Resources Code, Sections 21000–21177)

The California Environmental Quality Act (CEQA) requires that state and local agencies consider environmental consequences and project alternatives before a decision is made to implement a project requiring State or Local government approval, financing, or participation by the State of California. In addition, CEQA requires the identification of ways to avoid or reduce environmental degradation or prevent environmental damage by requiring implementation of feasible alternatives or mitigation measures.

California Native Plant Protection Act

The Native Plant Protection Act of 1977 (California Fish and Game Code, Sections 1900–1913) directed the CDFW to carry out the Legislature's intent to "preserve, protect and enhance rare and endangered plants in this State." The Native Plant Protection Act gave the California Fish and Game Commission the power to designate native plants as "endangered" or "rare" and protect endangered and rare plants from take. When the California Endangered Species Act was passed in 1984, it expanded on the original Native Plant Protection Act and enhanced legal protection for plants and created the categories of "threatened" and "endangered" species to parallel the Federal Endangered Species Act. The California Endangered Species Act converted all rare animals into the act as threatened species but did not do so for rare plants, which resulted in three listing categories for plants in California: rare, threatened, and endangered. The Native Plant Protection Act remains part of the California Fish and Game Code, and mitigation measures for impacts to rare plants are specified in a formal agreement between CDFW and the project proponent.

Porter-Cologne Water Quality Control Act and Section 401 of the Clean Water Act

California's RWQCB administers both the Porter-Cologne Water Quality Control Act and Section 401 of the CWA. The Porter-Cologne Water Quality Control Act, California Water Code Section 13260, requires that "any person discharging waste, or proposing to discharge waste, within any region that could affect the 'waters of the State' to file a report of discharge" with the RWQCB. Waters of the state are defined in the Porter-Cologne Act as "any surface water or groundwater, including saline waters, within the boundaries of the state" (California Water Code, Section 13050 (e)).

According to the RWQCB, waters of the state include but are not limited to rivers, streams, lakes, bays, marshes, mudflats, unvegetated seasonally ponded areas, drainage swales, sloughs, wet meadows, natural ponds, vernal pools, diked bay lands, seasonal wetlands, and riparian woodlands pursuant to Section 401 of the CWA. The RWQCB has also claimed jurisdiction and exercised discretionary authority over "isolated waters."

Streambed Alteration Agreement

CDFW must be notified prior to beginning any activity that would obstruct or divert the natural flow of, use material from, or deposit or dispose of material into a river, stream, or lake, whether permanent, intermittent, or ephemeral waterbodies under Section 1602 of the California Fish and Game Code. CDFW has 30 days to review the proposed actions and propose measures to protect affected fish and wildlife resources. The final proposal that is mutually agreed upon by CDFW and the applicant is the "Streambed Alteration Agreement." The conditions of a streambed alteration agreement and a CWA Section 404 permit often overlap.

Local

County of San Diego

The County of San Diego General Plan provides direction for future growth in the unincorporated areas of San Diego County, and provides policies related to land use, mobility, conservation, housing, safety, and noise. The County of San Diego General Plan Land Use Element provides a framework for managing future development in the County so that it is thoughtful of the existing

character of the current communities and the sensitive natural resources within the County. The County of San Diego General Plan contains the following relevant policies:

- **Conservation and Open Space (COS) Policy COS-1.2:** Minimize Impacts. Prohibit private development within established preserves. Minimize impacts within established preserves when the construction of public infrastructure is unavoidable.
- **Conservation and Open Space Policy COS-1.3:** Management. Monitor, manage, and maintain the regional preserve system facilitating the survival of native species and the preservation of healthy populations of rare, threatened, or endangered species.

Communities of Ramona and Santa Ysabel

The *Ramona Community Plan* (County of San Diego 2011a) provides guidance for the community of Ramona and the surrounding area. The Ramona Community Plan is a portion of the San Diego County General Plan that provides goals and policies for the community. The goals and policies were decided based on analysis by the Ramona Community Planning Group. The Ramona Community Plan contains the following relevant policies and goals:

- **Conservation and Open Space Policy COS 1.1.2:** Protect raw land from grading or other disturbances prior to approval and permit process.
- **Conservation and Open Space Policy COS 1.1.8:** Conserve functional wildlife and plant habitats, particularly those supporting rare or endangered species. These areas have been mapped as RCAs on the Ramona Resource Conservation Map.
- **Conservation and Open Space Policy COS 1.1.9:** Encourage the conservation of riparian brush and woodland areas and significant wildlife habitat.
- **Conservation and Open Space Policy COS 1.1.11:** Require the use of native seed mixes wherever feasible for the revegetation of cleared areas, provided that the use of native brush does not pose a fire hazard.
- **Conservation and Open Space Policy COS 1.1.12:** Discourage severe grading and encourage the preservation of native brush.

Central Mountain Subregional Plan

The *Central Mountain Subregional Plan* (County of San Diego 2011b) provides guidance to the communities of Cuyamaca, Descanso, Guatay, Mount Laguna, and Pine Valley, and covers an area of approximately 203,000 acres. The Central Mountain Subregional Plan is a portion of the San Diego County General Plan that provides goals and policies for that area of the county. The Central Mountain Subregional Plan contains the following relevant goals and policies:

- **Conservation Goal 1:** The careful management of environmental resources in the plan area that prevents wasteful exploitation or degradation of those resources, and preserves them for future generations.
- Vegetation and Wildlife Policy 2: In chaparral, clearing of brush shall be limited to that required for fire protection.
- **Vegetation and Wildlife Policy 4:** Cumulative effects of habitat disturbance should be addressed during evaluation of environmental impacts of development projects.

- Vegetation and Wildlife Policy 7: For any project requiring environmental review, biological studies will be required that specifically address wildlife movement corridors and areas of wildlife concentration whenever applicable.
- Vegetation and Wildlife Policy 11: Biological studies shall be required for discretionary permits when deemed necessary by County environmental review staff. These studies shall specifically address, but not be limited to, the identification of endangered, threatened, and sensitive species.
- Vegetation and Wildlife Policy 12: Spring surveys shall be required in areas where sensitive species are known to exist.
- Vegetation and Wildlife Policy 13: Require all biological resources to be recorded on a Resources Map and biological reports to be kept for public record and use.

North Mountain Subregional Plan

The North Mountain Subregional Plan (County of San Diego 2011c) provides guidance to the communities of Santa Ysabel, Warner Springs, Palomar Mountain, Mesa Grande, Sunshine Summit, Ranchita, and Oak Grove. As noted in the community plan, a majority of the area is characterized by large areas of open space with some scattered rural residential development. The North Mountain Subregional Plan is a portion of the San Diego County General Plan that provides goals and policies for the specific communities within the planning area. The North Mountain Subregional Plan contains the following relevant goals and policies:

- **Community Character Policy 3:** Require development to provide for two replacement trees for each tree removed at appropriate locations elsewhere on the subject property.
- Land Use Policy 5: Encourage preservation of areas with rare, unique, or endangered wildlife and plants.
- **Conservation General Goal:** The careful management of the environmental resources in the subregion to prevent wasteful exploitation or degradation of those resources, and to preserve resources for future use.
- **Vegetation and Wildlife Goal:** The preservation of the natural landscape and wildlife habitat within the subregion.

SDG&E Natural Community Conservation Plan (NCCP)

Approved in December 1995, SDG&E's NCCP authorizes take of 110 species (covered species) resulting from impacts from SDG&E's ongoing activities including installation, use, maintenance, and repair operations and expansion to those systems (SDG&E 1995). With the NCCP, SDG&E, USFWS, and CDFW have, concurrent with the approval date, entered into a long-term Implementing Agreement that describes the legal rights and obligations regarding each of these parties with respect to the implementation and maintenance of the NCCP. The Implementing Agreement authorizes SDG&E to conduct its activities within the plan area provided they are performed in conformance with the plan. The NCCP prescribes as "operational protocols" various protection, mitigation, and conservation measures that SDG&E must implement as part of its covered activities to ensure the survivability and conservation of protected species and their habitat. The 61 operational protocols provided in SDG&E's NCCP

include provisions for personnel training; pre-activity studies; and maintenance, repair, and construction of facilities, including access roads, survey work, and emergency repairs. SDG&E's NCCP does not exempt projects subject to permits from the CPUC or other agencies, thereby triggering the requirement for CEQA and National Environmental Policy Act (NEPA) review, using the SDG&E NCCP for the evaluation of impacts to covered species and their habitats. SDG&E's NCCP also has defined a number of plant and animal species as narrow endemics. These species are restricted in their distribution, may have rigid or narrow ecological requirements, and generally have low population numbers. As such, take authorization of these species is limited to emergencies and unavoidable impacts from repairs to existing facilities. Take of the species for non-emergency work may not occur without first conferring with the USFWS and CDFW. Furthermore, for new projects, destruction of narrow endemic wildlife species or their supporting habitat would not be covered by the NCCP.

Under its NCCP, SDG&E consults with the USFWS and CDFW on certain projects or activities in natural areas by preparing "pre-activity surveys" that evaluate the scope and nature of potential impacts in advance of construction or maintenance activities. The pre-activity survey, when submitted, initiates consultation with the USFWS and CDFW under established time frames to identify potential impacts and feasible avoidance, minimization, and/or mitigation measures as described in the NCCP.

As described in the Implementing Agreement for the SDG&E NCCP, USFWS, CDFW, and SDG&E agree that absent unforeseen circumstances, the mitigation measures provided in SDG&E's NCCP constitute the only mitigation measures that shall be required for any activity covered by the plan where it results in an impact to a covered species or its habitat.

The proposed project falls within the area where SDG&E's utility operations are governed by the NCCP. For the proposed project, SDG&E has adopted the operational protocols contained in the NCCP. While the project area is located within the City's MSCP Subarea Plan, SDG&E's public utility activities, such as the proposed project, are not subject to the regulatory jurisdiction of such local governments and, therefore, are not governed by the terms and conditions of such plans. However, in implementing its NCCP for the project, SDG&E would coordinate with the City and other jurisdictions to achieve consistency to the extent feasible. Where consistency is not feasible, SDG&E's NCCP provides for appropriate protocols and mitigation measures to protect natural community and natural resource values in these conservation-planning areas.

North County Multiple Species Conservation Plan

The North County MSCP is located in the northwest portion of San Diego County, encompassing the unincorporated communities of Bonsall, De Luz, Fallbrook, Harmony Grove, Rancho Santa Fe, Lilac, Pala, Pauma Valley, Ramona, Rincon Springs, and Valley Center, among others. The North County MSCP area is governed by the County of San Diego's North County Plan document, a planning document that aims to protect biodiversity and quality of life in the region by "reducing constraints on future development outside of proposed preserve areas and decreasing the costs of compliance with federal and state laws protecting biological resources" (County Plan incorporates goals including biological goals, economic goals, and social goals. The proposed project is anticipated to occur within SDG&E's ROW; therefore no conflicts

should occur with any other conservation plans or mitigation/preservation areas. The SDG&E Subregional NCCP is independent of other NCCP/HCPs, and therefore is not dependent upon the implementation of such plans and is not superseded by theirs.

East County MSCP

The East County MSCP area is located on approximately 1.6 million acres covering the eastern half of the County of San Diego. The East County MSCP area includes the communities of Central Mountain, Cuyamaca, Descanso, Pine Valley, Borrego Springs, Julian, Mountain Empire, Jacumba, Campo, Potrero, and Tecate, among others. However, the County only has land use authority over the private parcels within this area, which includes approximately 418,930 acres. The East County Plan is currently being developed. This document will eventually provide guidelines for the East County MSCP. As stated above, the proposed project is anticipated to occur within SDG&E's ROW; therefore no conflicts should occur with any other conservation plans or mitigation/preservation areas. The SDG&E Subregional NCCP is independent of other NCCP/HCPs; and therefore is not dependent upon the implementation of such plans and is not superseded by theirs.

Simon Preserve Resource Management Plan

The Simon Preserve is approximately 617 acres in size and is located from approximately 2 miles southeast of the unincorporated community of Ramona to approximately 13 miles northeast of the City of Poway. The Simon Preserve Resource Management Plan is a document that guides activities within the Simon Preserve in order to protect the biological and cultural resources present in the preserve. The Resource Management Plan not only catalogues the existing habitats, species, and resources within the preserve, it also guides future management of these resources and outlines operations and maintenance requirements for meeting management goals. As stated above, the proposed project is anticipated to occur within SDG&E's ROW; therefore, no conflicts should occur with any other conservation plans or mitigation/preservation areas.

County of San Diego Tree Ordinance

The San Diego Regulatory Code of Ordinances, Title 7, Division 1, Chapter 5 regulates the planting, trimming and removal of trees on County-owned property and County highways. However, the proposed project is anticipated to occur within SDG&E's ROW and no conflicts should occur with any other conservation plans or County tree ordinances. SDG&E is a public utility regulated by the CPUC. Local governments are precluded from regulating public utilities through their zoning laws, land use laws, ordinances, and other police powers by the exclusive jurisdiction of CPUC.

South Coast Resource Management Plan

The Mount Gower Preserve is a 1,574-acre preserve located southeast of the community of Ramona. The South Coast Resource Management Plan (BLM 1994) is a document that guides the activities on BLM-owned lands for San Diego, Riverside, San Bernardino, Orange, and Los Angeles Counties. The BLM is in the process of revising the South Coast Draft Resource Management Plan. This area covers nearly nine million acres, with approximately 300,820 acres of that land being BLM-administered public land. The Mount Gower Preserve is located within

this BLM planning area, and is thus subject to the South Coast Resource Management Plan. The preserve features dense chaparral, meadows, oak woodlands, and shaded stream habitats that provide a wide range of habitats for wildlife. The public lands within the Mount Gower Preserve are under a lease to the San Diego County Parks and Recreation Department. BLM retains ownership of these lands.

5.5.3 Environmental Impacts

Potential impacts to biological resources are separated into those likely to occur from - construction (both short- and long term impacts) and those that could occur as a result of operation and maintenance.

Significance Criteria

Appendix G of the CEQA Guidelines provides guidance for evaluating whether a development project may result in significant impacts. Appendix G suggests that a development project could have a significant impact on biological resources if the proposed project would:

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

Impact Discussion

Overview

The following discussion describes the proposed project's potential to impact sensitive resources during construction. SDG&E would operate in compliance with all state and federal laws, regulations, and permit conditions. This includes compliance with the CWA, Porter-Cologne Water Quality Control Act, federal Endangered Species Act, MBTA, BGEPA, CESA, CEQA, requirements and protective measures from BLM (when working on BLM land), CDFW, USFWS, and requirements and protective measures from Cleveland National Forest (when working on Cleveland National Forest land). In addition, SDG&E would operate under the SDG&E Subregional NCCP, which was established according to the ESA and CESA and the

NCCP Act. This would include compliance with Section 7.1, Operational Protocols and Section 7.2, Habitat Enhancement Measures of the SDG&E Subregional NCCP.

Impacts to sensitive species, including NCCP-covered species, and their habitats could result from the proposed project. Construction of the proposed project could result in temporary disturbance and/or permanent loss of sensitive vegetation communities, native trees, disturbed wetlands and jurisdictional waters due to construction activities including: pole removal, pole installation, anchor removal, temporary workspaces, access to poles (including foot paths), and the use of staging yards, stringing sites, and guard structures. SDG&E would avoid and minimize any impacts according to the NCCP and the Operational Protocols, and 401 Certification (RWQCB Certification No. 11C-114; Categorical Exemption; refer to PEA Appendix 4.4-A, Appendix A, Water Permits) conditions. With the implementation of the SDG&E NCCP Operational Protocols, prior approvals, and mitigation measures (MM BIO-1, MM BIO-2, MM BIO-3, MM BIO-4, MM BIO-5, MM BIO-6, and MM BIO-7), impacts are expected to be less than significant.. Long-term operation and maintenance will be reduced as a result of the project due to a reduction in the number of poles, type of poles, removal of guywires and stub poles, and consolidation of some line segments.

a) Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS?

Special-Status Plants

Five sensitive plant species—San Diego milk-vetch, Orcutt's brodiaea, delicate clarkia, San Bernardino aster, and Parry's tetracoccus—were detected within the proposed project survey area during the 2010 rare plant surveys (Chambers Group 2012c). However, these species were not identified within the construction impact area, and were flagged for avoidance during pre-activity surveys conducted between July 11–15, 2011. No other sensitive plant species were found during the 2010 rare plant surveys; however, several plants were determined to have a moderate potential to occur within the proposed project survey area (see Appendix 1-A), which include San Diego gumplant, Coulter's saltbush, and little mousetail. These species were determined to have a moderate potential to occur within the proposed project area due to having suitable habitat present within the survey area and historical occurrences recorded within 5 miles of the ROW; however, these species was not specifically surveyed for during the 2010 rare plant surveys. In addition, some areas were not surveyed due to lack of access. Since some areas have not been surveyed for special-status plants or some special status plants with moderate potential to occur have not been specifically surveyed for, it is assumed that there is some potential for these species to occur and they may be impacted during construction if appropriate protective measures are not implemented. Potential impacts are therefore considered significant.

To ensure that impacts to special-status plants are reduced to less-than-significant level, SDG&E would implement Applicant Proposed Measure (APM)-BIO-1 (see Section 4.8, Table 4-6 of this Initial Study (IS)) to avoid, minimize, or mitigate for impacts to biological resources. APM-BIO-1 outlines the NCCP operational protocols that will be implemented during project

construction. SDG&E would also implement operational protocol 11 (personnel training) and 13 (pre-activity studies), which would inform workers of sensitive biological resources occurring within the biological survey area and would require pre-construction surveys to identify on-site resources. Per the SDG&E Subregional NCCP, verification surveys are required if surface disturbance has not commenced within 30 days of the submittal of the PSR to the USFWS and the CDFW. In addition, implementation of MM BIO-1 would ensure that impacts to special-status plants are reduced to less-than-significant levels.

MM BIO-1 Prior to construction, San Diego Gas & Electric (SDG&E) shall retain a qualified biologist approved by the California Public Utilities Commission (CPUC) to conduct a focused rare plant survey during the time period when the following special-status plant species are detectable: San Diego gumplant (July – October; east of Del Amo Road (P65 east to Santa Ysabel Substation) in the following habitat types: chaparral, grassland, oak woodland, riparian forest, disturbed wetland, and in agricultural land east of Oak Hollow Road (P75 east to Santa Ysabel Substation)), and Coulter's saltbush (March – October; within proposed project impact areas within the project area in the following habitat types: agricultural land, coastal sage scrub, grassland, oak woodland, and disturbed wetlands).

There is some potential for little mousetail to occur within vernal pool and wetland areas; these areas will be protected through implementation of MM BIO 7, the SDG&E Natural Community Conservation Plan (NCCP), and through avoidance of impacts to wetlands. However, there is a confined area (P103 through P107), where poles are situated within a wet meadow and will be cut down and removed by hand. Therefore, in this confined area, presence is assumed and SDG&E shall do the following: using pin flags, narrowly define footpaths for hand crews to and from the poles; crews will hand-cut the pole; and the cut poles will be removed by hand or by helicopter only.

Locations of special-status plants shall be identified and inventoried. The qualified biologist shall supervise construction activities within the vicinity of areas identified as having special-status plant species. Impacts to special-status plant species shall be avoided to the maximum extent possible by installing fencing or flagging, marking areas to be avoided in construction areas, and limiting work in areas identified as having special-status plant species to periods of time when the plants have set seed and are no longer growing.

Where impacts to special-status plant species are unavoidable, the impact shall be quantified and compensated though off-site land preservation and /or plant salvage and relocation as determined by the qualified biologist and approved by the CPUC. Alternatively, if the special-status plant species in question is a covered species within the SDG&E NCCP, mitigation consistent with measures established in the NCCP shall be provided.

The results of the focused plant surveys and measures outlined above that will be implemented by SDG&E in the event special-status plant species are identified within the biological survey area shall be provided to CPUC. CPUC will review and approve the rare plant survey report and recommended avoidance or mitigation approaches prior to issuance of a notice to proceed.

Special-Status Wildlife (Reptiles)

Seven special-status wildlife species were present or have a moderate to high potential to occur within the proposed project Area. Three sensitive reptile species (coast horned lizard, Coronado Island skink, coastal rosy boa) are NCCP-covered species and were present in the proposed project area. Three species (coastal whiptail, Belding's orange-throated whiptail, northern reddiamond rattlesnake), the latter two which are NCCP-covered species, have a high potential to occur, and the remaining species (San Diego ring-necked snake, a NCCP-covered species) has a moderate potential to occur in the proposed project area.

To ensure that impacts to special-status plants are reduced to a less-than-significant level, SDG&E would implement APM-BIO-1 (see Section 4.8, Table 4-6 of this IS) to avoid, minimize, or mitigate for impacts to biological resources. APM-BIO-1 outlines the NCCP operational protocols that will be implemented during project construction. While construction activities could directly impact the habitat of these species through disturbance of habitat, SDG&E would implement APM-BIO-1 to avoid, minimize, or mitigate impacts to biological resources by restricting vehicles to existing roads when feasible, minimizing impacts by defining the disturbance areas, designing the proposed project to avoid or minimize new disturbance and erosion, and adjusting access roads to avoid sensitive habitats. SDG&E will also implement NCCP operational protocol which requires that pre-activity studies, including focused surveys, are conducted. In addition, implementation of MM BIO-2 (which requires a biological monitor to be present during all vegetation removal activities to prevent impacts to special-status species) as well as MM BIO-3, would further reduce potential impacts to less than significant levels.

MM BIO-2 San Diego Gas & Electric (SDG&E) shall retain qualified biologists and other qualified resource specialists, as necessary, to monitor all project construction activities that could reasonably result in impacts to biological resources. All monitor qualifications shall be reviewed and approved by the California Public Utilities Commission (CPUC) prior to conducting monitoring activities along the right-of-way. Monitors shall be responsible for preconstruction surveys, work area delineations (i.e., staking, flagging, etc.) to comply with SDG&E's Natural Community Conservation Plan, on-site monitoring and documentation of violations and compliance.

SDG&E shall submit a weekly report to CPUC that summarizes the biological monitoring activities that were completed during construction. The weekly report at a minimum shall include environmental training sign-in sheets, biological monitors assigned to project components, compliance issues/concerns and general wildlife observations.

MM BIO-3 At the end of each workday, any open holes shall be fully covered, after they have been inspected by the on-site biologist, with steel plates, plywood, or other effective coverings to prevent entrapment of wildlife species. If fully covering the

excavations is impractical, ramps will be used to provide a means of escape for wildlife that enter the excavations, or open holes will be securely fenced with exclusion fencing. If common wildlife species are found in a hole, the designated biological monitor shall immediately be informed and the animal(s) shall be removed. If the animal(s) is/are a sensitive species that require(s) special handling authorization, a qualified biologist (agency-permitted or approved to handle a specific species) shall remove the animal before resumption of work in that immediate area. San Diego Gas & Electric shall specify the requirement to cover all open holes, create ramps, or install exclusion fencing around open holes in its agreements with all construction contractors.

In addition, per the *SDG&E* Subregional *NCCP*, verification surveys are required if surface disturbance has not commenced within 30 days of the submittal of the PSR to the USFWS and the CDFW. If any additional sensitive reptile species are found, compliance with the *SDG&E* Subregional NCCP would occur.

Special-Status Wildlife (Avian)

As shown in Table 5.5-2, construction of the project would impact 13.16 acres (13.13 acre temporary, 0.3 acre permanent) to sensitive vegetation communities that may support foraging and/or nesting habitat for ten sensitive avian species that have either been observed within the proposed project survey area or have a moderate or high potential to occur. Two of these species have been observed foraging and nesting on site: CAGN (NCCP-covered) and purple martin. Three of these species have been observed foraging within the survey area and have a potential for nesting: white-tailed kite, Cooper's hawk (NCCP-covered), and rufous-crowned sparrow (NCCP-covered). The Cooper's hawk and rufous-crowned sparrow have a high potential to nest on the proposed project. Low quality suitable nesting habitat for the white-tailed kite near the proposed project exists; therefore the potential for this species to nest within the proposed project area is low. One species, western bluebird (NCCP-covered) is considered to have a high potential to forage and nest within the biological survey area. One of these species, the golden eagle (NCCP-covered), has a high potential to forage on site but can be considered absent for nesting due to the lack of suitable nesting habitat within the proposed project area. In addition, impacts to nesting habitat may affect nesting passerine and raptor species covered under the MBTA. Two of these species (Bell's sage sparrow, prairie falcon) have a moderate potential for nesting and foraging within the biological survey area. One species (ferruginous hawk, NCCP-covered) has a moderate potential for foraging and low potential for nesting within the biological survey area.

Proposed project activities that could result in the permanent or temporary impacts due to loss of nesting and foraging habitat include the removal of wood poles (which support cavity nesters and raptors depending on the design of cross-arms) and the removal of vegetation, such as during the creation of staging and laydown yards for the construction, stringing sites, wooden guard structures, and installation of new poles.

Temporary impacts to avian nesting and foraging may include a temporary increase in noise from construction equipment and vehicles. Specific temporary and permanent impacts for CAGN were also assessed for locations where CAGN were identified. This species was observed nesting and foraging near Pole Numbers P64 west to P52, P48 to P51, P44 to P43 to P47, and P46 during focused surveys conducted in 2010. Based on the observed locations of this species in suitable habitat (Coastal Sage Scrub/Chaparral Mix in the immediate area), approximately 122 square feet (0.0028 acre) of Coastal Sage Scrub/Chaparral Mix is anticipated to be permanently impacted due to the proposed project. Approximately 759 square feet (0.0493 acre) of Coastal Sage Scrub/Chaparral Mix and 425 square feet (0.0097 acre) of Buckwheat Scrub in the immediate area are anticipated to be temporarily impacted due to the proposed project.

Concerns regarding potential electrocution or bird strike from power lines are primarily focused on avian species. Because the proposed project will replace existing electric facilities, this electrocution and bird strike risk is part of the existing baseline. These risks are expected to be reduced as a result of the proposed project as the number of guy-wires, poles, and redundant lines will be reduced. Electrocution of avian species can occur from wing contact with two conductors, as avian species perching, landing, or taking off from a utility pole can complete the electrical circuit. Avian electrocutions can also occur through simultaneous contact with energized phase conductors and other equipment or simultaneous contact with an energized wire and a grounded wire. Electrocution of avian species poses a greater potential hazard to larger birds, such as raptors, because their body sizes and wing spans are large enough to bridge the distance between the conductor wires and, thus, complete the electrical circuit. The new power line structures would be constructed in compliance with the Avian Power Line Interaction Committee's Suggested Practices for Avian Protection on Power Lines, in addition to SDG&E's current construction standards, which include increased phase spacing and cover-ups to reduce avian mortality from electrocution. Therefore, the potential for wildlife electrocution would be reduced as a result of the proposed project.

The sensitive avian species listed above that have a potential to nest and/or forage within the proposed project are covered by the NCCP except for the purple martin, white-tailed kite, prairie falcon, and Bell's sage sparrow. In order to avoid and minimize impacts to sensitive and native avian species, SDG&E will implement all relevant Operational Protocols from the SDG&E Subregional NCCP. As created, this plan allows for "incidental take" of species covered under the plan, under Section 10(a) of the U.S. Endangered Species Act, and under Sections 2081 and 2800 et seg. of the California Endangered Species Act. According to the SDG&E Subregional NCCP, "incidental take" of covered species is allowed for utility actions relating to maintenance and construction of new facilities. SDG&E NCCP Operational Protocols include, but are not limited to, restricting vehicles to existing roads when feasible, avoiding wildlife to the extent practicable, and conducting pre-activity surveys. SDG&E would also comply with the MBTA. In order to avoid and minimize impacts to nesting raptors, large, existing stick nests that could support nesting raptors near Pole Number P90, P95, R107, P129, P156, and P158 would be monitored for nesting raptors during the raptor breeding season (January 1 through July 31). Impacts to nesting avian species would be less than significant with implementation of the SDG&E Subregional NCCP and Operational Protocols and compliance with the MBTA. Under the terms of the plan, SDG&E will notify the resource agencies of the project and its potential impacts. Reporting will be in the form of an Environmental Field Survey that describes the project. location, existing habitat, impacts, recommendations to minimize impacts, and form of mitigation. More specifically for temporary impacts, SDG&E will reseed impacted areas and implement a 2year monitoring program to determine success. For permanent impacts, SDG&E will deduct from SDG&E's Conservation Bank at a 1:1 ratio. Additionally, SDG&E will implement the protective measures described in the SDG&E NCCP. Operational protocols (Chapter 7.1) of the SDG&E NCCP would be implemented and are incorporated into this document by reference. SDG&E would implement APM-BIO-1 (see Section 4.8, Table 4-6 of this IS) to avoid, minimize, or mitigate for impacts to biological resources. APM-BIO-1 outlines the NCCP operational protocols that will be implemented during project construction. In addition, per the SDG&E Subregional NCCP, verification surveys are required if surface disturbance has not commenced within 30 days of the submittal of the PSR to the USFWS and the CDFW. If any additional sensitive avian species are found, compliance with the SDG&E Subregional NCCP would occur.

Impacts to an active nest of any bird species addressed under the MBTA during construction activities would be considered potentially significant. Direct impacts to nesting bird species would be considered significant. Implementation of MM BIO-4 and MM BIO-5 will ensure that impacts to nesting birds are reduced to less than significant.

MM BIO-4 If construction activities including but not limited to tree trimming, road maintenance (i.e., re-establishing of existing access roads), grading, or site disturbance are to occur between March 1 and September 1, a nesting bird survey shall be conducted by a gualified biologist to determine the presence of nests or nesting birds within 100 feet of the construction activities. The nesting bird surveys shall be completed no more than 72 hours prior to any construction activities. The survey will focus on special-status species known to use the area as well as other nesting birds that are protected under the Migratory Bird Treaty Act. If an active nest (defined below) is identified grading or site disturbance within a 100-foot buffer of the nest shall be monitored on a daily basis by a qualified biologist until project activities are no longer occurring within 100 feet of the nest or until fledglings become independent of the nest. "Nest" is defined as: a structure or site under construction or preparation, constructed or prepared, or being used by a bird for the purpose of incubating eggs or rearing young. Perching sites and screening vegetation are not part of the nest. "Active nest" is defined as: once birds begin constructing, preparing or using a nest for egg-laying. A nest is no longer an "active nest" if abandoned by the adult birds or once nestlings or fledglings are no longer dependent on the nest.

> The monitoring biologist may increase the buffer radius if he or she determines it is necessary. The monitoring biologist may decrease the buffer radius upon receiving approval from California Public Utilities Commission (CPUC), if he or she determines that the construction activities are not disturbing the nesting activities and a smaller buffer is more appropriate. The monitoring biologist shall halt construction activities if he or she determines that the construction activities are disturbing the nesting activities. The monitor shall make practicable recommendations to reduce the noise or disturbance in the vicinity of the nest. This may include recommendations such as: (1) turning off vehicle engines and other equipment whenever possible to reduce noise, (2) working in

other areas until the young have fledged, or (3) placing noise barriers to maintain the noise at the nest to 60 dBA Leq hourly or less or to the preconstruction ambient noise level if that exceeds 60 dBA Leq hourly. The onsite biologist will review and verify compliance with these nesting boundaries and will verify that the nesting effort has finished. Unrestricted construction activities can resume when no other active nests are found. Upon completion of the survey and any follow-up construction avoidance management, a report shall be prepared and submitted to the CPUC with the weekly report as identified in MM BIO-2.

A nesting bird report, at a minimum, shall include the date, starting and ending time, general weather conditions (cloud cover, temperature, wind), name of biologist with affiliation, area surveyed including map, survey results (species, nest GPS location, nest stage [number of eggs, number of nestlings]), recommended compliance (e.g., 100-foot buffer recommended, buffer increased with explanation, recommended noise reduction, noise dBA Leq levels at nest), and compliance issues/concerns. The report shall also include the date and nesting outcome (e.g., depredated, nestling fledged, nest abandoned).

MM BIO-5 In the unlikely event that rock blasting is used during construction, a noise and vibration calculation will be prepared and submitted to the California Public Utilities Commission (CPUC) and the County of San Diego for review before blasting at each site. The construction contractor will ensure compliance with all relevant local, state, and federal regulations relating to blasting activities. This Blasting Plan would include a site-specific nesting bird survey to be conducted by a CPUCapproved biologist. The results of this survey would be communicated to the CPUC. If the CPUC-approved biologist observes an active nest (see definition below) for any special-status species (including federal, state, and county candidate, sensitive, fully protected, or special-status species) or species covered by the Migratory Bird Treaty Act that may be impacted by blasting activities, San Diego Gas & Electric would postpone any activity that may impact the success of the nest until the nest no longer meets the given definitions. "Nest" is defined as: a structure or site under construction or preparation, constructed or prepared, or being used by a bird for the purpose of incubating eggs or rearing young. Perching sites and screening vegetation are not part of the nest. "Active nest" is defined as: once birds begin constructing, preparing or using a nest for egg-laying. A nest is no longer an "active nest" if abandoned by the adult birds or once nestlings or fledglings are no longer dependent on the nest.

Special-Status Wildlife (Mammals)

Nineteen sensitive mammal species have a moderate to high potential to occur within the project ROW. Three of these mammals (San Diego black-tailed jackrabbit, southern mule deer, and mountain lion; all NCCP-covered) have a high potential to occur. The remaining 16 sensitive mammal species have a moderate potential to occur and include the pallid bat, American badger (NCCP-covered), San Diego desert woodrat (NCCP-covered), Dulzura pocket

mouse (NCCP-covered), pallid San Diego pocket mouse (NCCP-covered), Townsend's bigeared bat, Stephen's kangaroo rat (NCCP-covered), western mastiff bat, western red bat, hoary bat, western yellow bat, western small-footed myotis, long-eared myotis, big free-tailed bat, jacumba pocket mouse (NCCP-covered), and ringtail. Proposed construction activities may cause both permanent and temporary impacts to these nineteen sensitive mammal species that have a moderate to high potential to occur within the proposed project area.

Proposed construction activities, including removing and installing power poles and clearing vegetation during creation of work areas, stringing sites, staging and laydown areas, and guard structures may cause both permanent and temporary impacts to these mammal species. Permanent impacts from these activities may include a reduction of foraging, burrowing, and nesting (woodrat) habitat from vegetation removal. Temporary impacts may result from construction noise and ground vibration, as mammals may be deterred from inhabiting or foraging in areas near such activities.

The NCCP covers nine sensitive mammals described above. Additionally, SDG&E will implement all relevant Operational Protocols from the SDG&E Subregional NCCP. The Operational Protocols are designed to avoid and minimize impacts to all sensitive resources. These protocols include, but are not limited to, restricting vehicles to existing roads when feasible, avoiding wildlife to the extent practicable, conducting pre-construction surveys, and handling of wildlife only by biologists or experts in handling wildlife. These protocols also include a biological monitor on site to avoid and minimize impacts to biological resources. Implementation of SDG&E's Operational Protocols and SDG&E Subregional NCCP guidelines would ensure potential impacts to sensitive mammal species remain less than significant.

Power lines and other project-related structures provide potential perching opportunities for raptor species, which can increase the potential for predation of wildlife, including sensitive mammal species, by raptors. Because the proposed project involves the replacement of existing facilities, reduction in the number of poles and lines, and does not include an extension of the TL, the extent of predation on sensitive and common wildlife species would be reduced as a result of the proposed project.

Although the Stephen's kangaroo rat is considered absent from the proposed project area, focused trapping for the Stephen's kangaroo rat were not conducted along TL 637 during the 2010 due to access constraints on private properties near the eastern portion of the alignment, west of Santa Ysabel. While grassland habitats to the west of Santa Ysabel and the Project area were assessed (and appropriate grassland locations trapped) during field surveys for the Sunrise Powerlink Proposed Northern Alignment, and only non-endangered kangaroo rat species were trapped, there is some potential for the federally endangered Stephen's kangaroo rat to occur. Therefore, this potential would result in a significant impact. Implementation of MM BIO-6 would reduce that potential impact to less than significant by requiring additional focused studies within suitable habitat that was not trapped in 2010.

MM BIO-6 In locations where Stephen's kangaroo rat habitat assessments were not conducted during the 2010 field survey, a pedestrian preconstruction survey for potentially occupied suitable habitat (open habitat with suitable soils, slope, and

kangaroo rat burrows) and follow-up trapping to confirm species, will be conducted by a California Public Utilities Commission (CPUC) approved biologist to assess the potential areas for Stephen's kangaroo rat to occur within the proposed project area. Any burrows, utilized habitat, or signs of Stephen's kangaroo rat utilizing a habitat (e.g., track prints) will be flagged for avoidance during construction activities. The monitoring biologist shall halt construction activities if he or she determines that the construction activities are disturbing Stephen's kangaroo rat occupied habitat. If Stephen's kangaroo rat occupied habitat cannot be avoided during construction, the monitoring biologist shall make recommendations to ensure minimal impacts to the existing Stephen's kangaroo rat habitat and burrows during construction. Recommendations may include, but are not limited to: (1) re-routing access to project work area for complete avoidance of Stephen's kangaroo rat occupied habitat; or (2) placement of dirt piles or sediment to avoid occupied burrows. Upon completion of the survey and any follow-up construction avoidance management, a report shall be prepared and submitted to the CPUC.

In addition, per the SDG&E Subregional NCCP, verification surveys are required if surface disturbance has not commenced within 30 days of the submittal of the PSR to the USFWS and the CDFW. If any additional sensitive mammal species are found, compliance with the SDG&E Subregional NCCP would ensure that impacts remain less than significant.

Special-Status Wildlife (Invertebrates)

Proposed construction activities may cause both permanent and temporary impacts to one sensitive invertebrate species, the San Diego fairy shrimp (NCCP-covered). CNDDB records list 11 occurrences within 3 miles of the TL ROW, the closest being approximately 1.3 miles away in a pool southeast of 7th and Telford streets in Ramona, California. In addition the project ROW contains suitable habitat to support this species. During pre-activity surveys conducted in 2012 for TL 637, low quality vernal pools were also identified outside the fenced Creelman Staging Yard and near the Warnock Staging Yard.

Proposed construction activities, including removing and installing power poles and clearing vegetation during creation of work areas, stringing sites, staging and laydown areas, and guard structures may cause both permanent and temporary impacts to the San Diego fairy shrimp. Permanent impacts from these activities may include a reduction of habitat as a result of excavating soils and disturbing ponds via high traffic and usage of these areas. Temporary impacts may result from impacts to soil resulting from vehicular and human presence.

While construction activities could directly impact the habitat of the species, SDG&E would implement all relevant Operational Protocols from the SDG&E Subregional NCCP. The Operational Protocols are designed to avoid and minimize impacts to all sensitive resources. These protocols include, but are not limited to, restricting vehicles to existing roads when feasible, avoiding wildlife to the extent practicable, conducting pre-construction surveys, and handling of wildlife only by biologists or experts in handling wildlife. These protocols also include a biological monitor on site to avoid and minimize impacts to biological resources. To ensure that impacts to special-status species are reduced to less-than-significant level, SDG&E would

implement APM-BIO-1 (see Section 4.8, Table 4-6 of this IS) to avoid, minimize, or mitigate for impacts to biological resources. APM-BIO-1 outlines the NCCP operational protocols that will be implemented during project construction. Implementation of SDG&E's Operational Protocols and SDG&E Subregional NCCP guidelines would ensure potential impacts to sensitive mammal species remain less than significant. In addition, to minimize impacts to aquatic resources, the project has been designed to relocate poles and work areas outside of jurisdictional areas whenever possible. SDG&E will also implement MM BIO-7 that would further reduce potential impacts to less than significant levels.

MM BIO-7 Prior to construction, qualified biologists approved by the California Public Utilities Commission shall flag all vernal pools (marginal or otherwise) and associated existing connectivity within the project footprint (water entering area during rain events) for avoidance during the proposed construction activities. Rain events are defined as "a precipitation event of 0.5 inch or greater."

If work is conducted during the rainy season (October 1 through May 1), before scheduling project activity in areas flagged as vernal pools, the weather forecast will be monitored. Work will not be scheduled in these areas if a greater than 40% chance of a rain event (as defined above) is forecasted during the time needed to complete project activities. If a rain event unexpectedly occurs during project activity, the site will be secured with appropriate best management practices as identified in APM HYD-1. Construction travel along public access roads where the road rut vernal pools have been identified will be flagged or otherwise marked prior to construction for minimal impact to these locations. Project related traffic in these areas will be kept to the minimum required to implement the project.

Lastly, per the SDG&E Subregional NCCP, verification surveys are required if surface disturbance has not commenced within 30 days of the submittal of the PSR to the USFWS and the CDFW. If any additional sensitive invertebrate species are found, compliance with the SDG&E Subregional NCCP would ensure that impacts remain less than significant.

No additional impacts to sensitive plant or wildlife species related to operation and maintenance as a result of the proposed project are anticipated. SDG&E currently maintains and operates existing electric power, distribution and substation facilities throughout the proposed project site, and the proposed project is the reconstruction of existing electric facilities within existing SDG&E ROW and substation property. Operations and maintenance activities for the proposed project would decrease slightly compared to current operation and maintenance activities due to the increased reliability of the new power line components included in a typical wood-to-steel replacement project, the installation of fewer poles along the alignment, removal of all guy-wires and associated poles along the alignment, consolidation of some redundant lines, and the relocation of poles outside of jurisdictional features. Any future potential maintenance-related construction projects would be evaluated under G.O. 131-D and CEQA for purposes of assessing whether further CPUC approval is required and would be conducted in compliance with the SDG&E Subregional NCCP. Therefore, no impacts are anticipated.

b) Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the CDFW or USFWS?

Impacts to Vegetation Communities

Table 5.5-2 quantifies the acreage of temporary and permanent impacts to vegetation communities resulting from construction and operation of the proposed project. Table 5.5-3 quantified the acreage of temporary and permanent impacts by vegetation communities.

Table 5.5-2: Anticipated Impact Summary Table						
Type of Impact		Area Impacted (square feet/acres)				
Temporary	Total Anticipated Temporary Impacts to Sensitive Vegetation Communities (not including Disturbed, Agriculture/Orchard, Bareground, and Landscape/Ornamental communities)	572,099 SF / 13.13 ac				
	Total Anticipated Temporary Impacts to Non- Sensitive Vegetation Communities (Disturbed, Agriculture/Orchard, Bareground, and Landscape/Ornamental communities)	491,321 SF / 11.28 ac				
	Total Anticipated Temporary impacts	1,018,420 SF / 23.38 ac				
Permanent ¹	Total Anticipated Permanent Impacts to Sensitive Vegetation Communities (not including Disturbed, Agriculture/Orchard, Bareground, and Landscape/Ornamental communities)	1,520 SF / 0.03 ac				
	Total Anticipated Permanent Impacts to Non- Sensitive Vegetation Communities (Disturbed, Agriculture/Orchard, Bareground, and Landscape/Ornamental communities)	2,306 SF / 0.05 ac				
	Total Anticipated Permanent Impacts	3,826 SF / 0.08 ac				

Table 5.5-3: Anticipated Impacts by Vegetation Community Type						
	Temporary		Permanent ¹			
Vegetation Community ²	Acres	Square Feet	Acres	Square Feet		
Agricultural/Orchards	5.029	219,073	0	0		
Buckwheat Scrub	0.953	41,550	0.005	205		
Chaparral	0.366	15,951	0.005	230		
Disturbed (Ruderal/Barren)	3.351	145,972	0.041	1,797		
Coastal Sage Scrub	0.132	5,762	0.0002	10		
Southern Mixed Chaparral/Coastal Sage Scrub	0.486	21,182	0.01	435		
Disturbed	2.652	115,543	0.011	465		
Disturbed Wetland	0.128	5,575	0.002	98		
Freshwater Marsh	0	0	0	0		
Meadow/Seep	0.002	88	0	0		
Grassland	10.052	437,844	0.012	503		

Table 5.5-3: Anticipated Impacts by Vegetation Community Type						
	Temporary		Permanent ¹			
Vegetation Community ²	Acres	Square Feet	Acres	Square Feet		
Landscape/Ornamental	0.118	5,158	0.001	44		
Open Oak Woodland	0.044	1,931	0.001	39		
Southern Riparian Forest	0	0	0	0		
Open Engelmann Oak Woodland	0.063	2,768	0	0		
Coast Live Oak Woodland	0.003	111	0	0		

Source: SDG&E 2013a

Notes: ¹ Permanent impacts to vegetation communities are discussed as construction impacts to be consistent with the structure and implementation of the SDG&E Subregional NCCP.

² Revisions to vegetation community names adjusted from SDG&E 2013a based on updated vegetation mapping efforts conducted in May 2013.

As shown on Table 5.5-3, the proposed project would result in temporary impacts to approximately 0.063 acre of Open Engelmann Oak Woodland, 0.044 acre of Open Oak Woodland, 0.003 acre of Coast Live Oak Forest, 0.366 acre of Chaparral, 0.132 acre of Coastal Sage Scrub, 0.953 acre of Buckwheat Scrub, 0.486 acre of Coastal Sage Scrub/Chaparral Mix, 0.002 acre of Meadow/Seep, 10.052 acres of Grassland, 0.118 acre of Landscape/Ornamental, 5.029 acres of Agriculture, 2.652 acres of Disturbed, 3.351 acres of Bareground, and 0.128 acre of Disturbed Wetland habitats. No temporary impacts to freshwater marsh or riparian forest habitat would occur. These impacts are associated with the limits of temporary disturbance as depicted on Figures 5.5-1A through 5.5-1I.

As shown on Table 5.5-3, the proposed project would permanently impact approximately 0.001 acre of Open Oak Woodland, 0.005 acre of Chaparral, 0.005 acre of Buckwheat Scrub, 0.010 acre of Coastal Sage Scrub/Chaparral Mix, 0.012 acre of Grassland, 0.001 acre of Landscape/Ornamental, 0.011 acre of Disturbed, 0.041 acre of Bareground, and 0.002 acre of Disturbed Wetland habitats. No permanent impacts to Riparian Forest, Agricultural, Coastal Sage Scrub, Freshwater Marsh, Open/Dense Engelmann Oak Woodland, or Coast Live Oak Forest habitat would occur.

Several of the vegetation communities that would be impacted by the development of the proposed project are considered sensitive natural communities by the which include Mixed Oak Woodland, Southern Riparian Forest, Oak Savanna, Chaparral, Southern Mixed Chaparral, Southern Mixed Chaparral/Coastal Sage Scrub, Coastal Sage Scrub, Grasslands, and Freshwater Seep/Open Water and impacts to these communities would be considered significant.

No live trees are proposed for removal during construction activities of the proposed project. Dead trees adjacent to facilities or underneath conductor may be removed for fire control purposes. SDG&E's standard operating protocol is to have a certified arborist on site to direct any trimming of native trees with the intention of limiting trimming to no more than 30% of the canopy of any individual tree. Prior to any trimming taking place, the SDG&E Environmental team will work with Project contractors to avoid any impacts to native trees. If impacts cannot be avoided, the certified arborist is called to determine the most appropriate way to trim the tree

that will result in the least impact to the tree. Additionally, the proposed project does not propose to grade any new access roads (although smoothing of the access roads and/or vegetation clearing will be necessary to improve some existing access roads and to re-establish unmaintained access roads pursuant to SDG&E Subregional NCCP).

To ensure that permanent impacts to sensitive vegetation communities are reduced to less than significant levels, SDG&E would implement APM-BIO-1 (see Section 4.8, Table 4-6 of this IS), which requires SDG&E to conduct all activities in accordance with NCCP Operational Protocols to avoid, minimize, or mitigate impacts to biological resources. Specifically, SDG&E would utilize specific operational protocols established in their NCCP (including but not limited to protocols 7, 11, 13, 14, 15, 16, 17, 20, 24, 25, 28, 29, 30, 35, 36, 39, 41, 42, 43, 44, 48, and 57). Where avoidance of sensitive habitat areas is not possible, or where sensitive habitat areas exist adjacent to the proposed project work areas, implementation of the measures in Section 7.1 and 7.2 of the SDG&E Subregional NCCP would ensure these impacts remain less than significant. SDG&E proposes to withdraw credit from the SDG&E mitigation bank for 412 square feet of permanent impacts to sensitive vegetation communities located within Preserve areas at a ratio of 2:1 for a total of 824 square feet, and for a total of 23,313 square feet of temporary impacts to sensitive vegetation communities located within Preserve areas at a ratio of 1:1 as a result of project-related activities. Therefore, SDG&E proposes to draw down a total of 24,137 square feet (0.55 acre) of credit from the SDG&E mitigation bank for impacts to sensitive habitat types located within Preserve areas. Total anticipated temporary and permanent impacts to vegetation communities are summarized in Table 5.5-4 Anticipated Impacts Summary Table for Preserve Areas.

SDG&E proposes to include 59,600 square feet of anticipated temporary impacts to sensitive habitats located within Preserve areas in the SDG&E Enhancement and Monitoring Program. Six thousand and six hundred (6,600) square feet of the above mentioned temporary impacts will be actively restored through active site enhancement. Fifty-three thousand (53,000) square feet of the above mentioned temporary impacts will be passively restored through monitoring of impacted habitat that is expected to recover on its own. Habitat that is expected to recover on its own consists of grassland, in which the majority of species are non-native in origin. Because SDG&E does not actively enhance non-native vegetation, and because this habitat type is generally considered resilient enough to completely regenerate to pre-activity levels without active enhancement measures, these areas will be monitored in order to determine whether or not they meet success criteria.

As a result of implementation of the above measures, potential impacts from construction would be less than significant. In addition, it is important to note that TL 637 is an existing power line with existing facilities (i.e., poles), and that all old facilities will be completely removed where feasible when they are replaced with new facilities as a part of the proposed project. The permanent impacts calculated for the installation of new facilities for the proposed project do not take into account the removal of the old facilities and the permanent impacts associated with the original installation of those facilities, therefore the impacts presented in this report are conservative.

Impacts to Preserve Areas

The term "Preserve" means the area encompassed by the MSCP's Multi-Habitat Planning Area (MHPA) map (as currently defined or ultimately adopted), the equivalent maps for the MSCP

programs in San Diego County, the South Orange County NCCP Subregional Plan reserve area, and the Riverside County Conservation Agency Core reserve areas. If no preserve areas are formally delineated, those areas which are designated moderate, high, and very high-quality habitat are considered a "Preserve." Habitat quality is based on species composition and connectivity with the surrounding natural vegetation communities. SDG&E proposes to withdraw credit from the SDG&E mitigation bank for 412 square feet (square feet) of permanent impacts to sensitive vegetation communities located within Preserve areas at a ratio of 2:1 for a total of 824 square feet, and for a total of 23,313 square feet of temporary impacts to sensitive vegetation communities. Therefore, SDG&E proposes to draw down a total of 24,137 square feet (0.55 acre) of credit from the SDG&E mitigation bank for impacts to sensitive habitat types located within Preserve areas. Total anticipated temporary and permanent impacts to sensitive vegetation communities are summarized in Table 5.5-4, Anticipated Impacts Summary Table for Preserve Areas.

Table 5.5-4: Anticipated Mitigation Summary Table for Preserve Areas				
	Area (square feet)			
Temporary	Total Anticipated Credit withdrawal for Temporary Impacts to Buckwheat Scrub, Coastal Sage Scrub, Coastal Sage Scrub/Chaparral Mix, Chaparral, Dense Engelmann Oak Woodlands, Grassland, Meadow Seep, Open Engelmann Oak Woodland, and Open Oak Woodland habitats Within a Preserve at a 1:1 Ratio	23,313		
Permanent ¹	Total Anticipated Credit Withdrawal for Permanent Impacts to Buckwheat Scrub, Coastal Sage Scrub, Coastal Sage Scrub/Chaparral Mix, Chaparral, Grassland, and Meadow Seep Habitats Within a Preserve at a 2:1 Ratio	824		
Temporary & Permanent Total	Total Anticipated Credit Withdrawal for Impacts to Buckwheat Scrub, Coastal Sage Scrub, Coastal Sage Scrub/Chaparral Mix, Chaparral, Dense Engelmann Oak Woodlands, Grassland, Meadow Seep, Open Engelmann Oak Woodland, and Open Oak Woodland Habitats Within Preserve Areas	24,137		
Enhancement	Total Anticipated Enhancement (Active Enhancement) for Temporary Impacts to Buckwheat Scrub, Coastal Sage Scrub, and Open Engelmann Oak Woodland Habitats Within a Preserve at a 1:1 Ratio	6,600		
Monitoring	Total Anticipated Enhancement (Monitoring) for Temporary Impacts to Grassland Habitats Within a Preserve at a 1:1 Ratio	53,000		
Enhancement & Monitoring Total	Total Anticipated Enhancement (Active Enhancement & Monitoring) for Impacts to Buckwheat Scrub, Coastal Sage Scrub, and Open Engelmann Oak Woodland Habitats Habitat Within Preserve Areas	59,600		

Source: SDG&E 2013a

Note: ¹Permanent impacts to vegetation communities are discussed as construction impacts to be consistent with the structure and implementation of the SDG&E Subregional NCCP.

SDG&E proposes to include 59,600 square feet of anticipated temporary impacts to sensitive habitats located within Preserve areas in the SDG&E Enhancement and Monitoring Program. The Enhancement and Monitoring Program consists of two components: the active enhancement of areas containing sensitive vegetation located within Preserve areas that are temporarily impacted by project-related activities, and the monitoring of areas containing sensitive vegetation located within Preserve areas that are temporarily impacted by project-related activities, and the monitoring of areas containing sensitive vegetation located within Preserve areas that are temporarily impacted by project-

related activities which are expected to recover on their own. Habitat that is expected to recover on its own consists of grassland, in which the majority of species are non-native in origin. Because SDG&E does not actively enhance non-native vegetation, and because this habitat type is generally considered resilient enough to completely regenerate to pre-activity levels without active enhancement measures, these areas will be monitored in order to determine whether or not they meet success criteria. Success criteria as defined by Section 7.2 of the SDG&E Subregional NCCP:

Monitoring, involving visual inspection shall be conducted on restoration sites after one year. Coverage standards will be based on established stands of the target vegetation or another reference area. The means of determining success criteria should be based on estimates of cover by native species. The cover of the native species should increase and the cover of weed species should decrease, eventually approximating the reference area. The reference areas should be a nearby stand of vegetation that the restoration is attempting to emulate. It should have a similar aspect, slope, and soil type. Cover for the restoration and reference areas should be estimated using repeatable cover classes.

If success criteria for both enhancement and monitoring areas are not met after three years, SDG&E proposes to withdraw the appropriate amount of credit for these areas from the SDG&E mitigation bank at a 1:1 ratio.

Work crews must follow all SDG&E Subregional NCCP Operational Protocols to avoid and minimize impacts to resources as a result of project-related activities within the proposed project area. Impacts associated with the operations and maintenance of existing facilities are addressed for the term of the NCCP by SDG&E's agreement to restrict development other than SDG&E's activities on fee-owned ROWs which contain habitat, connect fragmented habitat areas, or contribute to the carrying capacities of the Preserve areas in the region. SDG&E agrees to limit its use of such ROWs to utility activities. Therefore, mitigation for operations and maintenance of existing facilities located outside the Preserve is not required.

It should be noted that while the proposed project site is located within the boundary of these Preserve Areas, the proposed project is anticipated to occur within SDG&E's ROW; therefore no conflicts should occur with any other conservation plans or mitigation/preservation areas. The SDG&E Subregional NCCP is independent of other NCCP/HCPs; and therefore is not dependent upon the implementation of such plans and is not superseded by theirs. The TL 637 is an existing power line with existing facilities (i.e., poles) and all old facilities will be completely removed where feasible when they are replaced with new facilities as a part of the proposed project. The permanent impacts calculated for the installation of new facilities for the proposed project do not take into account the removal of the old facilities and the permanent impacts associated with the original installation of those facilities; therefore the impacts presented in this report are conservative. It is expected that the majority of habitat impacted previously by the original facilities will return to its natural state on its own, or will be restored to its natural state through the site enhancement required for new impacts from the proposed project. As a result, impacts to preserve areas are considered less than significant.

Lastly, no impacts are anticipated as a result of operation and maintenance associated with the proposed project. SDG&E currently maintains and operates existing electric power, distribution and substation facilities throughout the proposed project site, and the proposed project is the reconstruction of existing electric facilities within existing SDG&E ROW and substation property. SDG&E's existing facilities and operations and maintenance activities are included in the baseline for evaluating the impacts of the proposed project. Operations and maintenance activities for the proposed project would decrease slightly compared to baseline conditions due to the increased reliability of the new power line components included in a typical wood-to-steel replacement project, the installation of fewer poles along the alignment, removal of guy-wires and associated poles, consolidation of lines where redundant, and the relocation projects would be evaluated under G.O. 131-D and CEQA for purposes of assessing whether further CPUC approval is required and would be conducted in compliance with the SDG&E Subregional NCCP. Therefore, no impacts are anticipated.

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

Development of the proposed project would have temporary and permanent impacts to federally protected wetlands. To further minimize impacts to aquatic resources, the proposed project has been designed to relocate poles outside of jurisdictional areas whenever possible. However, being part of an existing TL limits placement of the new poles due to consistency in alignment.

Sixty-seven (67) drainages or features, potentially subject to ACOE, CDFW, and RWQCB jurisdiction are located within the proposed project area, however all but 17 have been avoided. Eleven poles, (P148, P149, P150, P103, P104, P105, P106, R107³, P114, P152 and P129) are located within wet meadows that have been determined to be jurisdictional by the ACOE and RWQCB. Six existing poles along Creelman Lane (east of Keyes Road) are located within an unvegetated streambed/waters of the U.S. that has been determined to be jurisdictional by CDFW, ACOE, and the RWQCB. Steel plates will be used to temporarily span over two ACOE/RWQCB/CDFW jurisdictional areas to provide temporary access during construction. Project activity associated with all 17 poles and the temporary steel plates needed to provide construction access will be carried out under non-notifying Nationwide Permit #12 issued by the ACOE, and a 401 Certification from the RWQCB approved on May 16, 2012 (File No. 11C-114). The impacts associated with the six poles within CDFW jurisdiction will not substantially adversely affect an existing fish or wildlife resource; therefore, per California Fish and Game Code, Section 1602, a Streambed Alteration Agreement notification is not required. SDG&E coordinated with CDFW on this determination during the week of December 12, 2011.

Several existing poles within TL 637 are proposed to be relocated outside of a jurisdictional area including Poles Number P104, P105, P106, P114, and P129. Existing Pole Number R107 is in a disturbed wet meadow and has been proposed to be eliminated from the line. In addition and as

 $^{^{3}}$ R = pole to be removed

mentioned previously, SDG&E would implement operational protocols (see APM-BIO-1 – Section 4.8, Table 4-6 of this IS) to avoid, minimize, or mitigate for impacts to biological resources including wetland resources. In particular, SDG&E would implement operational protocol 14, which requires that an environmental surveyor identify and flag the extent of sensitive habitat within the project area so that these areas are avoided during construction. Further, potential indirect impacts to wetlands would be reduced by implementation of additional BMPs to ensure that erosion and sedimentation do not adversely impact the drainage.

Permanent Impacts

Replacement of existing Poles Number P103, P148, P149, and P150 with new steel poles would occur within disturbed wetland areas (wet meadow). Access to the poles would occur off adjacent dirt roads. A total of 98-square feet (0.002 acre) of permanent impacts to disturbed wetlands is anticipated for these poles.

Temporary Impacts

Temporary impacts associated with the pole removal and replacement activities include access to the poles and workspace around the poles. The replacement of poles and removal of pole butts will occur within the same workspace. As mentioned, temporary impacts associated with pole butt removals are anticipated. However, as stated in the avoidance and minimization measures provided in the RWQCB certification application, if it is determined in the field that pole butt removal activities will cause a significant impact to a drainage feature, the poles will be cut and left in place. Steel plates and a temporary bridge are anticipated to be used to span over approximately three jurisdictional areas to provide temporary access during construction.

Permitting

ACOE and RWQCB – Project activities in drainage and wetland feature areas will be carried out under non-notifying Nationwide Permit #12 issued by ACOE, and a 401 Certification from RWQCB (Certification 11C-114; Categorical Exemption). Permanent impacts to ACOE wetlands associated with pole removal and replacement are 98-square feet. Temporary impacts to ACOE jurisdictional wetlands are 0.13 acre, and the temporary impacts to streambed are 0.04 acre. Compensatory mitigation was not required. The San Diego RWQCB determined that the proposed project is categorically exempt from CEQA pursuant to CEQA Guidelines Section 15301(b). The exemption applies to repair and maintenance of existing utility structures. Specifically the replacement of the existing wood poles constitutes maintenance of existing facilities to provide electric power as identified in Section 15301(b).

CDFW – The temporary impacts (0.04 acre) associated with the removal of six poles within CDFW jurisdiction will not substantially adversely affect an existing fish or wildlife resource; therefore, a Streambed Alteration Agreement notification was not submitted.

Consistent with the SDG&E Subregional NCCP, the proposed project has been designed to avoid sensitive habitat areas when possible, including not placing poles in drainage areas, using existing access roads, and placing any new facilities, staging areas, stringing sites, guard structures, and helicopter landing zones outside sensitive habitats when feasible. Through compliance with avoidance and minimization measures included in the RWQCB 401 certification

application and compliance with the SDG&E Subregional NCCP, direct and indirect impacts to wetlands and other jurisdictional waters would be less than significant.

Lastly, no impacts are anticipated for maintenance and operational impacts associated with the proposed project. SDG&E currently maintains and operates existing electric power, distribution and substation facilities throughout the proposed project site, and the proposed project is the reconstruction of existing electric facilities within existing SDG&E ROW and substation property. SDG&E's existing facilities and operations and maintenance activities are included in the baseline for evaluating the impacts of the proposed project. Operations and maintenance activities for the proposed project would decrease slightly compared to baseline conditions due to the increased reliability of the new power line components included in a typical wood-to-steel replacement project, the installation of fewer poles along the alignment, and the relocation of poles outside of jurisdictional features. Any future potential maintenance-related construction projects would be evaluated under G.O. 131-D and CEQA for purposes of assessing whether further CPUC approval is required. If necessary, SDG&E will obtain any agency permits required to conduct maintenance activities that would impact wetland resources. Several existing poles within the proposed project area are proposed to be relocated outside of a wetland area. In addition, existing Pole No. P103 is located within a wet meadow and the proposed new pole location will be within a wet meadow, but will be relocated immediately adjacent to an existing dirt access road that will minimize wetland impacts during future maintenance activity. Operation and maintenance for these poles would then be conducted outside of a wetland area, reducing future potential impacts to wetland resources. Therefore, no impacts are anticipated.

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

As stated in Section 5.5.1, Environmental Setting, the majority of the proposed project is located within open and freely accessed natural habitat, grazing pastures, nonnative grasslands, and hillsides. Several drainage features are adjacent to the proposed construction area that could potentially be used as a movement corridor for mammal species; therefore, the quality of the adjacent drainages as a wildlife movement corridor for terrestrial species is diminished on a temporary basis during construction for these areas. However, the proposed construction activities would not significantly impact or restrict general wildlife movement due to the temporary and intermittent locations of construction activities outside the drainage, ridge, and other features. Although some wildlife may be temporarily displaced during construction, wildlife would not be physically prevented from moving around project equipment in the proposed project corridor, particularly since most wildlife will move through the landscape during the evening hours when construction is not occurring.

In addition, the proposed project site is located within an existing ROW where power lines are currently present and pole replacements are primarily adjacent to existing pole site locations. The proposed project does not propose to grade any new access roads or construct new permanent fences. Smoothing of the access roads and/or vegetation clearing will be necessary to improve some existing access roads and to re-establish unmaintained access roads pursuant to SDG&E Subregional NCCP. Since no extension of this TL are proposed the quality of the

adjacent wildlife movement corridors for terrestrial species is diminished on a temporary basis only during construction. The protective measures outlined in the SDG&E Subregional NCCP and the measures presented previously in impact discussion questions (a) and (b) would avoid and minimize any impacts associated with construction. Therefore, it is anticipated that potential impacts to wildlife movement would be less than significant.

Because the number and footprint of replacement facilities will be less than the baseline, and resulting operations and maintenance will be reduced, impacts to wildlife movement corridors are anticipated to be less than significant during operation and maintenance activities.

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

SDG&E is a public utility regulated by the CPUC. As described in the SDG&E Subregional NCCP Implementing Agreement, local governments are pre-empted from regulating public utilities through their zoning laws, land use laws, ordinances, and other police powers (including other NCCPs or HCPs) by the exclusive jurisdiction of CPUC. To the extent issuance of a tree removal permit or other approval by a local jurisdiction is a discretionary action; CPUC approval of the PTC would pre-empt local authority. Because these local policies or ordinances do not apply, there would be no impact.

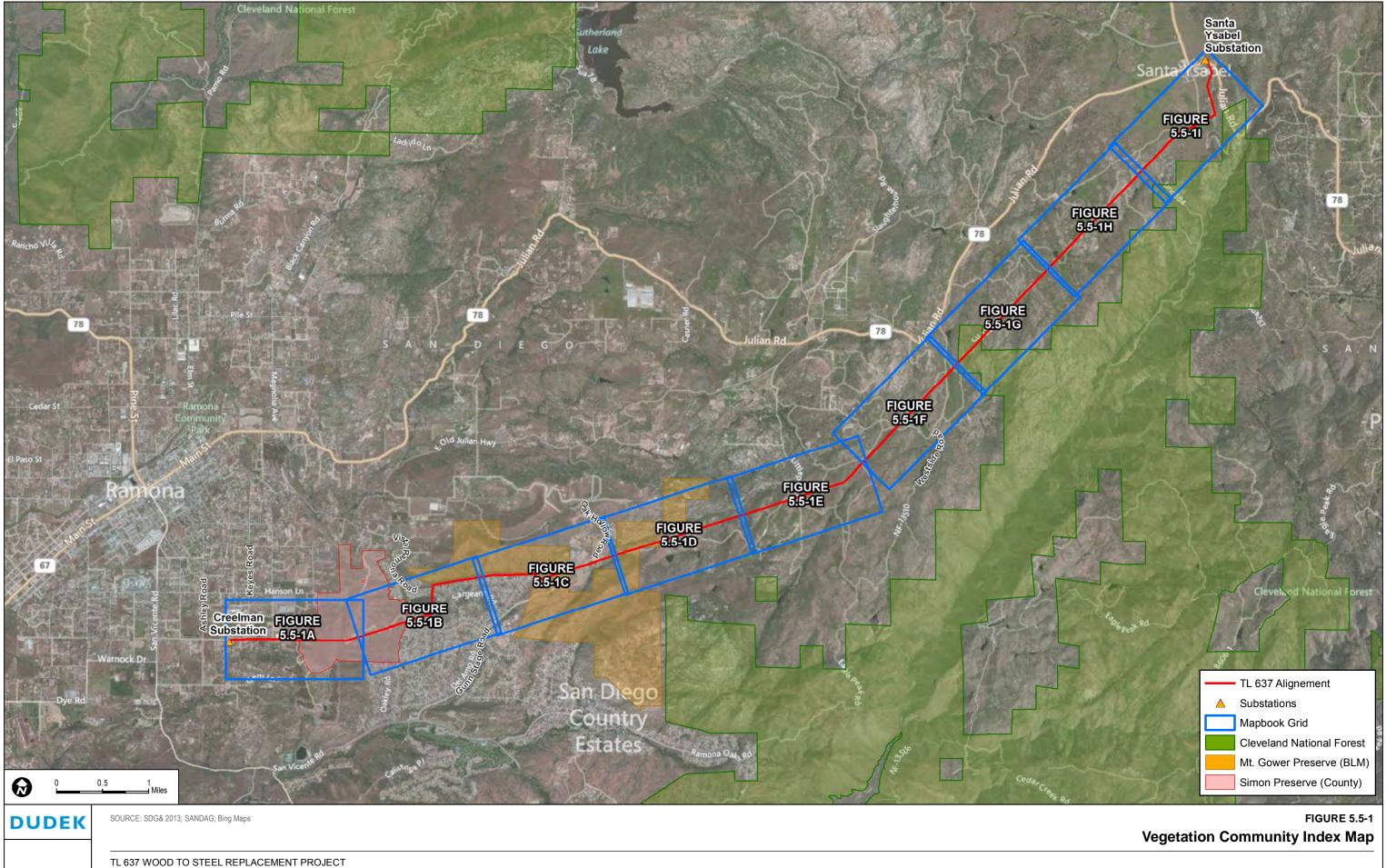
No impact as a result of operation and maintenance are anticipated as a result of the proposed project. As noted above, local discretionary policies and ordinances do not apply to the proposed project. In addition, SDG&E currently maintains and operates existing electric power, distribution and substation facilities throughout the proposed project site, and the proposed project is the reconstruction of existing electric facilities within existing SDG&E ROW and substation property. SDG&E's existing facilities and operations and maintenance activities are included in the baseline for evaluating the impacts of the proposed project. Operations and maintenance activities for the proposed project would decrease slightly compared to baseline conditions due to the increased reliability of the new power line components included in a typical wood-to-steel replacement project, the installation of fewer poles along the alignment, elimination of guy wires and associated poles, combining duplicative lines, and the relocation of poles outside of jurisdictional features. Any future potential maintenance-related construction projects would be evaluated under G.O. 131-D and CEQA for purposes of assessing whether further CPUC approval is required. Standard operational and maintenance activities (such as road repairs, tree trimming, structure inspections, and repairs) would not conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plan. Therefore there is no impact as a result of operation and maintenance of the proposed project.

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

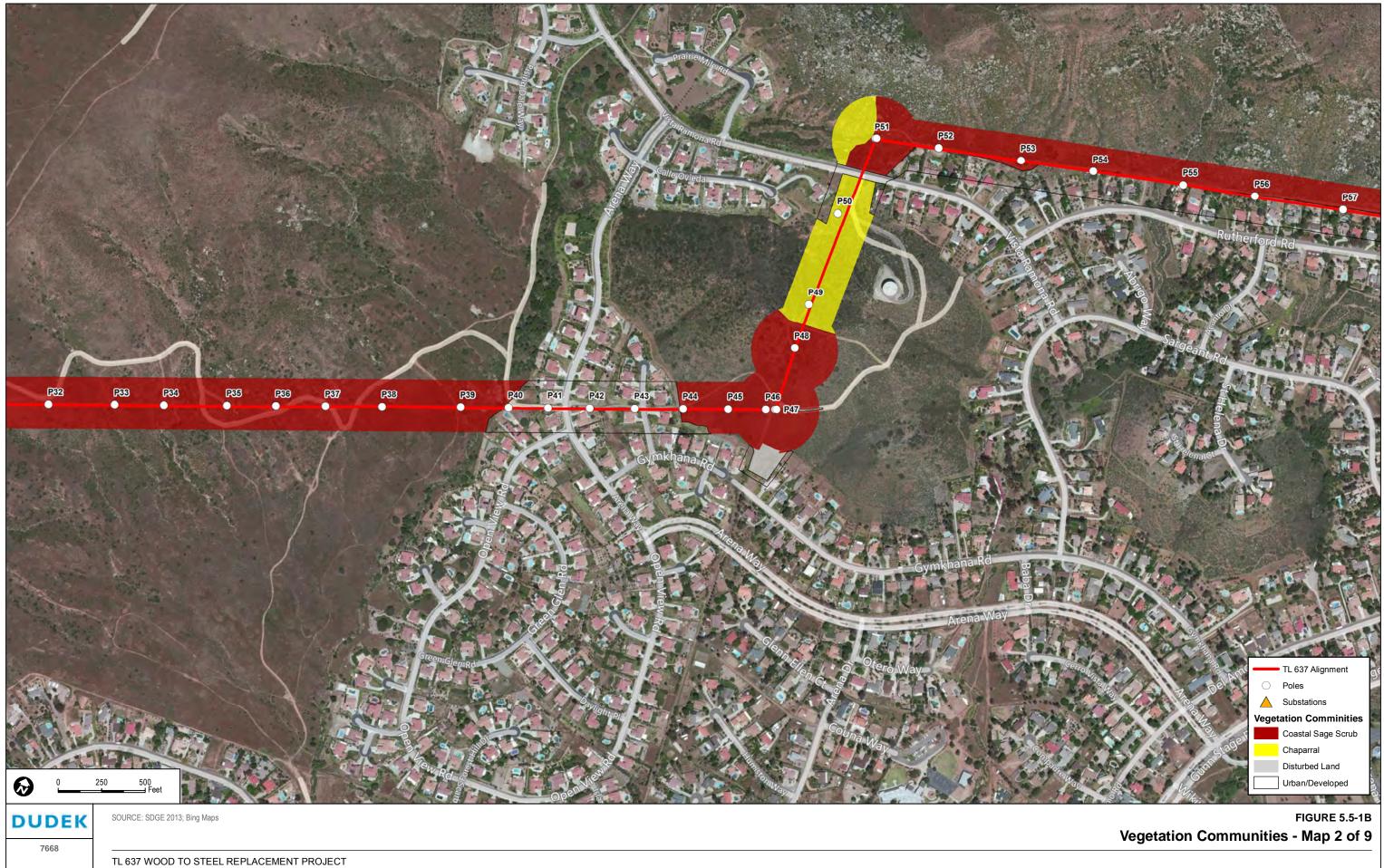
The proposed project traverses through areas within the San Diego East County MSCP NCCP/HCP, and the San Diego North County MSCP NCCP/HCP (line of separation at Poles Number P82, and P83). Neither of these NCCP/HCPs has been adopted, therefore there is no

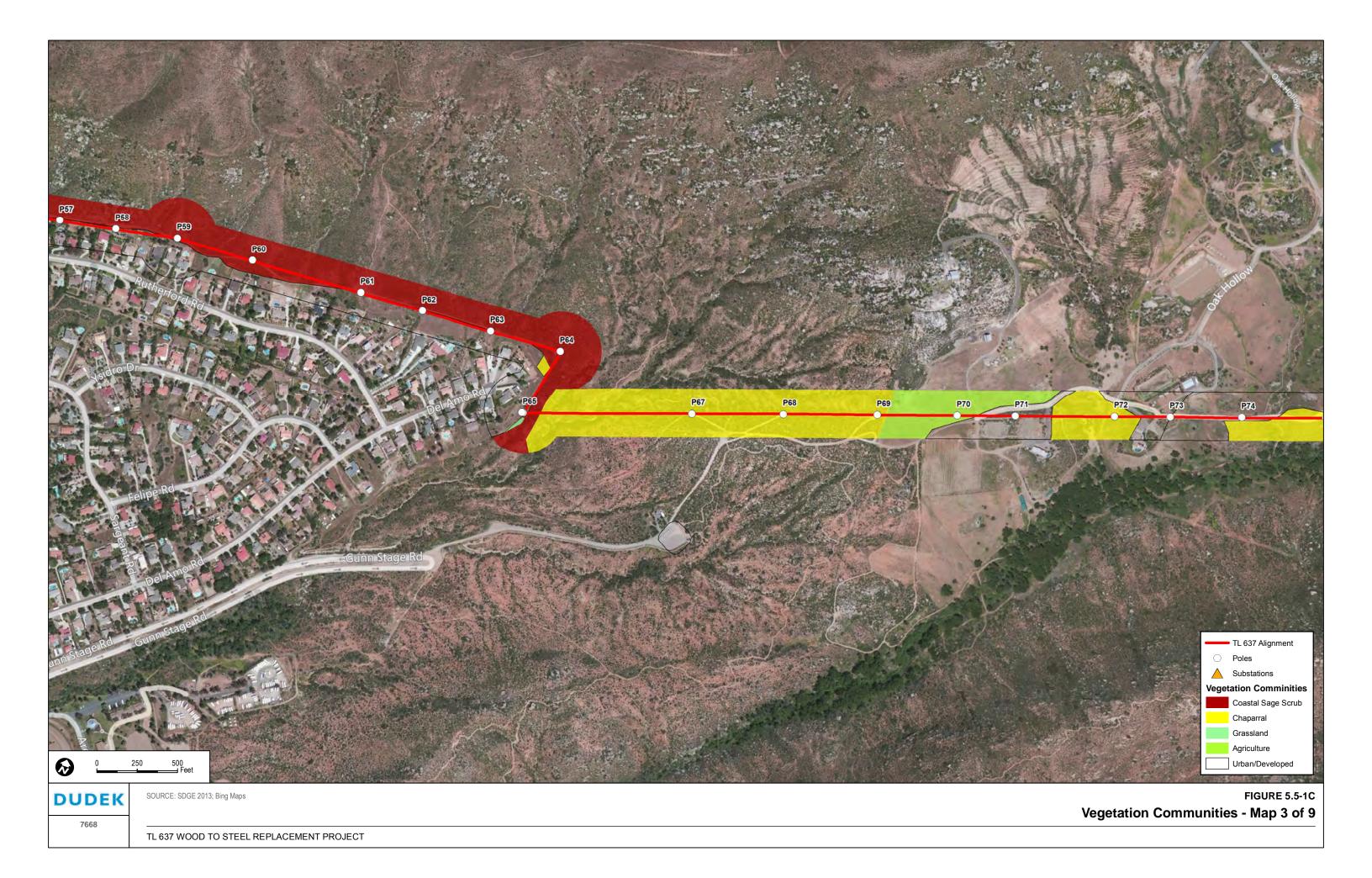
conflict. Nonetheless, the proposed project would occur within and follow the requirements of the SDG&E Subregional NCCP, established according to the Federal and State ESA and the State's NCCP Act. In the event of a conflict, SDG&E Subregional NCCP would supersede other applicable plans, including the San Diego County MSCP. As a result, the proposed pole replacement would not conflict with the provisions of any HCPs; and no impacts are anticipated. However, temporary and permanent impacts to biological resources resulting from the proposed project would be restored and/or mitigated in accordance with the mitigation requirements established by SDG&E in its NCCP. Where appropriate (for permanent impacts to native grasslands and scrub, for example), habitat credits would be deducted from NCCP credits. In addition, during construction, SDG&E would ensure that construction activities are conducted in accordance with NCCP operational protocols to avoid, minimize, or mitigate impacts to biological resources.

As noted above, neither the San Diego North County MSCP NCCP/HCP nor the East County MSCP NCCP/HCP has been adopted. SDG&E operates under its own NCCP, established according to the federal and state ESAs and the state's NCCP Act. As a result, the proposed pole replacement would not conflict with the provisions of any HCPs; no impacts are anticipated.



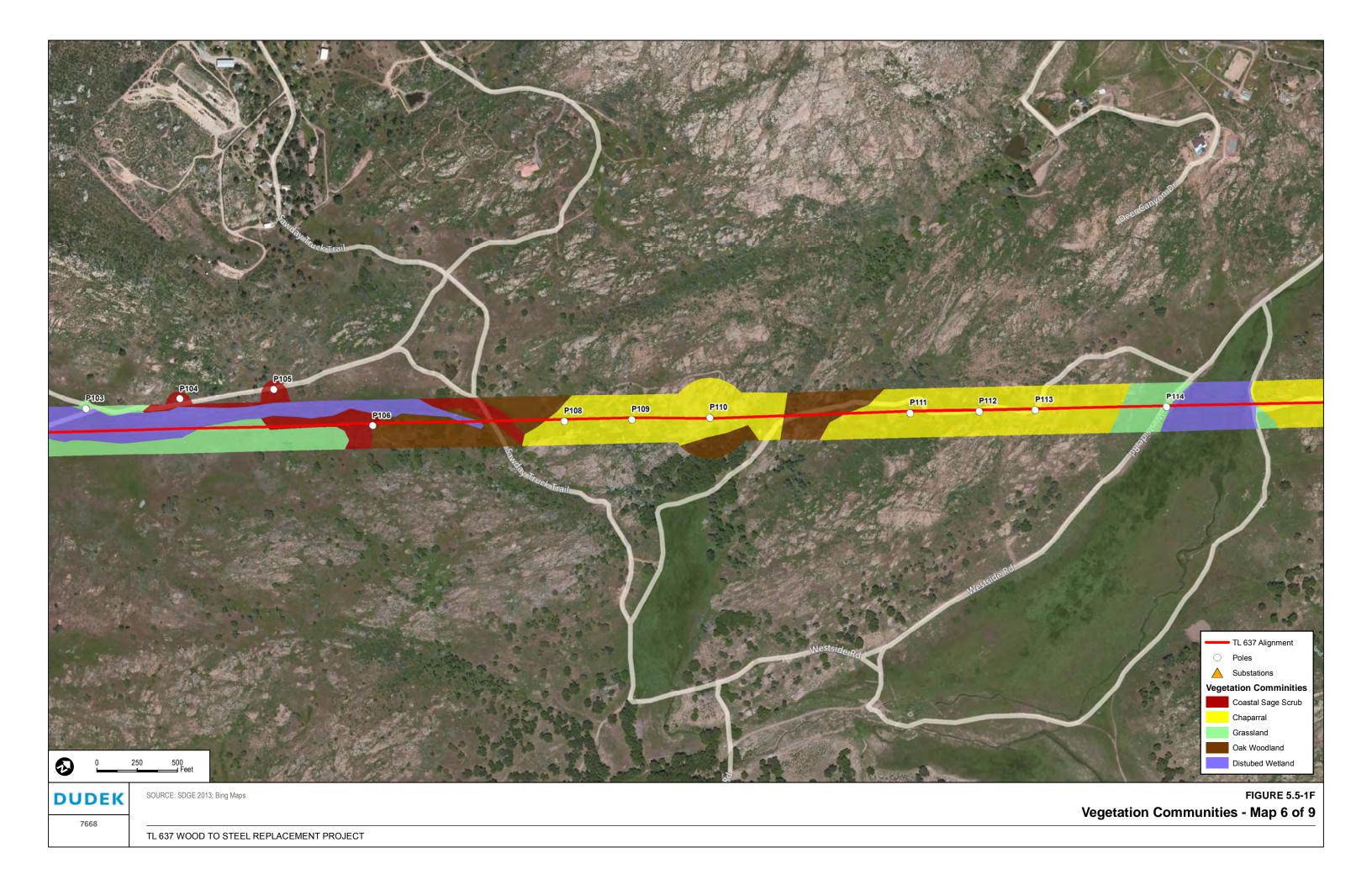


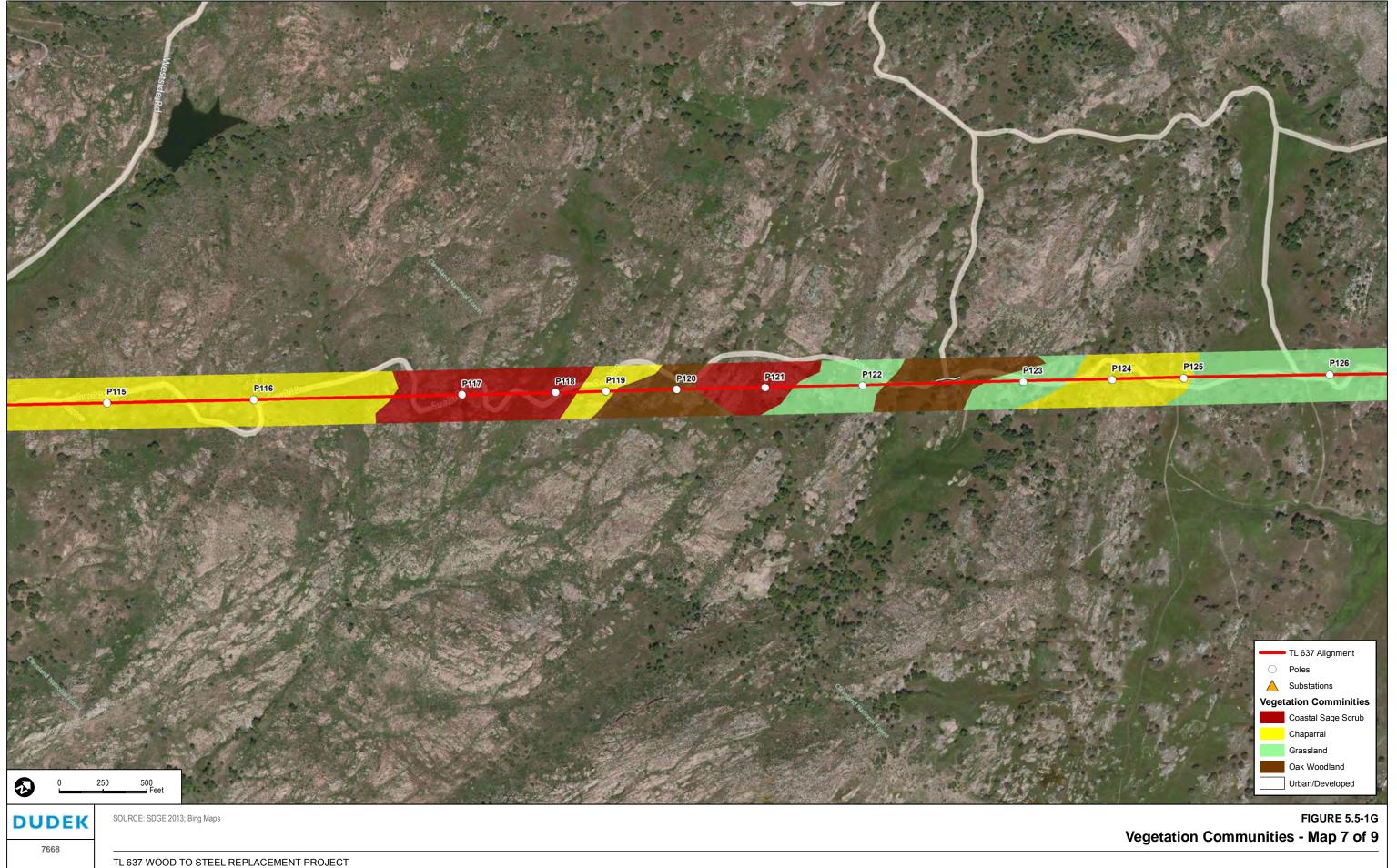






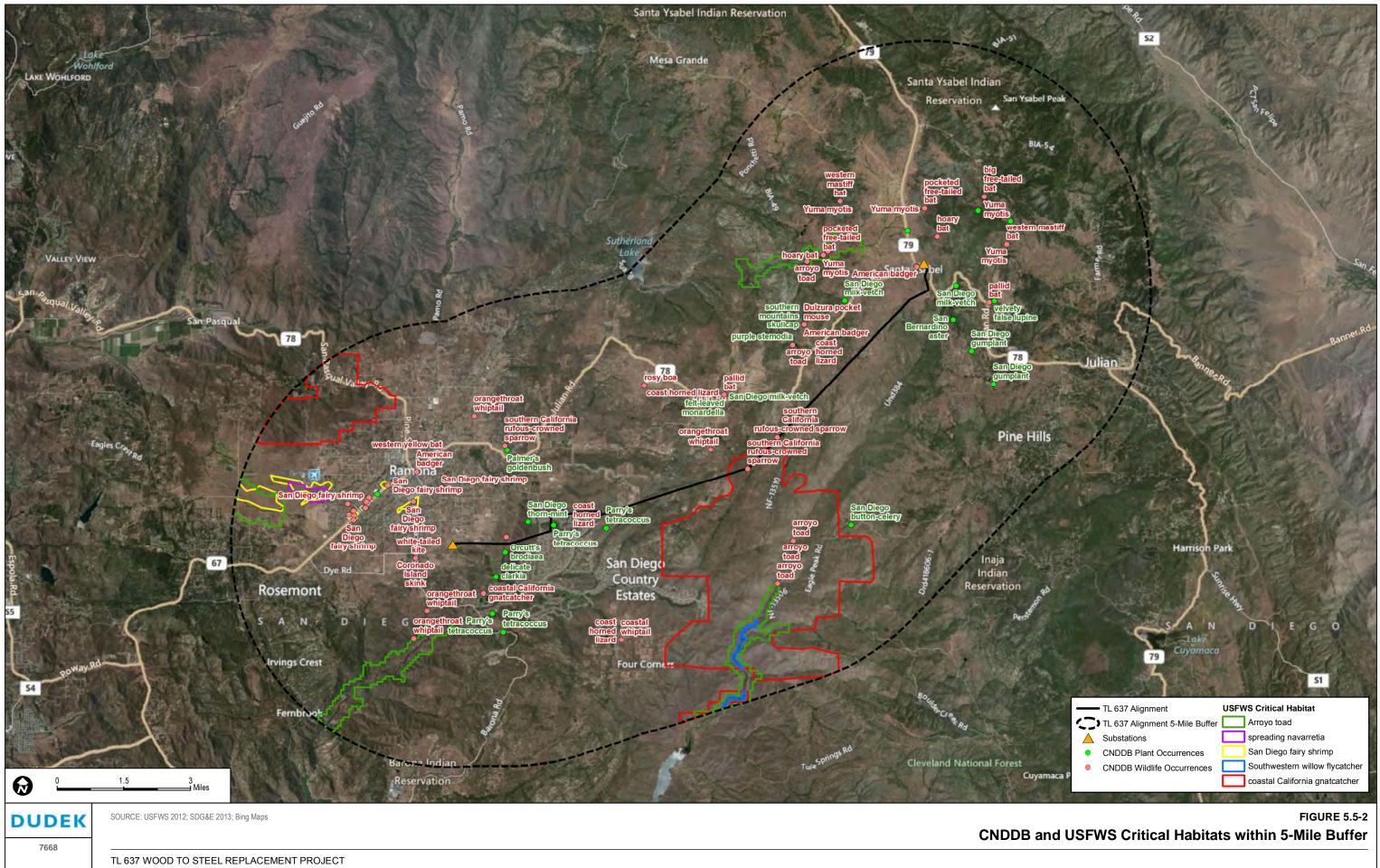












5.6 CULTURAL RESOURCES

Wo	uld the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a)	Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?				
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?		\boxtimes		
<i>c)</i>	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				
d)	Disturb any human remains, including those interred outside of formal cemeteries?			\boxtimes	

5.6.1 Environmental Setting

This section of the Initial Study (IS) documents the cultural resources located on and around the proposed project alignment and surrounding areas. Information presented in this section was gathered from a review of San Diego Gas & Electric's (SDG&E's) Proponent's Environmental Assessment (PEA) (SDG&E 2013), including a cultural resources survey performed for the project site (ASM 2012). Site record and archival searches were completed at the South Coastal Information Center (SCIC) and the Native American Heritage Commission (NAHC). Field surveys for cultural resources were conducted by e2M/HDR in March 2009 and subsequently by ASM in April 2011. In addition, a paleontological locality and specimen records search was conducted for the project in March 2012 (San Diego Natural History Museum 2012).

Cultural resources are the tangible or intangible remains or traces left by prehistoric or historical peoples who inhabited the San Diego region. Cultural resources can also include traditional cultural places, such as gathering areas, landmarks, and ethnographic locations (County of San Diego 2007a). Prehistoric resources can include lithic scatters, ceramic scatters, quarries, habitation sites, temporary camps, rock shelters, cairns, rock rings, agave roasting pits, ceremonial sites, and trails. Historical resources can consist of structures (building foundations), historic objects (bottles and cans), and sites (refuse deposits or scatters).

Examples of Native American traditional cultural resources or traditional cultural properties (TCPs) include sacred sites, as well as traditional resources of any community that are important for maintaining the cultural traditions of any group. Examples of Native American TCPs include places such as traditional landscapes, sacred mountains, and buildings; or areas where plants are collected for food, medicine, basket weaving, and ceremonial uses.

Other examples of TCPs include buildings, parks, neighborhoods, or other places required to maintain contemporary cultural traditions.

Paleontological resources are the remains and/or traces of prehistoric life, exclusive of human remains, and including the localities where fossils were collected and the sedimentary rock formations from which they were obtained/derived. They can include bones, teeth, soft tissue, shells, wood, leaf impressions, footprints, burrows, and microscopic remains. The defining character of fossils is their geologic age. Fossils or fossil deposits are generally regarded as older than 10,000 years, the generally accepted temporal boundary marking the end of the last Late Pleistocene glacial event and the beginning of the current period of climatic amelioration of the Holocene (County of San Diego 2007b).

In the San Diego region, paleontological resources occur in subsurface sedimentary rock layers, although they sometimes may be found in surface outcrops. These resources are limited and nonrenewable because the organisms from which they derive are extinct. Fossils are important scientific and educational resources because they are used to:

- Study the phylogenetic relationships between extinct organisms, as well as their relationships to modern groups
- Elucidate the taphonomic, behavioral, temporal, and diagenetic pathways responsible for fossil preservation, including biases in the fossil record
- Reconstruct ancient environments, climate change, and paleoecological relationships
- Provide a measure of relative geologic dating that forms the basis for biochronology and biostratigraphy, which is an independent and supporting line of evidence for isotopic dating
- Study the geographic distribution of organisms and tectonic movements of land masses and ocean basins through time
- Study patterns and processes of evolution, extinction, and speciation.

Records Search and Field Survey Results – Cultural Resources

A cultural resources records and literature search was conducted for the proposed project at the SCIC in 2011. Current site and project information available in the California Historical Resources Information System (CHRIS) Geographical Information System inventory was also examined for known and recorded sites and for previously surveyed areas located within the project vicinity. The SCIC records search identified 17 prehistoric and historic sites/isolates within the project's area of potential effects. e²M/HDR's field surveys for the proposed project were conducted on March 5, 6 and 9, 2009 (ASM 2012). Four new sites and two new isolates were identified during field surveys. All identified cultural resources within the proposed project's area of potential effects are shown in Table 5.6-1.

Table 5.6-1 – Io	dentified Cultura	al Resources		
Site/Isolate Designation	USGS Quad	Description	NRHP/CRHR Status	Identified
SDI-5038	Ramona	Prehistoric Bedrock Milling	Not Evaluated	No
SDI-11266	Santa Ysabel	Historical Foundation	Not Evaluated	No
SDI-11633	Ramona	Prehistoric Lithic Scatter	Not Evaluated	Yes
SDI-11634	Ramona	Prehistoric Lithic Scatter	Not Evaluated	Yes
SDI-11638	Ramona	Multiple Component	Not Evaluated	No
SDI-12448	Santa Ysabel	Prehistoric Bedrock Milling	Not Evaluated	No
SDI-13247	Ramona	Prehistoric Bedrock Milling	Not Evaluated	No
SDI-17954	Santa Ysabel	Prehistoric Bedrock Milling	Not Evaluated	No
SDI-17958	Santa Ysabel	Multiple Component	Not Evaluated	Yes
SDI-18434	Santa Ysabel	Prehistoric Bedrock Milling	Not Evaluated	No
SDI-18964	Santa Ysabel	Prehistoric Bedrock Milling	Not Evaluated	Yes
SDI-19025	Santa Ysabel	Prehistoric Bedrock Milling	Not Evaluated	Yes
SDI-19030	Santa Ysabel	Prehistoric Bedrock Milling	Not Evaluated	Yes
SDI-19031	Santa Ysabel	Historical Foundations	Not Evaluated	Yes
P-37-028748	Santa Ysabel	Historical Rock Wall	Not Evaluated	Yes
P-37-029760	Santa Ysabel	Historical Well	Not Evaluated	Yes
SDI-20241	Santa Ysabel	Prehistoric Bedrock Milling	Not Evaluated	Yes
BC-I-01	Ramona	Prehistoric Isolate (Groundstone)	Not Eligible	N/A
BC-I-02	Ramona	Prehistoric Isolate (Core)	Not Eligible	N/A
SDI-20240	Ramona	Prehistoric Bedrock Milling	Not Evaluated	N/A
SDI-20242	Santa Ysabel	Prehistoric Bedrock Milling	Not Evaluated	N/A
SDI-20243	Santa Ysabel	Historical Refuse Scatter	Not Evaluated	N/A
SDI-20669	Santa Ysabel	Prehistoric Bedrock Milling	Not Evaluated	Yes

Source: ASM 2012.

NRHP – National Register of Historical Places

CRHR – California Register of Historical Resources

The pedestrian field surveys complied with the California Office of Historic Preservation instructions for recording cultural resources. All prehistoric and historic sites, both newly discovered and previously identified (if re-identified in the field), were recorded. No artifacts were collected during the surveys. The presence or absence of evidence for cultural materials or deposits was noted. Diagnostic artifacts were documented in the field (i.e., basic metrics, location, and description) and left on site (ASM 2012).

Field surveys indicated that 69 poles along the proposed project alignment are located in areas of high potential for buried cultural deposits. Twenty-seven of the replacement pole locations were identified as lying near or within 20 feet of cultural sites and isolates. Four of these

resources were recommended not eligible or are not eligible due to their status as an isolated artifact, and the rest of the sites have undetermined eligibility (ASM 2012).

Additionally, a records search with the NAHC was also requested by ASM in July 2010. A response on July 25, 2010, indicated the presence of Native American cultural resources within 0.5 mile of the proposed project area (ASM 2012).

No resources identified are listed or eligible for listing in the NRHP.

Moreover, the Creelman Substation was surveyed on July 13, 2009, and no previous or newly recorded archaeological resources were noted (ASM 2012).

Paleontological Resources Assessment Results

The paleontological investigation conducted for the proposed project noted that the majority of the proposed pole replacement sites are located in areas underlain by plutonic igneous rocks of the Cretaceous-age (~120–90 million years old) Peninsular Ranges Batholith. These crystalline rocks vary in composition and include granite, tonalite, and granodiorite. Sedimentary rocks exposed along the project right-of-way (ROW) are deposits of the Middle to Late Eocene-age (~36–38 million years old) Pomerado Conglomerate and of Late Pleistocene to Holocene-age (~500,000 years old to present) channel deposits. Paleontological locality and specimen records at the San Diego Natural History Museum showed that there are no known fossil discovery sites within 1 mile of the proposed project ROW (San Diego Natural History Museum 2012).

5.6.2 Regulatory Setting

Federal

Federal regulations would not apply to the proposed project, because both federal agencies (U.S. Forest Service (USFS) and the Bureau of Land Management (BLM)) with jurisdiction over lands through which the project alignment traverses have approved the project for work that would occur within USFS and BLM-managed land.

State

California Environmental Quality Act (CEQA)

State historic preservation regulations affecting this project include the statutes and guidelines contained in CEQA (California Public Resources Code, Sections 21083.2 and 21084.1, and Section 15064.5 of the CEQA Guidelines). CEQA requires lead agencies to carefully consider the potential effects of a project on historical resources. A "historical resource" includes, but is not limited to, any object, building, structure, site, area, place, record, or manuscript, which is historically or archaeologically significant (California Public Resources Code, Section 5020.1 (j)).

Section 15064.5 of the CEQA Guidelines specifies criteria for determining the significance of impacts to archaeological and historical resources. Section 15064.5 defines a "historical resource" as:

- (1) A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources (Pub. Res. Code §5024.1, Title 14 CCR, Section 4850 et seq.).
- (2) A resource included in a local register of historical resources, as defined in section 5020.1(k) of the Public Resources Code or identified as significant in an historical resource survey meeting the requirements section 5024.1(g) of the Public Resources Code, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
- (3) Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources (14 CCR 4852) including the following:
 - A. Is associated with events that have made a contribution to the broad patterns of California history
 - B. Is associated with the lives of important persons from our past
 - C. Embodies the distinctive characteristics of a type, period, region or method construction, or represents the work of an important individual or possesses high artistic values
 - D. Has yielded, or may be likely to yield, important information in prehistory or history.

The fact that a resource is not listed in, or determined to be eligible for listing in the CRHR, not included in a local register of historical resources (pursuant to Section 5020.1(k) of the Public Resources Code), or identified in a historical resources survey (meeting the criteria in Section 5024.1(g) of the Public Resources Code) does not preclude a lead agency from determining that the resource may be a historical resource as defined in Public Resources Code Sections 5020.1(j) or 5024.1. If a cultural resource does not meet the definition of a "historic resource" under CEQA Guidelines Section 15164.5, it must be reviewed under CEQA Statute Section 21083.2(g), which defines the significance of an archaeological site in terms of whether it is "unique." A unique archaeological resource implies 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:

- The archaeological artifact, object, or site contains information needed to answer important scientific questions, and there is a demonstrable public interest in that information.
- The archaeological artifact, object, or site has a special and particular quality, such as being the oldest of its type or the best available example of its type.
- The archaeological artifact, object, or site is directly associated with a scientifically recognized important prehistoric or historic event or person.

A non-unique archaeological resource indicates an archaeological artifact, object, or site that does not meet the previously listed criteria. Impacts to non-unique archaeological resources receive no further consideration under CEQA, other than the recording of its existence by the lead agency if it so elects.

CEQA Statute Section 21083.2 indicates that a lead agency may make efforts to preserve unique archaeological resources by implementing avoidance strategies including redesign, dedication of permanent conservation easements, capping of archaeological sites, or incorporating archaeological sites in parks or other open spaces. If avoidance is not possible, project impacts to those portions of the unique archaeological resources shall be mitigated. Provisions for the accidental discovery of archaeological sites during construction are recommended, including its immediate evaluation and, if considered to be unique, mitigation through implementing avoidance measures or archaeological data recovery excavations.

Advice on procedures to identify such resources, evaluate their importance, and estimate potential effects is given in several agency publications such as the series produced by the Governor's Office of Planning and Research (OPR). The technical advice series produced by OPR strongly recommends that Native American concerns and the concerns of other interested persons and corporate entities, including, but not limited to, museums, historical commissions, associations, and societies, be solicited as part of the process of cultural resources inventory.

CEQA Guidelines Section 15064.5(b) defines when a project would potentially have significant impacts on cultural resources. A "substantial adverse change in the significance of an historical resource" means "physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired" (14 CCR 15000 et seq.). The significance of a historical resource is materially impaired when a project:

- Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register of Historical Resources;
- Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to section 5020.1(k) of the Public Resources Code or its identification in a historical resources survey meeting the requirements of section 5024.1(g) of the Public Resources Code, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or
- Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the CRHR as determined by a lead agency for purposes of CEQA.

CEQA Guidelines Section 15064.5(b)(4) states that the lead agency shall identify potentially feasible measures to mitigate significant adverse changes in the significance of a historical resource. Section 15064.5(b)(3) of the CEQA Guidelines also states that impacts on a historic resource may be reduced to a less-than-significant level if project design follows the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for

Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings, or the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings (Weeks and Grimmer 1995).

CEQA Guidelines Section 15126.4(b) defines mitigation measures related to impacts on historical resources. In addition to following the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings, the section states that documentation of a historical resource with a historic narrative, photographs, or architectural drawings, as mitigation for the effects of demolition of the resource will not necessarily mitigate the effects to less-than-significant levels. Avoidance of impacts on any historical resource of an archaeological nature is encouraged. Preservation in place is the preferred manner of mitigating impacts to archaeological sites, by methods including: (1) avoiding construction on archaeological sites; (2) incorporation of sites within parks, greenspace, or other open space; (3) covering the archaeological sites with a layer of chemically stable soil before building on the site; and/or (4) deeding the site into a permanent conservation easement. When site avoidance is not possible, data recovery through excavation should recover scientifically consequential information from and about the historical resource, prior to any excavation being undertaken. Archaeological sites known to contain human remains shall be treated in accordance with the provisions of Section 7050.5 of the Health and Safety Code. If an artifact must be removed during project excavation or testing, curation may be an appropriate mitigation. Data recovery is not required for a historical resource if the lead agency determines that testing or studies already completed have adequately recovered the scientifically consequential information from and about the archaeological or historical resource.

CEQA Guidelines Section 15064.5(d) assigns special importance to human remains and specifies procedures to be used when Native American remains are discovered. These procedures are detailed under California Public Resources Code Section 5097.98. Under CEQA, lead agencies are required to consider impacts to unique paleontological resources. CEQA is concerned with assessing impacts associated with the direct or indirect destruction of unique paleontological resources or sites, as defined in Section D.7.1.3, which are of value to the region or state.

California Public Resources Code

California Public Resources Code Section 5024.1 (a) establishes the CRHR. Section 5024.1(c– f) provides criteria for CRHR eligibility listing. In addition, the CRHR also automatically includes the following: California properties listed on the NRHP, State Historic Landmark No. 770 and all consecutively numbered state landmarks following No. 770 (landmarks preceding No. 770 shall be reviewed for eligibility by the State Historic Preservation Office (SHPO)), and points of historical interest that have been reviewed by the SHPO and recommended for inclusion in the CRHR in accordance with criteria adopted by the State Historic Resources Commission.

California Public Resources Code Sections 5097–5097.6 outlines the requirements for cultural resource analysis prior to the commencement of any construction project on state lands. The state agency proposing the project may conduct the cultural resource analysis or may contract with the State Department of Parks and Recreation. In addition, this section identifies that the unauthorized disturbance or removal of archaeological, historical, or paleontological resources located on public lands is a misdemeanor. It prohibits the knowing destruction of objects of antiquity without a permit

(expressed permission) on public lands, and it provides for criminal sanctions. This section was amended in 1987 to require consultation with the NAHC whenever Native American graves are found. Violations for taking or possessing remains or artifacts are felonies.

California Public Resources Code Section 5097.5 states that "no person shall knowingly and willfully excavate upon, or remove, destroy, injure, or deface, any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, rock art, or any other archaeological, paleontological or historic feature situated on public lands, except with the express permission of the public agency having jurisdiction over the lands."

California Public Resources Code, Section 5097.9 (interference with Native American religion or damage to cemeteries or places of worship, etc.) states that no public agency or private party shall cause severe or irreparable damage to any Native American sanctified cemetery, place of worship, religious or ceremonial site, or sacred shrine located on public property, except on a clear and convincing showing that the public interest and necessity so require.

California Public Resources Code, Section 5097.98, states that whenever the NAHC receives notification of Native American human remains from a county coroner, the NAHC shall immediately notify the most likely descendent. The most likely descendent may, with permission from the owner of the land in which the human remains were found, inspect the site and recommend to the owner or the responsible party conducting the excavation work a means for treating and/or disposing of the human remains and any associated grave goods. The most likely descendent is required to complete their site inspection and make their recommendation within 48 hours of their notification from the NAHC.

California Health and Safety Code

In addition, California law protects Native American burials, skeletal remains, and associated grave goods, regardless of their antiquity, and provides for the sensitive treatment and disposition of those remains.

Section 7050.5(b) of the California Health and Safety Code specifies protocol when human remains are discovered. The code states:

In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined, in accordance with Chapter 10 (commencing with Section 27460) of Part 3 of Division 2 of Title 3 of the Government Code, that the remains are not subject to the provisions of Section 27492 of the Government Code or any other related provisions of law concerning investigation of the circumstances, manner and cause of death, and the recommendations concerning treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative, in the manner provided in Section 5097.98 of the Public Resources Code.

5.6.3 Environmental Impacts

Significance Criteria

Appendix G of the CEQA Guidelines provides guidance for evaluating whether a development project may result in significant impacts (14 CCR 15000 et seq.). Appendix G suggests that a development project could have a significant impact on cultural resources if the project would:

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

Impact Discussion

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

As mentioned in Section 5.6.1, Environmental Setting, the South Coastal Information Center records search identified 17 prehistoric and historic sites/isolates within the project's area of potential effects. Field surveys were conducted by e²M/HDR for the project on March 5, 6, and 9, 2009. Six new sites were identified during field surveys, for a total of 23 identified sites. Table 5.6-1 in Section 5.6.1 shows all cultural resources identified with in the project's area of potential effects.

Additionally, a records search with the NAHC was requested by ASM in July 2010. A response on July 25, 2010, indicated the presence of Native American cultural resources within 0.5 mile of the proposed project area.

No resources identified are listed or eligible for listing in the NRHP.

The majority of identified sites potentially affected by the proposed project are located near pole locations or substations and their corresponding access roads; therefore, impacts would be potentially significant at these locations. To ensure potential impacts to buried cultural deposits at the locations during construction activities would be reduced to a less-than-significant level, Mitigation Measures CUL-1 through CUL-3 are provided.

Additionally, new replacement poles would be placed within the previously disturbed areas around the original pole location (approximately 6–8 feet from existing facilities) to avoid new subsurface ground disturbance. The site-specific cultural resources report recommends relocating pole structures within 4–6 feet of the original pole locations to minimize ground disturbance; however, Mitigation Measures CUL-1 through CUL-3 as provided below, would mitigate impacts associated with pole relocation activities to a less-than-significant level.

MM CUL-1: During construction of the proposed project, all Avoidance Measures as identified in Table 4 of the project-specific cultural resources report conducted by ASM (ASM 2012) shall be implemented. All measures shall be implemented by a

qualified archaeologist who is approved by the California Public Utilities Commission. Avoidance Measures as listed in Table 4 of the report include retention of a cultural resources monitor during pole relocation work; establishment of Environmentally Sensitive Areas (ESAs) where sensitive resources are present in the vicinity of work sites; and avoiding sensitive bedrock, historical features, or other identified features within established ESAs.

- **MM CUL-2:** Prior to commencement of construction associated with the Santa Ysabel Staging Yard, an Environmentally Sensitive Area (ESA) shall be established around the existing resource by the retained cultural monitor. Fencing shall be erected to demarcate the ESA to minimize the potential for impacts during construction.
- **MM CUL-3:** Where access roads traverse or are located near cultural resource sites as identified in the cultural resources report conducted by ASM (ASM 2012), vehicles shall be required to remain within existing access roads. No road grading shall be allowed within identified cultural resource site boundaries.

Following completion of construction activities, operations and maintenance activities would resemble those currently administered by SDG&E for the existing Tie-Line (TL) 637 alignment, and activities would not increase in duration, intensity, or frequency. Operations and maintenance would require routine and periodic equipment testing, pole brushing, herbicide application, and other related ongoing maintenance tasks, similar to those currently conducted by SDG&E. Operation of the proposed project would not result in ground disturbance or any other activity that may alter or adversely affect a known or unknown historic resource within the project alignment. As such, impacts would be less than significant.

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

Field surveys indicated that 69 poles along the proposed project alignment are located in areas of high potential for buried cultural deposits (ASM 2012). The potential for impacts to unidentified, buried deposits exists if the proposed work consists of trenching for underground utilities, or excavation for foundation poles. Direct-embedded replacement of poles and micropile poles would not disturb enough buried soil in their construction footprint to constitute a potential impact to unknown, buried archaeological deposits. Since this project would only use micropile poles or direct-embedded steel poles, the footprint of excavation disturbance is too small to identify potential buried cultural resources.

Of the replacement pole locations, 27 poles were identified as lying near or within 20 feet of cultural sites and isolates. Four of these resources were deemed not eligible or are isolated artifacts and therefore not eligible. The rest of the sites have undetermined eligibility. As such, impacts would be potentially significant with regard to identified cultural resources sites located near pole locations or substations and their corresponding access roads. To reduce impacts at these sites to a less-than-significant level, Mitigation Measures CUL-1 through CUL-3 have been provided. In addition, all proposed pole changes are either micropile or direct-embedded; and there are no excavated foundation poles proposed, which would further reduce impacts during construction.

Although the probability of subsurface archaeological deposits within the project area would be low based on previous work in the area and cultural resources research conducted for the proposed project alignment, construction activities may result in the loss of previously unidentified or unknown cultural resources. During construction, implementation of Applicant Proposed Measure (APM)-CUL-1 through APM-CUL-4 (proposed by SDG&E as project design features), would be implemented (see Section 4.8, Table 4-6 of this IS). These APMs call for adherence to all federal, state, and local laws and regulations to protect and avoid cultural resources, cultural resources sensitivity training for all SDG&E staff assigned to the project, professional archaeological monitoring during construction activities, and protocol in the event unanticipated cultural resources are discovered.

In addition to APMs CUL-1 through CUL-4, and Mitigation Measures (MM) CUL-1 through CUL-3 as previously discussed, MM CUL-4 is provided which would ensure that impacts to unknown cultural resources would remain less than significant. MM CUL-4 supersedes APM-CUL-4 as proposed by SDG&E (see Section 4.8, Table 4-6 of this IS).

MM CUL-4: In the event that any prehistoric or historic subsurface cultural resources are discovered during ground-disturbing activities, such as chipped or ground stone, historic debris, building foundation, or human bones, all work within 50 feet of the resources shall be halted, and a qualified archaeologist shall be consulted to assess the significance of the find. If any find is determined to be significant, representatives of San Diego Gas & Electric (SDG&E), California Public Utilities Commission (CPUC), and the qualified archaeologist shall confer to determine the appropriate avoidance measures or other appropriate mitigation, with the ultimate determination to be made by the CPUC. All significant cultural materials recovered shall be subject to scientific analysis; professional museum curation, as necessary; and a report prepared by a specialist according to current professional standards.

In considering any suggested mitigation proposed by the consulting archaeologist to mitigate impacts to historical resources or unique archaeological resources, the CPUC and SDG&E shall determine whether avoidance is necessary and feasible in light of factors such as the nature of the find, project design, costs, and other considerations. If avoidance is infeasible, other appropriate measures (e.g., data recovery) shall be instituted. Work may proceed on other parts of the project site while mitigation for historical resources or unique archaeological resources is carried out. If the CPUC, in consultation with the qualified archaeologist, determines that a significant archaeological resource is present and that the resource could be adversely affected by the proposed project, SDG&E will:

- a. Attempt to redesign the project to avoid any adverse effect on the significant archaeological resources.
- b. If the circumstances warrant an Archaeological Data Recovery Program (ADRP), such a program shall be conducted. The project archaeologist and the CPUC shall confer and consult to determine the scope of the ADRP.

The archaeologist shall prepare a draft ADRP that shall be submitted to the CPUC for review and approval. The ADRP shall identify how the proposed ADRP would preserve the significant information the archaeological resource is expected to contain. That is, the ADRP shall identify the scientific/historical research questions that are applicable to the expected resource, the data classes the resource is expected to possess, and how the expected data classes would address the applicable research questions. Data recovery, in general, should be limited to portions of the archaeological resource that could be adversely affected by the proposed project. Destructive analytical methods shall not be applied to cultural materials if nondestructive methods are practical.

Following completion of construction activities, operations and maintenance activities would resemble those currently administered by SDG&E for the existing TL 637 alignment, and activities would not increase in duration, intensity, or frequency. Operations and maintenance would require routine and periodic equipment testing, pole brushing, herbicide application, and other related on-going maintenance tasks, similar to those conducted by SDG&E currently. Operation of the proposed project would not result in ground disturbance or any other activity that may alter or adversely affect a known or unknown archaeological resource within the project alignment. Impacts would be less than significant with mitigation incorporated.

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

As discussed in Section 5.6.1, Environmental Setting, the site is not located on deposits that have the potential for fossils to occur. Given the occurrence of non-fossiliferous plutonic igneous rocks along the project ROW, impacts to paleontological resources during installation of the new tie-line poles are unlikely. However, impacts to sensitive paleontological resources could occur in those portions of the ROW underlain by sedimentary rocks. These areas include those mapped as the Middle to Late Eocene-age Pomerado Conglomerate and the Late Pleistocene to Holocene-age channel deposits. Some pole locations are within sedimentary rocks that have potential for containing paleontological resources. Therefore, grading and excavation for the proposed project may result in disturbance or destruction of undiscovered paleontological resources in these areas. SDG&E has proposed APM-CUL-6 and APM-CUL-7 (see Section 4.8, Table 4-6 of this IS) requiring paleontological monitoring during grading and excavation. Implementation of these APMs would ensure that potential impacts to paleontological resources would be less than significant.

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

The records search did not reveal that human remains were found within the proposed project alignment or within the vicinity of the proposed project alignment; however, the potential exists for unintended discovery of unknown human remains during subsurface construction activities. SDG&E has proposed APM-CUL-5 requiring adherence to specific protocol in the event human remains are discovered (see Section 4.8, Table 4-6 of this IS). Implementation of APM-CUL-5, which provides details about procedures for discovery of human remains, would reduce potential impacts to human remains to a less-than-significant level.

5.7 GEOLOGY AND SOILS

Wo	uld the project:	Potentially Significant	Less Than Significant with Mitigation	Less-Than- Significant	No
a)	Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	Impact	Incorporated	Impact	Impact
	i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42				
	ii) Strong seismic ground shaking?			\boxtimes	
	iii) Seismic-related ground failure, including liquefaction?			\boxtimes	
	iv) Landslides?			\boxtimes	
b)	Result in substantial soil erosion or the loss of topsoil?			\boxtimes	
<i>c)</i>	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?				
d)	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?				
e)	Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				

5.7.1 Environmental Setting

Information presented in this section was gathered from a review of San Diego Gas & Electric's (SDG&E's) Proponent's Environmental Assessment (PEA) (SDG&E 2013) and project-specific geotechnical study prepared by VO Engineering Inc. dated October 26, 2011 (VO Engineering 2011).

Site Geology: The Tie-Line 637 Wood-to-Steel Replacement Project (proposed project) alignment spans approximately 14 miles and traverses a number of geologic units as shown in Table 5.7-1.

Table 5.7-1 –Geologic Units Located on Project Site							
Symbol	Unit Name	Age	Description				
	Sedimentary Units						
Qya	Young Alluvial Deposits	Recent (Holocene)	Unconsolidated to slightly consolidated sand and gravel deposited in active washes.				
Qoc	Old Colluvial Deposits	Quaternary	Unconsolidated to well consolidated deposits of sediment, rock fragments, and soil material deposited by creep and rainwash.				
Тр	Poway Group/Ballena Gravels	Tertiary	Remnant channel deposits of the Ballena River system. Massively bedded conglomerates, conglomeritic sandstone, and minor beds and lenses of sandstone.				
	Crystalline (Basement) Units						
Klp	Tonalite of La Posta	Cretaceous	Homogeneous tonalite, leucotonalite, and leucogranodiorite.				
Kc	Cuyamaca Gabbro	Cretaceous	Gabbro plutons and other intrusions				
Ks	San Marcos Gabbro	Cretaceous	Gabbro stocks and other intrusions				
Kjv/Kjv-w	Japatul Valley Tonalite	Cretaceous	Tonalite to granodiorite intrusions				
Jer	Cuyamaca Reservoir Granodiorite	Jurassic	Granodiorite and tonalite intrusions				
Jm	Undifferentiated Plutonic Rocks	Jurassic/Cretaceous	Granotoid plutons				

Source: SDG&E 2013.

As shown in Table 5.7-1, the majority of the proposed project alignment occurs within crystalline basement rock. Pole locations occurring in sedimentary geologic units are shown in Table 5.7-2.

Table 5.7-2 – Pole Locations in Sedimentary Geology					
Symbol	Unit Name	Age	Pole Locations		
Qya	Young Alluvial Deposits	Recent (Holocene)	P51, P75		
Qoc	Old Colluvial Deposits	Quaternary	P59 through P64		
Тр	Poway Group/Ballena Gravels	Tertiary	P22 through P32		

Source: SDG&E 2013.

Soils occurring along the project alignment primarily consist of sand characterized as sand with plastic and non-plastic fines. Additionally, silty or clayey fine sands and inorganic low-plasticity clays occur at some pole locations (SDG&E 2013).

Potential Geologic Hazards: Potential geologic hazards at the proposed project site include surface rupture, seismic shaking, landslides, and liquefaction.

Seismic Setting: The San Diego region is influenced by plate boundary interaction between the Pacific and North American plates. The San Clemente Fault Zone, approximately 60 miles west of San Diego, marks the edge of a regional fault zone characterized by northwest-striking, predominately right-slip faults that extend into the California Continental Borderland Province. This zone is bordered to the east by the San Andreas Fault, located approximately 90 miles east of San Diego. The nearest significant seismic hazard to coastal San Diego County is the Rose Canyon Fault Zone. The Rose Canyon Fault Zone is comprised predominantly of right lateral strike-slip faults that extend south–southeast, bisecting the San Diego metropolitan region. The State of California has designated portions of the fault zone in the Mount Soledad, Rose Canyon, and downtown San Diego area as Earthquake Fault Zones.

The project alignment is not underlain by active or potentially active faults, and does not lie within an Alquist–Priolo Earthquake Fault Zone. The nearest known active fault is the Elsinore Fault Zone fault located approximately 2.6 miles northeast of the proposed project alignment.

Surface Rupture: As previously discussed, the project alignment is not underlain by a known active or potentially active fault. Therefore, the potential for ground rupture due to faulting at the site is considered low. Strong seismic ground shaking could occur considering the seismically active region of southern California.

Landslides: Several formations within the San Diego region are particularly prone to landsliding. These formations generally have high clay content and mobilize when they become saturated with water. Other factors, such as steeply dipping bedding that project out of the face of the slope and/or the presence of fracture planes, also increases the potential for landsliding. The proposed project site does not contain these features and is not susceptible to landslides, nor does it traverse landslide-susceptive topographic units.

Liquefaction: Liquefaction occurs during strong seismic events when cohesionless soils take on liquid characteristics, losing strength and stability. Four pole locations were identified as being located in areas susceptible to liquefaction during a strong seismic event: P103, R107, P114, and P129. Pole R107 would be removed once project is constructed.

5.7.2 Regulatory Setting

Geologic resources and geotechnical hazards are governed primarily by local jurisdictions. The conservation elements and seismic safety elements of county general plans contain policies for the protection of geologic features and avoidance of hazards, but do not specifically address transmission line construction projects. Relevant and potentially relevant statutes, regulations, and policies are discussed as follows.

State

California Environmental Quality Act (CEQA) (California Public Resources Code, Section 21000 et seq.) was adopted in 1970 and applies to most public agency decisions to carry out, authorize, or approve projects that may have adverse environmental impacts. CEQA requires that agencies inform themselves about the environmental effects of their proposed actions, consider all relevant information, provide the public with an opportunity to comment on the environmental issues, and avoid or reduce potential environmental harm whenever feasible.

Relevant CEQA sections include those for protection of geologic resources, protection of soil from erosion, and protection of paleontological resources (certain fossils found in sedimentary rocks).

Alquist–Priolo Earthquake Fault Zoning Act of 1972

The Alquist–Priolo Earthquake Fault Zoning Act of 1972 (formerly the Special Studies Zoning Act) (California Public Resources Code, Section 2621 et seq.) regulates development and construction of buildings intended for human occupancy to avoid the hazard of surface fault rupture. While the act does not specifically regulate transmission lines, it does help define areas where fault rupture is most likely to occur. The act groups faults into categories of active, potentially active, and inactive. Historical and Holocene-age faults are considered active, late-Quaternary-age 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 in order to determine whether building setbacks should be established.

California Seismic Hazards Mapping Act: Seismic Ground Shaking Hazards

The California Seismic Hazards Mapping Act of 1990 (California Public Resources Code, Section 2690 et seq.) is designed to protect the public from the effects of strong ground shaking, liquefaction, landslides, other ground failures, or other hazards caused by earthquakes. The act requires site-specific geotechnical investigations to identify the hazard and the formulation of mitigation measures before the permitting of most developments designed for human occupancy. Special Publication 117, Guidelines for Evaluating and Mitigating Seismic Hazards in California (CGS 2008), constitutes the guidelines for evaluating seismic hazards other than surface fault rupture and for recommending mitigation measures, as required by California Public Resources Code, Section 2695(a).

Erosion Regulations

State regulations pertaining to the management of erosion/sedimentation as they relate to water quality are described in Section 5.9 of this IS. The primary purpose of these regulations and standards is to protect surface waters from the effects of land development. Among other measures included in such regulations and standards are the requirements to reduce the potential for sedimentation caused by erosion.

5.7.3 Environmental Impacts

Significance Criteria

Appendix G of the CEQA Guidelines provides guidance for evaluating whether a development project may result in significant impacts (14 CCR 15000 et seq.). Appendix G suggests that a development project could have a significant impact on geology, soils, and seismicity if the project would:

- a) Expose people or structures to potential adverse effects, including the risk of loss, injury, or death involving the following:
 - i) Rupture of a known earthquake fault, as delineated on the most recent Alquist–Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault

- ii) Strong seismic ground shaking
- iii) Seismic-related ground failure, including liquefaction
- iv) Landslides
- b) Result in substantial soil erosion or the loss of topsoil
- c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse
- d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property
- e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater.

Impact Discussion

a) Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

 Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault (refer to Division of Mines and Geology, Special Publication 42)

No portion of the project is located in an active fault zone. Consequently, it is anticipated that implementation of the proposed project would not expose people or structures to substantial adverse effects, including the risk of loss, injury, or death caused by fault rupture. Impacts would be less than significant.

ii) Strong seismic ground shaking

The project site would likely be subject to ground shaking in response to either a local moderate or more distant large magnitude earthquake considering the project's location in the seismicallyactive Southern California region. To reduce impacts from ground shaking, SDG&E proposes to implement Applicant Proposed Measure (APM)-GEO-1 (see Section 4.8, Table 4-6 of this IS), which incorporates recommendations from the geotechnical investigation prepared for the proposed project (VO Engineering 2011). Incorporation of these recommendations would ensure that project design would adhere to specific performance standards to address geologic hazards identified along the project alignment, and therefore would reduce impacts from ground shaking to less than significant.

iii) Seismic-related ground failure, including liquefaction

The project site would likely be subject to ground shaking in response to either a local moderate or more distant large magnitude earthquake. Therefore, the project alignment would have moderate potential for liquefaction. As discussed previously, four pole locations were identified as being located within soils susceptible to liquefaction. To reduce impacts related to liquefaction and potential ground failure, SDG&E proposes to implement APM-GEO-1 (see Section 4.8, Table 4-6 of this IS), which would ensure that development of the project is in conformance with recommendations of the geotechnical investigation. These recommendations

address the potential for ground failure, including liquefaction, and would ensure that impacts would be less than significant.

iv) Landslides

No landslides were mapped along the proposed project alignment. Additionally, the project alignment would not be susceptible to landslide impacts due to mild topography and low-lying geographic features. Impacts related to landslide hazards would be less than significant.

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

During construction of the proposed project, there would be potential for limited, minor erosion, siltation and discharge of pollutants as a result of stormwater runoff from disturbed areas; however, ground disturbance would be limited to minor grading activities within and around individual pole sites. To minimize impacts related to erosion and discharge of pollutants, SDG&E has proposed APM-HYD-1 as discussed in Section 5.9, which would implement best management practices (BMPs) as part of the Stormwater Pollution Prevention Plan (SWPPP) to be prepared as required by the National Pollutant Discharge Elimination System (NPDES) General Construction Activity Storm Water Permit. BMPs to be implemented during construction are outlined in SDG&E's Water Quality Construction BMP Manual. See Section 4.8, Table 4-6 of this IS for a list of APMs as proposed by SDG&E.

Construction-related BMPs identified in the SWPPP may include silt fence, fiber rolls, street sweeping and vacuuming, storm drain inlet protection, stockpile management, solid waste management, stabilized construction entrance/exit, vehicle and equipment maintenance, desilting basin, gravel bag berm, sandbag barrier, material delivery and storage, spill prevention and control, concrete waste management, or other related BMPs. Implementation of BMPs as identified in the SWPPP would ensure that the proposed project would comply with all federal, state, and local water pollution control laws. Additionally SDG&E has proposed APM-GEO-2 which calls for soil stabilization following site disturbance. In addition to APM-GEO-2 and APM-HYD-1, and Mitigation Measures (MM) HYD-1 and MM HYD-3 (see Section 5.9, Hydrology and Water Quality) have been provided to ensure impacts due to soil erosion during operation and maintenance activities would be less than significant. See Section 4.8, Table 4-6 of this IS for a list of APMs as proposed by SDG&E.

c) 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?

As previously discussed in the responses to impact discussion questions a-iii and a-iv, the project contains soils that are susceptible to liquefaction; however, SDG&E proposes to implement APM-GEO-1 (see Section 4.8, Table 4-6 of this IS), which would ensure recommendations provided in the project-specific geotechnical report are implemented, including measures to address liquefaction. Consequently, impacts caused by unstable soils and geologic unit would be less than significant.

d) 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?

Two pole locations were identified as expansive soil sites (P39 and P147); however, the proposed project would not involve the construction of foundations that would be susceptible to expansive soils. Additionally, the project would remove and replace existing pole structures to be located directly adjacent to existing pole locations along the Tie-Line (TL) 637 alignment. No additional facilities would be constructed that may be located on expansive soils. Consequently, potential impacts from expansive soils would be less than significant.

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

The construction and operation of the proposed project would not include modifications or additions to current wastewater disposal systems. Therefore, there would be no impact related to soils incapable of supporting septic systems.

5.8 HAZARDS AND HAZARDOUS MATERIALS

Wo	uld the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				
b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?				
<i>c)</i>	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				
d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				
e)	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?				
f)	For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				
g)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				
h)	Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				

5.8.1 Environmental Setting

Information presented in this section, including information on known hazardous waste sites, was gathered from a review of San Diego Gas & Electric's (SDG&E's) Proponent's Environmental Assessment (PEA) (SDG&E 2013a) and data responses (SDG&E 2013b).

Hazardous Materials/Contaminated Sites

The Tie-Line 637 Wood-to-Steel Replacement Project (proposed project) alignment was not identified as being located on a site that is included in any hazardous site lists pursuant to Government Code Section 65962.5 (SDG&E 2013a); however, three sites (as shown in Table 5.8-1) were identified as meeting the criteria outlined in Government Code Section 65962.5. Mountain Proflame Gas (LP), located on State Route 78 (SR-78), is listed as an open site assessment with potential soil contamination from diesel fuel. Mountain Proflame Gas is classified as Category 1 - open site assessment, characterized by soil or groundwater contamination that does not pose an immediate human health threat. Contamination is isolated and contained within the property, and does not extend into adjacent parcels. The second identified site, the Santa Ysabel site on SR-78, which was a former Chevron station, is listed as a leaking underground storage tank cleanup site, with soil contamination from gasoline. This site is classified as a Category 3 – leaking underground storage tank, which may have significant soil and groundwater contamination and/or threaten human health. Lastly, the Santa Ysabel Old Barn site, located at 21800 Washington Street, is listed as an open site assessment, with no contaminant profile provided. The Santa Ysabel Old Barn site is classified as Category 1 - open site assessment, characterized by soil or groundwater contamination that does not pose an immediate human health threat and does not affect adjacent parcels (SDG&E 2013a).

Table 5.8-1: Hazardous Materials Sites Adjacent to the Proposed Project Alignment				
Site Name and Address; Proposed Project Structure Closest	Regulatory Listing	Contamination Profile		
Mountain Proflame Gas (LP), 30275 Highway 78; Santa Ysabel Substation	Category 1 - open site assessment	Contaminants of concern: diesel fuel affecting soil quality		
Santa Ysabel (Formerly Chevron), 30350 Highway 78; Santa Ysabel Substation	Category 3 - leaking underground storage tank (LUST)	Contaminants of concern: gasoline		
Santa Ysabel Old Barn site, 21800 Washington Street; Santa Ysabel Substation	Category 1 - open site assessment	No contamination profile provided		

Source: SDG&E 2013a.

Proximity to Schools

There are no schools within 0.25 mile of the proposed project alignment. The closest schools to the proposed site are Barnett Elementary School, approximately 0.5 mile from the project alignment in the San Diego Country Estates subdivision; Ramona High School and Pierce Middle School, approximately 0.7 mile northwest of the Creelman Staging Yard; and Spencer Valley Elementary School, approximately 1.7 miles southeast of the Santa Ysabel Substation.

Fire Hazard

Government Code 51175-89 directs the California Department of Forestry and Fire Protection (CAL FIRE) to identify areas of very high fire hazard severity zones with Local Responsibility Areas. The proposed project site has been identified as a high fire hazard severity zone by CAL FIRE, as shown on Figure 5.8-1.

Proximity to Airports

The site is not within 2 miles of a public or private airport. The closest public use airport is the Ramona Airport, which is approximately 3.4 miles northwest of the Creelman Substation. The closest private use airports to the project alignment are the Flying J Airport, approximately 1.8 miles northwest of the alignment, and the Hoffman Airport, approximately 4.9 miles northwest of the Santa Ysabel Substation.

5.8.2 Regulatory Setting

Federal

Hazardous Materials

Toxic Substances Control Act of 1976

Congress enacted the Toxic Substances Control Act of 1976 (15 U.S.C. 2601 et seq.) to give the U.S. Environmental Protection Agency (EPA) the ability to track the thousands of industrial chemicals being produced in or imported into the United States. The EPA routinely screens industrial chemicals and reports and tests those found to pose a potential health hazard to the environment and/or to human health. Through the Toxic Substances Control Act, the EPA can ban the manufacture and import of chemicals that pose an immediate risk. The EPA also can track and control new industry-developed chemicals to protect the environment and human health from potential risks.

Resource Conservation and Recovery Act of 1976

The Resource Conservation and Recovery Act (RCRA), or Solid Waste Disposal Act (42 U.S.C. 6901 et seq.), established a framework for the proper management of hazardous and nonhazardous solid waste. This act, along with the Toxic Substances Control Act, enacted a program administered by the EPA for regulation of the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA was amended in 1984 by the Hazardous and Solid Waste Act, 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 Hazardous and Solid Waste Act. 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.).

Comprehensive Environmental Response, Compensation, and Liability Act

CERCLA (42 U.S.C. 9601 et seq.), commonly known as Superfund, was enacted by Congress on December 11, 1980. This law provided broad federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. CERCLA established requirements concerning closed and abandoned hazardous waste sites, provided for liability of persons responsible for the release of hazardous waste at these sites, and established a trust fund to provide for cleanup when no responsible party could be identified. The law authorizes two types of responses: (1) short-term removals requiring prompt response and (2) long-term remedial response actions that permanently and significantly reduce serious on-site dangers. CERCLA also enabled revision of the National Contingency Plan (42 U.S.C. 9605). The National Contingency Plan provided guidelines and procedures needed to respond to releases and threatened releases of hazardous substances, pollutants, or contaminants. The National Contingency Plan also established the National Priorities List of contaminated sites warranting further investigation by the EPA. CERCLA was amended by the Superfund Amendments and Reauthorization Act (SARA) on October 17, 1986.

Clean Air Act

Under the authority of Section 112(r) of the Clean Air Act, the Chemical Accident Prevention Provisions require facilities that produce, handle, process, distribute, or store more than a "threshold quantity" of any extremely hazardous toxic and flammable substance listed at 40 CFR, Part 68.130, to develop and implement a risk management program, prepare a risk management plan, and submit the risk management plan to the EPA. Although a federal program, the Risk Management Program is intended to reduce hazards at the local level. The program is applicable to companies of all sizes that use certain flammable and toxic substances. The Risk Management Program is intended to help local fire, police, and emergency response personnel (first responders) in the event of an accidental spill or exposure event. The Risk Management Program is contained in the Clean Air Act (42 U.S.C. 7401 et seq.).

U.S. Department of Transportation Office of Hazardous Materials Safety

Transportation of hazardous materials is regulated by the U.S. Department of Transportation's Office of Hazardous Materials Safety. The Office of Hazardous Materials Safety formulates, issues, and revises hazardous materials regulations under the federal Hazardous Materials Transportation Law (49 CFR 100–185). These regulations cover hazardous materials definitions and classifications, hazard communications, shipper and carrier operations, training and security requirements, and packaging and container specifications.

The hazardous materials transportation regulations require carriers transporting hazardous materials to receive training in the handling and transportation of hazardous materials. Training requirements include pre-trip safety inspections; use of vehicle controls and equipment, including emergency equipment; procedures for safe operation of the transport vehicle; training on the properties of the hazardous material being transported; and loading and unloading procedures. All drivers must possess a commercial driver's license (49 CFR 383). Vehicles transporting hazardous materials must be properly placarded. In addition, the carrier is responsible for the safe unloading of hazardous materials at the site, and operators must follow specific procedures during unloading to minimize the potential for an accidental release of hazardous materials.

State

Hazardous Materials

Hazardous Waste Control Law

The California Hazardous Waste Control Law is administered by the California Environmental Protection Agency to regulate hazardous wastes. While the Hazardous Waste Control Law is generally more stringent than RCRA, until the EPA approves the California hazardous waste control program (which is charged with regulating the generation, treatment, storage, and disposal of hazardous waste), both state and federal laws apply in California. The Hazardous Waste Control Law lists 791 chemicals and approximately 300 common materials that may be hazardous; establishes criteria for identifying, packaging, and labeling hazardous wastes; prescribes management controls; establishes permit requirements for treatment, storage, disposal, and transportation; and identifies some wastes that cannot be disposed of in landfills.

The California Code of Regulations (CCR) provides the following definition for hazardous waste (22 CCR 66261.10 (a) (1)):

A waste that exhibits the characteristic may: (A) cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or (B) pose a substantial present or potential hazard to human health or the environment when it is improperly treated, stored, transported, disposed of or otherwise managed.

According to 22 CCR, substances having a characteristic of toxicity, ignitability, corrosivity, or reactivity are considered hazardous. Hazardous wastes are hazardous substances that no longer have a practical use, such as material that has been abandoned, discarded, spilled, or contaminated or is being stored prior to proper disposal.

Toxic substances may cause short- or long-term health effects, ranging from temporary effects to permanent disability or death. For example, toxic substances can cause eye or skin irritation, disorientation, headache, nausea, allergic reactions, acute poisoning, chronic illness, or other adverse health effects if human exposure exceeds certain levels (the level depends on the substance involved). Carcinogens (substances known to cause cancer) are a special class of toxic substances. Examples of toxic substances include most heavy metals, pesticides, and benzene (a carcinogenic component of gasoline). Ignitable substances (e.g., gasoline, hexane, and natural gas) are hazardous because of their flammable properties. Corrosive substances (e.g., strong acids and bases such as sulfuric (battery) acid or lye) are chemically active and can damage other materials or cause severe burns upon contact. Reactive substances (e.g., explosives, pressurized canisters, and pure sodium metal) may cause explosions or generate gases or fumes as a result of contamination or exposure to heat, pressure, air, or water.

Other types of hazardous materials include radioactive and biohazardous materials. Radioactive materials and wastes contain radioisotopes, which are atoms with unstable nuclei that emit ionizing radiation to increase their stability. Radioactive waste mixed with chemical hazardous waste is referred to as "mixed wastes." Biohazardous materials and wastes include anything derived from living organisms. They may be contaminated with disease-causing agents such as bacteria or viruses.

Department of Toxic Substances Control

The Hazardous Waste Control Law states that any person who stores, treats, or disposes of hazardous wastes must obtain a Hazardous Waste Facility Permit or a grant of authorization from the Department of Toxic Substances Control.

California Accidental Release Prevention Program

Similar to the federal Risk Management Program, the California Accidental Release Prevention Program (CalARP) includes additional state requirements and an additional list of regulated substances and thresholds. The regulations of the program are contained in 19 CCR 2735.1 et seq. The intent of CalARP is to provide first responders with basic information necessary to prevent or mitigate damage to public health, safety, and the environment from the release or threatened release of hazardous materials.

California Department of Transportation and California Highway Patrol

The California Department of Transportation (Caltrans) regulates the transportation of hazardous materials throughout the state. Caltrans requires that drivers transporting hazardous wastes obtain a certificate of driver training that shows the driver has met the minimum requirements concerning the transport of hazardous materials, including proper labeling and marking procedures, loading/handling processes, incident reporting and emergency procedures, and appropriate driving and parking rules. The California Highway Patrol also requires shippers and carriers to complete hazardous materials employee training before transporting hazardous materials.

California Health and Safety Code

In California, the handling and storage of hazardous materials is regulated by Chapter 6.95 of the California Health and Safety Code. Under Sections 25500–25543.3, facilities handling hazardous materials are required to prepare a hazardous materials business plan. The business plan provides information to local emergency response agencies regarding the types and quantities of hazardous materials stored at a facility and provides detailed emergency planning and response procedures in the event of a hazardous materials release. In the event that a facility stores quantities of specific acutely hazardous materials above the thresholds set forth by California code, facilities are also required to prepare a risk management plan and California accidental release plan. The risk management plan and accidental release plan provide information about the potential impact zone of a worst-case release and require plans and programs designed to minimize the probability of a release and mitigate potential impacts.

Underground or aboveground storage tanks (USTs/ASTs) are typically used to store hazardous waste. Regulations regarding USTs used to store hazardous materials require owners and operators to register, install, monitor, and remove their tanks according to established standards and procedures. Releases are to be reported to the local Certified Unified Program Agency. Chapter 6.67 of the California Health and Safety Code (Sections 25270–25270.13) regulates the storage of petroleum in ASTs and requires construction methods and monitoring to prevent petroleum releases. Owners of ASTs containing petroleum products with an aggregate storage capacity greater than 1,320 gallons are required to prepare and implement spill prevention and response strategies and to contribute to the Environmental Protection Trust Fund that is used to

respond to some spills. Proper drainage, dikes, and walls are required to prevent accidental discharges from endangering employees, facilities, or the environment.

California Occupational Safety and Health Administration

The California Occupational Safety and Health Administration (Cal/OSHA) is the primary agency responsible for worker safety in the handling and use of chemicals in the work place. Cal/OSHA standards are generally more stringent than federal regulations. The employer is required to monitor worker exposure to listed hazardous substances and notify workers of exposure (8 CCR 337–340). The regulations specify requirements for employee training, availability of safety equipment, accident prevention programs, and hazardous substance exposure warnings.

California Fire Code

The California Fire Code is contained within Title 24, Part 9 of the CCR. Based on the International Fire Code, the California Fire Code is created by the California Buildings Standards Commission and regulates the use, handling, and storage requirements for hazardous materials at fixed facilities. Similar to the International Fire Code, the California Fire Code and the California Building Code use a hazards classification system to determine the appropriate measures to incorporate to protect life and property.

Title 14 CCR, Sections 1250–1258, Fire Prevention Standards for Electric Utilities, provides specific exemptions from electric pole and tower firebreak and electric conductor clearance standards, and it specifies when and where standards apply. Section 1254 of Title 14 presents guidelines for minimum clearance requirements around utility poles.

California Public Utilities Commission General Order 95: Rules for Overhead Transmission Line Construction

California Public Utilities Commission (CPUC) General Order 95, adopted in 1941 and updated in January 2012, is the key standard governing the design, construction, operation, and maintenance of overhead electric lines in the state. It includes safety standards for overhead electric lines, including minimum distances for conductor spacing and minimum conductor ground clearance, standards for calculating maximum sag, electric line inspection requirements, and vegetation clearance requirements.

Rule 31.2, Inspection of Lines, requires that lines be inspected frequently and thoroughly to ensure they are in good condition, and that lines temporarily out of service be inspected and maintained as not to create a hazard.

Rule 35 of General Order 95, Tree Trimming, defines minimum vegetation clearance around power lines. Rule 35 guidelines, at the time of trimming, require the following:

- Four-foot radial clearances for any conductor of a line operating at 2,400 volts or more, but less than 72,000 volts
- Six-foot radial clearances for any conductor of a line operating at 72,000 volts or more, but less than 110,000 volts

- Ten-foot radial clearances for any conductor of a line operating at 110,000 volts or more, but less than 300,000 volts (this would apply to the proposed project)
- Fifteen-foot radial clearances for any conductor of a line operating at 300,000 volts or more.

Under California Public Utilities Code, Section 1708.5, interested persons are permitted to petition the CPUC to adopt, amend, or repeal a regulation. In response to the 2007 wildfires in San Diego County, on November 6, 2007, SDG&E submitted a petition to the CPUC requesting that the CPUC issue an Order Instituting Rulemaking to determine whether General Order 95 should be amended or whether more rules should be adopted to address disaster preparedness, including damage from Santa Ana Wind-driven firestorms (CPUC and BLM 2008). According to SDG&E, the petition requested that the CPUC consider several items, including the following:

- Operating rural electrical lines differently during severe fire weather
- Mitigating potential hazards associated with rural lines, including undergrounding line, using steel poles in place of wood, and shortening spans between poles
- Better coordinating disaster management efforts among agencies, municipalities, local jurisdictions, and utilities
- Maintaining electrical line rights-of-way free of vegetation
- Adopting a statewide Disaster Management Plan.

California Public Resources Code

The California Public Resources Code (PRC) regulations are discussed in further detail as follows:

- **PRC, Section 4291** requires a reduction of fire hazards around buildings, requiring 100 feet of vegetation management around all buildings, and is the primary mechanism for conducting fire prevention activities on private property within CAL FIRE jurisdiction.
- **PRC, Section 4292** states a that a minimum firebreak of 10 feet in all directions from the outer circumference of such pole or tower be established around any pole that supports a switch, transformer, lightning arrester, line junction, or end or corner pole. All vegetation shall be cleared within the firebreak.
- **PRC, Section 4293** establishes the minimum vegetation clearance distances (between vegetation and energized conductors) required for overhead transmission line construction. Minimum clearances are discussed as follows:
 - A minimum radial clearance of 4 feet shall be established for any conductor of a line operating at 2,400 or more volts but less than 72,000 volts.
 - A minimum radial clearance of 6 feet shall be established for any conductor of a line operating at 72,000 or more volts but less than 110,000 volts.
 - A minimum radial clearance of 10 feet shall be established for any conductor of a line operating at 110,000 or more volts but less than 300,000 volts.
 - A minimum radial clearance of 15 feet shall be established for any conductor of a line operating at 300,000 or more volts.

Specific requirements applicable to the construction and operation of the proposed project include those from PRC, Division 4, Chapter 6:

- Section 4427 Operation of fire-causing equipment
- Section 4428 Use of hydrocarbon-powered engines near forest, brush, or grass-covered lands without maintaining firefighting tools
- Section 4431 Gasoline-powered saws, etc.; firefighting tools
- Section 4442 Spark arrestors as fire prevention measures; requirements, exemptions.

Fire Hazard Severity Zones

CAL FIRE mapped Fire Hazard Severity Zones in San Diego County based on fuel loading, slope, fire weather, and other relevant factors as directed by PRC, Sections 4201–4204, and Government Code Sections 51175–51189. Fire Hazard Severity Zones are ranked from moderate to very high and are categorized for fire protection within a Federal Responsibility Area, State Responsibility Area, or Local Responsibility Area under the jurisdiction of a federal agency, CAL FIRE, or local agency, respectively.

California Strategic Fire Plan

The 2010 Strategic Fire Plan for California is the statewide plan for adaptive management of wildfire as a cooperative effort between the State Board of Forestry and Fire Protection and CAL FIRE. The central goals that are critical to reducing and preventing the impacts of fire revolve around both suppression and fire prevention efforts. The key goals include the following (CAL FIRE 2010):

- 1. Improved availability and use of information on hazard and risk assessment;
- 2. Land use planning, including general plans, new development, and existing developments;
- 3. Shared vision among communities and the multiple fire protection jurisdictions, including county-based plans and community-based plans such as Community Wildfire Protection Plans;
- 4. Establishing fire resistance in assets at risk, such as homes and neighborhoods;
- 5. Shared vision among multiple fire protection jurisdictions and agencies;
- 6. Levels of fire suppression and related services; and
- 7. Post-fire recovery.

While the plan puts emphasis on pre-fire adaptive management of risk, including measures such as fuel breaks, defensible space, and other fuel reduction strategies, it does not contain any specific requirements or regulations but rather acts as an assessment of current fire management practices and standards and makes recommendations on how best to improve the practices and standards in place (CAL FIRE 2010).

California Code of Regulations Title 14, Sections 1252, 1253, and 1254

Regulations in 14 CCR, Sections 1252 and 1253, state that in San Diego County, power line hazard reduction standards are applicable year-round. Power line reduction strategies include

pole brush clearing in southeastern San Diego County, and CAL FIRE is responsible for inspecting local implementation of these strategies.

Regulations in 14 CCR 14, Section 1254, state that the fire break minimum clearance requirements of PRC, Section 4292, are applicable within an imaginary cylindroid space surrounding each pole or tower on which a switch, fuse, transformer, or lightning arrester is attached. The radius of the cylindroid is 10 feet (3.1 meters) measured horizontally from the outer circumference of the specified pole or tower; the height is equal to the distance from the intersection of the imaginary vertical exterior surface of the cylindroid with the ground to an intersection with a horizontal plane passing through the highest point at which a conductor is attached to such pole or tower. Flammable vegetation and materials located wholly or partially within the firebreak space shall be treated as follows:

- At ground level: Remove flammable materials, including but not limited to ground litter, duff, and dead or desiccated vegetation that will allow fire to spread.
- From 0 to 8 feet (0 to 2.4 meters) above ground level: Remove flammable trash, debris, or other materials, including grass, herbaceous, and brush vegetation. All limbs and foliage of living trees shall be removed up to a height of 8 feet (2.4 meters).
- From 8 feet (2.2 meters) above ground level to the horizontal plane of the highest point of conductor attachment: Remove dead, diseased, or dying limbs and foliage from living, sound trees and remove any dead, diseased, or dying trees in their entirety.

CAL FIRE Civil Cost Recovery Program

The California Legislature has ruled that since wildland fires cost taxpayers millions of dollars per year, taxpayers should not be responsible for costs associated with suppressing fires caused by an act of human carelessness. The CAL FIRE Civil Cost Recovery Program was established to recover firefighting costs when the fires are a result of people (or entities) violating the law or being negligent in their actions. For overhead electric lines, these violations are generally related to non-compliance with vegetation clearance requirements.

Examples of cost recovery related to transmission lines include the following (CAL FIRE 2013):

- In 1996, Southern California Edison was billed \$7.9 million for fire suppression costs for the Calabasas Fire. A settlement was negotiated for \$6.55 million just prior to trial in 2003. CAL FIRE determined that the fire was caused when a eucalyptus branch was bent by the wind into a lightning arrester.
- The largest amount ever billed by CAL FIRE to date was \$8.2 million to Pacific Gas & Electric (PG&E) for the Campbell Fire in 1990. The Campbell Fire burned over 125,000 acres and destroyed 27 structures in Tehama County. CAL FIRE determined that the fire was caused by a tree limb that made contact with a 500-kilovolt power line. PG&E had not maintained the 10-foot clearance around its power line as required by law. PG&E eventually agreed to a negotiated settlement of \$5 million.

5.8.3 Environmental Impacts

Significance Criteria

Appendix G of the California Environmental Quality Act (CEQA) Guidelines (14 CCR 15000 et seq.) provides guidance for evaluating whether a development project may result in significant impacts. Appendix G suggests that a development project could have a significant impact on hazards and hazardous materials if the project 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 or other materials into the environment
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school
- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment
- Result in a safety hazard for people residing or working in the project area (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)
- Result in a safety hazard for people residing or working in the project area (for a project within the vicinity of a private airstrip)
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan
- Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

Impact Discussion

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

Petroleum products, such as vehicle equipment fuel, may be transported and stored at the project site during construction, and transformer oil, paint, and solvents would be used during construction and operation of the project. Herbicides may be used prior to construction activities and during operation of the project to clear and maintain vegetation along the alignment. To minimize impacts associated with the routine transport, use, or disposal of hazardous materials, Mitigation Measure (MM) HAZ-1 and MM HAZ-2 are provided to ensure agency oversight of the handling of hazardous material during construction and implementation of best management practices (BMPs) would occur. With implementation of MM HAZ-1 and MM HAZ-2, impacts due to potential hazardous substance spills during construction would be less than significant.

- **MM HAZ-1** Prior to construction, all San Diego Gas & Electric, contractor, and subcontractor project personnel would receive training regarding the appropriate work practices necessary to effectively implement hazardous materials procedures and protocols and to comply with the applicable environmental laws and regulations, including, without limitation, hazardous materials spill prevention and response measures. A sign-in sheet of contractor and subcontractor project personnel who have received training shall be provided to California Public Utilities Commission on a weekly basis as indicated in MM BIO-2.
- **MM HAZ-2** During construction, construction best management practices (BMPs) shall be implemented to prevent impacts from release of hazardous materials during construction activities. Typical BMPs could include, but would not be limited to, construction practices such as the use of absorbent pads for spill containment, specified locations for construction vehicle refueling, and a daily vehicle inspection schedule designed to identify leaking fuels and/or oils as early as possible.

The project may require the use of explosives during the construction. These activities would be limited to areas where explosives are absolutely necessary, and precautions would be taken to limit accessibility to recreational users and the general public. Prior to removing earth or rock with the use of explosives, a pre-blast survey and blasting plan would be prepared for the project (MM HAZ-3). The pre-blast survey would be conducted for structures within a minimum radius of 1,000 feet from the identified blast site. Sensitive receptors that could reasonably be affected by blasting would also be surveyed as part of the pre-blast survey. The blasting plan would outline the anticipated blasting procedures for the removal of rock material at pole locations and would address air-blast limits, ground vibrations, and maximum peak particle velocity for ground movement to ensure that all application regulatory measures are met.

- **MM HAZ-3** In the event that rock blasting is used during construction, a noise and vibration calculation will be prepared and submitted to the California Public Utilities Commission and the County of San Diego for review before blasting at each site. The construction contractor will ensure compliance with all relevant local, state, and federal regulations relating to blasting activities. In addition to any other requirements established by the appropriate regulatory agencies, the pre-blast survey and blasting plan shall meet the following conditions:
 - The pre-blast survey shall be conducted for structures within a minimum radius of 1,000 feet from the identified blast site to be specified by San Diego Gas &Electric (SDG&E) or SDG&E's contractor. Sensitive receptors that could reasonably be affected by blasting shall be surveyed as part of the pre-blast survey. Notification that blasting would occur shall be provided to all owners of the identified structures to be surveyed prior to commencement of blasting. The pre-blast survey shall be included in the final blasting plan.

- The final blasting plan shall address air-blast limits, ground vibrations, and maximum peak particle velocity for ground movement, including provisions to monitor and assess compliance with the air-blast, ground vibration, and peak particle velocity requirements. The blasting plan shall meet criteria established in Chapter 3 (Control of Adverse Effects) in the Blasting Guidance Manual of the U.S. Department of Interior Office of Surface Mining Reclamation and Enforcement.
- The blasting plan shall outline the anticipated blasting procedures for the removal of rock material at the proposed pole locations. The blasting procedures shall incorporate line control to full depth and controlled blasting techniques to create minimum breakage outside the line control and maximum rock fragmentation within the target area. Prior to blasting, all applicable regulatory measures shall be met. The applicant, general contractor, or its subcontractor (as appropriate) shall keep a record of each blast for at least 1 year from the date of the last blast.

In addition to MM HAZ-1, MM HAZ-2, and MM HAZ-3, SDG&E has proposed Applicant Proposed Measure (APM) HAZ-4, which would establish a safety buffer between recreational users of the Simon Preserve, Mount Gower Preserve, and Mount Gower helicopter landing zone during construction activities at these locations. Construction schedules and activities would be coordinated with the authorized officer for the recreational area where construction would temporarily occur. With implementation of MM HAZ-1, MM HAZ-2, MM HAZ-3, and APM-HAZ-4, impacts during construction would be less than significant. See Section 4.8, Table 4-6 of this Initial Study (IS) for a list of APMs as proposed by SDG&E.

Operation and maintenance of the proposed project alignment would resemble those currently administered by SDG&E for the existing Tie-Line (TL) 637 alignment and activities would not increase in duration, intensity, or frequency. Operations and maintenance would require routine and periodic equipment testing, pole brushing, herbicide application, and other related ongoing maintenance tasks similar to those currently conducted by SDG&E. Therefore, because operation and maintenance of the proposed alignment facilities would not increase in duration, intensity, or frequency and would not introduce the use of new hazardous materials to the site, impacts would be less than significant.

b) 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?

As discussed above in response 5.8.3 (a), hazardous materials used during the construction and operation phases may inadvertently be released through spills or leaks; however, with the incorporation of SDG&E's APM-HAZ-4 (see Section 4.8, Table 4-6 of this IS) and MM HAZ-1 through MM HAZ-3, the potential to create a significant hazard through release of hazardous materials would be less than significant.

c) 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?

The proposed project would not be located within 0.25 mile of an existing or proposed school. The closest schools to the proposed site are Barnett Elementary School, approximately 0.5 mile from the project alignment in the San Diego Country Estates subdivision, and Ramona High School and Pierce Middle School, approximately 0.7 mile northwest of the Creelman Staging Yard. Spencer Valley Elementary School is approximately 1.7 miles southeast of the Santa Ysabel Substation. Therefore, because there are no existing or proposed schools within 0.25 mile of the proposed project alignment, no impact would occur during project construction and operations.

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

The proposed project alignment was not identified as being located on a site that is included in any hazardous site lists pursuant to Government Code Section 65962.5 (SDG&E 2013a); however, three sites (as shown in Table 5.8-1) were identified as meeting the criteria outlined in Government Code Section 65962.5. The proposed project alignment would not traverse or occur within any of these listed sites, and because identified contamination at these sites would be contained and isolated within their respective property lines, impacts regarding potential contamination along the project alignment would be less than significant.

e) 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?

The project is not located within a public airport land use plan or within 2 miles of a public airport. The Ramona Airport is approximately 3.4 miles from the Creelman Substation. Because the proposed project would require occasional, short-term helicopter support during construction, MM HAZ-4 and MM HAZ-5 are provided.

- **MM HAZ-4** Prior to flight operations for helicopter use during construction, San Diego Gas &Electric (SDG&E) shall coordinate with local air traffic control and comply with all Federal Aviation Administration regulations regarding helicopter use to prevent conflict with air traffic generated by the Ramona Airport. Documentation verifying SDG&E has coordinated with local air traffic control shall be provided to California Public Utilities Commission prior to use of helicopters for construction activities.
- **MM HAZ-5** Prior to flight operations for helicopter use during construction, a Helicopter Lift Plan shall be prepared if required pursuant to Federal Aviation Administration regulations. The Helicopter Lift Plan shall be submitted to the California Public Utilities Commission for review and approval.

Although the proposed project alignment is not located within an airport land use plan, SDG&E notified the FAA of two poles that would potentially affect air navigation (SDG&E 2013b). Based on this notification, the FAA conducted an aeronautical study under the provisions of 49 U.S.C.

44718 and Title 14 of the CFR, Part 77, and determined that no hazard to air navigation would occur as a result of the proposed project and no aerial marking lights/balls would be required as part of proposed project implementation. As such, the proposed project would not result in a safety hazard for people residing or working in the alignment area (SDG&E 2013a). Therefore, with implementation of MM HAZ-4 and MM HAZ-5, impacts would be less than significant.

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

No private airstrips exist within the vicinity of the project site. The closest private use airport is the Flying J Airport, approximately 1.8 miles from the project alignment. Because the proposed project would not be located within the immediate vicinity of a private airstrip, no impact would result.

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

There are numerous fire and police stations and emergency medical service providers located throughout the service area. However, none is located immediately adjacent to the proposed project alignment. Therefore, no fire protection, police protection, and/or emergency service providers would be directly affected by construction activities such that implementation of emergency response plans would be adversely affected.

During the construction period, all streets would remain open to emergency vehicles. The only indirect impact would result from construction vehicles using roadways to access pole construction sites. Because the number of vehicles would represent a minimal contribution to average daily traffic flow, these vehicles would not impair traffic flow. Therefore, the project would not block any of the designated emergency roads and, consequently, would not interfere with an adopted emergency response plan or emergency evacuation plan. Impacts would be less than significant.

h) 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?

The proposed project area is located within a high-risk wildland fire hazard area in eastern San Diego County. Heat or sparks from construction equipment and vehicles, as well as the use of flammable hazardous materials, could ignite the on-site vegetation and start a fire. SDG&E has proposed APM-HAZ-2 (see Section 4.8, Table 4-6 of this IS), which would reduce impacts related to wildland fire hazards due to construction activities to less than significant.

APM-HAZ-2 calls for the development and implementation of a project-specific fire plan, the TL 637 Project Fire Plan (Fire Plan; see SDG&E's Proponent's Environmental Assessment (PEA), Appendix 4.7-C: TL 637 Project Fire Plan). Measures outlined in the proposed Fire Plan would exceed fire prevention measures as stated in California Forestry Practice Rules, California Code of Regulations Chapters 4, 4.5 and 10. Avoidance and minimization measures included in the plan to prevent wildland fires would include training, oversight, and work controls in all phases of preparation and implementation of the proposed project. As stated in the Fire Plan, suppression in the event of a fire starting would be facilitated by locating mobile water tenders within 2

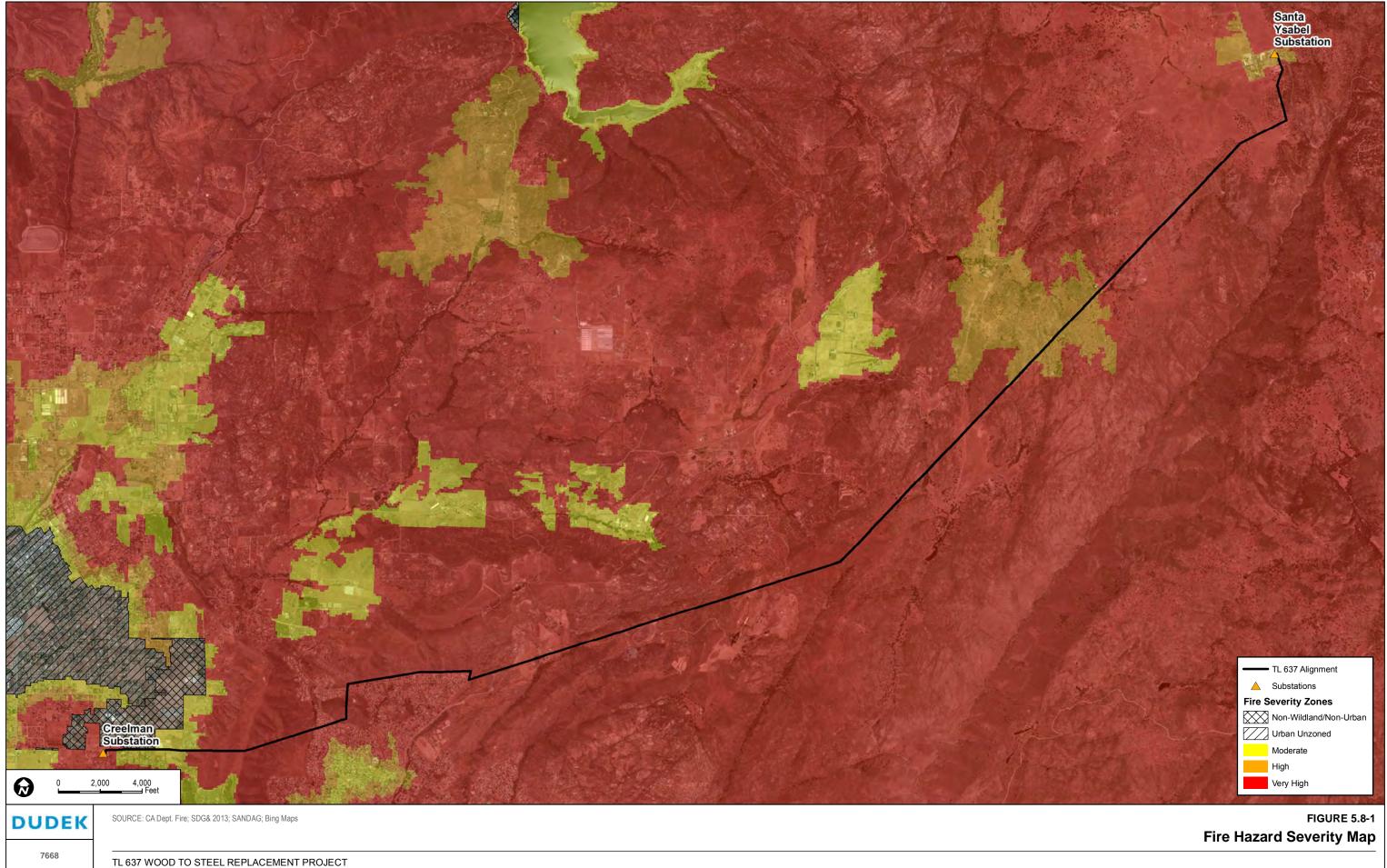
minutes of work areas considered by the project fire safety coordinator in conjunction with the project foreman to include hazardous fire danger, requiring firefighting equipment (one shovel, one Pulaski, and one 5 gallon back pack pump) within 50 feet of any work/equipment site, and avoidance of construction activities, especially "hot works", during periods of declared Red Flag Warnings or other severe fire weather conditions as identified by SDG&E. Because APM-HAZ-2 would also ensure that measures identified in the Cleveland National Forest Fire Plan would be implemented for the entire proposed project, fire hazards due to construction activities would be less than significant (see PEA, Appendix 4.7-B: Cleveland National Forest Fire Plan).

Operation and maintenance activities for the proposed project alignment would resemble those currently administered by SDG&E for the existing TL 637 alignment and activities would not increase in duration, intensity, or frequency. Operations and maintenance would require routine and periodic equipment testing, pole brushing, herbicide application, and other related ongoing maintenance tasks similar to those currently conducted by SDG&E. SDG&E has proposed APM-HAZ-1 and APM-HAZ-3 (see Section 4.8, Table 4-6 of this IS), which would reduce impacts related to wildland fire hazards due to operation and maintenance activities to less than significant.

APM-HAZ-1 includes the design of proposed steel pole structures that would be constructed as part of the proposed project, which would replace fire-susceptible wooden poles with fireresistant steel poles, resulting in a fire-hardened alignment that would protect proposed project facilities in the event of a wildland fire. Project design would include fire-hardening techniques including replacing wood poles with steel poles, increasing conductor spacing to maximize line clearances, installing steel poles designed to withstand an extreme wind-loading case and known local conditions, and installing longer polymer insulators. These design components of the proposed project would minimize fire risk through enhanced safety and reliability of the power line system during extreme weather conditions.

APM-HAZ-3 would ensure that the standard practices in *Electrical Standard Practice 113.1*, including avoidance and minimization measures to comply with state and local fire ordinances, would be implemented during construction and operation of the project.

Implementation of APMs HAZ-1 through HAZ-3 would ensure that impacts remain less than significant.



INTENTIONALLY LEFT BLANK

5.9 Hydrology and Water Quality

		Potentially Significant	Less Than Significant with Mitigation	Less-Than- Significant	No
Wo	uld the project:	Impact	Incorporated	Impact	Impact
a)	Violate any water quality standards or waste discharge requirements?		\boxtimes		
Ь)	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?				
<i>c)</i>	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?				
d)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site?				
e)	Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?				
f)	Otherwise substantially degrade water quality?			\boxtimes	
<i>g)</i>	Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				
h)	Place within a 100-year flood hazard area structures which would impede or redirect flood flows?				

Would the project:		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
i)	Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?				
j)	Inundation by seiche, tsunami, or mudflow?				\bowtie

5.9.1 Environmental Setting

The hydrology and water quality analysis in this section is based on the review of San Diego Gas & Electric's (SDG&E's) Proponent's Environmental Analysis (PEA; SDG&E 2013a) and data responses (SDG&E 2013b), and a review of relevant governmental plans and policies regarding stormwater and water quality.

The topographic character of the approximately 14-mile Tie-Line 637 Wood-to-Steel Replacement Project (proposed project) alignment varies, with elevations ranging from approximately 2,550 to 3,140 feet above mean sea level. Average monthly rainfall in the proposed project vicinity ranges from approximately 4.6 inches in winter to less than 0.25 inch in summer. Rainfall results in ephemeral streamflow in the project area. Various hydrologic features characterizing the proposed project study area, including surface water and surface water hazards, groundwater and flood hazards, are described below.

Surface Water

The proposed project is located in the San Diego Basin of the California Regional Water Quality Control Board (RWQCB). Within the San Diego Basin, the project site is located within the San Dieguito Hydrologic Unit and the San Diego River Hydrologic Unit. The San Dieguito Hydrologic Unit covers approximately 350 square miles and includes the San Dieguito River and its tributaries, Santa Ysabel and Santa Maria Creeks, Lake Hodges, Sutherland and San Dieguito Reservoirs, one coastal lagoon, and the San Dieguito Slough. The San Diego River Hydrologic Unit encompasses an area of about 440 square miles, drained by the San Diego River. Major water storage facilities within this unit include the El Capitan, San Vicente, Cuyamaca, Jennings, and Murray Reservoirs. Ephemeral streams characterize the drainage features within the proposed project area, except for Dye Creek, which is a perennial stream (SDG&E 2013a). Surface water bodies that are traversed by the proposed project alignment are shown in Table 5.9-1.

Table 5.9-1: Surface Waters Traversed by the Proposed Project Water Body Vater Body			
Pole Number	Name	Feature Type	Flow Characteristics
P5	Unnamed	Ephemeral drainage	Water flows south to north across a road through a corrugated metal pipe to a blue line drainage.
R11	Unnamed	Blue line drainage	Water flows east to west along a road.
R11	Unnamed	Road rut drainage	Water flows east to west along a road and possibly connects with a blue line drainage.
R13	Unnamed	Blue line drainage	Water flows east to west.
R17	Unnamed	Road rut drainage	Water flows from east to west along a road and connects with a blue line drainage.
R174	Unnamed	Road rut drainage	Water flows from east to west, then crosses a road to connect to a blue line.
P23	Unnamed	Ephemeral drainage	Water flows from east to west, then connects to a blue line.
D31	Unnamed	Ephemeral drainage	Water flows northwest to southeast, then connects to an unnamed stream leading to San Vicente Creek.
D33	Unnamed	Ephemeral drainage	Water flows northwest to southeast, then connects to an unnamed stream leading to San Vicente Creek.
D33	Unnamed	Ephemeral drainage	Water flows northwest to southeast, then connects to an unnamed stream leading to San Vicente Creek.
P35	Unnamed	Ephemeral drainage	Water flows northwest to southeast, then connects to an unnamed stream leading to San Vicente Creek.
P35	Unnamed	Ephemeral drainage	Water flows northwest to southeast, then connects to an unnamed stream leading to San Vicente Creek.
P35	Unnamed	Ephemeral drainage	Water flows northwest to southeast, then connects to an unnamed stream leading to San Vicente Creek.
P36	Unnamed	Ephemeral drainage	Water flows northwest to southeast, then connects to an unnamed stream leading to San Vicente Creek.
P37	Unnamed	Ephemeral drainage	Water flows northwest to southeast, then connects to an unnamed stream leading to San Vicente Creek.
P37	Unnamed	Ephemeral drainage	Water flows northwest to southeast, then connects to an unnamed stream leading to San Vicente Creek.
P38	Unnamed	Ephemeral drainage	Water flows northwest to southeast, then connects to an unnamed stream leading to San Vicente Creek.
P39	Unnamed	Intermittent drainage	Water flows northwest to southeast, then connects to an unnamed stream leading to San Vicente Creek.
D40	Unnamed	Ephemeral blue line stream	Water flows northwest to southeast, then connects to an unnamed stream leading to San Vicente Creek.
P45	Unnamed	Ephemeral drainage	Flow diverted east to west (via concrete channel and pipe) to an unnamed stream and then San Vicente Creek.
P49	Unnamed	Ephemeral drainage	Water flows southeast to northwest. Historically would connect to an unnamed stream. Currently obstructed by houses.
P51	Unnamed	Ephemeral drainage	Water flows east to west and is piped across the street to an unnamed stream connecting to San Vicente Creek.

Table 5.9-1:	Surface Wat	ters Traversed by t	he Proposed Project
Pole Number	Water Body Name	Feature Type	Flow Characteristics
P51	Unnamed	Ephemeral drainage	Water flows east to west and is piped across the street to an unnamed stream connecting to San Vicente Creek.
P54	Unnamed	Ephemeral drainage	Water flows north to south; connectivity is blocked by an earthen dam to protect housing tract from flooding.
P62	Unnamed	Blue line drainage	Water flows north to south through a corrugated metal pipe to the opposite side of the road.
P63	Unnamed	Ephemeral drainage	Water flows north to south to connect to a blue line drainage.
P63	Unnamed	Ephemeral drainage	Water flows north to south and would historically connect to a blue line drainage; however, this is obstructed by a housing development.
P64	Unnamed	Ephemeral drainage	Water flows north to south, connecting to a blue line drainage.
P65	Unnamed	Ephemeral drainage	Water flows north to south, connecting to a blue line drainage.
R66	Unnamed	Ephemeral drainage	Water flows north to south, connecting to a blue line drainage.
P68	Unnamed	Ephemeral drainage	Water flows north to south, connecting to a blue line drainage.
P76	Unnamed	Road rut drainage leading to erosion feature	Water flow is east to west and is the result of a road rut. Water flows into an erosion drainage that leads to a blue line drainage.
P77	Unnamed	Road rut drainage leading to erosion feature	Water flows northeast to southwest and is the result of a road rut. Water flows into an erosion drainage that leads to a blue line drainage.
P79	Unnamed	Ephemeral drainage	Start of a drainage feature leading to a blue line.
P80	Unnamed	Ephemeral drainage	Water flows southeast to northwest into a blue line.
P81	Unnamed	Ephemeral drainage	Water flows east to west into a blue line.
P85	Unnamed	Ephemeral drainage	Water flows north to south, and is an erosion feature that connects with a blue line.
P87	Unnamed	Ephemeral drainage	Water flows south to north into a blue line.
P98	Unnamed	Ephemeral drainage	Water flows from northwest to southeast to connect to San Vicente Creek.
P99	Unnamed	Ephemeral drainage	Water flows north to southwest to connect with San Vicente Creek.
P101	Unnamed	Ephemeral drainage	Water flows from northwest to southeast to connect with San Vicente Creek.
P104	Unnamed	Ephemeral drainage	Water flows from northwest to southeast to connect with San Vicente Creek.
P111	Unnamed	Ephemeral drainage	Water flows south to north to connect to Dye Creek.
P115	Unnamed	Ephemeral drainage	Water flows north to southwest, connecting to Dye Creek.
P115	Unnamed	Ephemeral drainage	Water flows north to southwest, connecting to Dye Creek.

Table 5.9-1:	Surface Wat	ters Traversed by t	he Proposed Project
Pole Number	Water Body Name	Feature Type	Flow Characteristics
P117	Unnamed	Ephemeral drainage	Water flows north to south into another drainage leading to Dye Creek.
P118	Unnamed	Ephemeral drainage	Water flows north to south into another drainage leading to Dye Creek.
P121	Unnamed	Ephemeral drainage	Water flows north to south into another drainage leading to Dye Creek.
P142	Unnamed	Ephemeral drainage	Water flows east to west into another drainage leading to the San Diego River.
P143	Unnamed	Ephemeral drainage	Water flows east to west into another drainage leading to the San Diego River.
P143	Unnamed	Man-made drainage	Water flows east to west into another drainage leading to the San Diego River.
P144	Unnamed	Ephemeral drainage	Water flows east to west into another drainage leading to the San Diego River.
P149	Unnamed	Man-made drainage	Water flows east to west, diverts water parallel to road, then is piped under the road to connect to a blue line drainage.
P152	Unnamed	Ephemeral drainage	Water flows east to west, crosses overland travel route, then crosses under the AR to connect to a blue line drainage.
P158	Unnamed	Ephemeral drainage	Water flows east to west, to an apparent seep outside the project area.
P160	Unnamed	Ephemeral drainage	Water flows east to west. Historically flowed into drainage; currently obstructed by housing development.
P161	Unnamed	Ephemeral drainage	Water flows east to west into water diversion.
Santa Ysabel Helicopter Landing Zone	Unnamed	Ephemeral drainage	Water flows southeast to northwest, is diverted parallel to State Route 79, and is piped across the street to join Santa Ysabel Creek.

Source: SDG&E 2013b.

Four watersheds make up the proposed project study area as relevant to this analysis, including the San Diego River, San Vicente, Santa Ysabel, and Santa Maria watersheds (SDG&E 2013a).

Flood Hazards

According to a Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FEMA 2012), the project alignment is in FEMA Zone X and is considered outside of 100-year and 500-year floodplains and subject to minimal flooding. The project alignment is not located downstream of a dam or within a dam inundation area. In addition, based on document review, there are no dams or facilities upstream of the site that could cause inundation of the subject site.

Groundwater

The proposed project study area contains 27 groundwater basins that are the product of unconsolidated alluvial aquifers.

Surface Water Quality

Under Section 303(d) of the Clean Water Act (CWA), the State Water Resources Control Board (SWRCB) is required to develop a list of water quality limited segments for jurisdictional "waters of the United States." The waters on the list do not meet water quality standards; therefore, the San Diego RWQCB was required to establish priority rankings and develop action plans, called total maximum daily loads (TMDLs), to improve water quality. The California Environmental Protection Agency approved the RWQCB's 303(d) list of water quality limited segments in February 2009. The list includes pollutants causing impairment to receiving waters, or in some cases, the condition leading to impairment. The proposed project site lies within the San Dieguito Hydrologic Unit and the San Diego River Hydrologic Unit, consisting of 67 drainages or hydrologic features potentially subject to U.S. Army Corps of Engineers (ACOE). California Department of Fish and Wildlife (CDFW), and RWQCB jurisdiction. As shown on Figure 5.9-1, 11 poles are located within jurisdictional wet meadows as determined by the ACOE and the RWQCB. One of the 11 existing poles located within jurisdictional wet meadows would be permanently removed from the existing alignment as part of the proposed project; therefore, only 10 poles would be removed and relocated as shown on Figure 5.9-1. Additionally, six existing poles along Creelman Lane (east of Keyes Road) are located within jurisdictional unvegetated streambeds/waters of the United States as determined by the ACOE, the CDFW, and the RWQCB (SDG&E 2013a, 2013b).

5.9.2 Regulatory Setting

Federal

Clean Water Act

Increasing public awareness and concern for controlling water pollution led to enactment of the Federal Water Pollution Control Act Amendments of 1972. As amended in 1977, this law became commonly known as the CWA (33 U.S.C. 1251 et seq.). The CWA established basic guidelines for regulating discharges of pollutants into the waters of the United States. The CWA requires that states adopt water quality standards to protect public health, enhance the quality of water resources, and ensure implementation of the CWA.

National Pollutant Discharge Elimination System

The National Pollutant Discharge Elimination System (NPDES) permit program, as authorized by Section 402 of the CWA, was established to control water pollution by regulating point sources that discharge pollutants into waters of the United States. In the State of California, the U.S. Environmental Protection Agency (EPA) has authorized the SWRCB permitting authority to implement the NPDES program. In general, the SWRCB issues two baseline general permits: one for industrial discharges and one for construction activities. The Phase II Rule that became final on December 8, 1999, expanded the existing NPDES program to address stormwater discharges from construction sites that disturb land equal to or greater than 1 acre.

Section 401 of the Clean Water Act

Section 401 of the CWA requires an applicant for a federal permit, such as for the construction or operation of a facility that may result in the discharge of a pollutant, to obtain certification of

those activities from the state in which the discharge originates. This process is known as Water Quality Certification.

Section 404 of the Clean Water Act

Section 404 of the CWA established a permitting program to regulate the discharge of dredged or filled material into waters of the United States, which include wetlands adjacent to national waters. This permitting program is administered by the ACOE and enforced by the EPA.

Section 10 of the Rivers and Harbors Act

Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403) requires the ACOE to authorize construction of any structure in or over navigable waters of the United States or obstruction or alteration in a navigable water. A structure or work outside the limits defined for navigable waters of the United States requires a Section 10 permit if the structure or work affects the course, location, condition, or capacity of the water body. Navigable waters are defined as waters that are subject to the ebb and flow of the tide.

Safe Drinking Water Act

The Safe Drinking Water Act (SDWA) (42 U.S.C. 201) was originally passed by Congress in 1974 to protect public health by regulating the public drinking water supply. The law was amended in 1986 and 1996 and requires many actions to protect drinking water and its sources, including rivers, lakes, reservoirs, springs, and groundwater wells. The act authorizes the EPA to set national health-based standards for drinking water to protect against both naturally occurring and man-made contaminants that may be found in drinking water. The EPA states that established drinking water standards must be met, and water agencies must work together to enforce standards.

Through Title 40, Part 144, of the Code of Federal Regulations (CFR) (40 CFR 144), the SDWA prohibits any injection activity that could allow the movement of fluid-containing contaminants into underground sources of drinking water if the presence of that contaminant could cause a violation of any primary drinking water regulation under 40 CFR 142, or that would otherwise adversely affect public health. This regulation allows the director to take emergency action if a known contaminant is present or is likely to enter a public water system or underground drinking water source.

National Flood Insurance Program

FEMA administers the National Flood Insurance Program under the U.S. Department of Homeland Security. The program encourages the adoption and enforcement by local communities of floodplain management ordinances that reduce flood risks. In support of the program, FEMA identifies flood hazard areas throughout the United States on FEMA flood hazard boundary maps.

State and Local

Streambed Alteration Agreement

Sections 1601–1603 of the California Fish and Game Code require an agreement between the CDFW and a public agency proposing to substantially divert or obstruct the natural flow or effect changes to the bed, channel, or bank of any river, stream, or lake. The agreement is designed to protect the fish and wildlife values of a river, lake, or stream.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act of 1967 (California Water Code, Section 13000 et seq.) requires the SWRCB and the nine RWQCBs to adopt water quality criteria to protect state waters. These criteria include the identification of beneficial uses, narrative and numerical water quality standards, and implementation procedures. The criteria for the project area are contained in the water quality control plan for the San Diego Basin.

State Water Resources Control Board

The SWRCB is responsible for issuing stormwater permits in accordance with the NPDES program. For projects disturbing 1 or more acres of land, the applicant must file a Notice of Intent for coverage under the General Permit for Stormwater Discharges Associated with Construction Activity (General Permit) and prepare a stormwater pollution prevention plan (SWPPP) that specifies best management practices (BMPs) to prevent pollutants from contacting stormwater and procedures to control erosion and sedimentation.

Regional Water Quality Control Board

The RWQCBs govern the protection of surface waters by assessing the attainment of designated beneficial uses and by issuing permits and/or certifications, such as CWA Section 401 water quality certifications and Section 402 (NPDES) permits. Each RWQCB is responsible for water quality control planning within its region through a water quality control plan, or basin plan. The proposed project falls within the jurisdiction of the Region 9 RWQCB and is subject to the Region 9 (San Diego) Basin Plan. The RWQCB is also responsible for implementing the provisions of the General Permit, including reviewing SWPPPs and monitoring reports, conducting compliance inspections, and taking enforcement actions. In addition, the RWQCB may issue individual dewatering permits for discharges associated with construction projects.

Municipal Stormwater Permit

On January 24, 2007, the San Diego RWQCB issued an NPDES Municipal Stormwater Permit (Order No. R9-2007-0001) to the county and 20 other cities or jurisdictions in the region. The 2007 permit renews Permit No. CAS0108758, which was previously issued on July 16, 1990 (Order No. 90-42), and renewed on February 21, 2001. The renewed permit requires the development and implementation of BMPs in development planning and construction of private and public development projects. Development projects are also required to include BMPs to reduce pollutant discharges from the project site in the permanent design. BMPs associated with the final design are described in the Model Standard Urban Storm Water Mitigation Plan. In addition, the county requires a stormwater management plan to describe potential construction and post-construction pollutants and identify BMPs to protect water resources.

County of San Diego Code of Regulatory Ordinances Sections 67.801–67.814, Watershed Protection, Stormwater Management, and Discharge Control Ordinance

The county's Watershed Protection, Stormwater Management, and Discharge Control Ordinance (WPO) was adopted in March 2008 and revised in January 2010. The purpose of the WPO is to protect water resources and improve water quality by controlling the non-stormwater conveyance system and receiving waters, to cause the use of management practices by the county and its citizens that would reduce the adverse effects of polluted runoff discharges on waters of the state, to secure benefits from the use of stormwater as a resource, and to ensure that the county is compliant with state and federal law. The WPO establishes standards and requirements that are legally enforceable by the county within the county's jurisdiction. Projects that require a permit (e.g., administrative permit, Major Use Permit, grading permit) are required to demonstrate compliance with the WPO. Section 67.804, for example, specifically addresses waste discharge and prohibits the discharge of pollutants to the stormwater system unless they are permitted through the NPDES program.

As part of the revised ordinance, Priority Development Projects are required to incorporate lowimpact development (LID) techniques. Adopted in 2008, the LID Handbook was developed to compliment the WPO by providing guidance regarding LID techniques and practices. LID design considerations for proposed private projects may include the following: (1) draining runoff from impervious areas into pervious areas based on the capacity to treat/hold runoff; (2) designing pervious areas to receive and treat runoff by using swales, detention, and/or bioretention and using amended soils to increase infiltration; (3) using porous pavements where appropriate; (4) conserving natural areas, trees, vegetation, and soils; (5) constructing streets, sidewalks, and parking areas to the minimum widths necessary for public safety, thereby retaining pervious areas; (6) minimizing the impervious footprint of the project and disconnecting impervious surfaces; (7) minimizing soil compaction (under planned green/open areas); and (8) minimizing disturbance to natural drainages.

County of San Diego Grading Ordinance

The County Code Title 8, Division 7, Excavation and Grading, Clearing and Watercourses,¹ echoes protections at the federal level by prohibiting any actions or development that would impede water flows, and addresses grading and clearing near watercourses. The Grading Ordinance requires that projects involving more than 200 cubic yards of grading, clearing, and/or removal of natural vegetation obtain a grading permit.

Chapter 6 of the ordinance exists to protect persons and property against flood hazards by prohibiting the alteration of the surface of land so as to reduce the capacity of a watercourse and prohibit any action that impairs, impedes, or accelerates the flow of water in a watercourse in such a manner that adversely affects adjoining properties. The ordinance prohibits any land

¹ The ordinance defines a watercourse as any surface water body (including any arroyo, canal, channel, conduit, creek, culvert, ditch, drain, gully, ravine, reservoir, river, stream, wash, waterway, or wetland) in which waters from a tributary drainage area of 100 acres or larger flow in a definite direction or course, either continuously or intermittently, and any area adjacent thereto which is subject to inundation from a 100-year flood.

alteration or construction of structures in, upon, or across a watercourse without first obtaining a permit. Enforcement occurs at the time that grading plans or improvement plans are reviewed during the grading permit process. The lines of inundation need to be shown on the plot plan in order to comply with the Grading Ordinance, Section 87.602(a). The county official shall not approve the grading plans or improvement plans unless he or she determines that the proposed grading does not create an unreasonable hazard of flood or inundation to persons or property.

County of San Diego Flood Damage Prevention Ordinance

The purpose of this ordinance is to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas. In order to accomplish its purposes, this ordinance includes methods and provisions for (a) restricting or prohibiting uses that are dangerous to health, safety, and property due to water or erosion hazards or that result in damaging increases in erosion or flood heights or velocities; (b) requiring that uses vulnerable to floods, including facilities that serve such uses, be protected against flood damage at the time of initial construction; (c) controlling the alteration of natural floodplains, stream channels, and natural protective barriers, which help accommodate or channel flood waters; (d) controlling filling, grading, dredging, and other development that may increase flood damage; and (e) preventing or regulating the construction of flood barriers that would unnaturally divert flood waters or that may increase flood hazards in other areas. The provisions of the ordinance are enforced with the requirement to obtain a development permit before new construction, substantial improvements, or development begins within any area of special flood hazards.

5.9.3 Environmental Impacts

Significance Criteria

Appendix G of the California Environmental Quality Act (CEQA) (14 CCR, Section 15000 et seq.) suggests that a development project could have a significant impact on hydrology and water quality if the project 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 groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on or off site
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site
- Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff
- Otherwise substantially degrade water quality

- Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map
- 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
- Be at risk of inundation by seiche, tsunami, or mudflow.

Impact Discussion

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

During construction of the proposed project, there would be potential for limited, minor erosion, siltation, and discharge of pollutants as a result of stormwater runoff from disturbed areas; however, ground disturbance would be limited to minor grading activities within and around individual pole sites. To minimize impacts related to erosion and discharge of pollutants, San Diego Gas & Electric (SDG&E) has proposed Applicant Proposed Measure (APM)-HYD-1 (see Section 4.8, Table 4-6 of this Initial Study), which would implement best management practices (BMPs) as part of the stormwater pollution prevention plan (SWPPP) to be prepared as required by the National Pollutant Discharge Elimination System (NPDES) General Construction Activity Storm Water Permit (General Permit). BMPs to be implemented during construction are outlined in SDG&E's Water Quality Construction BMP Manual.

Construction-related BMPs identified in the SWPPP may include silt fence, fiber rolls, street sweeping and vacuuming, storm drain inlet protection, stockpile management, solid waste management, stabilized construction entrances/exits, vehicle and equipment maintenance, a desilting basin, gravel bag berms, sandbag barriers, material delivery and storage, spill prevention and control, concrete waste management, or other related BMPs. Implementation of BMPs as identified in the SWPPP would ensure that the proposed project would comply with all federal, state, and local water pollution control laws and that impacts to water quality and waste discharge during construction would remain less than significant.

Following completion of construction activities, operations and maintenance activities would resemble those currently administered by SDG&E for the existing Tie-Line (TL) 637 alignment and activities would not increase in duration, intensity, or frequency. Operations and maintenance would require routine and periodic equipment testing, pole brushing, herbicide application, and other related ongoing maintenance tasks similar to those currently conducted by SDG&E, which could result in pollutant runoff. As identified in Table 5.9-1, the proposed project alignment traverses a number of surface water bodies. To ensure that impacts to these surface water features during operation and maintenance activities would remain less than significant, Mitigation Measure (MM) HYD-1, MM HYD-2, and MM HYD-3 are provided. Implementation of MM HYD-1 through MM HYD-3 would ensure that operation of the proposed project would not result in significant impacts resulting from pollutant runoff. Additionally, operation and maintenance activities would disturbance or any other activity that may violate water quality standards or waste discharge requirements, and no new sources of point-source discharges would be introduced as a result of project implementation. As such, impacts would be less than significant.

- **MM HYD-1** During routine operation and maintenance activities, if erosion is discovered along the proposed project alignment that would affect a surface water feature, including but not limited to a wet meadow, stream, channel or any other surface water body, San Diego Gas &Electric shall implement erosion control measures including but not limited to:
 - Periodic inspection and maintenance, including cleaning dips and crossdrains, repairing non-jurisdictional ditches, marking culvert inlets to aid in location, and clearing debris from culverts.
 - Avoid using roads during wet periods if such use would damage road drainage features.
 - Grade road surfaces only as often as necessary to maintain a stable running surface and to retain the original surface drainage.
 - Place all excess material removed by maintenance operations in safe disposal sites and stabilize these sites to prevent erosion. Avoid locations where erosion will carry materials into a stream.
- **MM HYD-2** Herbicides shall not be applied within 100 feet of a surface water feature, including but not limited to a wet meadow, stream, channel, or any other surface water body.
- **MM HYD-3** During pole repair work, mowing or trimming of vegetation shall be conducted to ensure that ground disturbance is minimized. Vegetation clearing shall be avoided where feasible. In the unlikely event that vegetation clearing or minor grading is required during operation and maintenance activities, San Diego Gas & Electric shall establish a temporary work site where work is to be conducted. Any topsoil or vegetation removed during this process shall be stored, and redistributed over the temporary work site when maintenance activities are completed, unless clearance is required around the poles.
- b) 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 (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?

The project would not require permanent groundwater pumping during any phase of construction or for long-term operational purposes. Dewatering at specific pole sites may be required if shallow groundwater resources are discovered during excavation of pole structure foundations or other ground-disturbing activities. If required, dewatering would occur in small, isolated patches and pumping activities would be short term; therefore, dewatering, if required, would not affect local deep-water well resources. Under these conditions, pumped water would be discharged at a nearby location, thereby returning water volumes to the local groundwater

aquifer. Should contaminated water be encountered during this process, water would be handled and disposed of in accordance with all applicable federal, state, and local laws governing contaminated water resources and disposed of at an appropriate off-site location.

As the project would not require the use of permanent groundwater resources and would not construct new structures that would affect groundwater recharge, implementation of the proposed project would not result in a net decrease in groundwater aquifer volumes and impacts would be less than significant.

c) 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?

As previously discussed, 11 existing poles along the TL 637 alignment are located within jurisdictional wet meadows as determined by the U.S. Army Corps of Engineers (ACOE) and the Regional Water Quality Control Board (RWQCB), and 6 poles are located within jurisdictional unvegetated streambeds/waters of the United States as designated by the ACOE, the California Department of Fish and Wildlife (CDFW), and the RWQCB. Additionally, the proposed project would include installation of steel plates that would cover two jurisdictional areas to provide temporary access during construction activities. Temporary and permanent impacts to these areas are discussed below.

Temporary Impacts

Removal and replacement of pole structures along the proposed project alignment would require direct access to the poles from adjacent dirt roads and minimal workspace immediately around individual pole sites during extraction and installation. Removal and replacement of pole butts would result in temporary impacts including impacts to 0.13 acre of jurisdictional wetlands and 0.04 acre of jurisdictional streambeds (SDG&E 2013b). To reduce impacts associated with pole butt removal, SDG&E will implement the conditions specified in the RWQCB for a Clean Water Act (CWA) Section 401 Water Quality Certification (certification no. 11C-114) issued for the project on May 16, 2012 (MM HYD-4). Under CEQA implementation of the conditions specified in the RWQCB 401 Certification would ensure the project comply with state and federal water pollution control laws.. Therefore, implementation of MM HYD-4 would ensure that impacts to drainage features, including those from erosion and siltation during construction, would remain less than significant.

MM HYD-4 San Diego Gas &Electric shall implement the terms and conditions as specified in the Regional Water Quality Control Board Clean Water Act Section 401 Certification (Certification No. 11C-114; May 16, 2012), which identifies the poles to remain in place and those to be relocated outside jurisdictional areas.

Permanent Impacts

Removal and replacement of existing wood pole structures during construction would occur from adjacent dirt roads and minimal workspace immediately around individual pole sites during extraction and installation. Construction activities would result in approximately 98 square feet (0.002 acre) of total permanent impacts to previously disturbed wet meadows (SDG&E 2013b).

Removal and replacement of the 17 existing wood pole structures currently located in previously disturbed jurisdictional wet meadows and jurisdictional unvegetated streambeds/waters of the United States, as well as installation of temporary steel plates, would be conducted under an ACOE non-notifying Nationwide Permit 12 and a Section 401 Certification from the RWQCB.

SDG&E has proposed APM-HYD-1 (see Section 4.8, Table 4-6 in this Initial Study), which calls for implementation of BMPs as part of the SWPPP to be prepared as required by the NPDES General Permit. Additionally, MM HYD-4 is provided to ensure that no significant impacts would occur during pole butt removal. Implementation of BMPs as part of the SWPPP and SDG&E's Water Quality Construction BMP Manual, as well as MM HYD-4, would ensure that impacts related to erosion, siltation, and runoff during construction would be less than significant.

Following completion of construction activities, operations and maintenance activities would resemble those currently administered by SDG&E for the existing TL 637 alignment and activities would not increase in duration, intensity, or frequency. As shown in Table 5.9-1, the proposed project alignment would traverse a number of surface water features that are currently traversed by the existing TL 637 alignment. Because the proposed project would involve the removal and replacement of existing pole structures in the same locations as existing poles and would not result in the construction of new facilities, the proposed project would not alter the existing drainage patterns of the site or area such that it would result in erosion or siltation within the alignment or in an off-site location. Moreover, the proposed project would require fewer pole structures than the existing alignment; therefore, fewer facilities would be installed under the proposed project that would potentially impact existing drainage patterns or a surface water course. Impacts would be less than significant.

d) 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 substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site?

As discussed in impact discussion response (c), although the project would traverse a number of surface water features as listed in Table 5.9-1, the proposed project would involve the removal and replacement of existing pole structures in the same locations as existing poles. Implementation of the project would not result in the construction of new facilities or introduce new or increased impervious surface area to the project alignment that could increase runoff volumes or alter drainage patters. Because the proposed project would involve the removal and replacement of existing pole structures and would require fewer pole structures than the existing alignment, implementation of the project would not substantially alter the course of an existing drainage such that it would result in flooding. Impacts would be less than significant.

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

As discussed in impact discussion response (c), the project would not create or contribute substantial runoff. The proposed project would involve the removal and replacement of existing pole structures and would not result in the construction of new facilities or introduce new or increased impervious surface area to the proposed project alignment that could increase runoff volumes. Additionally, SDG&E has proposed APM-HYD-1 (see Section 4.8, Table 4-6 in this Initial Study), which would implement BMPs as part of the SWPPP to be prepared as required by the NPDES General Permit. Implementation of BMPs as part of the SWPPP and SDG&E Water Quality Construction BMP Manual would ensure that impacts related to runoff would be less than significant. Therefore, the project would not create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems. Impacts would be less than significant.

f) Would the project otherwise substantially degrade water quality?

Implementation of the proposed project would result in less-than-significant impacts regarding erosion and siltation as well as discharge of pollutants resulting from stormwater runoff from disturbed areas during construction. Proposed project construction and operational activities would not result in alteration to existing drainage patterns and therefore would not result in substantial long-term erosion or siltation. To reduce impacts of construction-related activities that could affect water quality, APM-HYD-1 would be implemented as discussed in impact discussion response (a) (see Section 4.8, Table 4-6 in this Initial Study). The project would not result in a prohibited discharge, as defined in the RWQCB Basin Plan, or conflict with any water quality objectives or applicable regulations. Impacts would be less than significant.

g) Would the project place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

No housing would be constructed as a result of the proposed project. Therefore, there would be no flood hazard impacts to residents as a result of the proposed project.

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

No new structures would be constructed that would impede or redirect flood flow within a 100year flood hazard area. As a result, the project would not impact flood flows.

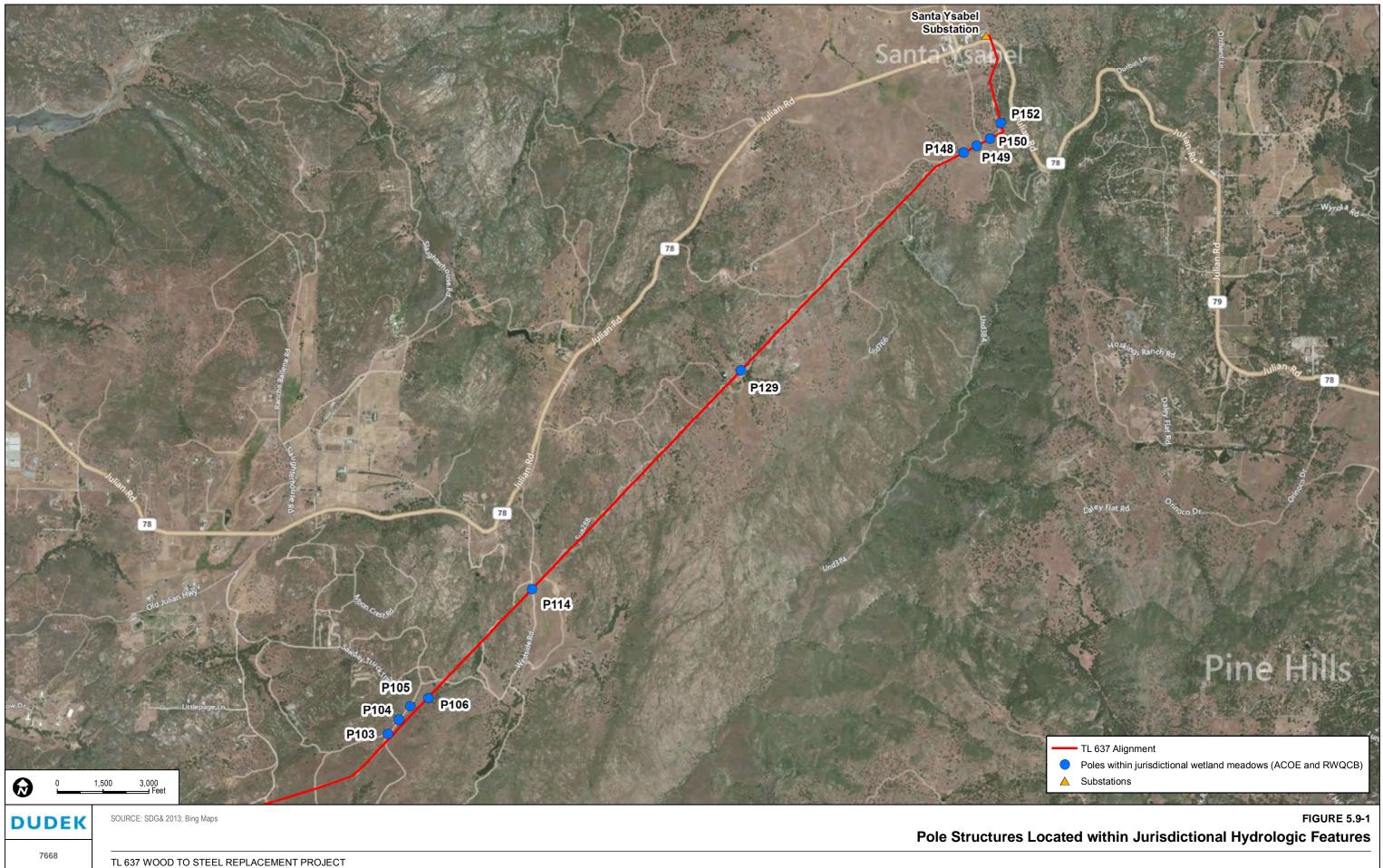
i) Would the project expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?

As discussed in Section 5.9.1, the proposed project alignment is not located downstream of a dam or within a dam inundation area. In addition, based on document review, there are no dams or facilities upstream of the site that could cause inundation of the project site. Additionally, no

building structures would be constructed as part of the proposed project; therefore, no impact would occur.

j) Would the project be at risk of inundation by seiche, tsunami, or mudflow?

Hydrologic and topographic conditions of the project site and surrounding area do not lend themselves to these conditions. The proposed project alignment is not located near any water body that would potentially be affected by a seiche, tsunami, or mudflow; therefore, the proposed project would not be susceptible to any of the above-stated natural phenomena. No impact would occur.



INTENTIONALLY LEFT BLANK

5.10 LAND USE AND PLANNING

Wo	uld the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a)	Physically divide an established community?				\boxtimes
b)	Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?				
c)	Conflict with any applicable habitat conservation plan or natural community conservation plan?				

5.10.1 Environmental Setting

Information presented in this section was gathered from a review of San Diego Gas & Electric's (SDG&E's) Proponent's Environmental Assessment (PEA) (SDG&E 2013a) and data responses (SDG&E 2013b), as well as from site visits, review of aerial photographs, and review of the County of San Diego's General Plan, the Ramona Community Plan, the Central Mountain Subregional Plan, and the North Mountain Subregional Plan.

5.10.1.1 Existing Land Uses

As discussed in Chapter 1.0, the Tie-Line 637 Wood-to-Steel Replacement Project (proposed project) is located within a central portion of unincorporated San Diego County, California, specifically within the Ramona and Santa Ysabel communities (see Chapter 4.0, Figure 4-1, Regional Map, and Figure 4-2, Vicinity Map). In addition to the County of San Diego, the proposed project alignment traverses federal and state jurisdictional boundaries including the U.S. Bureau of Land Management (BLM) on the Mount Gower Preserve, a segment of the Cleveland National Forest managed by the United States Forest Service (USFS), and the California Department of Transportation (Caltrans) rights-of-way (ROW) at State Route (SR) 78 and SR 79.

Land uses surrounding the project alignment include semi-rural residential development; agricultural; grazing, ranchland, and horse pastures; and several small commercial uses. According to the County of San Diego's zoning designations, the existing zoning classifications on the project alignment include Limited Agriculture (A70), General Agriculture (A72), Open Space (S80), and General Rural (S92). Various permanent components and temporary staging areas under the proposed project are located on land zoned as agricultural (A70 and A72). The closest residences to the proposed alignment are located directly adjacent to the proposed project alignment.

5.10.1.2 Planned Land Uses

Planned land uses are those designated in long-range planning documents including land management plans, resource management plans, and general plans that are intended to guide the future development and growth patterns of a given jurisdiction. The County of San Diego General Plan does not include an agricultural land use designation; however, the proposed project traverses parcels designated Rural, Semi-Rural, Open Space–Recreation, and Public Agency Lands. Land uses relevant to the proposed project, along with identified land use units as listed in Table 5.10-1, are shown on Figure 5.10-1.

1: Existing	and Designated Land	Uses within P	roject Alignment	
Community	General Plan Land Use Designation	Zoning Designation	Existing Land Use	Length of Land Use Unit
Ramona	Public/Semi-Public Facilities and Semi-Rural Residential (SR-2, SR-4, SR10)	Agriculture	Existing electric distribution and power lines, existing substation, rural residences	0.9 mile
Ramona	Open Space– Conservation	Specific Plan	Existing electric distribution and power lines, Simon Park Preserve, Mount Gower	0.9 mile
Ramona	Specific Plan, Open Space–Conservation, Village Residential (VR-2)	Rural Residential	Existing electric distribution and power lines, residences	1.9 miles
Ramona to Santa Ysabel	Public Agency Lands, Rural Lands (RL-40, RL-80)	Agriculture	Existing electric distribution and power lines, private residences, grazing land	9.6 miles
Santa Ysabel	Public Agency Lands, Open Space– Conservation, Rural Lands (RL-80), Village Residential (VR-2.9)	Agriculture, Rural Residential, and Commercial Office	Existing electric distribution and power lines, grazing lands, private residents, small commercial facilities	0.2 mile
	Staging	Yards/HLZs		
Ramona	Public/Semi-Public Facilities	Agriculture	Existing Creelman Substation	N/A
Ramona	Semi-Rural Residential (SR-2)	Agriculture	Empty lot	N/A
Santa Ysabel	Open Space– Conservation	Agriculture	Storage lot	N/A
Santa Ysabel	Rural Lands (RL-80)	Agriculture	Empty lot	N/A
Ramona	Open Space- Conservation	Specific Plan	Unpaved parking lot	N/A
Ramona/Sa nta Ysabel	Rural Lands (RL-80)	Agriculture	Open grazing land	N/A
	Community Ramona Ramona Ramona to Santa Ysabel Santa Ysabel Ramona Ramona Santa Ysabel Santa Ysabel Ramona Ramona	CommunityGeneral Plan Land Use DesignationRamonaPublic/Semi-Public Facilities and Semi-Rural Residential (SR-2, SR-4, SR10)RamonaOpen Space- ConservationRamonaSpecific Plan, Open Space-Conservation, Village Residential (VR-2)Ramona to Santa YsabelPublic Agency Lands, Rural Lands (RL-40, RL-80)Santa YsabelPublic Agency Lands, Open Space- Conservation, Rural Lands (RL-80), Village Residential (VR-2.9)RamonaPublic Agency Lands, Open Space- Conservation, Rural Lands (RL-80), Village Residential (VR-2.9)RamonaPublic/Semi-Public FacilitiesRamonaSemi-Rural Residential (SR-2)Santa YsabelOpen Space- ConservationRamonaRural Lands (RL-80)Santa YsabelOpen Space- ConservationRamonaSemi-Rural Residential (SR-2)Santa YsabelOpen Space- ConservationRamonaRural Lands (RL-80)RamonaRural Lands (RL-80)	CommunityGeneral Plan Land Use DesignationZoning DesignationRamonaPublic/Semi-Public Facilities and Semi-Rural Residential (SR-2, SR-4, SR10)AgricultureRamonaOpen Space- ConservationSpecific PlanRamonaSpecific Plan, Open SpaceConservation, Village Residential (VR-2)Rural Residential Residential (VR-2)Ramona to Santa YsabelPublic Agency Lands, Rural Lands (RL-40, RL-80) Village Residential (VR-2)AgricultureSanta YsabelPublic Agency Lands, Qpen Space- Conservation, Rural Lands (RL-80), Village Residential (VR-2.9)Agriculture, Rural Residential, and Commercial OfficeRamonaPublic Agency Lands, Open Space- Conservation, Rural Lands (RL-80), Village Residential (VR-2.9)Agriculture, Rural Residential, and Commercial OfficeRamonaSemi-Rural Residential (SR-2)AgricultureSanta YsabelOpen Space- ConservationAgricultureRamonaSemi-Rural Residential (SR-2)AgricultureSanta YsabelOpen Space- ConservationAgricultureSanta YsabelQuen Space- ConservationAgricultureSanta YsabelRural Lands (RL-80)AgricultureRamonaOpen Space- ConservationSpecific PlanSanta YsabelRural Lands (RL-80)Agriculture	CommunityDesignationDesignationExisting Land UseRamonaPublic/Semi-Public Facilities and Semi-Rural Residential (SR-2, SR-4, SR10)AgricultureExisting electric distribution and power lines, existing substation, rural residencesRamonaOpen Space- ConservationSpecific PlanExisting electric distribution and power lines, Simon Park Preserve, Mount GowerRamonaSpecific Plan, Open Space-Conservation, Village Residential (VR-2)Rural Residential Residential (VR-2)Existing electric distribution and power lines, rivate residencesRamona to Santa YsabelPublic Agency Lands, Rural Lands (RL-40, RL-80)Agriculture, Rural Residential, and Open Space- Conservation, Rural Lands (RL-80), Village Residential (VR-2.9)Existing electric distribution and power lines, grazing lands, power lines, grazing lands, power lines, grazing lands, Rural Lands (RL-80), Village Residential (VR-2.9)Existing electric distribution and power lines, grazing lands, private residents, small commercial OfficeRamonaPublic/Semi-Public FacilitiesAgriculture, Rural Residential (VR-2.9)Existing CreeIman SubstationRamonaSemi-Rural Residential (SR-2)AgricultureExisting CreeIman SubstationRamonaOpen Space- ConservationAgricultureErnpty lotSanta YsabelOpen Space- ConservationAgricultureEmpty lotRamonaOpen Space- ConservationAgricultureEmpty lotSanta YsabelOpen Space- ConservationAgricultureEm

Table 5.10-1 shows existing and designated land uses within the proposed project alignment.

Source: SDG&E 2013b.

HLZ- helicopter landing zone; N/A - not applicable

5.10.2 Regulatory Setting

The California Public Utilities Commission (CPUC) has sole and exclusive jurisdiction over the siting and design of the proposed project because it authorizes the construction, operation, and maintenance of investor-owned public utility facilities. Although such projects are exempt from local land use and zoning regulations and discretionary permitting (i.e., they would not require any land use approval that would involve a discretionary decision to be made by a local agency such as a planning commission, city council, or county board of supervisors), General Order No. 131-D, Section XIV.B, requires that in locating a project, "the public utility shall consult with local agencies regarding land use matters." The public utility is required to obtain any required non-discretionary local permit. As such, a discussion of relevant plans and policies are provided for informational purposes.

Federal and State

No federal or state regulations regarding land use are relevant to the proposed project.

Local

As previously discussed, pursuant to Article 12, Section 8, of the California Constitution, the proposed project is not subject to local plans, policies, or regulations. As the lead agency under the California Environmental Quality Act (CEQA), the CPUC has independent jurisdiction and approval authority for the project. However, state agencies such as the CPUC are required to consider local land use policies and regulations when making decisions. Therefore, County of San Diego plans and policies are listed below for informational purposes and to assist in determining local land use compatibility.

County of San Diego General Plan

Originally undertaken in 1988, a new comprehensive General Plan was adopted by the County Board of Supervisors on August 3, 2011. In addition to the Land Use Element that designates the general location and intensity of land uses throughout the county, the General Plan includes subregional and community plans that contain policies specifically created to address the issues, characteristics, and visions of specific communities. Therefore, in addition to the General Plan Land Use Element, the subregional/community plans covering lands traversed by the proposed project, including the Ramona Community Plan, the Central Mountain Subregional Plan, and the North Mountain Subregional Plan, are also relevant for informational purposes.

A review of the General Plan Land Use Element indicates that several policies are relevant to the proposed project; however, since the County of San Diego has no approval authority for the proposed project, they are listed for information purposes only. General Plan policies relevant to the proposed project are analyzed in Table 5.10-2 in Section 5.10.3, Environmental Impacts.

Subregional/Community Plans

The proposed project traverses lands within the boundaries of the Ramona Community Plan, the Central Mountain Subregional Plan, and North Mountain Subregional Plan. Therefore, relevant policies of subregional and community planning areas spanned by the proposed project are identified below.

Ramona Community Plan

The Ramona Community Plan includes the following goals and policies related to land use relevant to the proposed project:

- Land Use Goal 5.1: Public facilities in the planning area that are provided in a manner to adequately serve development and to minimize costs to the taxpayers.
 - **Land Use Policy 5.1.7**: Encourage local service districts and utility companies to conform to the adopted Community Plan.
- **Conservation and Open Space Goal 1.1:** The conservation, preservation, and wise utilization of resources in the Ramona planning area.
 - **Conservation and Open Space Policy 1.1.7:** Encourage access along major creek drainages for riding and hiking trails, whenever possible.
 - **Conservation and Open Space Policy 1.1.10:** Encourage a brush management program in conjunction with other public agencies to reduce wildfire hazards.
 - **Conservation and Open Space Policy 1.1.12:** Discourage severe grading and encourage the preservation of native brush.
- **Conservation and Open Space Goal 1.2:** The preservation of Agriculture in the Planning Area.
 - Conservation and Open Space 1.2.1: Promote and preserve viable agricultural land uses and provide an attractive agricultural industry atmosphere within the Ramona Planning Area (County of San Diego 2011b).

Central Mountain Subregional Plan

The unified vision of the five communities composing the Central Mountain Subregion (Cuyamaca, Descanso, Guatay, Pine Valley, and Mount Laguna) is the "protection and preservation of [the] area's intrinsic beauty, its natural resources, and wildlife habitat, as well as the safety and well-being of area residents and motorists" (County of San Diego 2011c). The following policies of the Central Mountain Subregional Plan were determined to be relevant to the proposed project:

- Land Use Policy 7: All new and existing electrical utilities, telephone, and cable shall be put underground for safety and a more reliable systems operation, whenever feasible, and not damaging to the environment.
- Land Use Policy 9: No development shall be permitted on significant or prominent mountain tops, ridgelines, or summits.
 - **Private Inholdings In or Lands Adjacent to U.S. Forest Service Lands and State Parks Policy 3:** Lots abutting Cuyamaca Rancho and Anza Borrego State Parks and the Cleveland National Forest shall establish no access, such as roadways and trails, to the Park or Forest unless such access is permitted by the Park Superintendent or the Forest Ranger (County of San Diego 2011c).

North Mountain Subregional Plan

Scattered rural residential development and vast open expanses of land characterize the North Mountain Subregion (County of San Diego 2011d). The rural communities of Santa Ysabel, Warner Springs, and Palomar Mountain are included within the subregional plan area boundaries.

The following policies of the North Mountain Subregional Plan were determined to be relevant to the proposed project:

- Land Use, General Policy 7: Require development to demonstrate compliance with Conservation and Open Space Element Policies COS-4.4 and 5.3 and that the groundwater supply will not be adversely impacted.
- Land Use, General Policy 9: Require development projects proposed within 2,000 feet of the intersection of State Routes 78 and 79 to ensure that groundwater contamination has not occurred.

County of San Diego Zoning Ordinance

The County of San Diego Zoning Ordinance regulates land uses in the unincorporated portions of the County of San Diego and specifies permitted uses on established land use zones. The relevant zoning designations relevant to lands traversed by the proposed project alignment are Limited Agriculture (A70), General Agriculture (A72), Open Space (S80), and General Rural (S92).

Simon Preserve Resource Management Plan

The Simon Preserve is approximately 617 acres in size and is located from approximately 2 miles southeast of the unincorporated community of Ramona to approximately 13 miles northeast of the City of Poway. The Simon Preserve Resource Management Plan is a document that guides activities within the Simon Preserve in order to protect the biological and cultural resources present in the preserve. The Resource Management Plan not only catalogues the existing habitats, species, and resources within the preserve, it also guides future management of these resources and outlines operations and maintenance requirements for meeting management goals.

5.10.3 Environmental Impacts

Significance Criteria

Appendix G of the CEQA Guidelines (14 CCR, Section 15000 et seq.) provides guidance for evaluating whether a development project may result in significant impacts. Appendix G suggests that a development project could have a significant impact on land use and planning if the project would:

- a) Physically divide an established community
- b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect
- c) Conflict with any applicable habitat conservation plan or natural community conservation plan.

Impact Discussion

a) Would the project physically divide an established community?

The approximately 14-mile span of the Tie-Line (TL) 637 route along which the proposed fire hardening improvements would occur is located on private and public lands within a central portion of unincorporated San Diego County, specifically within the Ramona and Santa Ysabel communities (see Figure 4-1, Regional Map, and Figure 4-2, Vicinity Map). In addition to the County of San Diego, the proposed project alignment traverses federal and state jurisdictional boundaries including the BLM on the Mount Gower Preserve, a segment of the Cleveland National Forest managed by the USFS, and Caltrans ROW at SR 78 and SR 79. SDG&E was required to obtain a ROW grant amendment from the BLM for work proposed on the Mount Gower Preserve. The ROW grant was approved and issued by the BLM on June 1, 2012. In addition to the Mount Gower Preserve, the proposed project alignment crosses the Simon Preserve, which is owned and managed by the County of San Diego. SDG&E's easement traversing the Simon Preserve was established prior to County acquisition of the preserve in 1959; therefore, no permits or approvals are required for work on this easement.

Additionally, two poles along the project alignment located within the Cleveland National Forest (P115 and P116), have already been replaced; therefore, only reconductoring of the new tie-line associated with the proposed project would occur within the Cleveland National Forest under the jurisdiction of the USFS (SDG&E 2013a).

Land uses surrounding the project alignment include semi-rural residential development; agricultural; grazing, ranchland, and horse pastures; and several small commercial uses. Various permanent components and temporary staging areas under the proposed project are located on land zoned as Limited Agricultural (A70), General Agriculture (A72), Open Space (S80), and General Rural (S92). The closest residences to the proposed alignment are located directly adjacent to the alignment within San Diego Country Estates, where poles would be replaced within SDG&E's ROW (see Land Use Unit 3 on Figure 5.10-1).

The proposed project would replace existing wood pole structures with new steel pole structures, in addition to minor substation improvements and installation of a co-located fiber optic line, within the same ROW alignment as the existing TL 637; therefore, it would not introduce a new land use. Additionally, the proposed project would require fewer pole structures and less land area for project implementation when compared to existing conditions. As such, the project is considered consistent with the Ramona Community Plan, the Central Mountain Subregional Plan, the North Mountain Subregional Plan, and the County's General Plan. Due to the foregoing factors, implementation of the proposed project would not physically divide an established community. No impact would occur.

b) 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?

The project site is located within the Central Mountain and North Mountain Subregional Plan of the County's General Plan. According to the County's General Plan, the proposed project

traverses parcels designated Rural, Semi-Rural, Open Space–Recreation, and Public Agency Lands. The Ramona Community Plan, Central Mountain Subregional Plan, and North Mountain Subregional Plan developed in relation to the County's General Plan have several goals and policies for current and future development as described in Section 5.10.2.

As discussed previously, no local land use plans, policies, or regulations would apply to the proposed project because, pursuant to General Order No. 131-D, the CPUC has sole and exclusive jurisdiction over the siting and design of the proposed project. Consequently, the proposed project would not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project. Therefore, no impact would occur.

Although the proposed project would be exempt from local land use and zoning regulations and discretionary permitting, the CPUC has consulted with local agencies regarding land use matters potentially affected by the proposed project. Table 5.10-2 provides a consistency analysis with plans and policies for informational purposes only.

As previously discussed in response to impact discussion question (a), due to the redevelopment nature of the proposed project within the same ROW alignment as the existing TL 637, no General Plan land use or zoning conflicts within the alignment would occur as a result of project implementation. Therefore, the project is considered consistent with the Ramona Community Plan, the Central Mountain Subregional Plan, the North Mountain Subregional Plan, and the County's General Plan, and no impact would occur.

c) Would the project conflict with any applicable habitat conservation plan or natural community conservation plan?

The proposed project alignment traverses federal and state jurisdictional boundaries including the BLM on the Mount Gower Preserve, a segment of the Cleveland National Forest managed by the USFS, and the Caltrans ROW at SR 78 and SR 79. SDG&E has obtained a ROW grant amendment from the BLM for work proposed on the Mount Gower Preserve, which is located within the Draft North County Multiple Species Conservation Plan area and the BLM South Coast Resource Management Plan boundaries. The ROW grant for work within the Mount Gower Preserve was approved and issued by the BLM on June 1, 2012.

In addition to the Mount Gower Preserve, the proposed project alignment crosses the Simon Preserve, which is owned and managed by the County of San Diego under the Simon Preserve Resource Management Plan. SDG&E's easement traversing the Simon Preserve was established prior to County acquisition of the Preserve in 1959; therefore, no permits or approvals are required for work on this easement.

As previously discussed in response to impact discussion question (a), due to the redevelopment nature of the proposed project within the same ROW alignment as the existing TL 637, conflicts with applicable conservation plans anticipated to occur as a result of project implementation would be less than significant.

See Section 5.5, Biological Resources, for further discussion.

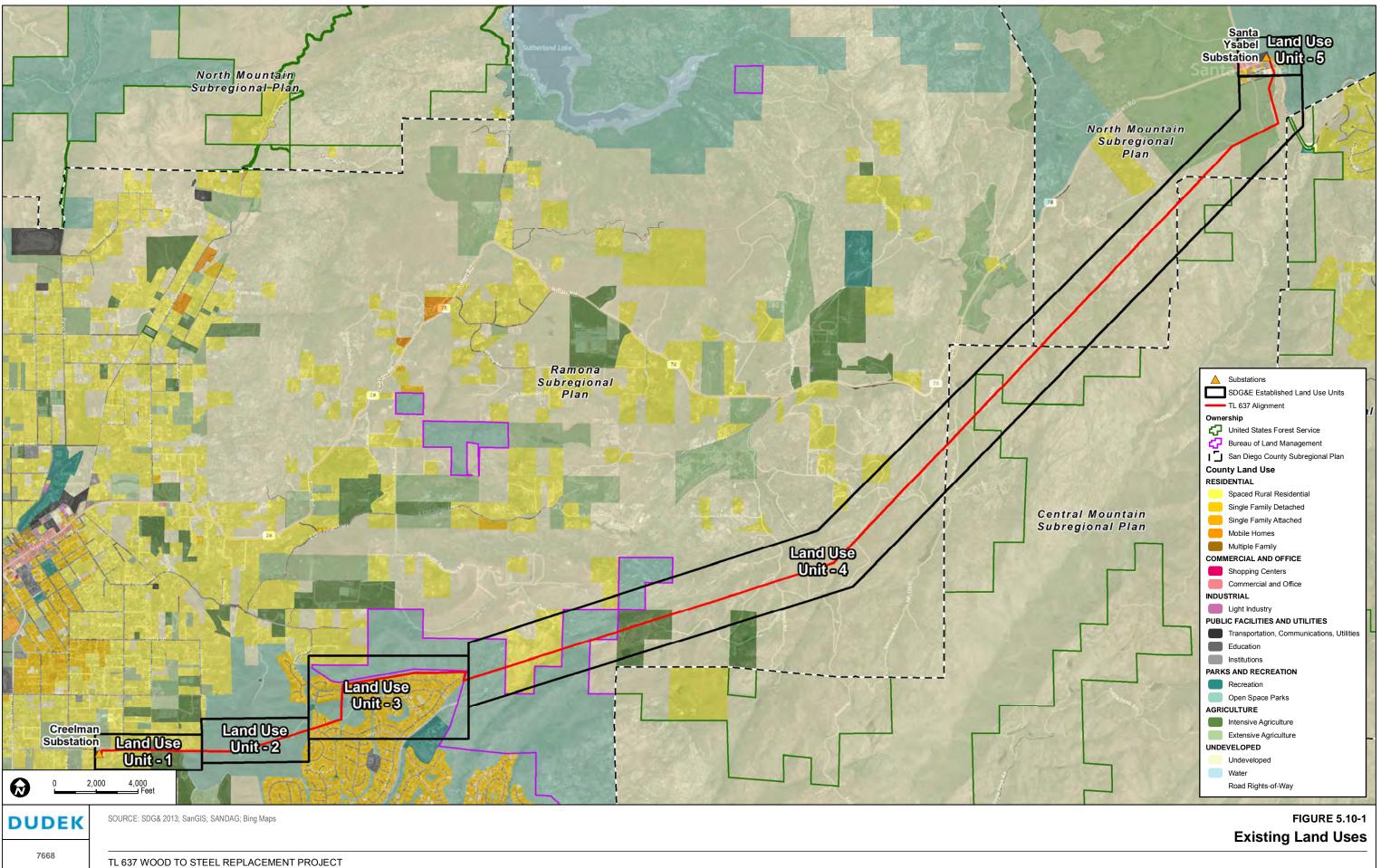
Table 5.10-2: Local Plan and Policy Consistency Analysis					
Goal/Recommendation Number	Goal/Recommendation	Project	Project Consistency/ Inconsistency		
	Coun	ty of San Diego General Plan			
		Land Use Element			
Goal LU-12: Infrastructure and Services Supporting Development	Adequate and sustainable infrastructure, public facilities, and essential services that meet community needs and are provided concurrent with growth and development.	The proposed project would consist of the redevelopment and fire-hardening of an existing tie-line alignment, which would improve system efficiency, reliability, and service to the local community.	The project would be consistent with this goal.		
Policy LU-12.3: Infrastructure and Services Compatibility	Provide public facilities and services that are sensitive to the environment with characteristics of the unincorporated communities. Encourage the co-location of infrastructure facilities, where appropriate.	The proposed wood-to-steel pole replacement project would replace existing wood poles with new steel poles along the existing TL 637 alignment. No new facilities would be constructed. As the project would be constructed within the existing ROW and no new facilities would be required, land-based impacts would be minimal. Additionally, the proposed fiber optic line would be co-located on the new steel poles with the new tie-line.	The project would be consistent with this policy.		
Policy LU-12.4: Planning for Compatibility	Plan and site infrastructure for public utilities and public facilities in a manner compatible with community character, minimize visual and environmental impacts, and, whenever feasible, locate any facilities and supporting infrastructure outside preserve areas.	The proposed wood-to-steel pole replacement project would replace existing wood poles with new steel poles and would remain within the existing alignment, which would reduce land- based impacts. Although the project would traverse the Simon Preserve and Mount Gower Preserve, existing poles would be replaced with new poles and no new facilities would be constructed. Project implementation would resemble that of existing conditions visually and spatially. The proposed steel poles would consist of a different material compared to existing wood poles, and proposed pole structures would be slightly taller than existing facilities; however, no significant visual changes would occur along the existing alignment that would be considered a significant new or modified aesthetic element within local viewsheds.	The project would be consistent with this policy.		
Goal LU-15: Adequate Wireless Communication Facilities	Wireless telecommunication facilities that utilize state-of-the-art techniques to minimize impacts to communities and the environment.	The proposed project would consist of the redevelopment and fire-hardening of an existing tie-line alignment, which would improve system efficiency, reliability, and service to the local community. The proposed tie-line project would replace existing wood poles with new steel poles and would remain within the existing alignment to reduce land-based impacts. No new facilities would be constructed. The proposed fiber optic line would be co-located on poles with the new tie-line.	The project would be consistent with this goal.		

Table 5.10-2: Local Plan and Policy Consistency Analysis					
Goal/Recommendation Number	Goal/Recommendation	Project	Project Consistency/ Inconsistency		
Policy LU-15.1: Telecommunication Facilities Compatibility with Setting	Require that wireless telecommunication facilities be sited and designed to minimize visual impacts, adverse impacts to the natural environment, and are compatible with existing development and community character.	The proposed tie-line project would replace existing wood poles with new steel poles and would remain within the existing alignment to reduce land-based impacts. No new facilities would be constructed. The proposed steel poles would consist of a different material compared to existing wood poles, and proposed pole structures would be slightly taller than existing facilities; however, no significant visual changes would occur along the existing alignment that would be considered a significant new or modified aesthetic element within local viewsheds. The proposed fiber optic line would be co-located on poles with the new tie-line, which would further reduce visual and land-based impacts regarding visual, environmental, and community character impacts.	The project would be consistent with this policy.		
Policy LU-15.2: Co- Location of Telecommunication Facilities	Encourage wireless telecommunication service providers to co-locate their facilities whenever appropriate, consistent with the Zoning Ordinance.	The proposed wood-to-steel pole replacement project would upgrade and fire-harden an existing tie-line alignment, and would not require a change in land uses along the alignment, including those delineated in the County zoning code. The proposed fiber optic line would be co-located on poles with the new tie-line.	The project would be consistent with this policy.		
		Safety Element			
Policy S-1.2: Public Facilities Location	Advise, and where appropriate require, new development to locate future public facilities, including new essential and sensitive facilities, with respect to the County's hazardous areas and state law.	The proposed wood-to-steel pole replacement project would upgrade and fire-harden an existing tie-line alignment and would not construct new facilities or relocate the project to a new location that would be considered hazardous.	The project would be consistent with this policy.		
Policy S-3.1: Defensible Development	Require development to be located, designed, and constructed to provide adequate defensibility and minimize the risk of structural loss and life safety resulting from wildland fires.	The proposed wood-to-steel pole replacement project would consist of the redevelopment and fire-hardening of an existing tie- line alignment, which would improve system efficiency, reliability, and service to the local community, while reducing risk to telecommunication facilities in the event of a wildfire.	The project would be consistent with this policy.		
Policy S-3.7: Fire Resistant Construction	Require all new, remodeled, or rebuilt structures to meet current ignition- resistance construction codes and establish and enforce reasonable and prudent standards that support retrofitting of existing structures in high fire threat areas.	The proposed wood-to-steel pole replacement project would consist of the redevelopment and fire-hardening of an existing tie- line alignment, which would improve system efficiency, reliability, and service to the local community, while reducing risk to telecommunication facilities in the event of a wildfire. The proposed replacement steel poles would be fire resistant.	The project would be consistent with this policy.		

Table 5.10-2: Local	Table 5.10-2: Local Plan and Policy Consistency Analysis					
Goal/Recommendation Number	Goal/Recommendation	Project	Project Consistency/ Inconsistency			
	Conserv	vation and Open Space Element				
Policy COS-11.1: Protection of Scenic Resources	Require the protection of scenic highways, corridors, regionally significant scenic vistas, and natural features, including prominent ridgelines, dominant landforms, reservoirs, and scenic landscapes.	Proposed structures would be composed of materials resembling the wood of existing pole structures once the outer layer becomes weathered and develops a patina. As such, the overall aesthetic of the proposed facilities would resemble existing conditions. Although poles would increase in height from existing conditions, this would not result in a substantial change in the identified viewshed, and the proposed poles would be installed in the same general location as existing poles.	The project would be consistent with this policy.			
Policy COS-13.1: Restrict Light and Glare	Restrict outdoor light and glare from development projects in Semi-Rural and Rural Lands and designated rural communities to retain the quality of night skies by minimizing light pollution.	The proposed project would not introduce new lighting to the project alignment that does not already occur under existing conditions, and materials used for the proposed weathered steel pole structures would produce a patina that would not reflect light during the daytime, and therefore would not result in a new source of glare.	The project would be consistent with this policy.			
	F	Ramona Community Plan				
Policy 1.1.12: Conservation and Open Space	Discourage severe grading and encourage the preservation of native brush.	The proposed tie-line project would replace existing wood poles with new steel poles and would remain within the existing alignment to reduce land-based impacts. Minimal grading would be required around individual pole sites; however, no substantial grading would be required as part of project construction.	The project would be consistent with this policy.			
Policy 1.2.1: Conservation and Open Space	Promote and preserve viable agricultural land uses and provide an attractive agricultural industry atmosphere within the Ramona Planning Area.	The proposed wood-to-steel pole replacement project would upgrade and fire-harden an existing tie-line alignment, and would not require a change in land uses along the alignment, including agricultural uses.	The project would be consistent with this policy.			
Goal 1.1: Land Use	The rural atmosphere of the Ramona community is preserved and enhanced, while encouraging a balance of land uses that are compatible with a country lifestyle.	The proposed wood-to-steel pole replacement project would consist of the redevelopment and fire-hardening of an existing tie- line alignment. Proposed structures would be composed of materials resembling the wood of existing pole structures once the outer layer becomes weathered and develops a patina. As such, the overall aesthetic of the proposed facilities would resemble existing conditions and would not impact the rural characteristics of the Ramona community.	The project would be consistent with this goal.			

Table 5.10-2: Local	Table 5.10-2: Local Plan and Policy Consistency Analysis					
Goal/Recommendation Number	Goal/Recommendation	Project	Project Consistency/ Inconsistency			
	Centr	al Mountain Subregional Plan				
Land Use Policy 7	All new and existing electrical utilities, telephone, and cable shall be put underground for safety and a more reliable systems operation, whenever feasible, and not damaging to the environment.	The proposed tie-line project would replace existing wood poles with new steel poles and would remain within the existing alignment to reduce land-based impacts. The existing alignment is configured overhead, and undergrounding the approximately 14-mile segment of TL 637 would result in greater environmental impacts compared to the proposed project, which would resemble that of existing conditions. Because greater adverse environmental impacts would occur if TL 637 were undergrounded, the proposed replacement facilities will remain overhead.	The proposed project would be developed in the SDG&E ROW that contains the existing TL 637. The project proposes steel poles, which will increase fire safety and reliable systems operation. Therefore, the project would not conflict with this policy. Further, the proposed project would be consistent with this policy because it would meet the objective of resulting in minimal damage to the environment.			
Private Inholdings In Or Lands Adjacent To U.S. Forest Service Lands and State Parks Policy 3	Lots abutting Cuyamaca Rancho and Anza Borrego State Parks and the Cleveland National Forest shall establish no access, such as roadways and trails, to the Park or Forest unless such access is permitted by the Park Superintendent or the Forest Ranger.	The proposed project would not require the construction of new access roads or trails, and all work would be conducted using existing dirt access roads. The two poles located within the Cleveland National Forest have already been replaced; therefore, only reconductoring of the new tie-line would be required in this area.	The project would be consistent with this policy.			
Scenic Highways and Visual Resources Policy 2	All development in scenic corridors shall be subject to the following policies and recommendations: (e) All utilities shall be undergrounded whenever feasible unless undergrounding would significantly impact environmental resources; and (q) Lighting shall be limited to the minimum necessary for safety. Scenic corridors are located along Interstate 8, State Route 79, and Sunrise Highway and around Lake	The proposed wood-to-steel pole replacement project would consist of the redevelopment and fire-hardening of an existing tie- line alignment. Proposed structures would be composed of materials resembling the wood of existing pole structures once the outer layer becomes weathered and develops a patina. As such, the overall aesthetic of the proposed facilities would resemble existing conditions. In addition, the undergrounding of TL 637 within the existing SDG&E ROW would result in greater environmental impacts compared to the proposed project. Therefore, the goal and recommendation to underground utilities	The project would be consistent with this policy.			

Table 5.10-2: Local	Table 5.10-2: Local Plan and Policy Consistency Analysis					
Goal/Recommendation Goal/Recommendation Project		Project Consistency/ Inconsistency				
	Cuyamaca.	is not applicable to the project. Additionally, the proposed project would not introduce new				
		lighting to the project alignment that does not already occur under existing conditions.				
	Norti	h Mountain Subregional Plan				
Land Use Policy 2, General	Require development to demonstrate compliance with Conservation and Open Space Element Policies COS-4.4 and 5.3 and that the groundwater supply will not be adversely impacted.	Permanent use of groundwater would not be required under the proposed project; however, temporary, short-term dewatering may be required if shallow groundwater sources are discovered during construction. If discovered, groundwater would be pumped and reintroduced into the local aquifer at a nearby location. No net decrease in local groundwater levels would occur.	The project would be consistent with this policy.			
Land Use Policy 9, Santa Ysabel	Require development projects proposed within 2,000 feet of the intersection of State Routes 78 and 79 to ensure that groundwater contamination has not occurred.	If groundwater is discovered during construction, groundwater would be pumped and reintroduced into the local aquifer at a nearby location. No net decrease in local groundwater levels would occur. If contaminated, water would be handled and disposed of off site in accordance with all applicable federal, state, and local laws and regulations. No portion of the proposed project would result in direct groundwater contamination.	The project would be consistent with this policy.			



INTENTIONALLY LEFT BLANK

5.11 MINERAL RESOURCES

Would the project:		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a) Result in the loss of availab known mineral resource the value to the region and the the state?	at would be of				
 b) Result in the loss of available locally important mineral re- recovery site delineated on general plan, specific plan, use plan? 	source a local				

5.11.1 Environmental Setting

Information presented in this section was gathered from a review of San Diego Gas & Electric's (SDG&E's) Proponent's Environmental Assessment (PEA) (SDG&E 2013) and the County of San Diego General Plan Mineral Resources Map (County of San Diego 2009).

There are no known mineral resources within the project area. As depicted on the County of San Diego General Plan Mineral Resource Zones (MRZ) map, the proposed project alignment has not been designated as having any known mineral resources, or as having potential for mineral resources. The project site is categorized "MRZ-3," which is defined as areas containing mineral deposits of which the significance cannot be evaluated from available data (County of San Diego 2009).

5.11.2 Regulatory Setting

The California State Legislature enacted the Surface Mining and Reclamation Act (SMARA) in 1975 to limit new development in areas containing significant mineral deposits. SMARA calls for the California state geologist to classify the lands within California based on mineral resource availability.

5.11.3 Environmental Impacts

Significance Criteria

Appendix G of the California Environmental Quality Act (CEQA) (14 CCR 15000 et seq.) provides guidance for evaluating whether a development project may result in significant impacts. Appendix G suggests that a development project could have a significant impact on mineral resources if the project would:

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state

b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan.

Impact Discussion

a) 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?

As discussed under Section 5.11.1, Environmental Setting, the project alignment has not been designated as having any known mineral resources, or as having potential for mineral resources. Therefore, the project would not impact any known or expected mineral resources.

b) 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?

As discussed in response to impact discussion question (a), the project alignment is not located in an area containing known mineral resources, and therefore would not result in the loss of availability of a mineral resource.

5.12 NOISE

	Would the project result in:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
<i>a)</i>	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?				
b)	Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?				
<i>c)</i>	A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?				
d)	A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?				
<i>e)</i>	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?				
f)	For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				

5.12.1 Environmental Setting

This section of the Initial Study (IS) evaluates noise impacts associated with the Tie-Line 637 Wood-to-Steel Replacement Project (proposed project) implementation. The noise analysis is based on the review of San Diego Gas & Electric's (SDG&E's) Proponent's Environmental Assessment (PEA) (SDG&E 2013a) and data responses (SDG&E 2013b).

General Characteristics of Community Noise

Various noise descriptors have been developed to describe time-varying noise levels. The following are the noise descriptors most commonly used in community noise analysis.

- Equivalent Sound Level (L_{eq}): L_{eq} represents an average of the sound energy occurring over a specified period. In effect, L_{eq} is the steady-state sound level containing the same acoustical energy as the time-varying sound that actually occurs during the same period. The 1-hour, A-weighted, equivalent sound level (L_{eq}(h)) is the energy average of A-weighted sound levels occurring during a 1-hour period and is the basis for noise abatement criteria used by California Department of Transportation (Caltrans) and the Federal Highway Administration.
- **Percentile-Exceeded Sound Level (L**_{xx}): L_{xx} represents the sound level exceeded for a given percentage of a specified period (e.g., L₁₀ is the sound level exceeded 10% of the time, and L₉₀ is the sound level exceeded 90% of the time).
- **Maximum Sound Level (L**_{max}): L_{max} is the highest instantaneous sound level measured during a specified period.
- **Day-Night Level (L**_{dn}): L_{dn} is the energy average of A-weighted sound levels occurring over a 24-hour period, with a 10-decibel (dB) penalty applied to A-weighted sound levels occurring during nighttime hours between 10:00 p.m. and 7:00 a.m.
- **Community Noise Equivalent Level (CNEL):** Similar to L_{dn}, CNEL is the energy average of the A-weighted sound levels occurring over a 24-hour period, with a 10 dB penalty applied to A-weighted sound levels occurring during the nighttime hours between 10:00 p.m. and 7:00 a.m., and a 5 dB penalty applied to the A-weighted sound levels occurring during evening hours between 7 p.m. and 10 p.m.

To describe environmental noise and to assess project impacts on areas that are sensitive to noise, a measurement scale that simulates human perception is customarily used. Sound (noise) levels are measured in decibels. Community noise levels are measured in terms of an A-weighted sound level. The A-weighted scale of frequency sensitivity accounts for the sensitivity of the human ear, which is less sensitive to low frequencies and correlates well with human perceptions of the annoying aspects of noise. The A-weighted decibel scale (dBA) is cited in most noise criteria.

Human activities cause community noise levels to be widely variable over time. For simplicity, sound levels are usually best represented by an equivalent level over a given time period (L_{eq}). The L_{eq} , or equivalent sound level, is a single value (in dBA) for any desired duration, which includes all of the time-varying sound energy in the measurement period, usually 1 hour.

People are generally more sensitive to and annoyed by noise during the evening and nighttime. Thus, another noise descriptor used in community noise assessments, termed the Community Noise Equivalent Level (CNEL), was introduced. The CNEL scale represents a time-weighted, 24-hour average noise level based on the A-weighted sound level. CNEL accounts for the increased noise sensitivity during the evening (7:00 p.m.–10:00 p.m.) and nighttime hours (10:00 p.m.–7:00 a.m.) by adding 5 and 10 dB, respectively, to the average sound levels occurring during these hours. Another noise descriptor termed the Day-Night Average Sound Level (L_{dn}) is also used. The L_{dn} is similar to CNEL except there is no penalty to the noise level occurring during the evening hours.

Human activities cause community noise levels to be widely variable over time. For simplicity, sound levels are usually best represented by an equivalent level over a given time period (L_{eq}). The L_{eq} , or

equivalent sound level, is a single value (in dBA) for any desired duration, which includes all of the time-varying sound energy in the measurement period, usually 1 hour. The noise level that is exceeded 50% of the time (L_{50}) is a level that is normally less than the L_{eq} , except for especially steady noise levels, in which case, it may be similar to or slightly greater than the L_{eq} .

Existing Noise Sources in Project Region

The existing noise environment in the project area is dominated by noises associated with the rural, public, semipublic, and agricultural land uses. Traffic along freeways, highways, and local roadways also contributes to the existing noise environment. Due to the various land uses and noise sources, different levels of noise are present within the project area. Ambient noise levels tend to be lowest in the open, undeveloped areas that comprise much of the project area. Noise levels are typically the highest near the major transportation facilities, such as State Route 78 (SR-78).

The existing noise environment also includes noise associated with operations and maintenance activities required to maintain the existing power line. Ongoing existing operations and maintenance activities that generate noise in the project area include: the use of four-wheel-drive vehicles, helicopter, boom trucks, and line trucks to access the power lines and poles; washing activities; tree and vegetation trimming activities; access road maintenance; and hardware replacement and repair work.

The existing power line generates low corona noise levels, which is also considered an existing operational noise. Corona noise is the audible noise created when energy dissipates from electrical conductive equipment. As energy dissipates from electrical conductive equipment, some of the energy causes local pressure changes that result in audible noise, or in radio or television interference. The audible corona noise generated by corona discharge is characterized as a hissing or crackling sound that may be accompanied by a hum. Slight irregularities or water droplets on the conductor and/or insulator surface accentuate the electric field strength near the conductor surface, making corona discharge and the associated audible noise more likely. Therefore, corona noise from power lines is often pronounced after wet weather, when the power lines are wet and the noise from the weather event is over.

Sensitive Receptors

Noise-sensitive receptors are facilities (e.g., residential areas, hospitals, schools) or activities for which excessive noise may cause annoyance or loss of business (e.g., work requiring a quiet environment for heavy telephone use). Sensitive receptors in the proposed project area include rural residences to the west of the proposed project alignment. The nearest noise sensitive receptors to the project site are rural residences with property lines located directly adjacent to the existing and proposed project alignment.

5.12.2 Regulatory Setting

Regulating environmental noise is generally the responsibility of local governments. U.S. Environmental Protection Agency (EPA) once published guidelines on recommended maximum noise levels to protect public health and welfare (EPA 1974), and the State of California maintains recommendations for local jurisdictions in the General Plan Guidelines published by

the Governor's Office of Planning and Research (OPR 1998). The following information summarizes federal and state recommendations and local requirements.

Federal

U.S. Environmental Protection Agency

The EPA has indicated that residential noise exposure of 55 to 65 dBA is acceptable when analyzing land use compatibility (EPA 1981); however, these guidelines are not regulatory. With regard to noise exposure and workers, the federal Occupational Safety and Health Administration (OSHA) establishes regulations to safeguard the hearing of workers exposed to occupational noise (29 CFR 1910.95). OSHA specifies that sustained noise over 85 dBA (8-hour time-weighted average) can be a threat to workers' hearing, and if worker exposure exceeds this amount, the employer shall develop and implement a monitoring plan (29 CFR 1910.95 (d) (1)).

State

California Government Code Section 65302(f) requires each local jurisdiction to include a noise element in its general plan. Generally speaking, noise levels less than 60 L_{dn} are acceptable for all land uses, including residences, schools, and other noise sensitive receptors. Noise levels greater than 70 L_{dn} are normally unacceptable for most noise sensitive land uses, and levels between 60 and 70 L_{dn} are usually considered conditionally acceptable because the structures where the receptors reside normally provide some level of insulation (OPR 1998).

Local

San Diego County Code of Regulatory Ordinances Title 3, Division 6, Chapter 4, Sections 36.401–36.435, Noise Ordinance

The Noise Ordinance establishes prohibitions for disturbing, excessive, or offensive noise as well as provisions such as sound level limits for the purpose of securing and promoting the public health, comfort, safety, peace, and quiet for its citizens. Planned compliance with sound level limits and other specific parts of the ordinance allows presumption that the noise is not disturbing, excessive, or offensive. Limits are specified depending on the zoning placed on a property (e.g., varying densities and intensities of residential, industrial, and commercial zones). Where two adjacent properties have different zones, the sound level limit at a location on a boundary between two properties is the arithmetic mean of the respective limits for the two zones, except for extractive industries. It is unlawful for any person to cause or allow the creation of any noise that exceeds the applicable limits of the Noise Ordinance at any point on or beyond the boundaries of the property on which the sound is produced.

Section 36.404 of the County Noise Ordinance contains sound level limits specific to receiving land uses. Sound level limits are in terms of a 1-hour average sound level. The allowable noise limits depend upon the County's zoning district and time of day. The proposed project would be located in several zones within the County including Limited Agriculture (A70), General Agriculture (A72), Open Space (S80), and General Rural (S92). Table 5.12-1 lists the sound level limits for the County.

Table 5.12-1: San Diego County Noise Ordinance Sound Level Limits				
	Applicable Lim	it 1-Hour Average So	ound Level (dB)	
Zone	7 a.m.–7 p.m.	7 p.m.–10 p.m.	10 p.m.–7 a.m.	
(1) RS, RD, RR, RHM, A70, A72, S80, S81, S87, S90, S92, RV, and RU with a density of less than 11 dwelling units per acre	50	50	45	
(2) RRO, RC, RM, C30, S86, V5 and RV and RU with a density of 11 or more dwelling units per acre	55	55	50	
(3) S94, V4, all other commercial zones.	60	60	55	
(4) V1, V2	60	55	see below	
V1	60	55	55	
V2	60	55	50	
V3	70	70	65	
(5) M50, M52, and M54	70	70	70	
(6) S82, M56, and M58	75	75	75	

Source: County Of San Diego 2009.

Notes:

a) If the measured ambient level exceeds the applicable limit noted in the table, the allowable 1-hour average sound level will be the ambient noise level. The ambient noise level will be measured when the alleged noise violation source is not operating.

b) The sound-level limit at a location on a boundary between two zoning districts is the arithmetic mean of the respective limits for the two districts, provided, however, that the 1-hour average sound-level limit applicable to extractive industries, including but not limited to borrow pits and mines, will be 75 dB at the property line, regardless of the zone where the extractive industry is actually located.

c) Fixed-location, public utility distribution or transmission facilities located on or adjacent to a property line shall be subject to the noise-level limits of this section, measured at or beyond 6 feet from the boundary of the easement upon which the equipment is located.

Section 36.408 of the County Noise Ordinance sets limits on the time of day and days of the week that construction can occur, as well as setting noise limits for construction activities. In summary, the ordinance prohibits operating construction equipment on the following days and times:

- Mondays through Saturdays except between the hours of 7:00 a.m.-7:00 p.m.
- Sundays and days appointed by the president, governor, or board of supervisors for a public fast, Thanksgiving, or other holiday.

In addition, the code requires that between the hours of 7:00 a.m.–7:00 p.m., no equipment shall be operated so as to cause an 8-hour average construction noise level in excess of 75 dBA when measured at the boundary line of the property where the noise source is located, or on any occupied property where the noise is being received. In addition to the general limitations on sound levels discussed above, the following additional maximum sound level limitations shall apply to impulsive noise from construction equipment, per County Noise Ordinance Section 36.410 as shown in Table 5.12-2.

Table 5.12-2: Maximum Sound Level (Impulsive) Measured				
Occupied Property Use Decibels (dBA)				
Residential, village zoning, or civic use	82			
Agricultural, commercial, or industrial use	85			

Source: County of San Diego 2009.

Note: The maximum sound level limitations shall apply to impulsive noise from construction equipment when measured at the boundary line of the property where the noise source is located or on any occupied property where the noise is received, for 25% of the minutes in the measurement period.

County Guidelines for Noise Sensitive Uses Affected by Airborne Noise

The County of San Diego Department of Planning and Land Use (2009) has published guidelines for determining the significance of Noise Sensitive Uses Affected by Airborne Noise. The Guidelines consider a significant impact would occur if a project were to cause the exterior noise to exceed 60 dB (CNEL), or cause an increase of 10 dB (CNEL) over pre-existing noise levels at outdoor living areas or private usable open space.

County Guidelines for Vibration and Groundborne Noise Impacts

The County of San Diego Department of Planning and Land Use (2009) has also published guidelines for determining the significance of groundborne vibration and noise impacts for use during the preparation of CEQA documents. Vibration is considered significant if project implementation will expose specific uses (organized into three categories) to groundborne vibration or noise equal to or in excess of levels determined by the Federal Transit Administration's (FTA's) Transit Noise and Vibration Impact Assessment (FTA 2006). County Guidelines are provided in Table 5.12-3.

Table 5.12-3: Guidelines for Determining the Significance of Groundborne Vibration andGroundborne Noise Impacts

oroundborne Noise impacts						
	Groundborne Vibration Impact Levels (inch/sec root mean square)		Groundborne Noise Impact Level (dB re 20 micropascals)			
Land Use Category	Occasional orFrequent EventsInfrequent Events		Frequent Events	Occasional or Infrequent Events ²		
Category 1: Buildings where low ambient vibration is essential for interior operations (research and manufacturing facilities with special vibration constraints)	0.0018 ⁴	0.0018 ⁴	Not Applicable (N/A) ^{5.6}	N/A ^{4,5}		
Category 2: Residences and buildings where people normally sleep (hotels, hospitals, residences, and other sleeping facilities)	0.0040	0.010	35 dBA	43 dBA		

Table 5.12-3: Guidelines for Determining the Significance of Groundborne Vibration and Groundborne Noise Impacts

	Groundborne Vibration Impact Levels (inch/sec root mean square)		Groundborne Noise Impact Level (dB re 20 micropascals)			
Land Use Category	Frequent Events	Occasional or Infrequent Events	Frequent Events	Occasional or Infrequent Events ²		
Category 3: Institutional land uses with primarily daytime use (schools, churches, libraries, other institutions, and quiet offices)	0.0056	0.014	40 dBA	48 dBA		

Source: FTA 2006.

Notes:

^a "Frequent Events" is defined as more than 70 vibration events per day.

- ^b "Infrequent Events" is defined as fewer than 70 vibration events per day.
- ^c This criterion limit is based on levels that are acceptable for most moderately sensitive equipment such as optical microscopes. Vibration-sensitive manufacturing or research would require detailed evaluation to define acceptable vibration levels. Ensuring lower vibration levels in a building often requires special design of the HVAC systems and stiffened floors.
- ^d Vibration-sensitive equipment is not sensitive to groundborne noise.
- ^e There are some buildings, such as concert halls, TV and recording studios, and theaters, that can be very sensitive to vibration and noise, but do not fit into any of the three categories.
- ^f For Categories 2 and 3 with occupied facilities, isolated events such as blasting are significant when the peak particle velocity (ppv) exceeds 1 inch per second. Nontransportation vibration sources such as impact pile drivers or hydraulic breakers are significant when their ppv exceeds 0.1 inch per second. More specific criteria for structures and potential annoyance were developed by Caltrans (2004) and would be used to evaluate these continuous or transient sources in the County of San Diego.

5.12.3 Environmental Impacts

Significance Criteria

Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.) provides guidance for evaluating whether a development project may result in significant impacts. Appendix G suggests that a development project could have a significant impact from noise if the project would:

- a) Expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies
- b) Expose persons to or generate excessive groundborne vibration or groundborne noise levels
- c) Cause a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project
- d) Cause a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project
- e) 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, expose people residing or working in the project area to excessive noise levels
- f) For a project within the vicinity of a private airstrip, expose people residing or working in the project area to excessive noise levels.

Impact Discussion

a) Would the project expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

The proposed project would generate noise from construction activities and operations. However, as explained below, noise levels would be kept within acceptable levels and time periods resulting in a less-than-significant impact.

Construction Noise: The proposed project would produce short-term noise during pole removal and installation, substation improvement work, and conductoring of the new power line and fiber optic cable. Aside from construction work associated with the substations, all construction activities would occur at each individual pole site for a temporary period of time. Total construction activities associated with the proposed project would occur over a 9-month period.

Construction noise would be associated with excavation activities during micropile and directembedded foundation construction as well as trenching activities associated with underground distribution systems. Once the replacement steel poles have been erected, a mechanical pulling machine and/or helicopter would be used for transmission line installation. A light- or mediumduty helicopter such as a K-Max or A-star model would be employed, and helicopter use would only occur during daylight hours within the existing Tie-Line (TL) 637 right-of-way (except for take-off and landing periods). Helicopter use would only be required where pull tensioning vehicles cannot reach pole sites, and helicopter operations would not occur every day. On specific construction days when helicopter use would be required, flight operations would be limited to approximately 2 hours. Additionally, flight operations would not occur in any one location for an extended period of time because helicopter stringing activities would be mobile from one pole to another, and only select poles would require helicopter stringing support. Two stringing sites would be located adjacent to an existing equine facility (see Attachment A, Detailed Alignment Maps, Map 5 of 10). To ensure noise during helicopter operations would not disturb horses and other livestock at the facility, or any nearby sensitive receptor, Mitigation Measure (MM) NOI-1 would be implemented. MM NOI-1 calls for SDG&E to notify livestock facility owners, residents, and nearby sensitive receptors of scheduled helicopter use prior to flight operations, including the aforementioned equine facility. Implementation of MM NOI-1 would reduce impacts to a level that is less than significant. Helicopter use would be compliant with all Federal Aviation Administration (FAA) and Caltrans standards and regulations.

MM NOI-1: At least 30 days before helicopter use and stringing operations are employed San Diego Gas &Electric (SDG&E) shall prepare and submit a public notice mailer to the California Public Utilities Commission for approval. The public notice mailer shall be prepared and mailed no less than 7 days prior to helicopter use and stringing operations along the proposed project alignment, SDG&E shall notify landowners, livestock facility owners, and residents within 50 feet of construction to provide adequate notice of potential helicopter and/or stringing activity within the project vicinity. If construction is delayed for more than 7 days, an additional notice shall be mailed to discuss the status and schedule of helicopter use and stringing operations.

The nearest noise sensitive receptors to the project site are rural residences with property lines located directly adjacent to the existing and proposed project alignment. Table 5.12-4 lists typical noise levels (adjusted for an 8-hour day) for commonly-used equipment. For point sources such as construction equipment, noise decreases by approximately 6 dB for each doubling of distance for a hard, flat site (no intervening topography).

Table 5.12-4: Construction Equipment Noise Levels at Adjusted for 8-Hour Day						
	Adjusted Noise Level for 8-Hour Day (dBA)					
Equipment	50 feet	100 feet	200 feet	500 feet	1,000 feet	
Air Compressor	73	67	61	53	47	
Auger	78	72	66	58	52	
Wire Pulling Machine	74	68	62	54	48	
Mower	75	69	63	55	49	
Drill Rig	78	72	66	58	52	
Grader	75	69	63	55	49	
Hydraulic Rock-Splitting/Drilling Equipment	75	69	63	55	49	
Truck	77	71	65	57	51	

Source: SDG&E 2013a.

Project construction activities would temporarily increase local noise levels in the vicinity of the project alignment. Due to the presence of rural residences in the proposed project vicinity, the residential threshold was utilized to determine construction noise impacts to this sensitive use. Based on the equipment identified, the 8-hour construction noise level is anticipated to be approximately 75 dB at a distance of 50 feet from the construction equipment (SDG&E 2013a). The property line of the nearest residence would be directly adjacent to the proposed alignment, similar to existing conditions. At this location, the 8-hour average construction sound level could exceed the 75 dBA threshold. Implementation of MM NOI-2 would mitigate temporary construction noise impacts to less than significant by requiring SDG&E to implement appropriate mitigation such as portable noise barriers or relocation of residents, if noise standards are exceeded.

MM NOI-2 In the event noise levels during construction activities are expected to exceed an 8- hour Leq of 75 dBA at the nearest property line or within 50 feet of the existing and proposed project alignment where noise sensitive areas are located, San Diego Gas &Electric (SDG&E) shall implement noise reduction measures to reduce noise levels below 75 dBA. Measures to be implemented could include: (1) portable noise barriers erected temporarily to reduce noise impacts at specific locations; or 2) if noise barriers would not reduce levels to below 75 dBA, depending on the location of residences and the level of construction noise, SDG&E shall offer to relocate affected residents.

Implementation of SDG&E MM NOI-2 supersedes Applicant Propsed Measure (APM)-NOI-4 (see Section 4.8, Table 4-6 of this IS). With implementation of SDG&E's proposed APMs NOI-1

through NOI-3 and supplemental mitigation measures, noise generated by construction activities conducted during daytime hours (between 7 a.m.–7 p.m.) would not result in significant impacts.

Regarding helicopter use during construction, a helicopter would be employed for the removal of existing wooden pole structures, installation of new steel poles, and during reconductoring of the new power lines. Four landing zone and staging areas would be utilized during helicopter takeoff and landing operations as listed in Table 5.12-5.

Table 5.12-5: Helicopter Landing Zones/Staging Areas and Sound Levels				
Helicopter Landing Zone	Distance/Direction to Nearest Sensitive Receptor	Helicopter Noise Level		
Mount Gower	1,350 feet northwest	61 dBA		
Littlepage Road	2,150 feet west	56 dBA		
Warnock	400 feet east ¹	71 dBA		
Creelman	650 feet southwest	67 dBA		
Woodlot	650 feet west	67 dBA		
Santa Ysabel	400 feet north ¹	71 dBA		

Source: SDG&E 2013a.

¹ Center of staging area would be used for helicopter takeoff and landing.

As shown in Table 5.12-5, noise levels at the nearest sensitive receptor during helicopter operations would not exceed 71 dBA, which would be below the County of San Diego noise ordinance limit (SDG&E 2013a). Helicopter use would be limited to allowable daytime hours between 7 a.m–7 p.m.

Additionally, required construction work at any one pole site along the alignment would not require more than a few days to up to 1 week. Following installation of the new steel pole, construction equipment would move down the alignment to the next pole site; therefore, heavy construction equipment and noise-generating activities would consistently move from one location to another, and no activity would occur in any one location for an extended period of time. As such, noise sensitive receptors would not be subject to long-term construction noise.

Moreover, SDG&E has proposed APMs NOI-1, NOI-2, and NOI-3 which would reduce construction noise impacts. Proposed APMs include limitations on generator use during construction, maintenance of heavy equipment mufflers, and notifying all residences within 50 feet of the proposed project alignment. At this time, blasting activities are not anticipated; however, should rock drilling or blasting be required during construction, such activities would only occur once per day for a short period of time (SDG&E 2013b). Such activities, though generally resulting in elevated noise levels at the time the activity is performed, would actually reduce overall drilling time required at each pole site. Thus, rock drilling and blasting activities would effectively reduce overall noise impacts over the course of the 9-month construction period. To further reduce potential impacts, MM-NOI-2 states that in the event that construction activities generate noise in excess of the limits delineated in Table 5.12-1 above, SDG&E would implement additional restrictions during the remainder of scheduled construction activities. APM NOI-5 requires that, in the unlikely event that rock blasting is used during construction, a noise and vibration calculation will be prepared and submitted to SDG&E for review before blasting for each site. The construction contractor shall ensure

compliance with all applicable local, state, and federal regulations relating to blasting activities. To ensure the noise and vibration calculation is reviewed by an outside agency, MM NOI-3 is provided, which would require review of the noise and vibration calculation by CPUC and the County of San Diego. MM NOI-3 would supersede APM-NOI-5 as proposed by SDG&E (see Section 4.8, Table 4-6 of this IS).

MM NOI-3 In the unlikely event that rock blasting is used during construction, a noise and vibration calculation will be prepared and submitted to the California Public Utilities Commission and the County of San Diego for review before blasting at each site. The construction contractor will ensure compliance with all relevant local, state, and federal regulations relating to blasting activities.

Therefore, with implementation of proposed APMs and MMs, construction noise impacts would be less than significant.

Nighttime construction activities are not planned; therefore, nighttime construction noise levels would be less than significant.

Operation Noise: Operation of the proposed facilities would result in the production of minimal long-term noise from corona noise associated with the new power line; however, the proposed project would not increase power line voltage. As such, proposed power line noise, including corona noise, would not increase compared to that of the existing power line. Additionally, a typical 69-kilovolt (kV) power line does not produce a discernible noise to the human ear. Moreover, installation of a new power line would replace an older, highly-used power line with a new, modern line that has been designed and constructed to minimize corona noise during operation. According to the noise analysis prepared for the proposed project, under conditions of average fog or precipitation, typical noise levels would be less than 32 dBA at 50 feet. Under very heavy rainfall, corona noise may increase to 44 dBA at 50 feet; however, noise generated during these weather conditions are further muffled by the rainfall itself as well as attenuation from structures when people are indoors (SDG&E 2013a). Additional short-term operational noise may be generated during maintenance activities or when emergency vehicles are required; however, these activities are similar to those under existing conditions. Due to the fire-hardening efforts implemented under the proposed project, and installation of more efficient and resilient facilities, operation and maintenance hours required along the alignment would likely decrease when compared to existing conditions. Therefore, impacts during operation would be less than significant.

b) Would the project expose persons to or generate excessive ground-borne vibration or ground-borne noise levels?

Human response thresholds for vibration is barely perceptible at 0.035 ppv. Table 5.12-6 shows common equipment vibration levels at a distance of 50 feet, which is the location of the closest sensitive receptor to the project alignment.

Table 5.12-6: Vibration Source Levels for Construction Equipment at 50 feet			
Equipment	ppv at 50 feet		
Caisson Drill	0.031		
Loaded Truck	0.027		
Small Bulldozer	0.001		

Source: FTA 2006.

As shown, vibration levels for typical construction equipment would be below the barely perceptible response level at 50 feet. Therefore, impacts would be less than significant.

Additionally, as previously discussed in response to impact discussion question (a), blasting activities are not anticipated; however, should rock drilling or blasting be required during construction, such activities would only occur once per day for a short period of time. SDG&E has proposed APM-NOI-5 (see Section 4.8, Table 4-6 of this IS), which would require a noise and vibration calculation to be conducted and submitted to SDG&E Environmental Programs and Transmission Engineering and Design for review before blasting at each site. To ensure the noise and vibration calculation is reviewed by an outside agency, MM NOI-3 is provided, which would require review of the noise and vibration calculation by CPUC and the County of San Diego. MM NOI-3 supersedes APM-NOI-5 as proposed by SDG&E. The construction contractor would ensure compliance with all relevant local, state, and federal regulations relating to blasting activities, as well as SDG&E's blasting guidelines. Implementation of MM-NOI-3 would ensure impacts related to groundborne vibration would remain less than significant.

c) Would the project cause a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

The proposed project is a redevelopment project in which existing wooden pole structures would be replaced with new steel poles, in addition to minor substation modifications and the reconductoring of new power lines. As previously discussed, construction noise impacts would be intermittent and short-term, and would be considered less than significant. Upon completion of construction activities, operational noise levels would resemble those under existing conditions. The project would not require the construction of new facilities that would introduce new noise sources or increase noise in the area; therefore, the project would not result in a substantial permanent increase in ambient noise levels. Impacts to a permanent increase in ambient noise levels would be considered to be less than significant.

d) Would the project cause a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

As discussed under response 5.12.3 (a), intermittent maximum noise levels from construction equipment could range from 75 to 95 dB at 50 feet from the source; however, in most cases, construction noise levels would not exceed 75 dB; therefore, construction noise impacts are anticipated to be in compliance with the County's Noise Ordinance. Required construction work at any one pole site along the alignment would not require more than a few days up to one week. Following installation of the new steel pole, construction equipment would move down the alignment to the next pole site; therefore, heavy construction equipment and noise-generating activities would consistently move from one location to another, and no activity

would occur in any one location for an extended period of time. Additionally, SDG&E has proposed APMs NOI-1 through NOI-3 (see Section 4.8, Table 4-6 of this IS), and supplemental MMs NOI-1 through NOI-3 have been provided, which would further reduce temporary, short-term construction noise levels. Impacts would be considered less than significant.

Once operational, the proposed project would reflect noise generation similar to, or less than, that of existing conditions. As such operational noise levels would not result in temporary or periodic increases in ambient noise levels beyond existing operational noise levels. Impacts would be less than significant.

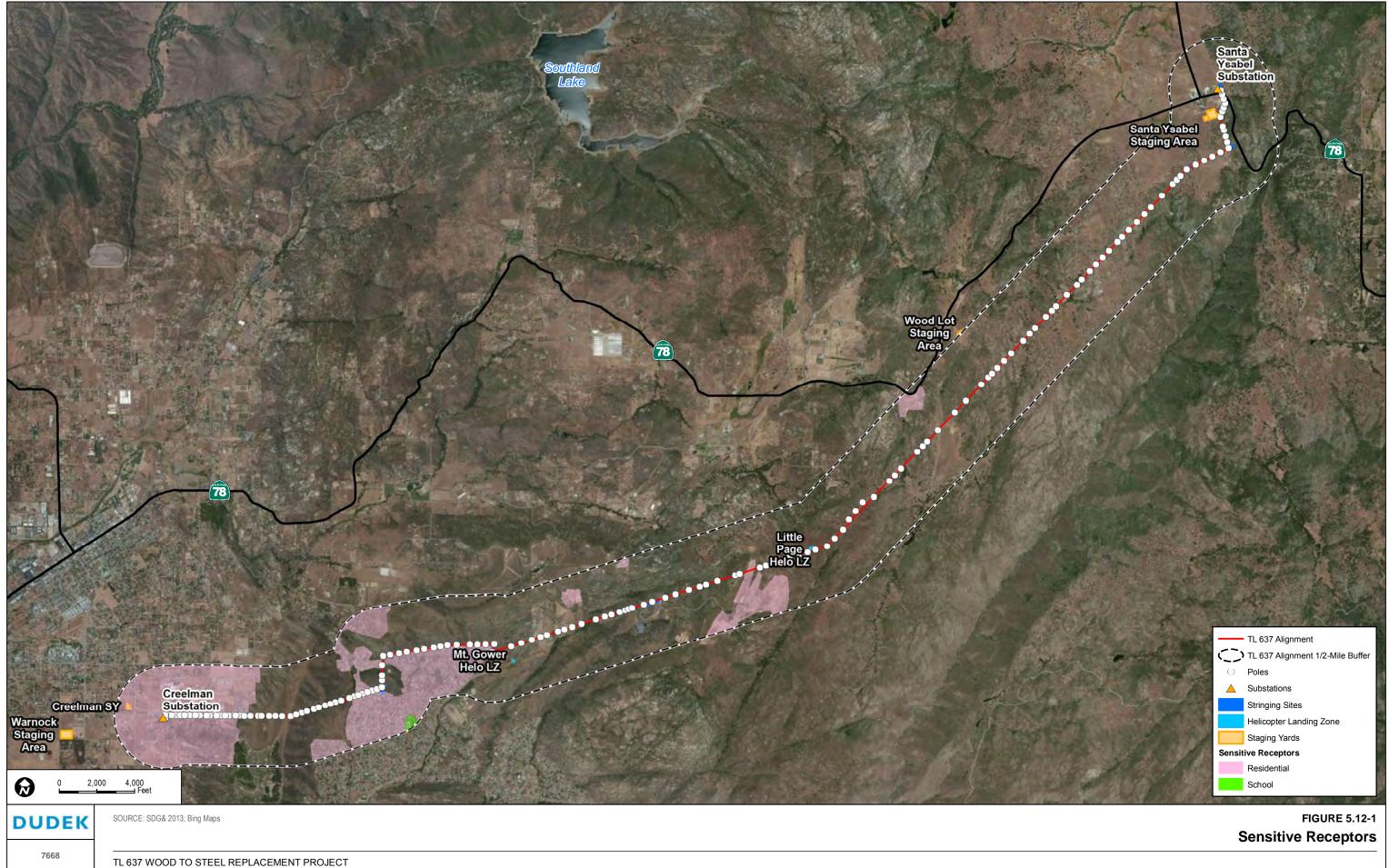
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

The project is not located within 2 miles of a public or private airport; however, the Creelman Substation is located 3.1 miles of the Ramona Airport. The project involves a wood-to-steel pole replacement project that would not expose people to excessive noise levels associated with the Ramona Airport; therefore, no impact would occur.

f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

The closest private airports to the proposed project alignment are the Flying J Private Airport located approximately 1.8 miles northwest of the TL 637 alignment and the Hoffman Private Airport is located approximately 4.9 miles northwest of the Santa Ysabel Substation. The project involves a wood-to-steel pole replacement project that would not expose people to excessive noise levels associated with private airports. Construction workers may be exposed to minimal noise generated at these airstrips; however, construction activities would be short-term and temporary, and would not expose construction workers to long-term noise associated with private airports. Impacts would be less than significant.

INTENTIONALLY LEFT BLANK



INTENTIONALLY LEFT BLANK

5.13 POPULATION AND HOUSING

Wo	uld the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a)	Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				
b)	Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				
<i>c)</i>	Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				

5.13.1 Environmental Setting

This section of the Initial Study evaluates impacts to population and housing trends associated with proposed project implementation. The analysis is based on the review of San Diego Gas & Electric's (SDG&E's) Proponent's Environmental Assessment (PEA) (SDG&E 2013) and demographic data provided by the San Diego Association of Governments (SANDAG).

Population: San Diego County as a whole had a population of 3,095,313 in 2010 (SANDAG 2012a), and by 2020 population growth is expected to increase by 14.2% to 3,535,000 (SANDAG 2010a). Unincorporated San Diego County had a population estimated to be 486,582 in 2010, according to SANDAG (SANDAG 2012b). It is estimated that the population will increase by approximately 12.1% to 545,290 by 2020 (SANDAG 2010b). The proposed project alignment occurs within the communities of Ramona and Santa Ysabel. In 2010, the Ramona Community Planning Area had a population of 35,675 (SANDAG 2012c) and is projected to increase to 39,101, or 9.6%, by 2020 (SANDAG 2010c). No population data is currently available for Santa Ysabel.

Housing: In 2010, unincorporated San Diego County had approximately 170,515 housing units, with an estimated vacancy rate of 6.6% (SANDAG 2012b). San Diego County as a whole had approximately 1,158,076 total housing units in 2010, with an estimated vacancy rate of 6.1% (SANDAG 2012a). In 2010, the Ramona Community Planning Area had approximately 12,376 housing units, with an estimated vacancy rate of 3.2% (SANDAG 2012c).

Employment: In 2011, the County of San Diego had an unemployment rate of 10% and the community of Ramona had an unemployment rate of 9.2%. No data was available for unincorporated San Diego County for this year (SDG&E 2013).

5.13.2 Regulatory Setting

Federal/State

There are no applicable federal or state regulatory policies relating to population or housing.

Local

San Diego Association of Governments (SANDAG) Regional Comprehensive Plan (RCP)

The SANDAG RCP (2004) is the long-term planning framework for the San Diego region. The RCP is intended to provide a broad context in which local and regional decisions can be made to foster a healthy environment, a thriving economy, and a high quality of life for all residents.

5.13.3 Environmental Impacts

Significance Criteria

Appendix G of the California Environmental Quality Act (CEQA) Guidelines (14 CCR 15000 et seq.) provides guidance for evaluating whether a development project may result in significant impacts. Appendix G suggests that a development project could have a significant impact on population and housing if the project would:

- a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)
- b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere
- c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

Impact Discussion

a) 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)?

The proposed project would replace existing wood poles with weathered steel poles along the Tie-Line (TL) 637 alignment and would not require the construction of new or expanded facilities. As such, no portion of the project would result in the generation of additional population. Additionally, the project would not provide additional long-term employment opportunities. No residences are proposed as part of the proposed project, and no extension of services beyond that currently planned for is associated with the proposed project. Therefore, the proposed project would not generate additional population or cumulatively exceed official regional or local population projections, nor would it induce substantial growth in the area either directly or indirectly. No impact would occur.

b) Would the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

No housing would be displaced or otherwise affected by the proposed project. No impact would occur.

c) Would the project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

No people would be displaced by construction or operation of the project. No impact would occur.

INTENTIONALLY LEFT BLANK

5.14 PUBLIC SERVICES

Would	d the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
fo fo fa fa fa fa fa fa fa fa fa fa fa fa fa	Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need or new or physically altered governmental acilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response imes, or other performance objectives for any of the public services:				
	Fire protection?			\boxtimes	
	Police protection?				\square
	Schools?				\square
	Parks?				\square
	Other public facilities?				\boxtimes

5.14.1 Environmental Setting

This section of the Initial Study (IS) evaluates impacts to fire protection, police protection, schools, parks, and other public facilities associated with proposed project implementation. The environmental analysis is based on the review of San Diego Gas & Electric's (SDG&E's) Proponent's Environmental Assessment (PEA) (SDG&E 2013).

Fire Protection

The Tie-Line 637 Wood-to-Steel Replacement Project (proposed project) is located within the communities of Ramona and Santa Ysabel in eastern San Diego County. The Ramona Municipal Water District (RMWD) provides the area with fire protection and emergency medical services. The RMWD contracts with the California Department of Forestry and Fire (CAL FIRE) for fire protection and emergency medical services. Three fire stations located in Ramona offer 24-hour fire protection services. Fire Station 80, located at 829 San Vicente Road, is approximately 2 miles from the western end of the project alignment. Fire Station 81, located at 24462 San Vicente Road and operated by the U.S. Forest Service (USFS), is approximately 2.8 miles from the project alignment area that crosses the San Diego Country Estates subdivision. The Inter-Mountain Fire and Rescue Department is an all-volunteer department with two fire stations and 57 volunteer firefighters. Fire Station 85, located at 25858 off State Route 78 (SR-78) in Ramona, is approximately 3.5 miles from the project alignment northeast of the San Diego Country Estates subdivision. Station 54, located at 911 Schoolhouse Canyon

Road in Santa Ysabel, provides fire service to Santa Ysabel, and is approximately 4.5 miles from the eastern terminus of the project alignment. A Mutual Aid agreement has been established between CAL FIRE, Inter-Mountain Fire, the RMWD, and the San Diego Rural Fire Protection District for provision of fire protection and emergency medical services (SDG&E 2013). Additionally, the USFS provides fire protection for all federal wildlands.

Police Protection

Police services in the project area are provided by the San Diego County Sheriff's Department. The San Diego County Sheriff's Department Ramona Substation, located at 1424 Montecito Road in Ramona, serves an area of approximately 150 square miles and approximately 40,000 residents. The substation is staffed with 1 lieutenant, 3 sergeants, 3 detectives, and 17 deputies, and is located approximately 3 miles northwest of the project alignment. Additionally, the San Diego County Sheriff's Department serves the Central Mountain Subregion through the Julian Substation, located approximately 6.6 miles southeast of the project alignment, whose purview includes the community of Santa Ysabel. The Julian Substation serves an area of approximately 200 square miles and is located at 2907 Washington Street in Julian (SDG&E 2013).

The USFS provides law enforcement services within the Cleveland National Forest.

Schools

Within the Ramona community, the Ramona Unified School District includes five elementary schools, one middle school, two high schools, and one combined middle school/high school, and one K-12 school. Four private schools are also located in Ramona including Keystone Academy, Montessori Children's Elementary School, Montessori Children's House, and Ramona Lutheran School.

The Santa Ysabel community includes the Spencer Valley Elementary School District, which serves 2,266 students in kindergarten through grade 12.

The closest school to the alignment is Barnett Elementary School located approximately 0.5 mile from the project alignment in the San Diego Country Estates subdivision (SDG&E 2013).

5.14.2 Regulatory Setting

There are no federal or state laws or policies related to public services that are applicable to the proposed project.

The San Diego County General Plan has a variety of goals and policies related to public service systems, and it generally describes the County's provision and management of fire and police protection services, schools, park and recreation facilities, and other public facilities.

5.14.3 Environmental Impacts

Significance Criteria

Appendix G of the California Environmental Quality Act (CEQA) Guidelines provides guidance for evaluating whether a development project may result in significant impacts (14 CCR 15000

et seq.). Appendix G states that a development project could have a significant impact on public services if the project would result in substantial, adverse physical impacts associated with the provision of new or physically altered governmental facilities, the 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 following public services:

- a) Fire protection
- b) Police protection
- c) Schools, parks, and other public facilities.

Impact Discussion

a) Would the project result in substantial, adverse physical impacts associated with the provision of new or physically altered governmental facilities, the 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 following public services: fire protection?

The proposed project area is located within a high-risk wildland fire hazard area within eastern San Diego County. The design of proposed steel pole structures that would be constructed as part of the proposed project would replace fire-susceptible wooden poles with fire-resistant steel poles, thus resulting in a fire-hardened alignment that would protect proposed project facilities in the event of a wildland fire. Project design would include fire-hardening techniques, including replacing wood poles with steel poles, increasing conductor spacing to maximize line clearances, installing steel poles designed to withstand an extreme wind loading case and known local conditions, and installing longer polymer insulators. These design components of the proposed project would minimize fire risk through enhanced safety and reliability of the power line system during extreme weather conditions, and reduce the risk of accidental ignition from power lines in fire-prone areas.

During construction, heat or sparks from construction equipment and vehicles, as well as the use of flammable hazardous materials, could potentially ignite the on-site vegetation and start a fire, resulting in an increase in fire response demand to the project site. Implementation of SDG&E-proposed Applicant Proposed Measure (APM)-HAZ-1 through APM-HAZ-3 (see Section 4.8, Table 4-6 of this IS) would ensure that wildfire impacts would be less than significant and therefore would not result in the need for new fire protection services. See Section 5.8, Hazards and Hazardous Materials, regarding fire prevention measures.

Operation and maintenance of the proposed project alignment would resemble those currently administered by SDG&E for the existing Tie-Line (TL) 637 alignment, and activities would not increase in duration, intensity, or frequency. Operations and maintenance would require routine and periodic equipment testing, pole brushing, herbicide application, and other related on-going maintenance tasks, similar to those currently conducted by SDG&E. Therefore, because operation and maintenance of the proposed alignment facilities would not increase in duration,

intensity, or frequency, and would not involve the construction of new facilities, wildland fire impacts associated with operation of the alignment would be less than significant and would not result in the need for new fire protection services.

b) Would the project result in substantial, adverse physical impacts associated with the provision of new or physically altered governmental facilities, the 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 following public services: police protection?

The proposed alignment would primarily be an unmanned facility and would only require routine operation and maintenance as described in response 5.14.3 (a). As discussed under Section 5.13.3 (a) (Population and Housing), the project would remove and replace existing wood pole structures, modify two existing substations within existing the substation fence lines, and install a fiber optic cable which would be co-located on the TL 637 tie-line. Therefore, the project would not generate population growth and no new demand would be placed on police protection.

c) Would the project result in substantial, adverse physical impacts associated with the provision of new or physically altered governmental facilities, the 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 following public services: schools, parks, and other public facilities?

The proposed alignment would primarily be an unmanned facility and would only require routine operation and maintenance as described in response 5.14.3 (a) above. As discussed under response 5.13.3 (a) (Population and Housing), the project would not generate population growth; therefore, no new demand would be placed on schools, parks, or other public facilities.

5.15 RECREATION

Wo	ould the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a)	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?				
b)	Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				

5.15.1 Environmental Setting

This section of the Initial Study (IS) discusses impacts to recreational resources associated with proposed project implementation. The environmental analysis is based on the review of San Diego Gas & Electric's (SDG&E's) Proponent's Environmental Assessment (PEA) (SDG&E 2013a) and data responses (SDG&E 2013b).

The Tie-Line 637 Wood-to-Steel Replacement Project (proposed project) is located in a rural portion of unincorporated San Diego County, which includes a number of recreational resources. The Simon Preserve, located 2 miles southeast of the unincorporated community of Ramona, encompasses approximately 617 acres of open space, recreational use trails, and Ramona Peak. The Mount Gower Preserve encompasses approximately 1,574 acres and is located southeast of the Ramona community. The Simon Preserve and Mount Gower Preserve are maintained by the County of San Diego Department of Parks and Recreation. The Cleveland National Forest, encompassing approximately 460,000 acres and managed by the U.S. Forest Service (USFS), is located primarily south of the proposed project alignment, through which a small segment of the project traverses.

5.15.2 Regulatory Setting

There are no federal or state laws or policies related to recreation facilities that are applicable to the proposed project.

The San Diego County General Plan has a variety of goals and policies related to recreation facilities, and it generally describes the County's provision and management of recreation facilities.

5.15.3 Environmental Impacts

Significance Criteria

Appendix G of the California Environmental Quality Act (CEQA) Guidelines provides guidance for evaluating whether a development project may result in significant impacts (14 CCR 15000 et seq.). Appendix G indicates that a project could have a significant impact on recreational facilities if the project would:

- a) 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
- b) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

Refer to Section 5.16, Transportation and Traffic, for a discussion regarding potential impacts to bicycle facilities.

Impact Discussion

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

The proposed alignment would primarily be an unmanned facility and would only require routine operation and maintenance. The project would remove and replace existing wood pole structures, modify two existing substations within existing substation fence lines, and install a fiber optic cable which would be co-located on the new Tie-Line (TL) 637. As discussed in Section 5.13.3, Population and Housing, in response to impact discussion question (b) the proposed project would not directly or indirectly induce growth and thus would not affect the use of or demand for existing parks and recreation facilities. Therefore, physical deterioration of recreation facilities would not occur because there would be no permanent increases in population as a result of the proposed project.

In addition to the County of San Diego, the proposed project alignment traverses federal and state jurisdictional boundaries including the U.S. Bureau of Land Management (BLM) on the Mount Gower Preserve, a segment of the Cleveland National Forest managed by the USFS, and the California Department of Transportation rights-of-way (ROW) at State Route 78 and State Route 79. SDG&E has obtained a ROW grant amendment from BLM for work proposed on the Mount Gower Preserve, which is located within the Draft North County Multiple Species Conservation Program Plan area and the BLM South Coast Resource Management Plan boundaries. The ROW grant for work within the Mount Gower Preserve was approved and issued by the BLM on June 1, 2012 (SDG&E 2013a).

In addition to the Mount Gower Preserve, the proposed project alignment crosses the Simon Preserve, which is owned and managed by the County of San Diego under the Simon Preserve Resource Management Plan. SDG&E's easement traversing the Simon Preserve was established prior to County acquisition of the Preserve in 1959; therefore, no permits or approvals are required for work on this easement.

Staging areas, helicopter landing zones and stringing sites have been identified for temporary use during construction, which would be located outside of the SDG&E ROW (see Figure 4-3). Temporary trail use restrictions would occur within the Simon Preserve, specifically between poles P24 through P39 (see Attachment A, Detailed Alignment Maps, Map 2 of 10 and 3 of 10), and within the Mount Gower Preserve between poles P66 through P69 (see Attachment A, Detailed Alignment Maps, Map 5 of 10). Additionally, the Mount Gower helicopter landing zone is located in an unpaved parking area for the Mount Gower Preserve, and two stringing sites that would be located adjacent to an existing equine facility (see Attachment A, Detailed Alignment Maps, Map 4 of 10). SDG&E has proposed Applicant Proposed Measure (APM)-REC-1 (see Section 4.8, Table 4-6 of this IS), which would implement temporary trail detours where construction activities may temporarily interfere with recreational trails within the Mount Gower and Simon Preserves. Additionally, SDG&E has proposed APM-HAZ-4 (see Section 4.8, Table 4-6 of this IS), which would establish a safety buffer between recreational users of the Simon Preserve, Mount Gower Preserve, and Mount Gower helicopter landing zone during construction activities at these locations. Construction schedules and activities would be coordinated with the authorized officer for the recreational area where construction would temporarily occur. With implementation of APM-REC-1 and APM-HAZ-4, impacts would be less than significant.

b) 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?

Because there would be no population growth associated with SDG&E's proposed project, the project would not include recreation facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment.

INTENTIONALLY LEFT BLANK

5.16 TRANSPORTATION/TRAFFIC

Wo	uld the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a)	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?				
b)	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?				
<i>c)</i>	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?		\boxtimes		
d)	Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				
e)	Result in inadequate emergency access?			\boxtimes	
f)	Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?				

5.16.1 Environmental Setting

The proposed project is located in the eastern portion of unincorporated San Diego County in a primarily rural area within the communities of Ramona and Santa Ysabel. The study area for this analysis includes roadways directly affected by the proposed project. This section of the Initial Study (IS) discusses impacts to traffic and circulation associated with implementation of the Tie-Line 637 Wood-to-Steel Replacement Project (proposed project). The environmental analysis and existing roadway information is based on the review of information presented in San Diego Gas & Electric's (SDG&E's) Proponent's Environmental Assessment (PEA) (SDG&E 2013).

Existing Roadway Network

Roadways have different classifications depending on their purpose and level of traffic:

- **Highway:** A main public road, especially one connecting towns and cities
- **Freeway:** A divided arterial highway with full control of access and with grade separation at intersections
- **State Route:** A roadway designated by state law as part of the Freeway and Expressway System of the California State Highway Code
- **Prime Arterial:** A main highway primarily for through traffic usually on a continuous route
- **Major Collector:** A four-lane facility, with a design speed of 25–35 miles per hour (mph) on a typical right-of-way (ROW) of 84 feet without bicycle lanes or 96 feet with two 6-footwide bicycle lanes.
- **Collector:** Streets that collect and distribute traffic to and from major highways and local streets. Collector streets also serve secondary traffic generators such as shopping and business centers, schools, parks and high density or large-scale residential areas.

Table 5.16-1 lists affected roadways and includes general roadway classification, number of lanes, daily traffic volumes, and level of service.

Figure 2, Vicinity Map, and Attachment A, Detailed Alignment Maps (Index Map), illustrate the study area roadway network that could be potentially affected by the proposed project, including the roadways listed in Table 5.16-1.

Table 5.16-1: Key Roadways Adjacent to the Project Alignment								
Roadway	Cross Street	Jurisdiction	Classification	Number of Lanes	Average Weekday Traffic Volume	LOS E* Capacity		
State Route (SR) 78	3rd Street	Caltrans	Highway	2	12,100	16,200		
SR-67/Main Street	10th Street/SR- 78	Caltrans	Highway	2–4	26,700	16,200- 34,200		
San Vicente Road	Gunn Stage Road	Caltrans	Highway	2	1,800	16,200		
Ashley Road	7th Street	San Diego County	Minor Collector	2	2,000	8,000		
Keyes Road	Old Julian Highway	San Diego County	Community Collector	2	1,600	16,200		

Table 5.16-1: Key Roadways Adjacent to the Project Alignment								
Roadway	Cross Street	Jurisdiction	Classification	Number of Lanes	Average Weekday Traffic Volume	LOS E* Capacity		
Vista Ramona Road	Old Julian Highway	San Diego County	Community Collector	2	3,200	16,200		
Gunn Stage Road	San Vicente Rd	San Diego County	Community Collector	4	4,600	16,200		
Old Julian Highway	Vista Ramona Road	San Diego County	Community Collector	2	1,300	16,200		

Source: SDG&E 2013

* Level of Service (LOS) E is considered to be the limit of acceptable delay.

Highways – SR-67, SR-78, and SR-79: The proposed project site is accessible off SR-67, SR-78, and SR-79, which are two-lane roads. A portion of SR-67 from the Ramona Community Plan Area boundary to Archie Moore Road has been improved to a four-lane roadway segment. SR-78 runs through the communities of Ramona and Julian, to the Salton Sea. SR-79 runs through central San Diego County. SR-79 and SR-78 merge in Santa Ysabel. The proposed project alignment is located west of SR-79.

Arterial Roads: San Vicente Road is the primary arterial in the proposed project area and is classified as a Major Road in the County of San Diego Circulation Element. San Vicente Road is a four-lane road which runs east–west within the San Diego Country Estates subdivision. The proposed project alignment is located east and west of San Vicente Road.

Local Roads: Table 5.16-1 lists local collector roads within the proposed project vicinity. Private local roads within the project alignment area include Cinnamon Rock Road, Oak Hollow Road, and West Side Road.

Air Transportation: The closest public use airport is the Ramona Airport, which is located approximately 3.4 miles northwest of the Creelman Substation. The closest private use airports to the project alignment are the Flying J Airport, located approximately 1.8 miles northwest of the alignment, and the Hoffman Airport located approximately 4.9 miles northwest of the Santa Ysabel Substation.

Public Transportation: Limited bus service in the Ramona community is provided by San Diego North County Transit District through the Ramona FLEX Commuter and Ramona FLEX Midday, which both require reservations. The bus routes provide service from the Escondido Transit Center in Escondido to downtown Ramona off Main Street. These bus lines are not located along the proposed project alignment route.

Bikeways: There are no designated bicycle facilities within the proposed project alignment route.

5.16.2 Regulatory Setting

Federal

Airports and navigable airspace not administered by the Department of Defense are under the jurisdiction of the Federal Aviation Administration (FAA). Federal Regulation Title 14, Section

77, establishes the standards and required notification for objects affecting navigable airspace. In general, construction projects exceeding 200 feet in height above ground level, or extending at a ratio greater than 50 to 1 (horizontal to vertical) from a public or military airport runway less than 3,200 feet long, out to a horizontal distance of 20,000 feet are considered potential obstructions and require FAA notification (14 CFR Part 77). In addition, the FAA requires a Helicopter Lift Plan for operating a helicopter within 1,500 feet of residential dwellings. All helicopter construction activities would be required to comply with all appropriate regulations of the FAA.

State

California Public Utilities Commission

General Order 26-D regulates the minimum clearance requirements for railroads and street railroads. As stated in Section 14, "all electrical construction over, above, adjacent to, along or across railroads shall conform to the requirements specified in General Order 95" (CPUC 1948).

General Order 95, Rules for Overhead Electric Line Construction, establishes uniform requirements for overhead electrical line construction. According to General Order 95, Rule 36 (Section III, Table 1), the minimum allowable vertical clearance for supply cables, 22.5–300 kilovolts (kV), for crossings above railroad tracks that transport freight cars is 34 feet (CPUC 2012). The minimum side clearance between an electrical transmission line pole, tower, or structure and the center line of the adjacent railroad track is 8 feet, 6 inches (CPUC 2012). In addition, Section XI states that poles or towers supporting crossing spans shall be located outside of the railroad company's ROW wherever practical (CPUC 2012). For urban and rural thoroughfares, the minimum allowable vertical clearance for supply cables, 22.5–300 kV, is 30 feet (CPUC 2012).

California Department of Transportation

California Department of Transportation (Caltrans) is the state agency tasked with improving and maintaining roads in the state of California. In areas with designated state routes, the state has the responsibility to maintain these roadways, while the local jurisdiction is responsible for maintaining local roads. Local jurisdictions work with Caltrans to designate transportation network requirements and critical areas in need of improvement.

Local

Construction of the proposed project could potentially affect access, traffic flows, roadside parking, and transit routes on public streets and highways. Therefore, it will be necessary for SDG&E and/or the construction contractor to obtain encroachment permits or similar legal agreements from the public agencies responsible for each affected roadway or other transportation ROW. Such permits are needed for ROWs that would be crossed by the underground distribution lines as well as for transmission line construction activities that would require the use of a public ROW for a parallel installation. For the proposed project, these encroachment permits would be issued by the Caltrans.

5.16.3 Environmental Impacts

Significance Criteria

Appendix G of the California Environmental Quality Act (CEQA) Guidelines (14 CCR 15000 et seq.) provides guidance for evaluating whether a development project may result in significant impacts. Appendix G suggests that a development project could have a significant impact on traffic and transportation if the project would:

- a) 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
- b) 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
- c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that result in substantial safety risks
- d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)
- e) Result in inadequate emergency access
- f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

Impact Discussion

a) 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?

During construction activities, construction crew personnel vehicles, construction equipment, and trucks would be required to mobilize on local roadways and access roads for removal and replacement of alignment facilities. Construction-related traffic may temporarily affect traffic on local roadways where individual pole sites are located adjacent to the roadway. Roadways most likely to be temporarily impacted by construction activities are shown in Table 5.16-2.

Table 5.16-2: Potential Roadways Impacted During Construction Activities				
Roadway Pole Number(s)				
Creelman Lane	R1, P3, D1, P5, D6, D7, D8, R9, D167, R10, P168, R11, D12, R171, D16, R17, P173, R18, D19, D174, R174, P20			
Arena Way	P41, D42, and two guard structures			

Table 5.16-2: Potential Roadways Impacted During Construction Activities				
Roadway Pole Number(s)				
Littlepage Road	P93, and two guard structures			
SR-78	P161, P162, and two guard structures			
SR- 79	Two guard structures			

Source: SDG&E 2013.

Approximately 50 construction vehicles would be at or accessing each staging area at any given time. Each construction worker vehicle and each general construction vehicle or truck would make approximately one trip in the morning and one trip in the evening. Therefore, construction traffic would result in a temporary increase of approximately 100 daily vehicle trips per day at the staging yards. As shown in Table 5.16-1, this short-term, construction-related traffic would not create a substantial impact on traffic volumes nor change traffic patterns in such a way as to significantly impact LOS at identified roadways because the change in traffic volume would not be enough to change the existing volumes to capacity ratios.

To ensure traffic and circulation impacts would remain less than significant at locations listed in Table 5.16-2 where pole work would be required adjacent to public roadways, SDG&E has proposed Applicant Proposed Measure (APM)-TRA-1 (see Section 4.8, Table 4-6 in this IS), which would implement a traffic control plan to address potential disruption of traffic circulation during construction at nearby pole sites and address any safety issues. The traffic control plan would be prepared by the project engineer or contractor and would be subject to approval by the County of San Diego.

Additionally, SDG&E would be required to obtain encroachment permits from Caltrans for pole work off of SR-78 and SR-79. SDG&E would implement APM-TRA-2 (see Section 4.8, Table 4-6 in this IS) to ensure encroachment permits are obtained and safety measures are implemented during construction work on public roadways. Safety measures would include flagging, proper signage, and orange cones to alert the public to construction activities near the roadway.

With implementation of APM-TRA-1 and APM-TRA-2, it is expected that short-term, construction-related traffic would neither create a substantial impact on traffic volume nor change traffic patterns in such a way that congestion and delay would be substantially increased on street segments or intersections. Impacts would be less than significant.

Operation and maintenance of the proposed project alignment would resemble those currently administered by SDG&E for the existing Tie-Line (TL) 637 alignment, and activities would not increase in duration, intensity, or frequency. Operations and maintenance would require routine and periodic equipment testing, pole brushing, herbicide application, and other related on-going maintenance tasks, similar to those currently conducted by SDG&E. Therefore, because operation and maintenance of the proposed alignment facilities would not increase in duration, intensity, or frequency, and would not generate new trips in the proposed project area, traffic impacts during operation would not occur.

b) 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?

As previously discussed in response to impact discussion question (a), although the project would result in a temporary increase in traffic, short-term and limited construction-related traffic would not result in a substantial impact on traffic volumes nor change traffic patterns in such a way as to affect the LOS or vehicle to congestion ratios on study area roadways. Therefore, a less-than-significant impact would result.

c) Would the project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that result in substantial safety risks?

As discussed in Section 5.8, Hazards and Hazardous Materials, the project is not located within a public airport land use plan or within 2 miles of a public airport. The Ramona Airport is located approximately 3.4 miles from the Creelman Substation. Because the proposed project would require occasional, short-term helicopter support during construction, Mitigation Measure (MM) HAZ-4 and MM HAZ-5 are provided as discussed in Section 5.8.

- **MM HAZ-4** Prior to flight operations for helicopter use during construction, San Diego Gas &Electric (SDG&E) shall coordinate with local air traffic control and comply with all Federal Aviation Administration regulations regarding helicopter use to prevent conflict with air traffic generated by the Ramona Airport. Documentation verifying SDG&E has coordinated with local air traffic control shall be provided to California Public Utilities Commission prior to use of helicopters for construction activities.
- **MM HAZ-5** Prior to flight operations for helicopter use during construction, a Helicopter Lift Plan shall be prepared if required pursuant to Federal Aviation Administration regulations. The Helicopter Lift Plan shall be submitted to the California Public Utilities Commission for review and approval.

Although the proposed project alignment is not located within an airport land use plan, SDG&E notified the FAA of two poles which would potentially affect air navigation. Based on this notification, the FAA conducted an aeronautical study under the provisions of 49 U.S.C. Section 44718 and Title 14 of the CFR Part 77, and determined that no hazard to air navigation and aerial marking lights/balls would be required as part of proposed project implementation. As such, the proposed project would not result in a change in air traffic patterns (SDG&E 2013). Therefore, with implementation of MM HAZ-4 and MM HAZ-5 as discussed in Section 5.8, impacts would be less than significant.

d) 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)?

No long-term changes to circulation patterns are proposed as part of the project. The proposed project would replace existing pole structures with new pole structures, and would not involve

the construction of new facilities. As such, the project would not permanently increase hazards related to existing traffic patterns in the area. Short-term construction-related activities, such as pole work adjacent to public roadways, would have the potential to temporarily interfere with traffic patterns. Implementation of SDG&E-proposed APM-TRA-1 and APM-TRA-2 (see Section 4.8, Table 4-6 in this IS) would ensure that temporary construction-related impacts would be less than significant.

e) Would the project result in inadequate emergency access?

The project would not require the closure of access to any property or existing roads in the project vicinity. As stated previously, SDG&E would implement APM-TRA-1 (see Section 4.8, Table 4-6 in this IS), which would require the implementation of a traffic control plan to address potential disruption of traffic circulation during construction at nearby pole sites and address any safety issues. The traffic control plan would be prepared by the project engineer or contractor and would be subject to approval by the County of San Diego. SDG&E would implement APM-TRA-2 (see Section 4.8, Table 4-6 in this IS) to ensure encroachment permits are obtained and safety measures are implemented during construction work on public roadways. Safety measures would include flagging, proper signage, and orange cones to alert the public to construction activities near the roadway. Following construction activities, operation and maintenance of the proposed project alignment would resemble those currently administered by SDG&E for the existing TL 637 alignment, and activities would not increase in duration, intensity, or frequency. Therefore, less-than-significant impacts to emergency access or access to nearby uses are expected due to the project.

f) 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?

Implementation of the proposed project would not conflict with adopted policies or involve elimination of facilities supporting alternative transportation such as bus turnouts or bicycle facilities.

During construction, SDG&E would obtain encroachment permits to conduct work within the public ROW and would ensure that access for motorists and bicyclists remains open during construction, and therefore, less-than-significant impacts on alternative transportation modes are expected due to project construction.

The operation and maintenance of the proposed project would not result in generation of additional trips on local roadways and would not interfere with bicycle or pedestrian facilities in any way. As such, no off-site rail, bus, or bicycle traffic or circulation patterns would be altered or adversely affected by long-term operation and maintenance activities.

5.17 UTILITIES AND SERVICE SYSTEMS

Wo	uld the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a)	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				\boxtimes
b)	Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				
<i>c)</i>	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?				
d)	Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?				
e)	Result in a determination by the wastewater treatment provider, which serves or may serve the project, that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				
f)	Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?			\boxtimes	
g)	Comply with federal, state, and local statutes and regulations related to solid waste?				

5.17.1 Environmental Setting

This section of the Initial Study evaluates impacts to wastewater, water supply, stormwater facilities, and solid waste generation associated with proposed project implementation. The environmental analysis is based on the review of San Diego Gas & Electric's (SDG&E's) Proponent's Environmental Assessment (PEA) (SDG&E 2013a) and data responses (SDG&E 2013b).

Water Service: The Ramona Municipal Water District and Wynola Water District provide water service to the project area (SDG&E 2013a).

Wastewater Service: The Ramona Municipal Water District provides wastewater treatment service to the project area. The unincorporated community of Ramona lies within the Activated Sewer Powers Area. The San Diego Country Estates subdivision lies within the San Vicente Sewer Service Area. The unincorporated community of Santa Ysabel operates on septic systems and is not located within an established service territory of a local sewer district (SDG&E 2013a).

Solid Waste Service: Seven active landfills are located within San Diego County. The Otay Landfill would likely be the primary receiver of solid waste generated from the proposed project. Table 5.17-1 shows existing landfill capacity of landfills located in the proposed project vicinity (SDG&E 2013a).

Table 5.17-1: Landfill Capacity in Proposed Project Area						
Facility	Total Capacity (million cubic yards)	Remaining Capacity (million cubic yards)	Maximum Permitted Throughput (tons/day)			
Otay Landfill (Landfill Class III)	61.1	24.5	5,830			
Kettleman Hill – B18 Nonhaz Codisposal	10.7	6.0	8,000			
Clean Harbors Buttonwillow LLC	14.3	Not Available	10,482			

Source: SDG&E 2013a.

5.17.2 Regulatory Setting

Federal

There are no federal utility or service system policies relevant to the proposed project.

State

Utilities

The responsibilities of utility operators and other excavators working in the vicinity of utilities are detailed in Section 1, Chapter 3.1 "Protection of Underground Infrastructure," Article 2, of California Public Utilities Code. This law requires that an excavator must contact a regional notifications center at least 2 days prior to excavation of any subsurface installations. The notifications center for the project area is Underground Service Alert. Any utility provider seeking to begin an excavation project can call Underground Service Alert's toll-free hotline. Underground Service Alert, in turn, will notify the utilities that may have buried lines within 1,000 feet of the excavation. Representatives of the utilities are required to mark the specific location of their facilities within the work area prior to the start of excavation. The excavator is required to probe and expose the underground facilities by hand prior to using power equipment.

Water

The State Water Resources Control Board adopted Water Quality Order No. 2006-0008-DWQ for the reissuance of general National Pollutant Discharge Elimination System permit (CAG990002) on July 19, 2006. This general permit covers short-term and intermittent discharges from the dewatering of utility vaults and underground structures to surface waters.

Solid Waste

Assembly Bill (AB) 939 established an integrated waste management hierarchy to guide the California Integrated Waste Management Board and local agencies in the implementation of programs geared at (1) source reduction, (2) recycling and composting, and (3) environmentally safe transformation and land disposal. AB 939 also included waste diversion mandates that require all cities and counties to divert 50% of all solid waste through source reduction, recycling, and composting activities (California Integrated Waste Management Board 2008).

AB 75 was passed in 1999 and added new provisions to the Public Resources Code, mandating that all state agencies and large state facilities develop and implement an integrated waste management plan. In addition, the provisions of AB 75 required all state agencies and large state facilities to divert at least 25% of their solid waste from landfills by January 1, 2002, and at least 50% on and after January 1, 2004. As of January 1, 2006, extensions to the diversion requirements were no longer available (California Integrated Waste Management Board 2009).

The project is required to comply with Title 14 of the California Code of Regulations (CCR), which established minimum standards for solid waste handling and disposal (the current regulations of the California Integrated Waste Management Board are found within Title 14). The California Department of Toxic Substances Control issues permits for the transport of hazardous wastes.

5.17.3 Environmental Impacts

Significance Criteria

Criteria for determining the significance of impacts on utilities were based on the environmental checklist form in Appendix G of the California Environmental Quality Act (CEQA) Guidelines (14 CCR 15000 et seq.). On the basis of the checklist questions, a project may have a significant effect on the environment if it would result in any of the following outcomes:

- a) Exceed wastewater treatment requirements of the applicable RWQCB
- 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
- c) 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
- d) Not have sufficient water supplies available to serve the project from existing entitlements and resources, or would need new or expanded entitlements
- e) Result in a determination by the wastewater treatment provider, which serves or may serve the project, that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments
- Be served by a landfill without sufficient permitted capacity to accommodate the project's solid waste disposal needs
- g) Conflict with federal, state, and local statutes and regulations related to solid waste.

Impact Discussion

a) Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

Project implementation would not impact wastewater treatment. Wastewater treatment facilities are neither required nor part of the proposed project.

b) 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?

The proposed project would not require the use of wastewater facilities.

Construction activities would require the use of water (approximately 2.25 million gallons) for dust control and other activities during pole removal and replacement. Water would be obtained by construction contractors from existing local water sources, including private landowners and the Ramona Municipal Water District and as such no new water or treatment facilities or expansion to existing water facilities would be required. Furthermore SDG&E is currently working with the Ramona Municipal Water District in order to secure commitment letters for the approximate 2.25 million gallons of water needed for construction. Once commitment letters have been received, SDG&E would supply letters to the CPUC (SDG&E 2013b).

Operations and maintenance would require routine and periodic equipment testing, pole brushing, herbicide application, and other related ongoing maintenance tasks, similar to those currently conducted by SDG&E in support of Tie-Line (TL) 637. Therefore, because operation and maintenance of the proposed alignment facilities would not increase in duration, intensity, or frequency, and would not require additional water supplies beyond those used currently by SDG&E for operation and maintenance of the TL 637 alignment, impacts would be less than significant.

c) 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?

The proposed project would remove and replace existing pole structures within the TL 637 alignment and therefore would not increase the impervious surface along the TL 637 right-ofway or require or alter existing off-site drainage systems (also see Section 5.9, Hydrology and Water Quality). Impacts would be less than significant.

d) Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

See response to impact discussion question (b).

e) 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?

See response to impact discussion question (a).

f) Would the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

The primary source of solid waste resulting from construction of the proposed project would be wooden poles and associated appurtenances to be removed from the alignment and replaced. The majority of removed materials from the existing alignment would be recycled at a licensed facility within the area if it is determined that materials slated for disposal are nonhazardous and non-impacted. Treated wood products would be recycled or disposed of as appropriate at a licensed landfill in accordance with all federal, state, and local regulations. Conductors, hardware, and insulators associated with removed facilities would be recycled at a metal recycling facility. Excavated soil would be reused on site wherever feasible, including to infill and recompaction of vacant holes created during pole removal. All excess soil not reused on site would be recycled or disposed of at a nearby facility; however, it is anticipated that exportation of soil off site would not be required, as all soil is anticipated to be balanced along the alignment during construction (SDG&E 2013a). For any material that cannot be recycled, permanent disposal of waste generated from the proposed project would likely be sent to the Otay Landfill. which has sufficient capacity (as shown in Table 5.17-1) and is anticipated to remain open for waste accommodation until 2028. Because the majority of material to be removed would be recycled, the amount of construction waste to be disposed at a landfill or other permitted facility is expected to be minimal and therefore would have a less-than-significant impact on local solid waste facilities and would not result in the need for expansion of a landfill or other disposal site.

Upon completion of construction activities, operation and maintenance of the proposed project alignment would resemble those currently administered by SDG&E for the existing TL 637 alignment, and activities would not increase in duration, intensity, or frequency. Therefore, solid waste generation would not increase following completion of construction activities.

g) Would the project comply with federal, state, and local statutes and regulations related to solid waste?

See response to impact discussion question (f). All solid waste would be disposed of at an approved site in compliance with federal, state, and county regulations.

INTENTIONALLY LEFT BLANK

5.18 MANDATORY FINDINGS OF SIGNIFICANCE

Wo	uld the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a)	Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?				
b)	Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?				
<i>c)</i>	Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?				

a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?

Biological Resources

As further described in Section 5.5, Biological Resources, impacts to sensitive species and their habitats could result from the Tie-Line 637 Wood-to-Steel Replacement Project (proposed project). Field surveys indicate that five sensitive plant species, three sensitive reptiles, and five sensitive bird species are present within the proposed project area. An additional 28 wildlife and 4 sensitive plant species have a moderate to high potential to occur.

Specific impacts to sensitive vegetation communities include 13.16 acres (13.13 acres temporary, 0.3 acre permanent) that may support foraging and/or nesting avian species. Temporary impacts to avian nesting and foraging may include a temporary increase in noise from construction equipment and vehicles. Specific temporary and permanent impacts for the coastal California gnatcatcher (Polioptila californica californica; CAGN) were also assessed for locations where CAGN were identified. Based on the observed locations of this species in suitable habitat (coastal sage scrub/chaparral mix in the immediate area), approximately 122 square feet (0.0028 acre) of coastal sage scrub/Chaparral Mix is anticipated to be permanently impacted due to the proposed project. Approximately 759 square feet (0.0493 acre) of coastal sage scrub/chaparral mix and 425 square feet (0.0097 acre) of buckwheat scrub in the immediate area are anticipated to be temporarily impacted due to the proposed project. Development of the proposed project would also have temporary and permanent impacts to federally protected wetlands. To further minimize impacts to aquatic resources, the proposed project has been designed to relocate poles outside of jurisdictional areas whenever possible. However, being part of an existing transmission line limits placement of the new poles due to consistency in alignment.

The proposed construction activities would not significantly impact or restrict general wildlife movement due to the temporary and intermittent locations of construction activities outside the drainage, ridge, and other features. Although some wildlife may be temporarily displaced during construction, wildlife would not be physically prevented from moving around project equipment in the proposed project corridor, particularly since most wildlife would move through the landscape during the evening hours when construction is not occurring. In addition, the proposed project site is located within an existing right-of-way (ROW) where power lines are currently present and pole replacements are primarily adjacent to existing pole site locations. Additionally, since the proposed project would replace existing electric facilities, the risks concerning avian electrocution or bird strike from power lines are expected to be reduced as the number of guy-wires, poles, and redundant lines would be reduced.

Overall, the proposed construction activities, including removing and installing power poles and clearing vegetation during creation of work areas, stringing sites, staging and laydown areas, and guard structures may cause both permanent and temporary impacts to these wildlife species and/or their habits. However, implementations of all relevant Operational Protocols from the SDG&E Subregional Natural Community Conservation Plan (NCCP), Applicant Proposed Measure (APM)-BIO-1 as proposed by SDG&E (see Section 4.8, Table 4-6 of this Initial Study (IS)), and Mitigation Measure (MM) BIO-1 through MM BIO-7, which require pre-construction surveys along with avoidance and mitigation measures, are expected to reduce potential impacts to these resources below a level of significance. These measures would also require pre-construction surveys for those species that may occur within the proposed project area, but that were not previously surveyed. As a result, potential impacts to these resources are expected to be less than significant.

Lastly, no impacts are anticipated as a result of operation and maintenance associated with the proposed project. SDG&E currently maintains and operates existing electric power, distribution and substation facilities throughout the proposed project site, and the proposed project is the reconstruction of existing electric facilities within the existing SDG&E ROW and substation

property. SDG&E's existing facilities and operations and maintenance activities are included in the baseline for evaluating the impacts of the proposed project. Operations and maintenance activities for the proposed project would decrease slightly compared to baseline conditions due to the increased reliability of the new power line components included in a typical wood-to-steel replacement project, the installation of fewer poles along the alignment, removal of guy-wires and associated poles, consolidation of lines where redundant, and the relocation of poles outside of jurisdictional features.

Cultural Resources

As further described in Section 5.6, Cultural Resources, and based on a records search and field survey, impacts to cultural resources could result from the proposed project. Field surveys indicate that 69 poles along the proposed project alignment are located in areas of high potential for buried cultural deposits (ASM 2012). Of the replacement pole locations, 27 poles were identified as lying near or within 20 feet of cultural sites and isolates. Four of these resources were deemed not eligible or are isolated artifacts and therefore not eligible. The rest of the sites have undetermined eligibility. Implementation of APM-CUL-1 through APM-CUL-3 as proposed by SDG&E (see Section 4.8, Table 4-6 of this IS), and MM CUL-1 through MM CUL-3, would reduce potential impacts to these resources below a level of significance.

Additionally, construction of the proposed project may contribute to the potential loss of yet to be discovered significant cultural resources. Development of the proposed project would require excavation activities that may have the potential to disturb unknown resources. With implementation of APM-CUL-5 through APM-CUL-7 as proposed by SDG&E, and MM CUL-4, the proposed project would successfully preserve significant cultural resources, if present. Therefore, the potential to eliminate significant historical and/or archaeological resources, and human remains due to implementation of the project would be less than significant.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

As discussed in preceding Sections 5.2 through 5.17, the majority of the potential impacts of the proposed project would occur during construction with few lasting operational effects. Because the construction-related impacts of the proposed project would be temporary and localized to the project alignment, they would only have the potential to combine with similar impacts of other projects if they occur at the same time and in close proximity. Construction impacts caused by the proposed project (primarily related to air quality, biological resources, cultural resources, hydrology/water quality, noise, and traffic) could combine with similar effects of other projects being built in the project area at the same time. Current and probable future projects that could cause cumulative impacts within the cumulative study area include the Master Special Use Permit and Permit to Construct (MSUP/PTC) Power Line Replacement Projects within the Cleveland National Forest; Circuit 222 Wood-to-Steel Project; Sol Orchard solar projects; and the Feral Pig Control project. Foreseeable future projects are described in Table 5.18-1.

It is anticipated that the proposed project would be constructed before the MSUP/PTC project would commence construction; therefore, it is unlikely construction impacts from these two projects would overlap, resulting in cumulatively considerable impacts. Regarding construction schedule overlap with other projects as listed in Table 5.18-1, construction schedules for all projects have not been established; therefore, only reasonable assumptions can be made regarding significance of construction-related impacts for cumulative projects. Additionally, SDG&E has proposed APM-GEN-1 (see Section 4.8, Table 4-6 of this IS), which states that SDG&E would coordinate construction of the proposed projects in the immediate vicinity of the proposed project in an effort to reduce cumulative impacts. However; there may be some overlap during construction of the proposed project that would contribute to cumulative construction disturbances in the project area.

As discussed in Sections 5.2 through 5.17, impacts from the proposed project are considered to be less than significant or no impact after incorporation of APMs and supplementary mitigation measures. The proposed project's incremental effects on air quality, biological resources, cultural resources, hydrology and water quality, noise, and transportation and traffic, when combined with other projects in the project area, may have a cumulative impact which, as discussed below, has been determined to be less than significant.

Aesthetics

To the extent that the proposed project would be visible during construction along with one or more of the cumulative projects, adverse cumulative impacts may occur from construction equipment, vehicles, materials, staging areas, and personnel. These construction impacts, however, would be temporary and would not create significant cumulative effects.

As proposed steel poles would exceed existing wood pole heights by an average of 12 feet, the long-term visual character of the project site would change minimally as a result of proposed project operation. Further, while the maximum pole height increase would be approximately 40 feet at a limited number of pole locations (one individual pole which would result in a 90-foot height increase), this would not result in a substantial change in the overall visual character of the community or surrounding landscape. Additionally, increased pole heights would allow for greater distances between individual poles, which would allow for the permanent removal of eight poles on the existing alignment. The permanent removal of pole structures would result in a net reduction in permanent physical and visual impacts associated with these facilities. Moreover, proposed poles would be installed in the same general location as existing poles, and proposed pole structures would be composed of materials resembling the wood of existing pole structures once the outer layer patina becomes "weathered." Therefore, the aesthetic appearance in shape, color, and form of all proposed structures would reflect that of existing poles and would not result in a cumulatively considerable impact to the existing visual character.

		Approximate Distance from		Anticipated Construction Schedu		
Project Name	Location	Proposed Project	Project Description	Begin	End	
SDG&E's Master Special Use Permit/Permit to Construct (MSUP/PTC) Power Line Replacement Projects Note that the MSUP/PTC project includes TL 626, a 69-kilovolt (kV) power line that is co-located with Tie-Line (TL) 637.	Cleveland National Forest (CNF) and surrounding private lands	Varies; project involves a number of pole replacements and improvements to 11 existing 69 kV power lines and 12 kV distribution lines throughout the CNF. A small segment of TL 626 is located immediately adjacent to the proposed project, while other segments are approximately 16 miles from proposed project.	The proposed power line replacement projects include the reconstruction of five existing 69 kV power lines and six existing 12 kV distribution lines located within and outside of the CNF. The proposed power line replacement projects would replace existing wood poles by installing approximately 2,104 weathered steel poles (1,384 to support the 5 existing 69 kV lines and 720 to support the 6 existing 12 kV lines); remove approximately 15.2 miles of existing 12 kV overhead and replace/relocate some portions (approximately 13 miles) with new underground lines; convert approximately 5.7 miles from single-circuit 69 kV to double-circuit configuration; and remove approximately 11.2 miles of existing access roads used to operate and maintain the existing power lines and distribution lines. <i>TL 626 is the only project in the CNF MSUP/PTC within 10 miles of the proposed project, and only a small</i> <i>portion of TL 626 is within 1 mile of the Proposed Project. The proposed project and the TL 626 project both</i> <i>propose to replace approximately 12 poles and conductor where TL 637 and 626 are co-located on double-</i> <i>circuit structures. These 12 structures will be replaced as part of whichever project proceeds first.</i>	5 years total construct transmission and dis		
Circuit 222 Wood-to-Steel Project	Private lands southwest of Santa Ysabel	A segment of Circuit 222 is immediately adjacent to the proposed project, while other segments are approximately 1.8 miles from proposed project. Circuit 222 crosses TL 637 at pole P94.	Replacement of approximately 300 wood distribution poles with new weathered steel poles along Circuit 222. Circuit 222 is located northwest of the TL 637 alignment, south of the Santa Ysabel Substation. Circuit 222 and TL 637 share one pole (Pole No. P94). At this pole, C222 is located in a buck position, running across (not parallel to) the TL 637 alignment.	Sept. 2013	Feb. 2014	
Sol Orchard SD-5 – Santa Ysabel	Julian Road/State Route (SR) 78, approximately 1 mile west of SR-79	Approximately 1.2 miles west of Santa Ysabel Substation and 0.9 mile northwest of pole P142	Proposed 7.17 acres of photovoltaic panels located on 78.70-acre site. Project not yet approved.	Construction schedule not yet available		
Sol Orchard Solar Farm	Ramona Street and 1650 Warnock Drive	Approx. 0.3 mile from Warnock Drive Staging Area	Proposed 46 acres of photovoltaic panels located on 110-acre site with a production capacity of 7.5 megawatts (MW). Solar Farm approved by the Department of Planning and Land Use (DPLU) on October 19, 2012.	2nd quarter 2013	4th quarter 2013	
Feral Pig Control	CNF, All Districts	Varies; project covers large portion of CNF.	The CNF proposes to reduce and, where possible, eliminate further impacts from increasing numbers of non- native wild pigs on U.S. Forest Service land and water resources, including impacts to plant and animal species. Management of feral pig population through hunting within the Palomar and Descanso ranger districts.	Oct. 2012	No end date	

Sources: SDG&E 2013a, SDG&E 2013b.

INTENTIONALLY LEFT BLANK

With regard to viewer sensitivity, the majority of viewers in the area would be mobile viewers who are afforded intermittent views of the project alignment from a distance. Because viewers travelling along SR-78, SR-79, and local roadways would be mobile, available views of the project would be intermittent and brief, and would not allow for a prolonged, detailed assessment of the project by the viewer. As such, the overall aesthetic of the proposed facilities would resemble existing conditions and would not result in a substantial change in any portion of the alignment as shown in Figures 5.2-2 through 5.2-6. The overall change in visual character as a result of proposed project implementation would result in a less-than-significant impact, and would not be cumulatively considerable to the existing visual character of the project alignment and surrounding area.

Air Quality

The emissions of all criteria pollutants associated with the construction of the proposed project, including ozone precursors (volatile organic compounds and oxides of nitrogen (NO_x)), PM_{10} , and $PM_{2.5}$, would be below the emission-based significance levels. The pollutants generated from construction of the cumulative projects could result in a short-term, localized impact on ambient air quality that would overlap with those of the proposed project if the construction work were to occur in proximity and at the same time. However, the proposed project would not include any permanent, stationary sources of air pollution and would not induce population and/or employment growth, and therefore, the proposed project would not contribute in a cumulatively considerable manner to cumulative air quality impacts associated with the nonattainment status of the San Diego Air Basin.

Biological Resources

The proposed project, as well as the past, current, and future surrounding development in the project area, may increase the temporary impacts to sensitive vegetation communities, sensitive plant species, and sensitive wildlife species. As identified in Section 5.5.2, Regulatory Setting, compliance with all applicable laws and regulations along with all relevant Operational Protocols from SDG&E Subregional NCCP, APM-BIO 1 as proposed by SDG&E (see Section 4.8, Table 4-6 of this IS), and MM BIO-1 through MM BIO-7, would reduce the potential impacts to wildlife and associated habitats. With compliance to these applicable federal, state, local, and county laws associated with other projects in the vicinity, the cumulative impacts to sensitive wildlife species and their habitats would be reduced to less-than-significant levels and would not be cumulatively considered. The proposed project and other cumulative wood-to-steel project design components include replacing wood poles with steel poles, increasing conductor spacing to maximize line clearances, installing steel poles, and installing longer polymer insulators. Further discussion of project design components is located in Chapter 4.0, Project Description. These project design components would reduce the number of guy-wires, poles, and redundant lines. As such, the risk of avian electrocution and avian bird strikes may be reduced, as would the resulting permanent impacts and long-term operations and maintenance. Since the proposed project would also maintain and utilize existing access roads, impacts on wildlife movement is expected to be temporary. As a result, the cumulative impacts of this project as well as past, current, and future surrounding development on wildlife and their habitats are expected to be reduced to a less-than-significant level after implementation of applicable laws.

regulations, and measures as described in Section 5.5.2 and Section 5.5.3, Environmental Impacts.

Lastly, no impacts are anticipated as a result of operation and maintenance associated with the proposed project or other cumulative projects as operation would resemble existing conditions. Operation of the solar projects would not be anticipated to result in significant impacts, as the majority of impacts would result during construction of the proposed project. Impacts would not be cumulatively considerable.

Hazards and Hazardous Materials

The proposed project, as well as the past, current, and future surrounding development in the project area, may increase the opportunity and likelihood for exposure of people to hazardous materials. Compliance with applicable laws and regulations identified in Section 5.8.2, Regulatory Setting, would reduce the potential health and safety impacts associated with implementation of the project to less-than-significant levels. With adherence to applicable federal, state, and local county laws, and regulations associated with other projects in the area, the cumulative risk or adverse public health effects associated with the hazards and hazardous materials impacts would be reduced to less than significant and would not be cumulatively considerable. Additionally, the proposed project and other cumulative wood-to-steel projects would be implemented to fire-harden tie-line alignment facilities which would reduce the risk of wildland fire hazards from SDG&E electrical facilities. Project design would include firehardening techniques, including replacing wood poles with steel poles, increasing conductor spacing to maximize line clearances, installing steel poles designed to withstand an extreme wind loading case and known local conditions, and installing longer polymer insulators. These design components of the proposed project would minimize fire risk through enhanced safety and reliability of the power line system during extreme weather conditions. Additionally, SDG&Eproposed APM-HAZ-1 through APM-HAZ-4 (see Section 4.8, Table 4-6 of this IS) and supplemental mitigation measures (MM HAZ-1 through HAZ-5) as provided in Section 5.8 would further reduce impacts related to hazards and hazardous materials, including wildland fires, to a level that is less than significant. Because both the proposed project and other cumulative wood-to-steel projects would improve safety regarding hazards in the project area, fire safety would improve in the general proposed project area resulting in greater fire safety with regards to the proposed solar farm projects and feral pig control project. Therefore, impacts would not be cumulatively considerable.

Hydrology and Water Quality

Future and proposed construction projects in proximity to the proposed project, including the other cumulative wood-to-steel projects, could result in cumulative hydrologic and water quality impacts on the study area. The pollutants generated from construction of the cumulative projects could result in a significant cumulative impact on water quality if the construction work occurs in proximity and at the same time as the proposed project. At the individual project level, hydrological impacts can be mitigated to a less-than-significant level by incorporating APM-HYD-1 (see Section 4.8, Table 4-6 of this IS) and mitigation measures (MM HYD-1 through MM HYD-4) that would ensure that the proposed project would comply with federal, state, and local water pollution control laws; that project-specific stormwater and erosion control plans are

prepared and implemented; and operation and maintenance measures to prevent erosion and sedimentation are implemented (as described in Section 5.9, Hydrology and Water Quality). For the proposed project, SDG&E would prepare a Stormwater Pollution Prevention Plan (SWPPP) to comply with the National Pollutant Discharge Elimination System (NPDES) General Construction Activity Stormwater Permit, which requires implementation of best management practices. The other cumulative wood-to-steel projects would be constructed using similar methods as the proposed project, and would implement similar design features and measures to reduce hydrological impacts. The proposed solar project would similarly be required to prepare a SWPPP to comply with the NPDES General Construction Activity Stormwater Permit. Therefore, with implementation of APMs and mitigation measures identified for the proposed project, and similar construction practices anticipated for the other cumulative wood-to-steel projects, the project's potential cumulative impacts to hydrology and water quality would be reduced to a level that would be less than significant and not cumulatively considerable.

Noise

Potential adverse noise impacts during construction of the proposed project would be localized and would occur intermittently for varying periods of time throughout the construction period. The closest sensitive receptors are located immediately adjacent to the proposed project alignment.

Short-term impacts from construction noise can be mitigated to a level of less than significant by limiting construction activities per local noise ordinances as described in Section 5.12, Noise. Providing advanced notice of construction and a public liaison to minimize construction noise nuisances would further minimize impact due to short-term construction noise. APM-NOI-1 through APM-NOI-3 would mitigate construction noise to a level that is less than significant. Additionally, the other cumulative wood-to-steel projects included in the MSUP/PTC Power Line Replacement Projects are expected to be constructed after the proposed project is completed and construction activities would not overlap. Other projects, such as the Circuit 222 Wood-to-Steel Project, may be constructed within the same general time frame as the proposed project. However, SDG&E has proposed APM-GEN-1 and APM-NOI-1 through APM-NOI-3, and mitigation measures NOI-1 through NOI-3 have been provided, to ensure construction schedules do not overlap to the extent feasible, and noise would be reduced to less-than-significant levels during construction activities. Therefore, construction noise impacts would not be cumulatively considerable when considered in conjunction with the proposed project.

Operation and maintenance activities are not expected to be above daytime ambient noise levels in the project area and/or in excess of standards in the local noise ordinances for adjacent properties. Operation and maintenance activities would resemble those currently administered by SDG&E and would not increase above noise levels under existing conditions. Therefore, in the absence of significant impacts, incremental accumulation of significant effects due to the proposed project would not occur.

Transportation and Traffic

As discussed in Section 5.16, Transportation and Traffic, construction of the proposed project would contribute to short-term impacts to traffic circulation on local roadways. Short-term traffic

impacts caused by construction of the proposed project and the other cumulative wood-to-steel projects within the project area would result from increased truck traffic and single-passenger vehicles from construction worker traffic. It is anticipated that short-term impacts to project area roads can be mitigated to a less-than-significant level by incorporating APMs proposed by SDG&E as described in Section 5.16, including preparation and implementation of a traffic control plan, staggering work shifts, and carpooling. These measures would ensure that access would be maintained to individual properties and businesses, that emergency access would not be restricted, and that congestion and delay of traffic resulting from ongoing development are not substantially increased and would be of a short-term nature. These measures would reduce the proposed project's cumulative construction impacts to a level that would be less than significant and not cumulatively considerable. Additionally, the other cumulative wood-to-steel projects included in the MSUP/PTC Power Line Replacement Projects are expected to be constructed after the proposed project is completed, and construction activities would not overlap. Other projects, such as the Circuit 222 Wood-to-Steel Project, may be constructed within the same general time frame as the proposed project; however, SDG&E has proposed APM-GEN-1 and APM-TRA-1 and APM-TRA-2 to ensure construction schedules do not overlap to the extent feasible, and traffic impacts would be reduced to less-than-significant levels. Therefore, construction traffic impacts would not be cumulatively considerable when considered in conjunction with the proposed project.

The operation of the proposed project would generate minimal traffic only required for routine patrolling and maintenance; therefore, the project would not contribute to long-term cumulative impacts to traffic.

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

The preceding sections of this IS discuss the various types of impacts that could have adverse effects on human beings. During construction of the project, temporary adverse impacts to humans related to dust, noise, and traffic may occur. The proposed construction would also result in potentially hazardous conditions, largely from the possible release of hazardous substances during construction activities. SDG&E has proposed APMs (see Section 4.8, Table 4-6 of this IS) that would reduce potentially adverse impacts on humans. In addition, mitigation measures that would mitigate the project's potential significant impacts have been provided (see Section 6, Mitigation and Monitoring Program for a list of mitigation measures). This IS concludes that potential adverse effects to humans are either less than significant or can be mitigated to a less-than-significant level with the implementation of measures presented herein. Therefore, the proposed project does not involve any activities, either during construction or operation that would cause significant adverse effects on human beings that cannot be readily mitigated to a less-than-significant level.

6.0 MITIGATION IMPLEMENTATION AND MONITORING PLAN

San Diego Gas & Electric (SDG&E) proposes to construct and operate the Tie-Line (TL) 637 Wood-to-Steel Replacement Project (proposed project). An Initial Study was prepared to assess the proposed project's potential environmental effects. The Initial Study was prepared based on information in the Proponent's Environmental Assessment (PEA), project site visits, and supplemental research. The majority of the Proposed Project's impacts would occur during project construction. Within SDG&E's application, Applicant Proposed Measures (APMs) proposed by SDG&e as project design features, were proposed to reduce potentially significant adverse impacts related to project construction and operation.

The purpose of this Mitigation Monitoring Plan (MMP) is to ensure effective implementation of each APM, as well as the mitigation measures identified by the Initial Study and imposed by the CPUC as part of project approval.

This Mitigation Monitoring Plan includes:

- The APMs and mitigation measures that SDG&E must implement as part of the proposed project;
- The actions required to implement these measures;
- The monitoring requirements and effectiveness criteria; and
- The timing of implementation for each measure.

The CPUC will use this MMP as the framework for a Mitigation Monitoring, Compliance, and Reporting Program (MMCRP). The MMCRP will be created by the CPUC to formalize protocols to be followed prior to and during construction by CPUC third-party environmental monitors (CPUC EMs) and SDG&E project staff. The MMCRP will include, but will not be limited to, the following topics:

- Agency Jurisdiction
- Roles/Responsibilities
- Communication
- Compliance Verification and Reporting
- Project Changes

A CPUC-designated environmental monitor will carry out all construction field monitoring to ensure full implementation of all measures. In all instances where non-compliance occurs, the CPUC's designated environmental monitor will issue a warning to the construction foreman and SDG&E's project manager. Continued non-compliance shall be reported to the CPUC's designated project manager. Any decisions to halt work due to non-compliance will be made by the CPUC. The CPUC's designated environmental monitor will keep a record of any incidents of non-compliance with mitigation measures, APM, or other conditions of project approval. Copies of these documents shall be supplied to SDG&E and the CPUC.

Final language of the MMCRP will be made in consultation with SDG&E. Drafted language for minor project changes and dispute resolution protocols are provided below.

6.1 MINOR PROJECT CHANGES

The CPUC Project Manager along with the CPUC Monitoring Team will ensure that any process to consider minor project changes that may be necessary due to final engineering or deviations from the procedures identified under the monitoring program are consistent with CEQA requirements. No minor project changes will be approved by the CPUC if they are located outside of the geographic boundary of the project study area or create new or substantially more severe significant impacts. A minor project change is one that is strictly limited to those that do not trigger other permit requirements unless the appropriate agency has approved the change, that does not increase the severity of an impact or create a new impact without appropriate agency approval, and that clearly and strictly complies with the intent of the mitigation measure or applicable law or policy. SDG&E shall seek any other project refinements by a petition to modify.

A proposed project change that has the potential for creating significant environmental effects will be evaluated to determine whether a petition to modify and/or supplemental California Environmental Quality Act (CEQA) review is required. Any proposed deviation from the approved project, adopted mitigation measures, APMs, and correction of such deviation, will be reported immediately to the CPUC Project Manager for his or her review. The CPUC Monitoring Team will review the minor project change request to ensure that all of the information required to process the minor project change is included, and then forward the request to the CPUC Project Manager for review and approval. The CPUC Project Manager may request a site visit from the CPUC EM, or may need additional information to process the minor project change. In some cases, project refinements may also require approval by jurisdictional agencies. In general, a minor project change request must include the information listed below.

- Detailed description of the location, including maps, photos, and/or other supporting documents;
- How the minor project change request deviates from a project requirement;
- Biological resource surveys or verification that no biological resources would be significantly impacted;
- Cultural resource surveys or verification that no cultural resources would be significantly impacted; and
- Agency approval (if necessary).

6.2 DISPUTE RESOLUTION

It is expected that the Mitigation Monitoring Plan will reduce or eliminate many potential disputes. However, even with the best preparation, disputes may occur.

Issues should be first addressed at the field level informally between the CPUC EMs and SDG&E's EMs at the regular progress meetings. Questions may be raised to the SDG&E Project Environmental Manager or SDG&E Project Construction Manager. Should the issue persist or not be resolved at these levels, the following procedures will be used:

- **Step 1.** Disputes unresolved in the field and complaints (including those from the public) should be directed to the CPUC Project Manager for resolution. The Project Manager will attempt to resolve the dispute informally. Should this informal process fail, the CPUC Project Manager will inform SDG&E prior to initiating Step 2.
- **Step 2.** Should this informal process in the field fail, the CPUC Project Manager may issue a formal letter requiring corrective actions to address the unresolved or persistent deviations from the Proposed Project or adopted MMP.
- Step 3. If a dispute or complaint regarding implementation or evaluation of the Program or mitigation measures cannot be resolved informally or through a letter request, any affected participant in the dispute or complaint may file a written "notice of dispute" with the CPUC's Executive Director. This notice should be filed in order to resolve the dispute in a timely manner, with copies concurrently served on other affected participants. Within 10 days of receipt, the Executive Director or designee(s) shall meet or confer with the filer and other affected participants to resolve the dispute. The Executive Director shall issue an Executive Resolution describing his/her decision, and serve it to the filer and other affected participants.
- Step 4. If one or more of the affected parties is not satisfied with the decision as described in the Resolution, such party(ies) may appeal it to the Commission via a procedure to be specified by the Commission.

Parties may also seek review by the Commission through existing procedures specified in the CPUC Rules of Practice and Procedure for formal and expedited dispute resolution, although a good faith effort should first be made to use the foregoing procedure.

Table 6-1: Mitiga	ation <u>Mon</u> i	itorin <u>g Pr</u>	ogram Table			
Impact	ММ	APM No.	Mitigation Measure/ Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Action and Location
Construction of the proposed project could result in air quality and noise impacts due to project construction overlap.		APM- GEN-1	Construction scheduling. SDG&E will coordinate construction of the proposed project such that construction activities will typically not overlap with other SDG&E construction projects in the immediate vicinity of the proposed project.	SDG&E to implement measure as defined and incorporate commitments into construction contracts.	SDG&E to submit documentation to CPUC verifying construction schedules for SDG&E projects do not overlap in the immediate vicinity.	Prior to construction.
Construction of the proposed project could result in noise impacts due to helicopter use.		APM- GEN-2	Helicopter use. Helicopter takeoffs and landings conducted at the Warnock and Santa Ysabel Staging Yards will be restricted to the approximate center of the staging area. Helicopter usage will conform to acceptable hours for construction activities, as outlined within the San Diego County Noise Code.	SDG&E to implement measure as defined and incorporate commitments into construction contracts.	SDG&E to submit documentation to CPUC prior to construction identifying the takeoff and landing locations at the Warnock and Santa Ysabel Yards. CPUC to inspect periodically during construction to ensure SDG&E is conducting helicopter activities in accordance with APM-GEN-2.	Prior to and during construction.
			Aesthetics			
Construction of the proposed project could result in short- term visual impacts.		APM- AES-1	Visual screening of staging yards. The Warnock and Santa Ysabel Staging Yards will have opaque mesh installed along the fence that will soften the view of the <i>s</i> taging yard from public vantage points such as roads, residences, and public vantage points.	SDG&E to implement measure as defined and incorporate commitments into construction contracts.	SDG&E to submit documentation verifying color of screening materials prior to construction. CPUC to verify installation of staging yard fencing during construction.	Prior to and during construction

Table 6-1: Mitiga	ation Moni	toring Pr	ogram Table			
Impact	ММ	APM No.	Mitigation Measure/ Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Action and Location
Operation of the proposed project could result in long-term visual impacts.		APM- AES-2	Restoring appearance of temporarily disturbed areas. When proposed project construction has been completed, all temporarily disturbed terrain will be restored, as needed and as appropriate, to approximate pre-construction conditions. Revegetation would be used, where appropriate (revegetation in certain areas is not possible due to vegetation management requirements related to fire safety) to reestablish a natural-appearing landscape and reduce potential visual contrast between disturbed areas and the surrounding landscape.	SDG&E to implement measure as defined and incorporate commitments into construction contracts. SDG&E to provide CPUC documentation of pre-construction conditions. In addition, SDG&E to provide documentation demonstrating that disturbed areas have been restored in accordance with the guidelines provided in section 7.2, "Habitat Enhancement Measures," of the NCCP.	CPUC to verify restoration of temporary disturbed areas is completed in accordance with APM-AES-2. CPUC to provide final sign-off indicating restoration meets the intent of APM-AES-2 prior to completing the MMCRP phase.	During and post- construction.
			Biological Resources			
Construction of the proposed project could result in temporary and/or permanent loss of native vegetation, direct or indirect loss of listed/ sensitive plants or habitat for		APM- BIO-1	SDG&E Subregional NCCP. The proposed project will avoid and minimize impacts to biological resources through implementation of the SDG&E Subregional NCCP. The SDG&E Subregional NCCP establishes a mechanism for addressing biological resource impacts incidental to the development, maintenance, and repair of SDG&E facilities within the SDG&E Subregional NCCP coverage area. The proposed project is located within the SDG&E Subregional NCCP	SDG&E to implement NCCP Protocols as defined and incorporate commitments into construction contracts.	CPUC to inspect periodically during construction to ensure SDG&E is conducting activities in accordance with NCCP Protocols. SDG&E to provide documentation to CPUC prior to	Prior to and during construction.

Table 6-1: Mitig	ation Monit	oring Pr	ogram Table			
Impact	MM	APM No.	Mitigation Measure/ Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Action and Location
sensitive plants, and direct or indirect loss of listed/sensitive wildlife or habitat of sensitive wildlife.			coverage area. The SDG&E Subregional NCCP includes a Federal Endangered Species Act (ESA) Section 10(A) permit and a California ESA Section 2081 memorandum of understanding (for incidental take) with an Implementation Agreement with the United States Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW – formerly the California Department of Fish and Game), respectively, for the management and conservation of multiple species and their associated habitats, as established according to the Federal and State ESAs and California's NCCP Act. The NCCP's Implementing Agreement confirms that the mitigation, compensation, and enhancement obligations contained in the Agreement and the SDG&E Subregional NCCP meet all relevant standards and requirements of the California ESA, the Federal ESA, the NCCP Act, and the Native Plant Protection Act with regard to SDG&E's activities in the Subregional Plan Area.		construction verifying commitments have been incorporated into the construction contracts.	
			Pursuant to the SDG&E Subregional NCCP, SDG&E conducted pre-construction studies for all activities occurring off of existing access roads in natural areas. An independent biological consulting firm surveyed all proposed project impact areas and prepared a Preactivity Study Report (PSR) outlining all anticipated impacts related to the proposed project. The proposed project will include monitoring for all project components, as recommended by the PSR and outlined in the SDG&E Subregional NCCP, as well as other avoidance and minimization measures outlined in the NCCP's Operational Protocols. The PSR was submitted to the CDFW and USFWS, and no comments were received. Prior to the commencement of construction, a			

le 6-1: Mitig	gation <u>Moni</u>	toring Pr	ogram Table			
Impact	ММ	APM No.	Mitigation Measure/ Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Actior and Location
			verification survey will be conducted of the proposed project disturbance areas, as required by the SDG&E Subregional NCCP.			
			Biological monitors will be present during construction to assure implementation of the avoidance and minimization measures. If the previously delineated work areas must be expanded or modified during construction, the monitors will survey the additional impact area to determine if any sensitive resources will be impacted by the proposed activities, to identify avoidance and minimization measures, and to document any additional impacts. Any additional impacts are included in a Post-Construction Report (PCR) for purposes of calculating the appropriate mitigation, which generally includes site enhancement or credit withdrawal from the SDG&E mitigation bank. When construction is complete, the biological monitor will conduct a survey of the entire line to determine actual impacts from construction. The PCR will determine how much site enhancement and credit withdrawal from the SDG&E mitigation bank will be required to address impacts from project- related activities. These impact and mitigation credit calculations are submitted to the USFWS and the CDFW as part of the NCCP Annual Report pursuant to requirements of the NCCP and the NCCP Implementing Agreement.			
			Specific operating restrictions that are incorporated into the proposed project design to comply with the SDG&E Subregional NCCP include the following:			
			• Vehicles would be kept on access roads and limited to 15 miles per hour (Section 7.1.1, 1).			
			No wildlife, including rattlesnakes, may			

able 6-1: Mitig	gation Moni	itoring Pro	ogram Table			
Impact	MM	APM No.	Mitigation Measure/ Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Action and Location
			be harmed, except to protect life and limb (Section 7.1.1, 2).			
			 Feeding of wildlife is not allowed (Section 7.1.1, 4). 			
			 No pets are allowed within the ROW (Section 7.1.1, 5). 			
			• Plant or wildlife species may not be collected for pets or any other reason (Section 7.1.1, 7).			
			 Littering is not allowed, and no food or waste would be left on the ROW or adjacent properties (Section 7.1.1, 8). 			
			 Measures to prevent or minimize wild fires would be implemented, including exercising care when driving and not parking vehicles where catalytic converters can ignite dry vegetation (Section 7.1.1, 9). 			
			• Field crews shall refer all environmental issues, including wildlife relocation, dead or sick wildlife, or questions regarding environmental impacts to the Environmental Surveyor. Biologists or experts in wildlife handling may be necessary to assist with wildlife relocations (Section 7.1.1, 10).			
			 All SDG&E personnel would participate in an environmental training program conducted by SDG&E, with annual updates (Section 7.1.2, 11). 			
			 The Environmental Surveyor shall conduct preactivity studies for all activities occurring in natural areas, and will complete a preactivity study form including recommendations for review by a biologist and construction 			

able 6-1: Mitig	gation Moni	toring Pro	gram Table			
Impact	MM	APM No.	Mitigation Measure/ Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Action and Location
			monitoring, if appropriate. The form will be provided to CDFW and USFWS but does not require their approval (Section 7.1.3, 13).			
			• The Environmental Surveyor shall flag boundaries of habitats to be avoided and, if necessary, the construction work boundaries (Section 7.1.3, 14).			
			• The Environmental Surveyor must approve of activity prior to working in sensitive areas where disturbance to habitat may be unavoidable (Section 7.1.4, 25).			
			 In the event SDG&E identifies a covered species (listed as threatened or endangered by the federal or state) of plant within the temporary work area (10-foot radius) surrounding a power pole, SDG&E would notify the USFWS (for Federal ESA listed plants) and CDFW (for California ESA listed plants) (Section 7.1.4, 28). 			
			• The Environmental Surveyor shall conduct monitoring as recommended in the preactivity study form (Section 7.1.4, 35.).			
			• Supplies, equipment, or construction excavations where wildlife could hide (e.g., pipes, culverts, pole holes, trenches) shall be inspected prior to moving or working on/in them (Section 7.1.4, 37 and 38). Fugitive dust will be controlled by regular watering and speed limits (Section 7.1.4, 39).			
			 During the nesting season, the presence or absence of nesting species (including raptors) shall be determined by a biologist 			

Impact	MM	APM No.	Mitigation Measure/ Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Action and Location
			who would recommend appropriate avoidance and minimization measures (Section 7.1.6, 50).			
			 Maintenance or construction vehicle access through shallow creeks or streams is allowed. However, no filling for access purposes in waterways is allowed (Section 7.1.7, 52). 			
			 Staging/storage areas for equipment and materials shall be located outside of riparian areas (Section 7.1.7, 53). 			
Construction activities could mpact rare plants species.	BIO-1		Prior to construction, San Diego Gas & Electric (SDG&E) shall retain a qualified biologist approved by the California Public Utilities Commission (CPUC) to conduct a focused rare plant survey during the time period when the following special-status plant species are detectable: San Diego gumplant (July – October; east of Del Amo Road (P65 east to Santa Ysabel Substation) in the following habitat types: chaparral, grassland, oak woodland, riparian forest, disturbed wetland, and in agricultural land east of Oak Hollow Road (P75 east to Santa Ysabel Substation)), and Coulter's saltbush (March – October; within proposed project impact areas within the project area in the following habitat types: agricultural land, coastal sage scrub, grassland, oak woodland, and disturbed wetlands).	SDG&E to implement measure as defined and incorporate commitments into construction contracts.	CPUC to review and verify completion of rare plant survey for the San Diego gumplant and Coulter's saltbush. If rare plants are identified, CPUC to inspect periodically during construction to ensure on-site monitor presence and successful avoidance of sensitive species. Alternatively, if special-status plant in question is a covered species within the SDG&E	CPUC to review survey prior to construction and i rare plants are identified and a monitor is required CPUC to inspect site periodically during construction. CPUC to monitor that footpaths are narrowly defined in wetland area near little mouseta in order to allow for hand removal poles between
			There is some potential for little mousetail to occur within vernal pool and wetland areas; these areas will be protected through implementation of MM BIO 7, the SDG&E Natural Community Conservation Plan (NCCP), and through avoidance of impacts to wetlands. However, there is a confined area (P103 through P107), where		Subregional NCCP, CPUC to inspect periodically during construction to ensure SDG&E is conducting activities in accordance with	P103 through P107 and that poles are remove by hand or helicopter only.

able 6-1: Mitig	gation Moni	toring P	ogram Table			
Impact	ММ	APM No.	Mitigation Measure/ Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Action and Location
			poles are situated within a wet meadow and will be cut down and removed by hand. Therefore, in this confined area, presence is assumed and SDG&E shall do the following: using pin flags, narrowly define footpaths for hand crews to and from the poles; crews will hand-cut the pole; and the cut poles will be removed by hand or by helicopter only.		NCCP Protocols.	
			Locations of special-status plants shall be identified and inventoried. The qualified biologist shall supervise construction activities within the vicinity of areas identified as having special-status plant species. Impacts to special-status plant species shall be avoided to the maximum extent possible by installing fencing or flagging, marking areas to be avoided in construction areas, and limiting work in areas identified as having special-status plant species to periods of time when the plants have set seed and are no longer growing.			
			Where impacts to special-status plant species are unavoidable, the impact shall be quantified and compensated though off-site land preservation and /or plant salvage and relocation as determined by the qualified biologist and approved by the CPUC. Alternatively, if the special-status plant species in question is a covered species within the SDG&E NCCP, mitigation consistent with measures established in the NCCP shall be provided.			
			The results of the focused plant surveys and measures outlined above that will be implemented by SDG&E in the event special- status plant species are identified within the biological survey area shall be provided to			

Table 6-1: Mitigation Monitoring Program Table									
Impact	ММ	APM No.	Mitigation Measure/ Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Actior and Location			
			CPUC. CPUC will review and approve the rare plant survey report and recommended avoidance or mitigation approaches prior to issuance of a notice to proceed.						
Construction activities could impact sensitive wildlife species.	BIO-2		San Diego Gas & Electric (SDG&E) shall retain qualified biologists and other qualified resource specialists, as necessary, to monitor all project construction activities that could reasonably result in impacts to biological resources. All monitor qualifications shall be reviewed and approved by the California Public Utilities Commission (CPUC) prior to conducting monitoring activities along the right-of-way. Monitors shall be responsible for preconstruction surveys, work area delineations (i.e., staking, flagging, etc.) to comply with SDG&E's Natural Community Conservation Plan, on-site monitoring and documentation of violations and compliance. SDG&E shall submit a weekly report to CPUC that summarizes the biological monitoring activities that were completed during construction. The weekly report at a minimum shall include environmental training sign-in sheets, biological monitors assigned to project components, compliance issues/concerns and general wildlife observations.	SDG&E to implement measure as defined and incorporate commitments into construction contracts.	CPUC to review and approve monitors' resumes and associated qualifications submitted by SDG&E prior to construction. CPUC to inspect periodically during construction to ensure on-site monitor presence and successful avoidance of sensitive species. SDG&E to provide weekly reports to CPUC and CPUC monitors regarding avoidance of sensitive species. SDG&E to provide post-construction compliance report to CPUC within 60 days of end of ground- disturbing activities.	Prior to and during construction. SDG&E to provide post-construction compliance report to CPUC within 60 days of completing ground-disturbing activities.			

Table 6-1: Mitig	ation <u>Monit</u>	orin <u>g Pr</u>	ogram Table			
Impact	ММ	APM No.	Mitigation Measure/ Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Action and Location
Construction of the proposed project could impact sensitive wildlife species.	BIO-3		At the end of each workday, any open holes shall be fully covered, after they have been inspected by the on-site biologist, with steel plates, plywood, or other effective coverings to prevent entrapment of wildlife species. If fully covering the excavations is impractical, ramps will be used to provide a means of escape for wildlife that enter the excavations, or open holes will be securely fenced with exclusion fencing. If common wildlife species are found in a hole, the designated biological monitor shall immediately be informed and the animal(s) shall be removed. If the animal(s) is/are a sensitive species that require(s) special handling authorization, a qualified biologist (agency-permitted or approved to handle a specific species) shall remove the animal before resumption of work in that immediate area. San Diego Gas & Electric shall specify the requirement to cover all open holes, create ramps, or install exclusion fencing around open holes in its agreements with all construction contractors.	SDG&E to implement measure as defined and incorporate commitments into construction contracts.	SDG&E to provide verification to CPUC of measure including submittal of construction contract. Survey efforts will be documented by the biologist in the daily log and reported to the CPUC at the end of each week.	Prior to and during construction.
Construction of the proposed project could result in the potential impacts to nesting birds.	BIO-4		If construction activities including but not limited to tree trimming, road maintenance (i.e., re- establishing existing access roads), grading, or site disturbance are to occur between March 1 and September 1, a nesting bird survey shall be conducted by a qualified biologist to determine the presence of nests or nesting birds within 100 feet of the construction activities. The nesting bird surveys shall be completed no more than 72 hours prior to any construction activities. The survey will focus on special-status species known to use the area as well as other nesting birds that are protected under the Migratory Bird Treaty Act. If an active nest (defined below) is identified grading or site disturbance within a 100-foot buffer of the nest	SDG&E to implement measure as defined and incorporate commitments into construction contracts.	SDG&E to provide verification to CPUC of measure including submittal of construction contract. Survey efforts will be documented by the biologist in the daily log and reported to the CPUC at the end of each week.	Prior to and during construction for all areas within 100 feet of construction activities.

Impact	мм	APM No.	Mitigation Measure/ Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Actio and Location
			shall be monitored on a daily basis by a qualified biologist until project activities are no longer occurring within 100 feet of the nest or until fledglings become independent of the nest. "Nest" is defined as: a structure or site under construction or preparation, constructed or prepared, or being used by a bird for the purpose of incubating eggs or rearing young. Perching sites and screening vegetation are not part of the nest. "Active nest" is defined as: once birds begin constructing, preparing or using a nest for egg-laying. A nest is no longer an "active nest" if abandoned by the adult birds or once nestlings or fledglings are no longer dependent on the nest.			
			The monitoring biologist may increase the buffer radius if he or she determines it is necessary. The monitoring biologist may decrease the buffer radius upon receiving approval from California Public Utilities Commission (CPUC), if he or she determines that the construction activities are not disturbing the nesting activities and a smaller buffer is more appropriate. The monitoring biologist shall halt construction activities if he or she determines that the construction activities are disturbing the nesting activities. The monitor shall make practicable recommendations to reduce the noise or disturbance in the vicinity of the nest. This may include recommendations such as: (1) turning off vehicle engines and other equipment whenever possible to reduce noise, (2) working in other areas until the young have fledged, or (3) placing noise barriers to maintain the noise at the nest to 60 dBA Leq hourly or less or to the preconstruction ambient noise level if that exceeds 60 dBA Leq hourly. The on-site			

Table 6-1: Mitig	ation Monit	toring Pr	ogram Table			
Impact	ММ	APM No.	Mitigation Measure/ Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Action and Location
			these nesting boundaries and will verify that the nesting effort has finished. Unrestricted construction activities can resume when no other active nests are found. Upon completion of the survey and any follow-up construction avoidance management, a report shall be prepared and submitted to the CPUC with the weekly report as identified in MM BIO-2. A nesting bird report, at a minimum, shall include the date, starting and ending time, general weather conditions (cloud cover, temperature, wind), name of biologist with affiliation, area surveyed including map, survey results (species, nest GPS location, nest stage [number of eggs, number of nestlings]), recommended compliance (e.g., 100-foot buffer recommended, buffer increased with explanation, recommended noise reduction, noise dBA Leq levels at nest), and compliance issues/concerns. The report shall also include the date and nesting outcome (e.g., depredated, nestling fledged, nest abandoned).			
Construction of the proposed project could result in the potential impacts to nesting birds.	BIO-5		In the unlikely event that rock blasting is used during construction, a noise and vibration calculation will be prepared and submitted to the California Public Utilities Commission (CPUC) and the County of San Diego for review before blasting at each site. The construction contractor will ensure compliance with all relevant local, state, and federal regulations relating to blasting activities. This Blasting Plan would include a site- specific nesting bird survey to be conducted by a CPUC-approved biologist. The results of this survey would be communicated to the CPUC. If the CPUC-approved biologist observes an active nest (see definition below) for any special-status species (including federal, state, and county candidate, sensitive, fully protected, or special-	SDG&E to implement measure as defined and incorporate commitments into construction contracts.	If blasting is required, SDG&E to prepare blasting plan in accordance with MM HAZ-3. SDG&E to provide nesting survey report documentation to CPUC regarding avoidance and CDFW concurrence as necessary. CPUC to inspect	Prior to blasting activities Conduct nesting bird surveys prior to and during construction.

Table 6-1: Mitig	ation Mo <u>nit</u>	oring <u>Pr</u>	ogram Table			
Impact	ММ	APM No.	Mitigation Measure/ Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Action and Location
			status species) or species covered by the Migratory Bird Treaty Act that may be impacted by blasting activities, San Diego Gas & Electric would postpone any activity that may impact the success of the nest until the nest no longer meets the given definitions. "Nest" is defined as: a structure or site under construction or preparation, constructed or prepared, or being used by a bird for the purpose of incubating eggs or rearing young. Perching sites and screening vegetation are not part of the nest. "Active nest" is defined as: once birds begin constructing, preparing or using a nest for egg-laying. A nest is no longer an "active nest" if abandoned by the adult birds or once nestlings or fledglings are no longer dependent on the nest.		periodically during construction in order to ensure successful avoidance if possible/or if not possible, implementation of additional mitigation shall occur.	
Construction of the proposed project could impact Stephen's kangaroo rat habitat.	BIO-6		In locations where Stephen's kangaroo rat habitat assessments were not conducted during the 2010 field survey, a pedestrian preconstruction survey for potentially occupied suitable habitat (open habitat with suitable soils, slope, and kangaroo rat burrows) and follow-up trapping to confirm species, will be conducted by a California Public Utilities Commission (CPUC) approved biologist to assess the potential areas for Stephen's kangaroo rat to occur within the proposed project area. Any burrows, utilized habitat, or signs of Stephen's kangaroo rat utilizing a habitat (e.g., track prints) will be flagged for avoidance during construction activities. The monitoring biologist shall halt construction activities if he or she determines that the construction activities are disturbing Stephen's kangaroo rat occupied habitat. If Stephen's kangaroo rat occupied habitat cannot be avoided during construction, the monitoring biologist shall make recommendations to ensure minimal impacts to the existing Stephen's	SDG&E to implement measure as defined and incorporate commitments into construction contracts.	CPUC to inspect periodically during construction to ensure on-site monitor presence and successful avoidance of Stephen's kangaroo rat habitat. SDG&E to provide a post-construction compliance report to CPUC and CPUC monitors regarding avoidance of Stephen's kangaroo rat habitat.	Prior to, during, and following construction.

Table 6-1: Mitig	gation Monit	toring Pr	ogram Table			
Impact	мм	APM No.	Mitigation Measure/ Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Action and Location
			kangaroo rat habitat and burrows during construction. Recommendations may include, but are not limited to: (1) re-routing access to project work area for complete avoidance of Stephen's kangaroo rat occupied habitat; or (2) placement of dirt piles or sediment to avoid occupied burrows. Upon completion of the survey and any follow-up construction avoidance management, a report shall be prepared and submitted to the CPUC.			
Construction of the proposed project could impact vernal pools.	BIO-7		Prior to construction, qualified biologists approved by the California Public Utilities Commission shall flag all vernal pools (marginal or otherwise) and associated existing connectivity within the project footprint (water entering area during rain events) for avoidance during the proposed construction activities. Rain events are defined as "a precipitation event of 0.5 inch or greater." If work is conducted during the rainy season (October 1 through May 1), before scheduling project activity in areas flagged as vernal pools, the weather forecast will be monitored. Work will not be scheduled in these areas if a greater than 40% chance of a rain event (as defined above) is forecasted during the time needed to complete project activities. If a rain event unexpectedly occurs during project activity, the site will be secured with appropriate best management practices as identified in APM	SDG&E to implement measure as defined and incorporate commitments into construction contracts.	SDG&E to submit a report to CPUC prior to construction identifying the survey methods, locations of vernal pools, and construction footprint. CPUC to inspect periodically during construction to ensure successful avoidance of vernal pools.	Prior to and during construction.
			HYD-1. Construction travel along public access roads where the road rut vernal pools have been identified will be flagged or otherwise marked prior to construction for minimal impact to these locations. Project related traffic in these areas will be kept to the minimum required to implement the project.			

Table 6-1: Mitiga	ition Moni	toring Pr	ogram Table			
Impact	MM	APM No.	Mitigation Measure/ Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Action and Location
			Cultural Resources			
Construction of the proposed project could affect known cultural resources.		APM- CUL-1	SDG&E's practices are in accordance with Federal, State, and local laws to protect and avoid cultural resources, including: Archaeological Resources Protection Act of 1979, as amended, National Historic Preservation Act of 1966, as amended (NHPA), California Penal Code 622 ½, PRC 5097.1 through 5097.6, PRC 5097.98, and CEQA. An independent Cultural Resource Management firm conducted pre-construction surveys under contract with SDG&E, prepared an inventory of cultural resources within the proposed project's Area of Potential Effect, and provided recommendations for avoidance and minimization to assist SDG&E in its compliance with CEQA requirements. SDG&E's Principal Cultural Resources Specialist worked closely with SDG&E design and engineering to move several of the poles during the design phase of the proposed project to avoid impacts to known cultural resources. Known cultural resources will be spanned or otherwise avoided through project design and through routing during construction activities to the extent feasible. In addition, the micropile pole type will be used at many locations during construction to minimize ground disturbance and decrease potential impacts to unknown buried deposits.	SDG&E to implement measure as defined and incorporate commitments into construction contracts.	SDG&E to provide documentation to CPUC prior to construction verifying commitments have been incorporated into the construction contracts. SDG&E to provide a memorandum prepared by an archeologist that indicates measures as defined have been incorporated into the final design. The memorandum shall be reviewed and approved by CPUC prior to issuance of an NTP.	Prior to and during construction.

Table 6-1: Mitig	ation M <u>on</u>	itoring <u>P</u> r	ogram Table			
Impact	ММ	APM No.	Mitigation Measure/ Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Action and Location
Construction of the proposed project could affect cultural resources.		APM- CUL-2	Cultural resources sensitivity training. Prior to construction or ground-disturbing activities, all SDG&E, contractor, and subcontractor project personnel will receive training regarding the appropriate work practices necessary to effectively implement the project design features and ordinary construction restrictions relating to cultural resources, including the potential for exposing subsurface cultural resources and paleontological resources. This training will include presentation of the procedures to be followed upon the discovery or suspected discovery of archaeological materials, including Native American remains, as well as of paleontological resources. Known archaeological sites would be demarcated by a qualified archaeologist as Environmentally Sensitive Areas prior to the start of construction. Construction crews would be instructed to avoid disturbance of these areas.	SDG&E to implement measure as defined and incorporate commitments into construction contracts.	SDG&E to provide cultural resources sensitive training material to CPUC for review and approval prior to issuance of an NTP. SDG&E to submit documentation to CPUC on a weekly basis that includes sign-in sheets of construction personnel that have attended the cultural resources sensitivity training. SDG&E to provide a map to CPUC prior to issuance of an NTP that identifies all environmentally sensitive areas that will be flagged in the field and avoided during construction.	Prior to and during construction.
Construction of the proposed project could affect archaeological resources.		APM- CUL-3	Archaeological monitoring. A qualified archaeologist will attend preconstruction meetings, as needed, and a qualified archaeological monitor will monitor activities in the vicinity of all known cultural resources within the proposed project area. The requirements for archaeological monitoring will be noted on the construction plans. The archaeologist's duties will include monitoring, evaluation of any finds,	SDG&E to implement measure as defined and incorporate commitments into construction contracts.	SDG&E to provide qualifications of archeological monitors to CPUC for review and approval prior to issuance of an NTP. All archeological monitors shall be	Prior to and during construction.

Table 6-1: Mitigation Monitoring Program Table							
Impact	MM	APM No.	Mitigation Measure/ Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Action and Location	
			analysis of materials, and preparation of a monitoring results report conforming to Archaeological Resource Management Reports guidelines.		reviewed and approved by CPUC prior to working on the project.		
Construction of the proposed project could affect undiscovered human remains.		APM- CUL-5	Unanticipated discovery of human remains. If human remains are encountered during construction, SDG&E will comply with California State law (Health and Safety Code Section 7050.5; PRC Sections 5097.94, 5097.98 and 5097.99). This law specifies that work will stop immediately in any areas where human remains or suspected human remains are encountered. The appropriate agency and SDG&E will be notified of any such discovery. SDG&E will contact the Office of the Medical Examiner. The Medical Examiner has two working days to examine the remains after being notified by SDG&E. Under some circumstances, a determination may be made without direct input from the Medical Examiner. When the remains are determined to be Native American, the Medical Examiner has 24 hours to notify the Native American Heritage Commission (NAHC). The NAHC will immediately notify the identified most likely descendant (MLD) and the MLD has 24 hours to make recommendations to the landowner or representative for the respectful treatment or disposition of the remains and grave goods. If the MLD does not make recommendations within 24 hours, the area of the property must be secured from further disturbance. If there are disputes between the landowner and the nearest likely descendants, the NAHC will mediate the dispute to attempt to find a resolution. If mediation fails to provide measures acceptable to the landowner, the landowner or his or her authorized representative shall re-inter the human remains	SDG&E to implement measure as defined and incorporate commitments into construction contracts.	SDG&E to provide notification to CPUC within 24 hours of a potential human remains discovery. The notification shall be submitted by the CPUC-approved archeologist and identify the process that will be implemented to address the unanticipated discovery.	During construction in all work areas.	

Table 6-1: Mitig	ation Moni	toring <u>Pr</u>	ogram Table			
Impact	ММ	APM No.	Mitigation Measure/ Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Action and Location
			and items associated with Native American burials with appropriate dignity on the property in a location not subject to further subsurface disturbance.			
Construction of the proposed project could affect paleontological resources.		APM- CUL-6	Paleontological monitoring. A paleontological monitor will work under the direction of a qualified project paleontologist and will be on site to observe excavation operations that involve the original cutting of previously undisturbed deposits for the eight poles located within paleontologically sensitive formations (i.e., Pomerado Conglomerate, Late Pleistocene to Holocene-age channel deposits). A paleontological monitor is defined as an individual who has experience in the collection and salvage of fossil materials.	SDG&E to implement measure as defined and incorporate commitments into construction contracts.	SDG&E to provide qualifications of paleontological monitors to CPUC for review and approval prior to issuance of an NTP. All paleontological monitors shall be reviewed and approved by CPUC prior to working on the project. SDG&E to provide CPUC with a map prior to issuance of an NTP that indicates project facilities where paleontological monitoring will be required.	Prior to and during construction.
Construction of the proposed project could affect undiscovered paleontological resources and fossils.		APM- CUL-7	Unanticipated discovery of fossils. In the event that fossils are encountered, the paleontological monitor would have the authority to divert or temporarily halt construction activities in the area of discovery to allow recovery of fossil remains in a timely fashion. The paleontologist would contact SDG&E's Cultural Resource Specialist and Environmental Project Manager at the time of discovery. The paleontologist, in consultation with SDG&E's Cultural Resource Specialist, would determine	SDG&E to implement measure as defined and incorporate commitments into construction contracts.	SDG&E to provide notification to CPUC within 24 hours of an unanticipated discovery. The notification shall be submitted by the CPUC-approved paleontologist and identify the process that will be	During construction.

Table 6-1: Mitig	ation <u>Monit</u>	torin <u>g Pr</u>	ogram Table			
Impact	ММ	APM No.	Mitigation Measure/ Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Action and Location
			the significance of the discovered resources. SDG&E's Cultural Resource Specialist and Environmental Project Manager would have to concur with the evaluation procedures to be performed before construction activities would be allowed to resume. Because of the potential for recovery of small fossil remains, it may be necessary to set up a screen-washing operation on site. If fossils are discovered, the paleontologist (or paleontological monitor) would recover them along with pertinent stratigraphic data. In most cases, this fossil salvage can be completed in a short period of time. Because of the potential for recovery of small fossil remains, such as isolated mammal teeth, recovery of bulk sedimentary-matrix samples for off-site wet screening from specific strata may be necessary, as determined in the field. Fossil remains collected during monitoring and salvage would be cleaned, repaired, sorted, cataloged, and deposited in a scientific institution with permanent paleontological collections, and a paleontological monitoring report would be written.		implemented to address the unanticipated discovery.	
Construction of the proposed project could affect undiscovered cultural resources.	CUL-1		During construction of the proposed project, all Avoidance Measures as identified in Table 4 of the project-specific cultural resources report conducted by ASM (ASM 2012) shall be implemented. All measures shall be implemented by a qualified archaeologist who is approved by the California Public Utilities Commission. Avoidance Measures as listed in Table 4 of the report include retention of a cultural resources monitor during pole relocation work; establishment of Environmentally Sensitive Areas (ESAs) where sensitive resources are present in the vicinity of work sites; and avoiding sensitive bedrock, historical	SDG&E to implement measure as defined and incorporate commitments into construction contracts.	SDG&E to provide a status report to CPUC indicating completion of all measures listed on Table 4 of the cultural resources report prepared by ASM. SDG&E to provide a map to CPUC prior to issuance of an NTP that identifies all environmentally	Prior to and during construction.

Impact	MM	APM No.	Mitigation Measure/ Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Action and Location
			features, or other identified features within established ESAs.		sensitive areas that will be flagged in the field and avoided during construction.	
Construction of the proposed project could affect undiscovered cultural resources.	CUL-2		Prior to commencement of construction associated with the Santa Ysabel Staging Yard, an Environmentally Sensitive Area (ESA) shall be established around the existing resource by the retained cultural monitor. Fencing shall be erected to demarcate the ESA to minimize the potential for impacts during construction.	SDG&E to implement measure as defined and incorporate commitments into construction contracts.	CPUC and SDG&E monitor to ensure work is suspended upon discovery of resources to ensure avoidance of all significant cultural resources. If avoidance is not possible upon conclusion of evaluations, data recovery research program exhausts potential of site to yield further important information. The qualifications of the qualified archaeologist shall be provided to the CPUC.	During groundbreaking activities in construction areas
Construction of the proposed project could affect undiscovered cultural resources.	CUL-3		Where access roads traverse or are located near cultural resource sites as identified in the cultural resources report conducted by ASM (ASM 2012), vehicles shall be required to remain within existing access roads. No road grading shall be allowed within identified cultural resource site boundaries.	SDG&E to implement measure as defined and incorporate compliance requirements into construction contracts.	CPUC to conduct periodic in-field inspections to ensure measure is being carried out.	During construction.

Table 6-1: Mitigation Monitoring Program Table								
Impact	ММ	APM No.	Mitigation Measure/ Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Action and Location		
Construction of the proposed project could affect undiscovered cultural resources.	CUL-4		In the event that any prehistoric or historic subsurface cultural resources are discovered during ground-disturbing activities, such as chipped or ground stone, historic debris, building foundation, or human bones, all work within 50 feet of the resources shall be halted, and a qualified archaeologist shall be consulted to assess the significance of the find. If any find is determined to be significant, representatives of San Diego Gas & Electric (SDG&E), California Public Utilities Commission (CPUC), and the qualified archaeologist shall confer to determine the appropriate avoidance measures or other appropriate antigation, with the ultimate determination to be made by the CPUC. All significant cultural materials recovered shall be subject to scientific analysis; professional museum curation, as necessary; and a report prepared by a specialist according to current professional standards. In considering any suggested mitigation proposed by the consulting archaeologist to mitigate impacts to historical resources or unique archaeological resources, the CPUC and SDG&E shall determine whether avoidance is necessary and feasible in light of factors such as the nature of the find, project design, costs, and other considerations. If avoidance is infeasible, other appropriate measures (e.g., data recovery) shall be instituted. Work may proceed on other parts of the project site while mitigation for historical resources or unique archaeological resources is carried out. If the CPUC, in consultation with the qualified archaeological resource is present and that the resource could be adversely affected by the proposed project, SDG&E will:	SDG&E to implement measure as defined and incorporate compliance requirements into construction contracts.	CPUC and SDG&E monitor to ensure work is suspended upon discovery of resources to ensure avoidance of all significant cultural resources. If avoidance is not possible upon conclusion of evaluations, data recovery research program exhausts potential of site to yield further important information. The qualifications of the qualified archaeologist shall be provided to the CPUC.	During construction.		

Table 6-1: Mitiga	ation Moni	toring Pr	ogram Table			
Impact	ММ	APM No.	Mitigation Measure/ Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Action and Location
			a. Attempt to redesign the project to avoid any adverse effect on the significant archaeological resources.			
			 b. If the circumstances warrant an Archaeological Data Recovery Program (ADRP), such a program shall be conducted. The project archaeologist and the CPUC shall confer and consult to determine the scope of the ADRP. The archaeologist shall prepare a draft ADRP that shall be submitted to the CPUC for review and approval. The ADRP shall identify how the proposed ADRP would preserve the significant information the archaeological resource is expected to contain. That is, the ADRP shall identify the scientific/historical research questions that are applicable to the expected resource, the data classes the resource is expected to possess, and how the expected data classes would address the applicable research questions. Data recovery, in general, should be limited to portions of the archaeological resource that could be adversely affected by the proposed project. Destructive analytical methods shall not be applied to cultural materials if nondestructive methods are practical. 			
		•	Geology and Soils			
Construction of the proposed project could expose people or structures to potential substantial adverse seismic effects and the		APM- GEO-1	Project plans and specifications take into account the potential for mass wasting and liquefaction. A geotechnical study was conducted by VO Engineering Inc. in 2011 to evaluate the pole locations along the proposed project power line route for the presence of geologic hazards. The geotechnical study indicated the presence of geologic conditions potentially susceptible to mass wasting or liquefaction at the locations of proposed	SDG&E to implement measure as defined and incorporate commitments into construction contracts. SDG&E to provide copies of geotechnical	CPUC to verify incorporation of recommendations and findings on preconstruction plans (if necessary).	Prior to construction. This measure applies to all components of the proposed project.

Table 6-1: Mitiga	ation <u>Moni</u> t	torin <u>g Pr</u>	ogram Table			
Impact	ММ	APM No.	Mitigation Measure/ Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Action and Location
proposed project would be located on unstable and expansive soils.			Pole Nos. P103, R107, P110, P114, P129, P22, P23, P48, P49, and P51. The final project plans and specifications prepared by the responsible engineer have taken into account the geologic hazard conditions present at these locations and include appropriate engineering design and construction measures to minimize the potential for damage to proposed project structures in the event that there is an occurrence of these hazards.	investigation reports to the CPUC prior to issuance of an NTP.		
Construction of the proposed project could result in erosion impacts.		APM GEO-2	Soil stabilization. Once temporary surface disturbances are complete, areas that would not be subject to additional disturbance will be stabilized to control soil erosion.	SDG&E to implement measure as defined and incorporate commitments into construction contracts.	CPUC to inspect periodically during construction to ensure SDG&E is conducting activities in accordance with APM-GEO-2.	During construction.
			Hazards and Hazardous Mater	ials		
Construction of the proposed project could result in wildland fire impacts.		APM- HAZ-1	Steel structures. New structures are designed utilizing steel to avoid potential adverse effects relating to fire and fire damage.	SDG&E to implement measure as defined and incorporate commitments into construction contracts.	CPUC to verify pole structure design prior to construction.	Prior to construction.
Construction of the proposed project could result in wildland fire impacts.		APM- HAZ-2	TL 637 Project Fire Plan. The purpose of the proposed project is to improve the reliability of the power lines in fire-prone (very high to extreme fire threat areas) and wind-prone areas and minimize the risks associated with future wildfires. The proposed project is located within the Very High fire threat designation, as indicated on SDG&E's 2012 Fire Threat Zone Map. The proposed project design includes fire-hardening techniques, including replacing wood poles with steel poles, increasing conductor spacing to maximize line clearances, installing steel poles designed to	Plan to be submitted to CPUC and County of San Diego Department of Environmental Health.	CPUC to verify submittal of the project Fire Plan. CPUC to verify and ensure that potential exposure of workers, the public, or the environment to fire hazard has been minimized through plan implementation.	Prior to and during construction.

	ble 6-1: Mitigation Monitoring Program Table							
Impact	APM MM No.	Mitigation Measure/ Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Action			
		withstand an extreme wind-loading case and known local conditions, and installing longer polymer insulators. These design components of the proposed project minimize fire risk through enhanced safety and reliability of the power line system during extreme weather conditions. In addition to these design features, the proposed project will implement the TL 637 Project Fire Plan. The TL 637 Project Fire Plan exceeds fire prevention measures as stated in California Forestry Practice Rules, PRC 4:6. Avoidance and minimization measures to prevent wildland fires include training, oversight, and work controls in all phases of preparation and implementation of the proposed project. Training and briefings in fire prevention and suppression methods are key components of reducing the threat of a wildland fire on the proposed project. Additionally, suppression in the event of a fire starting will be facilitated by locating water tanks within two minutes of a work site, requiring firefighting equipment within 50 feet of any work/equipment site, and avoidance of construction activities during periods of declared Red Flag Warnings or other severe fire weather conditions as identified by SDG&E. Other avoidance and minimization measures may be employed, such as standby firefighters and fire engines. In addition, portions of the proposed project activity level (PAL) work restriction measures to employ while working on forest lands. Therefore, the proposed project design and construction avoidance and minimization measures will avoid and minimize fire risks as outlined in the TL 637						

Table 6-1: Mitig	ation Moni	toring <u>Pr</u>	ogram Table			
Impact	ММ	APM No.	Mitigation Measure/ Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Action and Location
Construction of the proposed project could result in wildland fire impacts.		APM- HAZ-3	Electric Standard Practice 113.1 – Wildland Fire Prevention and Fire Safety. The proposed project will be constructed consistent with Electric Standard Practice 113.1 – Wildland Fire Prevention and Fire Safety. Electric Standard Practice 113.1 outlines practices and procedures for SDG&E activities occurring within areas of potential wildland fire threat within SDG&E's service territory. The proposed project design includes replacement of wood poles with steel poles, increased conductor spacing to maximize line clearances, installation of steel poles to withstand an extreme wind-loading case and known local conditions, and undergrounding of a portion of the power line. These design components of the proposed project minimize the fire risk through enhanced safety and reliability of the power line system, particularly during extreme weather conditions. The standard practices in Electrical Standard Practice 113.1 include avoidance and minimization measures to comply with state and local fire ordinances.	SDG&E to implement measure as defined and incorporate commitments into construction contracts.	CPUC to verify compliance with Electric Standard Practice 113.1 and implementation of associated measures.	Prior to and during construction.
Construction of the proposed project could result in safety hazards to recreational trail users.		APM- HAZ-4	Coordination and measures within parks and preserves. Appropriate safety measures will be implemented where trails and construction areas are near each other within the Simon Preserve, Mt. Gower Preserve, and the Mt. Gower HLZ to provide a safety buffer between recreational users and construction areas. Construction schedule and activities will be coordinated with the authorized officer for the recreation area.	SDG&E to implement measure as defined and incorporate commitments into construction contracts.	CPUC to verify safety measures in the field and verify with authorized officer for the recreation area that SDG&E has coordinated construction schedule and activities.	Prior to and during construction.
Construction of the proposed project could result in hazardous	HAZ-1		Prior to construction, all San Diego Gas & Electric, contractor, and subcontractor project personnel would receive training regarding the appropriate work practices necessary to	SDG&E to conduct training program as described and incorporate	SDG&E to submit training materials to CPUC for review and approval. Attendee	Prior to and during construction.

Table 6-1: Mitig	ation Monit	oring Pr	ogram Table			
Impact	ММ	APM No.	Mitigation Measure/ Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Action and Location
substance spills during transport, use or disposal, and construction could create a significant hazard to the public through accident conditions involving the release of hazardous material.			effectively implement hazardous materials procedures and protocols and to comply with the applicable environmental laws and regulations, including, without limitation, hazardous materials spill prevention and response measures. A sign- in sheet of contractor and subcontractor project personnel who have received training shall be provided to California Public Utilities Commission on a weekly basis as indicated in MM BIO-2.	measure into construction contracts. SDG&E to provide documentation of contractor and subcontractor training to the CPUC.	sign-in sheets to be provided to CPUC on a weekly basis.	
Construction of the proposed project could result in hazardous substance spills during transport, use or disposal, and construction could create a significant hazard to the public through accident conditions involving the release of hazardous material.	HAZ-2		During construction, construction best management practices (BMPs) shall be implemented to prevent impacts from release of hazardous materials during construction activities. Typical BMPs could include, but would not be limited to, construction practices such as the use of absorbent pads for spill containment, specified locations for construction vehicle refueling, and a daily vehicle inspection schedule designed to identify leaking fuels and/or oils as early as possible.	SDG&E to implement measure as defined and incorporate compliance requirements into construction contracts.	CPUC to verify through review of preconstruction plans. CPUC to verify in the field.	Prior to and during construction.
Construction of the proposed project could result in hazard impacts during blasting activities.	HAZ-3		In the event that rock blasting is used during construction, a noise and vibration calculation will be prepared and submitted to the California Public Utilities Commission and the County of San Diego for review before blasting at each site. The construction contractor will ensure compliance with all relevant local, state, and federal regulations	SDG&E to implement measure as defined and incorporate compliance requirements into construction	CPUC to review and approve blasting plan prior to any blasting activities.	Prior to and during construction.

ble 6-1: Mitigation Monitoring Program Table							
Impact	ММ	APM No.	Mitigation Measure/ Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Action and Location	
			relating to blasting activities. In addition to any other requirements established by the appropriate regulatory agencies, the pre-blast survey and blasting plan shall meet the following conditions:	contracts.			
			 The pre-blast survey shall be conducted for structures within a minimum radius of 1,000 feet from the identified blast site to be specified by San Diego Gas &Electric (SDG&E) or SDG&E's contractor. Sensitive receptors that could reasonably be affected by blasting shall be surveyed as part of the pre-blast survey. Notification that blasting would occur shall be provided to all owners of the identified structures to be surveyed prior to commencement of blasting. The pre- blast survey shall be included in the final blasting plan. 				
			• The final blasting plan shall address air-blast limits, ground vibrations, and maximum peak particle velocity for ground movement, including provisions to monitor and assess compliance with the air-blast, ground vibration, and peak particle velocity requirements. The blasting plan shall meet criteria established in Chapter 3 (Control of Adverse Effects) in the Blasting Guidance Manual of the U.S. Department of Interior Office of Surface Mining Reclamation and Enforcement.				
			• The blasting plan shall outline the anticipated blasting procedures for the removal of rock material at the proposed pole locations. The blasting procedures shall incorporate line control to full depth and controlled blasting techniques to create minimum breakage outside the line control and maximum rock fragmentation within the				

Table 6-1: Mitiga	ation <u>Moni</u> t	torin <u>g Pr</u>	ogram Table			
Impact	ММ	APM No.	Mitigation Measure/ Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Action and Location
			target area. Prior to blasting, all applicable regulatory measures shall be met. The applicant, general contractor, or its subcontractor (as appropriate) shall keep a record of each blast for at least 1 year from the date of the last blast.			
Construction of the proposed project could result in a safety hazard near an airport.	HAZ-4		Prior to flight operations for helicopter use during construction, San Diego Gas &Electric (SDG&E) shall coordinate with local air traffic control and comply with all Federal Aviation Administration regulations regarding helicopter use to prevent conflict with air traffic generated by the Ramona Airport. Documentation verifying SDG&E has coordinated with local air traffic control shall be provided to California Public Utilities Commission prior to use of helicopters for construction activities.	SDG&E to implement measure as defined and incorporate compliance requirements into construction contracts.	CPUC to review documentation verifying SDG&E has coordinated with local air traffic control prior to use of helicopters for construction activities.	Prior to construction- related flight operations.
Construction of the proposed project could result in a safety hazard near an airport.	HAZ-5		Prior to flight operations for helicopter use during construction, a Helicopter Lift Plan shall be prepared if required pursuant to Federal Aviation Administration regulations. The Helicopter Lift Plan shall be submitted to the California Public Utilities Commission for review and approval.	SDG&E to implement measure as defined and incorporate compliance requirements into construction contracts.	CPUC to review and approve the Helicopter Lift Plan.	Prior to construction- related flight operations.
			Hydrology and Water Qualit	у У		
		APM- HYD-1	SDG&E Water Quality Construction BMPs Manual. SDG&E's Water Quality Construction BMPs Manual (BMP Manual) was created to organize SDG&E's standard water quality protection procedures for various specific actions that routinely occur as part of SDG&E's ongoing construction, operations, and maintenance activities. The primary focus of most BMPs is the reduction and/or elimination of water quality impacts during construction of linear projects such as the proposed project. The BMPs described	SDG&E to implement measure as defined and incorporate commitments into construction contracts.	CPUC to ensure that commitments have been incorporated into construction contracts. CPUC to inspect periodically to ensure minimization of disturbance and erosion. SDG&E to submit SWPPP to CPUC in order to	Prior to and during construction. This measure applies to grading activities and substation operations.

Table 6-1: Mitigation Monitoring Program Table									
Impact	ММ	APM No.	Mitigation Measure/ Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Action and Location			
			within the BMP Manual were derived from several sources, including the State of California guidelines as well as the Caltrans Water Quality BMPs. The BMP Manual will be utilized during construction (by way of preparation and implementation of the SWPPP), operation, and maintenance of the proposed project to ensure compliance with all relevant SDG&E and government-mandated water quality standards.		verify.				
Construction of the proposed project could cause erosion impacts resulting in a violation of water quality standards or waste discharge requirements.	HYD-1		 During routine operation and maintenance activities, if erosion is discovered along the proposed project alignment that would affect a surface water feature, including but not limited to a wet meadow, stream, channel or any other surface water body, San Diego Gas &Electric shall implement erosion control measures including but not limited to: Periodic inspection and maintenance, including cleaning dips and cross-drains, repairing non-jurisdictional ditches, marking culvert inlets to aid in location, and clearing debris from culverts. Avoid using roads during wet periods if such use would damage road drainage features. Grade road surfaces only as often as necessary to maintain a stable running surface and to retain the original surface drainage. Place all excess material removed by maintenance operations in safe disposal sites and stabilize these sites to prevent erosion. Avoid locations where erosion will carry materials into a 	SDG&E to implement measure as defined.	CPUC to review documentation of coordination with RWQCB. If necessary, SDG&E to provide applicable permit/waiver to CPUC to verify.	Prior to construction.			

Table 6-1: Mitig	ation Monit	oring Pr	ogram Table			
Impact	ММ	APM No.	Mitigation Measure/ Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Action and Location
Construction of the proposed project could result in a violation of water quality standards or waste discharge requirements due to herbicide application.	HYD-2		Herbicides shall not be applied within 100 feet of a surface water feature, including but not limited to a wet meadow, stream, channel, or any other surface water body.	SDG&E to implement measure as defined and incorporate into construction plans.	CPUC to conduct in- field inspections periodically.	During construction.
Construction of the proposed project could result in a violation of water quality standards or waste discharge requirements.	HYD-3		During pole repair work, mowing or trimming of vegetation shall be conducted to ensure that ground disturbance is minimized. Vegetation clearing shall be avoided where feasible. In the unlikely event that vegetation clearing or minor grading is required during operation and maintenance activities, San Diego Gas & Electric shall establish a temporary work site where work is to be conducted. Any topsoil or vegetation removed during this process shall be stored, and redistributed over the temporary work site when maintenance activities are completed, unless clearance is required around the poles.	SDG&E to implement measure as defined and incorporate into construction plans.	CPUC to conduct in- field inspections periodically.	During construction.
Construction of the proposed project could result in a violation of water quality standards or waste discharge requirements.	HYD-4		San Diego Gas &Electric shall implement the terms and conditions as specified in the Regional Water Quality Control Board (RWQCB) Clean Water Act Section 401 Certification (Certification No. 11C-114; May 16, 2012), which identifies the poles to remain in place and those to be relocated outside jurisdictional areas.	SDG&E to implement all measures as defined in the RWQCB 401 Certification. SDG&E to provide CPUC a list of poles to remain in place and those to be relocated outside of jurisdictional areas.	CPUC to conduct in- field inspection of poles remaining in place and relocated outside jurisdictional areas.	During construction.

Table 6-1: Mitiga	ation Monit	oring Pr	ogram Table							
Impact	ММ	APM No.	Mitigation Measure/ Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Action and Location				
	Noise									
Construction of the proposed project could generate noise levels in excess of established standards and/or temporary or periodic increases in noise levels.		APM- NOI-1	Generators. Generator use will be limited to less than 50 horsepower (HP) at all staging yards. Any generators used at the staging yards will be located away from noise sensitive areas, and positioned on the property to comply with the San Diego County noise ordinance.	SDG&E to implement measure as defined and incorporate into construction plans.	CPUC to verify generator horsepower and position of generator with respect to noise sensitive areas.	During construction.				
Construction of the proposed project could generate noise levels in excess of established standards and/or temporary or periodic increases in noise levels.		APM- NOI-2	Mufflers. Functioning mufflers will be maintained on all equipment.	SDG&E to implement measure as defined and incorporate into construction plans.	CPUC to verify muffler requirement included in construction plans.	Prior to construction.				
Construction of the proposed project could generate noise levels in excess of established standards and/or temporary or periodic increases in noise levels.		APM- NOI-3	Resident notification. Residents within 50 feet will receive notification of the start of construction at least one week prior to the start of construction activities within that area.	SDG&E to implement measure as defined.	SDG&E to provide CPUC with construction notices for review and approval to ensure advance notice has been given.	Prior to construction.				
Construction of the proposed project could generate noise levels in excess of	NOI-1		At least 30 days before helicopter use and stringing operations are employed San Diego Gas &Electric (SDG&E) shall prepare and submit a public notice mailer to the California Public Utilities Commission for approval. The	SDG&E shall conduct public notification as defined.	SDG&E to provide CPUC with construction notices for review and approval to ensure	Notification provided prior to helicopter use and stringing operations to all				

Table 6-1: Mitiga					Monitoring	
Impact	ММ	APM No.	Mitigation Measure/ Applicant Proposed Measure	Implementation Actions	Requirements and Effectiveness Criteria	Timing of Action and Location
established standards and/or temporary or periodic increases in noise levels.			public notice mailer shall be prepared and mailed no less than 7 days prior to helicopter use and stringing operations along the proposed project alignment, SDG&E shall notify landowners, livestock facility owners, and residents within 50 feet of construction to provide adequate notice of potential helicopter and/or stringing activity within the project vicinity. If construction is delayed for more than 7 days, an additional notice shall be mailed to discuss the status and schedule of helicopter use and stringing operations.		advance notice has been given.	property owners within 50 feet of construction.
Construction of the proposed project could generate noise levels in excess of established standards and/or temporary or periodic increases in noise levels.	NOI-2		In the event noise levels during construction activities are expected to exceed an 8- hour Leq of 75 dBA at the nearest property line or within 50 feet of the existing and proposed project alignment where noise sensitive areas are located, San Diego Gas &Electric (SDG&E) shall implement noise reduction measures to reduce noise levels below 75 dBA. Measures to be implemented could include: (1) portable noise barriers erected temporarily to reduce noise impacts at specific locations; or 2) if noise barriers would not reduce levels to below 75 dBA, depending on the location of residences and the level of construction noise, SDG&E shall offer to relocate affected residents.	SDG&E to implement measure as defined. SDG&E to monitor noise where noise sensitive areas are located. SDG&E to provide documentation of noise levels to CPUC.	CPUC to verify SDG&E employ of public liaison person and ensure procedures for reaching the public liaison are in place. SDG&E to provide CPUC with construction notices for review and approval to ensure advance notice has been given. CPUC to ensure that commitments have been incorporated into construction contracts. CPUC to inspect periodically to ensure noise measures are adequately	Prior to and during construction. Notification provided to CPUC prior to construction.

Table 6-1: Mitiga	ation Moni	toring Pr	ogram Table			
Impact	ММ	APM No.	Mitigation Measure/ Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Action and Location
Construction of the proposed project could generate noise levels in excess of established standards and/or temporary or periodic increases in noise levels.	NOI-3		In the unlikely event that rock blasting is used during construction, a noise and vibration calculation will be prepared and submitted to the California Public Utilities Commission and the County of San Diego for review before blasting at each site. The construction contractor will ensure compliance with all relevant local, state, and federal regulations relating to blasting activities.	SDG&E to implement measure as defined.	Calculations prepared and submitted to CPUC for review and approval prior to rock blasting activities. The CPUC will ensure that these measures are carried out during project construction.	Calculation prepared prior to construction and in effect throughout construction. Notification provided to CPUC prior to construction.
		•	Recreation			
Construction of the proposed project could result in temporary impacts to recreational trails.		APM- REC-1	Temporary trail detours. Where feasible, temporary detours will be provided for trail users. Signs will be provided to direct trail users to the temporary trail detours.	SDG&E to implement measure as defined.	CPUC to ensure that this measure is carried out during project construction.	During construction.
			Transportation/Traffic			
Project implementation could result in a conflict with an applicable traffic plan, ordinance, or policy.		APM- TRA-1	Standard Traffic Control Procedures. SDG&E will implement a traffic control plan to address potential disruption of traffic circulation during construction activities and address any safety issues. The traffic control plan will be prepared by the project engineer or contractor and subject to approval by the County.	SDG&E to prepare and implement a traffic control plan as defined	SDG&E to provide documentation of coordination with the County of San Diego as stipulated in the measure and SDG&E confirmation with all required conditions to ensure traffic flows would be generally maintained without severe congestion.	Prior to construction.
Project implementation could result in a conflict with an		APM- TRA-2	Encroachment permits. SDG&E will obtain the required encroachment permits from Caltrans for work near Highways 78 and 79, and will ensure that proper safety measures are in place while	SDG&E to coordinate with Caltrans as defined and receive	SDG&E to provide documentation of coordination with the Caltrans as stipulated	Prior to construction.

Table 6-1: Mitigation Monitoring Program Table								
Impact	ММ	APM No.	Mitigation Measure/ Applicant Proposed Measure	Implementation Actions	Monitoring Requirements and Effectiveness Criteria	Timing of Action and Location		
applicable traffic plan, ordinance, or policy.			construction work is occurring near public roadways. These safety measures include flagging, proper signage, and orange cones to alert the public to construction activities near the roadway.	encroachment permit.	in the measure and. Documentation of encroachment permit issuance to be provided to CPUC in order to verify.			

MM = Agency Mitigation Measure

APM = Applicant Proposed Measure

Note that SDG&E APMs-CUL-4, NOI-4 and NOI-5 were superseded by agency mitigation measures

INTENTIONALLY LEFT BLANK

7.0 LIST OF PREPARERS

7.1 LEAD AGENCY

Lon Payne, CPUC Project Manager, Energy Division

7.2 PREPARERS

Dudek – Primary Consultant

John Porteous, CEP, Project Manager

Rica Nitka, Assistant Project Manager

Andrew Greis, GIS Specialist

Amy Seals, Technical Editor

Becky Golden-Harrell, Technical Editor

Brian Grover, Noise

Brock Ortega, Principal Biologist

David Deckman, Air Quality

Devin Doyon, Publications Production Assistant

Hannah Westwood, Publications Production Lead

Jennifer Longabaugh, Environmental Analyst

Laurel Porter, Technical Editor

Melissa Blundell, Biologist

Michael Huff, Fire Specialist

Micah Hale, RPA, Cultural Resources Lead

INTENTIONALLY LEFT BLANK

8.0 REFERENCES

MITIGATED NEGATIVE DECLARATION PREFACE

- SDG&E (San Diego Gas & Electric). 2013a. *Proponent's Environmental Assessment for the Tie-Line 637 Wood-to-Steel Project*. Application 13-03-003. Volume II of II. March 2013.
- SDG&E. 2013b. A.13-03-003 SDG&E (05/21/13 and 5/31/13) Partial Response to Data Request. SDG&E TL 637 Wood-to-Steel Project. "ED Additional Data Request Dated May 10, 2013." Response provided May 21 and 31, 2013.
- SDG&E. 2013c. Response to Data Request 3. SDG&E TL 637 Wood-to-Steel Project. Response provided August 6, 2013.

1.0 INITIAL STUDY ENVIRONMENTAL CHECKLIST FORM

SDG&E (San Diego Gas & Electric). 2013. *Proponent's Environmental Assessment for the Tie-Line 637 Wood-to-Steel Project*. Application 13-03-003. Volume II of II. March 2013.

4.0 EXPANDED DESCRIPTION OF THE PROJECT

- SDG&E (San Diego Gas & Electric). 2013a. *Proponent's Environmental Assessment for the Tie-Line 637 Wood-to-Steel Project*. Application 13-03-003. Volume II of II. March 2013.
- SDG&E. 2013b. A.13-03-003 SDG&E (05/21/13 and 5/31/13) Partial Response to Data Request. SDG&E TL 637 Wood-to-Steel Project. "ED Additional Data Request Dated May 10, 2013." Response provided May 21 and 31, 2013.

5.0 EVALUATION OF ENVIRONMENTAL IMPACTS

5.1 Introduction

14 CCR 15000–15387 and Appendix A–L. Guidelines for Implementation of the California Environmental Quality Act, as amended.

5.2 Aesthetics

- 14 CCR 15000–15387 and Appendix A–L. Guidelines for Implementation of the California Environmental Quality Act, as amended.
- Caltrans (California Department of Transportation). 2013. California Scenic Highway Program FAQ. Accessed June 4, 2013. http://www.dot.ca.gov/hq/LandArch/scenic/faq.htm.

County of San Diego. 2011a. San Diego County General Plan – Conservation and Open Space Element. August 2011.

County of San Diego. 2011b. Ramona Community Plan. Adopted August 3, 2011.

County of San Diego. 2011c. Central Mountain Subregional Plan. Adopted August 3, 2011.

County of San Diego. 2011d. North Mountain Subregional Plan. Adopted August 3, 2011.

- SDG&E (San Diego Gas & Electric). 2013a. Proponent's Environmental Assessment for the Tie-Line 637 Wood-to-Steel Project. Application 13-03-003. Volume II of II. March 2013.
- SDG&E. 2013b. A.13-03-003 SDG&E (05/21/13 and 5/31/13) Partial Response to Data Request. SDG&E TL 637 Wood-to-Steel Project. "ED Additional Data Request Dated May 10, 2013." Response provided May 21 and 31, 2013.
- San Diego Country Estates Association. 2011. "About San Diego Country Estates." Accessed June 4, 2013 at: http://www.sdcea.net/About-Us/San-Diego-Country-Estates.aspx

5.3 Agricultural Resources

- 14 CCR 15000–15387 and Appendix A–L. Guidelines for Implementation of the California Environmental Quality Act, as amended.
- California Public Resources Code, Section 4521–4529.5. Z'berg-Nejedly Forest Practice Act of 1973.
- California Public Resources Code, Sections 12200–12231. California Forest Legacy Program Act of 2007.
- County of San Diego. 2011a. County of San Diego General Plan. Land Use and Conservation and Open Space Elements. Adopted August 3, 2011.

County of San Diego. 2011b. Ramona Community Plan. Adopted August 3, 2011.

- County of San Diego. 2011c. Central Mountain Subregional Plan. Originally adopted January 3, 1979. Updated/Adopted August 3, 2011.
- County of San Diego. 2011d. North Mountain Subregional Plan. Originally adopted January 3, 1979. Updated/Adopted August 3, 2011.
- DOC (California Department of Conservation). 2007a. *FMMP Prime Farmland Definition*. Division of Land Resource Protection Farmland Mapping and Monitoring Program. Accessed at http://www.conservation.ca.gov/dlrp/fmmp/overview/ Pages/prime_farmland_fmmp.aspx. Site accessed May 31, 2013.

- DOC. 2007b. *Williamson Act Questions and Answers*. Division of Land Resource Protection Farmland Mapping and Monitoring Program. Fact Sheet accessed at http://www.conservation.ca.gov/DLRP/lca/Pages/Index.aspx. Site accessed August 5, 2009.
- DOC. 2010. San Diego County Important Farmland 2010. Sheet 1 of 2 and Sheet 2 of 2. Division of Land Resource Protection Farmland Mapping and Monitoring Program. Map published March 2013.
- DOC. 2013. San Diego County Williamson Act FY 2012/2013. Division of Land Resource Protection Conservation Program Support. 2013.
- SDG&E (San Diego Gas & Electric). 2013. *Proponent's Environmental Assessment for the Tie-Line 637 Wood-to-Steel Project*. Application 13-03-003. Volume II of II. March 2013.

5.4 Air Quality/Greenhouse Gas Emissions

- 14 CCR 15000–15387 and Appendix A–L. Guidelines for Implementation of the California Environmental Quality Act, as amended.
- CARB (California Air Resources Board). 2006. Public Workshop to Discuss Establishing the 1990 Emissions Level and the California 2020 Limit and Developing Regulations to Require Reporting of Greenhouse Gas Emissions. Sacramento, California. December 1, 2006. http://www.arb.ca.gov/cc/inventory/meet/2006_12_01_presentation_intro.pdf
- CARB. 2008. *Climate Change Proposed Scoping Plan: A Framework for Change*. October, approved December 12, 2008. http://www.arb.ca.gov/cc/scopingplan/document/psp.pdf.
- CARB. 2009. "Glossary of Air Pollutant Terms". http://www.arb.ca.gov/html/gloss.htm
- CARB. 2012a. Area Designations Maps / State and National. http://www.arb.ca.gov/desig/adm/adm.htm.
- CARB. 2012b. Ambient Air Quality Standards. Accessed at: http://www.arb.ca.gov/research/aaqs/aaqs2.pdf.
- CARB. 2013a. Air Quality Data Statistics. http://arb.ca.gov/adam
- CARB. 2013b. "California Greenhouse Gas Inventory for 2000–2010 by Category as Defined in the Scoping Plan." February 19, 2013. http://www.arb.ca.gov/cc/inventory/ data/tables/ghg_inventory_scopingplan_00-09_2011-10-26.pdf.
- CAT (California Climate Action Team). 2006. Final 2006 Climate Action Team Report to the Governor and Legislature. Sacramento, California. March.
- CAT. 2010. Climate Action Team Report to the Governor and Legislature. Sacramento, CA. December. http://www.energy.ca.gov/2010publications/CAT-1000-2010-005/CAT-1000-2010-005.PDF

- County of San Diego. 2004. San Diego County Grading, Clearing and Watercourses Ordinance. San Diego County Code, Title 8, Division 7, Section 87.428, Dust Control Measures. April 23, 2004. http://www.sdcounty.ca.gov/dpw/docs/propgradord.pdf.
- County of San Diego. 2007. County of San Diego Guidelines for Determining Significance and Report Format and Contents Requirements. Air Quality. Land Use and Environmental Group. Department of Planning and Land Use, Department of Public Works. March 19, 2007.
- County of San Diego. 2012. Climate Action Plan. Adopted June 2012. Accessed on November 19, 2012 at: http://www.sdcounty.ca.gov/pds/advance/climateactionplan.html.
- EPA (U.S. Environmental Protection Agency). 2012a. *Six Common Air Pollutants*. Last updated April 20, 2012. http://www.epa.gov/air/urbanair/.
- EPA. 2012b. "Region 9: Air Programs, Air Quality Maps." Last updated May 5, 2012. http://www.epa.gov/region9/air/maps/maps_top.html
- EPA 2013a. "AirData: Access to Air Pollution Data." http://www.epa.gov/airdata
- EPA. 2013b. Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990–2010. EPA 430-R-12-001. Washington, D.C.: EPA. June 19, 2013. http://www.epa.gov/climatechange/ emissions/usinventoryreport.html.
- EPA and NHTSA (U.S. Environmental Protection Agency and National Highway Traffic Safety Administration. 2010. *Light-Duty Vehicle Greenhouse Gas Emission Standards and Corporate Average Fuel Economy Standards; Final Rule*. EPA–HQ–OAR–2009–0472. NHTSA-2009-0059. http://www.nhtsa.gov/Laws+&+Regulations/CAFE+-+Fuel+Economy/Model+Years+2012-2016:+Final+Rule
- EPA and NHTSA. 2011. Medium- and Heavy-Duty Fuel Efficiency Improvement Program. Final Environmental Impact Statement. June 2011. www.nhtsa.gov/staticfiles/rulemaking/ pdf/cafe/FEIS-MedHD.pdf
- EPA and NHTSA. 2012. 2017 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions and Corporate Average Fuel Economy Standards. EPA–HQ–OAR–2010– 0799, NHTSA-2010-0131.
- IPCC (Intergovernmental Panel on Climate Change). 2007. *Climate Change 2007: The Physical Science Basis*, Summary for Policymakers. http://ipcc-wg1.ucar.edu/wg1/docs/WG1AR4_SPM_PlenaryApproved.pdf
- National Climatic Data Center. 2009. Global Warming Frequently Asked Questions. Asheville, N.C. Accessed at: http://lwf.ncdc.noaa.gov/oa/climate/globalwarming.html

- OPR (California Governor's Office of Planning and Research). 2008. Technical Advisory CEQA and Climate Change: Addressing Climate Change through California Environmental Quality Act (CEQA) Review.
- SDAPCD (San Diego Air Pollution Control District). 1969. Rules and Regulations. Regulation IV. Prohibitions. Rule 51. Nuisance. Effective January 1, 1969.
- SDAPCD. 2005. *Measures to Reduce Particulate Matter in San Diego County*. December 2005. http://www.sdapcd.org/planning/plan.html.
- SDAPCD. 2009. SDAPCD Regulation IV: Prohibitions; Rule 55: Fugitive Dust. December 24, 2009. http://www.sdapcd.org/rules/Reg4pdf/R67-0.pdf.
- SDG&E (San Diego Gas & Electric). 2013a. *Proponent's Environmental Assessment for the Tie-Line 637 Wood-to-Steel Project*. Application 13-03-003. Volume II of II. March 2013.
- SDG&E. 2013b. A.13-03-003 SDG&E (05/21/13 and 5/31/13) Partial Response to Data Request. SDG&E TL 637 Wood-to-Steel Project. "ED Additional Data Request Dated May 10, 2013." Response provided May 21 and 31, 2013.

5.5 Biological Resources

- Best, T.L., W.M. Kiser, and P.W. Freeman. 1996. "*Eumops perotis.*" American Society of Mammalogists. *Mammalian Species* 534:1–8.
- BLM (Bureau of Land Management). 1994. South Coast Resource Management Plan (1994). http://www.blm.gov/pgdata/etc/medialib/blm/ca/pdf/pdfs/palmsprings_pdfs/sc_rmp.Par.2 4754.File.dat/South-Coast-RMP&ROD-1994.pdf. Site visited November 2012.
- Californiaherps.com . 2013. A guide to the Amphibians and Reptiles of California. Accessed in May 2013 from http://www.californiaherps.com/
- Call. 1978. *Nesting Habitats and Surveying Techniques for Common Western Raptors.* Technical Note TN-316. Denver, Colorado: U.S. Department of the Interior, Bureau of Land Management.
- CDFG (California Department of Fish and Game). 2005. California Department of Fish and Wildlife and the California Interagency Wildlife Task Group (CDFW and CITG) Life History Account for Ringtails. February 2005.
- CDFG. 2008. Life History Accounts and Range Maps- California Wildlife Habitat Relationships System. Originally published in: Zeiner, D.C., W.F. Laudenslayer, Jr., K.E. Mayer, and M. White, eds. 1988–1990. *California's Wildlife. Vol. I-III.* Updates are noted in accounts that have been added or edited since original publication.Accessed at: http://www.dfg.ca.gov/biogeodata/cwhr/cawildlife.aspx.

- CDFW (California Department of Fish and Wildlife). 2013. *California Natural Diversity Database.* Rarefind. Version 4.0. Computer database. May 2013.
- Chambers Group. 2010. Quino Checkerspot Butterfly (Euphydryas editha quino). Focused Survey Report for the San Diego Gas & Electric Cleveland National Forest Project, San Diego, California. Prepared for San Diego Gas & Electric Company. San Diego, California: Chambers Group Inc. September 2010.
- Chambers Group. 2011a. Coastal California Gnatcatcher (Polioptila californica californica). Focused Survey Report for the San Diego Gas & Electric Company Cleveland National Forest Master Services Permit Project, San Diego County, CA. Prepared for San Diego Gas & Electric Company. San Diego, California: Chambers Group Inc. February 2011.
- Chambers Group. 2011b. Arroyo Toad (Anaxyrus californicus). Focused Survey Report for the San Diego Gas & Electric Cleveland National Forest Master Services Permit Project, San Diego County, CA. Prepared for San Diego Gas & Electric Company. San Diego, California: Chambers Group Inc. February 2011.
- Chambers Group. 2011c. *California Spotted Owl* (Strix occidentalis occidentalis). *Habitat* Assessment and Focused Survey Report for the San Diego Gas & Electric Cleveland National Forest Master Use Permit Project, San Diego County, CA. Prepared for San Diego Gas & Electric Company. San Diego, California: Chambers Group, Inc. February 2011.
- Chambers Group. 2011d. Least Bell's Vireo (Vireo bellii pusillus). Focused Survey Report for the San Diego Gas & Electric Cleveland National Forest Master Services Permit Project, San Diego County, CA. Prepared for San Diego Gas & Electric Company. San Diego, California: Chambers Group Inc. February 2011.
- Chambers Group. 2011e. Hermes Copper Butterfly (Hermelycaena [Lycaena] hermes). Focused Survey Report for the San Diego Gas & Electric Cleveland National Forest Project, San Diego County, CA. Prepared for San Diego Gas & Electric Company. San Diego, California: Chambers Group Inc. February 2011.
- Chambers Group. 2011f. Southwestern Willow Flycatcher (Empidonax traillii extimus). Focused Survey Report for the San Diego Gas & Electric Cleveland National Forest Master Services Permit Project, San Diego County, CA. Prepared for San Diego Gas & Electric Company. San Diego, California: Chambers Group Inc. February 2011.
- Chambers Group. 2012a. Final Biological Technical Report, TL 637 Wood to Steel Pole Replacement, Creelman Substation to Santa Ysabel, Substation, Ramona and Santa Ysabel, San Diego County, California. Prepared for San Diego Gas & Electric Company. San Diego, California: Chambers Group Inc. December 2012.
- Chambers Group. 2012b. Stephens' Kangaroo Rat (Dipodomys stephensi). Focused Survey Report for the San Diego Gas & Electric Cleveland National Forest Master Services

Permit Project, San Diego County, CA. Prepared for San Diego Gas & Electric Company. San Diego, California: Chambers Group Inc. April 2012.

- Chambers Group. 2012c. Rare Plant Survey Draft Report For The San Diego Gas and Electric Cleveland National Forest Master Services Permit Project in the Cleveland National Forest and Surrounding Areas, San Diego County, CA. Prepared for San Diego Gas & Electric Company. San Diego, California: Chambers Group Inc. February 2012.
- CNPS (California Native Plant Society). 2013. Inventory of Rare and Endangered Plants (online edition, v7). Sacramento, California: California Native Plant Society.. Accessed May 2013. http://www.cnps.org/inventory.
- County of San Diego 2009. *North County Multiple Species Conservation Plan.* Draft. February 2009.
- County of San Diego. 2011a. *General Plan Update Ramona Community Plan.* Adopted August 3, 2011. Accessed online December 11, 2012. http://www.sdcounty.ca.gov/pds/docs/CP/Ramona_CP.pdf. .
- County of San Diego. 2011b. San Diego General Plan: Central Mountain Subregional Plan. Adopted August 3, 2011.
- County of San Diego. 2011. *North Mountain Subregional Plan.* Accessed online November 14, 2012. http://www.sdcounty.ca.gov/pds/generalplan.html. .
- Cryan, P.M. 2003. "Seasonal Distribution of Migratory Tree Bats (*Lasiurus* and *Lasionycteris*) in North America." *Journal of Mammalogy* 84(2):579–593.
- Garrett, K. and J. Dunn. 1981. *The Birds of Southern California: Status and Distribution.* Los Angeles Audubon Society.
- Gray, J. and D. Bramlet. 1992. Habitat Classification System, Natural Resources, Geographic Information System (GIS) Project. Santa Ana, California: County of Orange Environmental Management Agency.
- Grinnell, J. 1933. Review of the recent mammal fauna of California. Univ. Calif. Publ. Zool. 40:71-234.
- Hall, E.R. 1981. *The Mammals of North America*, 2nd Edition. John Wiley & Sons. 2 volumes, 1181 pages.
- Hermanson, J.W., and T.J. O'Shea. 1983. *Antrozous pallidus*. Mammal. Species No. 213. 8 pages.
- Hickman, J.C. 1993. *The Jepson Manual: Higher Plants of California*. Berkeley, California: University of California Press.

- Holland, D.C. and R.H. Goodman. 1998. A Guide to the Amphibians and Reptiles of MCB Camp Pendleton, San Diego County, California. Prepared for AC/S Environmental Security Resource Management Division MCB Camp Pendleton, California. Contract M00681-94-C-0039.
- Holland, R. F. 1986. Preliminary descriptions of the terrestrial natural communities of California. Nongame-Heritage Program, California Department of Fish and Game. 156 pp.
- Jennings, M.R. and M.P. Hayes. 1994. *Amphibian and Reptile Species of Special Concern in California*. Final report submitted to the California Department of Fish and Game, Rancho Cordova, California. Contract 8023.
- Johnsgard, P.A. 1990. *Hawks, Eagles, and Falcons of North America*. Washington, D.C.: Smithsonian Institution Press.
- Kochert, M. N., K. Steenhof, C. L. Mcintyre and E. H. Craig. 2002. Golden Eagle (Aquila chrysaetos), The Birds of North America Online (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of North America Online: http://bna.birds.cornell.edu/bna/species/684. doi:10.2173/bna.684
- Kunz, T. H., and R. A. Martin. 1982. Plecotus townsendii. Mammal. Species No. 175. 6pp
- Lemm, Jeffrey M. 2006. *Field Guide to Amphibians and Reptiles of the San Diego Region*. Berkley, California: University of California Press.
- Lind, A. J. 1998. Region 5 USFS Sensitive Animal Species Evaluation and Documentation Form. Unpublished document. Cited in the San Diego Ring-necked Snake Species Account. Cleveland National Forest website. http://www.fs.fed.us/r5/scfpr/projects/ Imp/docs/species-animals.pdf
- Miller, A. H., and R. C. Stebbins. 1964. The lives of desert animals in Joshua Tree National Monument. Univ. California Press, Berkeley. 452pp.
- SDG&E (San Diego Gas & Electric). 1995. *Subregional Natural Community Conservation Plan.* San Diego Gas & Electric Company. December 1995
- SDG&E. 2013a. Proponent's Environmental Assessment for the Tie-Line 637 Wood-to-Steel Project. Application 13-03-003. Volume II of II. March 2013.
- SDG&E. 2013b. A.13-03-003 SDG&E (05/21/13 and 5/31/13) Partial Response to Data Request. SDG&E TL 637 Wood-to-Steel Project. "ED Additional Data Request Dated May 10, 2013." Response provided May 21 and 31, 2013.
- Shump, K. A., Jr., and A. U. Shump. 1982. Lasiurus borealis. Mammal. Species No. 183. 6pp.
- Spiteri, D.E. 1988. "The Geographic Variability of the Species *Lichanura trivirgata* and a Description of a New Species." In *Proceedings of the Conference on California*

Herpetology, ed. H.F. DeLisle, P.R. Brown, B. Kaufman and B.M. McGurty. Special Publications of the Southwestern Herpetologists Society.

- Stebbins, R.C. 2003. *Western Reptiles and Amphibians.* Peterson Field Guide, 3rd ed. New York, New York: Houghton Mifflin Company.
- Unitt, P. 2004. *San Diego County Bird Atlas.* No. 39. Proceedings of the San Diego Society of Natural History. San Diego, California: Ibis Publishing Company.
- Vaughan, T. A., and P. H. Krutzsch. 1954. Seasonal distribution of the hoary bat in southern California. *Journal of Mammalogy*. 35:431-432.
- Winters, K. Personal communication with K Winters. March 19, 2013.
- Yingling, R.P. 1982. "Lichanura, L. trivirgata." Catalogue of American Amphibians and Reptiles 294.1–294.2.
- Zeiner, D.C., W.F. Laudenslayer, Jr., and K.E. Mayer, ed. 1988. *California's Wildlife, Volume 1: Amphibians and Reptiles*. Sacramento, California: California Department of Fish and Game.
- Zeiner, D.C., W.F. Laudenslayer Jr., K.E. Mayer, and M. White, eds. 1990a. *California's Wildlife: Volume II. Birds.* Sacramento, California: California Department of Fish and Game.
- Zeiner, D.C., W.F. Laudenslayer Jr., K.E. Mayer, and M. White, eds. 1990b. *California's Wildlife: Volume III. Mammals.* Sacramento, California: California Department of Fish and Game.

5.6 Cultural Resources

- 14 CCR 15000–15387 and Appendix A–L. Guidelines for Implementation of the California Environmental Quality Act, as amended.
- 16 U.S.C. 431–433. American Antiquities Act of 1906, as amended.
- 16 U.S.C. 469–469c. Archaeological and Historic Preservation Act of 1974, as amended.
- 16 U.S.C. 470–470kk. National Historic Preservation Act of 1966 (NHPA), as amended.
- 16 U.S.C. 470aa–470mm. Archaeological Resources Protection Act of 1979, as amended.
- 25 U.S.C. 3001–3013. Native American Graves Protection and Repatriation Act (NAGPRA), as amended.
- 43 U.S.C. 1701–1782. Federal Land Policy and Management Act of 1976, as amended.
- 42 U.S.C. 4321–4370f. National Environmental Policy Act (NEPA) of 1969, as amended.

- ASM. 2012. Inventory of the Cultural Resources Along San Diego Gas & Electric Tie Line 637, San Diego County, California. Prepared for SDG&E. Prepared by ASM Affiliates, Inc. March.
- County of San Diego. 2007a. County of San Diego Guidelines for Determining Significance – Cultural Resources: Archaeological and Historic Resources. Land Use and Environment Group, Department of Land Use and Planning, Department of Public Works. December 5, 2007.
- County of San Diego. 2007b. County of San Diego Guidelines for Determining Significance Paleontological Resources. Land Use and Environment Group, Department of Land Use and Planning, Department of Public Works. March 19, 2007.
- San Diego Natural History Museum. 2012. Paleontological record search SDG&E Transmission Line 637 Pole Replacement Project. Joseph J. El Adli. March 27, 2012.
- SDG&E (San Diego Gas & Electric). 2013. Proponent's Environmental Assessment for the Tie-Line 637 Wood-to-Steel Project. Application 13-03-003. Volume II of II. March 2013.

5.7 Geology and Soils

- 14 CCR 15000–15387 and Appendix A–L. Guidelines for Implementation of the California Environmental Quality Act, as amended.
- California Public Resources Code, Division 2, Geology, Mines, and Mining, Chapter 7.5 Alquist-Priolo Earthquake Fault Zoning, Sections 2621–2630. http://www.consrv.ca.gov/cgs/ codes/prc/Pages/chap-7-5.aspx.
- California Public Resources Code, Section 21000–21177. California Environmental Quality Act (CEQA), as amended.
- California Public Resources Code. Chapter 7.8; Division 2; Sections 2690–2699.6. California Seismic Hazards Mapping Act of 1990. http://www.consrv.ca.gov/cgs/codes/prc/ Pages/chap-7-8.aspx#2690.
- CGS. 2008. *Guidelines for Evaluating and Mitigating Seismic Hazards in California*. Special Publication 117. Sacramento, California: California Geological Survey. Revised and readopted September 11, 2008. http://www.conservation.ca.gov/cgs/shzp/webdocs/ sp117.pdf.
- SDG&E (San Diego Gas & Electric). 2013. Proponent's Environmental Assessment for the Tie-Line 637 Wood-to-Steel Project. Application 13-03-003. Volume II of II. March 2013.

VO Engineering. 2011. Geotechnical Study. SDG&E Tie Line 637, Wood to Steel Pole Conversion, Creelman to Santa Ysabel, California. Prepared by VO Engineering Inc. October 26, 2011.

5.8 Hazards and Hazardous Materials

- 8 CCR, Sections 337–340. California Occupational Safety and Health Regulations (CAL/OSHA), Subchapter 1, Article 5, Hazardous Substances Information and Training.
- 14 CCR, Sections 1250–1258. Fire Prevention Standards for Electric Utilities.
- 14 CCR, Sections 15000–15387 and Appendices A–L. Guidelines for Implementation of the California Environmental Quality Act, as amended.
- 15 U.S.C. 2601–2692. Toxic Substances Control Act of 1976.
- 19 CCR, Sections 2735.1–2785.1. California Accidental Release Prevention Program.
- 22 CCR, Sections 66261.10–66261.9.5. California Department of Toxic Substances Control, Chapter 11. Identification and Listing of Hazardous Waste.
- 24 CFR, Part 9. California Fire Code.
- 40 CFR, Part 68.130. List of Substances.
- 42 U.S.C. 6901–6992k. Solid Waste Disposal Act of 1976.
- 42 U.S.C. 7401–7626. Clean Air Act of 1970.
- 42 U.S.C. 9601–9675. Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980.
- 49 CFR, Parts 100–185, Title 49, Transportation, Chapter I Pipeline and Hazardous Materials Safety Administration, Department of Transportation, Subchapter A – Hazardous Material and Oil Transportation.
- 49 CFR, Part 383. Transportation, Chapter III, Federal Motor Carrier Safety Administration, Department of Transportation, Subchapter B – Federal Motor Carrier Safety Regulations, Part 383 – Commercial Driver's License Standards; Requirements and Penalties.
- CAL FIRE (California Department of Forestry and Fire Protection). 2010. 2010 Strategic Fire Plan for California. June 2010.
- CAL FIRE. 2013. "CAL FIRE Civil Cost Recovery Program." Fact Sheet. Accessed March 2013 at: http://www.fire.ca.gov/communications/downloads/fact_sheets/CostRecovery.pdf 14 CCR 15000 et seq.

- California Health and Safety Code. Sections 25270–25270.13. Division 20, Chapter 6.67. Aboveground Petroleum Storage Act.
- California Health and Safety Code. Sections 25500–25543.3. Division 20, Chapter 6.95, Article 1, Business and Area Plans.
- California Public Utilities Code, Section 1708.5.
- CPUC (California Public Utilities Commission). 2012. General Order 95. Overhead Electric Line Construction. Adopted 1941. Revised January 12, 2012.
- CPUC (California Public Utilities Commission) and BLM (Bureau of Land Management). 2008. *Final Environmental Impact Report/Environmental Impact Statement and Proposed Land Use Amendment for the Sunrise Powerlink Project*. SCH No. 2006091071; DOI Control No. FES-08-54. Prepared by Aspen Environmental Group for CPUC and BLM. Agoura Hills, California: Aspen Environmental Group. October 2008.

Government Code, Sections 51175–51189. Very High Fire Hazard Severity Zones.

- PRC (California Public Resources Code), Sections 4201–4204. Chapter 1, Prevention and Control of Forest Fires, Article 9, Fire Hazard Severity Zones.
- PRC, Sections 4291–4299. Chapter 1, Protection of Forest, Range, and Forage Lands, Chapter 3, Mountainous, Forest-, Brush-, and Grass-Covered Lands.
- PRC, Sections 4427–4442. Division 4, Chapter 6, Article 2, Prohibited Activities.
- SDG&E (San Diego Gas & Electric). 2013a. *Proponent's Environmental Assessment for the Tie-Line 637 Wood-to-Steel Project*. Application 13-03-003. Volume 2 of 2. March 2013.
- SDG&E. 2013b. A.13-03-003 SDG&E (05/21/13 and 5/31/13) Partial Response to Data Request. SDG&E TL 637 Wood-to-Steel Project. "ED Additional Data Request Dated May 10, 2013." Response provided May 21 and 31, 2013.

5.9 Hydrology and Water Quality

- 14 CCR, Sections 15000–15387 and Appendices A–L. Guidelines for Implementation of the California Environmental Quality Act, as amended.
- 33 U.S.C. 403. Rivers and Harbors Act of 1899.
- 33 U.S.C. 1251–1387. Federal Water Pollution Control Act, as amended (commonly referred to as the Clean Water Act).
- 40 CFR, Part 142. National Primary Drinking Water Regulations Implementation.

- 40 CFR, Part 144. Chapter I, Environmental Protection Agency, Subchapter D, Water Programs, Part 144, Underground Injection Control Program.
- 42 U.S.C. 201. Safe Drinking Water Act of 1974, as amended.

California Fish and Game Code, Sections 1601–1603. Streambed Alteration Agreement.

- California Water Code, Sections 13000–16104. Porter-Cologne Water Quality Control Act, as amended. Prepared by the State Water Resources Control Board, with additions and amendments (shown as tracked changes) effective January 1, 2011. Accessed January 17, 2011. http://www.swrcb.ca.gov/laws_regulations/.
- FEMA (Federal Emergency Management Agency). 2012. FEMA Flood Insurance Rate Map. County of San Diego, California.
- RWQCB (Regional Water Quality Control Board San Diego Region. 2009. Appendix A, "New and Revised Decisions" of the Clean Water Act, Sections 305(b) and 303(d) 2008 Integrated Report for the San Diego Region. Staff Report, December 16, 2009. Accessed November 2010. http://www.waterboards.ca.gov/sandiego/water_issues/ programs/303d_list/index.shtml.
- SDG&E (San Diego Gas & Electric). 2013a. Proponent's Environmental Assessment for the Tie-Line 637 Wood-to-Steel Project. Application 13-03-003. Volume II of II. March 2013.
- SDG&E. 2013b. A.13-03-003 SDG&E (05/21/13 and 5/31/13) Partial Response to Data Request. SDG&E TL 637 Wood-to-Steel Project. "ED Additional Data Request Dated May 10, 2013". Response provided May 21 and 31, 2013.

5.10 Land Use and Planning

- 14 CCR 15000–15387 and Appendix A–L. Guidelines for Implementation of the California Environmental Quality Act, as amended.
- County of San Diego. 2011a. San Diego County General Plan Update. Adopted August 3, 2011.
- County of San Diego. 2011b. County of San Diego General Plan Update. Ramona Community Plan. Adopted August 3, 2011.
- County of San Diego. 2011c. Central Mountain Subregional Plan. County of San Diego General Plan. Adopted August 3, 2011.
- County of San Diego. 2011d. North Mountain Subregional Plan. County of San Diego General Plan. Adopted August 3, 2011.
- SDG&E (San Diego Gas & Electric). 2013a. *Proponent's Environmental Assessment for the Tie-Line 637 Wood-to-Steel Project*. Application 13-03-003. Volume II of II. March 2013.

SDG&E. 2013b. A.13-03-003 SDG&E (05/21/13 and 5/31/13) Partial Response to Data Request. SDG&E TL 637 Wood-to-Steel Project. "ED Additional Data Request Dated May 10, 2013". Response provided May 21 and 31, 2013.

5.11 Mineral Resources

- 14 CCR 15000–15387 and Appendix A–L. Guidelines for Implementation of the California Environmental Quality Act, as amended.
- County of San Diego. 2009. County of San Diego General Plan. Mineral Resource Zones map. Figure C-4.
- SDG&E (San Diego Gas & Electric). 2013. Proponent's Environmental Assessment for the Tie-Line 637 Wood-to-Steel Project. Application 13-03-003. Volume II of II. March 2013.

5.12 Noise

- 14 CCR 15000–15387 and Appendix A–L. Guidelines for Implementation of the California Environmental Quality Act, as amended.
- 29 CFR 1910.95. Title 29, Occupational Safety and Health Administration, Department of Labor, Part 1910, Occupational Safety and Health Standards, Subpart G, Occupational health and Environment Control, Section 1910.95, Occupational Noise Exposure.
- California Government Code. Section 65300–65303.4. Chapter 3, Local Planning, Article 5, Authority for and Scope of General Plans.
- Caltrans (California Department of Transportation). 2004. Transportation and Construction-Induced Vibration Guidance Manual. Caltrans Environmental Program, Environmental Engineering. Noise, Vibration, and Hazardous Waste Management Office. June 2004.
- County of San Diego. 2009. *Guidelines for Determining Significance: Noise*. Land Use and Environment Group, Department of Planning and Land Use, Department of Public Works. January 27, 2009. http://www.sdcounty.ca.gov/pds/docs/Noise-Guidelines.pdf.
- EPA (U.S. Environmental Protection Agency). 1974. "EPA Identifies Noise Levels Affecting Health and Welfare."
- EPA. 1981. Noise Effects Handbook A Desk Reference to Health and Welfare Effects of Noise. By Office of the Scientific Assistant, Office of Noise Abatement and Control, U.S. Environmental Protection Agency. October 1979. Revised July 1981.
- FTA (Federal Transit Administration). 2006. *Transit Noise and Vibration Impact Assessment*. July 1, 2006.
- OPR (Office of Planning and Research). 1998. State of California, Governor's Office of Planning and Research. General Plan Guidelines. November 1998.

- SDG&E (San Diego Gas & Electric). 2013a. Proponent's Environmental Assessment for the Tie-Line 637 Wood-to-Steel Project. Application 13-03-003. Volume II of II. March 2013.
- SDG&E. 2013b. A.13-03-003 SDG&E (05/21/13 and 5/31/13) Partial Response to Data Request. SDG&E TL 637 Wood-to-Steel Project. "ED Additional Data Request Dated May 10, 2013." Response provided May 21 and 31, 2013.

5.13 Population and Housing

- 14 CCR 15000–15387 and Appendix A–L. Guidelines for Implementation of the California Environmental Quality Act, as amended.
- SANDAG (San Diego Association of Governments). 2004. *Regional Comprehensive Plan for the San Diego Region*. Final. July 2004.
- SANDAG. 2010a. "Population and Housing". 2050 Regional Growth Forecast. San Diego Region. February 2010. www.sandag.org.
- SANDAG. 2010b. "Population and Housing". 2050 Regional Growth Forecast. San Diego County Unincorporated Area. February 2010. www.sandag.org.
- SANDAG. 2010c. "Population and Housing". 2050 Regional Growth Forecast. Ramona Community Planning Area. County of San Diego. February 2010. www.sandag.org.
- SANDAG. 2012a. "Demographic & Socio-Economic Estimates". Updated to reflect Census 2010. San Diego Region. Population and Housing. March 27, 2012. www.sandag.org.
- SANDAG. 2012b. "Demographic & Socio-Economic Estimates". Unincorporated. April 1, 2010 estimates. Population and Housing. September 13, 2012. www.sandag.org.
- SANDAG. 2012c. "Demographic & Socio-Economic Estimates". Ramona. April 1, 2010 estimates. Population and Housing. September 13, 2012. www.sandag.org.
- SDG&E (San Diego Gas & Electric). 2013. Proponent's Environmental Assessment for the Tie-Line 637 Wood-to-Steel Project. Application 13-03-003. Volume II of II. March 2013.

5.14 Public Services

- 14 CCR 15000–15387 and Appendix A–L. Guidelines for Implementation of the California Environmental Quality Act, as amended.
- SDG&E (San Diego Gas & Electric). 2013. Proponent's Environmental Assessment for the Tie-Line 637 Wood-to-Steel Project. Application 13-03-003. Volume II of II. March 2013.

5.15 Recreation

- 14 CCR 15000–15387 and Appendix A–L. Guidelines for Implementation of the California Environmental Quality Act, as amended.
- SDG&E (San Diego Gas & Electric). 2013a. *Proponent's Environmental Assessment for the Tie-Line 637 Wood-to-Steel Project*. Application 13-03-003. Volume II of II. March 2013.
- SDG&E. 2013b. A.13-03-003 SDG&E (05/21/13 and 5/31/13) Partial Response to Data Request. SDG&E TL 637 Wood-to-Steel Project. "ED Additional Data Request Dated May 10, 2013." Response provided May 21 and 31, 2013.

5.16 Transportation and Traffic

- 14 CCR 15000–15387 and Appendix A–L. Guidelines for Implementation of the California Environmental Quality Act, as amended.
- 14 CFR Part 77. Safe, Efficient Use, and Preservation of the Navigable Airspace.
- CPUC (California Public Utilities Commission). 1948. Regulations Governing Clearances on Railroads and Street Railroads with Reference to Side and Overhead Structures, Parallel Tracks, Crossings of Public Roads, Highways and Street. Adopted January 19, 1948.
- CPUC. 2012. State of California Rules for Overhead Electric Line Construction. General Order No. 95. January 2012.
- SDG&E (San Diego Gas & Electric). 2013. Proponent's Environmental Assessment for the Tie-Line 637 Wood-to-Steel Project. Application 13-03-003. Volume II of II. March 2013.

5.17 Utilities

- 14 CCR 15000–15387 and Appendix A–L. Guidelines for Implementation of the California Environmental Quality Act, as amended.
- California Integrated Waste Management Board. 2008. "History of California Solid Waste Law, 1985–1989."
- California Integrated Waste Management Board. 2009. "Assembly Bill (AB) 75, Chapter 764, Statutes of 1999." Accessed October 20, 2009. http://www.ciwmb.ca.gov/stateagency/ requirements/AB75.htm.
- California Public Utilities Code, Section 1, Chapter 3.1. Protection of Underground Infrastructure.

- SDG&E (San Diego Gas & Electric). 2013a. *Proponent's Environmental Assessment for the Tie-Line 637 Wood-to-Steel Project*. Application 13-03-003. Volume II of II. March 2013.
- SDG&E. 2013b. A.13-03-003 SDG&E (05/21/13 and 5/31/13) Partial Response to Data Request. SDG&E TL 637 Wood-to-Steel Project. "ED Additional Data Request Dated May 10, 2013." Response provided May 21 and 31, 2013.

5.18 Mandatory Findings of Significance

- ASM. 2012. Inventory of the Cultural Resources Along San Diego Gas & Electric Tie Line 637, San Diego County, California. Prepared for SDG&E. Prepared by ASM Affiliates, Inc. March.
- SDG&E (San Diego Gas & Electric). 2013a. *Proponent's Environmental Assessment for the Tie-Line 637 Wood-to-Steel Project*. Application 13-03-003. Volume II of II. March 2013.
- SDG&E. 2013b. *Master Special Use Permit, Cleveland National Forest, Orange and San Diego Counties, California, Revised Plan of Development.* Prepared by Insignia Environmental. Encinitas, California: Insignia Environmental. April 2013.

INTENTIONALLY LEFT BLANK