

PROPONENT'S ENVIRONMENTAL ASSESSMENT

For the Tie-Line 637 Wood-to-Steel Project

Application 13-03-003
Volume II of II

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Submitted By:



PROPONENT'S ENVIRONMENTAL ASSESSMENT

FOR THE

TIE-LINE 637 WOOD-TO-STEEL PROJECT

APPLICATION 13-03-003

VOLUME II OF II

MARCH 2013



A  Sempra Energy utility

SAN DIEGO GAS & ELECTRIC COMPANY

101 ASH STREET, HQ12B

SAN DIEGO, CA 92101

TEL: (619) 699-5162

FAX: (619) 699-5027

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Appendix 1-C: Existing Power Line Map

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1.0 PEA SUMMARY

In accordance with the California Public Utilities Commission (CPUC) General Order (G.O.) 131-D, this Proponent's Environmental Assessment (PEA) has been prepared by San Diego Gas & Electric Company (SDG&E) to support SDG&E's application for a Permit to Construct (PTC) for the Tie-Line (TL) 637 Wood-to-Steel Project (Proposed Project).

As discussed in more detail below, the overall purpose of the Proposed Project is to increase system reliability and reduce risk associated with known local conditions and potential fire events. The Proposed Project would "fire harden" TL 637, an existing 69kV wood power line, by replacing existing wood structures with weathering steel poles. The Proposed Project would be located within currently existing SDG&E rights-of-way (ROW) and substation property.

This PEA Summary briefly describes the location and primary components of the Proposed Project, the Proposed Project need and range of alternatives considered, the PEA contents, the major conclusions of the PEA, SDG&E's public outreach and consultation efforts, areas of controversy, and issues to be resolved. As discussed below, in light of the existing environmental baseline and ordinary construction/operating restrictions incorporated into the Proposed Project, no significant environmental impacts have been identified.

1.1 PROJECT LOCATION

The Proposed Project is located in unincorporated San Diego County, near the communities of Ramona and Santa Ysabel. Segments of TL 637 cross the Mount Gower and Simon Preserves, as well as the Cleveland National Forest.

1.2 PROPOSED PROJECT COMPONENTS

As discussed in Section 3.0, the Proposed Project comprises the reconstruction of existing electric facilities within existing SDG&E ROW and substation property. Specifically, the Proposed Project includes the following three main components:

- Power line reconstruction (TL 637 wood-to-steel);
- Minor substation modifications at the Creelman and Santa Ysabel Substations; and
- New fiber optic communication line between the Creelman and Santa Ysabel Substations.

1.2.1 TL 637 Wood-to-Steel

The existing wood poles along the approximate 14 mile TL 637 between the existing Creelman and Santa Ysabel Substations will be replaced with new weathering steel poles. Key elements of the TL 637 wood-to-steel pole replacement are:

- Replace existing wood poles with new weathering steel (approximately 69 of the new weathering steel poles will be directly-embedded and approximately 87 will be supported by micropile foundations);
- Reconductor TL 637 with 636 aluminum conductor steel support/alumoweld (ACSS/AW) conductor;
- Associated distribution line work (relocation of existing distribution circuits to the TL 637 poles along Creelman Lane, west of the Creelman Substation;
- Minor undergrounding of existing distribution circuits to new pole locations; and
- Vacant position for potential future distribution lines on a portion of TL 637 route.

1.2.2 Substation Work

Work will be required at both the Creelman and Santa Ysabel Substations to allow for the wood-to-steel conversion of TL 637. The required work at the substations will be relatively minor and will not require the addition, subtraction, or relocation of major equipment. All substation work would be within the existing substation properties.

1.2.3 New Fiber Optic Line

SDG&E is proposing to install a new SDG&E owned and operated fiber optic cable between the Creelman and Santa Ysabel Substations. This new fiber optic line will be installed on the new TL 637 steel poles in an overhead position and will be utilized to transfer information between the two substations.

1.3 PROJECT NEED AND RANGE OF ALTERNATIVES CONSIDERED

The Proposed Project has been developed by SDG&E in order to achieve the following project objectives (refer to Section 2.0, Proposed Project Purpose and Need):

1. Increase the fire safety and service reliability of TL 637, an existing 69 kilovolt (kV) power line.
2. Minimize potential adverse environmental effects.
3. Locate proposed facilities within existing utility corridors to the extent feasible.

Section 5.2, Description of Project Alternatives to Minimize Significant Effects, outlines four alternatives to the Proposed Project, including a no project alternative, a wood-to-wood replacement alternative, an underground power line alternative, and a minor relocations alternative. The no project alternative and wood-to-wood replacement alternative would not meet the primary objective of increasing fire safety and service reliability, and were therefore rejected by SDG&E. The underground power line alternative would meet the primary objective of increasing fire safety and service reliability, but would result in greater (not less) adverse impacts when compared to the Proposed Project.

1.4 PROPONENTS ENVIRONMENTAL ASSESSMENT CONTENTS

1.4.1 PEA

The PEA was prepared in accordance with the PEA Checklist issued by the CPUC and is divided into five sections and a series of corresponding appendices. PEA section contents are briefly described below.

Section 1.0-PEA Summary. Section 1.0 discusses the conclusions and content of the PEA sections, and contains information on SDG&E's coordination efforts.

Section 2.0-Proposed Project Purpose and Need. Section 2.0 outlines the purpose and need for the Proposed Project, including the Proposed Project objectives.

Section 3.0-Proposed Project Description. Section 3.0 describes the whole of the Proposed Project, including construction, operation, and maintenance. The Project Description includes a detailed description of construction methods, construction schedule, existing facilities, proposed facilities, and anticipated permit requirements.

Section 4-Environmental Impact Assessment. Section 4 (4.1 through 4.15) includes a discussion of the existing conditions and potential and anticipated impacts for the following resource areas:

- Aesthetics
- Agricultural and Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Geology, Soils, and Mineral Resources
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation and Traffic
- Utilities and Service Systems

Section 4.16 includes an assessment of potential cumulative impacts that could occur as a result of impacts from the Proposed Project contributing to cumulatively considerable adverse effects when analyzed with respect to other foreseeable projects.

Section 5.0-Detailed Discussion of Significant Environmental Impacts. Section 5.0 includes a detailed discussion of significant impacts. This section also evaluates the alternatives (Section 5.2) to the Proposed Project as well as potential growth-inducing impacts (Section 5.3).

Throughout the PEA sections and appendices, SDG&E has provided specific information to address the items outlined within the CPUC’s PEA Checklist for Transmission¹ Line and Substation Projects (PEA Checklist). Table 1-1, PEA Checklist Key Table, provides the specific location within the PEA and appendices of all data provided to meet the requirements of the PEA Checklist.

The PEA also contains technical appendices in support of Sections 1.0 through 5.0 as well as other items required by the CPUC PEA Checklist and G.O. 131-D. Specifically, the PEA includes the following appendices:

- Appendix 1-A: Letters of Support
- Appendix 1-B: Parcel and Mailing Information for Properties within 300 Feet of the Proposed Project
- Appendix 1-C: Existing Power Line Map
- Appendix 3-A: Pole Detail Table
- Appendix 3-B: Detailed Route Map
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- Appendix 4.7-B: Cleveland National Forest Fire Plan
- Appendix 4.7-C: TL 637 Project Fire Plan

1.4.2 Other PEA Requirements

The following items are included within the CPUC PEA Checklist and/or CPUC G.O. 131-D and have been provided as described below:

- Parcel and mailing information for parcels within 300 feet of the Proposed Project. This has been provided as Appendix 1-B.
- Map showing existing power lines within the Proposed Project area. This map has been provided as Appendix 1-C.

¹ The term “Transmission” as used within this section of the PEA refers to the CPUC’s PEA Checklist document and is not intended to suggest that TL 637 is designed for immediate or eventual operation at 200kV or above.

1.5 MAJOR PEA CONCLUSIONS

As discussed throughout the PEA, the Proposed Project replaces existing wood structures with weathering steel poles and is located entirely within currently existing SDG&E ROW and substation properties. The baseline environmental setting for the Proposed Project includes the existing electric power, distribution and substation facilities and SDG&E's on-going operation and maintenance of these facilities. SDG&E's ordinary construction and operating restrictions have been incorporated into the design and description of the Proposed Project (see Section 3.8, Project Design Features and Ordinary Construction/Operating Restrictions).

1.5.1 Resource Areas with No Impact or Less than Significant Impacts

The PEA analyzes the potential environmental impacts associated with construction, operation and maintenance of the Proposed Project. As discussed in PEA Sections 4.1 through 4.16, the Proposed Project would not result in any significant adverse environmental impacts. Specifically, the following sections were found to have no impacts:

- Agricultural and Forestry Resources;
- Mineral Resources;
- Land Use and Planning;
- Population and Housing; and
- Public Services.

The following resource areas were found to have less than significant impacts:

- Aesthetics;
- Air Quality;
- Biological Resources;
- Cultural Resources;
- Geology and Soils;
- Greenhouse Gases;
- Hazards and Hazardous Materials;
- Hydrology and Water Quality;
- Noise;
- Recreation;
- Transportation and Traffic; and
- Utilities and Service Systems.

1.5.2 Significant, Unavoidable Impacts

No significant, unavoidable adverse impacts were identified during the preparation of the PEA (refer to PEA Sections 4.1 through 4.16).

1.5.3 CEQA Compliance

The PEA confirms that the Proposed Project qualifies for an exemption under CEQA. Specifically, the Proposed Project falls within the Class 2 Categorical Exemption (*CEQA Guidelines*, Section 15302), which applies to the “replacement or reconstruction of existing structures and facilities where the new structure will be located on the same site as the structure replaced and will have substantially the same purpose and capacity as the structure replaced, including but not limited to... replacement or reconstruction of existing utility systems and/or facilities involving negligible or no expansion of capacity.” In addition, this PEA confirms that none of the exceptions to the categorical exemptions described in the *CEQA Guidelines*, Section 15300.2 applies.

1.5.3.1 CEQA Guidelines Section 15302 (Class 2 Exemptions)

The Proposed Project is the reconstruction of existing wood power line and distribution line structures for the purpose of increasing fire safety and service reliability (see Section 2.0, Proposed Project Purpose and Need). The reconstructed TL 637 will be located within the same utility corridor as the existing line, and the new line will not include an increase in voltage or expansion of service area (reconstructed lines will retain the existing kV ratings).

1.5.3.2 CEQA Guidelines Section 15300.2 (Exceptions)

The Proposed Project will not result in any significant, adverse impacts on the environment, as outlined in Sections 1.5.1 through 1.5.3 and detailed in Section 4.0 *et seq.* of the PEA and does not trigger any of the exceptions to the categorical exemptions outlined in *CEQA Guidelines*, Section 15300.2. More specifically:

- Location: The Proposed Project will not impact an environmental resource of hazardous or critical concern where designated, precisely mapped, and officially adopted pursuant to law by federal, state, or local agencies as analyzed in this PEA. For details, please refer to Section 4.4, Biological Resources, Section 4.5, Cultural Resources, Section 4.6, Geology and Soils, Section 4.7, Hazards and Hazardous Materials, Section 4.8, Hydrology and Water Quality, and Section 4.9, Land Use Planning. In summary:
 - Biological Resources: Implementation of the *San Diego Gas & Electric Subregional Natural Communities Conservation Plan (SDG&E Subregional NCCP)*, associated avoidance and minimization measures, and SDG&E protocols (all of which are ordinary operating restrictions for SDG&E) ensures that the Proposed Project will not result in a significant environmental impact to biological resources.
 - Cultural Resources: The Proposed Project will not significantly affect cultural resource sites listed on either the National Register of Historic Places or the California Register of Historical Places, or on any local inventory list. Implementation of SDG&E’s ordinary operating and construction restrictions as

outlined in Section 3.8, Project Design Features and Ordinary Construction/Operating Restrictions, will avoid impacts to known and undiscovered resources.

- Geology and Soils: The Proposed Project does not traverse a known active fault or mapped Alquist–Priolo Earthquake Fault Zone (refer to Section 4.6, Geology, Soils, and Mineral Resources).
 - Hazards and Hazardous Materials: The Proposed Project is located within the fire threat zone, as indicated on the SDG&E Fire Threat Zone Map. However, the Proposed Project will fire harden the existing wood power line facilities, thereby minimizing the risks associated with the Fire Threat Zone. Moreover, SDG&E's ordinary operating restrictions, including implementation of the *TL 637 Project Fire Plan* and *Cleveland National Forest Fire Plan*, will avoid wildland fire risks during construction.
 - Hydrology and Water Quality: The Proposed Project alignment is not located within a 100-year flood hazard area; therefore, the poles would not impede or redirect flood flows within a 100-year flood hazard area, and no substantial impacts to the floodplain are anticipated to occur.
 - Land Use and Planning: Proposed Project facilities will be located within existing SDG&E ROW. Therefore, Proposed Project activities will not conflict with any applicable land use plan, policy, or regulation.
- **Cumulative Impacts**: The Proposed Project will not result in significant cumulative impacts as analyzed in Section 4.16, Cumulative Impacts. Four development projects were identified within one mile of the Proposed Project; however, construction of the Proposed Project is not anticipated to overlap with any of these projects (refer to Section 4.16, Cumulative Impacts). The Proposed Project is not anticipated to result in any cumulatively considerable impacts following construction, particularly since operation and maintenance activities on TL 637 are anticipated to decrease after the power line is reconstructed.
 - **Significant Effect**: No reasonable possibility of significant impact due to unusual circumstances is expected, since the circumstances of the Proposed Project (1) do not differ from the general circumstances of projects typically found to be exempt under CEQA and G.O. 131-D; (2) do not create an environmental risk that does not exist for the general class of exempt projects; and (3) does not involve physical conditions that are not completely addressed through adherence to existing building and design standards. The Proposed Project will have no impact, or impacts that will remain below relevant thresholds of significance as stated within Sections 4.1 through 4.16 of this PEA due to the Proposed Project location, project design, adherence to SDG&E's ordinary construction/operating restrictions and other protocols and plans (including the *SDG&E Subregional NCCP* and *TL 637 Project Fire Plan*), and adherence to existing laws and regulations, (including implementation of a Storm Water Pollution Prevention Plan [SWPPP]).
 - **Scenic Highways**: The Proposed Project will not damage scenic resources within a highway officially designated as a state scenic highway or county scenic highway as discussed in Section 4.1, Aesthetics.

- **Hazardous Waste Sites:** The Proposed Project is not located on a hazardous waste site included in any list compiled pursuant to Section 65962.5 of the Government Code as analyzed within Section 4.7, Hazards and Hazardous Materials.
- **Historic Resources:** The project will not cause a substantial adverse change in the significance of a historical resource as documented in Section 4.5, Cultural Resources.

1.6 PUBLIC OUTREACH EFFORTS AND LETTERS OF SUPPORT

To date, approximately four supporters, including government entities, private land owners, individual customers and other organizations have expressed their support for the Proposed Project. Proposed Project supporters include, but are not limited to, the following:

- Ramona Chamber of Commerce;
- E.A. Ranches, LLC;
- San Diego County Estates Association; and
- Tulloch Family Partners.

Copies of support letters that have been received to date can be found within Appendix 1-A, Proposed Project Letters of Support.

1.7 INTER-AGENCY REVIEW AND COORDINATION

During the engineering and planning processes for the Proposed Project, SDG&E coordinated with a number of government agencies. The key inter-agency and other coordination is further described below.

1.7.1 California Public Utilities Commission

On June 4, 2012, SDG&E filed an Advice Letter (2398-E) with the CPUC to construct the TL 637 Wood-to-Steel Project. In October 2012, the CPUC officially requested, and SDG&E agreed, that SDG&E prepare an application for a PTC, including the preparation of a PEA, for the consideration of the CPUC for the approval of the TL 637 Wood-to-Steel Project. In February 2013, CPUC advised that an environmental consultant had been retained to review the PTC application, at which point SDG&E finalized the application for filing.

1.7.2 Bureau of Land Management and the County of San Diego

TL 637 crosses the Mount Gower and Simon Preserves. The Mt. Gower Preserve is owned by the U.S. Bureau of Land Management (BLM) and managed by the County of San Diego. The Simon Preserve is owned and managed by the County of San Diego. The Proposed Project required a revision to the BLM ROW grant, which was previously renewed in August 2011. SDG&E's easement crossing the Simon Preserve, acquired in 1959, pre-dates ownership of this area by the County of San Diego.

To obtain BLM approval of the ROW grant amendment, SDG&E filed an SF-299 application with all applicable exhibits and environmental and cultural reviews. BLM issued the ROW

amendment on June 1, 2012 pursuant to a categorical exclusion from the National Environmental Policy Act (NEPA).

No further action was needed for the 1959 easement through the Simon Preserve. An on-site coordination meeting was conducted on April 25, 2012 by SDG&E staff with attendance from BLM and County of San Diego staff to discuss how SDG&E would conduct work for the Proposed Project while continuing to allow public access to the County preserves and trails.

1.7.3 Cleveland National Forest

An approximately 1,750 foot segment of TL 637 crosses a corner of the Cleveland National Forest. This segment includes two existing steel poles (Pole Nos. P115 and P116) that do not need to be replaced. Cleveland National Forest is aware that TL 637 will be reconducted as part of the Proposed Project.

1.7.4 Federal Aviation Administration

SDG&E determined that two poles required noticing to the Federal Aviation Administration (FAA). SDG&E contacted the FAA and the FAA conducted an aeronautical study under the provisions of 49 United States Code, Section 44718 and Title 14 of the code of Federal Regulations, part 77; for the Proposed Project poles. The FAA determined there is no hazard to air navigation and aerial marking lights/balls are not required.

1.7.5 Regional Water Quality Control Board, California Department of Fish and Wildlife and the U.S. Army Corps of Engineers

Eleven existing wood poles (Pole Nos. P148, P149, P150, P103, P104, P105, P106, P107, P114, P152, and P129) are currently located within wet meadows that have been determined to be jurisdictional by the United States Army Corps of Engineers (USACE) and the Regional Water Quality Control Board (RWQCB). Six poles (Pole Nos. D10, D169, D171, D167, P11, and P13) are located within a streambed/water of the U.S. that has been determined to be jurisdictional by the California Department of Fish and Wildlife (CDFW – formerly the California Department of Fish and Game), USACE and the RWQCB. In addition, steel plates will be used to temporarily span over two USACE/RWQCB/CDFW jurisdictional areas to provide temporary access during construction. Project activity associated with all seventeen poles and the temporary steel plates needed to provide construction access will be carried out under non-notifying Nationwide Permit #12 issued by the USACE, 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.

1.7.6 California Department of Transportation

An encroachment permit from the California Department of Transportation (Caltrans) was initially obtained for the Proposed Project's crossing of Highway 78 near the Santa Ysabel Substation. The Caltrans approval expired on December 31, 2012; therefore an extension has been requested from Caltrans for the Proposed Project.

1.8 AREAS OF CONTROVERSY

To date, SDG&E has not identified any areas of controversy regarding the Proposed Project.

1.9 ISSUES TO BE RESOLVED

To date, SDG&E has not identified any issues that remain unresolved prior to construction of the Proposed Project.

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Table 1-1: PEA Checklist Key Table

Location in PEA Checklist	Checklist Item	Location within PEA
Chapter 1: PEA Summary		
	Include major conclusions of the PEA.	Section 1.5 – Major PEA Conclusions
	List any areas of controversy.	Section 1.7.2 – Areas of Controversy
	Identify any major issues that must be resolved, including the choice among reasonably feasible alternatives and mitigation measures, if any.	Section 1.8 – Issues to be Resolved
	Include a description of inter-agency coordination if any.	Section 1.7 – Inter-Agency and Other Consultations
	Include a description of public outreach efforts, if any.	Section 1.6 – Public Outreach Efforts
Chapter 2: Project Purpose and Need		
2.1 Overview	Include an analysis of Proposed Project objectives and purpose and need that is sufficiently detailed so that the Commission can independently evaluate the Proposed Project need and benefits in order to accurately consider them in light of the potential environmental impacts.	Section 2.0 – Proposed Project Purpose and Need
	Explain the objective(s) and/or purpose and need for implementing the Proposed Project.	Section 2.0 – Proposed Project Purpose and Need
2.2 Project Objectives	Include an analysis of the reason why attainment of these objectives is necessary or desirable. Such analysis must be sufficiently detailed to inform the Commission in its independent formulation of Proposed Project objectives which will aid any appropriate CEQA alternatives screening process.	Section 2.0 – Proposed Project Purpose and Need

Table 1-1 (cont.): PEA Checklist Key Table

Location in PEA Checklist	Checklist Item	Location within PEA
Chapter 3: Project Description		
3.1 Project Location	Identify geographical location: County, City (provide Proposed Project location map[s]).	Section 3.2 – Proposed Project Location, Regional Context, and Regional Electric System Figure 3-1: Project Vicinity Map
3.1 Project Location	Provide a general description of land uses within the Proposed Project site (e.g., residential, commercial, agricultural, recreation, vineyards, farms, open space, number of stream crossings, etc.).	Section 4.9 – Land Use and Planning Table 4.9-1: Designated and Existing Land Uses in the Proposed Project Vicinity
	Determine whether the Proposed Project is located within an existing property owned by the Applicant, traverses existing ROWs, or requires new ROWs. Provide the approximate area of the property or the length of the Proposed Project that is in an existing ROW or which requires new ROWs.	Section 3.6 – Permanent Land and Right-of-Way Requirements
3.2 Existing System	Describe the local system to which the Proposed Project relates.	Section 2.0 – Proposed Project Purpose and Need
	Provide a schematic diagram and map of the existing system.	Appendix 1-C: Existing Power Line Map
	Provide a schematic diagram that illustrates the system as it would be configured with the implementation of the Proposed Project.	Appendix 3-B: Detailed Route Map

Table 1-1 (cont.): PEA Checklist Key Table

Location in PEA Checklist	Checklist Item	Location within PEA
3.4 Proposed Project	Describe the Proposed Project. Is it an upgrade, a new line, new substations, etc.?	Section 3.1 – Proposed Project Overview Section 3.3 – Proposed Project Facilities
	Describe how the Proposed Project fits into the regional system. Does it create a loop for reliability, etc.?	Section 2.0 – Proposed Project Purpose and Need Section 3.1 – Proposed Project Overview Section 3.2 – Proposed Project Location, Regional Context, and Regional Electric System
	Describe all reasonably foreseeable future phases, or other reasonably foreseeable consequences of the Proposed Project.	Section 3.3 – Proposed Project Facilities
	Provide the capacity increase in megawatts (MW). If the Proposed Project does not increase capacity, state that.	Proposed Project does not increase any voltage ratings. Refer to Sections 2.0 and 3.0
	Provide GIS (or equivalent) data layers for the Proposed Project preliminary engineering, including estimated locations of all physical components of the Proposed Project, as well as those related to construction.	GIS Data is confidential and is not provided within this submittal.
3.5 Project Components 3.5.1 Power Line	Describe what type of line exists and what type of line is proposed.	Section 3.2 – Proposed Project Location, Regional Context, and Regional Electric System Section 3.3 – Proposed Project Facilities
	Identify the length of the upgraded alignment, the new alignment, etc.	Section 3.1 – Proposed Project Overview Section 3.3 – Proposed Project Facilities
	Describe whether construction would require one-for-one pole replacement, new poles, steel poles, etc.?	Section 3.3 – Proposed Project Facilities Section 3.4 – Construction Methods
	Describe what would happen to other lines and utilities that may be collocated on the poles to be replaced (e.g., distribution, communication, etc.).	Section 3.3 – Proposed Project Facilities

Table 1-1 (cont.): PEA Checklist Key Table

Location in PEA Checklist	Checklist Item	Location within PEA
3.5.2 Poles/Towers	Provide information for each pole/tower that would be installed and for each pole/tower that would be removed.	Section 3.3.1 – TL37 Wood-to-Steel Replacement Appendix 3-A: Pole Detail Table Appendix 3-B: Detailed Route Map
	Describe any specialty poles or towers; note where they would be used; make sure to note if any guying would likely be required across a road.	Section 3.3.1.6 – Temporary Poles Appendix: 3-A: Pole Detail Table Appendix 3-B: Detailed Route Map
	If the Proposed Project includes pole-for-pole replacement, describe the approximate location of where the new poles would be installed relative to the existing alignment.	Section 3.3.1 – TL37 Wood-to-Steel Replacement Appendix: 3-A – Pole Detail Table Appendix 3-B: Detailed Route Map
	Describe any special pole types and any special features.	Section 3. 3 – Proposed Project Facilities
3.5.3 Conductor/Cable 3.5.3.1 Above-Ground Installation	Describe the type of line to be installed on the poles/tower.	Section 3.3.1 – TL37 Wood-to-Steel Replacement
	Describe the number of conductors required to be installed on the poles or tower and the number on each side including applicable engineering design standards.	Section 3.3.1 – TL37 Wood-to-Steel Replacement
	Provide the size and type of conductor and insulator configuration.	Section 3.3.1 – TL37 Wood-to-Steel Replacement
	Provide the approximate distance from the ground to the lowest conductor and the approximate distance between the conductors (i.e., both horizontally and vertically). Provide specific information at highways, rivers, or special crossings.	Section 3.3.1 – TL37 Wood-to-Steel Replacement
	Provide the approximate span lengths between poles or towers, note where different if distribution is present or not if relevant.	Section 3.3.1 – TL37 Wood-to-Steel Replacement
	Determine whether other infrastructure would likely be collocated with the conductor; if so, provide conduit diameter of other infrastructure.	Section 3.3.1 – TL37 Wood-to-Steel Replacement

Table 1-1 (cont.): PEA Checklist Key Table

Location in PEA Checklist	Checklist Item	Location within PEA
3.5.3.2 Below Ground Installation	Describe the type of line to be installed.	Section 3.3 – Proposed Project Facilities Section 3.4.8 – Underground Distribution and Fiber Optic Lines Section 3.4.9.7 – Underground Distribution and Fiber Optic Lines
	Describe the type of casing the cable would be installed in; provide the dimensions of the casing.	Section 3.4.8 – Underground Distribution and Fiber Optic Lines
	Provide an engineering ‘typical’ drawing of the duct bank and describe what types of infrastructure would likely be installed within the duct bank.	Appendix 3-C: Typical Photographs and Structures
3.5.4 Substations	Provide “typical” plan and profile views of the proposed substation and the existing substation if applicable.	Not Applicable
	Describe the types of equipment that would be temporarily or permanently installed and provide details as to what the function/use of said equipment would be.	Section 3.3.2 – Substations
	Provide the approximate or “typical” dimensions (width and height) of new structures including engineering and design standards that apply.	Not Applicable
	Describe the extent of the Proposed Project. Would it occur within the existing fence line, existing property line or would either need to be expanded?	Section 3.3.2 – Substations
	Describe the electrical need area served by the distribution substation.	Section 2.0 – Proposed Project Purpose and Need Section 3.2 – Proposed Project Location, Regional Context, and Regional Electric System

Table 1-1 (cont.): PEA Checklist Key Table

Location in PEA Checklist	Checklist Item	Location within PEA
3.6 Right-of-Way Requirements	Describe the ROW location, ownership, and width. Would the existing ROW be used or would a new ROW be required?	Section 3.6 – Permanent Land and Right-of-Way Requirements
	If a new ROW is required, describe how it would be acquired and approximately how much land would be required (length and width).	Not Applicable
3.6 Right-of-Way Requirements	List the properties likely to require acquisition.	Not Applicable
3.7 Construction 3.7.1 For All Projects 3.7.1.1 Staging Areas	Where would the main staging area(s) likely be located?	Section 3.4.9 – Temporary Work Areas Section 3.4.9.1 – Materials Storage and Staging Areas Appendix 3-B: Detailed Route Map
	Approximately how large would the main staging area(s) be?	Section 3.4.9 – Temporary Work Areas Section 3.4.9.1 – Materials Storage and Staging Areas Appendix 3-B: Detailed Route Map
	Describe any site preparation required, if known, or generally describe what might be required.	Section 3.4.9 – Temporary Work Areas
	Describe what the staging area would be used for.	Section 3.4.9.1 – Materials Storage and Staging Areas
	Describe how the staging area would be secured, would a fence be installed? If so, describe the type and extent of the fencing.	Section 3.4.9.1 – Materials Storage and Staging Areas
	Describe how power to the site would be provided if required.	Section 3.4.9.1 – Materials Storage and Staging Areas
	Describe any grading activities and/or slope stabilization issues.	Section 3.4.9.1 – Materials Storage and Staging Areas

Table 1-1 (cont.): PEA Checklist Key Table

Location in PEA Checklist	Checklist Item	Location within PEA
3.7.1.2 Work Areas	Describe known work areas that may be required for specific construction activities.	Section 3.4.9 – Temporary Work Areas Section 3.4.9.1 – Materials Storage and Staging Areas Appendix 3-B: Detailed Route Map
	For each known work area, provide the area required (include length and width) and describe the types of activities that would be performed.	Section 3.4.9 – Temporary Work Areas Appendix 3-B: Detailed Route Map
	Identify the approximate location of known work areas in the GIS database.	Not Applicable
	Describe how the work areas would likely be accessed.	Section 3.4.9.6 – Access Appendix 3-B: Detailed Route Map Appendix 3-A: Pole Detail Table
3.7.1.2 Work Areas	If any site preparation is likely required, generally describe what and how it would be accomplished.	Section 3.4.9 – Temporary Work Areas
	Describe any grading activities and/or slope stabilization issues.	Section 3.4.9 – Temporary Work Areas
	Based on the information provided, describe how the site would be restored.	Section 3.4.12 – Site Cleanup
3.7.1.3 Access Roads and/or Spur Roads	Describe the types of roads that would be used and/or would need to be created to implement the Proposed Project.	Section 3.4.9.6 – Access Appendix 3-B: Detailed Route Map Appendix 3-A: Pole Detail Table
	For road types that require preparation, describe the methods and equipment that would be used.	Section 3.4.9.6 – Access
	Identify approximate location of all access roads (by type) in the GIS database.	Not Applicable

Table 1-1 (cont.): PEA Checklist Key Table

Location in PEA Checklist	Checklist Item	Location within PEA
3.7.1.3 Access Roads and/or Spur Roads	Describe any grading activities and/or slope stabilization issues.	Section 3.4.9.6 – Access
3.7.1.4 Helicopter Access	Identify which proposed poles/towers would be removed and/or installed using a helicopter.	Section 3.4.11 – Helicopter Usage during Power Line Construction
	If different types of helicopters are to be used, describe each type and what activities they would be used for.	Section 3.4.11 – Helicopter Usage during Power Line Construction Table 3-2: Typical Construction Equipment and Usage
3.7.1.4 Helicopter Access	Provide information as to where the helicopters would be staged, where they would refuel, where they would land within the Proposed Project site.	Section 3.4.9.1 – Materials Storage, Staging, and Helicopter Landing Zones Section 3.4.11 – Helicopter Usage during Power Line Construction Appendix 3-B: Detailed Route Map
	Describe any BMPs that would be employed to avoid impacts caused by use of helicopters, for example: air quality and noise considerations.	Section 3.4.11 – Helicopter Usage during Power Line Construction Section 3.8 – Project Design Features and Ordinary Construction/Operating Restrictions
	Describe flight paths, payloads, hours of operations for known locations, and work types.	Section 3.4.11 – Helicopter Usage during Power Line Construction
3.7.1.5 Vegetation Clearance	Describe the types of vegetation clearing that may be required and why.	Section 3.7 – Operation and Maintenance (Existing and Proposed) Table 4.4-3: Anticipated Impacts by Vegetation Community Type
	Identify the preliminary location and provide an approximate area of disturbance in the GIS database for each type of vegetation removal.	Section 4.4 – Biological Resources Appendix 3-B: Detailed Route Map Appendix 4.4-A: Biological Technical Report

Table 1-1 (cont.): PEA Checklist Key Table

Location in PEA Checklist	Checklist Item	Location within PEA
3.7.1.5 Vegetation Clearance	Describe how each type of vegetation removal would be accomplished.	Section 3.4 – Construction Methods
	For removal of trees, distinguish between tree trimming as required under GO-95D and tree removal.	Section 3.7 – Operation and Maintenance (Existing and Proposed) Section 4.4 – Biological Resources
	Describe the types and approximate number and size of trees that may need to be removed.	Section 4.4 – Biological Resources
	Describe the type of equipment typically used.	Section 3.4.14.2 – Construction Equipment
3.7.1.6 Erosion and Sediment Control and Pollution Prevention during Construction	Describe the areas of soil disturbance including estimated total areas and associated terrain type and slope. List all known permits required. For project sites of less than 1 acre, outline the BMPs that would be implemented to manage surface runoff.	Section 3.8 – Project Design Features and Ordinary Construction/Operating Restrictions Section 3.11 – Required Approvals Table 3-7: Anticipated Permit, Approval, and Consultation Requirements
	Describe any grading activities and/or slope stabilization issues.	Section 3.4 – Construction Methods
	Describe how construction waste would be disposed.	Section 3.4.12 – Site Cleanup Section 3.4.13 – Retired Structures/Poles Materials, and Components Section 4.15 – Utilities and Service Systems
3.7.1.7 Cleanup and Post-Construction Restoration	Describe how cleanup and post-construction restoration would be performed.	Section 3.4.12 – Site Cleanup

Table 1-1 (cont.): PEA Checklist Key Table

Location in PEA Checklist	Checklist Item	Location within PEA
3.7.2 Power Line Construction (Above Ground) 3.7.2.1 Pull and Tension Sites	Provide the general or average distance between pull and tension sites.	Section 3.4.9.2 – Stringing Sites Section 3.4.5 – Conductor Stringing Appendix 3-B: Detailed Route Map
	Provide the area of pull and tension sites including the estimated length and width.	Section 3.4.9.2 – Stringing Sites
	According to the preliminary plan, identify the number of pull and tension sites that would be required, and their locations. Provide the location information in GIS.	Section 3.4.9.2 – Stringing Sites Appendix 3-B: Detailed Route Map
	Describe the type of equipment that would be required at these sites.	Section 3.4.12.2 – Construction Equipment Table 3-2: Standard Construction Equipment and Usage
	If conductor is being replaced, describe how it would be removed from the site.	Section 3.4.12.2 – Construction Equipment Table 3-2: Standard Construction Equipment and Usage
3.7.2.2 Pole Installation and Removal	Describe how the construction crews and their equipment would be transported to and from the pole site locations. Provide vehicle type, number of vehicles, estimated number of trips, and hours of operation.	Section 3.4.12.2 – Construction Equipment Section 3.4.9.3 – Pole Sites Table 3-2: Standard Construction Equipment and Usage
	Describe the process of removing the poles and foundations.	Section 3.4.3 – Pole Removal
	Describe what happens to the holes that the poles were in (i.e., reused or backfilled)?	Section 3.4.3 – Pole Removal
	If the holes are to be backfilled, what type of fill would be used and where would it come from?	Section 3.4.3 – Pole Removal

Table 1-1 (cont.): PEA Checklist Key Table

Location in PEA Checklist	Checklist Item	Location within PEA
3.7.2.2 Pole Installation and Removal	Describe any surface restoration that would occur at the pole sites.	Section 3.4.12 – Site Cleanup
	Describe how the poles would be removed from the sites.	Section 3.4.3 – Pole Removal
	If topping is required to remove a portion of an existing pole that would now only carry distribution lines, describe the methodology to access and remove the tops of these poles. Describe any special methods that would be required to top poles that may be difficult to access, etc.	Section 3.4.3 – Pole Removal
	Describe the process of how the new poles/towers would be installed; specifically identify any special construction methods for specific locations or for different types of poles/towers.	Section 3.4.1 – Micropile Construction Section 3.4.2 – Weathering Steel Pole Construction (Directly-Imbedded)
3.7.2.2 Pole/Tower Installation	Describe the types of equipment and their use as related to pole/tower installation.	Section 3.4.1 – Micropile Construction Section 3.4.2 – Weathering Steel Pole Construction (Directly-Imbedded) Table 3-2: Standard Construction Equipment and Usage
	Describe the actions taken to maintain a safe work environment during construction.	Section 3.4 – Construction Methods Section 3.4.9.3 – Pole Sites
	Describe what would be done with soil that is removed from a hole/foundation site.	Section 3.4 – Construction Methods
	For any foundations required, provide a description of the construction method(s), approximate average depth and diameter of excavation, approximate volume of soil to be excavated, approximate volume of concrete or other backfill required, etc.	Not Applicable

Table 1-1 (cont.): PEA Checklist Key Table

Location in PEA Checklist	Checklist Item	Location within PEA
3.7.2.2 Pole/Tower Installation	Describe briefly how poles/towers and associated hardware are assembled.	Section 3.4.1 – Micropile Construction Section 3.4.2 – Weathering Steel Pole Construction (Directly-Imbedded) Section 3.4.5 –Conductor Stringing
3.7.2.2 Pole/Tower Installation	Describe how the poles/towers and associated hardware would be delivered to the site; would they be assembled off-site and brought in or assembled on site?	Section 3.4.1 –Micropile Construction Section 3.4.2 – Weathering Steel Pole Construction (Directly-Imbedded) Section 3.4.9.3 –Pole Sites
	Provide the following information about pole/tower installation and associated disturbance area estimates; pole diameter, lattice tower base dimension, auger hole depth, permanent footprint per pole/tower, number of poles/towers, average work area around poles/towers, and total permanent footprint for poles/towers.	Section 3.4.1 –Micropile Construction Section 3.4.2 – Weathering Steel Pole Construction (Directly-Imbedded) Section 3.4.9.3 –Pole Sites
3.7.2.3 Conductor/Cable Installation	Provide a process-based description of how new conductor/cable would be installed and how old conductor/cable would be removed, if applicable.	Section 3.4.5 - Conductor Stringing
	Generally describe the conductor/cable splicing process.	Section 3.4.5 - Conductor Stringing
	If vaults are required, provide their dimensions and approximate location/spacing along the alignment.	Not Applicable
	Describe in what areas conductor/cable stringing/installation activities would occur.	Section 3.4.5 – Conductor Stringing Section 3.4.9.2 – Stringing Sites
	Describe any safety precautions or areas where special methodology would be required.	Section 3.4.10 – Road Crossings Section 3.4.11 – Helicopter Usage during Power Line Construction

Table 1-1 (cont.): PEA Checklist Key Table

Location in PEA Checklist	Checklist Item	Location within PEA
3.7.3 Power Line Construction (Below Ground) 3.7.3.1 Trenching	Describe the approximate dimensions of the trench (e.g., depth, width).	Section 3.3.3 – New SDG&E Fiber Optic Line Section 3.4.8 – Underground Distribution and Fiber Optic Lines
3.7.3 Power Line Construction (Below Ground) 3.7.3.1 Trenching	Describe the methodology of making the trench.	Section 3.4.8 – Underground Distribution and Fiber Optic Lines
	Provide the total approximate cubic yardage of material to be removed from the trench, the amount to be used as backfill and the amount to subsequently be removed/disposed of off-site.	Section 3.4 – Construction Methods Section 3.4.8 – Underground Distribution and Fiber Optic Lines
	Provide off-site disposal location, if known, or describe possible option(s).	Section 3.4.13 – Retired Structures/Poles, Materials, and Components
	If engineered fill would be used as backfill, provide information as to the type of engineered backfill and the amount that would be typically used.	Section 3.4.8 – Underground Distribution and Fiber Optic Lines
	Describe if dewatering would be anticipated, if so, how the trench would be dewatered, what the anticipated flows of the water are, whether there would be treatment, and how the water would be disposed.	Section 3.4.6 – Dewatering
	Describe the process for testing excavated soil or groundwater for the presence of pre-existing environmental contaminants that could be exposed as a result of trenching operations.	Section 4.7 – Hazards and Hazardous Materials
	If pre-existing hazardous waste was encountered, describe the process of removal and disposal.	Section 4.7 – Hazards and Hazardous Materials
	Describe any standard BMPs that would be implemented.	Section 4.7 – Hazards and Hazardous Materials

Table 1-1 (cont.): PEA Checklist Key Table

Location in PEA Checklist	Checklist Item	Location within PEA
3.7.3.2 Trenchless Techniques: Microtunnel, Bore and Jack, Horizontal Directional Drilling	Provide the approximate location of the bore pits.	Not Applicable
	Provide the length, width and depth of the sending and receiving pits.	Not Applicable
	Describe the methodology of excavating and shoring the pits.	Not Applicable
	Describe the methodology of the trenchless technique.	Not Applicable
	Provide the total cubic yardage of material to be removed from the pits, the amount to be used as backfill and the amount to subsequently be removed/disposed of off-site.	Not Applicable
	Describe the process for safe handling of drilling mud and bore lubricants.	Not Applicable
	Describe the process for detecting and avoiding “fracturing-out” during horizontal directional drilling operations.	Not Applicable
	Describe the process for avoiding contact between drilling mud/lubricants and stream beds.	Not Applicable
	If engineered fill would be used as backfill, provide information as to the type of engineered backfill and the amount that would be typically used.	Not Applicable
	If dewatering is anticipated, describe how the pit would be dewatered, what the anticipated flows of the water are, whether there would be treatment, and how the water would be disposed.	Not Applicable
	Describe the process for testing excavated soil or groundwater for the presence of pre-existing environmental contaminants.	Not Applicable
	If a pre-existing hazardous waste was encountered, describe the process of removal and disposal.	Not Applicable

Table 1-1 (cont.): PEA Checklist Key Table

Location in PEA Checklist	Checklist Item	Location within PEA
3.7.3.2 Trenchless Techniques: Microtunnel, Bore and Jack, Horizontal Directional Drilling	Describe any grading activities and/or slope stabilization issues.	Not Applicable
	Describe any standard BMPs that would be implemented.	Not Applicable
3.7.4 Substation Construction	Describe any earth moving activities that would be required; what type of activity and, if applicable, estimate cubic yards of materials to be reused and/or removed from the site for both site grading and foundation excavation.	Section 3.3.2 – Substations Section 3.3.2.1 – Creelman Substation Section 3.3.2.2 – Santa Ysabel Substation
	Provide a conceptual landscape plan in consultation with the municipality in which the substation is located.	Not Applicable
	Describe any grading activities and/or slope stabilization issues.	Section 3.3.2 – Substations Section 3.3.2.1 – Creelman Substation Section 3.3.2.2 – Santa Ysabel Substation
	Describe possible relocation of commercial or residential property, if any.	Not applicable – no relocation of commercial or residential property is being proposed as part of this project.
3.7.5 Construction Workforce and Equipment	Provide the estimated number of construction crew members.	Section 3.4.14.1 – Construction Personnel
	Describe the crew deployment, whether crews would work concurrently, if they would be phased, etc.	Section 3.4.14.1 – Construction Personnel Section 3.4.14.2 – Construction Equipment Table 3-2: Standard Construction Equipment and Usage

Table 1-1 (cont.): PEA Checklist Key Table

Location in PEA Checklist	Checklist Item	Location within PEA
3.7.5 Construction Workforce and Equipment	Describe the different types of activities to be undertaken during construction, the number of crew members for each activity, and the number and types of equipment expected to be used for said activity. Include a written description of the activity.	Section 3.4.14.1 – Construction Personnel Section 3.4.14.2 – Construction Equipment Table 3-2: Standard Construction Equipment and Usage
	Provide a list of the types of equipment expected to be used during construction of the Proposed Project as well as a brief description of the use of the equipment.	Section 3.4.14.2 – Construction Equipment Table 3-2: Standard Construction Equipment and Usage
3.7.6 Construction Schedule	Provide a preliminary project construction schedule; include contingencies for weather, wildlife closure periods, etc.	Section 3.5 – Construction Schedule Table 3-3: Proposed Construction Schedule
3.8 Operation and Maintenance	Describe the general system monitoring and control.	Section 3.7 – Operation and Maintenance (Existing and Proposed)
	Describe the general maintenance program of the Proposed Project include timing of inspections, type of inspection, and a description of how the inspection would be implemented.	Section 3.7 – Operation and Maintenance (Existing and Proposed)
	If additional full time staff would be required for operation and/or maintenance, provide the number of workers and for what purpose they are required.	Section 3.7 – Operation and Maintenance (Existing and Proposed)
3.9 Applicant Proposed Measures	If there are measures that the Applicant would propose to be part of the Proposed Project, include those measures and reference plans or implementation descriptions.	Section 3.8 – Project Design Features and Ordinary Construction/Operating Restrictions Section 3.9 – Applicant Proposed Measures
3.10 Electric and Magnetic Fields Summary	Electric and Magnetic Fields Summary	Section 3.10 – Electric and Magnetic Fields Appendix 3-D: Detailed Magnetic Field Management Plan for the TL 637 Wood-to-Steel Project

Table 1-1 (cont.): PEA Checklist Key Table

Location in PEA Checklist	Checklist Item	Location within PEA
Chapter 4: Environmental Setting		
	For each resource area discussion within the PEA, include the following: a description of the physical environment in the vicinity of the Proposed Project and a description of the regulatory environment/context.	Section 4.1 through Section 4.15
	Limit detailed descriptions to those resource areas which may be subject to a potentially significant impact.	Section 4.1 through Section 4.15
Chapter 5: Environmental Impact Assessment Summary		
5.1 Aesthetics	Provide visual simulations of prominent public view locations, including scenic highways, to demonstrate the views before and after project implementation.	Section 4.1 – Aesthetics Figures 4.1-4 through 4.1-8
5.2 Agriculture Resources	Identify the types of agricultural resources affected.	Section 4.2 – Agriculture and Forestry Resources
5.3 Air Quality	Provide supporting calculations/spreadsheets/technical reports that support emission estimates in the PEA.	Appendix 4.3-A: Emissions Spreadsheets
	Provide documentation of the location and types of sensitive receptors that could be impacted by the project.	Section 4.3 – Air Quality and Greenhouse Gases
	Identify Proposed Project greenhouse gas (GHG) emissions.	Section 4.3 – Air Quality and Greenhouse Gases
5.3 Air Quality	Ensure that the assessment of air quality impacts are consistent with PEA Sections 3.7.5 and 3.7.6, as well as with the PEA's analysis of impacts during construction, including traffic and all other emissions.	Section 4.3 – Air Quality and Greenhouse Gases

Table 1-1 (cont.): PEA Checklist Key Table

Location in PEA Checklist	Checklist Item	Location within PEA
5.4 Biological Resources	Provide a copy of the Wetland Delineation and supporting documentation. If verified, provide supporting documentation.	Appendix 4.4-A: Biological Technical Report
	Provide a copy of special-status surveys for wildlife, botanical and aquatic species, as applicable. Any GIS data documenting locations of special-status species should be provided.	Appendix 4.4-A: Biological Technical Report
5.5 Cultural Resources	Cultural Resources Report documenting a cultural resources investigation of the Proposed Project.	Report contains confidential information and is not included with this submittal
	Provide a copy of the records found in the literature search.	Report contains confidential information and is not included with this submittal
	Provide a copy of all letters and documentation of Native American consultation.	Report contains confidential information and is not included with this submittal
5.6 Geology, Soils, and Seismic Potential	Provide a copy of the geotechnical investigation if completed, including known and potential geologic hazards such as ground shaking, subsidence, liquefaction, etc.	Geotechnical Report contains confidential information and is not included with this submittal.
5.7 Hazards and Hazardous Materials	Include the Environmental Data Resources report.	Appendix 4.7-A: Regulatory Database Records
	Include a Hazardous Substance Control and Emergency Response Plan, if required.	Not applicable.
	Include a Health and Safety Plan, if required.	If required, this will be prepared at a later date.
	Describe the Worker Environmental Awareness Program	If required, this will be prepared at a later date.
5.7 Hazards and Hazardous Materials	Describe which chemicals would be used during construction and operation of the Proposed Project.	Section 4.7 – Hazards and hazardous Materials

Table 1-1 (cont.): PEA Checklist Key Table

Location in PEA Checklist	Checklist Item	Location within PEA
5.8 Hydrology and Water Quality	Describe impacts to groundwater quality including increased runoff due to construction of impermeable surfaces, etc.	Section 4.8 – Hydrology and Water Quality
	Describe impacts to surface water quality including the potential for accelerated soil erosion, downstream sedimentation, and reduced surface water quality.	Section 4.8 – Hydrology and Water Quality
5.9 Land Use and Planning	Provide GIS data of all parcels within 300 feet of the Proposed Project with the following data: APN number, mailing address, and parcel’s physical address.	Appendix 1-B: Parcel and Mailing Information for Properties within 300 Feet of the Proposed Project
5.10 Mineral Resources	Data needs already specified under Chapter 3 would generally meet the data needs for this resource area.	Not applicable.
5.11 Noise	Provide long term noise estimates for operational noise.	Section 4.10 - Noise
5.12 Population and Housing	Data needs already specified under Chapter 3 would generally meet the data needs for this resource area.	Not applicable.
5.13 Public Services	Data needs already specified under Chapter 3 would generally meet the data needs for this resource area.	Not applicable.
5.14 Recreation	Data needs already specified under Chapter 3 would generally meet the data needs for this resource area.	Not applicable.
5.15 Transportation and Traffic	Discuss traffic impacts resulting from construction of the Proposed Project including ongoing maintenance operations.	Section 4.14 – Transportation and Traffic
	Provide a preliminary description of the traffic management plan that would be implemented during construction of the Proposed Project.	Section 4.14 – Transportation and Traffic
5.16 Utilities and Services Systems	Describe how treated wood poles would be disposed of after removal, if applicable.	Section 3.4.13 – Retired Structures/Poles, Materials, and Components

Table 1-1 (cont.): PEA Checklist Key Table

Location in PEA Checklist	Checklist Item	Location within PEA
5.17 Cumulative Analysis	Provide a list of projects within the Proposed Project area that the applicant is involved in.	Section 4.16 – Cumulative Impacts
	Provide a list of projects that have the potential to be proximate in space and time to the Proposed Project.	Section 4.16 – Cumulative Impacts
5.18 Growth-Inducing Impacts, If Significant	Provide information on the Proposed Project’s growth-inducing impacts.	Section 5.3 – Growth-Inducing Impacts
Chapter 6: Detailed Discussion of Significant Impacts		
6.1 Mitigation Measures Proposed to Minimize Significant Effects	Discuss each mitigation measure and the basis for selecting a particular mitigation measure should be stated.	Sections 4.1 through 4.15
6.2 Description of Project Alternatives and Impact Analysis	Provide a summary of the alternatives considered that would meet most of the objectives of the Proposed Project and an explanation as to why they were not chosen as the Proposed Project. Include system or facility alternatives, route alternatives, route variations, alternative locations.	Section 5.2 – Description of Project Alternatives to Minimize Significant Effects
	Include a description of a “No Project Alternative” should be included.	Section 5.2 – Description of Project Alternatives to Minimize Significant Effects
	If significant environmental effects are assessed, the discussion of alternatives shall include alternatives capable of substantially reducing or eliminating any said significant environmental effects, even if the alternative(s) substantially impede the attainment of the Proposed Project objectives and are more costly.	Section 5.2 – Description of Project Alternatives to Minimize Significant Effects

Table 1-1 (cont.): PEA Checklist Key Table

Location in PEA Checklist	Checklist Item	Location within PEA
6.3 Growth-Inducing Impacts	Discussion should be fairly succinct and focus on if the Proposed Project will foster economic or population growth, cause an increase in population that could further tax existing community service facilities, or encourage and facilitate other activities that would cause population growth that could significantly affect the environment.	Section 5.3 - Growth-Inducing Impacts
6.4 Suggested Applicant Proposed Measures to address GHG Emissions	Include a menu of suggested APM's that applicants can consider.	Section 4.3 – Air Quality and Greenhouse Gases
Chapter 7: Other Process-Related Data Needs		
	Include an excel spreadsheet that identifies all parcels within 300 feet of any Proposed Project component with the following data: APN number, owner mailing address, and parcels physical address.	Appendix 1-B: Parcel and Mailing Information for Properties within 300 Feet of the Proposed Project

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2.0 PROPOSED PROJECT PURPOSE AND NEED

This section of the Proponent's Environmental Assessment (PEA) identifies the objectives, purpose and need for San Diego Gas & Electric Company's (SDG&E) Proposed Tie-Line 637 Wood-to-Steel Project (Proposed Project), as required by the California Public Utilities Commission's (CPUC) PEA Guidelines (CPUC Information and Criteria List, Appendix B, Section V) and the California Environmental Quality Act (CEQA) Guidelines (Section 15126.6(a)). Additional information regarding the Proposed Project's purpose and need is provided in SDG&E's application to the CPUC, in accordance with CPUC General Order (G.O.) 131-D.

2.1 OVERVIEW OF PROJECT NEED

SDG&E is a regulated public utility that provides electric service to approximately 1.4 million electric customers within a 4,100-square-mile service area, covering 25 cities and unincorporated areas within San Diego County and a portion of Orange County. SDG&E requests approval of the Proposed Project to increase system reliability and replace an existing wood-pole power line with new weathering steel poles in an existing fire-prone area.

The societal impacts from both the 2003 and 2007 wildfires were significant. Many residents were evacuated (approximately 500,000 in 2007, according to the media), homes burned, services disrupted (including electric service in areas where overhead electric facilities were damaged), and other work interrupted.

The main component of the Proposed Project is the replacement of existing wood structures with new weathering steel poles along the Tie-Line (TL) 637 route between the Creelman and Santa Ysabel Substations. Over half of the existing TL 637 structures were installed prior to 1960, and some of the current structures on TL 637 were installed as early as 1949. These activities are an integral component of SDG&E's Community Fire Safety Program (CFSP). The fire hardening, or Wood-to-Steel, projects protect the electric system against wildfire damage, while also reducing the potential for power lines to be an ignition source. Fire hardening includes the use of steel poles in place of wood poles, increased phase spacing, incorporation of Avian Power Line Interaction Committee guidelines, use of high strength multi-stranded steel core conductors, and a design based on extreme wind loading criteria. Fire hardening projects are among the tools SDG&E is employing to not only protect the electric system against wildfire, but to also further reduce the risk of power line related ignitions in fire prone areas. By incorporating these fire hardening activities, the Proposed Project would increase the fire safety and service reliability of TL 637 between Creelman and Santa Ysabel Substations. This is consistent with CPUC G.O., North American Electric Reliability Corporation/Federal Energy Regulatory Commission (NERC/FERC) requirements, and SDG&E internal standards.

G.O. 95 also contains a requirement for utilities to design, construct, and maintain their facilities for "known local conditions." SDG&E has gained more data about known local conditions and now operates over 140 anemometers, employs two meteorologists providing operational weather

information and four experienced fire professionals advising about fire risk and mitigation. Known local conditions for TL 637 include severe weather conditions, including extreme temperatures, high winds, and ice. This area experiences some of the highest winds in San Diego County and it is also the area with the highest fire risk.

The Proposed Project is also required to meet California Independent System Operator (CAISO) Tariff provisions, which require operation and maintenance of facilities to avoid materially adverse impacts on the CAISO-Controlled Grid. NERC Reliability Standards for the Bulk Electric Systems of North America and FERC Standards of Conduct for Transmission¹ Providers (Order No. 717), which define reliability requirements for planning and operating electric systems in North America to ensure electric systems operate reliably, are also applicable to the Proposed Project. These standards would also be consistent with SDG&E’s Written Procedures and Compliance Plan and all associated compliance controls and procedures. In addition, the Proposed Project would avoid and minimize potential environmental effects by maximizing use of existing SDG&E rights-of-way (ROW) and existing access roads, and by following SDG&E’s robust program of environmental compliance practices and protocols (see Section 3.8, Project Design Features and Construction/Operations Restrictions).

The Proposed Project involves the replacement of existing facilities within existing 69 kilovolt (kV) power line and 12kV distribution facility corridors. The installation of the new steel poles would generally occur in close proximity to existing poles, and helicopter landing zones, staging areas, stringing sites, and other work areas would be placed, where possible, in previously disturbed areas to minimize impacts. SDG&E has also designed the Proposed Project to utilize existing access roads, where possible, improving them only as needed to perform safe and effective construction and operation and maintenance activities on the electric lines.

Additional benefits of the Proposed Project include reduction of outage potential, improved contamination resistance, reduction of facility maintenance, maximization of equipment life span potential, installation of fiber optic for enhanced digital protective relay systems, and improved avian protection.

2.2 PROPOSED PROJECT OBJECTIVES

As discussed above, SDG&E has identified the need to reconstruct TL 637 to include fire-hardening components, namely the replacement of existing wood poles with new steel poles that meet current design standards. Addressing the overall fire threat and service reliability concerns is the overall purpose of the Proposed Project, which will achieve the following objectives:

1. Increase the fire safety and service reliability of TL 637, an existing 69kV power line.
2. Minimize potential adverse environmental effects.
3. Locate proposed facilities within existing utility corridors to the extent feasible.

The Proposed Project components are presented in Section 3.0, Proposed Project Description. Each of the Proposed Project objectives is more thoroughly described below.

¹ The term “Transmission” as used herein refers to the NERC and FERC definition and is not intended to suggest that TL 637 is designed for immediate or eventual operation at 200kV or above.

2.2.1 Objective 1: Increase the Fire Safety and Service Reliability of TL 637

The fundamental objective of the Proposed Project is to increase the fire safety and service reliability of TL 637, which is located in an area of high fire risk.

Since 2007, SDG&E has focused a great deal of effort on fire prevention and fire preparedness, including the development of a Community Fire Safety Program (CFSP). The program consists of three categories, 1) Increased education and outreach to employees and customers about the risks of wildfires, 2) Implementation of new prevention measures to help reduce the risk of fires associated with electric facilities, and 3) Enhanced readiness during periods of high fire risk as well as enhanced response capabilities with fire suppression resources and emergency power supplies. The CFSP involves engineering, construction, operations, and stakeholder facets. SDG&E has partnered with fire agencies and external stakeholders to enhance fire safety for all of San Diego County. Since the inception of the CFSP, approximately four years ago, the wood-to-steel projects (or fire hardening projects) have been an integral part of the CFSP. This falls under the engineering facet discussed above.

The Proposed Project is consistent with SDG&E's efforts to improve reliability and reduce fire risks in fire-prone areas through fire-hardening projects and other enhancements. SDG&E prioritizes the maintenance of poles in each power line in high-risk fire areas according to the existing vegetation/fuel conditions, the history of high-speed winds, and age and condition of the existing infrastructure as part of a strategy to strengthen power lines connecting backcountry substations for improved reliability. SDG&E periodically reviews and updates the prioritization of poles to be replaced due to changes in field conditions, e.g., increased density of vegetation (fire fuel) in the vicinity of poles. The Proposed Project incorporates current design standards to reduce fire risks and will implement a project-specific fire plan to minimize fire risks during construction.

During the evaluation process, TL 637 met the criteria for immediate replacement based on the above factors. Specifically, these factors include (1) a designation of Very High Fire Threat as indicated on SDG&E's 2012 Fire Threat Zone map; and (2) a record of very high winds. The Proposed Project will result in the strengthening of TL 637 in the high-fire threat area, which will reduce the risk of potential fire hazard impacts under certain atmospheric conditions.

The Proposed Project has been designed to meet Objective Number (No.) 1 and construction of the Proposed Project will fully meet this objective.

2.2.2 Objective 2: Minimize Potential Adverse Environmental Effects

In addition to meeting the primary objective of fire hardening TL 637, the Proposed Project was also designed to meet Objective No. 2, which calls for the minimization of potential adverse environmental effects during the implementation of wood-to-steel project component. Avoidance and minimization of environmental impacts is a requirement of the *San Diego Gas & Electric Subregional Natural Communities Conservation Plan* (NCCP) and part of SDG&E's standard procedures and protocols.

The Proposed Project has been designed to include elements that will minimize or avoid potential adverse effects to the environment, including the following:

- Relocation of an approximately 1,170-foot section of the existing 69kV power line (including relocation of three existing poles and elimination of one pole) approximately 250 feet northwest in order to remove the alignment from an existing wet meadow and avoid future operations and maintenance impacts.
- Removal of poles (including the four poles described above that are currently located within the wet meadow) that are located within environmentally sensitive areas.
- Adherence to SDG&E environmental protection procedures and protocols, such as the NCCP.
- Utilization of existing access roads, footpaths, work areas, and disturbed areas during construction, to the extent feasible.
- Locating replacement poles as close as possible to the existing poles, generally within 6 to 8 feet, except when adjacency to environmentally sensitive areas requires relocating further away to avoid environmental impacts.

2.2.3 Objective 3: Locate Proposed Facilities within Existing Utility Corridors to the Extent Feasible

In addition to meeting the primary objective of fire hardening TL 637 and limiting the potential environmental effects, the Proposed Project was also designed to meet Objective No. 3, which calls for the utilization of existing utility corridors to the extent feasible. TL 637 is an existing 69kV power line that connects the Creelman and Santa Ysabel Substations. The Proposed Project would follow the existing TL 637 alignment and would not require the acquisition of any new ROW.

In addition, all required alterations at the Creelman and Santa Ysabel Substations will be located within the existing property and fence lines. No expansion of either facility is required. The Proposed Project is therefore consistent with the objective of following the existing alignment of TL 637.

2.3 CONCLUSION

As outlined above, the Proposed Project will meet all three project objectives and fully accomplish the fundamental purpose of increasing the fire safety and service reliability of TL 637. The Proposed Project will fire harden TL 637, which includes the associated distribution underbuild and interest poles, between the Creelman and Santa Ysabel Substations. Furthermore, the Proposed Project will fulfill the purpose and primary objective while meeting Objective Nos. 2 and 3 by avoiding potential adverse environmental effects (including removing structures and re-locating the TL 637 to avoid sensitive areas) and utilizing existing utility corridors.

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3.0 PROPOSED PROJECT DESCRIPTION

3.1 PROPOSED PROJECT OVERVIEW

SDG&E is a regulated public utility that provides electric service to three million customers within a 4,100 square mile service area, covering parts of two counties and 25 cities in the San Diego area. In an effort to maintain existing electric power tie lines in high fire and wind areas in SDG&E's service territory, SDG&E proposes to replace wood poles with steel poles along approximately 14 miles of TL 637, extending from the existing Creelman Substation to the existing Santa Ysabel Substation (Proposed Project).

The Proposed Project would include the following primary components, which are described in more detail in Section 3.3:

- Replacement of approximately 156 existing wood poles with new steel poles between the Creelman and Santa Ysabel Substations (including distribution line underbuild),
- Addition of new fiber optic cable (SDG&E owned and operated) to be co-located on the rebuilt TL 637 pole line between Creelman and Santa Ysabel Substations and relocation of small amounts of existing private fiber optic lines on approximately 21 poles, and
- Minor work at the Creelman and Santa Ysabel Substations to allow for connection of the relocated TL 637 and underbuilt distribution line.

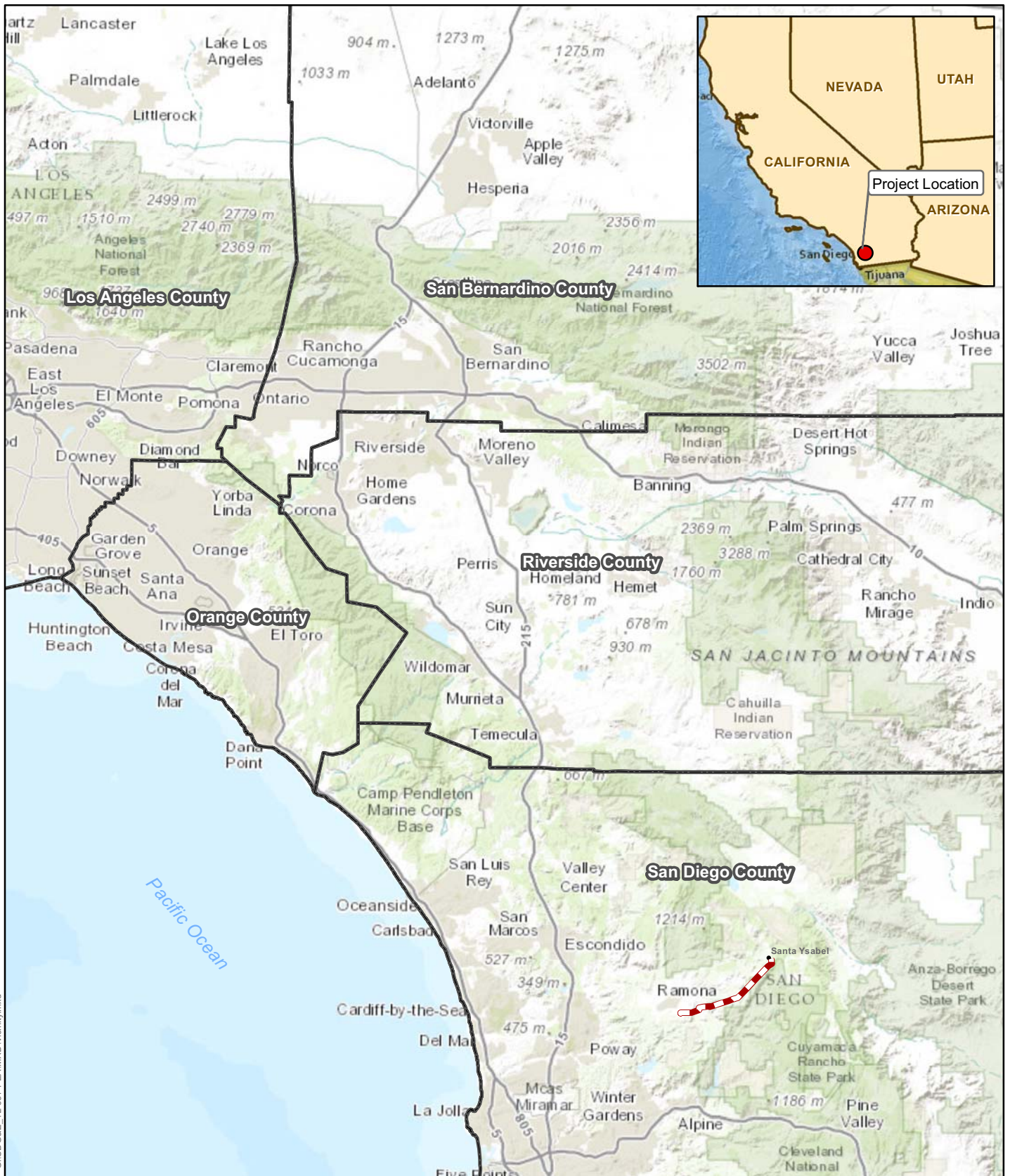
The CPUC will be the lead agency for the Proposed Project under CEQA. SDG&E is submitting this PEA (Volume II of II) in support of its Application (Volume I of II) for a Permit to Construct (PTC).

3.2 PROPOSED PROJECT LOCATION, REGIONAL CONTEXT, AND REGIONAL ELECTRIC SYSTEM

As shown in Figure 3-1, Project Vicinity Map, the Proposed Project components are located in the unincorporated communities of Ramona and Santa Ysabel, San Diego County, California. Specifically, TL 637 traverses densely vegetated and fire-prone areas on private and public lands, including lands owned by the County of San Diego, U.S. Bureau of Land Management (BLM), and a small portion of Cleveland National Forest. TL 637 is a 69kV, predominantly single-circuit power line that connects the existing Creelman and Santa Ysabel Substations. A small portion of the TL 637 pole line is shared with TL 626, another existing 69kV wood power line, near the Santa Ysabel Substation. These approximately 12 poles are double-circuit, supporting both TL 637 and TL 626.¹

¹ SDG&E has filed a separate application for a Permit to Construct that would authorize the replacement of TL 626 (A.12-10-009). If CPUC authorizes the replacement of these 12 poles in connection with A.12-10-009 before a decision is rendered in this proceeding, the 12 poles will not need to be replaced again in connection with the TL 637 project.

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Tie-Line 637 Wood-To-Steel Project

Project Vicinity Map

Figure 3-1

Created For:	Created By:
Brad Carter	
Date: 2/15/2013	

SDG&E is providing this map with the understanding that the map is not survey grade.

 Project Location



Sources: SDG&E, 2012; Esri, 2012



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BACK OF FIGURE 3-1

3.3 PROPOSED PROJECT FACILITIES

Specifically, SDG&E is proposing the following as part of the Proposed Project:

- Replacement of approximately 156 wood power line and interset distribution structures with approximately 156 weathering steel structures.² Of the 156 replacement structures, approximately 69 will be directly-embedded steel poles and approximately 87 will be engineered steel poles supported by micropile foundations.
- Approximately 16 small sections of new underground distribution line.
- Removal (without replacement) of approximately eight existing wood structures, including one stub pole, five distribution poles, and two 69kV poles.
- Pole top only work at approximately three existing structures.
- Topping one pole above existing communication infrastructure.
- Installation of fiber optic on the entire power line. Undergrounding of fiber optic at the Creelman and Santa Ysabel Substations, including anchor installation for one pole at the Santa Ysabel Substation.
- Relocation of approximately 1,170 feet of existing 69kV power line that currently crosses a wet meadow to a new location adjacent to an existing access road.
- Reconductoring of the entire power line from 3/0 aluminum conductor steel reinforced/alumoweld (ACSR/AW) to 636 aluminum conductor steel support/alumoweld (ACSS/AW) conductor.
- Utilization, as needed, of approximately 22 temporary stringing sites. These may be approximately 150 foot by 14 to 150 foot, depending on pole location and site constraints.
- Installation of approximately 10 temporary guard structures to avoid construction hazards where conductor crosses roads.
- Utilization, as needed, of approximately six temporary staging yards/helicopter landing zones.

Each of these general Proposed Project components is discussed in detail within the following subsections.

3.3.1 TL 637 Wood-to-Steel Replacement

As stated above, the existing wood poles along the approximate 14 mile TL 637 between the existing Creelman and Santa Ysabel Substations will be replaced with new weathering steel poles. Three types of poles will be used for the Proposed Project: direct-embedded weathering steel poles, direct-embedded modified weathering steel poles, and engineered weathering steel poles supported by micropile foundations. Existing wood poles will be completely removed and the holes backfilled with soils from the pole replacement, with the exception of Pole Nos. R107 and P54. At these locations the existing poles will be cut at ground level and the remainder of

² It is important to note that work completed under the Corrective Maintenance Program will continue, as warranted, where existing poles are identified that need to be replaced.

the pole will be left in place to avoid impacts to sensitive resources. Additional poles may also be cut at ground level where it is determined that complete removal of the existing pole would result in additional, adverse disturbance. Soil will not be taken from the surrounding areas to fill the holes. If additional backfill material is required, clean, decomposed granite will be used to backfill the old pole holes. Excess soil from the new holes will be placed on top of the decomposed granite.

Replacement poles will be located as close as possible to the existing poles, typically within 6 to 8 feet, with the exception of three poles (Pole Nos. P20, P54, P114) which will be replaced in-line up to approximately 200 feet from the existing pole location. In addition, approximately 1,170 feet of the power line located in a meadow between poles P103 and P105 will be relocated north adjacent to a nearby existing dirt access road. The replacement poles will be installed by line truck or by helicopter. Excess spoils generated from project activities will be dispersed around the bases of the poles within the allotted temporary work areas and/or evenly distributed on the existing access roads and properly compacted. In the event that the soil cannot be spread and adequately contoured or compacted on existing access roads, crews will remove the excess soil from the project site. Replacement poles will include galvanized pole steps if the pole locations are not accessible by a 24-hour all weather access road.

Appendix 3-A, Pole Detail Table, provides a list of the proposed new 69kV poles by type (all new 69kV poles will be steel) and all wood poles to be removed (including replacements and poles being removed from service). Appendix 3-B, Detailed Route Map, provides a map with the location of all to be removed and installed. Typical drawings and/or representative photographs of the types of structures to be installed and removed are included in Appendix 3-C, Typical Structure Diagrams and Photographs.

In general, the new 69kV steel poles (both direct bury and micropile) will range in height from approximately 43 feet to 110 feet and will be located on average approximately 480 feet apart depending on the topography of the route. The minimum height of the new 69kV conductor will be approximately 41 feet above ground level. The new poles will taper to approximately 14-inches at the top of the poles. The average overall height increase is approximately 12 feet (19 percent) to allow for increased vertical spacing between conductors in accordance with current design standards. The above-stated averages include only the height increases for the pole replacements over the entire Proposed Project and have not been adjusted to include the poles that are being removed from service. The anticipated maximum pole height increase will be approximately 40 feet for the overall Proposed Project, excluding the one new pole on the power line (90 feet). All poles will be constructed to current SDG&E standards, including design standards for avian protection.

The following subsections provide a detailed description of the scope of work for each element of TL 637 wood-to-steel component of the Proposed Project.

3.3.1.1 Directly-Embedded Steel Poles

The directly-embedded steel poles are light-duty and modified weathering steel poles are heavy-duty directly-embedded steel poles that are secured using a concrete backfill. The poles will range in heights above grade of approximately 43 to 79 feet. The diameter of the pole at ground level is approximately 30 inches in diameter for light-duty poles and approximately 42 inches for

modified weathering steel poles. The poles will be directly-embedded at a depth of approximately 7 to 16 feet as necessary for installation. This type of pole will be used at approximately 29 locations for light-duty steel poles and 40 locations for the modified, heavy-duty steel poles.

3.3.1.2 Micropile Foundation Engineered Steel Poles

Micropile foundation poles are engineered steel poles that are anchor-bolted to a foundation utilizing micropile technology. The engineered poles utilize a thicker gauge steel and a transition plate bolted to micropiles, which allows for the elimination of guying and associated anchorage, and minimizes ground disturbance to install foundation poles. The poles have a height above grade of approximately 55 to 110 feet. A steel transition plate is installed above the micropile foundation to act as the base foundation for an engineered steel pole. The combined dimensions of the micropile foundation and pole are expected to be no more than 8 feet in diameter. This type of pole will be used at approximately 87 locations along the Proposed Project route.

3.3.1.3 Distribution Underbuild

Existing distribution lines are currently underbuilt through portions of the TL 637 route between the Creelman and Santa Ysabel Substations. These distribution lines will be transferred to the new TL 637 poles along with the new 69kV conductor, again in an underbuild position. In addition, existing distribution line circuits that are currently located on distribution only structures will be moved to an underbuild position on the new TL 637 structures. This consolidation will result in a net reduction in the number of structures and will mainly take place along Creelman Lane (refer to Appendix 3-B) where the distribution structures are located on the north side of Creelman Lane and the TL 637 alignment (existing and proposed) is located on the south side of Creelman Lane. The distribution lines will be installed in an overhead position throughout the majority of the TL 637 route, however, small portions of underground distribution line installation will be required (refer to Appendix 3-A and 3-B) where existing underground circuit must be relocated to the new pole location. In addition, a vacant distribution position will be added for Pole No. P47 through TL 637's connection with the Santa Ysabel Substation, in an overhead position. This vacant distribution position is being created to support potential future distribution line needs in the Proposed Project area.

Trenching for underground distribution will typically be performed within a 10-foot radius of the pole. The new underground distribution lines will be installed using approximately 5-inch conduits, with typically 2-12 conduits per trench. A typical sketch of a distribution line duct bank (trench package) is included within Appendix 3-C. However, trenching outside of the radius may be necessary at some locations and is accounted for as temporary impacts. In addition, hand holes will be installed along the trenching alignment.

3.3.1.4 Reconductoring

Once the new poles have been installed, new conductor will be installed on the new poles. The existing TL 637 power line is comprised of 3/0 ACSR/AW conductor. The new TL 637 will utilize 636 ACSS/AW conductor, which is the current standard conductor type for 69kV power lines. As noted above, approximately 12 poles along the TL 637 route (near the Santa Ysabel Substation) are shared structures (double-circuit) with TL 626, another existing 69kV power line.

Therefore, when this segment of TL 637 is replaced with the new steel poles and reconducted, SDG&E will evaluate the need to reconductor this segment of TL 626 at the same time that the poles are replaced. If it is reasonable and prudent to reconductor this segment of TL 626, the TL 626 conductor positioned on these poles will be reconducted to 636 ACSS/AW. If it is not reasonable and prudent to reconductor this segment of TL 626, SDG&E will re-install the existing TL 626 conductor on the new steel poles.

3.3.1.5 Communications Infrastructure

Private communications companies currently utilize a number of the poles on TL 637 to hold communications infrastructure (e.g., cable TV and/or telephone). This infrastructure will have to be re-located to the new steel poles following construction of the Proposed Project. The affected poles are located at/near the Creelman Substation (substation plus approximately 20 poles east of the substation) and at the Santa Ysabel Substation (approximately one pole only located at the substation).

During construction, SDG&E will attempt to coordinate with representatives of the non-SDG&E utilities to coordinate the transfer of their attachments to the new steel poles within approximately 45 days from the transfer of SDG&E conductors to the new poles.

3.3.1.6 Temporary Poles

There are approximately seven pole structures along the TL 637 route alignment that require same hole sets for the poles. At these locations, the new steel pole will ultimately be located in the same location as the existing wood pole. In order to complete construction at these locations, temporary poles will be installed adjacent to the existing poles in order to provide adequate electric power reliability during construction. These temporary poles will be utilized until the new TL 637 line is complete and the existing poles can be removed. Once the existing poles are removed, the new steel pole can be installed at the existing pole location and the conductor will be transferred from the temporary pole to the new steel pole. The temporary pole is then removed and construction is complete. Installation of temporary poles will require anchors and utilization of concrete block sleds for temporary guying.

3.3.1.7 Grounding Rods

All of the steel poles, regardless of foundation type, will require the installation of two grounding rods buried approximately 8 to 18 inches deep and 4-inches wide. The grounding rods are approximately 8 feet in length and will be installed approximately 6 feet apart within the established work areas described in Sections 3.4.1 and 3.4.2. Permanent impacts associated with the grounding rod installation will be negligible (e.g., less than 1 square foot per structure).

3.3.2 Substations

Work will be required at both the Creelman and Santa Ysabel Substations to allow for the wood-to-steel conversion of TL 637 that is the main component of the Proposed Project. The required work at the substations will be relatively minor and will not require the addition, subtraction, or re-location of major equipment. Furthermore, all required work will be located within the existing substation property line and existing fence line. A detailed description of the substation work is provided below for each affected substation.

3.3.2.1 Creelman Substation

The following work is required in and around Creelman Substation to support the installation of one new 48 strand All-Dielectric Self Support (ADSS) Single-Mode Fiber (SMF) on TL637:

1. Trench for 60 feet and install one 4 inch schedule 40 polyvinyl chloride (PVC) conduit from Pole No. P2 (located outside 10 feet east fence line), to existing PB No. 2 (located in the southeast corner of the yard).
2. At Pole No. P2 route new ADSS SMF through the new conduit to PB No. 2, leave 50 feet of slack coiled and stored, and continue routing fiber through existing conduit to the control house.
3. Inside the control house, route new ADSS SMF in the overhead cable tray to the telecommunications rack labeled “TC-1.”
4. At TC-1 install new AFL 2U 48 Port Fiber Panel, and terminate all 48 SMF strands to factory installed “pig-tails” using Single Fusion Splice Method.
5. Label and tag fiber at every access point, hand-hole and pole attachment with “S-4” tags.

3.3.2.2 Santa Ysabel Substation

The following work is required in and around the Santa Ysabel Substation in order to support the installation of one new 48 strand ADSS, SMF on TL 637:

1. Trench for 100 feet and install one 4-inch schedule 40 PVC conduit from Pole No. D182 (located outside yard 100 feet south of fence line), to new 3313 hand-hole (located outside yard 5 feet south of fence line).
2. Install one new 3313 hand-hole (located outside yard 5 feet south of fence line).
3. Trench for 100 feet and install one 4 inch schedule 40 PVC conduit from new 3313 hand-hole (located outside yard 5 feet south of fence line), to control house west wall, and provide building entrance at overhead cable tray elevation.
4. At Pole No. D182 route new ADSS SMF through the new conduit to new 3313 hand-hole, leave 50 feet of slack coiled and stored, and continue routing fiber through new conduit to the control house.
5. Inside the control house, route new ADSS SMF in the overhead cable tray to the telecommunications rack labeled “TC-1”.
6. At TC-1 install new AFL 2U 48 Port Fiber Panel, and terminate all 48 SMF strands to factory installed “pig-tails” using Single Fusion Splice Method.
7. Label and tag fiber at every access point, hand-hole and pole attachment with “S-4” tags.

3.3.3 New SDG&E Fiber Optic Line

SDG&E is proposing to install a new SDG&E owned and operated fiber optic cable between the Creelman and Santa Ysabel Substations. This new fiber optic line will be installed on the new TL 637 steel poles and will be utilized to transfer information between the two substations. The

fiber optic is an appurtenance to the power line, and is being installed for SDG&E use only. The fiber optic line will allow for the use of the latest substation relay technology, allowing for quicker trip operations and improved relay coordination. The new SDG&E fiber optic cable will be 48 count ADSS fiber optic cable with a diameter of approximately 17 millimeters.

The new fiber optic cable will require minor trenching at two pole locations (Pole Nos. P2 and D182) and within the two substations, but will otherwise be installed in an overhead position on the new TL 637 poles. The areas of required fiber optic trenching are depicted on the Detailed Route Map that is included as Appendix 3-B.

3.4 CONSTRUCTION METHODS

This section includes an overview of the typical methods that will be used for construction of the Proposed Project. Specifically, this section describes typical construction methods for overhead and underground facilities, pole types, construction equipment, and temporary construction work areas. It is anticipated that construction of the Proposed Project will result in approximately 520 cubic yards of excavation for direct-embed and micropile foundation poles. In addition, construction is anticipated to require approximately 28 cubic yards of cut and 7 cubic yards of fill for preparation of micropile construction platforms (see Section 3.4.1 below) and installation of one small retaining wall near Pole No. D167. Finally, trenching of fiber optic and distribution lines is anticipated to result in approximately 77 cubic yards of excavation. Actual cut, fill, and excavation amounts may vary dependent upon actual field conditions. SDG&E is typically able to re-use soil on site during wood-to-steel projects, like the Proposed Project, where extensive grading and excavation is not required. Excess soil from excavation of trenches or new pole installations may also be transported to a local recycling or appropriately permitted waste disposal facility if the soil is not re-used onsite or otherwise recycled. Excess soil will be re-used onsite wherever possible and only transported offsite as the final option. SDG&E's construction methods are subject to implementation of the SDG&E's standard environmental procedures and protocols, including *SDG&E's Subregional NCCP*, which is described in greater detail in Section 4.4, Biological Resources, and below (see Sections 3.7 and 3.8). SDG&E has successfully implemented the NCCP for projects such as the Proposed Project for nearly two decades.

3.4.1 Micropile Construction

Micropile foundation installation will be utilized due to existing soil conditions (presence of rock), pole site access limitations, and to minimize ground disturbance. In order to complete the micropile installation process, special proprietary drill rig platforms and componentized drilling rigs are flown or driven to the site and set up over the foundation at the structure site. High pressure and volume air compressors, a grout plant or grout transfer unit, tool boxes, personnel work platforms, firefighting equipment, and installation materials are also flown or driven to the pole locations. Equipment has been designed to be securely leveled on steep slopes or uneven terrain without the need for excessively benched excavations. Standard Penetration Tests (SPTs) are typically performed at specific elevations in order to characterize the soil conditions while the first micropile foundation is being drilled. SPT values are input into the foundations schedule, which acts as a decision matrix for properly constructing the foundation in order to match tower loading and soil conditions. The foundation schedule provides guidance in determining the number of piles necessary, the length of casing embedment, the bond length, and

the grouting method to be used in the installation of each pile. The drill platform, drill rig, and other materials are moved to each subsequent micropile foundation location along the Proposed Project ROW. Micropile foundations will be used at approximately 87 pole locations.

Each micropile will require a hole approximately 6 to 9 inches in diameter. The actual diameter and number of these holes per foundation will vary, depending on the pole design requirements. Typically 4 to 16 holes are drilled per pole foundation. The depth of the holes will vary, based on the design requirements and the underlying soil and rock properties at each micropile foundation location.

A combination of construction platforms may be used at each micropile foundation structure site, depending on terrain and site conditions. These platforms may consist of the following approximations:

- Drill rig platform: 8 feet by 8 feet (64 square feet)
- Three personnel deck platforms: 8 feet by 8 feet (64 square feet)
- Firefighting equipment platform: 8 feet by 8 feet (64 square feet)
- Grout platform: 8 feet by 8 feet (64 square feet)
- Air compressor platform: 16 feet by 8 feet (128 square feet)

Each platform listed above is supported by approximately four adjustable legs, and each leg requires an approximately 2-foot by 2-foot level pad on the ground surface. Additional temporary impacts at each site may include footpaths to remote helicopter pole set locations.

The volume of material permanently excavated from each micropile foundation site generally is 4 yards for 10 of the 8-inch diameter holes, all drilled to 30 feet deep. This material can be both spread and compacted on adjacent access roads or removed to an appropriate offsite disposal facility. The grout used in the micropile foundation process consists of a combination of water, Portland cement, and sand. All unused grout will be safely stored and removed to an appropriate offsite storage or disposal facility.

Permanent impacts associated with the micropile foundation poles are based on an average 7 foot diameter micropile cap plate. Permanent impacts for each foundation are estimated at approximately 39 square feet. The temporary impact area for each micropile foundation will include the setup for all platforms and equipment within an area approximately 1,250 square feet (20-foot radius), most of which will not be disturbed. The platforms will be positioned at each site to accommodate the terrain and to avoid/minimize disturbance to tall patches of native vegetation to the greatest extent possible.

3.4.2 Weathering Steel Pole Construction (Directly-Embedded)

Permanent impacts resulting from the installation of light-duty steel poles were calculated with an assumption that each pole location would require up to an approximately 54-inch diameter hole for the replacement pole and that each pole would measure up to 30 inches in diameter at ground level, which would result in an approximately 5 square feet permanent impact per pole for the pole alone. Permanent impacts resulting from the installation of heavy-duty steel poles were calculated with an assumption that each pole location would require up to an approximately

66-inch diameter hole for the replacement pole and that each pole would measure up to 42 inches at ground level, which would result in an approximately 10 square feet permanent impact for the pole alone. Permanent impacts for light- and heavy-duty steel poles are only calculated for the area of the pole alone. As all light- and heavy-duty poles will be backfilled with concrete, there will be an additional permanent impact surrounding the pole resulting from the concrete backfill. As terrain will vary between pole replacement locations, and pole diameter at the base will vary between pole replacement locations, these additional permanent impacts cannot be accurately estimated at this time. Actual permanent impacts from both the pole and the concrete backfill surrounding the pole will be assessed in the post-construction report, and addressed through credit withdrawal from the SDG&E mitigation bank where appropriate.

The replacement poles would be located as close as possible to the existing poles, generally within 6 to 8 feet, with the exception of the consolidation along Creelman Lane and the segment of relocated power line to avoid sensitive environmental areas (wet meadow).

To install the directly-embedded steel poles, pole holes will be excavated using a drill rig mounted on the back of a truck or by hand with the aid of a hand jack powered by an air compressor. The temporary work area would be confined to the existing disturbed area around the base of the pole as much as possible (i.e. within a 10-foot radius). Plywood boards and plastic covering would be used to cover the excavated holes until pole installation activities begin. The excavated soil would be temporarily stockpiled adjacent to the excavated hole within the temporary work area. Once the pole bases are installed, concrete will be used to backfill the holes. Crews will spread and compact excess soil as close to the pole as possible (i.e., within 10 feet of the pole). Soil would be compacted using tamping equipment or hand tools to minimize the potential for erosion. Excess soil may also be dispersed evenly and compacted onto existing unpaved access roads in which vehicle accessibility will be maintained. The appropriate Best Management Practices (BMPs) would be used before, during, and after all project-related construction activities where necessary to prevent offsite sedimentation.

3.4.3 Pole Removal

Pole removal activities will utilize boom and bucket trucks, and a helicopter to remove cross arms, conductors, and poles. Associated hardware, including anchors and old wood poles, will be recycled and/or disposed of at an approved offsite location. Appendix 3-C shows typical wood poles and a wood pole line that currently exists. A list of poles, detailing the proposed action for the poles (replace, remove, access only) and construction notes for each pole, is included in Appendix 3-A. In addition, approximately eight poles are proposed to be removed from service without being replaced as part of the Proposed Project.

3.4.4 Guard Pole Installation

Temporary guard structure installation will occur in locations within the 14-mile Proposed Project alignment where stringing work will cross existing facilities such as other utilities, roadways, and highways to assure minimum clearances are maintained while conductors are being pulled. Different types of guard structures may be used, depending on the site conditions. Guard structures may consist of a single wood pole with a cross-beam attached to side extensions or a two-pole wood structure with a cross-beam. In many locations, such as paved areas, a boom or bucket truck will be used as a guard structure. The guard structures will require excavating

the pole holes using a truck-mounted auger. The poles will be installed using a line truck, and the soil will be backfilled around each pole. Upon completion of overhead construction, these guard structures will be pulled and removed from the project site; and the holes will be backfilled. Approximately ten wooden guard structures will be utilized on the project at locations where the TL crosses public roads. The guard structures are necessary to provide for safety while conductor is pulled through the line.

3.4.5 Conductor Stringing

Once the new poles have been installed, a mechanical pulling machine (powered dolly) and/or helicopter will be used to facilitate the installation of new conductors. Wherever possible, activities will occur within existing paved or unpaved access roads or other previously disturbed areas.

Conductor stringing operations begin with the installation of travelers or “rollers” on the bottom of each of the insulators. The rollers allow the conductor to be pulled through each structure until the entire line is ready to be pulled up to the final tension position. Following installation of the rollers, a sock line (a small cable used to pull the conductor) is pulled onto the rollers from structure to structure. Once the sock line is in place, it is attached to the conductor and used to pull or “string” the conductor into place on the rollers using conventional tractor-trailer mounted pulling equipment located at pull and tension sites (“stringing sites”) along the line. The conductor is pulled through each structure under controlled tension to keep it elevated and away from obstacles, thereby preventing third-party damage to the line and protecting the public. After the conductor is pulled into place, the sags between the structures are adjusted to a recalculated level. The conductor is then clipped into the end of each insulator, the rollers are removed, and vibration dampers and other accessories are installed.

3.4.6 Dewatering

Based on the geotechnical investigation completed by VO Engineering on the Proposed Project, at least six micropile locations are expected to encounter groundwater during micropile drilling operations. Standard practice for micropile installation when encountering water would be to expel any standing water in the hole by use of compressed air. If this approach does not allow for a dry hole during placement of the grout, the water will be left and will be displaced during grout placement. The contractor will use a tremie tube to place the grout by pumping from the lowest point of the drill hole with continuous injection until uncontaminated grout flows out the top of the pile. The overflow water and grout will be locally contained on site around each pile and allowed to dry prior to disposal. After drying, the grout will be removed and properly disposed of. If the water flow is too heavy to allow for drying, the overflow will be stored on site in metal drums and removed from the site. Drums will be properly identified as to their contents and waste materials will be disposed at an approved landfill or through a waste collection company.

Other dewatering is not anticipated, but may be required based on weather conditions during construction. If necessary, trenches and other excavation sites will be dewatered using a portable pump and disposed of in accordance with relevant regulations and permits.

3.4.7 Blasting

If rock is encountered during pole excavation, a hydraulic rock drilling and splitting procedure (rock-splitting) may potentially be used to minimize drilling time, depending on site specific conditions. The procedure involves drilling a hole in the rock and inserting a non-blasting cartridge of propellant. The cartridge is mechanically initiated by an impact generation device. This hydro-fracturing effect causes controlled tensile crack propagation in the rock and does not result in flyrock, noxious fumes, or ground vibrations.

In the unlikely event that rock blasting may potentially be used to excavate pole locations along the power line that are solid rock, and where the hydraulic rock drilling and splitting procedure would be ineffective, the following procedure would be utilized. The procedure would minimize both drilling time and noise impacts. The blasting involves drilling approximately 3-inch-diameter blast holes to the full depth of the shaft and inserting explosives. Blasting caps are connected, and a non-electric detonator is employed. Flyrock protection is installed prior to blasting, and seismographs are placed to measure and record peak particle velocity and air blast levels at various distances from the blast site. Dust control would include a combination of steel plate covering, geo-textile fabric with chain link fence covering, and wetting the blasting surface. If blasting is utilized with the project, the blasting contractor will be required to obtain a blasting permit and explosive permit per the San Diego County Regulatory Ordinances. The appropriate BMPs will be used before, during, and after all project-related construction activities where necessary to prevent erosion and offsite sedimentation.

3.4.8 Underground Distribution and Fiber Optic Lines

New underground construction for distribution and fiber optic lines will be conducted utilizing an open trench method. Prior to trenching for underground distribution lines or fiber optic cable, SDG&E will notify other utility companies (via Underground Service Alert) to locate and mark existing underground utilities along the proposed underground alignments. Exploratory excavations (potholing) will also be conducted to verify the locations of existing facilities in the field, if necessary.

Trenches will be excavated using a backhoe, saw cutter, and other trenching equipment as warranted by site conditions. The depth of the trench will be determined by localized topography and potential conflicts, but is anticipated to be approximately 5 to 6 feet deep, with a width of approximately 2.5 feet. Dewatering of the trenches is not anticipated, but may be required based on weather conditions during construction. If trench water is encountered, trenches will be dewatered using a portable pump and disposed of in accordance with relevant regulations and permits (refer to Section 3.4.6). Once installed, the depth from grade to the top of the concrete duct package will be approximately 2.5 feet, and the depth from grade to the top of the conduit in the duct package will be approximately 3 feet. The trench alignment will proceed to/from cable poles or splice vaults, as applicable.

The previously excavated native material will be used to backfill the trench after installation of the concrete duct banks. SDG&E does not anticipate that engineered backfill will be required. The remainder of the excavated material will be spread across the ROW or access roads, if possible, or disposed of at an approved facility. SDG&E does not anticipate encountering contaminated soils (see Section 4.7, Hazards and Hazardous Materials).

The PVC cable conduits for underground distribution lines will be installed (separated by spacers), and concrete will be poured around the conduits to form the duct banks after trenching activities for the underground duct banks have been completed. The trenches will be backfilled with these materials and the cables will be installed in the duct banks upon completion of the duct bank installation. Each cable segment will be pulled into the duct bank and terminated at the cable pole where the line converts to an overhead configuration. A cable reel will be placed at one end of the section and a pulling rig at the other end to pull the cable through the ducts. A larger rope will then be pulled into the duct using a fish line and attached to the cable puller, which pulls the cable through the duct. Lubricant will be applied to the cable as it enters the duct to decrease friction during pulling.

3.4.9 Temporary Work Areas

Work areas for each type of pole will vary but will be confined to the previously disturbed areas around the bases of the existing poles to the extent possible in order to provide a safe and adequate workspace. Temporary work areas also include storage yards, helicopter landing zones, temporary construction access, and stringing sites. Each of these temporary work areas are described below.

During construction, alteration to the temporary work spaces may be required to accommodate construction activities. Any necessary changes will be evaluated per *SDG&E's Subregional NCCP*, the Proposed Project Stormwater Pollution Prevention Plan (SWPPP), and for cultural resources in order to avoid impacts to sensitive resources and to identify any necessary changes to the SWPPP.

3.4.9.1 Materials Storage, Staging, and Helicopter Landing Zones

The Proposed Project includes approximately four temporary construction staging yards and two potential helicopter landing zones (refer to Appendix 3-A and 3-B), resulting in a total area of approximately 15.1 acres. The helicopter landing zones will be utilized for helicopter take-offs and landings and the staging areas will be used for refueling areas for vehicles and construction equipment by a mobile fueling truck, pole assemblage, open storage of material and equipment, construction trailers, portable restrooms, parking, and lighting and may include generator use for temporary power in construction trailers. The staging yards may also be used as helicopter landing zones. Construction workers typically meet at the staging yard each morning and park their vehicles at the yard. In-ground fencing will be installed at the staging yards.

Warnock Staging Yard

The Warnock Staging Yard is approximately 258,311 square feet (5.93 acres). The site is located at the corner of Keyser and Warnock Roads in the unincorporated community of Ramona and can be accessed via either road.

Creelman Staging Yard

The Creelman Staging Yard is approximately 43,560 square feet (1 acre). The site is located on SDG&E-owned land at the corner of Creelman Lane and Ashley Road in the unincorporated community of Ramona and can be accessed via Ashley Road.

Woodlot Staging Yard

The Woodlot Staging Yard is approximately 27,000 square feet (0.62 acres). The site is located in a cleared storage lot off an access road. It can be accessed by either of two existing private roads from California State Route Highway (Hwy) 78 in the unincorporated community of Santa Ysabel.

Santa Ysabel Staging Yard

The Santa Ysabel Staging Yard is divided into two areas by an unpaved private road. The total area is approximately 283,140 square feet (6.5 acres). The largest area is located east of the private unpaved road leading off Grutly Street and is approximately 226,512 square feet (5.2 acres). The smaller area is west of the private unpaved road and is approximately 56,628 square feet (1.3 acres). The site is located on Grutly Street in the unincorporated community of Santa Ysabel and can be accessed via Washington Street from Hwy 78. The Santa Ysabel Staging Yard may also be used to stage helicopter operations.

Mt. Gower Helicopter Landing Zone

The Mt. Gower Helicopter Landing Zone (HLZ) is approximately 75 feet by 75 feet with a total area of approximately 5,625 square feet (0.129 acre). Helicopter landing zones are necessary to facilitate the removal and placement of poles via helicopter. This site is located in the unpaved parking area for the Mt. Gower Preserve and is accessible from Gunn Stage Road. The Mt. Gower HLZ will be utilized for the replacement of new pole(s).

Littlepage Road Helicopter Landing Zone

The Littlepage Road HLZ is approximately 200 feet by 200 feet with a total area of 40,000 square feet (0.92 acre). The site is located northeast of Pole No. P98 and is accessible from the existing access road. Vegetation communities consist of buckwheat scrub, fire-recovering coastal sage scrub, and non-native grassland, which dominate this site.

3.4.9.2 Stringing Sites

Approximately 22 stringing sites will be required and are listed as follows (refer to Appendix 3-B for graphic representation of the proposed stringing sties):

- Stringing Site No. 1 is located adjacent to Creelman Substation. Stringing Site No. 1 is approximately 4,500 square feet (0.1 acre) and will be accessed via Creelman Lane and is located in the unincorporated community of Ramona.
- Stringing Site No. 2 is located adjacent to Pole No. P3. Stringing Site No. 2 is approximately 6,000 square feet (0.14 acre) and will be accessed via Creelman Lane in the unincorporated community of Ramona.
- Stringing Site No. 3 is located adjacent to Pole No. P2. Stringing Site No. 3 is approximately 6,000 square feet (0.14 acre) and will be accessed via Creelman Lane in the unincorporated community of Ramona.

- Stringing Site No. 4 is located adjacent to Pole No. P25. Stringing Site No. 4 is approximately 2,100 square feet (0.05 acre) and will be accessed via existing SDG&E access roads in the unincorporated community of Ramona.
- Stringing Site No. 5 is located adjacent to Pole No. P29. Stringing Site No. 5 is approximately 22,500 square feet (0.52 acre) and will be accessed via existing SDG&E access roads in the unincorporated community of Ramona.
- Stringing Site No. 6 is located adjacent to Pole No. P47. Stringing Site No. 6 is approximately 16,500 square feet (0.38 acre) and will be accessed via existing SDG&E access roads in the unincorporated community of Ramona.
- Stringing Site No. 7 is located adjacent to Pole No. P47. Stringing Site No. 7 is approximately 2,100 square feet (0.05 acre) and will be accessed via existing SDG&E access roads in the unincorporated community of Ramona.
- Stringing Site No. 8 is located adjacent to Pole No. P51. Stringing Site No. 8 is approximately 2,100 square feet (0.05 acre) and will be accessed via existing SDG&E access roads in the unincorporated community of Ramona.
- Stringing Site No. 9 is located adjacent to Pole No. P64. Stringing Site No. 9 is approximately 7,500 square feet (0.17 acre) and will be accessed via existing SDG&E access roads in the unincorporated community of Ramona.
- Stringing Site No. 10 is located adjacent to Pole No. P64. Stringing Site No. 10 is approximately 11,250 square feet (0.26 acre) and will be accessed via existing SDG&E access roads in the unincorporated community of Ramona.
- Stringing Site No. 11 is located adjacent to Pole No. P65. Stringing Site No. 11 is approximately 1,200 square feet (0.03 acre) and will be accessed via existing SDG&E access roads in the unincorporated community of Ramona.
- Stringing Site No. 12 is located adjacent to pole P83. Stringing Site No. 12 is approximately 22,500 square feet (0.52 acre) and will be accessed via existing SDG&E access roads in the unincorporated community of Ramona.
- Stringing Site No. 13 is located adjacent to pole P84. Stringing Site No. 13 is approximately 22,500 square feet (0.52 acre) and will be accessed via existing SDG&E access roads in the unincorporated community of Ramona.
- Stringing Site No. 14 is located adjacent to pole P100. Stringing Site No. 14 is approximately 2,100 square feet (0.05 acre) and will be accessed via existing SDG&E access roads in the unincorporated community of Ramona.
- Stringing Site No. 15 is located adjacent to pole P100. Stringing Site No. 15 is approximately 2,100 square feet (0.05 acre) and will be accessed via existing SDG&E access roads in the unincorporated community of Ramona.
- Stringing Site No. 16 is located adjacent to Pole No. P114. Stringing Site No. 16 is approximately 22,500 square feet (0.52 acre) and will be accessed via West Side Road, a county road located in the unincorporated community of Santa Ysabel.

- Stinging Site No. 17 is located between Pole Nos. P122 and P123. Stringing Site No. 17 is approximately 2,100 square feet (0.05 acre) and will be accessed via existing SDG&E access roads located in the unincorporated community of Santa Ysabel.
- Stringing Site No. 18 is located adjacent to Pole No. P145. Stringing Site No. 18 is approximately 2,100 square feet (0.05 acre) and will be accessed via existing SDG&E access roads located in the unincorporated community of Santa Ysabel.
- Stringing Site No. 19 is located adjacent to Pole No. P146. Stringing Site No. 19 is approximately 11,250 square feet (0.26 acre) and will be accessed via existing SDG&E access roads located in the unincorporated community of Santa Ysabel.
- Stringing Site No. 20 is located adjacent to Pole No. P151. Stringing Site No. 20 is approximately 22,500 square feet (0.52 acres) in size and will be accessed via existing access roads located in the unincorporated community of Santa Ysabel.
- Stringing Site No. 21 is located adjacent to Pole No. P151. Stringing Site No. 21 is approximately 22,500 square feet (0.52 acres) in size and will be accessed via existing access roads located in the unincorporated community of Santa Ysabel.
- Stringing Site 22 is located adjacent to Pole No. P163 inside the Santa Ysabel Substation. Stringing Site No. 22 is approximately 22,500 square feet (0.52 acre) in size and will be accessed via existing access roads located in the unincorporated community of Santa Ysabel.

Additional or other stringing sites may be identified during construction.

3.4.9.3 Pole Sites

Work areas for each type of pole will vary but will be confined to the previously disturbed areas around the bases of the existing poles to the extent possible in order to provide a safe and adequate workspace. The temporary impact area for directly-embedded poles is approximately 304 square feet, and approximately 309 square feet for modified directly-embedded poles.

The positioning of construction equipment (typically line trucks, bucket trucks, and crane trucks) will involve the placement of approximately four outriggers (per vehicle) with dimensions of approximately 2 feet wide by 3 feet long (6 square feet) per outrigger for line trucks, and 4 feet wide by 4 feet long (16 square feet) per outrigger for crane trucks. The locations of the construction vehicles are dependent upon the contractor safely performing the work. The impacts from outriggers staged outside delineated temporary work areas will be evaluated by the onsite biological monitor prior to their placement (as outlined within *SDG&E's Subregional NCCP*). The monitor, as appropriate, will assist crews in outrigger placement to avoid and minimize impacts to sensitive habitat types. In order to maintain a safe working space for crewmembers working directly under all poles anticipated to be replaced, construction vehicles may need to be staged off existing access roads and/or outside delineated temporary work areas when new poles are being placed. These impact areas cannot be accurately anticipated prior to construction, so their impacts will not be identified herein with respect to habitat type; however, the onsite biological monitor will assist crews in locating appropriate staging areas for construction vehicles that avoid and minimize impacts to sensitive habitat types. All final impacts are recorded within the post-construction report prepared pursuant to *SDG&E's Subregional NCCP Implementing Agreement*.

3.4.9.4 Guard Structures

Often, bucket trucks are utilized as guard structures during stringing activities. Where wooden poles are used as guard structures, installation requires the temporary use of approximately 36 square feet of area for a single-pole guard structure and approximately 72 square feet of area for an h-frame guard structure. The temporary work area is located in the immediate vicinity of the guard structure location. No permanent impacts would result from the utilization of guard structures.

3.4.9.5 Temporary Right-of-Way

Construction is anticipated to occur both within and outside of existing ROW. However, no temporary construction easements are anticipated to be required.

3.4.9.6 Access

Construction will primarily take place within the existing SDG&E ROW easements. Most sites/pole locations are accessible by vehicle on unpaved SDG&E-maintained access roads or by overland travel. Other areas without road access will be accessed via footpaths or by helicopter. To enable crews and equipment to access the associated poles, 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's Subregional NCCP*. SDG&E is not required to mitigate for impacts to vegetation resulting from road maintenance (i.e., re-establishing) of existing access roads. No new access roads will be established. Cleared vegetation will be removed from the project site and disposed of at an approved offsite facility. Vehicles will remain within existing access roads, previously disturbed areas, and designated temporary work areas, where feasible. At designated drainage crossing locations along the access roads, the blade of the equipment will be lifted 25 feet on either side of the drainage to avoid impacts to the drainage. Temporary bridging of drainage crossings may be utilized wherever feasible.

Approximately seven footpaths are required to access poles that are not accessible by road. These footpaths will be approximately 2 to 4 feet wide. At this time, one footpath will require minor vegetation trimming (refer to Appendix 3-A). Additional footpaths may be required.

3.4.9.7 Underground Distribution and Fiber Optic Lines

Construction of new underground distribution and fiber optic line segments will require room for the safe operation of construction equipment and personnel. The underground line construction included as part of the Proposed Project will utilize the cut and cover construction method, which typically requires 10 to 12 feet of space for construction, but can in some cases be limited to less space depending upon physical constraints. The areas of underground distribution and fiber optic line are described in Appendix 3-A and depicted on Detailed Route Map in Appendix 3-B.

3.4.10 Road Crossings

Typically, guard structures are used for larger road crossings and traffic control is utilized for locations where overhead lines cross smaller roads. Where traffic control is utilized at crossings, encroachment permits are required from the applicable municipal agency. Guard structures are

discussed in Section 3.4.8.4 above. However, special conditions exist for freeway crossings such as where the Proposed Project route crosses Hwy 78, which is under the jurisdictional authority of the California Department of Transportation (Caltrans). SDG&E has previously acquired approval from Caltrans to complete Proposed Project construction activities at this location, however, this approval expired at the end of the 2012 calendar year and SDG&E has requested an extension from Caltrans for this approval (see Section 3.11, Required Approvals).

3.4.11 Helicopter Usage during Power Line Construction

Helicopters may be utilized as a construction tool to set new poles or during stringing of overhead conductor cable associated with the Proposed Project. SDG&E anticipates that light- or medium-duty helicopters (e.g. K-Max and A-star) helicopters will be utilized. Helicopters will only be utilized during daylight hours, and flight paths will be limited to the existing power line ROW except for ingress and egress from the helicopter landing/staging yards. All helicopter utilization will be compliant with all relevant usage permits including Federal Aviation Administration (FAA) and Caltrans.

3.4.12 Site Cleanup

SDG&E will restore all areas that are temporarily disturbed by the Proposed Project activities (including stringing sites, structure removal sites, and staging areas) to approximate pre-construction conditions following the completion of construction. Restoration could include reseeded, planting of replacement vegetation, or replacement of structures (such as fences), as appropriate. In addition, all construction materials and debris will be removed from the Proposed Project area and recycled or properly disposed of off-site. SDG&E will conduct a final survey to ensure that cleanup activities are successfully completed as required.

3.4.13 Retired Structures/Poles, Materials, and Components

It is SDG&E’s policy to re-use or recycle all old structures/poles, materials, and components following the retirement of substations, power lines, and structures/poles. Whatever cannot be re-used or recycled is disposed of at an appropriate facility pursuant to all relevant laws. Table 3-1, Common Destination of Retired Project Components, outlines how some major retired project components are often disposed of following construction.

Table 3-1: Common Destination of Retired Project Components

Project Structure, Material, or Component	Common End Use or Destination
Wood power line structures/poles	Donated for re-use or sanitary disposal
Conductor cable	Recycled
Insulators	Sanitary disposal
Scrap steel, copper and other metal	Recycled
Concrete	Recycled
Soils	Re -used onsite or disposed of pursuant to relevant laws
Batteries	Recycled
Source: SDG&E	

3.4.14 Construction Equipment and Personnel

3.4.14.1 Construction Personnel

Construction of the Proposed Project may require multiple four- to six-person crews and associated equipment. Also present throughout construction will be environmental monitors, construction inspectors, and SDG&E personnel. These crews may work simultaneously at various points along the Proposed Project route, with up to approximately 140 people (including construction crews, monitors, and all other support staff) working at one time. SDG&E will supplement its workforce as required during construction from a contractor's pool of experienced personnel.

3.4.14.2 Construction Equipment

Table 3-2, Standard Construction Equipment and Usage lists the typical construction equipment that could be utilized for the Proposed Project and their respective uses with respect to the Proposed Project scope.

Table 3-2: Standard Construction Equipment and Usage

Equipment Type	Equipment Use
2-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 augur	Excavate for direct-bury 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

Table 3-2 (cont): Standard Construction Equipment and Usage

Equipment Type	Equipment Use
Pickup trucks	Transport construction personnel
Portable generators	Operate power tools
Pulling rig	Pull conductor
Tool van	Tool storage
Tractor/Trailer Unit	Transport materials at structure sites and staging yards
Water truck	Dust control
Wire truck	Hold spools of wire
Source: SDG&E	

3.5 CONSTRUCTION SCHEDULE

SDG&E estimates that construction of the Proposed Project will take a total of approximately 9 months to complete, depending on outages. Construction is scheduled to begin in January 2014 and run through September 2014. The complete construction schedule, outlined by task, is summarized in Table 3-3, Proposed Construction Schedule, below.

Table 3-3: Proposed Construction Schedule

Proposed Project Segment/Task	Approximate Duration (Months)	Anticipated Start Date¹
Micropile foundation drilling and grouting	3	January 2014
Cap and testing	0.5	March 2014
Directly-embedded pole – hole excavation	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
Clean-up	1	August 2014
Notes: ¹ Pending acquisition of all required approvals. Source: SDG&E		

3.6 PERMANENT LAND AND RIGHT-OF-WAY REQUIREMENTS

Table 3-4, Permanent Land and ROW Requirements, outlines the anticipated new land and ROW required for the Proposed Project.

Table 3-4: Permanent Land and ROW Requirements

Proposed Project Component	Approximate Area (feet)	Approximate Area (acres)
TL 637 Wood-to-Steel	None	None
Creelman and Santa Ysabel Substations	None	None
Distribution Lines	None	None
Fiber Optic Line	None	None

Source: SDG&E

3.7 OPERATION AND MAINTENANCE (EXISTING AND PROPOSED)

The Proposed Project will replace existing electric power line and distribution facilities within an existing utility corridor. SDG&E currently operates and maintains these facilities consistent with the ordinary operating restrictions described in Section 3.8. These ordinary restrictions include standard protocols and procedures, such as *SDG&E's Subregional NCCP*, which is described in greater detail in Section 4.4, Biological Resources, as well as other ordinary operating restrictions that have been developed to avoid and minimize environmental impacts and to comply with applicable environmental laws and regulations. No change in SDG&E's operations and maintenance practices and restrictions is anticipated or included as part of the Proposed Project. As noted in Section 3.8, the existing operating practices and restrictions have been incorporated into the design of the Proposed Project and are also reflected in the baseline from which impacts of the Proposed Project have been evaluated.

SDG&E will continue to regularly inspect, maintain, and repair the reconstructed power line and distribution facilities and substations following completion of Proposed Project construction. Operations and maintenance activities would not increase in intensity, frequency or duration with implementation of the Proposed Project and would be substantially similar to existing operations and maintenance activities. Typical activities involve both routine inspections and preventive maintenance to ensure service reliability, as well as emergency work to maintain or restore service continuity. SDG&E performs aerial and ground inspections of Proposed Project facilities and patrols aboveground components annually. Inspection for corrosion, equipment misalignment, loose fittings, and other common mechanical problems is performed at least every three years (per G.O. 165) for power lines.

SDG&E uses helicopters in the visual inspection of overhead facilities. SDG&E patrols each electric power line annually or as required via helicopter. SDG&E may also use helicopters to deliver equipment, position poles and structures, string lines, and position aerial markers, as required by FAA regulations. SDG&E's Transmission³ department uses helicopters for patrolling power lines during trouble jobs (e.g., outages/service curtailments) in areas that have no vehicle access or rough terrain. For patrolling during such jobs, the helicopter picks up the

³ The term "Transmission" as used within this section of the PEA refers to internal SDG&E operating departments and is not intended to suggest that TL 637 is designed for immediate or eventual operation at 200kV or above.

patrolman at the district yard. For new construction or maintenance, the helicopter needs a flat staging area for fueling and picking up material, equipment, and personnel. The area required for small helicopter staging is generally 100 feet by 100 feet. The size of the crew needed varies from four to 10 crewmembers, two helicopter staff, and a water truck driver to apply water for dust control at the staging area. Most helicopter operations take only one day.

SDG&E maintains a clear working space area around certain poles pursuant to requirements found within G.O. 95 and Public Resources Code (PRC) 42.92. SDG&E keeps these areas clear of shrubs and other obstructions for fire prevention purposes. In addition, vegetation that has a mature height of 15 feet or taller are not allowed to grow within 10 horizontal feet of any conductor within the ROW for safety and reliability reasons.

Typical power line operation and maintenance activities include security and other inspections, ROW and access repairs, pole brushing in accordance with fire break clearance requirements, herbicide application, emergency and non-emergency repairs and replacements, insulator washing, and tree trimming. These activities are performed on an as needed basis.

As to substation operations and maintenance, both the Creelman and Santa Ysabel Substations will continue to be operated and maintained consistent with current substation operations. In general, routine substation operations will be the same as what occurs at the existing substations. Maintenance activities will include equipment testing, equipment monitoring and repair, and emergency and routine procedures for service continuity and preventive maintenance. Typically, a major maintenance inspection will take place annually for approximately one week.

Routine vegetation clearing would continue to occur at each substation on an as-needed basis for purposes of safety, access, and aesthetics. Vegetation clearing activities would typically involve the presence of one to two small maintenance vehicles and one or more employees to clear or trim vegetation to achieve the minimum working space around the substation facilities.

3.8 PROJECT DESIGN FEATURES AND ORDINARY CONSTRUCTION/OPERATING RESTRICTIONS

The Proposed Project includes design features and ordinary construction and operating restrictions that avoid and minimize environmental impacts. The design features and ordinary construction and operating restrictions incorporated into the Proposed Project include measures that are routinely implemented by SDG&E on other projects that involve ground disturbance. Many of these features and restrictions have been developed over time to avoid and minimize environmental impacts, to comply with *SDG&E’s Subregional NCCP*, and to comply with applicable environmental laws and regulations. Consistent with its existing operations and maintenance practices, SDG&E will implement these operating restrictions as appropriate during construction, operation, and maintenance to avoid and minimize potential environmental impacts.

Many of the design features and ordinary construction and operating restrictions incorporated into all phases of the Proposed Project are described below.

- **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.
- **Steel structures.** New structures are designed utilizing steel to avoid potential adverse effects relating to fire and fire damage.
- **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 stand-by firefighters and fire engines. In addition, portions of the Proposed Project occurring within the Cleveland National Forest must abide by the *Cleveland National Forest Fire Plan*. 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 minimization measures will avoid and minimize fire risks as outlined in the *TL 637 Project Fire Plan* and the *Cleveland National Forest Fire Plan*.
- **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 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 Pre-activity 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 (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 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.** 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.
 - **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.
 - **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.

- **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.
- **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-enter 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.
- **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.

- **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. 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.
- **SDG&E Water Quality Construction BMP 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 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.
- **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.

- **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 staging yard from public vantage points such as roads, residences, and public vantage points.
- **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 preconstruction 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.
- **Soil stabilization.** Once temporary surface disturbances are complete, areas that would not be subject to additional disturbance will be stabilized to control soil erosion.
- **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.
- **Mufflers.** Functioning mufflers will be maintained on all equipment.
- **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.
- **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.
- **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 re-location of residents and/or the use of portable noise barriers.
- **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.
- **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.
- **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.
- **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.

- **Encroachment permits.** SDG&E will obtain the required encroachment permits from Caltrans for work near Hwys 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.

3.9 APPLICANT PROPOSED MEASURES

Applicant Proposed Measures (APMs) are measures that have been identified and developed specifically for a given project during the preparation of the PEA. APMs are typically applied to project-related activities to avoid potential project-specific impacts, or ensure that potential project-specific impacts remain less than significant where they cannot be avoided. With implementation of project design features and SDG&E’s ordinary construction and operating restrictions, no APMs are required; therefore none are proposed as part of the Proposed Project.

3.10 ELECTRIC AND MAGNETIC FIELDS

A specific report concerning electric and magnetic fields for the Proposed Project can be found in Appendix 3-D, Detailed Magnetic Field Management Plan.

3.11 REQUIRED APPROVALS

The CPUC is the lead California agency for the Proposed Project. SDG&E must comply with the CPUC’s G.O. No. 131-D, which contains the permitting requirements for the construction of the Proposed Project. This PEA is being prepared as part of an application to obtain a PTC for the Proposed Project.

In addition to the PTC, SDG&E has obtained (or will obtain) approval for the Proposed Project from other Federal, State, and local agencies. Table 3-5, Anticipated Permit, Approval, and Consultation Requirements identifies these other permits, approvals, and licenses that SDG&E has obtained for the Proposed Project. Some of these required approvals are further detailed in the following subsections.

3.11.1 Cleveland National Forest

An approximately 2,000 foot segment of TL 637 crosses a corner of the Cleveland National Forest. This segment includes two poles (Pole Nos. P115 and P116) that do not need to be replaced as part of the Proposed Project. Both of these poles were previously replaced through the Corrective Maintenance Program. The two Cleveland National Forest pole replacements were approved by the Cleveland National Forest (both Descanso and Palomar Districts) on August 30, 2011 and the poles were replaced. Replacement of these poles was completed on February 27, 2012.

3.11.2 U.S. Bureau of Land Management and County of San Diego

TL 637 crosses the Mount Gower and Simon Preserves. The Mt. Gower Preserve is owned by BLM and managed by the County of San Diego. The Simon Preserve is owned and managed by

the County of San Diego. The Proposed Project triggered an amendment to the BLM ROW grant, which was recently renewed in August 2011 and amended in May 2012. SDG&E's easement crossing the Simon Preserve, acquired in 1959, pre-dates ownership of this area by the County of San Diego.

To obtain BLM approval, SDG&E filed an SF-299 application with all applicable exhibits and environmental and cultural reviews. BLM issued the ROW amendment on June 1, 2012 pursuant to a categorical exclusion from the National Environmental Policy Act (NEPA).

No further action was needed for the 1959 easement through the Simon Preserve. An on-site coordination meeting was conducted on April 25, 2012 by SDG&E staff with attendance from BLM and County of San Diego staff to demonstrate how SDG&E would conduct work for the Proposed Project while continuing to allow public access to the County preserves and trails.

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Table 3-5: Anticipated Permit, Approval, and Consultation Requirements

Permit/Approval/Consultation	Agency	Jurisdiction/Purpose	Permit Status
Federal Agencies			
NEPA Compliance, ROW Grant amendment	BLM	Construction on BLM managed lands.	Approval obtained
Clean Water Act Section 404	United States Army Corps of Engineers	Impacts to waters of the U.S.	Coverage under non-notifying Nationwide Permit No. 12.
State Agencies			
PTC	CPUC	Overall project approval and CEQA review	PEA submitted as part of PTC application
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 one acre of land	Not yet applied for
Section 401 Water Quality Certification	Regional Water Quality Control Board	Impacts to waters of the U.S.	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

3.12 REFERENCES

San Diego Gas & Electric Company. December 15, 1995. *Subregional Natural Community Conservation Plan*.

San Diego Gas & Electric Company. July, 2009. *Electric Standard Practice No. 113.1 – Wildland Fire Prevention and Fire Safety*.

San Diego Gas & Electric Company. December 2012. *Fire Prevention Plan*.

San Diego Gas & Electric Company. January 2013. *TL 637 Project Fire Plan*.

4.0 ENVIRONMENTAL IMPACT ASSESSMENT

This section of the PEA presents an evaluation of the potential impacts associated with the Proposed Project for identified environmental resource areas derived from CPUC requirements, Public Utilities Commission Section 1001-1013, and CEQA requirements, PRC Section 21080 et seq.

For each resource area, the analysis includes a description of the existing environment and an evaluation of potential adverse and beneficial environmental consequences (also referred to as environmental impacts or effects) associated with the construction, operation and maintenance of the Proposed Project. In general, construction-related impacts discussed within the PEA are those temporary impacts that could occur as a result of construction activities. However, permanent impacts to biological resources are discussed as construction impacts (see Section 4.4, Biological Resources) in order to maximize consistency with the *SDG&E Subregional NCCP*, which addresses avoidance and minimization of biological resources for all of SDG&E's activities relating to the Proposed Project. Operations and Maintenance-related impacts discussed within the PEA are those permanent (or on-going) impacts that result from the operation and maintenance of the Proposed Project facilities following completion of construction. To the extent operation and maintenance of the Proposed Project will occur in the same location as existing facilities and would have the same or substantially the same impacts, would have the same or less frequency and duration as operation and maintenance activities of the existing facilities, such activities are incorporated into the existing environmental setting and baseline for assessing impacts. Cumulative impacts are considered to account for other activities in the area which, when considered together with the Proposed Project, could potentially compound or increase environmental impacts.

The analyses presented in this section are based on the following: (1) details of the Proposed Project as presented in Section 3.0, Proposed Project Description; (2) requirements under CEQA and the *CEQA Guidelines*; (3) CPUC requirements, including G.O. 131-D and guidance materials; and (4) consideration of input from responsible and reviewing agencies.

Potential impacts are identified and evaluated based upon the significance criteria outlined in Appendix G of the *CEQA Guidelines*. A completed CEQA checklist for each resource area is provided at the beginning of each resource chapter. For example, the completed aesthetics CEQA checklist is provided on Page 4.1-1 of the Aesthetics Section of the PEA.

The individual impact assessments for each of the resource areas are organized within Section 4 of this PEA as follows:

- 4.1 – Aesthetics
- 4.2 – Agriculture and Forestry Resources
- 4.3 – Air Quality and Greenhouse Gases
- 4.4 – Biological Resources

- 4.5 – Cultural Resources
- 4.6 – Geology, Soils, and Mineral Resources
- 4.7 – Hazards and Hazardous Materials
- 4.8 – Hydrology and Water Quality
- 4.9 – Land Use and Planning
- 4.10 – Noise
- 4.11 – Population and Housing
- 4.12 – Public Services
- 4.13 – Recreation
- 4.14 – Transportation and Traffic
- 4.15 – Utilities and Service Systems
- 4.16 – Cumulative Impacts

Technical support and reference for the impact assessments are provided in the following technical appendices:

- Appendix 4.3-A: Emissions Calculations
- Appendix 4.4-A: Biological Technical Report
- Appendix 4-5-A: Paleontological Resources Record Search
- Appendix 4.7-A: Regulatory Database Search Results
- Appendix 4.7-B: Cleveland National Forest Fire Plan
- Appendix 4.7-C: TL 637 Project Fire Plan

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4.1 AESTHETICS

Would the project:		Potentially Significant Impact	Potentially Significant Unless APMs Incorporated	Less than Significant Impact	No Impact
a.	Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b.	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c.	Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d.	Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

4.1.1 Introduction

This section of the PEA describes the existing conditions relating to visual and aesthetic resources within the Proposed Project area and potential impacts to these resources that could result from the construction, operation, or maintenance of the Proposed Project.

Visual or aesthetic resources are generally defined as both the natural and built features of the landscape that are seen and that contribute to the public’s experience and appreciation of the environment. Visual resource or aesthetic impacts are generally defined in terms of a project’s physical characteristics and potential visibility and the extent to which its presence would alter the perceived visual character and quality of the environment. The Proposed Project will replace an existing 69kV wood pole power line and 12kV distribution facilities with weathering steel facilities. Weathering steel poles are brownish in color and have the appearance of wood poles. Potential impacts of the Proposed Project to aesthetic resources will be less than significant.

4.1.2 Methodology

The visual analysis is based on review of technical data including Proposed Project maps and drawings provided by SDG&E, aerial and ground level photographs of the Proposed Project area, local planning documents, and computer-generated visual simulations. Field observations were conducted in November 2012 to document existing visual conditions in the Proposed Project area and to identify potentially affected sensitive viewing locations. The identified sensitive viewing locations consider CEQA criteria as well as input received from the CPUC and include the following:

- Locations along designated scenic roadways;
- Recognized Scenic Vista points;

- Nearby residences within the communities of Ramona and Santa Ysabel; and
- Publicly accessible locations where visible Proposed Project changes include increased pole heights.

This visual study employs assessment methods based, in part, on the U.S. Department of Transportation (DOT), Federal Highway Administration’s (FHWA), and other accepted visual analysis techniques as summarized by Smardon, et al. (1986). This study also addresses the *CEQA Guidelines* for visual impact analysis. Included are systematic documentation of the visual setting and an evaluation of visual changes associated with the Proposed Project. In order to convey a sense of existing visual conditions, a set of 18 photographs depict representative public views of the Proposed Project area. As depicted in these photographs, public views of the Proposed Project area currently include electric power, distribution, and substation facilities. These existing conditions constitute the baseline from which visual impacts are evaluated.

Consistent with FHWA methods, this impact analysis describes changes to existing visual resources and assesses viewer response to that change. Central to this assessment is an evaluation of representative views from which the Proposed Project would be visible to the public. In order to document the visual change that would occur, visual simulations, presented as before and after images, show the Proposed Project from key representative public viewpoints, or Key Observation Points (KOPs). The visual impact assessment is based on evaluation of the changes to the existing visual resources that would result from construction and operation of the Proposed Project. These changes were assessed, in part, by evaluating the after views provided by the computer-generated visual simulations and comparing them to the existing visual environment.

4.1.2.1 Visual Simulation Methods

Visual simulations were produced using computer-modeling and rendering techniques. The simulations illustrate the visual change associated with the Proposed Project as seen from publicly accessible KOPs within the Proposed Project area. Taken together, the set of simulations illustrate the representative visual change associated with the Proposed Project. The KOP locations were selected to represent sensitive viewing locations, as described in Section 4.1.2, and to represent the largest number of affected viewers.

The visual simulations are the results of an objective computer modeling process; the technical methods employed for producing the computer-generated simulation images are outlined below.

High resolution digital photographs were taken using a single lens reflex camera with a 50 millimeter lens or equivalent which represents a horizontal view angle of 40 degrees. Systematic documentation of photography viewpoint locations included Global Positioning System (GPS) recording and photo log sheet and basemap annotation. Three-dimensional computer modeling for proposed power line and distribution structures, developed using engineering design data supplied by SDG&E, was combined with geographic information system (GIS) and engineering data and digital aerial photographs of the existing site to produce digital modeling for visual analysis and simulation of the Proposed Project. For the simulation viewpoints, photograph locations were incorporated based on GPS field data, using 5 feet as the assumed eye level.

Computer "wireframe" perspective plots were overlaid on the photographs to verify scale and viewpoint locations. Digital visual simulation images were then produced based on computer renderings of the 3-D modeling combined with selected digital site photographs. The final "hardcopy" visual simulation images contained in this visual analysis were printed from the digital image files and produced in color on 11x17 inch sheets. The simulation figures present two images per sheet - an existing view with a simulation below that portrays the Proposed Project from the corresponding KOP. A summary of the five simulation views and a description of the particular Proposed Project changes portrayed in each of the views are included in Section 4.1.4.

4.1.3 Existing Conditions

4.1.3.1 Regional and Local Landscape Setting

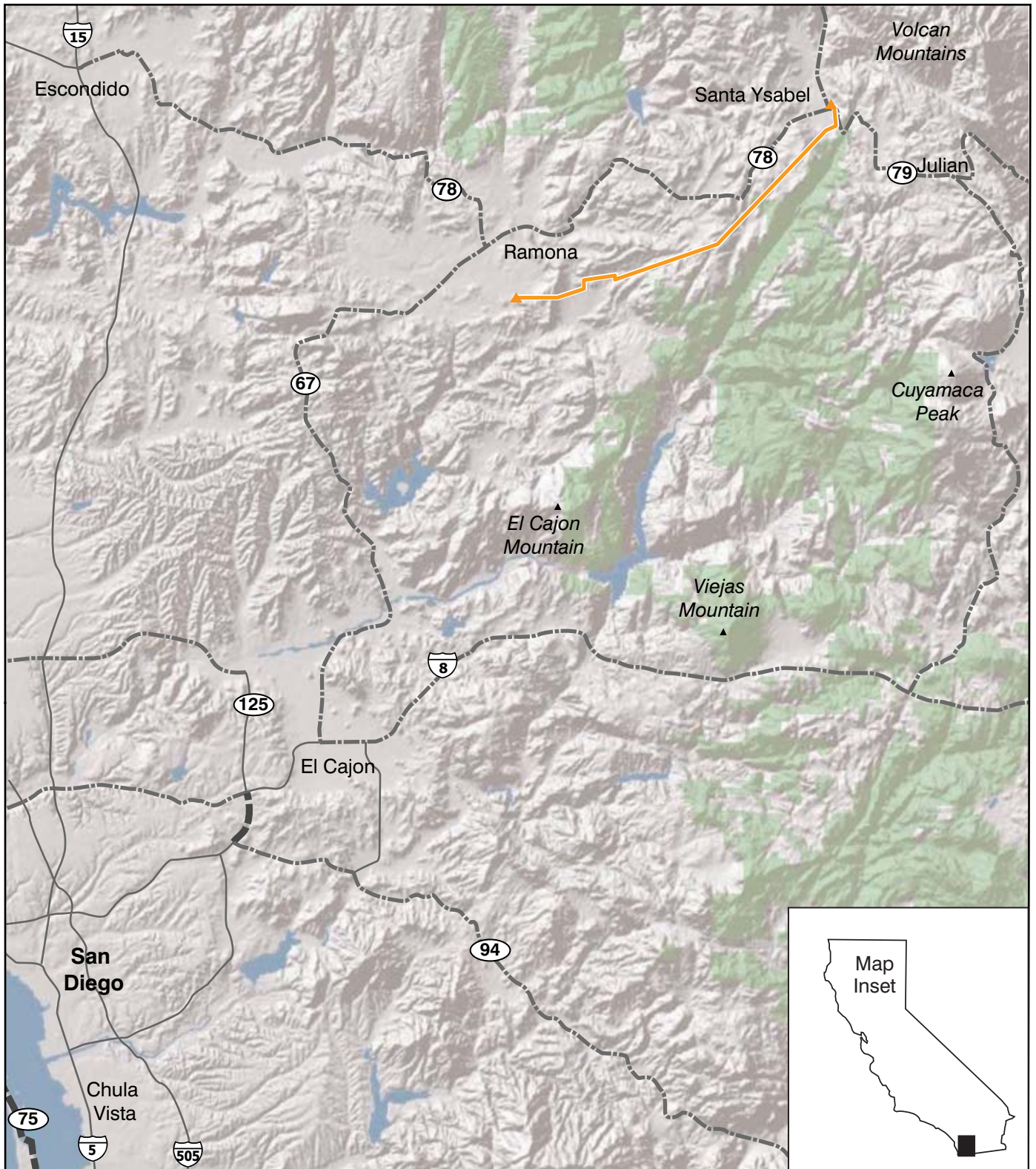
The Proposed Project is situated in central San Diego County, in an area of undulating terrain dominated by the Laguna Mountains. Ranging in elevation from 1,000 to over 6,500 feet, the mountains are topographically part of the Peninsular Ranges Province which extends to the tip of Baja California. The rugged Laguna Mountains landform is characterized by jagged rock outcroppings that contrast with more undulating terrain. The predominant orientation of the mountains is north-south. Although rainfall in the region is limited, pronounced variations in precipitation occur from west to east, giving way to increasingly arid conditions as one proceeds inland (east). The landscape of the western slopes includes numerous seasonal watercourses and rivers, many of which have been dammed. The relative density and texture of vegetation, and the amount of exposed rock in evidence combine to result in areas of strong visual contrasts within the landscape. The region's environmental setting enables a number of discrete vegetation communities to coexist in relatively close proximity, including savannah-like woodlands and riparian communities that include grassland and meadows, adjacent to the numerous streams and seasonal watercourses that bisect the western areas. Figure 4.1-1, Regional Landscape Context, shows the Proposed Project's regional context.

The Proposed Project begins in Ramona, an unincorporated rural community located near the eastern edge of suburban San Diego County, and from Creelman Substation it extends northeast for approximately 14 miles through hilly, largely undeveloped terrain. The route crosses county parkland and a BLM-owned open space preserve as well as ranch land and other undeveloped private lands. A small part of the Proposed Project (approximately 2,000 linear feet and two steel power line poles) is within the Cleveland National Forest. In limited areas, the Proposed Project passes residential development and limited commercial use near the Santa Ysabel Substation.

Landform along the route gradually rises from west to east and elevations range from approximately 1,500 to almost 3,200 feet above sea level. Vegetation in the Proposed Project area includes limited areas of ornamental residential landscaping and consists primarily of grazing land and expanses of open land with native coastal scrub/chaparral.

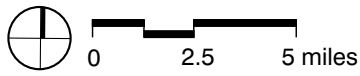
Nighttime lighting in the Proposed Project area includes street lighting, as well as localized lighting sources associated with limited residential and commercial development.

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**SDG&E Tieline 637 Wood to Steel Project
Regional Landscape Context**

Figure 4.1-1



SDG&E is providing this map with the understanding that it is not survey grade.

- Cleveland National Forest
- Eligible State Scenic Highway
- Designated State Scenic Highway
- Project Route
- Substation

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BACK OF FIGURE 4.1-1

4.1.3.2 Proposed Project Viewshed

The Proposed Project viewshed is defined as the general area from which the project is visible or can be seen. For purposes of describing a project's visual setting and assessing potential visual impacts, the viewshed can be broken down into distance zones of foreground, middleground, and background. The foreground is defined as the zone within a quarter to a half-mile from the viewer. Landscape detail is most noticeable and objects generally appear most prominent when seen in the foreground. The middleground can be defined as a zone that extends from the foreground up to three to five miles from the viewer, and the background extends from about three to five miles to infinity.

Analysis of the project primarily considers the potential effects of project elements on foreground viewshed conditions, although consideration is also given to middleground and background views. As described below, the Proposed Project will be visible from some nearby locations along public roads. In addition, it will be seen from limited residential and public recreation areas. At many locations intervening natural landforms will partially or fully screen public views of the Proposed Project. In addition, Proposed Project visibility will be limited where it blends in with surrounding or backdrop vegetation and landforms in many areas. Given these conditions as well as the length of the overall Proposed Project alignment, the Proposed Project will not be visible in its entirety from any single viewing location.

Within the Proposed Project area, power and distribution structures, including substations, steel and wood poles and overhead conductors associated with existing power lines including the Proposed Project, are established features seen within the landscape setting.

4.1.3.3 Landscape Units and Representative Views

A set of five distinct sub-areas, or landscape units, have been identified for purposes of documenting and describing the Proposed Project's foreground viewshed. Table 4.1-1, Summary of Landscape Units, summarizes the landscape units identified within the Proposed Project viewshed. Figure 4.1-2, Photograph Viewpoint Locations, delineates the Proposed Project route, and photograph viewpoint locations. Figures 4.1-3a through 4.1-3i, Photographs of Existing Facilities and Environmental Setting, present a set of 18 photographs that show representative visual conditions and existing public views within the Proposed Project area, from the points shown on Figure 4.1-2.

As depicted in the photographs of representative views, existing electric utility facilities (including 69kV power lines, 12kV distribution lines and substation facilities) are visible in all of the landscape units and throughout the entire Proposed Project area.

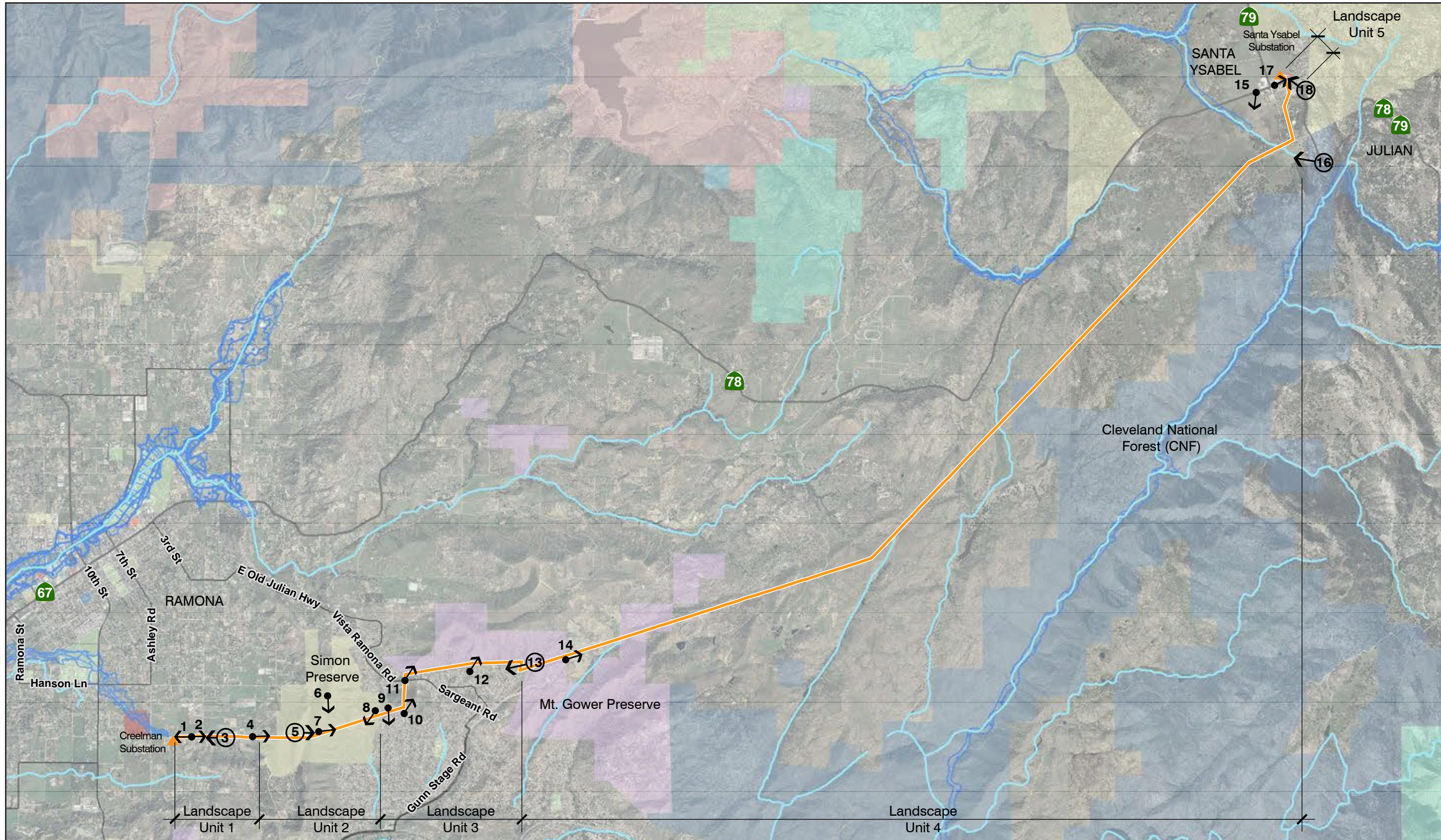
Table 4.1-1: Summary of Landscape Units

Landscape Unit (Approximate length/size)	Primary Affected Viewers	Representative Photograph Numbers*	Representative Simulation Figure
1. Ramona community (approximately 1 mile)	Residents, motorists	1 through 4	4.1-4
2. Simon Preserve (approximately 1.3 miles)	Recreationalists	5 through 8	4.1-5
3. San Diego Country Estates subdivision (approximately 2 miles)	Residents, motorists, and recreationalists	7, 9 through 12	4.1-6
4. Mt. Gower Preserve, Cleveland National Forest land, and rural areas (approximately 10 miles)	Recreationalists, motorists, and residents	13 through 16	4.1-6 and 4.1-7
5. Santa Ysabel (approximately 0.15 mile)	Motorists, residents and limited number of commercial users	17 and 18	4.1-8
* Refer to Figure 4.1-2 for viewpoint locations			

Landscape Unit 1: Ramona Community (Photographs 1 through 4)

Located in the community of Ramona, Landscape Unit 1 lies within a low density, semi-rural residential area with agricultural uses such as crop cultivation and cattle pastures. Residential properties with ample setbacks are located along Creelman Lane, a rural road that is private and unpaved in the area from the Creelman Substation east to the intersection of Keyes Road. From Keyes Road east to its terminus, Creelman Lane is a paved public road. At the eastern end of this landscape unit the Proposed Project route lies between a residential area and Simon Preserve, a County open-space park. The Proposed Project route includes 14 existing poles that will be replaced within this approximately 1-mile landscape unit. Two temporary staging areas will be located west of this unit in a similar landscape.

The four representative photographs discussed below are views taken from places along Creelman Lane. Photograph 1 is a view looking west along the route toward the substation. From this location the substation is largely screened by mature trees and vegetation located on the nearby residential property. On the left side of this view the upper portions of poles situated in the substation can be seen above the vegetation, and, along the road wood power poles and overhead lines are prominent in the foreground with a distant hillside partially visible in the backdrop. Photograph 2, taken from the same location as the previous photograph, is a view looking east along the route that shows a nearby residence and mature roadside vegetation with overhead conductors, a steel distribution pole on the right and wood poles on both sides of the road. Further away poles can also be seen on the hillside, silhouetted against the sky as the route enters Simon Preserve.



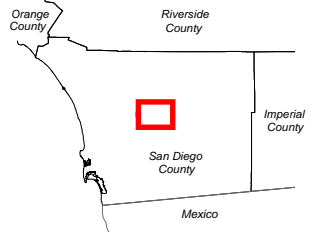
0 2,000 4,000 8,000 Feet

 1 inch = 5,000 feet @ 11" X 17"

 SDG&E is providing this map with the understanding that it is not survey grade.

 ENVIRONMENTAL VISION

 021413



- 1 ● → Viewpoint Location and Direction
- ← 13 Simulation Viewpoint Location and Direction
- TL 637 Project Route
- ▲ Substation

- Land Ownership**
- SDG&E Fee Owned, Leased
 - U.S. Forest Service
 - Bureau of Land Management
 - Department of Defense
 - BIA Trust Land
 - U.S. Fish & Wildlife Service
 - Other Federal
 - State
 - State Parks

SDG&E Tieline 637 Wood to Steel Project
 Photograph Viewpoint Locations
Figure 4.1-2

LAND SERVICES GIS
 Geospatial Information Systems
 5555 La Jolla Village Drive
 San Diego, CA 92161
 (619) 594-8800
 lsgis@sempra.com



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BACK OF FIGURE 4.1-2



Photograph 1. Creelman Lane at Sixes Court looking west toward substation (Landscape Unit 1)



Photograph 2. Creelman Lane at Sixes Court looking east (Landscape Unit 1)

Refer to Figure 4.1-2 for photograph viewpoint locations



Photograph 3. Creelman Lane east of Keyes Road looking west (Landscape Unit 1) *



Photograph 4. Creelman Lane near Big Sky Road looking east (Landscape Unit 1)

* Simulation View

Refer to Figure 4.1-2 for photograph viewpoint locations

Figure 4.1-3b
Photographs of Existing Facilities and Environmental Setting
SDG&E Tieline 637 Wood-to-Steel Project

Photograph 3, taken from east of Keyes Road, shows open pasture in the foreground on both sides of the road and a variety of mature landscaping along the roadside. From this location wood power poles are visible on the right (north) side of the road; further west, the route crosses over Creelman Lane. A separate set of wood poles and overhead lines parallel the left (south) side of the road. The roadside landscaping partially screens some of the power poles. Photograph 4 is a view near Big Sky Road and an adjacent residential property that shows a paved roadway and residential landscaping in the foreground with an unobstructed view of the power line as it heads east over the hill into the Simon Preserve. Wood poles are visible against a combination of sky and hillside backdrop.

Primary viewers in this landscape unit include residents on Creelman Lane and nearby streets as well as local motorists traveling on nearby rural roads.

Landscape Unit 2: Simon Preserve (Photographs 5 through 8)

This landscape unit is comprised of the Simon Preserve, a 617-acre hillside County preserve and open space with recreational trails for use by hikers, equestrians, and cyclists. Primary access to the preserve is from Bassett Street in San Diego Country Estates subdivision, although additional access points are located in the surrounding residential area. The elevation along this portion of the route varies between approximately 1,500 and 2,000 feet. There is also a small semi-rural residential area located at the western end of this unit. Within this 1.3-mile landscape unit, the Proposed Project route includes 21 existing poles that will be replaced.

From the edge of the community of Ramona, the Proposed Project route runs east into Simon Preserve, an area dominated by grassland and coastal scrub/chaparral mix with few canopy trees. From places within the Simon Preserve, trail panoramic views include open vistas toward distant landscape features including to Cuyamaca Peak (elevation: 6,512 feet) in the east, El Cajon Mountain (3,677 feet) in the south, and mountains at the edge of the coastal plateau. The four photographs discussed below represent views from locations along recreation trails within Simon Preserve.

Photograph 5 from the western portion of the Simon Preserve shows open grassland in the foreground with hillsides and distant mountains including Cuyamaca Peak in the backdrop. Two wood poles of the Proposed Project route are noticeable in the foreground; the closest structure appears against a landscape backdrop while the other is seen against a combination of hillside and sky. Photograph 6, taken near Ramona Peak at approximately 2,100 feet in elevation, shows a panoramic landscape view with the Proposed Project line visible near the center of the view against a landscape backdrop from approximately 2,000 feet away. In this view, although the existing wood poles are visible, they are not particularly noticeable because the structures blend in with the muted colors of the landscape backdrop.

In Photograph 7, a trail view from farther east in the Simon Preserve, the San Diego Country Estates residential development is visible near the center of the photograph. This photograph also shows undeveloped, rocky slopes of Mount Gower in the background, and on the left, a light colored water tank lies on a grass covered hilltop. In the right foreground one of the Proposed Project poles is prominent while other more distant poles are less visible against a mountainous chaparral backdrop. Conductors are visible against the sky.



Photograph 5. Simon Preserve trail looking east (Landscape Unit 2) *



Photograph 6. Simon Preserve trail highpoint looking south (Landscape Unit 2)

* Simulation View

Refer to Figure 4.1-2 for photograph viewpoint locations

Figure 4.1-3c

Photographs of Existing Facilities and Environmental Setting
SDG&E Tieline 637 Wood-to-Steel Project



Photograph 7. Simon Preserve trail looking east (Landscape Unit 2)



Photograph 8. Simon Preserve trail near residences looking southwest (Landscape Unit 2)

Refer to Figure 4.1-2 for photograph viewpoint locations

Figure 4.1-3d
Photographs of Existing Facilities and Environmental Setting
SDG&E Tieline 637 Wood-to-Steel Project

In Photograph 8, taken from near the eastern edge of the park location looking south, conductors and upper portions of poles are somewhat noticeable, silhouetted against the sky, whereas lower portions of these structures tend to blend in with the texture and more muted colors of the hillside background.

The primary viewers in this landscape unit are recreationalists using the park's trails.

Landscape Unit 3: San Diego Country Estates (Photographs 7, and 9 through 12)

Landscape Unit 3 consists of the San Diego Country Estates residential subdivision and the Mt. Gower Preserve. The Preserve is a County-administered, BLM- owned open space that includes recreation trails for hiking and horse riding. The Proposed Project route includes 26 existing wood poles that will be replaced within this 2-mile landscape unit.

The four representative photographs discussed below are views taken from places within the San Diego Country Estates residential area. Photographs that represent views toward the Proposed Project from Mt. Gower Preserve are discussed under Landscape Unit 4. As the route continues east through the San Diego Country Estates residential area, the line crosses streets, passes between and behind residences, and runs along the edge of the Mt. Gower Preserve. In this unit, open views of poles and conductors are available from roads and residential properties. Photograph 9, from Arena Way, shows a residential street view with mountains in the backdrop and roadway, street trees and portions of houses in the foreground. From this location the upper portion of a Proposed Project pole and overhead conductors are visible against the sky. In Photograph 10, taken from a residential cul-de-sac, shows an unobstructed view of the wood poles where the route ascends a scrub covered hillside located within the subdivision.

Photograph 11, from Vista Ramona Road taken near the roadway crossing, shows rocky hillsides and part of a landscaped residence as well as an unobstructed view of two poles. In this area the route extends northeast along the edge of Mt. Gower Preserve, passing behind residences located along this street. Photograph 12 is a view from a residential street in the northern part of the subdivision where poles are visible behind houses as the route continues east. In this area, the houses and residential landscaping partially screen roadway views of the poles.

Primary viewers within this landscape unit are residents of San Diego Country Estates subdivision and local motorists. Other viewers include recreationalists at Simon and Mt. Gower Preserves.

Landscape Unit 4: Mt. Gower Preserve, Cleveland National Forest, and rural undeveloped areas (Photographs 13 through 16)

In Landscape Unit 4, the power line crosses private undeveloped land, public land, rangeland, and agricultural crop land in a northeasterly direction. The western part of this unit includes rolling and mountainous topography within the Mt. Gower Preserve. In addition, approximately 2,000 feet of the route including two existing poles, which will not be replaced, crosses Cleveland National Forest land. The area is sparsely populated and dominated by grassland and scrub vegetation mixed with areas of exposed soil and rock outcroppings. Tree groupings are found in limited places, particularly along riparian corridors.



Photograph 9. Arena Way looking south (Landscape Unit 3)



Photograph 10. Gymkhana Road looking northeast (Landscape Unit 3)

Refer to Figure 4.1-2 for photograph viewpoint locations



Photograph 11. Vista Ramona Road looking northeast (Landscape Unit 3)



Photograph 12. Rutherford Road looking northeast (Landscape Unit 3)

Refer to Figure 4.1-2 for photograph viewpoint locations

Elevations rise to over 3,000 feet. Within this 10-mile landscape unit, the Proposed Project route includes approximately 89 existing wood poles that will be replaced. In addition, two temporary helicopter landing areas and a temporary staging yard are proposed this unit.

Four photographs discussed below include two views toward the Proposed Project route from Mt. Gower Preserve and two views toward the route from publicly accessible locations near the eastern end of this unit. Because the majority of the line within this landscape unit crosses remote, private undeveloped land, this portion of the Proposed Project route is not typically visible to the public.

Photograph 13, taken near the Mt. Gower Preserve trailhead shows a view looking west along the route toward San Diego Country Estates with two Proposed Project poles visible in the foreground on the left (south) and others seen on the right as the line runs along the base of the hillside, behind residences. Except where silhouetted against the sky, the poles generally blend in with the landscape background. Photograph 14, taken from the eastern edge of the Preserve, shows the line travelling east out of the preserve across a rural residential area with a hillside backdrop. A light colored residence, a steel water tank, fences, and wood poles of the line are visible features in the foreground. Further back against the hillside, wood poles of the route are barely perceptible.

The Proposed Project route passes within 600 feet of Hwy 78, and is visible from limited areas along this county scenic roadway. Photograph 15 is a view taken from Hwy 78, approximately 0.5 mile away from the Proposed Project at a location near the western edge of the town of Santa Ysabel. In this roadway view the Proposed Project structures are silhouetted against sky and barely visible along the hilltops; foreground landscape elements include open pasture roadside fences, a windmill and water tank.

The Proposed Project will also be visible from limited areas of the Cleveland National Forest, including the Inaja Memorial Picnic Ground located off of Hwy 79. Photograph 16 is a view from the Inaja Memorial Picnic Ground, taken near a scenic vista and trailhead location. The view includes sweeping vista of grassland and wooded hillsides; from this location the poles are barely noticeable against grassland backdrop. Where the poles appear against scrub vegetation and trees, they are almost imperceptible.

Primary viewers in this landscape unit are recreationalists using Mt. Gower Preserve and Cleveland National Forest land including the Inaja Memorial Picnic Ground. Motorists along portions of Hwys 78 and 79 and rural roadways comprise another viewer group in this area. A limited number of rural residential viewers also have views of the Proposed Project.

Landscape Unit 5: Santa Ysabel (Photographs 17 and 18)

Landscape Unit 5, the smallest unit, is comprised of a limited amount of commercial and residential development and the Santa Ysabel Substation located in the rural community of Santa Ysabel. This 0.15-mile portion lies at an elevation of approximately 3,000 feet within the relatively level Santa Ysabel Valley and is the route's eastern terminus. Buildings and mature vegetation partially screen views of the existing line from the town. The Proposed Project crosses Hwys 78 and 79 in this area.



Photograph 13. Mt. Gower Preserve trail looking west (Landscape Unit 4) *



Photograph 14. Eastern boundary of Mt. Gower Preserve looking east (Landscape Unit 4)

* Simulation View

Refer to Figure 4.1-2 for photograph viewpoint locations

Figure 4.1-3g
Photographs of Existing Facilities and Environmental Setting
SDG&E Tieline 637 Wood-to-Steel Project



Photograph 15. Hwy 78 looking south (Landscape Unit 4)



Photograph 16. Inaja Memorial Picnic Ground looking west (Landscape Unit 4) *

* Simulation View
Refer to Figure 4.1-2 for photograph viewpoint locations

Figure 4.1-3h
Photographs of Existing Facilities and Environmental Setting
SDG&E Tieline 637 Wood-to-Steel Project

Within this 0.15-mile landscape unit, there are approximately six existing poles to be replaced along the route and one temporary staging yard.

Photograph 17, from eastbound Hwys 78 and 79 looking east toward the substation shows the line as it travels north crossing the road. This roadway location affords an unobstructed view toward the substation facility; nearby wood and weathering steel poles are also visible in the foreground. This view also includes additional wood poles, roadside signage and fences seen against a mixed scrub and tree covered hillside landscape. Photograph 18 is a view from Hwys 78 and 79 looking northwest. From this location the route crossing is in the foreground and roadside vegetation substantially screens substation structures, although the upper portions of weathering steel poles located at the substation site are visible above the vegetation. Unobstructed foreground views toward the reddish brown colored steel poles on the left as well as other utility poles and a hillside landscape backdrop can also be seen. The poles appear against a combination of sky and landscape backdrop, and conductors crossing the highway appear against the sky.

Viewers in this landscape unit include motorists on Hwys 78 79 and local Santa Ysabel streets. In addition, viewers include a limited number of residents and commercial uses in Santa Ysabel.

4.1.3.4 Potentially Affected Viewers

Accepted visual assessment methods, including those adopted by FHWA and other federal agencies, establish sensitivity levels as a measure of public concern for changes to scenic quality. Viewer sensitivity, one of the criteria for evaluating visual impact significance, can be divided into high, moderate, and low categories. Factors considered in assigning a sensitivity level include viewer activity, view duration, viewing distance, adjacent land use, and special management or planning designation. According to the DOT *Visual Impact Assessment for Highway Projects*, research on the subject suggests that certain activities tend to heighten viewer awareness of visual and scenic resources, while others tend to be distracting. The primary potentially affected viewer groups within the Proposed Project area are described briefly below.

Motorists

Motorists, the largest viewer group that could be affected by the Proposed Project, include people traveling on Hwy 78, Hwy 79, and local residential streets including Creelman Lane and Vista Ramona Road. Local travelers, who are familiar with the visual setting, are the primary motorists in the Proposed Project area, although other motorists may include those using the highways on a less regular basis. Affected motorists' views are generally brief in duration, typically lasting less than a few minutes. Viewer sensitivity is considered low to moderate.

Recreationalists

Recreationalists, another potentially affected viewer group, include hikers, equestrians, and cyclists using trails in Simon Preserve, Mt. Gower Preserve, as well as visitors to portions of the Cleveland National Forest including the Inaja Memorial Outlook. View duration for this group could range from several minutes to several hours, and viewer sensitivity is considered moderate to high.



Photograph 17. Hwy 78/79 in Santa Ysabel looking east (Landscape Unit 5)



Photograph 18. Hwy 78/79 in Santa Ysabel looking northwest (Landscape Unit 5) *

* Simulation View

Refer to Figure 4.1-2 for photograph viewpoint locations

Figure 4.1-3i
Photographs of Existing Facilities and Environmental Setting
SDG&E Tieline 637 Wood-to-Steel Project

Residents

Residents within the areas that border the power line and substations comprise the third viewer group. These include the communities of Ramona, San Diego Country Estates neighborhood, and Santa Ysabel, as well as scattered rural residences. Residential views tend to be long in duration; sensitivity to visual change for this viewer group is considered moderate to high.

4.1.3.5 Regulatory Background

Federal

Bureau of Land Management (BLM)

The Federal Land Policy and Management Act of 1976 requires BLM to protect the quality of scenic values on public lands (43 United States Code [USC] 1701). To this end, BLM has developed the Visual Resource Management system to identify and maintain scenic values and visual quality. Under this system, BLM-administered lands are inventoried, analyzed, and assigned visual ratings or Management Classes. Class designations are derived from an analysis of scenic quality (rated by landform, vegetation, water, color, influence of adjacent scenery, scarcity, and cultural modification), a determination of viewer sensitivity levels (sensitivity of people to changes in the landscape), and distance zones. Management Classes describe the different degrees of modification allowed to the basic elements of the landscape (form, line, color, texture). Management classes and their goals are defined in Table 2.

Table 4.1-2: BLM Management Classes and Goals

Management Class	Goals
Class I	To preserve the existing character of the landscape. The level of change to the characteristic landscape should be very low and must not attract attention.
Class II	To retain the existing character of the landscape. The level of change to the characteristic landscape should be low.
Class III	To partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate.
Class IV	To provide for management activities that require major modification of the existing character of the landscape. The level of change to the characteristic landscape can be high.

Source: BLM

The Proposed Project passes through Mt. Gower Preserve, a BLM-owned and county managed park with a Class III management designation. Class III guidelines allow for moderate change to landscape character. Management actions may attract attention but should not attract the view of the casual observer.

U.S.D.A. Forest Service (USFS)

Approximately 2,000 feet of the Proposed Project including two existing poles, which will not be replaced, are located within the eastern part of the route is in the Cleveland National Forest, U.S. Forest Service (USFS) land. The only required work at this located is the replacement of the conductor and the installation of the new fiber optic line. For managing visual resources of lands within its jurisdiction, the USFS applies an inventory and assessment system known as the Scenery Management System. The Scenery Management System establishes management goals to describe the level of modification associated with land use activity that is acceptable in a given area. These standards or Scenic Integrity Objectives range from “Very High”, which is typically applied only to highly sensitive landscapes such as wilderness areas or special classified areas, to “Very Low”, a standard that allows land use activity that may appear dominant in relationship to the natural landscape while not completely harmonizing with the natural setting.

Land Management Plan, Part 2: Cleveland National Forest Strategy and the *Land Management Plan, Part 3: Design Criteria for the Southern California National Forests* contain policies for managing the Cleveland National Forest Scenic Inventory Objectives that have been designated for areas within the national forest. The Proposed Project crosses land that is classified as “High” and near land classified as “Moderate.” Only two poles are located within Cleveland National Forest, however, neither of which will be replaced. Therefore, the Proposed Project will not result in noticeable changes to the visual landscape within the Cleveland National Forest.

State*CPUC General Order 131-D*

G.O. 131-D confirms that the CPUC preempts local discretionary authority over the location and construction of electric utility facilities. Nonetheless, as part of the environmental review process, SDG&E has considered relevant land use plans and policies that pertain to visual quality for the jurisdictions crossed by the Proposed Project route. As noted below at the end of each policy discussion, the construction and operation of this Proposed Project does not conflict with any environmental plans, policies, or regulations pertinent to aesthetics.

California Department of Transportation: Scenic Highway Program

California's Scenic Highway Program was created by the Legislature in 1963. Its purpose is to preserve and protect scenic highway corridors from change that would diminish the aesthetic value of lands adjacent to highways. The State Scenic Highway System includes highways that are either eligible for designation as scenic highways or have been designated as such. The status of a state scenic highway changes from “eligible” to “officially designated” when the local jurisdiction adopts a scenic corridor protection program, applies to the Caltrans for scenic highway approval, and receives from Caltrans the designation. A city or county may propose adding routes with outstanding scenic elements to the list of eligible highways. However, state legislation is required for designation.

Figure 4.1-1 shows Eligible and Designated Scenic Highways in the Proposed Project's regional context. The nearest Designated Scenic Highway is Hwy 78 within the Anza-Borrego Desert

State Park approximately 11 miles to the east of the Proposed Project route. The Proposed Project would not be visible from this portion of the road. The Proposed Project route crosses and is visible from Hwy 79, an eligible state scenic highway. Because the Proposed Project involves changes within an existing power line ROW where existing power line and distribution structures are visible, it would not substantially affect views from this roadway.

Local

San Diego County General Plan

San Diego County General Plan Land Use Element (2011)

Chapter 3, Land Use Element contains provisions regarding siting utilities within preserve areas. Portions of the Proposed Project lie in the Simon Preserve and Mt. Gower Preserve.

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 Project involves changes within an existing power line ROW and will not substantially affect visual resource features in the preserve. Therefore, it is consistent with this plan.

San Diego County General Plan Conservation and Open Space Element

Chapter 5, the Conservation Element contains a general discussion of scenic resources. Specifically, it contains a dark skies policy, policies relating to undergrounding utilities, scenic county routes. Hwy 78, Hwy 79, San Vicente Road and Ramona Oaks Road are County scenic highways. The Proposed Project lies approximately 0.8 mile from San Vicente Road, approximately 1.4 miles from Ramona Oaks Road, and crosses Hwys 78 and 79 in Santa Ysabel. County policies for protecting scenic resources include:

GOAL COS 11 Preservation of Scenic Resources. Preservation of scenic resources, including vistas of important natural and unique features, where visual impacts of development are minimized.

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. (p. 5-29)

The Proposed Project involves changes within an existing power line ROW and will not substantially affect views of significant topographic or natural resource features in the county. Therefore, it is consistent with this plan.

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.

COS 11.7 Underground Utilities. Require new development to place utilities underground and encourage “undergrounding” in existing development to maintain viewsheds, reduce hazards associated with hanging lines and utility poles, and to keep pace with current and future technologies. (p. 5-30)

As the Proposed Project is not new development and does not involve siting new power line facilities, these policies do not apply.

GOAL COS 12 Preservation of Ridgelines and Hillides. Ridgelines and steep hillsides that are preserved for their character and scenic value.

POLICY COS 12.1 Hillside and Ridgeline Development Density. Protect undeveloped ridgelines and steep hillsides by maintaining semi-rural or rural designations on these areas.

POLICY COS 12.2 Development Location on Ridges. Require development to preserve the physical features by being located down and away from ridgelines so that structures are not silhouetted against the sky.

The Proposed Project does not propose a new development along a ridgeline or hillside. In some locations, the Proposed Project will modify existing utility lines on hillsides or ridgelines; however as demonstrated in the Figure 4.1-4 through 4.1-8 simulations, these modifications will result in a minor, incremental change in the views of these topographic features.

The Conservation Element dark skies policies specifically refer to development near the Palomar Observatory and the Mount Laguna Observatory. The Proposed Project is located approximately 17 miles south of Palomar Observatory and 20 miles northwest of Mount Laguna, additionally the Proposed Project does not propose new lighting; therefore, these policies do not apply.

San Diego County General Plan Community and Subregional Plans

Unincorporated areas of San Diego County are governed by community and subregional plans. Most of the route lies within the Ramona Community Planning Area; however the Proposed Project alignment also crosses the Central Mountain and North Mountain Community Planning Areas.

Within the Ramona Community Planning Area, the route passes through the Littlepage Road – Hwy 78 Resource Conservation Area. Resource Conservation Areas are areas identified as worthy of special efforts to protect important natural resources including scenic features. Resources of this area are the rolling oak woodland and chaparral covered hills and areas with steep rock outcroppings.

As the Proposed Project proposes modifying an existing utility line and will not substantially affect scenic resources in the area, it is consistent with the Resource Conservation Area policy.

San Diego County Code: Division 9. Light Pollution Code

The Light Pollution Code (1998) contains detailed requirements for lighting in the areas of the Palomar Observatory and the Mount Laguna Observatory including prohibited light fixtures, hours of operation, and shielding. This area is a zone centered 15 miles in radius on these observatories. As the Proposed Project lies beyond this zone, this policy does not apply.

San Diego County Zoning Ordinance

The San Diego County Zoning Ordinance contains regulations applying to designated scenic areas including scenic highway corridors and areas adjacent to significant recreational, historic or scenic resources. These regulations include provisions for undergrounding utilities, grading, signage and lighting.

5202 Application of the Scenic Area Regulations

The Scenic Area Regulations shall be applied to areas of unique scenic value including but not limited to scenic highway corridors designated by the San Diego County General Plan and areas adjacent to significant recreational, historic or scenic resources, including but not limited to Federal and State parks.

The Proposed Project crosses and parallels Hwys 78 and 79, County Scenic Highways. As shown in simulation Figures 4.1-7 and 4.1-8, Proposed Project-related change will not substantially affect views from these roadways.

5210 Site Plan Review Criteria.

e. Above Ground Utilities. Utilities shall be constructed and routed underground except in those situations where natural features prevent undergrounding or where safety considerations necessitate above ground construction and routing. Above ground utilities shall be constructed and routed to minimize detrimental effects on the visual setting of the designated area. Where it is practical, above ground utilities shall be screened from view from either the scenic highway or the adjacent scenic, historic, or recreational resource by existing topography, by the placement of buildings and structures, or by landscaping and plantings which harmonize with the natural landscape of the designated area.

The Proposed Project proposes replacing an existing utility line. The weathering steel replacement poles will look similar to the existing wood poles which will minimize potential detrimental effects on the visual setting. As shown in the simulation Figures 4.1-4 through 4.1-8, the Proposed Project does not represent a substantial change to the visual setting and does not damage aesthetic resources.

f. Grading. The alteration of the natural topography of the site shall be minimized and shall avoid detrimental effects to the visual setting of the designated area and the existing natural drainage system. Alterations of the natural topography shall be screened from view from either the scenic highway or the adjacent scenic, historic, or recreational resource by landscaping and plantings which harmonize with the natural landscape of the

designated area, except when such alterations add variety to or otherwise enhance the visual setting of the designated area.

As more fully described in Section 3.4, the level of ground-disturbance anticipated does not constitute significant grading or alteration of the natural topography of the site. Any land disturbed by Proposed Project construction activities will be returned to approximate preconstruction condition, as needed, including re-vegetation.

g. Signs. Off-site signs shall be prohibited in areas subject to the Scenic Area Regulations. The number, size, location, and design of all other signs shall not detract from the visual setting of the designated area or obstruct significant views. Subsequent to the Site Plan review and approval, any alteration to signs other than general maintenance shall be subject to an Administrative Permit.

No signage is included in the Proposed Project, therefore this ordinance does not apply.

h. Lighting. The interior and exterior lighting of the buildings and structures and the lighting of signs, roads and parking areas shall be compatible with the lighting employed in the designated area.

No lighting is included in the Proposed Project, therefore this ordinance does not apply.

4.1.4 Potential Impacts

4.1.4.1 Significance Criteria

The significance criteria for assessing the impacts to aesthetics come from the CEQA Environmental Checklist. According to the CEQA checklist, a project will cause a potentially significant impact if it will:

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

Factors considered in applying these criteria to determine significance include the current visibility of existing electric facilities within the Proposed Project viewshed, the extent that changes to these facilities will be noticeable from residential areas, public open space, and designated scenic routes; the extent of change in the landscape's composition and character; the degree to which the various Proposed Project elements would contrast with or be integrated into the existing landscape; and the number and sensitivity of viewers. Proposed Project conformance with public policies regarding visual quality was also taken into account. As

outlined in Section 4.1.3.5, the Proposed Project is consistent with pertinent public visual and aesthetic resources policies.

4.1.4.3 Question 1a –Would the project have a substantial adverse effect on a scenic vista?

Construction and Operation & Maintenance - No Impact

The Proposed Project area includes existing power line, distribution, and substation facilities that are currently visible within the public viewshed and the Proposed Project is the reconstruction of existing facilities within SDG&E ROW and substation property. These existing facilities constitute the baseline from which impacts are measured. Neither CEQA nor the *CEQA Guidelines* provide a definition of what constitutes a “scenic vista” or reference about from what vantage point(s) the scenic vista, if any, should be observed. For purposes of this evaluation, a scenic vista is defined as a distant public view along or through an opening or corridor that is recognized and valued for its scenic quality. Inaja Memorial Overlook in the Cleveland National Forest is a recognized scenic vista. The Figure 4.1-7 visual simulation demonstrates that the visual change associated with the Proposed Project would not be particularly noticeable, and would not substantially alter the character of the landscape as seen from these vistas. Therefore, the Proposed Project would not have a substantial adverse effect on a scenic vista and no impacts would result.

4.1.4.4 Question 1b – Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

Construction and Operation & Maintenance - No Impact

The Proposed Project area includes existing electric power, distribution, and substation facilities that are currently visible within the public viewshed. These existing facilities constitute the baseline from which impacts are measured.

There are no designated State Scenic Highways within the Proposed Project viewshed; therefore, the Proposed Project would not substantially damage scenic resources within a State Scenic Highway.

The Proposed Project crosses Hwys 78/79, eligible state scenic highways and designated San Diego County scenic roadways. Limited views of the Proposed Project would be seen from this roadway, just as the existing electric facilities are visible from Hwys 78 and 79 today. As described in Section 4.1.3.3 and documented in Photographs 15 through 18 (Figure 4.1-3h and 4.1-3i), and simulation Figures 4.1-7 and 4.1-8, at present various power line structures, including substation components, steel and wood poles and overhead conductors, are partially visible from this roadway. Given the presence of these existing power line elements and given screening provided by intervening vegetation and topography, the Proposed Project would represent a minor incremental visual change. Therefore, the Proposed Project would not substantially affect existing views from Hwys 78 and 79 (As noted above, Hwys 78 and 79 are not State Scenic Highways) and no impacts would result.

4.1.4.5 Question 1c – Would the project substantially degrade the existing visual character or quality of the site and its surroundings?

Construction - Less than Significant Impacts

Construction-related visual impacts associated with the Proposed Project would not substantially degrade the existing visual character or quality of the site and its surroundings. Construction-related visual impacts would result from the presence of equipment, materials, and work crews along the Proposed Project alignment. Although these effects are relatively short-term, they could be most noticeable to residents who live in close proximity to the Proposed Project and motorists traveling along adjacent roadways. Construction activity may also be noticeable from nearby parks and open space areas. While construction of the entire Proposed Project is expected to take place over approximately nine months, construction at specific locations along the route would take considerably less time. To varying degrees, construction activities could be noticeable to local residents, motorists, and recreational users. However, because of their short-term and temporary nature, impacts would not substantially degrade the existing visual character or quality of the site and its surroundings. In addition, the Warnock and Santa Ysabel Staging Yards will have opaque mesh installed along the fence that will soften the view of the staging yards from public vantage points such as roads, residences, and public vantage points.

All areas that are temporarily disturbed including temporary staging yards will be restored to preconstruction conditions, to the extent practical, following the installation of the new power and distribution lines. This will include, as needed, removal of all construction materials and debris, and re-vegetation (re-vegetation in certain areas is not possible due to vegetation management requirements related to fire safety).

Operation & Maintenance – Less than Significant Impacts

The Proposed Project area includes existing electric substation, distribution and power line facilities including TL 637 that are seen within the public viewshed. The baseline from which impacts are measured includes these existing facilities. The existing access roads and maintenance work areas for TL 637 are also seen within this viewshed. The Proposed Project involves modifications to an approximately 14-mile-long existing power line that runs between two existing substations. The Proposed Project will replace approximately 156 wood structures with 69 directly-embedded and 87 micropile foundation weathering steel structures. Guy wires that support existing wood poles to be replaced will also be removed, as appropriate. No new guys will be installed as part of the Proposed Project. The engineered micropile poles utilize a steel base plate bolted to a larger diameter micropile foundation which allows for the elimination of guys and anchors and minimizes installation ground disturbance. In limited cases, the micropile foundation base could be more noticeable in close range unobstructed views; however, viewing distance and the presence of vegetation will minimize potential visibility.

Replacement conductors and a new fiber optic cable will also be installed along the route. In addition one new pole will be installed, approximately four other structures will be modified and approximately eight wood structures will be removed. This change would result in a net decrease of approximately six poles in the Proposed Project viewshed. The heights of existing structures to be replaced are between approximately 32 to 77 feet whereas heights of the new

poles are between 43 to 110 feet. The existing poles and overhead conductor are established features within the landscape setting. Although the replacement structures are taller (approximately 12 feet or 19 percent on average) than the existing power line structures, the new poles are similar in form and color to existing poles. Therefore, given the presence of existing power line structures, this incremental change is not anticipated to be significant.

Close-range, unobstructed views of the Proposed Project would occur from limited places along public roadways and from a limited number of nearby residences. However, the majority of the Proposed Project route traverses private land that is not accessible to the public. In addition, existing topography and vegetation in the Proposed Project area provides considerable screening with respect to public and residential views toward the Proposed Project. The Proposed Project's effect on existing vegetation would be minimal, consisting primarily of some minor vegetation trimming. Additionally, the Proposed Project would not obstruct views toward distant ridgelines and mountains.

A set of five before and after visual simulations depict the Proposed Project's appearance as seen from key public viewpoints along the power line route within the five landscape units. The location of each simulation view is depicted on Figure 4.1-2. Table 4.1-3, Summary of Simulation Views, presents an overview of the visual simulations in terms of the location of each viewpoint, visual changes depicted, and approximate viewing distance to the nearest visible Proposed Project element. As described in the following subsections and as shown on Figures 4.1-4 through 4.1-8, the Proposed Project represents an incremental visual change that would not substantially alter the existing landscape setting. In light of the effects described above and, as demonstrated in the set of five before and after visual simulations of the utility line route, the overall change brought about by the Proposed Project would not substantially degrade the existing visual character or quality of the landscape setting. As a result, impacts would be less than significant.

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Table 4.1-3: Summary of Simulation Views

Viewpoint (VP) Location – VP No. (Figure No.)*	Visible Proposed Project Change	Approx. Distance to nearest Proposed Project element (feet)
Landscape Unit 1		
Creelman Lane east of Keyes Road – VP 3 (Figure 4.1-4)	Relocation of line to south side of the street and co-location with distribution line. Removal of wood poles and replacement with approximately 6 to 32-foot taller weathering steel poles. Replacement conductor and addition of fiber optic cable.	180 feet
Landscape Unit 2		
Simon Preserve trail – VP 5 (Figure 4.1-5)	Replacement of 2 wood power line poles and one distribution wood power line pole with weathering steel poles that are approximately 22 to 28 feet taller. Replacement conductor and addition of fiber optic cable.	350 feet (distribution pole)
Landscape Unit 3 and 4		
Mount Gower Open Space – VP 13 (Figure 4.1-6)	Replacement of 7 wood power poles with approximately 9 to 33 feet taller weathering steel poles. Removal of 1 wood pole which will not be replaced. Replacement conductor and addition of fiber optic cable.	330 feet
Landscape Unit 4		
Inaja Memorial Picnic Ground – VP 16 (Figure 4.1-7)	Replacement of 6 wood power poles with weathering steel poles that are less than 1 foot to approximately 18 feet taller. Replacement conductor and addition of fiber optic cable.	2,600 feet (0.5 mile)
Landscape Unit 5		
Hwy 78/Hwy 79 in Santa Ysabel – VP 18 (Figure 4.1-8)	Replacement of 2 wood and steel power poles with weathering steel poles that are approximately 13 to 19 feet taller. Replacement conductor and addition of fiber optic cable.	320 feet
Notes: * Refer to Figures 4.1-2 for simulation viewpoint locations		

The following discusses and evaluates the Proposed Project's potential visual effects on key public views by landscape unit, as depicted in the visual simulations, which are representative of the potential impacts within each landscape unit.

Representative Simulation for Landscape Unit No. 1

Figure 4.1-4 is a view looking west along the Proposed Project route from Creelman Lane, approximately 400 feet east of Keyes Road. It represents the view of nearby residents and local motorists in the semi-rural residential area of Ramona. From this location, open pasture and mature landscaping along the roadside are seen in the foreground, and wood poles along the Proposed Project route are visible on the right (north) side of the road. A separate set of wood

power poles and overhead line parallels the left (south) side of the road. Further west (past Keyes Road), the Proposed Project route crosses to the other side of Creelman Lane. Roadside vegetation partially screens the lower portion of some of the wood poles; silhouetted against the sky, overhead conductors are also visible.

The Figure 4.1-4 visual simulation portrays the relocation of the Proposed Project line to the left (south) side of the road and the new structures include co-located distribution lines. The new poles on the left are approximately 6 to 32 feet taller and include fiber optic cables; however, the simulation also shows a remaining wood pole on the right side of Creelman Lane that is shorter and less noticeable, and removal of other poles. The replacement structures include both micropile foundation and direct embed poles. The simulation also shows a new pad mounted transformer that replaces a pole mounted transformer on the left side of the road. Interset distribution poles have also been replaced on this side of Creelman Lane. Comparison of the Figure 4.1-4 before and after images demonstrates that the visual change associated with the Proposed Project is incremental and, given the overall the reduction in number of utility structures, will result in a minor improvement to the landscape character in this area.

Representative Simulation for Landscape Unit No. 2

The Figure 4.1-5 photograph shows a trail view from Simon Preserve and thus is representative of the recreationalist experience in the park. This east facing view encompasses an unobstructed landscape vista that includes open grassy slopes with the backdrop of Cuyamaca Mountains including Cuyamaca Peak, seen toward the right. The landscape backdrop is composed of subtle blue-grey and brown-grey mottled textures with the darker green trees. Elements of San Diego Country Estates residential area situated within the valley are also visible near the center of this view in the middleground valley. In the foreground, a reddish-brown wood pole appears against grass covered terrain, and near the center of the view, on the ridgeline, a wood pole along the route is more noticeable against the combined background of rugged landscape and sky. On its left and further away, the top portion of another wood pole is barely discernible against the landscape backdrop. In addition, Photograph 6 on Figure 4.1-3c indicates that the Proposed Project route is less visible when seen at greater viewing distances from many places within Simon Preserve.

The Figure 4.1-5 visual simulation shows two wood poles supporting the power line and one interset wood pole supporting distribution lines have been replaced with approximately 22 to 28-foot taller weathering steel poles and the addition of fiber optic cable below the distribution lines. In comparison to the existing pole, the farthest of the three replacement poles is more visible due to its increased height. While somewhat taller, the replacement poles are similar to the existing poles in form, color and general appearance. In this respect the Proposed Project represents an incremental visual change. A comparison of the Figure 4.1-5 existing view and visual simulation indicates that the Proposed Project would not substantially alter the landscape character as seen from Simon Preserve.



Existing View from Creelman Lane east of Keyes Road looking west (VP 3)



Visual Simulation of Proposed Project

Note: Refer to Figure 4.1-2 for photograph viewpoint location. Exact pole heights may vary depending upon field conditions.

SDG&E Tieline 637 Wood to Steel Project
Existing View and Visual Simulation from Creelman Lane east of Keyes Road
Figure 4.1-4

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BACK OF FIGURE 4.1-4



Existing View from Simon Preserve trail looking east (VP 5)



Visual Simulation of Proposed Project

Note: Refer to Figure 4.1-2 for photograph viewpoint location.
Exact pole heights may vary depending upon field conditions.

SDG&E Tieline 637 Wood to Steel Project
Existing View and Visual Simulation from Simon Preserve Trail
Figure 4.1-5

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BACK OF FIGURE 4.1-5

Representative Simulation for Landscape Unit Nos. 3 and 4

Figure 4.1-6 is a Mt. Gower Preserve trail view taken near the trailhead off of Gunn Stage Road looking west along the Proposed Project route and toward San Diego Country Estates residential area. The view is representative of the suburban residential-open space edge that characterizes this portion of the route. The relatively undeveloped landscape of the preserve lies in the immediate foreground, and beyond this, residences are visible amidst brighter green mature trees seen near the center of the view along with a water tower situated on a scrub-covered hilltop in the background. Open, unobstructed views of poles and conductors are visible from both residential areas and trails in the preserve. Two poles along the route can be seen in the foreground on the left (south) and others are visible on the right as the line runs along the base of the hillside, behind residences. In this view overhead conductors can also be seen, both against the sky and less noticeably against hillside landscape. To varying degrees, poles behind the residences blend with the hillside landscape backdrop.

The Figure 4.1-6 visual simulation shows eight existing wood poles replaced by seven weathering steel poles. The new poles are approximately 9 to 33 feet taller. One of the poles, (the farthest left) will be removed and will not be replaced. Relatively small upper portions of two replacement poles are visible against the sky and are thus, may be more noticeable than the original structures that did not “skyline.” Overall, however, the replacement poles are a similar color and form to the existing poles, and the resulting change to the existing landscape character and composition is minor and incremental. The visual simulation demonstrates that the proposed changes will not substantially alter the existing visual character within Mt. Gower Preserve.

The Figure 4.1-7 photograph, taken from the Inaja Memorial Picnic Grounds near Hwys 78 and 79 in the Cleveland National Forest, generally represents the Inaja Scenic Overlook vista, and the view of recreationalists visiting the Cleveland National Forest as well as that of motorists traveling on nearby Hwys 78 and 79. It encompasses a rolling savannah landscape of the southern Santa Ysabel Valley. Below the road, approximately 0.5 mile away, the Proposed Project line is visible as it crosses the valley floor to the west. Poles and conductors appear against a combination of pale grassland and darker trees. Although the existing facilities are visible, because of the combination of distance and landscape texture, poles and conductors do not comprise a dominant element in the landscape as seen from this location.

The Figure 4.1-7 simulation shows existing wood poles replaced by weathering steel poles that are less than one foot to approximately 18 feet taller. Replacement poles are a similar form and color to existing poles and sited in the same locations. A comparison of the Figure 4.1-7 existing view and visual simulation illustrates that the proposed changes to TL 637 would not be particularly noticeable to recreationalists visiting Cleveland National Forest (including the Inaja Scenic Overlook vista) and motorists traveling on nearby Hwys 78 and 79. This visual simulation demonstrates that the proposed changes to TL 637 are minor and nearly imperceptible and would not alter the landscape character as seen from this scenic vista location and the surrounding area. As outlined in Section 4.1.3.3, much of Landscape Unit 4 crosses remote, undeveloped land and is generally not visible to the public.

Representative Simulation for Landscape Unit No. 5

The Figure 4.1-8 photograph represents a motorist's view travelling westbound on Hwys 78 and 79 through the relatively level Santa Ysabel Valley and the community of Santa Ysabel. It includes an unobstructed foreground view of the Proposed Project line where it crosses the roadway and approaches Santa Ysabel Substation. In the immediate foreground overhead conductors are visible against the sky and a brown weathering steel pole and wood distribution pole lie approximately 320 feet away on the left (south) side of the road; on the north side of the road, another pole is approximately 500 feet away and partially screened by mature trees located near the substation. From this location portions of poles situated within the substation site are visible beyond the road; however, the substation is largely screened by mature trees. The poles appear against a combination of sky and savannah-covered hillside backdrop.

The Figure 4.1-8 simulation shows the replacement of two existing weathering steel poles with taller weathering steel poles, one on either side of Hwys 78/79 and the addition of fiber optic cable. The replacement poles are taller with slightly larger diameters and micropile foundations, but are otherwise similar to the existing poles in form, color and general appearance. This simulation demonstrates that given the presence of numerous existing power line structures in this area, and due to the incremental change to existing poles, the visual effect will not substantially alter the character or composition of the existing landscape setting, as seen from this landscape unit.

4.1.4.6 Question 1d – New Light or Glare

Construction – No Impact

No night construction is planned. However, the possibility exists that work would occasionally extend into the evening hours, necessitating temporary lighting. In this case, lighting would be provided to allow work to continue until a safe stopping point has been reached. Lighting would consist of floodlights powered by a portable generator. The floodlights would be directed onto the work area and away from adjacent land uses, particularly residential areas and native habitat. Therefore, no impact would occur.

Operations and Maintenance – No Impact

The Proposed Project area includes existing electric power, distribution, and substation facilities that are visible within the public viewshed. These existing facilities constitute the baseline from which impacts are measured. Neither the existing nor proposed power line facilities include any permanent lighting. Potential glare from overhead conductors would be similar to what currently exists within the Proposed Project area under baseline conditions. The new weathering steel poles are made of dull, non-reflective steel that does not create glare. Therefore, there are no impacts.



Existing View from Mt. Gower Preserve trail looking west (VP 13)



Visual Simulation of Proposed Project

Note: Refer to Figure 4.1-2 for photograph viewpoint location. Exact pole heights may vary depending upon field conditions.

SDG&E Tieline 637 Wood to Steel Project
 Existing View and Visual Simulation from Mt. Gower Preserve Trail
Figure 4.1-6

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BACK OF FIGURE 4.1-6



Existing View from Inaja Memorial Picnic Ground looking west (VP 16)



Visual Simulation of Proposed Project

Note: Refer to Figure 4.1-2 for photograph viewpoint location. Exact pole heights may vary depending upon field conditions.

SDG&E Tieline 637 Wood to Steel Project
 Existing View and Visual Simulation from Inaja Memorial Picnic Ground
Figure 4.1-7

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BACK OF FIGURE 4.1-7



Existing View from Hwy 78/79 in Santa Ysabel looking northwest (VP 18)



Visual Simulation of Proposed Project

Note: Refer to Figure 4.1-2 for photograph viewpoint location. Exact pole heights may vary depending upon field conditions.

SDG&E Tieline 637 Wood to Steel Project
 Existing View and Visual Simulation from Hwy 78/79 in Santa Ysabel
Figure 4.1-8

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4.1.5 Project Design Features and Ordinary Construction/Operating Restrictions

With implementation of the ordinary construction restrictions (as outlined within Section 3.8) potential impacts related to aesthetics will remain less than significant.

4.1.6 Applicant Proposed Measures

The Proposed Project has no potentially significant impacts relating to aesthetics; therefore, no APMs are proposed.

4.1.7 Detailed Discussion of Significant Impacts

Based upon the preceding analysis, no potentially significant impacts relating to aesthetics are anticipated from the Proposed Project.

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4.2 AGRICULTURE AND FORESTRY RESOURCES

Would the project:		Potentially Significant Impact	Potentially Significant Unless APMs 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b.	Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c.	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d.	Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e.	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

4.2.1 Introduction

This section of the PEA describes the existing conditions and potential project-related impacts to agricultural and forestry resources in the vicinity of the Proposed Project. In addition, this section evaluates the consistency of the Proposed Project with the Farmland Mapping and Monitoring Program (FMMP) and the Williamson Act, otherwise known as the California Land Conservation Act of 1965. Although some segments of the Proposed Project pass through important farmland and/or the Cleveland National Forest, the existing power line currently passes through these areas, and the Proposed Project would not convert or otherwise adversely affect any agricultural or forestry resources and not impact would occur.

4.2.2 Methodology

The agriculture and forestry resources analysis within this section involved a review of various documents, including aerial photographs of the Proposed Project area, the general plan for the County of San Diego, and online information sources. The California Department of Conservation, Division of Land Resource Protection farmland map was reviewed to determine if, and where, Prime Farmland, Unique Farmland, or Farmland of Statewide Importance were located within the Proposed Project area. The *County of San Diego General Plan* Land Use and Conservation and Open Space Elements were reviewed to locate any existing Williamson Act contracts within the Proposed Project area. The subregional plans for the three County

subregions the Proposed Project crosses were also reviewed to determine if any County-designated agricultural preserves are present within the Proposed Project area.

4.2.3 Existing Conditions

4.2.3.1 Regulatory Setting

State

Farmland Mapping and Monitoring Program

The goal of the FMMP, administered by the California Department of Conservation, Division of Land Resource Protection, is to provide consistent and impartial data to decision makers for use in assessing present status, reviewing trends, and planning for the future of California's agricultural land resources. The basis of the mapping program is an agricultural land classification system that combines technical soil ratings based on soil classifications and current land use. The survey defines eight agricultural land categories:

- **Prime Farmland:** has the best combination of physical and chemical features able to sustain long-term agricultural production. It has the soil quality, growing season, and moisture supply needed to produce sustained high yields of crops when treated and managed, including water management, according to current farming methods. Prime Farmland must have been used for the production of irrigated crops at some time during the two update cycles prior to the mapping date.
- **Farmland of Statewide Importance:** is similar to Prime Farmland but with minor shortcomings such as greater slopes or less ability to store soil moisture. Farmland of Statewide Importance must have been used for the production of irrigated crops at some time during the two update cycles prior to the mapping date.
- **Unique Farmland:** includes areas of lower quality soils that do not meet the criteria for Prime Farmland or Farmland of Statewide Importance, but that have been used for the production of specific high economic value crops during the two update cycles prior to the mapping date.
- **Farmland of Local Importance:** includes areas other than Prime Farmland, Farmland of Statewide Importance, or Unique Farmland that is either currently producing crops, has the capability of such production, or is used for the production of confined livestock. Farmland of Local Importance may be important to local economies due to its productivity or value, defined by each county's local advisory committee, and adopted by its Board of Supervisors.
- **Grazing Land:** is land on which the existing vegetation is suited to the grazing of livestock and includes, at a minimum, 40 acres.
- **Urban and Built-up Land:** is occupied by structures with a building density of at least one unit to 1.5 acres, or approximately six structures to a 10-acre parcel. Such lands include residential, industrial, commercial, institutional facilities, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, and water control structures.

- **Other Land:** land not included in any other mapping category such as low-density rural developments; brush, timber, wetland, and riparian areas not suitable for livestock grazing; confined livestock, poultry, or aquaculture facilities; strip mines and borrow pits; and water bodies smaller than 40 acres. Vacant and non-agricultural land greater than 40 acres and surrounded on all sides by urban development is also mapped as Other Land.
- **Water:** includes perennial water bodies with an extent of at least 40 acres.

The California Department of Conservation prepares, updates, and maintains maps and data used for categorizing agricultural potential (as described above) and assessing the location, quality, and quantity of agricultural lands and conversion of these lands over time. The maps are updated every two years based on aerial photograph review, computer mapping analysis, public input, and field reconnaissance. Coverage includes 47.9 million acres (96 percent of the state's private lands) and is based on the extent of the United States Department of Agriculture (USDA) Natural Resources Conservation Service soil surveys. Most large government land holdings, including national parks, forests, and BLM land, are not included in the FMMP's survey area.

The Williamson Act

The California Land Conservation Act, better known as the Williamson Act, has been the State's primary agricultural land protection program since its enactment in 1965. More than 16 million of the State's 30 million acres of farm and ranch land are currently protected under the Williamson Act. The Williamson Act creates an arrangement whereby private landowners agree with counties and cities to voluntarily restrict land to agricultural and open-space uses. In return, the landowner receives property tax assessments that are lower than normal because the assessments are based on farming and/or open space uses rather than full market value. Local governments receive an annual subvention of forgone property tax revenues from the state via the Open Space Subvention Act of 1971. Williamson Act contracts automatically renew each year for a new 10-year period, unless either party files a "notice of non-renewal" to terminate the contract before the end of the current 10-year period. During the ensuing 10-year cancellation period following a "notice of non-renewal," property taxes are gradually raised to the applicable level for developable land.

The Williamson Act also authorizes cities and counties to establish Agricultural Preserves, referred to as Farmland Security Zones. An Agricultural Preserve defines the boundary of an area within which a city or county will enter into Williamson Act contracts with landowners. The boundary is designated by resolution of the board or city council having jurisdiction. Agricultural Preserves must include at least 100 acres, and generally are intended to avoid areas where public utility improvements and related land acquisitions may be required. Farmland Security Zone contracts require a minimum initial term of 20 years and they renew annually unless either party files a "notice of nonrenewal," similar to a Williamson Act contract. To be eligible for a Farmland Security Zone contract, the subject land must be designated on the Important Farmland Series maps as predominantly Prime Farmland, Farmland of Statewide Importance, Unique Farmland, or Farmland of Local Importance.

Public agencies may avoid the requirements of Government Code Section 51292 (conditions under which public improvement may not be located within preserve) if the public improvement is exempt from the requirements pursuant to Government Code Section 51293 (special exemptions). The Proposed Project would fall under Government Code Section 51293 (c) The

location or construction of any public utility improvement which has been approved by the CPUC.

Timberland and Timberland Production Zones

Timberland is privately owned land or land acquired for State forest purposes that is devoted to and used for growing and harvesting timber, or for growing and harvesting timber and compatible uses, and that is capable of growing an average annual volume of wood fiber of at least 15 cubic feet per acre. A Timberland Production Zone is an area that has been zoned pursuant to Section 51112 or 51113 of the Government Code and is devoted to and used for growing and harvesting timber, or for growing and harvesting timber and compatible uses. In California, a county board of supervisors may designate areas of timberland in the county as timberland preserves, which is the same as the state zoning designation of Timberland Production Zone. The land in a Timberland Production Zone is restricted in use to the production of timber for an initial 10-year term and is considered enforceably restricted. The Proposed Project is not located within timberland or a Timberland Production Zone.

Local

County of San Diego

While the *County of San Diego General Plan* does not have an agricultural land use designation, the Proposed Project alignment runs through lands designated as Rural and Semi-rural, which both encourage agricultural operations. The *County of San Diego General Plan* includes one policy relevant to the preservation of agricultural activity in relation to development.

Policy COS-6.2: 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.

There are no policies within the *County of San Diego General Plan* regarding forestry.

Ramona Community Plan

The *Ramona Community Plan* includes Goal COS 1.2: The Preservation of Agriculture in the Planning Area. Relevant policies include:

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* covers the area generally between the Ramona Subregion and the community of Santa Ysabel. Agricultural uses in the Central Mountain Subregion include cattle grazing, small-scale animal husbandry, and dry land oat/hay farming.

There is one relevant agricultural policy:

Policy 4: Clearing 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

Santa Ysabel and the surrounding area are within the North Mountain Subregion. Most of the privately owned lands in the North Mountain Subregion are designated as Rural, specifically for cattle grazing and dairies. There are no agricultural or forestry policies relevant to the Proposed Project.

4.2.3.2 Agricultural and Forestry Setting

The County of San Diego is consistently ranked among the top 10 agricultural counties (ranked eight for several years) in California. The County has the fourth highest number of farms of any county in the country and third highest number of farms of any county in California. Agriculture is the fifth largest component of the County's economy. As described below, portions of the Proposed Project alignment crosses land designated as Important Farmland and the Cleveland National Forest.

Designated Farmland

Land designated Farmland of Local Importance is adjacent to the Proposed Project alignment as it follows Creelman Lane within the Ramona Subregion. The alignment also passes through land designated as Farmland of Local Importance as it runs north into Santa Ysabel (North Mountain Subregion). None of the soils found in the central portion of the Proposed Project area (Central Mountain Subregion) are classified as having special use constraints by the USDA (refer to Section 4.2.3.1 for an explanation of soil types in relation to Farmland classifications).

Williamson Act

The Proposed Project crosses two Agricultural Preserves: Ramona and Rancho Santa Ysabel. The Proposed Project does not cross through land under Williamson Act contract. As discussed in Section 4.2.3.1, the Proposed Project would be exempt from the land use requirements of an Agricultural Preserve under Government Code Section 51293 (c).

Agricultural General Plan Designations and Zoning

According to the *County of San Diego General Plan* Land Use Element, the Proposed Project passes through the following land use designations: Semi-rural, Rural Lands, Open Space – Recreation, and Public Agency Lands. Agricultural operations are encouraged in Semi-rural and Rural Lands.

The Semi-rural category identifies areas of the County that are appropriate for lower-density residential neighborhoods, recreation areas, agricultural operations, and related commercial uses that support rural communities. The westernmost portion of the alignment passes through this land use designation in the community of Ramona. The Rural Lands category is applied to large open space and very-low-density private and publicly owned lands that provide for agriculture, managed resource production, conservation, and recreation. The Proposed Project area between the Mt. Gower Preserve and the Cleveland National Forest consists primarily of Rural Lands.

Electric utility poles and lines are classified in the County's zoning ordinance as Essential Services. Essential Services are permitted uses under all zones, including the General Agriculture (A72), Limited Agriculture (A70), Open Space (S80), and General Rural (S92) zones that the Proposed Project crosses.

A small portion of the Proposed Project (approximately 2,000 linear feet) passes through the Cleveland National Forest, which is designated Public Agency Lands in the *County of San Diego General Plan*. The County does not have jurisdiction over the lands designated as Public Agency.

Designated Forest Land

The Proposed Project crosses a small portion (approximately 2,000 linear feet) of USFS land within the Cleveland National Forest. This land is zoned Back Country in the Cleveland National Forest Land Management Plan, and includes areas of the National Forest that are generally undeveloped with few roads. Most of the National Forest's remote recreation and administrative facilities are found in the Back Country zone. Only two of the existing TL 637 poles are located within the Cleveland National Forest. Both of these existing poles are steel poles that do not need to be replaced at this time. The work within this area would be limited to reductoring, adding the new fiber optic line, and associated pole top work to the existing poles.

4.2.4 Potential Impacts

4.2.4.1 Significance Criteria

Thresholds of significance were incorporated from Appendix G of the *CEQA Guidelines*. Under these guidelines, the Proposed Project could have a potentially significant impact to agricultural resources if it 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 Resources Agency, to non-agricultural 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 PRC 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; or
- e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use.

4.2.4.2 Question 2a - Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Resources Agency, to non-agricultural use?

Construction – No Impact

A large portion of the area between the San Diego Country Estates subdivision and the community of Santa Ysabel consists of undeveloped land, ranchland and grazing pastures. The area is designated as rural lands and public agency lands, and the main land uses are crop cultivation and ranchland for cattle and horses. However, even with the presence of important agricultural areas in the vicinity of the site, the Proposed Project would be replacing poles within the existing TL 637 ROW and would not expand the existing power line use or introduce it as a new use. Temporary staging areas and stringing sites located outside SDG&E ROW and/or easements are needed to support the Proposed Project. The Creelman Staging Yard is located on largely undeveloped land designated as agricultural. The Warnock and Santa Ysabel Staging Yards and the Littlepage Road HLZ are all located on active grazing land. Portions of the Proposed Project alignment cross areas designated as Farmland of Local Importance; however, within these areas the stringing sites are located within existing roadways or the disturbed area along the existing power line and, therefore, would not convert or otherwise impact Farmland to non-agricultural use.

SDG&E communicates with local agencies (i.e., the County of San Diego) about the use of these temporary stringing sites and staging areas to ensure the avoidance of any temporary land use impacts. The use of these staging areas and stringing sites would be temporary and compatible with existing land uses designations, as discussed in Section 4.9, Land Use and Planning. Therefore, the Proposed Project would not alter any existing agricultural uses and would not convert Farmland to non-agricultural use. No impacts would occur.

Operation & Maintenance – No Impact

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 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 typically 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. Therefore, the operations and maintenance of the Proposed Project would not result in any potential impacts relating to the conversion of important farmland to non-agricultural use.

4.2.4.3 Question 2b - Conflict with existing zoning for agricultural use, or a Williamson Act contract?

Construction – No Impact

Agricultural Preserves within the Proposed Project area include the Ramona Preserve and the Rancho Santa Ysabel Preserve. The Proposed Project would be exempt from the land use requirements of an Agricultural Preserve under Government Code Section 51293 (c) The location or construction of any public utility improvement which has been approved by the CPUC. The Proposed Project is not located in any areas under a Williamson Act contract. Electric utility poles and lines are classified in the County’s zoning ordinance as Essential Services, which are permitted uses under all zones in the municipal code and all agricultural land use designations in the County’s general plan. Because the Proposed Project would be exempt from the Agricultural Preserve regulations and utilities are permitted uses in all other agricultural lands along the alignment, the Proposed Project would not conflict with existing zoning for agriculture use. There would be no impacts to existing zoning for agricultural use or a Williamson Act contract.

Operation & Maintenance – No Impact

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 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 typically 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. Therefore, the operations and maintenance of the Proposed Project would not result in any potential impacts relating to zoning or Williamson Act contracts.

4.2.4.4 Question 2c - Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

Construction – No Impact

Major utility corridors are considered a suitable use in designated areas of the Back Country zone of the Cleveland National Forest, and the Proposed Project is not located within timberland or a Timberland Production Zone. The Proposed Project would replace existing wood poles with steel poles along an existing power line, and neither of the two existing poles within the Cleveland National Forest needs to be replaced at this time. Thus, the Proposed Project would not conflict with existing zoning for or cause rezoning of forest land, timberland, or timberland zoned Timberland Production, and no impacts would occur.

Operation & Maintenance – No Impact

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 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 typically 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. Therefore, the operations and maintenance of the Proposed Project would not conflict with existing zoning or cause rezoning of forest land, timberland or timberland zoned Production Timberland, and there is no impact.

4.2.4.5 Question 2d - Result in the loss of forest land or conversion of forest land to non-forest use?

Construction – No Impact

A small portion (approximately 2,000 linear feet) of the Proposed Project area briefly runs through the Cleveland National Forest; however, only two poles are located in that portion, neither of the poles needs to be replaced and any construction activities would be completed within the disturbed areas surrounding the existing poles. The work within this area would only involve pole top work to existing poles. The Proposed Project would be replacing poles where the land is already being used for the existing TL 637 power line and would not change the existing land use within the Proposed Project alignment or in adjacent areas. Thus, the Proposed Project would not result in the loss of forest land or the conversion of forest land to non-forest. Impacts to forest land would not occur.

Operation & Maintenance – No Impact

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 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 typically 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. Therefore, the operations and maintenance of the Proposed Project would not result in any potential impacts relating to the loss of forest land or the conversion of forest land to non-forest use.

4.2.4.6 Question 2e - Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

Construction – No Impact

The Proposed Project would be replacing poles within the existing TL 637 and would not expand the existing power line use or introduce it as a new use. The Proposed Project would not change the existing environment in a way that could result in the conversion of farmland to non-agricultural use or forest land to non-forest use. Therefore, construction of the Proposed Project would not result in any other changes that could result in the conversion of farmland to non-agricultural use or forest land to non-forest use.

Operation & Maintenance – No Impact

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 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 typically 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. Therefore, the operations and maintenance of the Proposed Project would not result in any other changes that could result in the conversion of farmland to non-agricultural use or forest land to non-forest use.

4.2.5 Project Design Features and Ordinary Construction/Operating Restrictions

There are no project design features or ordinary construction/operating restrictions related to agriculture or forestry that are applicable to the Proposed Project.

4.2.6 Applicant Proposed Measures

The Proposed Project has no potentially significant impacts relating to agricultural and forestry resources; therefore, no APMs are proposed.

4.2.7 Detailed Discussion of Significant Impacts

Based on the preceding analysis, no significant impacts relating to agriculture and forestry are anticipated from the Proposed Project.

4.2.8 References

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4.3 AIR QUALITY AND GREENHOUSE GASES

Would the Project:		Potentially Significant Impact	Potentially Significant Unless APMs Incorporated	Less than Significant Impact	No Impact
a.	Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b.	Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c.	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d.	Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e.	Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f.	Diminish an existing air quality rule or future compliance requirement resulting in a significant increase in air pollutant(s)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g.	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h.	Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

4.3.1 Introduction

This section of the PEA describes the existing air quality in the Proposed Project area and potential impacts relating to air quality and greenhouse gases (GHGs) associated with construction and operation of the Proposed Project.

4.3.2 Methodology

Federal, state, and regional/local regulations and policies were consulted to determine the Proposed Project’s level of compliance with and impact, if any, to applicable air quality plans and/or standards. Information for this section was obtained from internet searches of federal, state, and regional/local websites.

This analysis of air quality impacts used the HP ratings, load factors, and emission factors from the California Air Resources Board (CARB)’s OFFROAD Model as provided in the CalEEMod User’s Guide, Appendix D, for heavy construction. The analysis also utilized emission factors from CARB’s EMFAC2011 Model for on-road vehicles. Emission factors for the construction year 2014 were used to calculate emissions.

4.3.3 Existing Conditions

4.3.3.1 Air Quality Regulatory Setting

Federal

National air quality policies are regulated through the federal Clean Air Act (CAA) of 1970 and its 1977 and 1990 amendments. Pursuant to the federal CAA, the United States Environmental Protection Agency (USEPA) has established National Ambient Air Quality Standards (NAAQS) for criteria air pollutants, which include ozone (O₃), carbon monoxide (CO), nitrogen dioxide (NO₂, which is a form of nitrogen oxides [NO_x]), sulfur dioxide (SO₂, which is a form of sulfur oxides [SO_x]), particulate matter less than 10 and 2.5 microns in diameter (PM₁₀ and PM_{2.5}, respectively), and lead (Pb). These pollutants are referred to as criteria pollutants because numerical criteria have been established for each pollutant, which define acceptable levels of exposure. USEPA has revised the NAAQS several times since their original implementation and would continue to do so as the health effects of exposure to air pollution are better understood.

USEPA designates areas as federal nonattainment areas if they have not achieved the NAAQS. Under the 1977 amendments to the federal CAA, states with air quality that did not achieve the NAAQS were required to develop and maintain state implementation plans (SIPs). These plans constitute a federally enforceable definition of the states approach (or “plan”) and schedule for the attainment of the NAAQS. Air quality management areas were designated as attainment, nonattainment or unclassified for individual pollutants depending on whether they achieve the applicable NAAQS and California Ambient Air Quality Standards (CAAQS) for each pollutant. In addition, California can designate areas as transitional. It is important to note that because the NAAQS and CAAQS differ in many cases, it is possible for an area to be designated attainment by USEPA (meets NAAQS) and nonattainment by California (does not meet CAAQS) for the same pollutant.

Areas that were designated as nonattainment in the past, but have since achieved the NAAQS, are further classified as attainment-maintenance. The maintenance classification remains in effect for 20 years from the date that the area is determined by USEPA to meet the NAAQS. There are numerous classifications of the nonattainment designation, depending on the severity of nonattainment. The ozone nonattainment designation has seven subclasses: transitional, marginal, moderate, serious, severe-15, severe-17, and extreme. The designation of

nonattainment status is based on USEPA's "design value" for a given pollutant. The design value is a statistic that describes the air quality status of a given location relative to the level of the NAAQS. Design values are computed and published annually by USEPA's Office of Air Quality Planning and Standards and reviewed in conjunction with USEPA Regional Offices. Nonattainment areas are then designated based on their design value. For ozone nonattainment areas, the classifications are as follows:

- Extreme: Area has a design value of 0.175 parts per million (ppm) and above.
- Severe 17: Area has a design value of 0.119 up to but not including 0.175 ppm
- Severe 15: Area has a design value of 0.113 up to but not including 0.119 ppm
- Serious: Area has a design value of 0.100 up to but not including 0.113 ppm.
- Moderate: Area has a design value of 0.086 up to but not including 0.100 ppm.
- Marginal: Area has a design value of 0.076 up to but not including 0.086 ppm.

Nonattainment areas under different classifications have different deadlines to achieve the NAAQS. Extreme nonattainment areas are subject to a deadline of June 2024 to attain the NAAQS for ozone. Severe-15 nonattainment areas are subject to a deadline of June 2019 to attain the NAAQS for ozone. Serious nonattainment areas are subject to a deadline of June 2013 to attain the NAAQS for ozone. There are no areas that are currently designated as "severe-17" nonattainment areas for the NAAQS for ozone. Areas that lack monitoring data are designated as unclassified areas. Unclassified areas are treated as attainment areas for regulatory purposes.

State

CARB was created in 1967 from the merging of the California Motor Vehicle Pollution Control Board and the Bureau of Air Sanitation and its laboratory. Under the federal CAA, states may enact their own statewide air quality regulations and standards, provided they are at least as stringent as the federal CAA. In 1988, the California CAA was enacted to regulate air quality within California. CARB, a department of the California Environmental Protection Agency (CalEPA), oversees air quality planning and control throughout California. Its responsibility lies with ensuring implementation of the California CAA, responding to the federal CAA requirements, and regulating pollutant emissions from motor vehicles sold in California. It also sets fuel specifications to further reduce vehicular emissions.

The California CAA established the CAAQS and a legal mandate to achieve these standards by the earliest practicable date. These standards apply to the same criteria pollutants as the NAAQS, but also include sulfate, visibility, hydrogen sulfide, and vinyl chloride.

Local

CARB has designated San Diego County as a discrete air basin under the jurisdiction of the San Diego County Air Pollution Control District (SDAPCD). In addressing its planning role with respect to the NAAQS, SDAPCD has most recently developed an Ozone Redesignation Request

and Maintenance Plan, which served as the basis for USEPA’s re-designation of the San Diego Air Basin (Basin) as an attainment zone for the one-hour ozone standard on July 28, 2003. As of April 30, 2012, the Basin has been designated as a marginal nonattainment area for the eight-hour ozone standard.

The Regional Air Quality Strategy (RAQS) was established by SDAPCD in 1991 to address state air quality planning requirements (focusing on ozone). The latest revision was published in April 22, 2009. SDAPCD is responsible for the overall development and implementation of the RAQS. The RAQS control measures focus on emission sources under SDAPCD’s authority, specifically, stationary emission sources and some area-wide sources; however, the emission inventories and emission projections in the RAQS reflect the impact of all emission sources and all control measures, including those under the jurisdiction of CARB (e.g., on-road motor vehicles, off-road vehicles and equipment, and consumer products) and USEPA (e.g., aircraft, ships, trains, and pre-empted off-road equipment). While legal authority to control different pollution sources is separated, SDAPCD is responsible for reflecting federal, state, and regional/local measures in a single plan to achieve ambient air quality standards in San Diego County.

Each local air quality management or air pollution control district establishes criteria to assess a project’s impacts on air quality. SDAPCD has established annual significance thresholds for oxides of nitrogen and reactive organic gases for stationary sources. SDAPCD has not established rules for characterizing impacts from construction, however. SDAPCD informally recommends quantifying construction emissions and comparing them to significance thresholds found in SDAPCD regulations for stationary sources (pursuant to SDAPCD Rule 20.1, et seq.) and shown in Table 4.3-1, Air Pollution Control District’s Screening Level Thresholds. If construction-phase emissions exceed these thresholds for a stationary source air quality impact analysis, then construction has the potential to violate air quality standards or to contribute substantially to existing violations. The significance thresholds are shown in Table 4.3-1. While this PEA uses these thresholds as a guide, this PEA also evaluates if other substantial evidence in light of the whole record indicates that the Proposed Project could have a significant air quality impact, including proximity of sensitive receptors. This additional evaluation provides a conservative analysis of the Proposed Project’s air quality impacts.

Table 4.3-1: Air Pollution Control District’s Screening Level Thresholds

Pollutant	Pounds/Day
Carbon Monoxide (CO)	550
Oxides of Sulfur (SO _x)	250
Volatile Organic Compounds (VOCs)	75
Oxides of Nitrogen (NO _x)	250
Particulate Matter (PM ₁₀)	100
Particulate Matter (PM _{2.5})	55
<p><i>Source: San Diego County Air Pollution Control District Rule 1501, 20.2(d)(2), 1995.</i> The San Diego County Air Pollution Control District does not have thresholds of significant for VOCs or PM_{2.5}. As such, the VOC and PM_{2.5} thresholds for construction from the South Coast Air Quality Management District’s CEQA Air Quality Significance Thresholds (http://www.aqmd.gov/ceqa/handbook/signthres.pdf) were utilized.</p>	

4.3.3.2 Greenhouse Gases and Global Climate Change Regulatory Setting

California has been at the forefront of developing solutions to address global climate change. Global climate change refers to any significant change in measures of climate, such as average temperature, precipitation, or wind patterns over a period of time. Global climate change may result from natural factors, natural processes, and/or human activities that change the composition of the atmosphere and alter the surface and features of land.

Global climate change is being addressed at both the international and federal levels. In 1988, the United Nations and the World Meteorological Organization established the Intergovernmental Panel on Climate Change (IPCC) to assess the scientific, technical, and socioeconomic information relevant to understanding the scientific basis for human-induced climate change, its potential impacts, and options for adaptation and mitigation. The most recent reports from the IPCC have emphasized the scientific consensus that real and measurable changes to the climate are occurring, that they are caused by human activity, and that significant adverse impacts on the environment, the economy, and human health and welfare are unavoidable.

The United Nations IPCC constructed several emission trajectories of GHGs needed to stabilize global temperatures and climate change impacts. The IPCC concluded that a stabilization of GHGs at 400 to 450 ppm carbon dioxide equivalent concentration is required to keep global mean temperature increases below 3.6° Fahrenheit (°F) (2° Celsius [°C]), which is assumed to be necessary to avoid dangerous climate change. When accounting for GHGs, all types of GHG emissions are expressed in terms of carbon dioxide equivalents (CO₂e) and are typically quantified in metric tons (MT) or millions of metric tons (MMT).

GHGs have varying global warming potential. The global warming potential is the potential of a gas or aerosol to trap heat in the atmosphere. According to USEPA, global warming potential is the “cumulative radiative forcing effect of a gas over a specified time horizon resulting from the emission of a unit mass of gas relative to a reference gas.” The reference gas for global warming potential is carbon dioxide (CO₂); therefore, carbon dioxide has a global warming potential of 1. The other main GHGs that have been attributed to human activity include methane (CH₄), which has a global warming potential of 21, and nitrous oxide (N₂O), which has a global warming potential of 310. Table 4.3-2, Global Warming Potentials and Atmospheric Lifetimes of Greenhouse Gases, presents the global warming potential and atmospheric lifetimes of common GHGs.

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Table 4.3-2: Global Warming Potentials and Atmospheric Lifetimes of Greenhouse Gases

GHG	Formula	100-Year Global Warming Potential	Atmospheric Lifetime (Years)
Carbon Dioxide	CO ₂	1	Variable
Methane	CH ₄	21	12 ± 3
Nitrous Oxide	N ₂ O	310	120
Sulfur Hexafluoride	SF ₆	23,900	3,200
Source: California Climate Action Registry General Reporting Protocol, Version 3.1. 2009. January.			

Human-caused sources of carbon dioxide include combustion of fossil fuels (coal, oil, natural gas, gasoline and wood). Data from ice cores indicate that carbon dioxide concentrations remained steady prior to the current period for approximately 10,000 years. Concentrations of carbon dioxide have increased in the atmosphere since the industrial revolution.

Methane is the main component of natural gas and also arises naturally from anaerobic decay of organic matter. Human-caused sources of natural gas include landfills, fermentation of manure and cattle farming. Human-caused sources of nitrous oxide include combustion of fossil fuels and industrial processes, such as nylon production and production of nitric acid.

Other GHGs are present in trace amounts in the atmosphere and are generated from various industrial or other uses.

All levels of government have responsibility for the protection of air quality, and each level (federal, state, and regional/local) has specific responsibilities relating to air quality regulation. The regulation of GHGs are a relatively new component of air quality regulation.

Federal

On March 21, 1994, the United States joined a number of countries around the world in signing the United Nations Framework Convention on Climate Change. Under the Convention, governments agreed to gather and share information on GHG emissions, national policies, and best practices; launch national strategies for addressing GHG emissions and adapting to expected impacts, including the provision of financial and technological support to developing countries; and cooperate in preparing for adaptation to the impacts of global climate change. The U.S. Supreme Court rules in *Massachusetts v. Environmental Protection Agency*, 549 U.S. 497 (2007), that USEPA has the ability to regulate GHG emissions. In addition to the national and international efforts described above, many local jurisdictions have adopted climate change policies and programs.

Endangerment Finding

On April 17, 2009, USEPA issued its proposed endangerment finding for GHG emissions. On December 7, 2009, the USEPA Administrator signed two distinct findings regarding GHGs under section 202(a) of the federal CAA:

Endangerment Finding: USEPA found that the current and projected concentrations of the six key well-mixed GHGs (carbon dioxide, methane, nitrous oxide, hydrofluorocarbons [HFCs], perfluorocarbons [PFCs], and sulfur hexafluoride [SF₆]) in the atmosphere threaten the public health and welfare of current and future generations.

Cause or Contribute Finding: USEPA found that the combined emissions of these well-mixed GHGs from new motor vehicles and new motor vehicle engines contribute to the GHG pollution which threatens public health and welfare.

The endangerment findings do not themselves impose any requirements on industry or other entities. However, this action is a prerequisite to finalizing USEPA's proposed GHG emission standards for light-duty vehicles, which were jointly proposed by USEPA and the DOT's National Highway Safety Administration on September 15, 2009.

Mandatory Reporting of Greenhouse Gases, 40 CFR Part 98

USEPA's rule titled Mandatory Reporting of Greenhouse Gases (40 Code of Federal Regulations [CFR] Part 98) requires mandatory reporting of GHGs for certain facilities. Subpart DD of the rule, titled Electrical Transmission and Distribution Equipment Use, applies to sulfur hexafluoride reporting from gas insulated substations. Under the final Mandatory Reporting Rule for Additional Sources of Fluorinated GHGs, owners and operators of electric power system facilities with a total nameplate capacity that exceeds 17,820 pounds (lbs) (7,838 kilograms [kg]) of sulfur hexafluoride and/or perfluorocarbons must report emissions of SF₆ and/or perfluorocarbons from the use of applicable electrical equipment. Owners or operators must collect emissions data, calculate GHG emissions, and follow the specified procedures for quality assurance, missing data, recordkeeping, and reporting.

The rule requires that each electric power system facility must report total sulfur hexafluoride and PFC emissions (including emissions from equipment leaks, installation, servicing, decommissioning, and disposal, and from storage cylinders) from the following types of equipment:

- Gas-insulated substations;
- Circuit breakers;
- Switchgear, including closed-pressure and hermetically sealed-pressure switchgear;
- Gas-insulated lines containing sulfur hexafluoride or perfluorocarbons;
- Gas containers such as pressurized cylinders;
- Gas carts;

- Electric power transformers; and
- Other containers of sulfur hexafluoride or perfluorocarbons.

Facilities subject to Subpart DD began monitoring GHG emissions on January 1, 2011, in accordance with the methods specified in Subpart DD. The deadline for reporting is currently March 31 of each year, unless that date falls on a weekend, in which case the report is due the next business day.

State

California Health and Safety Code Section 38505(g) defines GHGs as any of the following compounds: carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. Carbon dioxide, followed by methane and nitrous oxide, are the most common GHGs that result from human activity.

In the State of California GHG Inventory, CARB compiled statewide anthropogenic GHG emissions and sinks, which include processes that uptake GHG emissions (Table 4.3-3, State of California Greenhouse Gas Emissions by Sector). The inventory includes estimates for carbon dioxide, methane, nitrous oxide, sulfur hexafluoride, hydrofluorocarbons, and perfluorocarbons. The current inventory covers the years 1990 to 2008, and is summarized in Table 4.3-3. Data sources used to calculate the inventory include California and federal agencies, international organizations, and industry associations. The calculation methodologies are consistent with guidance from the IPCC. The 1990 emissions level is the sum total of sources and sinks from all sectors and categories in the inventory. In CARB’s original inventory, the inventory was divided into seven broad sectors and categories in the inventory, which include Agriculture, Commercial, Electricity Generation, Forestry, Industrial, Residential, and Transportation. The latest inventory includes GHG emissions from recycling and waste management, high-global warming potential gas emissions, and reductions in GHG emissions due to forestry (forestry sinks).

Table 4.3-3: State of California Greenhouse Gases Emissions by Sector

Sector	Total 1990 Emissions (MMTCO ₂ e) ¹	Percent of Total 1990 Emissions	Total 2008 Emissions (MMTCO ₂ e)	Percent of Total 2008 Emissions
Agriculture	23.4	5%	28.06	6%
Commercial	14.4	3%	14.68	3%
Electricity Generation	110.6	26%	116.35	25%
Forestry (excluding sinks)	0.2	<1%	0.19	<1%
Industrial	103.0	24%	92.66	20%
Residential	29.7	7%	28.45	6%

Table 4.3-3 (cont): State of California Greenhouse Gases Emissions by Sector

Sector	Total 1990 Emissions (MMT_{CO₂e})¹	Percent of Total 1990 Emissions	Total 2008 Emissions (MMT_{CO₂e})	Percent of Total 2008 Emissions
Transportation	150.7	35%	174.99	37%
Recycling and Waste			6.71	1%
High Global Warming Potential Gases			15.65	3%
Forestry Sinks	(6.7)		(3.98)	
¹ MMT _{CO₂e} refers to million metric tons of carbon dioxide equivalent emissions. Source: Staff Report – California 1990 Greenhouse Gas Emissions Level and 2020 Emissions Limit, California Air Resources Board, November 16, 2007.				

The following subsections describe regulations and standards that have been adopted by California to address global climate change issues.

Assembly Bill 32, the California Global Warming Solutions Act of 2006

In September 2006, Governor Schwarzenegger signed California Assembly Bill (AB) 32, the Global Warming Solutions Act, into law. AB 32 directs CARB to do the following:

- Make publicly available a list of discrete early action GHG emission reduction measures that can be implemented prior to the adoption of the statewide GHG limit and the measures required to achieve compliance with the statewide limit.
- Make publicly available a GHG inventory for the year 1990 and determine target levels for 2020.
- On or before January 1, 2010, adopt regulations to implement the early action GHG emission reduction measures.
- On or before January 1, 2011, adopt quantifiable, verifiable, and enforceable emission reduction measures by regulation that will achieve the statewide GHG emissions limit by 2020, to become operative on January 1, 2012, at the latest. The emission reduction measures may include direct emission reduction measures, alternative compliance mechanisms, and potential monetary and non-monetary incentives that reduce GHG emissions from any sources or categories of sources that CARB finds necessary to achieve the statewide GHG emissions limit.
- Monitor compliance with and enforce any emission reduction measure adopted pursuant to AB 32.

AB 32 required that by January 1, 2008, CARB determine what the statewide GHG emissions level was in 1990, and approve a statewide GHG emissions limit that is equivalent to that level, to be achieved by 2020. CARB adopted its Scoping Plan in December 2008, which provided estimates of the 1990 GHG emissions level and identified sectors for the reduction of GHG emissions. CARB has estimated that the 1990 GHG emissions level was 427 MMT net CO₂e. CARB estimates that a reduction of 173 MMT net CO₂e emissions below Business as Usual would be required by 2020 to meet the 1990 levels. This amounts to a 15-percent reduction from today’s levels, and a 30-percent reduction from projected Business as Usual levels in 2020.

The CPUC and California Energy Commission (CEC) concluded a lengthy proceeding in October 2008 to provide electricity and natural gas-specific recommendations to CARB for inclusion in its Scoping Plan and AB 32 regulations and programs. CARB adopted a comprehensive AB 32 Scoping Plan in December 2008 that outlined programs designed to achieve the 2020 GHG reduction goal of 174 million metric tons of CO₂e emissions through regulations, market mechanisms, and other actions.

For the electricity sector, the Scoping Plan adopted the fundamental recommendations of the CPUC for investor-owned and publicly-owned utilities to reduce GHG emissions. The investor-owned and publicly-owned utilities must continue to pursue energy efficiency programs, meet the goal of obtaining 33 percent of their electricity from renewable generation sources by 2020, and comply with a cap-and-trade program that seeks to reduce GHGs from electric generation and other sources.

Throughout 2009, CARB staff drafted rules to implement the 32 Scoping Plan and held public workshops on each measure included in the Scoping Plan. CARB identified “Discrete Early Actions” that would be implemented to reduce GHG emissions from the years 2007 through 2012. On January 29, 2009, CARB announced its regulatory schedule to adopt 74 separate regulations and other measures, including the enhanced energy efficiency programs and 33 percent Renewable Portfolio Standard. The early action measures identified within the Scoping Plan took effect on January 2010.

Senate Bill 97

Senate Bill 97, enacted in 2007, amends CEQA to state that GHG emissions and the effects of GHG emissions are appropriate subjects for CEQA analysis. Senate Bill 97 also directed the Governor’s Office of Planning and Research to develop regulations as part of the CEQA Guidelines “for the mitigation of greenhouse gas emissions or the effects of greenhouse gas emissions” and directed the California Natural Resources Agency to certify and adopt the regulations. The new regulations became effective as part of the CEQA Guidelines on March 18, 2010.

Section 15064.4 of the *CEQA Guidelines* specifically addresses the potential significance of GHG emissions. Section 15064.4 calls for a “good-faith effort” to “describe, calculate or estimate” GHG emissions. Section 15064.4 states that the analysis of GHG impacts should consider the extent that the project would increase or reduce GHG emissions; exceed a locally applicable threshold of significance; and comply with “regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions.”

Section 15064(h)(3) of the *CEQA Guidelines* states that a project may be found to have a less-than-significant impact on GHG emissions if it complies with an adopted plan that includes measures to reduce GHG emissions. The *CEQA Guidelines* do not require or recommend a specific analytical methodology or set a quantitative threshold for determining the significance of GHG emissions.

Senate Bill 375

Senate Bill 375, enacted in 2009, requires CARB to develop regional reduction targets for GHGs, and prompts the creation of regional plans to reduce emissions from vehicle use throughout the state. California's 18 Metropolitan Planning Organizations must each create a Sustainable Community Strategy. The Metropolitan Planning Organizations must develop the Sustainable Community Strategy through integrated land use and transportation planning and demonstrate an ability to attain the proposed reduction targets by 2020 and 2035.

The SANDAG is the Metropolitan Planning Organization for the Proposed Project region. SANDAG's Sustainable Community Strategy includes four building blocks:

1. A land use component that accommodates the Regional Housing Needs Assessment and includes the protection of sensitive resources, including areas protected under habitat conservation plans;
2. Transportation networks including highways, transit, and local streets and roads;
3. Transportation demand management strategies; and
4. Transportation system management programs and policies.

The Sustainable Community Strategy describes how the region will meet GHG reduction targets set by CARB. CARB's targets call for the region to reduce per capita emissions seven percent by 2020 and 13 percent by 2035 from a 2005 baseline. There are no mandated targets beyond 2035.

The SANDAG Board of Directors certified the Sustainable Community Strategy and a Regional Transportation Plan (RTP) on October 28, 2011, after more than two years of extensive public input. Several non-profit organizations challenged the Sustainable Community Strategy and RTP in San Diego Superior Court. On December 3, 2012, the court directed SANDAG to set aside its certification of the Environmental Impact Report for the Sustainable Community Strategy and RTP and to conduct new environmental review regarding GHGs. This ongoing litigation could result in changes to the Sustainable Community Strategy and RTP.

Executive Order S-3-05

Executive Order S-3-05, signed by Governor Schwarzenegger on June 1, 2005, calls for a reduction in GHG emissions to 1990 levels by 2020 and for an 80 percent reduction in GHG emissions by 2050. Executive Order S-3-05 also calls for the CalEPA to prepare biennial science reports on the potential impact of continued global climate change on certain sectors of the California economy. The first of these reports, "Our Changing Climate: Assessing Risks to

California”, and its supporting document “Scenarios of Climate Change in California: An Overview” were published by the California Climate Change Center in 2006.

State Standards Addressing Vehicular Emissions

California AB 1493, enacted on July 22, 2002, required CARB to develop and adopt regulations that reduce GHGs emitted by passenger vehicles and light duty trucks. CARB adopted the regulations on September 24, 2009, to reduce GHG emissions in new passenger vehicles from 2009 through 2016. CARB has estimated that the regulations will reduce climate change emissions from light duty passenger vehicle fleet by an estimated 18 percent in 2020 and by 27 percent in 2030.

Senate Bills 1078 and 107 and Executive Order S-14-08

Senate Bill 1078 requires retail sellers of electricity to provide at least 20 percent of their supply from renewable sources by 2017. Senate Bill 107 changed the target date to 2010. In November 2008, Governor Schwarzenegger signed Executive Order S-14-08, which expands the Renewables Energy Standard to 33 percent by 2020. In April 2011, the California legislature enacted Senate Bill 2, which mandates the Renewables Portfolio Standard of 33 percent by 2020 for investor-owned and publicly-owned utilities.

Executive Order S-21-09

Executive Order S-21-09 directs CARB to work with the CPUC and CEC to implement the Renewables Portfolio Standard of 33 percent by 2020. On May 5, 2011, the CPUC adopted Order Instituting Rulemaking 11-05-005 to open a new proceeding for the Renewables Portfolio Standard. CARB is also working with the CALISO and other load balancing authorities to address reliability, renewable integration requirements, and interactions with wholesale power markets. Consistent with applicable law, CARB has established a loading order in its Energy Action Plan for resources that provide the greatest environmental benefits with the least environmental costs and impacts on public health.

SDG&E Programs

SDG&E has been engaged for many years in activities to reduce GHG emissions. These activities include programs to increase energy efficiency, and efforts to meet the Renewables Portfolio Standard of 33 percent by 2020. In 2011, 20.8 percent of SDG&E’s retail sales were from renewable energy sources.

SDG&E submits a mandatory Long Term Procurement Plan to the CPUC that describes its strategy for meeting forecasted load during the next 10 years. The Long Term Procurement Plan must be consistent with the loading order prescribed in the CEC’s Energy Action Plan to meet growth first with conservation, then with renewable sources of electricity, and finally with new fossil-fueled sources to the extent necessary. New generation sources must be consistent with the Long Term Procurement Plan. The CPUC approved SDG&E’s most recent Long Term Procurement Plan in September 2008.

The Long Term Procurement Plan includes the following programs to reduce GHG emissions:

- Energy efficiency, which will reduce needed capacity by 487 MW by 2016;

- Demand response, which will reduce needed capacity by 249 MW by 2016;
- Renewables, which will provide 318 MW in 2010 and 727 MW in 2016; and
- New peaker plants to back up intermittent renewable and support retirement of older plants.

Forecasted reductions from these programs are greater than 1.5 MMT CO₂e per year. These efforts will reduce carbon intensity by one-third while accommodating continued population growth and will ensure consistency with the applicable plans, policies and regulations adopted by California to reduce GHG emissions.

4.3.3.3 Existing Air Quality and Climate Conditions

Basin Characteristics

One of the main determinants of Basin climatology is the Pacific High, a semi-permanent high-pressure center over the Pacific Ocean. In the summer, this pressure center is located well to the north, causing storm tracks to be directed north of California. This high-pressure cell maintains clear skies for much of the year. When the Pacific High moves southward during the winter, this pattern changes, and low-pressure storms are brought into the region, causing widespread precipitation.

Basin Climate

The climate of the Basin is characterized by warm, dry summers and mild, wet winters. The climate of San Diego, as with all of Southern California, is largely controlled by the strength and position of the Pacific High. This high-pressure ridge over the West Coast creates a repetitive pattern of frequent early morning cloudiness, hazy afternoon shine, clean daytime onshore breezes and little temperature change throughout the year. Limited rainfall occurs in the winter when the oceanic high pressure center is weakest and farthest south as the fringes of mid-latitude storms occasionally move through the area. The average temperatures in January range from 47 °F at night to 63°F during the day. The warmest month is August, when the high temperatures average 74°F. The annual rainfall is approximately 10 inches.

Generation of Air Pollutants

The same atmospheric conditions that create a desirable living climate combine to limit the ability of the atmosphere to disperse the air pollution generated by the large population attracted to the pleasant climate. The onshore winds across the coastline diminish quickly when they reach the foothill communities east of San Diego. The sinking air within the offshore high-pressure system forms a massive temperature inversion that traps all the air pollutants near the ground. The resulting horizontal and vertical stagnation, in conjunction with ample sunshine, causes a number of reactive pollutants to undergo photochemical reactions and form smog, which degrades visibility and irritates the tear ducts and nasal membranes of humans. While programs to control emission of air pollutants have substantially improved regional air quality within the last several decades, some parts of the Basin still do not meet clean air standards.

Local Climate

Local meteorological conditions in the Proposed Project vicinity conform to the regional pattern of strong onshore winds by day (especially in the summer) and weak offshore winds at night (particularly during the winter). These local wind patterns are driven by the temperature difference between the ocean and the warm interior topography. In the summer, moderate breezes of 8 to 12 miles per hour blow onshore and up through the valley from the southwest by day. Light onshore breezes may continue throughout the night when the land remains warmer than the ocean. In the winter, the onshore flow is weaker and the wind flow reverses to blow from the northeast in the evening as the land becomes cooler than the ocean.

Temperature Inversions

Both the onshore flow of marine air and the nocturnal winds are accompanied by two characteristic temperature inversion conditions that control the rate of air pollution dispersal throughout the Basin. The daytime cool onshore flow is capped by a deep layer of warm, sinking air. Along the coastline, the marine air layer beneath the inversion cap is deep enough to accommodate any locally generated emissions. However, as the layer moves inland, pollution sources (especially automobiles) add pollutants from below without any dilution from above through the inversion interface. When this polluted layer approaches foothill communities east of coastal developments, it becomes shallower and exposes residents in those areas to the concentrated by-products of coastal area sources.

4.3.3.4 Air Quality

CARB sets State air quality standards and monitors ambient air quality at approximately 250 air quality monitoring stations across the state. Air quality monitoring stations usually measure pollutant concentrations 10 feet above ground level; therefore, air quality is often referred to in terms of ground-level concentrations. Ambient air pollutant concentrations in the Basin are measured at 10 air quality-monitoring stations operated by SDAPCD.

The Escondido Monitoring Station located on East Valley Parkway in the City of Escondido was chosen to gather data for carbon monoxide, ozone, nitrogen dioxide, sulfur dioxide, PM₁₀, and PM_{2.5}. The data collected at this monitoring station are representative of the air quality experienced on-site from 2009 through 2011; refer to Table 4.3-5, Local Air Quality Levels. These data are likely conservative, as the monitoring station is located in a developed area with multiple emission sources, where TL 637 is located in a less developed area. The following air quality information briefly describes the various types of pollutants.

Ozone

Ozone occurs in two layers of the atmosphere. The layer surrounding the earth’s surface is the troposphere. The troposphere extends approximately 10 miles above ground level, where it meets the second layer, the stratosphere. The stratospheric layer extends upward from about 10 to 30 miles and protects life on earth from the sun’s harmful ultraviolet rays. In the troposphere, ozone is a photochemical pollutant and is formed from reactions between volatile organic compounds (VOCs) and nitrogen oxides with the presence of sunlight. Therefore, VOCs and nitrogen oxides are ozone precursors. VOCs and nitrogen oxides are emitted from various sources throughout the Basin. Significant ozone formation generally requires an adequate

amount of precursors in the atmosphere and several hours in a stable atmosphere with strong sunlight. High ozone concentrations can form over large regions when emissions from motor vehicles and stationary sources are carried hundreds of miles from their origins.

Many respiratory ailments, as well as cardiovascular disease, are aggravated by exposure to high ozone levels. Ozone also damages natural ecosystems (such as forests and foothill plant communities) and damages agricultural crops and some man-made materials (such as rubber, paint and plastics). Societal costs from ozone damage include increased healthcare costs, the loss of human and animal life, accelerated replacement of industrial equipment and reduced crop yields.

Carbon Monoxide

Carbon monoxide is an odorless, colorless toxic gas that is emitted by mobile and stationary sources as a result of incomplete combustion of hydrocarbons or other carbon-based fuels. In cities, automobile exhaust can cause as much as 95 percent of all carbon monoxide emissions. At high concentrations, carbon monoxide can reduce the oxygen-carrying capacity of the blood and cause headaches, dizziness, and unconsciousness.

Nitrogen Dioxide

Nitrogen oxides are a family of highly reactive gases that are a primary precursor to the formation of ground-level ozone, and react in the atmosphere to form acid rain. USEPA and CARB have established ambient air quality standards for nitrogen dioxide. Nitrogen dioxide is a reddish-brown gas that can cause breathing difficulties at high levels. Peak readings of nitrogen dioxide occur in areas that have a high concentration of combustion sources (e.g., motor vehicle engines, power plants, refineries, and other industrial operations).

Nitrogen dioxide can irritate and damage the lungs, and lower resistance to respiratory infections, such as influenza. The health effects of short-term exposure are still unclear. However, continued or frequent exposure to nitrogen dioxide concentrations that are typically much higher than those normally found in the ambient air may increase acute respiratory illnesses in children and increase the incidence of chronic bronchitis and lung irritation. Chronic exposure to nitrogen dioxide may aggravate eyes and mucus membranes and cause pulmonary dysfunction.

Sulfur Dioxide

Sulfur dioxide is a colorless, reactive gas that is produced from the burning of sulfur-containing fuels such as coal and oil, and by other industrial processes. Generally, the highest concentrations of sulfur dioxide are found near large industrial sources. Sulfur dioxide is a respiratory irritant that can cause narrowing of the airways leading to wheezing and shortness of breath. Long-term exposure to sulfur dioxide can cause respiratory illness and aggravate existing cardiovascular disease.

Coarse Particulate Matter (PM₁₀)

PM₁₀ refers to suspended particulate matter, which is smaller than 10 microns or 10 one-millionths of a meter. PM₁₀ arises from sources such as road dust, diesel soot, combustion products, construction operations, and dust storms. PM₁₀ scatters light and significantly reduces visibility. In addition, these particulates penetrate the lungs and can potentially damage the

respiratory tract. On June 19, 2003, CARB adopted amendments to the statewide 24-hour particulate matter standards based upon requirements set forth in the Children’s Environmental Health Protection Act (Senate Bill 25).

Fine Particulate Matter (PM_{2.5})

Due to recent increased concerns over health impacts related to fine particulate matter (particulate matter 2.5 microns in diameter or less), both federal and state PM_{2.5} standards have been created. Particulate matter impacts primarily affect infants, children, the elderly, and those with pre-existing cardiopulmonary disease. Due to its smaller size, PM_{2.5} has the potential to lodge more deeply in the lungs. Both USEPA and CARB have revised their ambient air quality standards for PM_{2.5} to more stringent levels since the standards were originally proposed in 1997. Almost everyone in California is exposed to levels at or above the current State standards during some parts of the year, and the statewide potential for significant health impacts associated with particulate matter exposure was determined to be large and wide-ranging.

Reactive Organic Gases and Volatile Organic Compounds

Hydrocarbons are organic gases that are formed solely of hydrogen and carbon. There are several subsets of organic gases, including reactive organic gases (ROGs) and VOCs. Both ROGs and VOCs are emitted from the incomplete combustion of hydrocarbons or other carbon-based fuels. The major sources of hydrocarbons are combustion engine exhaust, oil refineries, and oil-fueled power plants; other common sources are petroleum fuels, solvents, dry cleaning solutions, and paint (via evaporation).

Lead

Lead in the atmosphere occurs as particulate matter. Lead has historically been emitted from vehicles combusting leaded gasoline, as well as from industrial sources. With the phase-out of leaded gasoline, large manufacturing facilities are the sources of the largest amounts of lead emissions. Lead has the potential to cause gastrointestinal, central nervous system, kidney and blood diseases upon prolonged exposure. Lead is also classified as a probable human carcinogen.

CARB has also set standards for four additional pollutants: sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. These pollutants are generally not considered to be pollutants of concern in the Basin because there are no major sources that would contribute to ambient levels within the Basin.

Toxic Air Contaminants (TACs)

Section 39655 of the California Health and Safety Code defines a toxic air contaminant (TAC) as “an air pollutant which may cause or contribute to an increase in mortality or an increase in serious illness, or which may pose a present or potential hazard to human health.” Section 39657 (b) of the California Health and Safety Code defines TACs to include 189 substances that have been listed as federal hazardous air pollutants under Section 7412 of Title 42 of the USC.

TACs can cause various cancers, depending on the particular chemicals, their type, and the duration of exposure. Additionally, some of the TACs may cause other health effects over the short or long term. The 10 TACs posing the greatest health risk in California are acetaldehyde,

benzene, 1-3 butadiene, carbon tetrachloride, hexavalent chromium, para-dichlorobenzene, formaldehyde, methylene chloride, perchlorethylene, and diesel particulate matter.

Air Quality Designations

Three air quality designations can be given to an area for a criteria pollutant:

- **Nonattainment:** This designation applies when air quality standards have not been consistently achieved.
- **Attainment:** This designation applies when air quality standards have been achieved.
- **Unclassified:** This designation applies when insufficient monitoring data exists to determine a nonattainment or attainment designation.

Current NAAQS and CAAQS are summarized in Table 4.3-4, National and California Ambient Air Quality Standards. On April 15, 2004, USEPA formally replaced the 1979 1-hour ozone standard with a more stringent 8-hour standard as part of the Clean Air Rules of 2004. The Basin is currently designated as a nonattainment area for ozone and all particulate matter.

Table 4.3-4: National and California Ambient Air Quality Standards

Pollutant	Averaging Time	California ¹		Federal ²	
		Standard ³	Attainment Status	Standards ⁴	Attainment Status
Ozone (O ₃)	1 Hour	0.09 ppm (180 µg/m ³)	Nonattainment	NA	NA
	8 Hours	0.070 ppm (137 µg/m ³)	Nonattainment	0.075 ppm (147 µg/m ³)	Marginal Nonattainment
Particulate Matter (PM ₁₀)	24 Hours	50 µg/m ³	Nonattainment	150 µg/m ³	Attainment
	Annual Arithmetic Mean	20 µg/m ³	Nonattainment	NA	Attainment
Fine Particulate Matter (PM _{2.5})	24 Hours	No Separate State Standard		35 µg/m ³	Attainment
	Annual Arithmetic Mean	12 µg/m ³	Nonattainment	12 µg/m ³	Unclassified
Carbon Monoxide (CO)	8 Hours	9.0 ppm (10 mg/m ³)	Attainment	9 ppm (10 mg/m ³)	Attainment
	1 Hour	20 ppm (23 mg/m ³)	Attainment	35 ppm (40 mg/m ³)	Attainment
Nitrogen Dioxide (NO ₂) ⁵	Annual Arithmetic Mean	0.030 ppm (56 µg/m ³)	NA	0.053 ppm (100 µg/m ³)	Attainment
	1 Hour	0.18 ppm (338 µg/m ³)	Attainment	100 ppb	Attainment
Lead (Pb) ^{7,8}	30 days average	1.5 µg/m ³	Attainment	N/A	NA
	Calendar Quarter	N/A	NA	1.5 µg/m ³	Attainment

Table 4.3-4 (cont): National and California Air Quality Standards

Pollutant	Averaging Time	California ¹		Federal ²	
		Standard ³	Attainment Status	Standards ⁴	Attainment Status
Sulfur Dioxide (SO ₂) ⁶	24 Hours	0.04 ppm (105 µg/m ³)	Attainment	0.14 ppm (365 µg/m ³)	Attainment
	3 Hours	N/A	NA	0.5 ppm (1300 µg/m ³)	Attainment
	1 Hour	0.25 ppm (655 µg/m ³)	Attainment	75 ppb (196 µg/m ³)	NA
Visibility-Reducing Particles ⁹	8 Hours (10 a.m. to 6 p.m., PST)	Extinction coefficient = 0.23 km@<70% RH	Unclassified	No Federal Standards	
Sulfates	24 Hour	25 µg/m ³	Attainment		
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m ³)	Unclassified		
Vinyl Chloride ⁷	24 Hour	0.01 ppm (26 µg/m ³)	Unclassified		
<p>Notes:</p> <p>µg/m³ = micrograms per cubic meter; ppm = parts per million; km = kilometer(s); RH = relative humidity; PST = Pacific Standard Time. N/A = Not Applicable</p> <ol style="list-style-type: none"> California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1- and 24-hour), nitrogen dioxide, and particulate matter (PM₁₀, PM_{2.5}, 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. National standards (other than ozone, particulate matter and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than 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 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Concentration is 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 mm of mercury. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 mm of mercury; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety, to protect the public health. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant. The table presents primary standards with the exception of the 3-hour SO₂ standard, which is a secondary standard. 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. 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. CARB has identified lead and vinyl chloride as TACs with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants. 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. 					

Table 4.3-4 (cont): National and California Air Quality Standards

Pollutant	Averaging Time	California ¹		Federal ²	
		Standard ³	Attainment Status	Standards ⁴	Attainment Status
9. In 1989, CARB 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 standard, respectively. <i>Source: California Air Resources Board and U.S. Environmental Protection Agency, November 30, 2012.</i>					

Ambient Air Quality

Violations of NAAQS and CAAQS for ozone and PM have occurred historically in the Proposed Project area. The frequency of violations and current air quality conditions at the Escondido Monitoring Station are summarized in Table 4.3-5, Local Air Quality Levels. The Escondido Monitoring Station is the site nearest to the Proposed Project area, although the Escondido Monitoring Station is located in a more developed area with multiple emission sources compared to the TL 637 area.

Table 4.3-5: Local Air Quality Levels

Pollutant	Standard (Maximum Allowable Amount)		Year1	Maximum Concentration ²	Number of Days State/Federal Std. Exceeded
	California	Federal Primary			
1-hour Ozone (O ₃) ¹	0.09 ppm for 1 hour	NA	2009 2010 2011	0.093 ppm 0.105 ppm 0.098 ppm	0/NA 2/NA 1/NA
8-hour Ozone (O ₃) ¹	0.070 ppm for 8 hours	0.075 ppm for 8 hours	2009 2010 2011	0.080 ppm 0.084 ppm 0.089 ppm	9/1 5/3 2/2
1-hour Carbon Monoxide (CO)	20 ppm for 1 hour	35 ppm for 1 hour	2009 2010 2011	4.4 ppm 3.9 ppm 3.5 ppm	0/0 0/0 0/0
8-hour Carbon Monoxide (CO)	9.0 ppm for 8 hours	9 ppm for 8 hour	2009 2010 2011	3.54 ppm 2.46 ppm 2.20 ppm	0/0 0/0 0/0
Nitrogen Dioxide (NO ₂)	0.18 ppm for 1 hour	0.100 ppm For 1 hour	2009 2010 2011	0.073 ppm 0.064 ppm 0.062 ppm	0/0 0/0 0/0
1-hour Sulfur Dioxide (SO ₂)	75 ppb for 1 hour	NA	2009 2010 2011	0.004 ppm 0.005 ppm 0.007 ppm	0/0 0/0 0/0
24-hour Sulfur Dioxide (SO ₂)	0.04 ppm for 24 hours	NA	2009 2010 2011	0.003 ppm 0.002 ppm 0.002 ppm	0/NA 0/NA 0/NA
Fine Particulate Matter (PM _{2.5}) ^{1, 2}	No Separate Standard	35 µg/m ³ for 24 hours	2009 2010 2011	64.9 µg/m ³ 48.4 µg/m ³ 69.8 µg/m ³	NA/2 NA/2 NA/3
Particulate Matter (PM ₁₀) ^{1, 2}	50 µg/m ³ for 24 hours	150 µg/m ³ for 24 hours	2007 2008 2009	74.0 µg/m ³ 43.0 µg/m ³ 40.0 µg/m ³	1/0 0/0 0/0

Table 4.3-5 (cont): Local Air Quality Levels

Pollutant	Standard (Maximum Allowable Amount)		Year1	Maximum Concentration ²	Number of Days State/Federal Std. Exceeded
	California	Federal Primary			
<p>Sources: Aerometric Data Analysis and Measurement System (ADAM), summaries from 2009 to 2011, http://www.arb.ca.gov/ackm/; for 1-hour CO and 1-hour SO₂, San Diego Air Pollution Control District, Five-Year Air Quality Summary, http://www.sdapcd.org/info/reports/5-year-summary.pdf.</p> <p>ppm = parts per million; PM₁₀ = particulate matter 10 microns in diameter or less; NM = not measured; µg/m³ = micrograms per cubic meter; PM_{2.5} = particulate matter 2.5 microns in diameter or less; NA = not applicable; * There was insufficient (or no) data available to determine this value.</p> <p>Notes:</p> <ol style="list-style-type: none"> Maximum concentration is measured over the same period as the California Standards. PM₁₀ and PM_{2.5} exceedances are derived from the number of samples exceeded, not days. 					

4.3.3.5 Sensitive Receptors

Sensitive populations are more susceptible to the effects of air pollution than is the general population. According to the South Coast Air Quality Management District (SCAQMD), “a sensitive receptor is a person in the population who is particularly susceptible to health effects due to exposure to an air contaminant than is the population at large,” such as medical patients and elderly persons/athletes/children at public parks/playgrounds, long-term care/assisted living facilities, churches, schools, child care centers/homes and athletic fields.

Sensitive populations (sensitive receptors) that are in proximity to localized sources of toxics and carbon monoxide are of particular concern. Land uses that may include sensitive receptors include residences, schools, playgrounds, childcare centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent centers and retirement homes. Table 4.3-6, Locations That May Include Sensitive Receptors, lists the distances and locations where sensitive receptors may be found and that lie within one mile of the areas that would be affected by the improvements along TL 637. The closest land uses that may contain sensitive receptors would be the residential units located southwest of the Proposed Project site.

Table 4.3-6: Locations That May Include Sensitive Receptors

Type	Name	Distance from Project Site (miles)	Direction from Project Site
TL 637			
Residential	N/A	0.1	Residential uses surround the TL 637 route
Schools	Ramona High School	0.70	Northwest
	Olive Pierce Middle School	0.7	Northwest
	Barnett Elementary School	0.5	South
	Spencer Valley Elementary School	1.5	Southeast

Table 4.3-6 (cont): Locations That May Include Sensitive Receptors

Type	Name	Distance from Project Site (miles)	Direction from Proposed Project Site
Places of Worship	Christian Science	0.1	Northwest
	The Way Church	0.1	Southwest
	St. Mary's In-the-Valley Episcopal Church	0.4	West
	Immaculate Heart of Mary Catholic Church	0.55	North Northwest
	Seventh Day Adventist Church	0.55	North Northwest
	Berean Bible Church	0.55	North Northwest
	First Congregational Church of Ramona	0.55	Northwest
	The Church of Jesus Christ of Latter Day Saints	0.55	Northwest
	Apostolic Assembly of the Faith in Jesus Christ	0.55	Northwest
Calvary Chapel	0.75	East	
Parks	Simon Preserve	0	The Proposed Project is located within and traverses the Mt. Gower Preserve
	Collier Park	0.5	Northwest
	Mt. Gower Preserve	0	The Proposed Project is located within and traverses the Mt. Gower Preserve

Source: <http://www.mcpquest.com>
Note: Sensitive receptors utilized in this analysis are those within a one-mile radius of the Proposed Project site.

4.3.4 Potential Impacts

4.3.4.1 Significance Criteria

Standards of impact significance were derived from Appendix G of the *CEQA Guidelines*. Under these guidelines, the Proposed Project could have a potentially significant impact to air quality if it will:

- 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; or
- e) Create objectionable odors affecting a substantial number of people.

Also under these guidelines, a project would have a potentially significant impact to GHGs if it will:

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

4.3.4.2 SDAPCD Thresholds

Per SDAPCD, a project would result in a significant air quality impact if it generates total emissions (direct and indirect) that exceed their adopted thresholds; refer to Table 4.3-7, SDAPCD Pollutant Thresholds. A project that results in a significant impact must incorporate sufficient measures to reduce its impact to a level that is not significant. A project that results in impacts that cannot be mitigated to a level that is not significant must incorporate all feasible measures. Note that the emission thresholds are given as a daily value and an annual value, so that a multi-phased project (such as a project with a construction phase and a separate operational phase) with phases shorter than one year can be compared to the daily value.

Table 4.3-7: SDAPCD Pollutant Thresholds

Pollutant	Pounds/Day
Carbon Monoxide (CO)	550
Oxides of Sulfur (SO _x)	250
Volatile Organic Compounds (VOCs)	75
Oxides of Nitrogen (NO _x)	250
Particulate Matter (PM ₁₀)	100
Particulate Matter (PM _{2.5})	55

Source: San Diego County Air Pollution Control District Rule 1501, 20.2(d)(2), 1995.
 The San Diego County Air Pollution Control District does not have thresholds of significant for VOCs or PM_{2.5}. As such, the VOC and PM_{2.5} thresholds for construction from the South Coast Air Quality Management District’s CEQA Air Quality Significance Thresholds (<http://www.aqmd.gov/ceqa/handbook/signthres.pdf>) were utilized.

4.3.4.3 Question 3a – Conflict with or obstruct implementation of the applicable air quality plan?

Construction – Less Than Significant Impact

A potentially significant impact on air quality would occur if the Proposed Project would conflict with or obstruct the implementation of the applicable air quality plan. Although the Proposed Project would contribute air emissions to the Basin, of primary concern is that project-related impacts have been properly anticipated in the regional air quality planning process and reduced

whenever feasible. Therefore, it is necessary to assess the Proposed Project's consistency with the RAQS and SIP. Proposed Project consistency with the RAQS and SIP is determined in terms of whether the Proposed Project exceeds the criteria pollutant threshold levels established by SDAPCD and whether the Proposed Project would result in growth that has been anticipated in a given subregion. Construction emissions are temporary and short-term, and comprise a small percentage of the emissions budgets for construction activities that are included in the SIP. Construction of various small projects such as the Proposed Project is anticipated within the SIP emissions budgets. The Proposed Project will improve reliability and reduce fire risks in fire-prone areas as part of an overall effort of fire-hardening projects and other enhancements. Additional benefits of the Proposed Project include reduction of outage potential, improved contamination resistance, reduction of facility maintenance, maximization of equipment life span potential, installation of fiber optic for enhanced digital protective relay systems, and improved avian protection. The Proposed Project involves the replacement of existing pole structures and does not involve new construction. The Proposed Project would not result in growth that would conflict with or obstruct implementation of the applicable air quality plan.

Operation and Maintenance – No Impact

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 CPUC G.O. 131-D and CEQA for purposes of assessing whether further CPUC approval is required. Accordingly, the Proposed Project would not result in a significant increase in long-term air quality emissions. Therefore, the Proposed Project would not conflict with or obstruct implementation of the applicable air quality plan and would have no impact relating to plan consistency.

4.3.4.4 Question 3b - Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Construction – Less Than Significant Impact

Construction of the Proposed Project is anticipated to occur for approximately nine months (January through September, 2014). Table 4.3-8, Preliminary Construction Schedule, includes a preliminary schedule for the Proposed Project. Construction of the Proposed Project is anticipated to occur in 2014.

Table 4.3-8: Preliminary Construction Schedule

Construction Phase, 2014	Schedule (Estimated)
Micropile Foundation Drilling	1-4 through 2-15
Micropile Foundation Grouting	1-10 through 3-6
Cap and Testing	3-6 through 3-15
Foundation Digging	1-11 through 5-5
Shoe-Fly (Temporary) Pole Installation	1-8 through 1-21
Mobilization	2-20 through 3-4
Power Line Construction	3-4 through 6-17
Overhead Line Pulling and Tensioning	5-12 through 7-28
Sag work	6-18 through 8-6
Underground Distribution Installation	3-18 through 5-3
Demobilization	8-6 through 8-20
Cleanup	8-6 through 9-6

Note: Above information was provided by SDG&E and is subject to change upon final project design.

Construction equipment would include drill rigs, mobile cranes, bucket trucks, line trucks, crew trucks, generator sets, grouting equipment, air compressors, a helicopter, and trucks for transporting equipment to the site. Heavy hauling trucks would be employed for the equipment delivery and installation. Crew trucks, bucket trucks, and pick-up trucks would arrive and depart from the site daily for the duration of the construction activities.

It is anticipated that approximately 140 workers could be working on the Proposed Project at any one time. This estimate includes construction crews, SWPPP personnel, site monitors, testing and inspection crews, and SDG&E personnel.

Daily transportation of construction workers is not expected to cause a significant effect since there would not be more than 40 workers at one time in any one location at the peak of construction, and the number of trips generated would be minimal and constitute an insignificant percentage of current daily volumes in the area. Moreover, SDG&E will encourage carpooling to the greatest extent possible.

Future construction of the Proposed Project site would generate short-term air quality impacts during soil disturbance and construction operations. The short-term air quality analysis considers the following temporary impacts from the Proposed Project.

- Traveling on unpaved surfaces and earthmoving activities generates fugitive dust, and thus PM_{10} ;
- Heavy equipment and vehicles required for construction generates and emits diesel exhaust emissions; and,
- The vehicles of commuting construction workers and trucks hauling equipment would generate and emit exhaust emissions.

Construction activities at the Proposed Project were modeled based upon the schedule provided in Table 4.3-8. As discussed above, the Proposed Project was modeled using emission factors from CARB's OFFROAD2007 and EMFAC2011 programs.

Variables factored into estimating the total construction emissions include the level of activity, length of construction period, number of pieces and types of equipment in use, site characteristics, number of construction personnel, and the amount of site disturbance anticipated. The construction emissions findings for TL 637 are presented in Table 4.3-9, TL 637 Maximum Daily Construction Air Emissions. Table 4.3-9 presents an evaluation of the maximum daily emissions associated with the simultaneous construction activities required for the wood pole replacement project. Maximum daily activities were identified based on a review of the construction schedule to identify simultaneous construction phases. A listing of mobile and stationary construction equipment is included in the air quality modeling; refer to Appendix 4.3-A, Emissions Spreadsheets.

Table 4.3-9: TL 637 Maximum Daily Construction Air Emissions

Emissions Source	Pollutant (pounds/day) ¹				
	ROG	CO	NO _x	PM ₁₀	PM _{2.5}
2014					
Emissions	36.45	243.56	240.28	40.61	24.13
SDAPCD Thresholds	75	550	250	100	55
Is Threshold Exceeded After Mitigation?	No	No	No	No	No
ROG = reactive organic gases; NO _x = nitrogen oxides; CO = carbon monoxide; SO _x = sulfur oxides; PM ₁₀ = particulate matter; up to 10 microns					
Notes:					
1. Refer to Appendix 4.3-A, Emissions Spreadsheets, for assumptions used in this analysis, including quantified emissions reduction by mitigation measures.					

Fugitive Dust Emissions

Construction activities are a source of fugitive dust (PM₁₀) emissions that may have a substantial, although temporary, impact on local air quality. In addition, fugitive dust may be a nuisance to those living and working in the Proposed Project area. Fugitive dust emissions are associated with land clearing, excavation, cut and fill, and truck travel on unpaved roadways. Fugitive dust emissions vary substantially from day to day, depending on the level of activity, specific operations, and weather conditions. Fugitive dust from soil disturbance and construction is expected to be short-term and would cease upon Proposed Project completion. Additionally, most of this material is inert silicates, rather than the complex organic particulates released from combustion sources, which are more harmful to health.

The emission calculations include fugitive dust emissions as part of soil disturbance activities; refer to Table 4.3-9. With implementation of SDG&E's standard construction practices, the Proposed Project would not exceed the SDAPCD standards for PM₁₀ or PM_{2.5}. Standard measures include adherence to standard construction practices (watering of inactive and perimeter areas, track-out requirements, and containing dirt and dust within the Proposed Project area).

Construction Equipment and Worker Vehicle Exhaust

Exhaust emissions from construction activities include emissions associated with the transport of machinery and supplies to and from the Proposed Project site, emissions produced on-site as the equipment is used, and emissions from trucks transporting materials to/from the site. Emitted pollutants would include carbon monoxide, ROG, nitrogen oxides, PM₁₀, and PM_{2.5}. As presented in Table 4.3-9, the individual components of the Proposed Project would not cause exceedances of SDAPCD standards for any criteria pollutant. There is no other substantial evidence in the record demonstrating that the Proposed Project would have an additional significant impact. Therefore, impacts associated with construction would be less than significant.

Operation and Maintenance – No Impact

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. Accordingly, the Proposed Project would not result in a significant increase in long-term air quality emissions. Therefore, the Proposed Project would not violate any air quality standard or contribute substantially to an existing or projected air quality violation. No impacts would result.

4.3.4.5 Question 3c - 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)?

Construction – Less Than Significant Impact

As shown previously in Table 4.3-9, the construction of the Proposed Project would lead to a small, temporary increase in criteria air pollutants. SDG&E standard construction practices include minimizing vehicle idling time and controlling for dust emissions to reduce the impacts of the construction. Emissions, which would be temporary, would not exceed the SDAPCD standard for any criteria pollutant. Therefore, impacts associated with construction would be less than significant.

Operation & Maintenance – No Impact

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. Accordingly, the Proposed Project would not result in a significant increase in long-term air quality emissions. Therefore, the Proposed Project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment. No impacts would occur.

4.3.4.6 Question 3d - Expose sensitive receptors to substantial pollutant concentrations?

Construction – Less Than Significant Impact

California has identified diesel particulate matter as a TAC. Diesel particulate matter is emitted from on- and off-road vehicles that utilize diesel as fuel. Following identification of diesel particulate matter as a TAC in 1998, CARB has worked on developing strategies and regulations to reduce the emissions and associated risk from diesel particulate matter. The overall strategy for achieving these reductions is found in the *Risk Reduction Plan to Reduce Particulate Matter from Diesel-Fueled Engines and Vehicles*.

Construction activities associated with the wood pole replacement along TL 637 would result in emissions of diesel particulate matter. Sources of diesel particulate matter at the site would include haul truck activities, heavy construction equipment, and contractor vehicles. Potential health effects associated with exposure to diesel particulate matter are long-term effects and are evaluated on the basis of a lifetime of exposure (70 years). Because construction activities would move on a daily basis, and because activities would be short-term, emissions would not impact any sensitive receptors for any length of time.

CARB has adopted airborne toxic control measures (ACTMs) applicable to off-road diesel equipment and portable diesel engines rated brake 50 HP and greater. The purpose of these ACTMs is to reduce emissions of particulate matter from engines subject to the rule. The ACTMs require diesel engines to comply with PM emission limitations on a fleet-averaged basis.

CARB has also adopted an ACTM that limits diesel-fueled commercial motor vehicles idling. The rule applies to motor vehicles with gross vehicular weight ratings greater than 10,000 pounds that are licensed for on-road use. The rule restricts vehicles from idling for more than five minutes at any location with exceptions for idling that may be necessary in the operation of the vehicle.

All off-road diesel equipment, on-road heavy-duty diesel trucks, and portable diesel equipment used for the Proposed Project must meet California's applicable ACTMs for control of diesel particulate matter or nitrogen oxide in the exhaust (e.g., ACTMs for portable diesel engines, off-road vehicles, and heavy-duty on-road diesel trucks, and 5-minute diesel engine idling limits)

that are in effect during the implementation of the Proposed Project. The mobile fleets used for the Proposed Project are expected to comply fully with these ATCMs. This will ensure that pollutant emissions in diesel engine exhaust do not exceed applicable federal or state air quality standards.

Operation & Maintenance – No Impact

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. Accordingly, the Proposed Project would not result in a significant increase in diesel particulate emissions. Operational activities would be short-term, and similar to existing operational activities. Therefore, the Proposed Project would not expose sensitive receptors to substantial pollutant concentrations. No impacts would occur.

4.3.4.7 Question 3e - Create objectionable odors affecting a substantial number of people?

Construction – Less Than Significant Impact

Construction activity associated with the construction activities associated with the Proposed Project may generate detectable odors from heavy-duty equipment exhaust. Potential odors generated during construction operations would be temporary in nature and would be limited by the relatively small number of vehicles and equipment onsite and distance from any sensitive receptors. Therefore, impacts would be less than significant.

Operation & Maintenance – No Impact

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. Therefore, the Proposed Project would not create objectionable odors affecting a substantial amount of people. No impacts would occur.

4.3.4.8 Question 3f - Diminish an existing air quality rule or future compliance requirement resulting in a significant increase in air pollutant(s)?

Construction – Less Than Significant Impact

Construction emissions are temporary and short-term. Construction activities are subject to SDAPCD Rule 50, Visible Emissions; SDAPCD Rule 51, Nuisance; and SDAPCD Rule 55, Fugitive Dust Control. SDG&E's standard construction practices are consistent with the requirements of SDAPCD Rules 50, 51, and 55. Therefore, the construction of the Proposed Project will not diminish an existing air quality rule or future compliance requirement resulting in a significant increase in air pollutants. Impacts are less than significant.

Operation and Maintenance – No Impact

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. Accordingly, the Proposed Project would not result in a significant increase in long-term air quality emissions. The Proposed Project would not diminish an existing air quality rule or future compliance and would have no impact in regards to air quality rules and compliance requirements.

4.3.4.9 Question 3g - Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Impacts from GHG emissions are not direct impacts, but would have the potential for cumulative impacts on the environment. The Summary Report from the California Climate Change Center uses a range of emissions scenarios developed by the IPCC to project a series of potential warming ranges (i.e., temperature increases) that may occur in California during the 21st century. Three warming ranges were identified: Lower warming range (3.0 to 5.5 °F); medium warming range (5.5 to 8.0 °F); and higher warming range (8.0 to 10.5 °F). The report then presents an analysis of the future projected climate changes in California under each warming range scenario.

According to the report, substantial temperature increases would result in a variety of impacts to the people, economy, and environment of California. These impacts would result from a

projected increase in extreme conditions, with the severity of the impacts depending upon actual future GHG emissions and associated warming. These impacts are described below.

Public Health

Higher temperatures are expected to increase the frequency, duration, and intensity of conditions conducive to air pollution formation. For example, days with weather conducive to ozone formation are projected to increase by 25 to 35 percent under the lower warming range and 75 to 85 percent under the medium warming range. In addition, if global background ozone levels increase as is predicted in some scenarios, it may become impossible to meet local air quality standards.

An increase in wildfires could also occur, and the corresponding increase in the release of pollutants including PM_{2.5} could further compromise air quality. The Summary Report indicates that large wildfires could become up to 55 percent more frequent if GHG emissions are not significantly reduced. The purpose of the Proposed Project is to minimize the risk of fires along the TL 637 route. The Proposed Project therefore helps to address the risk of wildfires.

Potential health effects from global climate change may arise from temperature increases, climate-sensitive diseases, extreme events, and air quality. There may be direct temperature effects through increases in average temperature leading to more extreme heat waves and less extreme cold spells. Those living in warmer climates are likely to experience more stress and heat-related problems (e.g., heat rash and heat stroke). In addition, climate sensitive diseases (such as malaria, dengue fever, yellow fever, and encephalitis) may increase, such as those spread by mosquitoes and other disease-carrying insects.

Climate change could affect the Proposed Project area because warmer climates may experience more of the problems identified above related to heat, should increases in average temperature in the Proposed Project area occur.

Water Resources

A vast network of reservoirs and aqueducts capture and transport water throughout California from Northern California rivers and the Colorado River. The current distribution system relies on Sierra Nevada mountain snowpack to supply water during the dry spring and summer months. Rising temperatures, potentially compounded by decreases in precipitation, could severely reduce spring snowpack, increasing the risk of summer water shortages. In addition, if temperatures continue to rise, more precipitation would fall as rain instead of snow, further reducing the Sierra Nevada spring snowpack by as much as 70 to 90 percent. California's water resources are also at risk from rising sea levels. An influx of seawater would degrade California's estuaries, wetlands, and groundwater aquifers.

This global climate change impact is not likely to have a direct effect on the operation of the Proposed Project.

Agriculture

Increased GHGs and associated increases in temperature are expected to cause widespread changes to the agricultural industry, reducing the quantity and quality of agricultural products statewide. Significant reductions in available water supply to support agriculture would also impact production. Crop growth and development will change as will the intensity and frequency of pests and diseases. Agriculture's impacts from global climate change are not

anticipated to affect the Proposed Project directly because the Proposed Project site does not include agricultural uses. Agricultural impacts from global climate change could affect ranching and grazing activities in the Proposed Project area, however.

Ecosystems/Habitats

Continued global warming will likely shift the ranges of existing invasive plants and weeds, thus alternating competition patterns with native plants. Range expansion is expected in many species while range contractions are less likely in rapidly evolving species with significant populations already established. Continued global warming is also likely to increase the populations of and types of pests and affect natural ecosystems and biological habitats throughout California. This effect of global climate change could affect current ecosystems and habitats at the Proposed Project site.

Wildland Fires

Global warming is expected to increase the risk of wildfire and alter the distribution and character of natural vegetation. If temperatures rise into the medium warming range, the risk of large wildfires in California could increase by as much as 55 percent, which is almost twice the increase expected if temperatures stay in the lower warming range. However, since wildfire risk is determined by a combination of factors including precipitation, winds, temperature, and landscape and vegetation conditions, future risks will not be uniform throughout California. If global climate change leads to increased risk of wildfires in Southern California, this impact could affect the Proposed Project area. The purpose of the Proposed Project is to minimize the risk of fires along the TL 637 route. The Proposed Project therefore helps to address the risk of wildfires.

Rising Sea Levels

Rising sea levels, more intense coastal storms, and warmer water temperatures will increasingly threaten California's coastal regions. Under the high warming scenario, sea level is anticipated to rise 22 to 35 inches by 2100. A sea level risk of this magnitude would inundate coastal areas with salt water, accelerate coastal erosion, threaten levees and inland water systems, and disrupt wetlands and natural habitats. In California, the coastal zone is defined as 1,000 yards inland from the mean high tide level. Because the Proposed Project site is not located within the coastal zone, sea level risk would not affect the Proposed Project.

Construction – Less than Significant Impact

The main source of GHG emissions associated with the Proposed Project would be combustion of fossil fuels during construction of the Proposed Project. GHG emissions for construction were calculated using the same approach as criteria pollutant emissions for overall construction emissions. Estimated GHG emissions are summarized in Table 4.3-10, Greenhouse Gas Construction Emissions. Emission calculations are provided in Appendix 4.3-A, Emissions Calculations.

Table 4.3-10: Greenhouse Gas Construction Emissions

Construction Emission Source	GHG Emissions (metric tons)
	CO ₂ e
Construction Heavy Equipment	1,277
Helicopters	99
Construction Trucks	75
Worker Vehicles	1,071
TOTAL	2,552
Amortized Construction Emissions (amortized over 30 years)	84

Both the County of San Diego and SCAQMD have proposed significance thresholds for industrial projects of 10,000 metric tons of CO₂e annual emissions. The total annualized construction CO₂e emissions of 84 metric tons are below the County of San Diego’s and the SCAQMD’s significance threshold of 10,000 metric tons of CO₂e annually for industrial projects. The Proposed Project would therefore not generate GHGs that would have a significant impact on the environment. The impact is less than significant.

Operation & Maintenance – No Impact

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. Accordingly, the Proposed Project would not result in a significant increase in long-term air quality emissions. Therefore, the Proposed Project would not generate GHGs that would have a significant impact on the environment. No impacts would result.

4.3.4.10 Question 3h - Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Construction – Less Than Significant Impact

Construction of the Proposed Project would be temporary. GHG emissions are below the County of San Diego’s and the SCAQMD’s significance threshold when amortized over a 30-year period as recommended by the County of San Diego and the SCAQMD. Construction equipment and vehicles supporting the construction of the Proposed Project would comply with the requirements implemented by CARB to reduce GHG emissions. Accordingly, construction impacts are less than significant.

Operation & Maintenance – No Impact

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. Accordingly, the Proposed Project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases. Therefore, the Proposed Project would not generate GHGs that would have a significant impact on the environment. No impacts are anticipated.

4.3.5 Project Design Features and Ordinary Construction/Operating Restrictions

The Proposed Project will comply with applicable project design features, and ordinary construction/operating restrictions (refer to Section 3.8). Construction activities will comply with SDAPCD Rules 50, 51, and 55 governing visible emissions, nuisance effects, and emissions of fugitive dust. Equipment will comply with existing CARB requirements.

4.3.6 Applicant Proposed Measures

The Proposed Project has no potentially significant impacts relating to air quality and GHGs; therefore, no APMs are proposed.

4.3.7 Detailed Discussion of Significant Impacts

Based upon the preceding analysis, no significant impacts relating air quality and GHGs are anticipated from the Proposed Project.

4.3.8 References

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4.4 BIOLOGICAL RESOURCES

Would the Project:		Potentially Significant Impact	Potentially Significant Unless APMs 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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 US Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c.	Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d.	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e.	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f.	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

4.4.1 Introduction

This section of the PEA describes the biological resources in the vicinity of the Proposed Project, and identifies potential impacts to habitats and species that could result from the construction, operation, and maintenance of the Proposed Project. Additionally, potential impacts to sensitive vegetation communities, jurisdictional wetlands and waters, and migratory wildlife corridors are addressed.

The Proposed Project would incorporate the project design features and ordinary construction/operating restrictions (as outlined in Section 3.8), including *SDG&E’s Subregional NCCP*. The *SDG&E Subregional NCCP* is a Habitat Conservation Plan (HCP) permitted under Section 10A of the Federal ESA for incidental take and a NCCP permit under a management

authorization pursuant to Section 2835 of the California Fish and Wildlife Code. SDG&E entered into an Implementation Agreement with the USFWS and CDFW, respectively, for the management and conservation of multiple species and their associated habitats as established according to the federal and state ESAs and the state's NCCP Act. Through the avoidance of resources, application of protective measures and avoidance and minimization measures outlined in the *SDG&E Subregional NCCP*, and the SDG&E Enhancement and Monitoring Program, the Proposed Project's impacts to biological resources would be less than significant.

4.4.2 Methodology

4.4.2.1 Literature Review

Prior to conducting the field surveys, existing documentation relevant to the Proposed Project and the surrounding areas was reviewed. A list of special status plants and animals was prepared for the Proposed Project.

Special Status Species

The most recent records of the CDFW California Natural Diversity Database (CNDDDB) and the California Native Plant Society's (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). CNDDDB contains records of reported occurrences of federal or state listed species, proposed endangered or threatened species, Fully Protected (FP) Species, Federal Birds of Conservation Concern, California Species of Special Concern (SSC), or otherwise sensitive species or habitats that may occur within or in the vicinity of the Proposed Project. A complete list of these special status species is included in Appendix 4.4-A, Biological Technical Report (Appendix B, CNDDDB Sensitive Plant Species Occurrence Table and Appendix C, CNDDDB Sensitive Wildlife Species Occurrence Table).

Critical Habitat

The USFWS critical habitat areas for listed species were searched using GIS shapefiles provided by the USFWS within three miles of the Proposed Project alignment.

Drainages and Other Water Features

The desk top assessment for drainages and other water resources consisted of a review of the U.S. Geological Service (USGS) 7.5-minute topographic quadrangle containing the site, the USFWS National Wetlands Inventory (NWI) maps, and a review of aerial photographs.

Soils

The USDA, National Resource Conservation Science (NRCS) Web Soil Survey and National List of Hydric Soils, was used to assess soils mapped along the Proposed Project alignment, and GIS data was used to create maps. As prescribed by the 1987 United States Army Corps of Engineers (USACE) Wetland Delineation Manual and the 2008 Regional Supplement to the

USACE Wetland Delineation Manual: Arid West Region, Version 2.0, all available lists of hydric soils were referenced to identify any occurrence of hydric soils listed within the Proposed Project alignment. The national, state, and local hydric soils lists were used along with local soil survey maps for this assessment.

Field Surveys

Chambers Group collected general field reconnaissance data throughout the period from the spring of 2010 through the spring of 2012. Field data were recorded during sensitive plant and wildlife surveys. Focused plant surveys were conducted between April and September 2010 to cover the blooming periods of the sensitive annual plant species (perennial shrub species could be observed throughout the year). Focused wildlife surveys were conducted between May and September 2010. Additional surveys along the Proposed Project were conducted in 2011 on May 2, July 11 through 15, and November 8 and in 2012 on February 3, 7, 13, and 23 during pre-activity surveys; and from July 11 through 19, 2011, during the jurisdictional delineation surveys.

Focused Plant Surveys

Due to the presence of environmental conditions suitable for multiple sensitive plant species to occur within the Proposed Project, a series of focused rare plant surveys for specific target species was completed according to the guidelines set forth by CNPS. Three separate surveys were conducted within the Proposed Project area to capture the blooming periods for each of the targeted species with a potential to occur onsite. The areas surveyed (Survey Area) consisted of a 150-foot buffer around the power line pole centerline, which was extended to a 250-foot radius around each pole where the overhead line makes an angle greater than two degrees. The additional buffer was surveyed to include potential additional work space that is typically required during operation and maintenance work at angle points within the overhead lines.

Focused rare plant surveys were performed in accordance with survey protocols set forth by CDFW, CNPS, and USFWS Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed, and Candidate Plants. Species identified as being sensitive and having the potential to occur along the survey routes were reviewed by Chambers Group botanists prior to starting surveys each day. Botanists walked within the Survey Area approximately 30 feet (9 meter) apart and visually surveyed for any signs of the targeted plant species. A complete inventory of all plant species observed within the Proposed Project Survey Area was prepared. Vegetation communities were recorded on aerial photographs and mapped data was then digitized in GIS. Sensitive plant species observed during the survey were documented by counting individuals or estimating numbers for larger populations, characterizing the approximate population size, and recording a GPS location. Comprehensive lists of plants observed during the surveys can be found in Appendix 4.4-A (Appendix D, Plant Species Observed List).

The first round of spring surveys commenced on April 20, 2010, and concluded June 4, 2010. The second round of surveys commenced on June 7, 2010, and concluded on June 30, 2010. The third round of surveys commenced on August 2, 2010; continued through August 17, 2010.

Jurisdictional Delineation Survey

Chambers Group scientists conducted surveys along the Proposed Project, targeting suspected jurisdictional areas identified during the literature review from aerial and USGS topographic maps. Potential USACE, Regional Water Quality Control Board (RWQCB), and CDFW jurisdictional areas were field-checked for the presence of definable channels and/or wetland vegetation, riparian habitat, soils, and hydrology. Field checks were not limited to suspected jurisdictional areas identified during the literature review; the entire Proposed Project Survey Area was assessed. “Waters of the United States” were identified pursuant to criteria outlined in Section 401 and Section 404 of the Clean Water Act (CWA). “Waters of the State” regulated by CDFW were identified pursuant to criteria outlined in Section 1600 of the CDFW Code.

Potential wetland habitats were evaluated using the methodology set forth in the 1987 USACE Wetlands Delineation Manual and the 2008 Regional Supplement to the USACE Wetland Delineation Manual: Arid West Region, Version 2.0. The lateral extent of a jurisdictional drainage feature was also measured. USACE and RWQCB traditionally use the upper limit of the Ordinary High Water Mark (OHWM), by identifying signs of shelving, drift lines, and disturbed vegetation. Under the Rapanos court decision, USACE now requires a fact-specific significant nexus analysis to be performed for dry or ephemeral washes (non-Relatively Permanent Waters [RPW]) in southern California to determine the extent of USACE jurisdiction on a given project area. Connectivity was investigated and determined through a “desktop” study by utilizing the USGS topographic maps, USFWS NWI maps, and aerial imagery. CDFW traditionally uses the presence of a defined bed and bank and associated vegetation.

Wetland data was recorded onto standardized Wetland Determination Data Forms – Arid West Region data forms. In order to formally determine the presence or absence of wetlands, upland features were also recorded onto the standardized data sheets. Sample plots were established, and recorded data included plant species with estimated percent area coverage within each vegetation stratum (i.e., tree, sapling/shrub, herb, woody vine), soil profiles were investigated (where feasible), and evidence of hydrology was recorded. All delineation data was digitized for the precise mapping of jurisdictional areas. All data on jurisdictional determinations and wetland delineations were reproduced using GIS software and displayed on aerial maps.

Chambers Group biologists Nichole Cervin and Maya Mazon conducted the water resources survey from July 11 through July 14 and on July 18 and 19, 2011. During the survey the biologists drove and/or walked the access roads associated with the Proposed Project. Any potential jurisdictional feature observed within a 50-foot radius of a proposed pole or facility location was recorded. This 50-foot radius survey area was determined to include permanent and temporary work areas of pole installation and removal. In the field, boundaries and dimensions of jurisdictional features were recorded on aerial photographs, sub-meter GPS units, tablet computers, and field notes. Features within the 50-foot radius survey area were investigated for the presence of drainages, including culverts, corrugated metal pipe drains, reinforced concrete pipes, V-ditches, water bodies, riparian habitats, potential wetlands, and connectivity. The biologists noted alternatives if a proposed pole or facilities location may impact a jurisdictional water feature and whether the feature could be avoided during construction.

Sensitive Wildlife Surveys

Chambers Group conducted habitat assessment surveys for state- and federal-listed species with the potential to occur in the Proposed Project Survey Area. Based on the habitat assessments, protocol-level focused surveys were conducted for species with a moderate to high potential to occur within the Proposed Project. Methodologies for these species are found below.

Quino Checkerspot Butterfly (*Euphydryas editha quino*; QCB)

Permitted Quino checkerspot butterfly (QCB) biologists Michael Klein (TE-837760-6), Kris Alberts (TE-039640-2), and Paul Morrissey conducted the QCB habitat assessment in accordance with the *USFWS Quino Checkerspot Survey Protocol Information*. The biologists surveyed the Proposed Project route by helicopter, which allowed for an efficient and comprehensive aerial search of the Proposed Project landscape. The helicopter flew low enough over the Proposed Project area to allow for visual determination of the ground cover type and vegetation density. The biologists then mapped QCB suitable and non-suitable areas of the Proposed Project on aerial maps in the helicopter during the survey flight. The helicopter was determined by USFWS to be a suitable method of conducting a protocol habitat assessment. The helicopter QCB habitat assessment was then ground-truthed by a USFWS permitted QCB survey biologist on foot.

The QCB focused surveys were conducted in accordance with protocol set forth by the *USFWS Quino Checkerspot Survey Protocol Information* and the *USFWS Year 2005 Quino Survey Areas*. The flight season varies regionally and annually; therefore, coordination with permitted biologists was conducted to determine the beginning and end of the flight season, determined by identified QCB at known locations. If a QCB was detected at a site during the first five surveys, additional surveys were not required. If a QCB was not detected during the first five surveys, but the QCB flight season continued (as determined by conditions listed above), then additional surveys were conducted through the end of the flight season. Each survey segment was surveyed weekly at a minimum of five times during the QCB flight season. Certain segments were surveyed more than five times depending on QCB host plant conditions, nectar source availability, and whether QCB were still observed flying at nearby reference sites beyond the fifth survey.

Potential QCB habitat assessment surveys for the protocol focused surveys along the Proposed Project were conducted by USFWS permitted QCB biologist Greg Chapman (TE-075112-1). Comprehensive results of these surveys were presented in the *Quino Checkerspot Butterfly 45-Day Focused Survey Report for the San Diego Gas & Electric Cleveland National Forest Project, San Diego County, California* prepared by Chambers Group.

Coastal California Gnatcatcher (*Polioptila californica californica*; CAGN)

Permitted coastal California gnatcatcher (CAGN) Chambers Group biologists Kris Alberts (TE-039640-2) and Paul Morrissey conducted a helicopter survey of the Proposed Project area to locate species-specific Survey Areas. CAGN habitat suitability was assessed during this helicopter flyover. All sage scrub habitat areas that intersected the Proposed Project Survey Area were reviewed for the presence of suitable habitat necessary for breeding. Handheld GPS

units and aerial maps were used to outline portions of the Proposed Project that would be surveyed during the 2010 CAGN focused surveys. Areas classified as potential CAGN habitat were further assessed during the first round of focused surveys by CAGN permitted biologists.

All CAGN focused surveys were conducted by biologists holding the necessary federal ESA section 10(a)(1)(A) survey permit. Surveys were conducted according to the *USFWS Presence or Absence Survey Guidelines*. Surveys were conducted below 2,500 feet in elevation within areas primarily consisting of coastal sage scrub. The majority of plant species found in coastal sage scrub are low-growing, drought-deciduous shrubs and subshrubs, including California sagebrush (*Artemisia californica*), California buckwheat (*Eriogonum fasciculatum*), and sages. Areas containing alluvial fan scrub, chaparral, grassland, or riparian habitats adjacent to or intermixed with coastal sage scrub were also surveyed. Surveys were limited to areas located within the range of this species.

Six focused surveys were conducted at least one week apart in areas of suitable CAGN habitat between the hours of 0600 and 1200. Surveys were conducted by Kris Alberts (TE-039640-1), Travis Cooper (TE-170389-1) and Kris Alberts' sub-permittee Shannan Shaffer and accompanied by Paul Morrissey, Laurie Gorman (TE 233367-1) and Seth Reimers. Periods of excessive or abnormal heat, wind, fog, or other inclement weather were avoided; and no more than 80 acres (32 hectares) were surveyed per biologist per day. Sites with deep canyons, ridge lines, steep terrain, and thick shrub cover were surveyed more slowly. Surveys were conducted by permitted biologists slowly walking transects within suitable CAGN habitat within the Survey Areas and using binoculars to achieve 100 percent visual coverage. Taped CAGN vocalizations were used only to initially locate individuals, and tapes were not used frequently or to elicit further behaviors from any CAGN present. Information on any CAGN individuals observed was recorded to document the numbers and locations of paired or unpaired territorial males, ages and sexes of all birds observed, and nesting behavior. Comprehensive results of these surveys were presented in the *Coastal California Gnatcatcher Focused Survey Report for the San Diego Gas & Electric Company Cleveland National Forest Master Services Permit Project San Diego County, California* prepared by Chambers Group.

4.4.3 Existing Conditions

4.4.3.1 Regulatory Setting

Federal

Bureau of Land Management Sensitive Species

BLM Sensitive Species are species that are not federally listed that occur on BLM public lands, where BLM “has the capability to significantly affect the conservation status of the species through management.” BLM’s policy is to “ensure that actions authorized, funded, or carried out do not contribute to the need to list any of these species as threatened or endangered.” BLM offices maintain a list of special status plant and wildlife species specific to BLM management activities.

Clean Water Act of 1977 (Public Law 95-217)

The CWA governs discharge or dredge of materials in the waters of the United States, and it governs pollution control and water quality of waterways throughout the United States. Its intent, in part, is to restore and maintain the biological integrity of the nation's waters. The goals and standards of the CWA are enforced through permit provisions.

Pursuant to Section 404 of the CWA, the USACE regulates the discharge of dredged and/or fill material into waters of the United States. Waters of the United States include navigable waterways and wetlands adjacent to navigable waterways, and non-navigable waterways and wetlands adjacent to non-navigable waters that are contiguous with navigable waterways. The term "waters of the United States" is defined by 33 CFR Part 328 and currently includes (1) all navigable waters (including all waters subject to the ebb and flow of the tide), (2) all interstate waters and wetlands, (3) all other waters (e.g., lakes, rivers, intermittent streams) that could affect interstate or foreign commerce, (4) all impoundments of waters mentioned above, (5) all tributaries to waters mentioned above, (6) the territorial seas, and (7) all wetlands adjacent to waters mentioned above.

Wetlands are defined by 33 CFR 328.3(b) as "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support...a prevalence of vegetation typically adapted for life in saturated soil conditions." In the absence of wetlands, the limits of USACE jurisdiction in non-tidal waters, including intermittent RPW streams, extend to the OHWM which is defined by 33 CFR 328.3(e) as:

"...that line on the shore established by the fluctuation of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas."

On January 9, 2001, the United States Supreme Court ruled (in *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers*) (SWANCC) that the USACE jurisdiction does not extend to "isolated, non-navigable, intra-state waters or wetlands," including but not limited to isolated ponds, reservoirs, and wetlands. A joint guidance by the USEPA and USACE was issued on June 5, 2007, regarding the Court's decision on the consolidated cases *Rapanos v. United States* and *Carabell v. United States* (126 S. Ct. 2208 (2006)) (*Rapanos*), to clarify circumstances where a CWA Section 404 permit would be required before conducting activities in wetlands, tributaries, and other waters.

The State of California regulates discharge of material into waters of the State pursuant to Section 401 of the CWA. The State Water Resources Control Board (SWRCB) and the local RWQCB are the relevant permitting agencies. Waters of the State determined to be jurisdictional as surface and/or ground waters, if impacted, would require a 401 Certification if a USACE 404 permit is required. Limits of jurisdiction include wetland boundaries and the OHWMs of traditionally navigable waters (TNWs), RPWs, and non-RPWs.

Federal Endangered Species Act of 1973

The Federal ESA of 1973 protects endangered and threatened species by prohibiting Federal actions that would jeopardize the continued existence of such species or result in the destruction or adverse modification of habitat of such species. Section 9 of ESA prohibits the “take” of endangered wildlife, where take is defined as “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in such conduct” (50 CFR Section 17.3). For endangered plants, the statute prohibits removing, possessing, maliciously damaging, or destroying any endangered plant on federal land and removing, cutting, digging-up, damaging, or destroying any endangered plant on non-federal land in knowing violation of state law (16 USC 1538).

Under Section 7(a)(2) of the ESA, federal agencies must consult with federal resource agencies (i.e., USFWS) if listed species and/or critical habitat could be impacted by Proposed Project activity. USFWS then would prepare a Biological Opinion on how the action would affect the species and/or its critical habitat and would suggest reasonable and prudent measures or alternatives to minimize take of a listed species, avoid jeopardizing the continued existence of the species, or avoid adversely modifying its critical habitat.

Forest Service Sensitive Species

Forest Service Sensitive species are plant and animal species identified by a Regional Forester for which population viability is a concern.

Migratory Bird Treaty Act, as Amended (16 USC 703-711)

The Migratory Bird Treaty Act (MBTA), as amended, provides legal protection for almost all bird species occurring in, migrating through, or spending a portion of their life cycle in North America by restricting the killing, taking, collecting, and selling or purchasing of native bird species or their parts, nests, or eggs. Certain game bird species are allowed to be hunted for specific periods determined by Federal and State governments. The intent of the MBTA is to eliminate any commercial market for migratory birds, feathers, or bird parts, especially for eagles and other birds of prey.

Bald and Golden Eagle Protection Act, as Amended (16 USC 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 also 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.

State

California Endangered Species Act (California Fish and Wildlife Code Sections 2050-2116)

The CESA parallels the Federal ESA. CESA prohibits the “take” of State-listed species unless an incidental take permit is granted. Under CDFW Code Section 2081 (Incidental Take Permit), CDFW can authorize the “take” of a listed species (with exception to fully protected species) if the “take” of the listed species is incidental to carrying out an otherwise lawful project. Section 2080.1 provides an alternative to the Section 2081 permit process by allowing for “take” once an applicant obtains a Federal Incidental Take Permit which can be approved (Consistency Determination letter) within 30 days by the CDFW Director. If the Federal Incidental Take Statement is determined not to be consistent with CESA, then application for a State Incidental Take Permit (2081) is required.

State Fully Protected Species

The State of California designated species as FP prior to the creation of CESA and ESA. 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, fully protected 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 an 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 (Fish and Wildlife Code Section 2835). 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.

Sections 1600-1602 of the California Fish and Wildlife Code

Pursuant to Division 2, Chapter 6, Sections 1600-1602 of the Fish and Wildlife Code, CDFW regulates all diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake, which supports fish or wildlife. CDFW defines a “stream” (including creeks and rivers) as “a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having surface or subsurface flow that supports or has supported riparian vegetation.” CDFW’s definition of “lake” includes “natural lakes or man-made reservoirs.” CDFW limits of jurisdiction include the maximum extents of the uppermost bank-to-bank distance or riparian vegetation dripline. CDFW jurisdiction within altered or artificial waterways is based upon the value of those waterways to fish and wildlife.

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

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 directed CDFW to “preserve, protect and enhance rare and endangered plants in this State.” CDFW “requires a CESA Section 2081 (a) permit for take of candidate or listed threatened and endangered plants for scientific, educational, or management purposes, and a CESA Section 2081 (b) permit for incidental take of listed threatened and endangered plants from all activities, except those specifically authorized by the NPPA.” The CNPS Inventory of Rare and Endangered Vascular Plants of California was referenced in the literature review of the Proposed Project.

Porter-Cologne Water Quality Control Act of 1966 (California Water Code Sections 13000-13999.10)

This act mandates that activities that may affect waters of the State shall be regulated to attain the highest quality. The SWRCB and the local RWQCB are the relevant permitting agencies. RWQCB provides regulations for a “non-degradation policy” that are especially protective of waters with high quality. Porter–Cologne reserves the right for the State of California to regulate activities that could affect the quantity and/or quality of surface and/or ground waters, including isolated wetlands, within the State. Waters of the State include isolated waters that are no longer regulated by USACE. If the project is proposed to discharge into waters of the State, a Waste Discharge Report must be filed.

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 policies:

Conservation and Open Space 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* (2010) 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 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 Resource Conservation Areas (RCA) 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* (2011) 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* (2011) 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 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 Subregional Natural Community Conservation Plan

In December 1995, the USFWS and the CDFW approved the *SDG&E Subregional NCCP*, developed in coordination with such agencies that addresses potential impacts to species and habitat associated with SDG&E's ongoing installation, use, maintenance, and repair of its gas and electric systems, and typical expansion to those systems throughout much of SDG&E's existing service territory. As a part of the *SDG&E Subregional NCCP*, SDG&E has been issued incidental take permits (Permit PRT-809637) by the USFWS and the CDFW for 110 Covered

Species. The *SDG&E Subregional NCCP* was developed by following the multiple species and habitat conservation planning approach. Even with the *SDG&E Subregional NCCP*, SDG&E's goal is to avoid "take" of Covered Species whenever possible and to implement measures to avoid and minimize any take to the maximum extent possible. The *SDG&E Subregional NCCP* includes operational protocols that apply to construction and operations and maintenance activities. In approving the NCCP, USFWS, and CDFW determined that the operational protocols avoid potential impacts and provide appropriate mitigation where such impacts are unavoidable, and ensure the protection and conservation of federal and state listed species and Covered Species. The Proposed Project falls within the area in which SDG&E's utility operations are governed by the *SDG&E Subregional NCCP* and the NCCP would be applied to the Proposed Project. As such, the NCCP fully addresses all of the potential construction and operations and maintenance impacts of the Proposed Project on federal and state listed species and Covered Species. The NCCP avoidance and minimization measures and operational protocols have been incorporated as part of the Proposed Project description.

SDG&E is a public utility regulated by the CPUC. As described in the *SDG&E Subregional NCCP Implementing Agreement*, local governments are precluded 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 the CPUC. Therefore, as stated in the *SDG&E Subregional NCCP Implementing Agreement*, the *SDG&E Subregional NCCP* "is independent of other NCCP/HCPs and the Covered Species for which Incidental Take is authorized under the Take Authorizations is not dependent upon the implementation of such plans."

Other Conservation Plans

The Proposed Project traverses through preservation areas, including Mt. Gower Preserve (BLM lands), Simon Preserve (County of San Diego), and through two Multiple Species Conservation Plans (MSCPs), the North County MSCP and the East County MSCP (both the North County and East County MSCP are in Draft form and have not yet been adopted). The majority of the Proposed Project is anticipated to occur within SDG&E's ROW (with the exception of staging yards, temporary anchors, and a few string sites and wooden guard structures), and *SDG&E's Subregional NCCP* applies outside of existing ROW; therefore the Proposed Project does not conflict with other conservation plans or mitigation/preservation areas. SDG&E would coordinate with the appropriate authorities during the Proposed Project approval process to ensure that the impacts, avoidance and minimization measures, and operational protocols are implemented for the Proposed Project under the *SDG&E Subregional NCCP*.

North County MSCP

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." In order to maintain biodiversity and ecosystem health, the North County Plan

incorporates goals including biological goals, economic goals, and social goals. The North County Plan underwent a public review in 2009. Comments received during the public review period are now being used to revise the North County Plan.

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.

A great deal of collaborative work has gone into development of the East County Plan, including release of a preliminary draft map in 2008. However, County budget constraints and staffing reductions have caused progress of the East County Plan to slow significantly. Once the budget and staffing constraints are resolved, plan development is intended to resume. This document will eventually provide guidelines for the East County MSCP.

Simon Preserve Resource Management Plan

The Simon Preserve is approximately 617 acres in size and is located from approximately 2 miles southeast of the main town center of the unincorporated community of Ramona in the County of San Diego, 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.

South Coast Resource Management Plan

The Mt. Gower Preserve is a 1,574-acre preserve located southeast of the community of Ramona. The *South Coast Resource Management Plan (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 Mt. 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 Mt. Gower Preserve are under a lease to the San Diego County Parks and Recreation Department. BLM retains ownership of these lands.

4.4.3.2 Biological Resources Setting

The Proposed Project passes through several ecosystems or eco-regions, including foothills and the central valley regions of San Diego County. The Proposed Project Survey Area supports a variety of major vegetation communities in accordance with the categories set forth in Holland

(1986) or Gray and Bramlet (1992) totaling approximately 558.17 acres (this calculation does not include paved roads). General vegetation communities observed during the surveys include Mixed Oak Woodland, Southern Riparian Forest, Oak Savanna, Chaparral, Southern Mixed Chaparral, Mixed Chaparral/Coastal Sage Scrub, Diegan Coastal Sage Scrub, Freshwater Seep/Open Water, Grassland, Pastureland/Cultivated Agriculture, Urban and Developed/Ornamental Landscaping, and Disturbed habitat. Vegetation communities observed within the Proposed Project Survey Area and the plants that typically occur within those communities are described below. Plant species observed during the surveys are included in Appendix 4.4-A (Appendix D, Plant Species Observed List). The total vegetation acreages within the Proposed Project Survey Area are summarized in Table 4.4-1, Vegetation Communities Within the Proposed Project Survey Area.

Table 4.4-1: Vegetation Communities Within the Proposed Project Survey Area

Vegetation Communities (with associated NCCP vegetation community classification)	Acreage
Agriculture	7.37
Chaparral	26.05
Diegan Coastal Sage Scrub Buckwheat Scrub Coastal Sage Scrub	37.29
Disturbed Wetland	4.10
Disturbed Bare Ground	30.37
Freshwater Seep/Open Water Freshwater Marsh Meadow/Seep	1.31
Grassland (Includes Non-Native Grassland)	186.51
Mixed Oak Woodland Coast Live Oak Forest Open/Dense Engelmann Oak Woodland	10.98
Oak Savanna Open Oak Woodlands	83.21
Southern Mixed Chaparral	72.77
Southern Mixed Chaparral/Coastal Sage Scrub Coastal Sage Scrub/Chaparral Mix	15.62
Southern Riparian Forest Riparian Forests	3.74
Urban and Developed/Ornamental Landscaping Landscape/Ornamental	78.86
Grand Total	558.17

Vegetation Communities

Forests and Woodlands

Forest and Woodland habitats consist of multilayered vegetation. Forest habitats typically are characterized as having closed, dense tree canopies. Woodland habitats usually have a more open (20 percent) canopy than forest habitats.

Mixed Oak Woodland

Mixed Oak Woodlands are most often found at elevations below 4,000 feet above mean sea level (amsl). This type of community typically varies from pure, closed canopies of more than one oak (*Quercus* sp.) species. The dominant species within the Survey Area include 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 10 to 25 meters in height. The herbaceous layer, mainly consisting of nonwoody annual grasses and forbs, can be continuous. Poison oak (*Toxicodendron diversilobum*) also plays a major role in the woody understory or certain Oak Woodlands onsite. Mixed Oak Woodland can be found in canyon bottoms and steep, north-facing slopes with various soil types. This type of community recovers from fires very rapidly. Open/Dense Engelmann Oak Woodlands and Coast Live Oak Forest are also a component of Mixed Oak Woodland. Approximately 10.98 acres of this community exist within the Proposed Project Survey Area.

The following two vegetation communities are NCCP vegetation classifications that are components of Mixed Oak Woodland. Descriptions of these two NCCP vegetation communities are found below.

Coast Live Oak Forest

Areas within and/or surrounded by Coast Live Oak Forest consist of an evergreen woodland community, dominated by coast live oak that may reach a height of 35 to 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 potential dominant species. This community occurs along the coastal foothills of the Peninsular Ranges, typically on north-facing slopes and in shaded ravines.

Open/Dense Engelmann Oak Woodlands

Areas characterized by Open/Dense Engelmann Oak Woodlands are dominated by Engelmann oak trees and may include other oak species such as coast live oak and black oak and scrub oak (*Q. dumosa*). Trees are widely spaced in open Engelmann oak woodland. The understory is typically grassland or meadow.

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 usually dominated by shrubby willow species or other riparian shrubs. This community is almost always found along rivers and streams or in areas with a high water table. Dominant species require moist, bare mineral soil for germination and establishment and will typically begin to establish after flood waters recede. Approximately 3.74 acres of this community exist within the Proposed Project Survey Area.

The following vegetation community is a NCCP vegetation classification that is a component of Southern Riparian Forest. The description of the NCCP vegetation community is found below.

Riparian Forests

Areas characterized as Riparian Forests are identified by the following site conditions: areas occurring along the banks of stream channels and in flood plains dominated by trees such as coast live oak, western sycamore, Fremont's cottonwood (*Populus fremontii*), black willow (*Salix gooddingii*), and arroyo willow (*Salix lasiolepis*). The canopy is dense to open. The understory consists of herbaceous species and shrubs, frequently including Fendler's meadow-rue (*Thalictrum fendleri*), poison oak, skunkbush (*Rhus trilobata*), and spreading snowberry (*Symphoricarpos mollis*).

Oak Savanna

Oak Savannas in San Diego County are most often found at elevations ranging from 200 to 2,300 feet amsl. This type of community consists of annual grasses or perennial needlegrass (*Nassella* spp.) species along with widely scattered oak trees that provide less than 10 to 20 percent of the canopy cover. The dominant oak species in this community, particularly in San Diego County, is mainly coast live oak. The Oak Savanna community usually intergrades with Open Oak Woodlands. Approximately 83.21 acres of this community exist within the Proposed Project Survey Area.

The following vegetation community is a NCCP vegetation classification that is a component of Oak Savanna. The description of the NCCP vegetation community is found below.

Open Oak Woodlands

Areas characterized as Open Oak Woodlands are made up of a combination of oak tree species that may include Engelmann oak, coast live oak, scrub oak, and black oak trees. Generally, these areas contain oaks that are widely spaced, similar to a savanna habitat. The understory is typically grassland or meadow.

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 which are often gray-green in

color (e.g., sagebrush, buckwheat, sage). They occupy gentle to steep slopes with shallow or heavy soils mostly 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. Specific types of scrublands and chaparrals are discussed in more detail below.

Chaparral

Chaparral communities are most often found at elevations below 3,000 feet amsl. This type of community is dominated by leathery-leaved, woody shrubs 1.5 to 3 meters 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 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. Chaparral is adapted to repeated fires, after which many species respond by stump-sprouting from an underground root burl. Approximately 26.05 acres of this community exist within the Proposed Project Survey Area.

Southern Mixed Chaparral

Southern Mixed Chaparral communities are most often found at elevations below 3,000 feet amsl. This type of community is dominated by broad, leathery-leaved, woody shrubs 1.5 to 3 meters in height, forming a dense vegetation canopy typically dominated by scrub oak, chamise, several manzanita (*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. Southern Mixed Chaparral is adapted to repeated fires, after which many species respond by stump-sprouting 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 72.77 acres of this community exist within the Proposed Project Survey Area.

Mixed Chaparral/Coastal Sage Scrub

Mixed Chaparral/Coastal Sage Scrub communities are most often found at elevations below 3,000 feet amsl. This type of community represents a gradation and intermingling of coastal sage scrub and chaparral types. These communities represent ecotonal areas between chaparral and scrub communities with component species of both types. Approximately 15.62 acres of this community exist within the Proposed Project Survey Area.

Diegan Coastal Sage Scrub

Diegan Coastal Sage Scrub communities, as described by Holland, are most often found at elevations below 1,500 feet amsl. This community is the most common form of Coastal Sage Scrub found in San Diego County. This community is made up of low, soft-woody subshrubs up to one meter in height that are most active in winter and early spring. Most species commonly found in the community are drought-deciduous and include species such as California sagebrush, California buckwheat, white sage (*Salvia apiana*), and laurel sumac (*Malosma laurina*). This

community can be found on steep, xeric slopes or clay-rich soils that release stored water slowly. Diegan Coastal Sage Scrub may integrate with Buckwheat Scrub and types of chaparral at higher elevations. Approximately 37.29 acres of this community exist within the Proposed Project Survey Area.

The following two vegetation communities are NCCP vegetation classifications that are components of Diegan Coastal Sage Scrub. Descriptions of these two NCCP vegetation communities are found below.

Buckwheat Scrub

Areas within and/or surrounded by Buckwheat Scrub primarily consist of foothill buckwheat (*Eriogonum wrightii* var. *membranaceum*) or white sage, and generally lack the presence of California sagebrush. The inland form of buckwheat scrub may also contain species such as matchweed (*Gutierrezia* spp.) and cheat grass (*Bromus tectorum*).

Coastal Sage Scrub

Areas within and/or surrounded by Coastal Sage Scrub vegetation are primarily dominated by various combinations of California sagebrush, California buckwheat, saw-toothed goldenbush (*Hazardia squarrosa*), laurel sumac, and black sage and to a lesser extent by deerweed (*Lotus scoparius*), wild cucumber (*Marah macrocarpus*), chaparral yucca (*Yucca whipplei*), mission manzanita (*Xylococcus bicolor*), and California aster (*Corethrogyne filaginifolia*).

Grasslands and Meadows

Grasslands and Meadows are composed of the two vegetation communities. Grasslands consist of low, herbaceous vegetation dominated by grasses. These habitats grow in deep, well-developed soils on gentle slopes and flats. Meadow habitats are often referred to as seasonal wetlands that consist of seasonally-flooded or saturated areas dominated by annual and perennial herbs. Approximately 186.51 acres of this community exist within the Proposed Project Survey Area.

The following vegetation community is a NCCP vegetation classification that is a component of Grasslands and Meadows. The description of the NCCP vegetation community is found below.

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 numerous species of showy-flowered, native annual forbs, “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.

Freshwater Seep/Open Water

Freshwater Seeps in San Diego County are most often found at elevations ranging from 2,000 to 4,000 feet amsl. This type of 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. Freshwater Seeps were often found on pasturelands on private property within the Survey Area. Freshwater marshes and meadows are also found within this community. Approximately 1.31 acres of this community exist within the Proposed Project Survey Area.

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.

Meadow/Seep

Areas characterized as Meadow/Seep include vegetation such as annual and perennial herbs, including wildflowers and bulbs such as mariposa lily (*Calochortus* spp.), lupine, blue dicks (*Dichelostemma capitatum*), and many others. Where seeps occur, groundwater keeps the soil moist longer; and vegetation often includes rushes (*Carex* spp.) and spike rushes (*Eleocharis* spp.) and other plants typically associated with wet areas.

Freshwater Marsh

Areas characterized as Freshwater Marsh is characterized by soil that is saturated by fresh water. Freshwater Marshes contain vegetation dominated by emergent herbaceous species such as rushes, and spike rushes.

Wetland

Areas characterized as a Wetland generally consist of alkali heath (*Frankenia grandiflora*), arroyo willow, black willow, hardstem bulrush (*Scirpus acutus*), mulefat (*Baccharis salicifolia*), and common cattail (*Typha latifolia*). Approximately 4.10 acres of this community exists within the Proposed Project Survey Area.

The following vegetation community is a NCCP vegetation classification that is a component of Wetland communities. The description of the NCCP vegetation community is found below.

Disturbed Wetland

Disturbed Wetland areas consist 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).

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 dramatically disturbed or altered by humans.

Pasturelands/Cultivated Agriculture

This type of community is 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 are similar to native grasslands, made up of fine-textured, often clay soils that can be very moist in the winter and very dry in the summer. Approximately 7.37 acres of Pasturelands and Cultivated Agriculture exist within the Proposed Project Survey Area.

The following vegetation community is a NCCP vegetation classification that is a component of Pasturelands/Cultivated Agriculture. The description of the NCCP vegetation community is found below.

Agricultural

Areas characterized as agricultural habitat consist 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.

Urban and Developed/Ornamental Landscaping

Urban and Developed areas consist of buildings, pavement, and highway ROWs throughout the county. Approximately 78.86 acres of Urban and Developed land or Landscaped land exist within the Proposed Project Survey Area.

The following vegetation community is a NCCP vegetation classification that is a component of Urban and Developed/Ornamental Landscaping. The description of the NCCP vegetation community is found below.

Landscape/Ornamental

Project sites characterized as landscape/ornamental vegetation are dominated by non-native species planted for landscaping and generally occur in residential neighborhoods or along roadsides.

Disturbed

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 (*Centaurea melitensis*), wild oat, black mustard (*Brassica nigra*), prickly sow-thistle

(*Sonchus asper*), and wild lettuce (*Lactuca serriola*). Approximately 30.37 acres of this community exists within the Proposed Project Survey Area.

The following two vegetation communities are NCCP vegetation classifications that are components of Disturbed vegetation community. Descriptions of these two NCCP vegetation communities are found below.

Bare Ground

Areas characterized as bare ground habitats include areas with exposed soils, rocky substrate, access roads, and disturbed areas devoid of plant cover.

Disturbed

Areas within and/or surrounded by disturbed areas are 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.

Critical Habitat

USFWS designates critical habitat for endangered and threatened species under the federal ESA (16 USC Section 1533 (a)(3)). Critical habitat is designated for the survival and recovery of federally listed endangered and/or threatened species. Protected habitat includes areas for foraging, breeding, roosting, shelter, and movement of migration.

The USFWS critical habitat areas for listed species were searched using GIS shapefiles provided by USFWS within three miles of the Proposed Project alignment. Three USFWS designated critical habitat areas were identified: CAGN (within the Proposed Project ROW), and Arroyo toad (*Anaxyrus californicus*) and San Diego fairy shrimp (*Branchinecta sandiegonensis*) (outside of Proposed Project ROW). Although maps depict CAGN critical habitat, the USFWS designation of critical habitat for the CAGN specifically excluded areas within functioning HCPs, such as the *SDG&E Subregional NCCP*, and the area within the Proposed Project ROW was 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. 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.

Special Status Plants

The CNDDDB, CNPS' Electronic Inventory of Rare and Endangered Vascular Plants of California, *SDG&E Subregional NCCP species*, and BLM database search resulted in a list of 83 special status plant species that have been known to occur in the vicinity of the Proposed Project

area. Sixteen species derived from the CNDDDB and CNPS' Electronic Inventory of Rare and Endangered Vascular Plants of California have the potential to occur within three miles of the Proposed Project. Portions of the Proposed Project area exist within BLM lands under jurisdiction of BLM. Approximately 10 poles (Pole Nos. R66 to P68 and P75 to P81) located in the central area of the Proposed Project fall within BLM lands referred to as the Mt. Gower Preserve. Out of the 83 species, 67 species were derived from the BLM database search and were identified as having a potential to occur within the Proposed Project area on BLM Lands.

Out of the 83 species, 77 species are considered absent from the Proposed Project based on the lack of suitable habitat and the results of the focused survey efforts. Appendix 4.4-A (Appendix B, CNDDDB Sensitive Plant Species Occurrence Table) provides a list of all these species, as well as their status and potential to occur in the Proposed Project area.

Five species, San Diego milk-vetch (*Astragalus oocarpus*), Orcutt's brodiaea (*Brodiaea orcuttii*), delicate clarkia (*Clarkia delicata*), San Bernardino aster (*Symphyotrichum defoliatum*), and Parry's tetraococcus (*Tetraococcus dioicus*), have been determined to be present within the Proposed Project Survey Area. One species, San Diego gumplant (*Grindelia hallii*) is considered to have a moderate potential to occur within the Proposed Project alignment. Descriptions of the sensitive plant species and general areas identified during the focused plant surveys are found in the Appendix 4.4-A (Section 5.3).

San Diego Milk-Vetch County Rare Plant Register (CRPR) List 1B.2, BLMS

San Diego milk-vetch is a perennial herb in the Fabaceae family that flowers between May and August. This species often grows in the openings among chaparral and cismontane woodland. San Diego milk-vetch can be found at elevations between 1,000 and 5,000 feet (304 to 1,524 meter) amsl. San Diego milk-vetch is considered a sensitive species by BLM.

A total of 83 individuals were observed within the Proposed Project Survey Area near Pole No. R107 during protocol-level focused plant surveys conducted during the 2010 blooming period.

Orcutt's Brodiaea CRPR List 1B.1, BLMS, NCCP-Covered

Orcutt's brodiaea is a perennial, bulbiferous herb in the Themidaceae family that flowers between May and July. This species often grows in the openings of chaparral, cismontane woodland, coastal scrub, playas, and valley and foothill grassland. This species favors a variety of soil types including; clay, mesic, and sometimes serpentine soils. Orcutt's brodiaea can be found at elevations between 100 and 5,550 feet (30 to 1,676 meter) amsl. It can hybridize with the state and federal listed endangered thread-leaved brodiaea (*Brodiaea filifolia*). Orcutt's brodiaea is considered a sensitive species by the BLM.

A total of 1,020 individuals were observed within the Proposed Project Survey Area near Pole Nos. D26 and D28 during protocol-level focused plant surveys conducted during the 2010 blooming period.

Delicate Clarkia CRPR List 1B.2

Delicate clarkia is an annual herb in the Onagraceae family that flowers between April and June. This species often grows in gabbroic soils in chaparral and cismontane woodland. Delicate clarkia can be found at elevations between 770 and 3,280 feet (234 to 999 meters) amsl.

A total of 2,830 individuals were observed within the Proposed Project Survey Area near Pole Nos. P90, P108, R174, and P91 during protocol-level focused plant surveys conducted during the 2010 blooming period.

San Bernardino Aster CRPR 1B.2, BLMS

San Bernardino aster is a perennial, rhizomatous herb in the Asteraceae family that flowers between July and November. This species often grows in a variety of habitats, typically in vernal mesic soils in cismontane woodland, coastal scrub, lower montane coniferous forest, meadows and seeps, marshes and swamps, valley and foothill grassland, and near ditches, streams, and springs. This plant can be found at elevations between 6 and 6,700 feet (0 to 2,042 meters) amsl. San Bernardino aster is considered a sensitive species by the BLM.

A total of 100 individuals were observed within the Proposed Project Survey Area near Pole No. P106 during protocol-level focused plant surveys conducted during the 2010 blooming period.

Parry's Tetracoccus CRPR 1B.2, BLMS, NCCP-Covered

Parry's tetracoccus is a perennial deciduous shrub in the Euphorbiaceae family that flowers between April and May. This species often grows in chaparral and coastal scrub. Parry's tetracoccus can be found at elevations between 540 and 3,280 feet (164 to 999 meters) amsl. Parry's tetracoccus is considered a sensitive species by BLM.

A total of 181 individuals were observed within the Proposed Project Survey Area near Pole Nos. D46, P50, and P48 during protocol-level focused plant surveys conducted during the 2010 blooming period.

Special Status Wildlife

The CNDDDB, *SDG&E Subregional NCCP Covered Species*, and BLM database searches resulted in a list of 56 special status wildlife species that have been known to occur in the vicinity of the Proposed Project. Based on the habitat assessments by qualified and permitted biologists, focused surveys were conducted for QCB and CAGN. Only CAGN, a NCCP-covered species, were identified during the focused survey efforts. No QCB were detected or observed within the Survey Areas.

Approximately 10 poles (Pole Nos. R66 to P68, P75 to P81) are located in the central area of the Proposed Project and fall within BLM lands referred to as the Mt. Gower Preserve. Three species of bats are BLM Sensitive species only, and are considered to have a low potential to occur on BLM Lands within the Proposed Project alignment. A comprehensive list and details

of these species can be found in the Appendix 4.4-A (Appendix C, CNDDDB Sensitive Wildlife Species Occurrence Table).

Based on the database review and field surveys conducted in 2010, 2011 and 2012, 41 of the 56 special status wildlife species were determined to have a low potential to occur or to be absent from the Proposed Project Survey Area. Of the 56 species, seven are federally listed as endangered (of the seven, two are also state listed as endangered), one federally listed as threatened, two fully protected, and one listed as a federal candidate species. Of the seven listed species, only CAGN (federally threatened [FT]/SSC) were observed. Two fully protected species, golden eagle (NCCP-covered) and white-tailed kite (*Elanus leucurus*) (not NCCP-covered) were observed or have a high potential to forage on the site, but are considered absent or have a low potential to nest on the Proposed Project ROW, respectively.

The following seven species have been determined to have a moderate to high potential to occur within the Proposed Project Survey Area. Although these species have a moderate to high potential to occur within the Proposed Project, these species were not observed during the survey efforts.

- Northern Red-Diamond Rattlesnake (*Crotalus ruber ruber*) SSC, NCCP-Covered
- San Diego Ringneck Snake (*Diadophis punctatus similis*) USFS Sensitive, NCCP-Covered
- San Diego Desert Woodrat (*Neotoma lepida intermedia*) SSC, NCCP-Covered
- American Badger (*Taxidea taxus*) SSC, NCCP-Covered
- Belding's Orange-Throated Whiptail (*Aspidoscelis hyperythra beldingi*) SSC, NCCP-Covered
- Dulzura (California) Pocket Mouse (*Chaetodipus californicus femoralis*) SSC, NCCP-Covered
- Golden Eagle FPS Under BGEPA, CDFW Watch List, BLMS, NCCP-Covered

The following eight species were observed during surveys and are considered PRESENT within the Proposed Project Survey Area.

Coast (San Diego) Horned Lizard (Phrynosoma coronatum blainvillii) SSC, BLM and USFS Sensitive, NCCP-Covered

The coast horned lizard is a California SSC, BLM and USFS Sensitive, and is covered under the NCCP. It is found in a wide variety of habitats, including coastal sage scrub, annual grasslands, chaparral, oak woodlands, riparian woodlands, and coniferous forests. It is perhaps most abundant in riparian and coastal sage scrub habitats on old alluvial fans of the southern California coastal plain. In foothill and mountain habitats that are covered with dense brush or other vegetation, the species is largely restricted to areas with pockets of open microhabitat; this habitat structure can be created by natural events such as fire and floods or human-created disturbances such as livestock grazing, fire breaks, and road construction. The key elements of

these microhabitats are loose, fine, sandy soils; an abundance of native ants; open areas for basking; and low but relatively dense shrubs for refuge.

The coast horned lizard can be considered PRESENT within the Proposed Project. CNDDDB lists six records of occurrence for this species within three miles of the Proposed Project, the Survey Area contains good quality habitat, and this species was observed on the Proposed Project near Pole No. P116.

Coronado Island Skink (Plestiodon [Eumeces] skiltonianus interparietalis) SSC, BLMS, NCCP-Covered

The Coronado Island skink is a California SSC, considered sensitive by the BLM, and is covered under the NCCP. It occurs in a variety of plant associations ranging from coastal sage, chaparral, oak woodlands, pinyon-juniper, and riparian woodlands to pine forests; but within these associations it prefers early successional stages and is often restricted to areas with adequate rocky cover, usually near streams. This species is diurnal, with most activity occurring in early spring to early fall, with bimodal activity in summer. The Coronado Island skink has four white or beige stripes on a brown dorsum. The intervening mid-dorsal and lateral dark stripes extend to or beyond the middle of the tail in adults. The tail has at least some blue coloration; the tail color is often brilliant blue in juveniles and adults having unbroken tails. Coronado Island skinks feed upon small invertebrates found in leaf litter.

The Coronado Island skink can be considered PRESENT within the Proposed Project Survey Area. CNDDDB lists a record of occurrence within 1 mile of the Survey Area, and this species was observed on the Proposed Project near Pole No. R107. In addition, the Survey Area contains good quality suitable habitat to support this species.

Coastal Rosy Boa (Lichanura trivirgata roseofusca) USFS Sensitive, NCCP-Covered

The rosy boa is a USFS Sensitive Species and is covered under the NCCP. The rosy boa is considered a sensitive species by both BLM and USFS. The coastal rosy boa is associated with rocky coastal sage, inland sage, and chaparral-covered hillsides and canyons from the coast to the desert transition zone. It may be found under rocks, in rock crevices, or in boulder piles. It also is an excellent climber that willingly moves through vegetation and branches in search of prey. It preys upon small mammals, reptiles, amphibians, and birds and kills through constriction. Associated vegetation types include coastal sage scrub dominated by California sagebrush and buckwheat, chamise chaparral, and ceanothus/manzanita chaparral. It often is attracted to oases, intermittent streams, and other sources of water but does not require it. It is chiefly nocturnal but also is regularly seen during the day. Several historical locations known for this species occur in the vicinity of the Proposed Project; and suitable habitat for this species occurs along most of the coastal slope portion of the Survey Area.

This species is considered PRESENT within the Proposed Project Survey Area. CNDDDB lists two records of occurrence within 3 miles of the Proposed Project and the Survey Area contains good quality suitable habitat to support this species. In addition, this species was observed on the Proposed Project area near Pole Nos. 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, where this species was observed, are Pole Nos. P115 and P116. However, no ground disturbing activities would occur during construction, as these two poles have already been replaced with steel poles and only pole top work will occur during the Proposed Project at these locations.

Cooper's Hawk (Accipiter cooperii) SSC, NCCP-Covered

The Cooper's hawk (nesting) is a California SSC and is covered under the NCCP. Recently, the Cooper's hawk has been known to breed in suburban and urban areas with similar tree structure to native habitats. This species is similar in appearance to the sharp-shinned hawk (*Accipiter striatus*), but is distinguished by its larger size, more rounded tail, and darker crown. The Cooper's hawk is a medium-sized (14 to 20 inches) hawk and is well-adapted for hunting birds as prey with its long tail and short, rounded wings; these features allow maneuverability in pursuit and on the ambush. In addition to birds, it may also take amphibians, reptiles and small mammals as supplemental prey items.

The Cooper's hawk can be considered PRESENT within the Proposed Project Survey Area for foraging purposes and has a HIGH potential to nest. Although CNDDDB lists no records of occurrence within 3 miles of the Survey Area, the Proposed Project area contains good quality suitable habitat and this species was observed near Pole No. P156.

Southern California Rufous-Crowned Sparrow (Aimophila ruficeps canescens) Watch List (WL), NCCP-Covered

The southern California rufous-crowned sparrow is a California Watch List (WL) species and is covered under the NCCP. It is one of 17 recognized subspecies of the rufous-crowned sparrow, whose overall range includes parts of California, Arizona, New Mexico, Texas, Oklahoma and Arkansas as well as Mexico. Habitats include broken sage scrub and chaparral, native grasslands with sparse shrubs, and rocky, brush laden hillsides and canyons with open patches. It is a small, non-descript sparrow with a rusty crown, white eye-ring, dark whisker marks, and a flat-headed appearance. It is a secretive species that is more often heard than seen as it forages among the shrubs.

The southern California rufous-crowned sparrow can be considered PRESENT within the Proposed Project area for foraging, with a HIGH potential to nest. CNDDDB lists three records of occurrence within three miles of the Survey Area. This species was observed foraging in several locations along the Proposed Project Survey Area which contains good quality suitable habitat.

Purple Martin (Progne subis) SSC

The purple martin (nesting) is a California SSC and is not covered under the NCCP. 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. With a wingspan of up to 17 inches, the purple martin is the largest North American swallow. The male is uniformly blue-black above and below; it is the only 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; these birds are very aggressive cavity nesters that 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 Proposed Project area for both foraging and nesting purposes. CNDDDB 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 Hwy 78, at Collier Flat. In addition, a purple martin pair was observed nesting at Pole No. P113.

White-Tailed Kite FPS, BLMS

The white-tailed kite (nesting) is a California FPS, is considered sensitive by the BLM, and is not covered under the NCCP. 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. It also occurs in Mexico and Central America. In California, it is a resident and localized migrant of the Central Valley and Pacific coast. Evidence in recent years suggests that the range of this species is increasing, although erratic 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. The white-tailed kite 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 it will also take large insects, amphibians, and lizards. Degradation or loss of grassland habitat to development or ranching is a significant threat to populations. Historical population declines may be attributed to chemical poisoning.

The white-tailed kite can be considered PRESENT within the Proposed Project Survey Area for foraging purposes and has a LOW potential to nest. The CNDDDB lists one record of occurrence within 1 mile of the Proposed Project Survey Area, and this species was observed on the Proposed Project Survey Area near Pole No. P158.

Coastal California Gnatcatcher FT, SSC, NCCP-Covered

The CAGN is federally listed as a threatened species, is a California SSC, and is covered under the NCCP. The historical range of this species extended 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. Populations have since become increasingly fragmented. It is a permanent resident of Diegan, Riversidian, and Venturan sage scrub sub-associations found from sea level to 2,500 feet in elevation. CAGN is a small, secretive songbird with grayish coloration and faint, white, outer tail margins. Males of this species exhibit a black cap during the breeding season. This insectivorous bird nests and forages in moderately dense stands along gentle slopes, arid hillsides, mesas, foothills, and alluvial washes. It gleans a variety of insects within its territory, including caterpillars and other larval insects. It builds a cup nest in suitably dense shrubs and lays four eggs, on average. Contributing factors in the decline of this species include overly frequent fire cycles, non-native plant invasions, brown-headed cowbird nest parasitism, predation, and widespread habitat loss to

urbanization and agriculture. Chambers Group conducted focused surveys for this species in 2010. Comprehensive results of these surveys were presented in the *Coastal California Gnatcatcher Focused Survey Report for the San Diego Gas & Electric Company Cleveland National Forest Master Services Permit Project San Diego County, California* prepared by Chambers Group.

CAGN can be considered PRESENT on the Proposed Project for both foraging and nesting purposes. The USFWS designation of critical habitat for the CAGN specifically excluded areas within functioning HCPs, such as SDG&E's *SDG&E Subregional NCCP*. Habitat for the CAGN is found in several locations along the Proposed Project area. This species was observed nesting and foraging on the Proposed Project area near Pole No. P64 west to Pole No. P52, Pole No. P48 to Pole No. P51, Pole No. D44 to Pole No. P43 to Pole No. P47, and Pole No. D46 during focused surveys conducted in 2010 (Appendix 4.4-A, Section 5.4).

Special Mention Species

Golden Eagle FPS Under BGEPA and CDFW, CDFW WL, BLMS, NCCP-Covered

The golden eagle is a federally protected species under the BGEPA and by the State of California, is a CDFW WL species, and is considered sensitive by the BLM. This species is covered under the NCCP. This species is found mostly in western North America, from Alaska south to central Mexico. Fewer are found in eastern Canada, as well as a few isolated pairs in the eastern United States. The golden eagle prefers mountainous or hilly terrain, hunting over open country for small mammals, snakes, birds, or carrion. The golden eagle nests on cliff faces, walled canyons, or in tall trees. The golden eagle is a very large raptor, standing nearly three feet tall, with a large, hooked bill. It is brown all over, with a golden sheen on its head and golden patches and highlights over its life molt. Direct or indirect human activities (e.g., collisions with vehicles and structures; electrocution; gunshot; and poisoning) have been estimated to cause up to 70 percent of recorded golden eagle deaths. Populations are also threatened by habitat degradation and nest disturbance. Although data regarding golden eagles was obtained from SDG&E from a golden eagle nest survey conducted for the Sunrise Powerlink Project in 2010, this data was not publicly published in an effort to protect the location of the nest sites.

The golden eagle has a HIGH potential to forage within the Proposed Project area and can be considered ABSENT for nesting within the Proposed Project Survey Area. Although CNDDDB lists no records of occurrence within three miles of the survey area, a historic golden eagle nesting location was identified within five miles southeast of the Proposed Project, an area 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. According to the Raptor Management page on the USDA Forest Service website, this nest was not active in 2012. Therefore, this species is considered to have a high potential to forage but nesting areas are considered absent directly within the Proposed Project Survey Area.

Quino Checkerspot Butterfly federally endangered (FE), NCCP-Covered

The QCB is a federally listed endangered subspecies of *Euphydryas editha* and is covered under SDG&E's low-effect HCP. The species ranges from northern Baja California to Canada along the Pacific coast and east to Colorado. The historical range of this subspecies once included the coastal plains and inland valleys of southern California and northern Baja California. It formerly occurred at many sites in San Diego, Orange, Los Angeles, and western Riverside counties. It is associated with habitats that contain its primary larval host plant, western plantain (*Plantago erecta*) and other host plants such as bird's beak (*Cordylanthus rigidus*) and owl's clover (*Castilleja exserta*). Specifically, owl's clover serves as an additional larval host plant for some Quino checkerspot colonies located east of Temecula. These host plants tend to occur in clay or cryptogamic soils in areas mostly devoid of tall, weedy growth and/or a dense cover of shrubs. Adult butterflies characteristically tend to patrol low hilltops, rocky outcrops, and ridges. Additional habitat requirements include the presence of adult nectar sources and topographic features that include bare, open soils and ridgetops. Habitat loss and invasive plant species are contributing factors in the continuing decline of this species. Chambers Group conducted focused surveys for this species in 2010. Suitable habitat was identified during the habitat assessment by a permitted biologist; therefore focused surveys were conducted in areas containing suitable habitat for QCB within the Proposed Project Survey Area. No QCB were identified. Comprehensive results of these surveys were presented in the *Quino Checkerspot Butterfly 45-Day Focused Survey Report for the San Diego Gas & Electric Cleveland National Forest Project, San Diego County, California*.

The QCB can be considered ABSENT from the Proposed Project Survey Area. Although the Proposed Project Survey Area has suitable habitat, CNDDDB lists no records of occurrence within three miles of the Proposed Project. Protocol focused surveys within the Proposed Project Survey Area were conducted by USFWS permitted QCB biologist Greg Chapman (TE-075112-1). No QCB were identified during the protocol surveys.

Jurisdictional Delineation of Waters and Wetlands

Four watersheds exist within the Proposed Project Survey Area: the Santa Maria, San Vicente, San Diego River, and Santa Ysabel watersheds (refer to Appendix 4.4-A, Section 5.10). The Santa Maria watershed is located at the western end of the Proposed Project in the unincorporated community of Ramona. The San Vicente watershed begins at the origin of San Vicente Creek east of Littlepage Road and spans the survey area to Simon Preserve in the unincorporated community of Ramona. The San Diego River watershed originates at the San Diego River located in the unincorporated community of Santa Ysabel and is fed by rainwater and snowmelt from Volcan Mountain. The Santa Ysabel watershed originates in Volcan Mountain in the unincorporated community of Santa Ysabel and is fed by rainwater and snowmelt from Volcan Mountain.

Santa Maria Creek, San Vicente Creek, the San Diego River, and Santa Ysabel Creek are RPWs leading to several reservoirs. Santa Maria Creek does not flow directly within the Proposed Project but is fed by several ephemeral drainages that direct surface water only immediately after rain events. San Vicente Creek originates within the Proposed Project; however, perennial flow

does not establish until after the inflow from Dye Creek, which is outside the Proposed Project Survey Area. The San Diego River does not flow directly within the Proposed Project but is fed by several ephemeral drainages and Dye Creek.

Sixty-seven drainages or features, potentially subject to USACE, CDFW, and RWQCB jurisdiction are located within the Proposed Project area, however, all but 17 have been avoided. Eleven poles, (Pole Nos. P148, P149, P150, P103, P104, P105, P106, R107, P114, P152 and P129) are located within wet meadows that have been determined to be jurisdictional by the USACE and RWQCB. Six poles (Pole Nos. R10, R169, R171, D167, R11 and R13) are located within an unvegetated streambed/waters of the U.S. (adjacent to Creelman Road) that has been determined to be jurisdictional by CDFW, USACE and the RWQCB.

4.4.4 Potential Impacts

The following discussion describes the potential impacts to sensitive species and habitat that may occur as a result of construction and operation and maintenance of the Proposed Project. As part of the Proposed Project description, SDG&E would be operating under its own NCCP, which was established according to the Federal ESA and California ESA and the state's NCCP Act. The *SDG&E Subregional NCCP* contains operational protocols designed to avoid and minimize impacts to sensitive species and their habitats. Adherence to the *SDG&E Subregional NCCP* will protect and conserve listed and covered species and habitats and ensure that potential impacts remain less than significant. The *SDG&E Subregional NCCP* is described more fully in Section 3, Project Description. In order to preserve consistency with the operation protocols within the *SDG&E Subregional NCCP*, permanent and temporary impacts to biological resources that result directly from construction activities (such as impacts to sensitive habitats) are discussed within the Construction impacts section.

4.4.4.1 Significance Criteria

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.

Thresholds of impact significance were derived from Appendix G of the *CEQA Guidelines*. Under these guidelines, the Proposed Project could have a potentially significant impact to biological resources if it would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS;
- 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;
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;

- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or
- Conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state HCP.

4.4.4.2 Question 4a - 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?

Construction – Less than Significant

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, ESA, 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*. The *Operational Protocols* avoid and minimize impacts to all sensitive resources, regardless of whether the species is a NCCP-covered species. No additional APMs are recommended at this time. All associated impacts to biological resources for the Proposed Project are considered less than significant with adherence to prior approvals, existing laws and regulations, and SDG&E standard practices.

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 Appendix 4.4-A, Appendix F, Water Permits) conditions. With the implementation of the *SDG&E NCCP Operational Protocols* and prior approvals, impacts are expected to remain 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 Vegetation Communities

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 to the greatest extent possible, and placing any new facilities, staging areas, or access roads outside habitats when feasible. 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. Total temporary impacts to sensitive vegetation communities and non-sensitive vegetation communities (Disturbed, Agriculture, Bareground, and Landscape/Ornamental communities) identified within the Proposed Project are summarized in Table 4.4-2, Anticipated Impact Summary Table.

Table 4.4-2: 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, Bareground, and Landscape/Ornamental communities)	572,099 SF / 13.13 ac
	Total Anticipated Temporary Impacts to Non-Sensitive Vegetation Communities (Disturbed, Agriculture, Bareground, and Landscape/Ornamental communities)	491,321 SF / 11.28 ac
	Total Anticipated Temporary impacts	1,018,420 SF / 23.38 ac
Permanent¹	Total Anticipated Permanent Impacts to Sensitive Vegetation Communities (not including Disturbed, Agriculture, Bareground, and Landscape/Ornamental communities)	1,520 SF / 0.03 ac
	Total Anticipated Permanent Impacts to Non-Sensitive Vegetation Communities (Disturbed, Agriculture, Bareground, and Landscape/Ornamental communities)	2,306 SF / 0.05 ac
	Total Anticipated Permanent Impacts	3,826 SF / 0.08 ac
Notes: ¹ Permanent impacts to vegetation communities are discussed as construction impacts to be consistent with the structure and implementation of the <i>SDG&E Subregional NCCP</i> .		

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.

The Proposed Project would also temporarily impact approximately 0.063 acre of Open/Dense 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.

Anticipated permanent and temporary impacts associated with the Proposed Project were documented during a pre-activity survey conducted July 11 through 15, 2011. Vegetation communities were documented at each proposed facility impact area and noted in the PSR habitat/ land use and mitigation table. Vegetation communities were also further identified during a 2010 focused plant survey conducted by Chambers Group botanists. Many of the vegetation communities from the PSR and the 2010 plant survey overlap. As noted during the focused plant survey in 2010, rare and listed species were identified, mapped, and marked with waypoints on handheld GPS units. Any sensitive plant species identified was included in the final rare plant report. Rare plants identified on the ROW during the plant survey were also noted in the PSR studies. Total anticipated temporary and permanent impacts to vegetation communities are summarized in Table 4.4-3, Anticipated Impacts by Vegetation Community Type.

Table 4.4-3: Anticipated Impacts by Vegetation Community Type

Vegetation Community	Temporary		Permanent ¹	
	Acres	Square Feet	Acres	Square Feet
Agricultural	5.029	219,073	0	0
Buckwheat Scrub	0.953	41,550	0.005	205
Chaparral	0.366	15,951	0.005	230
Bare Ground	3.351	145,972	0.041	1,797
Coastal Sage Scrub	0.132	5,762	0	10
Coastal Sage Scrub/Chaparral Mix	0.486	21,182	0.010	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
Landscape/Ornamental	0.118	5,158	0.001	44
Open Oak Woodland	0.044	1,931	0.001	39
Riparian Forest	0	0	0	0
Open/Dense Engelmann Oak Woodland	0.063	2,768	0	0
Coast Live Oak Forest	0.003	111	0	0

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

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 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 sensitive vegetation communities are summarized in Table 4.4-4, Anticipated Impacts Summary Table for Preserve Areas.

Table 4.4-4: Anticipated Mitigation Summary Table for Preserve Areas

Type of Mitigation		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
Permanent¹	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
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
Notes:		
¹ Permanent impacts to vegetation communities are discussed as construction impacts to be consistent with the structure and implementation of the <i>SDG&E Subregional NCCP</i> .		

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 which are expected to recover on their own. Six thousand and six hundred square feet of the above mentioned temporary impacts will be mitigated through active site enhancement. Fifty-three thousand square feet of the above mentioned temporary impacts will be monitored to determine if natural recovery eliminates the need for further mitigation. 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.

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. 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.

Impacts to Sensitive Plant Species

Construction activities could potentially impact sensitive plant species. Five sensitive plant species — San Diego milk-vetch, Orcutt's brodiaea, delicate clarkia, San Bernardino aster, and Parry's tetracoccus,— are known to be present within the Proposed Project Survey Area, based on the 2010 rare plant surveys. However, these species were not identified within the construction impact area, and were flagged for avoidance during pre-activity surveys conducted between July 11 through 15, 2011. SDG&E would utilize the *SDG&E NCCP Operational Protocols*, to avoid and minimize any impacts to these species. Implementation of these *Operational Protocols* would ensure the potential impacts to delicate clarkia and San Bernardino aster remain less than significant.

No other sensitive plant species were found during the 2010 rare plant surveys. One additional sensitive plant species, San Diego gumplant, was 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 three miles of the ROW; however, the species was not specifically surveyed for during the 2010 rare plant surveys. SDG&E will survey for this species during the Proposed Project-wide verification survey prior to construction activities to avoid potential impacts to this species. Seventy-seven out of a total of 83 sensitive species were determined to be absent or have a low potential to occur within the Proposed Project area. None of these species were detected during the rare plant survey; therefore, no impacts to these species are expected to occur.

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 plant species are found, compliance with the *SDG&E Subregional NCCP* would ensure impacts remain less than significant.

Impacts to Sensitive Wildlife Species

A total of 56 sensitive wildlife species have a potential to occur on the Proposed Project. The potential presence of sensitive wildlife species is based on known recorded occurrences within the region and appropriate habitat present within the Proposed Project area. Seven species have a moderate to high potential to occur, and eight are considered present within the Proposed Project. SDG&E would utilize and implement the *SDG&E NCCP Operational Protocols* to avoid and minimize any impacts to these species. Implementation of these Operational Protocols would ensure the potential impacts to the eight species with a moderate to high potential to occur (northern red-diamond rattlesnake, San Diego ringneck snake, Belding's orange-throated whiptail, golden eagle, Dulzura pocket mouse, San Diego desert woodrat, and American badger) and the eight species that are considered present (coast horned lizard, Coronado Island skink, coastal rosy boa, coastal California gnatcatcher, purple martin, white-tailed kite, Cooper's hawk, and rufous-crowned sparrow) within the Proposed Project remain less than significant.

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 wildlife species are found, compliance with the *SDG&E Subregional NCCP* would ensure impacts remain less than significant. A discussion of these species is provided below.

Impacts to Sensitive Reptile Species

Construction activities could potentially impact six sensitive reptile species. Three of the sensitive reptile species (coast horned lizard, Coronado Island skink, coastal rosy boa) are NCCP-covered species and were present in the Proposed Project area. One species (Belding's orange-throated whiptail, NCCP-covered) has a high potential to occur, and the remaining two species (northern red-diamond rattlesnake, San Diego ringneck snake – both NCCP-Covered) have a moderate potential to occur in the Proposed Project area.

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 preconstruction surveys, and handling of wildlife only by biologists or experts in handling wildlife. This includes a biological monitor onsite 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 reptile species remain less than significant.

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 ensure impacts remain less than significant.

Impacts to Sensitive Avian Species

Proposed construction activities may cause both permanent and temporary impacts to foraging and/or nesting habitat for six 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 onsite: 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 of these species, the golden eagle (NCCP-covered), has a high potential to forage onsite 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.

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 Poles Nos. P64 west to P52, P48 to P51, D44 to P43 to P47, and D46 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.

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 and the white-tailed kite. 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*. 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, 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 Nos. P90, P95, R107, P129, P156, and P158 would be monitored for nesting raptors during the raptor breeding season (January 1 through July 31). Implementation of the *SDG&E Subregional NCCP* and *Operational Protocols*, and compliance with the MBTA would ensure the impacts to nesting avian species remain less than significant.

Concerns regarding potential electrocution of wildlife species from power lines are primarily focused on avian species. Because the Proposed Project will replace existing electric facilities, this electrocution risk is part of the existing baseline. 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.

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 ensure impacts remain less than significant.

Impacts to Sensitive Mammal Species

Proposed construction activities may cause both permanent and temporary impacts to three sensitive mammal species that have a moderate or high potential to occur within the Proposed Project area. These three sensitive mammal species are NCCP-covered species and include two rodent species: Dulzura (California) pocket mouse and San Diego desert woodrat; and one weasel species: American badger. All three species have a moderate 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 all three 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 onsite 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, elimination of poles, 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.

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.

Avoidance and Minimization of Impacts to Biological Resources

The Proposed Project has been designed to avoid sensitive habitat areas that may support special status species and sensitive biological resources when possible, including not placing poles in drainage areas, using existing access roads to the greatest extent possible, and placing staging

areas, laydown areas, guard structures, and helicopter landing areas outside habitats when feasible. Due to the small permanent footprint of the Proposed Project, and the presence of potential foraging adjacent to the Proposed Project, wildlife habitat is not expected to be adversely affected. Where avoidance of sensitive habitat areas supporting special status wildlife is not possible, or where sensitive habitat areas exist adjacent to 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. Compliance with the *SDG&E Subregional NCCP*, which includes avoidance and minimization measures and enhancement for loss of habitat within Preserve areas, would ensure impacts to NCCP Covered Species remain less than significant. Additionally, required pre-activity surveys, pursuant to the *SDG&E Subregional NCCP*, would also confirm the absence of any other special status species not covered under the *SDG&E Subregional NCCP*. If any non-Covered Species special status species are identified during the surveys, compliance with Sections 7.1 and 7.2 of the *SDG&E Subregional NCCP* would provide avoidance and minimization of impacts, as applicable. The presence or potential presence of a non-Covered Species is expected to be limited to the purple martin (present) and the white-tailed kite (present). The avoidance of any impacts to these species is expected through compliance measures in the *SDG&E Subregional NCCP*.

SDG&E Operational Protocols (Incorporated Into Proposed Project Design)

SDG&E has a long history of implementing the *SDG&E Subregional NCCP* and related operational protocols for projects such as the Proposed Project. Operational protocols represent an environmentally sensitive approach to traditional utility construction, maintenance and repair activities recognizing that slight adjustments in construction techniques can yield major benefits for the environment. The appropriate Operational Protocols for each individual project would be determined and documented by the Environmental Surveyor, which in the context of a wood to steel replacement project would be the lead natural resources representative from SDG&E in conjunction with the lead biological resources monitor from the private biological consulting firm contracted for the job.

Typical Operational Protocols for a wood to steel replacement project include, but are not limited to, the following; a PSR for all impacts occurring in natural areas, biological monitoring of all activities occurring in natural areas, flagging of sensitive habitat for avoidance by the biological monitor, and the review and approval of the biological monitor for all activities occurring in sensitive areas where disturbance to habitat may be unavoidable. In addition, per the *SDG&E NCCP Implementing Agreement*, SDG&E is required to prepare and submit an annual report to the CDFW and the USFWS describing the amount and type of habitats impacted and the activities causing these impacts. In order to meet this requirement, SDG&E's biological consultant will prepare a PCR detailing the actual impacts caused by the Proposed Project. This report will be used to determine the appropriate habitat enhancement and credit drawdown from the SDG&E mitigation bank after the Proposed Project has been constructed.

Operations & Maintenance – No Impact

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 and would be conducted in compliance with the *SDG&E Subregional NCCP*. Therefore, no impacts are anticipated.

4.4.4.3 Question 4b - 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?

Construction – Less than Significant

Proposed construction activities could result in temporary and permanent impacts to sensitive natural communities. Impacts could result from pole removal, installation, staging yards, stringing sites, laydown areas, helicopter landing zones, footpaths, and guard structures. No new access roads are proposed. The *SDG&E Subregional NCCP* allows for impacts to sensitive habitats when incidental to otherwise lawful activities and when conducted in full compliance with the *SDG&E Subregional NCCP*. Compliance with the *SDG&E Subregional NCCP* is designed to avoid impacts whenever possible and to implement protection measures to avoid and minimize take to the maximum extent possible. Therefore, implementation of the *SDG&E Subregional NCCP* would ensure potential impacts remain less than significant.

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 (including Non-native Grassland), 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.

The Proposed Project would also temporarily impact approximately 0.063 acre of Open/Dense 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 (including Non-native Grassland), and 0.128 acre of Disturbed Wetland habitats. No temporary impacts to freshwater marsh or riparian forest habitat would occur.

Consistent with the *SDG&E Subregional NCCP*, the Proposed Project has been designed to avoid sensitive habitat areas when possible, including not placing new poles in drainage areas, using existing access roads where feasible, and placing any new facilities, staging areas, stringing sites, guard structures, and helicopter landing zones outside sensitive habitats when feasible. 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 (refer to Table 4.4-4, Mitigation Summary Table in section 4.4.4.2).

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 4.4-4, 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 square feet of the above mentioned temporary impacts will be actively restored through active site enhancement. Fifty-three thousand 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.

Operations & Maintenance – No Impact

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 and would be conducted in compliance with the *SDG&E Subregional NCCP*. Therefore, no impacts are anticipated.

4.4.4.4 Question 4c - Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Construction – Less than Significant Impact

To 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. Several existing poles within TL 637 are proposed to be relocated outside of a jurisdictional area including Poles Nos. P104, P105, P106, P114, and P129. Existing Pole No. R107 is in a disturbed wet meadow and has been proposed to be eliminated from the line.

Permanent Impacts

Replacement of existing Poles Nos. 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

USACE and RWQCB – Project activities in drainage and wetland feature areas will be carried out under non-notifying Nationwide Permit #12 issued by USACE, and a 401 Certification from RWQCB (Certification 11C-114; Categorical Exemption). Permanent impacts to USACE wetlands associated with pole removal and replacement are 98-square feet. Temporary impacts to USACE 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.

Operations & Maintenance – No Impact

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.

4.4.4.5 Question 4d - 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?

Construction – Less than Significant Impact

It is not anticipated that construction of the Proposed Project would have a significant effect on wildlife movement corridors. The new pole installations would be located within an existing ROW where power lines are already present, and pole replacements are primarily adjacent to existing poles site locations. The Proposed Project will require use of 22 stringing sites and 10 wooden guard structures that will temporarily impact potential foraging habitat. In addition, the

Proposed Project will require use of four staging yards at the Warnock, Creelman, Woodlot, and Santa Ysabel sites and two helicopter landing zones at the Littlepage and Mount Gower sites. 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 to the greatest extent possible, and placing any new facilities and staging areas outside habitats when feasible.

The majority of the Proposed Project is located within urban, developed, grazing pastures, non-native grasslands, and hillsides. Several drainage features are adjacent to the proposed construction area that could potentially be used as a migration 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. 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. The protective measures outlined in the *SDG&E Subregional NCCP* and the measures in Sections 4.4.4.2 and 4.4.4.3 would avoid and minimize any impacts associated with construction. Therefore, the potential impacts to wildlife movement are anticipated to be less than significant.

Operations & Maintenance – No Impact

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. Because the Proposed Project involves the replacement of existing facilities and does not include an extension of the tie line, the extent of obstruction or reduction of wildlife corridors is not anticipated to differ from existing conditions. 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 comply with the NCCP. Therefore, no impacts to wildlife movement corridors are anticipated during operation and maintenance activities.

4.4.4.6 Question 4e - Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Construction – No Impact

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.

Operations & Maintenance – No Impact

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, 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.

4.4.4.7 Question 4f - Conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plan?

Construction – No Impact

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 Nos. 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.

Operations & Maintenance– No Impact

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. In the event of a conflict, *SDG&E's 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; therefore, no impacts are anticipated.

4.4.5 Project Design Features and Ordinary Construction/Operating Restrictions

With implementation of the project design features and ordinary construction/operating restrictions (as outlined within Section 3.8) potential impacts relating to biological resources will remain less than significant. Construction of the Proposed Project would also be completed in compliance with the 401 Certification from RWQCB (Certification 11C-114; Categorical Exemption).

4.4.6 Applicant Proposed Measures

The Proposed Project has no potentially significant impacts relating to biological resources; therefore, no APMs are proposed.

4.4.7 Detailed Discussion of Significant Impacts

Based on the preceding analysis, no significant impacts relating to biological resources are anticipated from the Proposed Project.

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4.5 CULTURAL RESOURCES

Would the project:		Potentially Significant Impact	Potentially Significant Unless APMs 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b.	Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c.	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d.	Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

4.5.1 Introduction

This section of the PEA describes the archaeological, historical, and paleontological resources identified within the Proposed Project area, and identifies potential impacts that could result from construction, operation, and maintenance of the Proposed Project. Components of the Proposed Project that could affect cultural resources include removal of existing poles/structures and power line, construction of new poles and stringing of new power lines, grading access roads, use of pulling stations, construction yards and laydown areas, or establishing HLZs.

Cultural resources as defined in CEQA include prehistoric and historic period archaeological sites, districts, and objects; historic buildings, structures, and traditional/cultural sites or the locations of important historic events. Although cultural resources identified within the Proposed Project site include prehistoric and historic archaeological sites and isolates, the Proposed Project will not result in significant impacts, either because the resources were not relocated, or will not be impacted. There are no known fossil localities within one mile of the Proposed Project. This is probably due to the widespread occurrence of non-fossil bearing igneous rocks. There is one geologic formation, the Pomerado Conglomerate, which has a high sensitivity potential for paleontological resources. With the implementation of ordinary construction restrictions (refer to Section 3.8), potential impacts to cultural and paleontological resources that may result from the Proposed Project would remain less than significant.

4.5.2 Methodology

4.5.2.1 Cultural Resources Records Search

Cultural resources information for existing conditions in the Proposed Project area was obtained from the California Historic Resources Information System (CHRIS). The CHRIS maintains regional offices that manage cultural resource records for known cultural resource locations and related technical studies. The regional office for San Diego County is the South Central

Information Center (SCIC) housed at San Diego State University. Sources reviewed consisted of all recorded archaeological and historic sites records, and cultural resource reports within a ½ mile radius of the Proposed Project area. Additional resources that were consulted for relevant information included the National Register of Historic Places, the Historic Property Data File, the California Register, the California Historical Landmarks, the California Inventory of Historic Resources, the California Points of Historical Interest, and historic maps.

4.5.2.2 Native American Scoping

In order to acquire more information about potential cultural resources located in or near the Proposed Project area, a request for information in the Sacred Lands file database was submitted to the NAHC in July 2010. The NAHC responded on July 25, 2010 and indicated that there are cultural resources recorded in the NAHC Sacred Lands file within a ½ mile of the Proposed Project area. The NAHC also enclosed a list of 21 Native American individuals and/or organizations that might have further knowledge of cultural resources in or near the Proposed Project area.

ASM Affiliates, Inc. (ASM) sent letters to all the individuals and/or organizations provided on the list by the NAHC. At this time, there have been no responses.

4.5.2.3 Cultural Resources Field Surveys

The purpose of the cultural resource field surveys was to relocate and update any previously recorded cultural resources, as well as to check for the presence/absence of any cultural resources on any previously unsurveyed portions of the Proposed Project area. Gallegos & Associates, E²M/HDR, and ASM conducted cultural resources field surveys of the Proposed Project area. The eastern and central portions of the Proposed Project were examined during Gallegos & Associates survey in 2007 for the Sunrise Powerlink Project; this survey included the 10 poles on BLM land. E²M/HDR conducted the initial cultural resources surveys at 53 poles and their access roads, string areas, the Santa Ysabel Substation laydown yard, and the Creelman Substation Staging Yard in 2009. ASM conducted additional field surveys in 2011, but did not revisit the areas surveyed by Gallegos & Associates and E²M/HDR.

E²M/HDR's cultural field surveys were conducted on March 5, 6, and 9, 2009. The survey included an approximate 40-foot radius around each pole to account for possible anchor placements. ASM's cultural field surveys occurred on April 26, 27, and May 2, 2011, and included 10 meter transects around each pole location. When a previously recorded site boundary was encountered, five meter transects were utilized and extended for a total distance of 50 meters, when previously recorded sites were not initially re-identified.

4.5.2.4 Paleontological Resources

A thorough literature and record search was conducted by the Department of Paleontology, San Diego Natural History Museum (SDNHM) on March 27, 2012. Relevant published geologic maps and reports, unpublished paleontological reports and unpublished museum collection locality data were reviewed. The Proposed Project and a one-mile radius were searched for fossil localities. There are no known fossil localities within one mile of the Proposed Project. The paleontological record search results letter can be found in Appendix 4.5-A.

4.5.3 Existing Conditions

4.5.3.1 Regulatory Setting

Federal Regulations

National Historic Preservation Act

Enacted in 1966, the NHPA has become the foundation and framework for historic preservation in the United States. The NHPA authorizes the Secretary of the Interior to expand and maintain a National Register of Historic Places, establishes an Advisory Council on Historic Preservation as an independent federal entity, requires federal agencies to take into account the effects of their undertakings on historic properties, affords the Advisory Council on Historic Preservation a reasonable opportunity to comment on any undertaking that may affect historic properties listed, or eligible for listing, in the National Register of Historic Places, and makes the heads of all federal agencies responsible for the preservation of historic properties owned or controlled by their agencies.

16 USC Section 470 (Section 106) of the NHPA governs federal regulations for cultural resources. The goal of the Section 106 process is to offer a measure of protection to sites that are determined eligible for listing on the National Register of Historic Places. The criteria for determining National Register eligibility are found in 36 CFR Part 60.

Native American Graves Protection and Repatriation Act

For activities on federal lands, the Native American Graves Protection and Repatriation Act (NAGPRA), enacted in 1990, provides a framework for determining the rights of lineal descendants and Native American tribes to repatriate Native American remains, funerary objects, sacred objects, or other objects of cultural patrimony with which they are associated. NAGPRA applies to items found on federal lands, and agencies that obtain federal funding. It requires consultation with “appropriate” Indian tribes prior to the intentional excavation, or removal after inadvertent discovery, of several kinds of cultural items, including human remains and objects of cultural patrimony.

Paleontological Resource Preservation Act

On March 30, 2009, the Paleontological Resources Preservation Act, 16 USC 470aaa (PRPA) became law. This requires the Secretaries of the Interior and Agriculture to manage and protect paleontological resources on Federal lands using scientific principles and expertise. New policies from these agencies regarding paleontological resources are in progress.

State Regulations

California Environmental Quality Act

CEQA requires that impacts to cultural resources be identified and, if impacts will be significant, that mitigation measures be implemented to reduce those impacts to the extent feasible. In the protection and management of the cultural environment, both the statute and its *CEQA*

Guidelines provide definitions and standards for cultural resources management. The term “historical resource” is defined as follows:

- (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.*
- (2) *A resource included in a local register of historical resources or identified as significant in a historical resource survey 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, 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 a historical resource, provided the lead agency’s determination is supported by substantial evidence in light of the whole record. Generally, a cultural 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, including the following:*
 - a. Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage;*
 - b. Is associated with the lives of persons important in our past;*
 - c. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or*
 - d. Has yielded, or may be likely to yield, information important in prehistory or history.*

The fact that a resource is not listed in, or determined to be eligible for listing in, the California Register of Historical Resources, not included in a local register of historical resources, or identified in an historical resources survey does not preclude a lead agency from determining that the resource may be an historical resource.

As defined in Section 21083.2(g) of CEQA, a “unique archaeological resource” is:

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 any of the following criteria:

- (1) *Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.*

(2) *Has a special and particular quality such as being the oldest of its type or the best available example of its type.*

(3) *Is directly associated with a scientifically recognized important prehistoric or historical event or person.*

Section 15064.5(a) (3) of the *CEQA Guidelines* explains that effects on cultural properties that qualify as historical resources or unique archaeological resources would be considered adverse if they involve physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of the resource would be materially impaired.

The statutes and guidelines cited above specify how cultural resources are to be managed in the context of projects subject to CEQA. Briefly, archival and field surveys must be conducted, and identified cultural resources must be inventoried and evaluated in prescribed ways.

California Native American Graves Protection and Repatriation Act

The California Native American Graves Protection and Repatriation Act (Cal NAGPRA) of 2001 is contained in the California Health and Safety Code Sections 8010-8021, and 8025-8030. Cal NAGPRA provides for the repatriation of human remains and cultural items in the possession or control of a state or local agency or museum to the rightful California Native American tribe. This law defines the term California Native American tribe to include non-federally recognized groups.

California Public Resources Code

Provisions can be found under the PRC regarding the treatment of human remains. These provisions are detailed in Section 5097.9 through 5097.996. These sections explain the actions to be taken when Native American remains are found. Section 7050.5 of the California Health and Safety Code states that anyone who knowingly disinters, disturbs, or willfully removes any human remains in or from any location other than a cemetery without the authority of law is guilty of a misdemeanor, except those circumstances as described in Section 5097.99 of the PRC. Under these provisions if a county coroner determines that remains found during excavation or disturbance of land are Native American, the coroner must contact the NAHC within 48 hours, and the NAHC must determine and notify a MLD who shall complete inspection of the site within 24 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

Local Regulations

San Diego County

The San Diego County regulations and policies pertaining to cultural resources can be found in the Conservation and Open Space Element of the *County of San Diego General Plan*. The Board of Supervisors adopted the current version of the *County of San Diego General Plan* on August 3, 2011.

The Conservation and Open Space Element includes three goals that deal with Cultural/Historic and Paleontological Resources. Goal 1 is the protection and preservation of the County's

important archaeological resources for their cultural importance to local communities, as well as for their research and educational potential. The County has developed the following six policies to help ensure the protection of the County's resources.

- Preserve important archaeological resources from loss or destruction and require development to include appropriate mitigation to protect the quality and integrity of these resources.
- Require development to avoid archaeological resources whenever possible. If complete avoidance is not possible, require development to fully mitigate impacts to archaeological resources.
- Require the appropriate treatment and preservation of archaeological collections in a cultural appropriate manner.
- Require consultation with affected communities, including local tribes to determine the appropriate treatment of cultural resources.
- Require human remains be treated with the utmost dignity and respect and that the disposition and handling of human remains will be done in consultation with the MLD and under the requirement of Federal, State and County Regulations.
- Coordinate with public agencies, tribes, and institutions in order to build and maintain a central database that includes a notation whether collections from each site are being curated, and if so, where, along with the nature and location of cultural resources throughout the County of San Diego.

Goal 2 is the protection, conservation, use, and enjoyment of the County's important historic resources. The County has developed the following two policies to help ensure the protection of the County's resources.

- Encourage the preservation and/or adaptive reuse of historic sites, structures, and landscapes as a means of protecting important historic resources as part of the discretionary application process, and encourage the preservation of historic structures identified during the ministerial application process.
- Encourage and promote the development of educational and interpretive programs that focus on the rich multicultural heritage of the County of San Diego.

Goal 3 is that paleontological resources and unique geologic features should be conserved for educational and/or scientific purposes. The County has developed the following two policies to help ensure the protection of the County's resources.

- Require the salvage and preservation of unique paleontological resources when exposed to the elements during excavation or grading activities or other development processes.
- Require development to minimize impacts to unique geological features from human related destruction, damage, or loss.

Community of Ramona

The *Ramona Community Plan* identifies one goal regarding cultural resources, this goal relates to the importance of Historic Resources, and several policies that relate to cultural resources. Below are the policies that relate to cultural resources:

- **Policy COS 1.3.3** Incorporate significant archaeological and historical sites into public projects wherever feasible.
- **Policy COS 1.3.4** Encourage public agencies and private property owners to preserve archaeological and historical resources.

4.5.3.2 Cultural Setting**Historic Overview***Prehistoric Background*

Evidence of early human occupation of southern California is scanty. A few sites have yielded artifacts that may date to the Clovis era (circa 11,000 years before present [B.P.]), but the oldest reliable dates for occupation come from Daisy Cave on San Miguel Island. Dates from this site indicate that the islands (and, therefore, probably the coast) were occupied as early as 11,600 to 11,000 B.P. Radiocarbon dates as old as 10,000 to 9,000 B.P. have been reported from coastal sites.

This early culture represents the post-Pleistocene adaptation to big game hunting of large mammals, possibly even members of the late Pleistocene megafauna such as mammoth, although direct evidence of this type of aboriginal megafauna exploitation is lacking from mainland southern California. Although it is reasonable to assume that vegetable foods were an important part of the diet, a lack of ground stone artifacts indicates that hard seeds were not routinely exploited. This early hunting tradition came to an end around 6,000 B.P. This is probably due to the advent of much warmer and drier times associated with the Altithermal, which led to a shift in subsistence strategies focused on plants and small game. However, regional and sub-regional variation and adaptation of toolkits, residence patterns, and resources exploited appears to have been the rule.

The following period, termed the Millingstone Substratum or the La Jolla/Pauma Complexes, dates from approximately 8,000 B.P. to 3,000 B.P. This horizon marks the technological advancements of seed grinding for flour as a staple of diet. This period has traditionally been thought of as the beginning of large-scale marine fauna exploitation, but recent research indicates marine fauna were probably an important part of the diet in earlier times. Diagnostic artifacts for this tradition include manos, metates, scraper planes, choppers, core tools, doughnut stones, discoidals, and cogstones. This period includes archaeological cultures/complexes such as Pauma, La Jolla, Topanga, Oak Grove, and Sayles. This period was not homogeneous across either time or space, and was characterized by adaptation to changing environments on both the regional and sub-regional scales.

The Pauma Complex, first identified by Delbert L. True, was primarily restricted to the areas east of Escondido in the peninsular ranges of northern San Diego County. It appears to have been a

millingsone complex based on a hunting and seed-gathering economy. This complex, dated to around 8,000 B.P., is characterized by an assemblage of San Dieguito-like crescents, leaf-shaped points, La Jollan millingsone artifacts, core scrapers, and stone discoidals. It is not known whether the Pauma Complex was an inland variant of the coastal La Jolla Complex, or represents seasonal inland encampments and adaptations of coastal groups, though recent studies have suggested that permanent inland and interior populations were more common than has traditionally been thought. It was also during this time that geographically expansive trade networks began to appear, with shell beads generated on the Channel Islands during this period being found as far away as Oregon.

The late Middle Holocene of San Diego County has not been well understood, with Moratto stating that there may have been a hiatus or reduction in occupation from 3,000 B.P. to 1,500 B.P. It is unlikely that the interior was abandoned completely, and it may be the case that interior adaptations were similar enough to those of the previous or later periods that they seem “invisible” in the archaeological record, or that occupation of the interior followed an ephemeral pattern that is not easily “seen” through the archaeological record.

The Late Prehistoric period began around 1,000 B.P. and continued until European contact. The period is characterized by three basic shifts in the economy: (a) intensification of land-based collecting and diversification of foods collected, (b) collection at specifically targeted shellfish resource areas and diversification of shellfish collected, and (c) the development or intensification of a quasi-maritime economy. Archaeologically the period is characterized by the introduction of the mortar and pestle, projectile points associated with bow and arrow technology, cremations, and the introduction of pottery around 1,000 B.P. The late period is represented by the San Luis Rey Complex, which is divided into stages I (550-200 B.P.) and II (200-100 B.P.). The complex was first proposed by Meighan based on his work at CA-SDI-132.

Archaeologically, the San Luis Rey Complex represents a termination of most of the millingsone practices in favor of greater reliance on acorn exploitation and establishment of semi-permanent villages in centralized resource locations. Small satellite camps surrounding the villages served as strategic foraging locations, allowing a flexible and varied resource base. San Luis Rey I assemblages are characterized by millingsones, bedrock mortars, cremations and small triangular points. San Luis Rey II contains all those plus pottery, cremation urns and, after contact, glass beads and metal knives.

The Late Prehistoric period essentially ended with Spanish colonization and establishment of the missions. Disease and forced relocation, which reduced the populations considerably among the coastal settlements, did much to destroy the cultural pattern established during that period.

Historic Background

The first Europeans to explore future California were in the 1542 expedition of Juan Rodriguez Cabrillo. It is possible that the Santa Maria Valley (Ramona area) near the Proposed Project could have been first visited in 1769 by Gaspar de Portola, as he led a 62-person expedition from San Diego to Monterey.

The closest mission to the Proposed Project area is the Mission San Luis Rey, which was founded in 1798 under the supervision of Padre Presidente Fermin Francisco de Lasuen. The mission inducted large numbers of mountain Indians. In 1818, the Santa Ysabel mission outpost

(*asistencia*) was established several miles north of the Santa Maria Valley near the present day community of Santa Ysabel.

In 1833, during the secularization process, Narcisco Botello, a Mexican soldier received the Santa Maria land grant. He was unsuccessful at ranching, and abandoned the land. In 1843, the grant was passed to Jose Joaquin Ortega and his son-in-law, Captain Edward Stokes.

In 1872, Adolfo Stokes sold all but 1,000 acres to Juan Arrambide. Arrambide and French immigrant Bernardo Etcheverry developed the valley in fruit orchards, vineyards, and grain fields, and ran a prosperous sheep operation on several thousand acres in Santa Maria Valley.

A steady flow of settlers came to southern California during the 1880s and 1890s; this included the Santa Maria Valley. The Santa Maria land grant was sold off in large and small parcels to various land speculators, and homesteaders. The area continued to grow gradually, with the predominant emphasis on turkey ranches, beehives and horse stables. From 1930 to the early 1970s, Santa Maria Valley and Ramona itself were known as the “Turkey Capital” of the world. The area has continued to grow with urban developments over the last several decades.

Ethnographic Overview

At the time of European contact, the Proposed Project area was occupied by the Kumeyaay (also known as Kamia, Ipai, Tipai, and Diegueño), a Yuman speaking people. The Kumeyaay ranged from the San Diego coastal region east to beyond the Salton Sea and south to beyond Ensenada in Mexico, the northern extents included Mount Palomar. They lived in semi-sedentary villages, with temporary camps radiating out from the central location. The basic social unit was the patrilocal extended family. With marriage being exogamy (marriage outside of group) and virilocal residence (couples living with the male's group).

The Kumeyaay were hunter-gatherers with an emphasis placed on acorn procurement and processing, as well as the capture of rabbits and other small game. Several scholars believe that the Kumeyaay, or at least some bands of the Kumeyaay, were practicing proto-agriculture at the time of Spanish contact. Although there is no concrete evidence of this, the Kumeyaay were certainly adept resource managers with a history of intensive plant managing.

Most tools were made from locally available materials, but obsidian was imported from the desert areas. Flaked tools included projectile points, scrapers, and biface knives. The common groundstone tools included metates, manos as well as mortars and pestles. Pottery came to the Kumeyaay quite late and was predominantly a plain brownware. The Kumeyaay were highly skilled in basket weaving, utilizing both coiled and twined construction methods. Some baskets were so tightly woven that they could carry water.

The Kumeyaay practiced many forms of spiritualism with the assistance of shamans. These Spiritual leaders neither were elected nor inherited their position. Important ceremonies included male and female puberty rites, the cremation ceremony, as well as the yearly mourning ceremony. The primary ceremonial direction among the Kumeyaay is east, and the Kumeyaay are the only California tribe known to possess a color-direction system in which white represents the east, green-blue the south, black the west, and red the north.

Cultural Resources in the Proposed Project Area

Record Search Results

The record search results were taken from the cultural technical report. Table 4.5.1:Recorded Cultural Resources within the Proposed Project Area, includes the 17 archaeological resources previously recorded as well as the six new sites and isolates located by ASM.

Table 4.5-1: Recorded Cultural Resources within the Proposed Project Area

Site/Isolate Designation	USGS Quad	Description	NRHP/CRHR Status	Relocated
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/H	Ramona	Multi 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	Multi 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	Historic Foundations	Not Evaluated	Yes
37-028748	Santa Ysabel	Historic Rock Wall	Not Evaluated	Yes
37-029760	Santa Ysabel	Historic Well	Not Evaluated	Yes
SDI-20241	Santa Ysabel	Prehistoric Bedrock Milling	Not Evaluated	Yes
BC-I-01	Ramona	Prehistoric Isolate (Groundstone)	Not Eligible	Yes
BC-I-02	Ramona	Prehistoric Isolate (Core)	Not Eligible	Yes

Table 4.5-1 (cont): Recorded Cultural Resources within the Proposed Project Area

Site/Isolate Designation	USGS Quad	Description	NRHP/CRHR Status	Relocated
SDI-20240	Ramona	Prehistoric Bedrock Milling	Not Evaluated	Yes
SDI-20242	Santa Ysabel	Prehistoric Bedrock Milling	Not Evaluated	Yes
SDI-20243	Santa Ysabel	Historic Refuse Scatter	Not Evaluated	Yes
SDI-20669	Santa Ysabel	Prehistoric Bedrock Milling	Not Evaluated	Yes

Archaeological Field Survey Results

During the field surveys, ten of the previously recorded archaeological resources were relocated, and updated by E²M/HDR or ASM (SDI-11633, SDI-11634, SDI-17958, SDI-18964, SDI-19025, SDI-19030, DI-19031, 37-028748, 37-029760, and SDI-20241). Seven previously recorded sites were not relocated within the Proposed Project area (SDI-5038, SDI-11266, SDI-11638, SDI-12448, SDI-13247, SDI-17954, and SDI-18434). Additionally, ASM identified four new sites (SDI-20240, SDI-20242, SDI-20243, and SDI-20669) and two new isolates (BC-I-01, and BC-I-02).

SDI-5038: CA-SDI-5038 was originally recorded in 1979 by Johnson and Pettus as a milling area containing two mortars, 16 slicks, and three basins. The site was updated in 1990 by Andrew Pigniolo as containing two milling areas and four loci of lithic debris, including hundreds of flakes and several associated artifacts. In 2009, ASM completed an updated cultural resource study for the property and noted that the site is still present but not all of the constituents could be re-located. Two milling areas were identified as well as a sparse lithic scatter; however, Pigniolo's four lithic scatter loci could not be re-located. The site boundaries were extended to include both milling loci. This site also contains a sparse lithic scatter of approximately 30+ metavolcanic and quartzite flakes. There were no apparent loci of debitage present; however, there appears to have been substantial erosion on the area, which may have affected surface deposits. In addition, at the time of the survey ground visibility was poor due to dense grasses. During the 2011 ASM survey, no elements associated with the previous recording were identified near the pole locations.

SDI-11266: This historical site was originally recorded in 1986 by Jenkins as an historical rock foundation and associated refuse scatter. During the 2011 ASM survey, no elements associated with the previous recording were identified near the pole locations.

SDI-11633: This prehistoric site was originally recorded in 1990 by Pigniolo as three pieces of quartz debitage among a natural quartz exposure. ASM identified the quartz exposure and possible pieces of debitage within the original project boundary.

SDI-11634: This prehistoric site was originally recorded in 1990 by Pigniolo as three pieces of quartzite debitage. During the 2011 ASM survey, this site was identified as previously recorded.

SDI-11638/H: This site was originally recorded in 1990 by Pigniolo and Briggs as a lithic testing and procurement site with a light scatter of flakes and tested cobbles. The site contained 200+ flakes and 40+ core tools over a very large area along a north/south trending ridge. Also recorded was the presence of a historic olive grove within the north central portion of the site. In 2009, ASM completed an updated cultural resource study for the property and noted that the site is still present, however the amount of lithic material is very sparse and spread out over a very large area. At the time of the 2011 ASM survey, the majority of the site was covered with very dense dry grasses resulting in minimal ground visibility. The historic component of the site was also relocated. A historic era olive grove consisting of eight rows of trees with approximately 10 trees in each row. Also present is a stacked cobble wall, running east west, for approximately 105 feet along the northern edge of the olive grove. The wall appears to be constructed with cobbles removed from the olive grove. The olive grove and rock wall are likely associated with homesteading activities within the vicinity. No elements associated with the previous recording were identified near the pole locations.

SDI-12448: This site was originally recorded by Saunders in 1991 as more than 20 milling elements, a rock circle, brownware sherds, stone tools, cores, and debitage. During the ASM survey, no elements associated with the previous recording were identified near the pole locations.

SDI-13247: Desautels and Beer originally recorded this prehistoric site in 1993 as nine bedrock milling features, potsherds, finished stone tools, preforms, projectile points, handstone, groundstone, bone fragments, and percussion tools. During the 2011 ASM survey, no elements associated with the previous recording were identified near the pole locations.

SDI-17954: ASM originally recorded this prehistoric site in 2006 as three bedrock-milling features with four surfaces, four brownware body sherds, a mano and a volcanic piece of debitage. During the 2011 ASM survey, no elements associated with the previous recording were identified near the pole locations.

SDI-17958: ASM originally recorded this site in 2006 as two bedrock milling features with 13 milling surfaces, a mano, more than 15 brownware sherds, more than 25 pieces of quartz debitage, a quartz Cottonwood projectile point, and a historical rock wall. Gallegos & Associates combined the two sites in 2009 and noted two additional milling features with five milling surfaces. During the 2011, ASM survey, this site was identified as previously recorded.

SDI-18434: This prehistoric site was originally recorded in 2006 by Gallegos & Associates as two bedrock-milling features with three milling slicks. During the 2011 ASM survey, no elements associated with the previous recording were identified near the pole locations.

SDI-18964: This prehistoric site was originally recorded in 2006 by Gallegos & Associates as four bedrock milling features with 15 milling slicks, one buffware sherd, 11 brownware sherds, a piece of quartz debitage, a piece of obsidian debitage and a quartz biface. During the 2011 ASM survey, the site was identified as previously recorded.

SDI-19025: This prehistoric site was originally recorded in 2007 by SWCA as two bedrock-milling features with three surfaces. Both ASM and e²M/HDR found this site to be as previously reported.

SDI-19030: This prehistoric site was originally recorded in 2007 by SWCA as two bedrock milling feature with two milling slicks. During the 2011 ASM survey, the site was identified as previously recorded.

SDI-19031: This historical site was originally recorded in 2007 by SWCA as five features associated with a former milling operation, included a water conveyance system, a wood structure ruin, a concrete foundation with discarded machinery, a concrete footing, and a concrete foundation with wood planks. Both ASM and e²M/HDR found this site to be as previously reported.

37-028748: This historical rock wall was originally recorded in 2007 by Gallegos & Associates. Both ASM and e²M/HDR found this site to be as previously reported.

37-029760: This historical well was originally recorded in 2007 by SWCA. E²M/HDR and ASM found this site to be as previously reported.

SDI-20241: This prehistoric site was originally recorded in 2009 by E²M/HDR as a bedrock-milling feature with one milling slick.

BC-I-01: This prehistoric isolate consists of one granitic groundstone fragment.

BC-I-02: This prehistoric isolate consists of one volcanic core.

SDI-20240: This prehistoric site consists of one bedrock-milling outcrop with a single milling slick.

SDI-20242: This prehistoric site consists of one bedrock-milling outcrop with a single milling slick.

SDI-20243: This historical site consists of glass shards and a cold cream jar.

SDI-20669: This prehistoric site consists of one bedrock-milling outcrop with a single milling slick.

Twenty-seven of the replacement pole locations were identified as lying near or within 20 feet of known cultural sites. These sites were identified through record searches and cultural surveys, and avoidance measures were developed through field visits to these poles and facilities by ASM staff. Several poles were moved in order to avoid impacts to known cultural resources. In all cases, the pole locations are far enough from the cultural resource locations that no direct impacts should occur where ordinary construction restrictions are implemented.

In the event of an unanticipated discovery of archaeological materials within a work area during construction monitoring, all ground-disturbing work at the work area will be suspended. The archaeological monitor will carefully inspect the ground surface around the discovery and the displaced dirt in order to determine whether the discovery is an isolated find (fewer than three items) or a site (three or more items, or a feature). If the discovery is determined to be a site, SDG&E archaeologists will be notified of the nature and extent of the discovery. The project

archaeologist and SDG&E archaeologists will work together to determine the correct course of action. The level of effort will be dictated by the nature and extent of the discovery and on the results of the initial evaluation effort.

4.5.3.3 Paleontological Resources within the Proposed Project Area

Based on the records search conducted through the Department of Paleontology, SDNHM (refer to Appendix 4.5-A), no previously recorded vertebrate paleontological sites are known to exist within the Proposed Project area. The Proposed Project area is predominantly underlain by plutonic igneous rocks of the Cretaceous-age (120-90 million years old) Peninsular Ranges Batholith. The high temperature and pressure conditions associated with the formation of the plutonic rocks are responsible for the absence of fossils. However, there are portions of the Proposed Project area that are underlain by sedimentary rocks, including the Pomerado Conglomerate and Late Pleistocene to Holocene aged channel deposits.

The Pomerado Conglomerate is a Middle to Late Eocene age sedimentary formation, which is approximately 36 to 38 million years in age, includes fluvial/deltaic deposits. The formation consists of a massive cobble conglomerate with sandstone as the matrix and thin interlayer. It is the uppermost formation of the Poway group. This formation has a high paleontological sensitivity due to known occurrences within the unit in other regions of San Diego County.

Late Pleistocene to Holocene (500,000 years old to present) aged channel deposits have a low to moderately sensitive for paleontological resources. Sedimentary rocks underlie eight poles within the Proposed Project area. Six of these poles are underlain with the Pomerado Conglomerate having a high sensitivity, and two with the Late Pleistocene to Holocene channel deposits, which has a low to moderate sensitivity.

4.5.4 Potential Impacts

4.5.4.1 Significance Criteria

Cultural Resources

Under CEQA, Proposed Project construction, operation, and maintenance effects to unique or important cultural resources must be considered. A cultural resource is considered unique or important if it meets any of the following criteria:

- Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- Is associated with the lives of persons important in our past;
- Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work on an important creative individual, or possesses high artistic values; or
- Has yielded, or may be likely to yield, information important in prehistory or history.

The Proposed Project could have a potentially significant impact to cultural resources if it 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.

For purposes of the first two thresholds, a “substantial adverse change” is defined as physical destruction, demolition, relocation, or alteration of an historical resource in Section 15064.5 (b) (1) of the *CEQA Guidelines*.

4.5.4.2 Question 5a - Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?

Construction – Less than Significant Impact

Twenty-three archaeological sites are located within or adjacent to the Project area. Twenty-one of these sites have not been evaluated for significance and may qualify as historical resources as identified in *CEQA Guidelines* Section 15064.5(a). For the purpose of this Project, these 21 sites are being assumed to qualify as “historical resources” as defines by CEQA, and impacts to these sites will be avoided.

Construction of the Proposed Project (including excavation of holes for the installation of the power line structures) could potentially impact historical resources by disturbing subsurface soils, and potentially disturbing or destroying unknown buried cultural deposits. By implementing project design features and ordinary construction restrictions, such as cultural resources sensitivity training for all construction personnel, and monitoring any areas that are considered environmentally sensitive, any possible potential impacts to historical resources would remain less than significant.

Operation & Maintenance – No Impact

The Proposed Project is the reconstruction of existing electric facilities within existing SDG&E ROW and substation property. To the extent operation and maintenance of the Proposed Project would occur in the same location as existing facilities and would have the same or substantially the same impacts, frequency and duration as operation and maintenance activities of the existing facilities, such activities are incorporated into the existing environmental setting and baseline for assessing impacts. Moreover, SDG&E already has standard internal programs and practices that avoid impacts to cultural resources and those programs and practices would not change as a result of the Proposed Project. There would be no operational impacts on cultural resources along the Proposed Project once the Proposed Project is constructed. The only activities that would occur would be regular maintenance and repairs, such as structure and insulator replacements. These activities would decrease slightly from existing conditions, and would have no effect on historical resources. 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. Therefore, no impacts to cultural resources are anticipated during

the continuing operation and maintenance of TL 637 following construction of the Proposed Project.

4.5.4.3 Question 5b - Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

Construction – Less than Significant Impact

Potential impacts to these 23 archaeological sites will remain less-than-significant with the implementation of project design features and ordinary construction restrictions, implementation of which is a standard SDG&E practice. The project design features and ordinary construction restrictions relevant to cultural resources (refer to Section 3.8) include: design changes to ensure impact avoidance, incorporation of avoidance and minimization measures during preconstruction, such as flagging approved work areas, and monitoring to ensure avoidance and minimization measures are followed into construction. Demarcation of known resources and construction monitoring will ensure avoidance of these resources during Project construction, operation, and maintenance; construction monitoring by a qualified archaeologist; and training of construction personnel.

In the event that cultural resources are discovered during construction, 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 must concur with the evaluation procedures to be performed before construction activities are allowed to resume. For significant cultural resources, a Research Design and Data Recovery Program would be prepared and carried out to mitigate impacts. Known archaeological sites will be avoided during Project construction, operation, and maintenance.

Construction of the Proposed Project (excavation of holes for the installation of the power line structures) could potentially impact prehistoric archaeological sites by disturbing subsurface soils, and potentially disturbing or destroying unknown buried cultural deposits. Any possible potential impacts would remain less than significant with the implementation of the cultural resources project design features and ordinary construction restrictions.

Operation & Maintenance – No Impact

The Proposed Project is the reconstruction of existing electric facilities within existing SDG&E ROW and substation property. To the extent operation and maintenance of the Proposed Project would occur in the same location as existing facilities and would have the same or substantially the same impacts, frequency and duration as operation and maintenance activities of the existing facilities, such activities are incorporated into the existing environmental setting and baseline for assessing impacts. Moreover, SDG&E already has standard internal programs and practices that avoid impacts to cultural resources and those programs and practices would not change as a result of the Proposed Project. There would be no operational impacts on cultural resources along the Proposed Project once the Proposed Project is constructed. The only activities that

would occur would be regular maintenance and repairs, such as structure and insulator replacements. These activities would decrease slightly compared to existing conditions, and would have no effect on archaeological resources. Therefore, no impacts to cultural resources are anticipated during the continuing operation and maintenance of TL 637 following construction of the Proposed Project.

4.5.4.4 Question 5c - Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

If the Proposed Project directly or indirectly destroys a unique paleontological resource, the impacts to paleontological resources would be considered significant. A fossil is defined as the remains of a prehistoric plant or animal. Fossils are considered to be non-renewable. Paleontological sensitivity is defined as the potential for a geologic unit to produce scientifically significant fossils. The sensitivity is based upon fossil data collected from the entire geologic unit, not just from a specific location or survey. Impacts to paleontological resources are identified from high to low. The specific criteria are defined as follows:

- **High Potential Rating:** Rock units with a high potential for significant paleontological resources are those known to have yielded vertebrate fossils within the region. This does not necessarily imply that vertebrate fossils would always be recovered from high potential rated rock units, but only that there are recorded occurrences within the unit.
- **Moderate Potential Rating:** Rock units possessing some degree of potential, such as favorable depositional environment for resource preservation or lithologically similar rock units in the region that have yielded vertebrate fossils.
- **Low Potential Rating:** Rock units containing lithologies that do not commonly preserve significant fossil resources such as sediments of Holocene, subHolocene or Recent age are usually considered too young (less than 10,000 years old) in geologic time to preserve fossils.

The type of proposed impacts for the pole replacements will be an important factor for example a small borehole diameter (<12 inches) for installation of a single utility pole will typically pulverize subsurface deposits and any contained fossil remains. In contrast, larger pole diameters often result in opportunities for the discovery and recovery of buried fossil remains.

Construction – Less than Significant Impact

The records search indicated that no previously recorded vertebrate paleontological sites are known to exist within the Proposed Project area (refer to Appendix 4.5-A). There is the potential for impacts to paleontological resources to occur when earthwork activities are performed, such as grading operations and excavation that cuts into the geological deposits (formations) within which fossils are buried, especially when the excavations go below three feet in depth. Potential impacts by the Proposed Project to unique paleontological resources exist primarily in the Pomerado Conglomerate formation. However, potential impacts would remain less than significant with the implementation of ordinary construction restrictions, which includes cultural resources sensitivity training for construction personnel, and monitoring of areas considered to be sensitive for paleontology.

Operation & Maintenance – No Impact

The Proposed Project is the reconstruction of existing electric facilities within existing SDG&E ROW and substation property. As previously discussed above, to the extent operation and maintenance of the Proposed Project would occur in the same location as existing facilities and would have the same or substantially the same impacts, frequency and duration as operation and maintenance activities of the existing facilities, such activities are incorporated into the existing environmental setting and baseline for assessing impacts. Moreover, SDG&E already has standard internal programs and practices that avoid impacts to cultural resources and those programs and practices would not change as a result of the Proposed Project. Ground-disturbing activities associated with Proposed Project operation and maintenance would be performed at similar intensities as they are currently conducted and at the locations already disturbed for Proposed Project construction. Therefore, no impacts to paleontological resources are anticipated during the continuing operation and maintenance of TL 637 following construction of the Proposed Project.

4.5.4.5 Question 5d - Disturb any human remains, including those interred outside of formal cemeteries?

Construction – Less than Significant Impact

There are no known existing cemeteries, previously recorded Native American or other human remains within or directly adjacent to the Proposed Project area. Therefore, the potential for the inadvertent discovery of Native American or other human remains during subsurface construction associated with the Proposed Project is considered low. If human remains are encountered during the course of construction, SDG&E would halt work in the vicinity of the find and would implement the appropriate notification processes as required by law (California Health and Safety Code 7050.5, PRC 5097.98-99, and NAGPRA). As a result, potential impacts would be less than significant.

Operation & Maintenance – No Impact

The Proposed Project is the reconstruction of existing electric facilities within existing SDG&E ROW and substation property. As previously discussed, to the extent operation and maintenance of the Proposed Project would occur in the same location as existing facilities and would have the same or substantially the same impacts, frequency and duration as operation and maintenance activities of the existing facilities, such activities are incorporated into the existing environmental setting and baseline for assessing impacts. Moreover, SDG&E already has standard internal programs and practices that avoid impacts to cultural resources and those programs and practices would not change as a result of the Proposed Project. Ground-disturbing activities associated with Proposed Project operation and maintenance would be performed at locations that have been previously disturbed for Proposed Project construction. Therefore, no impacts to human remains are anticipated during the continuing operation and maintenance of TL 637 following construction of the Proposed Project.

4.5.5 Project Design Features and Ordinary Construction/Operating Restrictions

With the implementation of the project design features and ordinary construction restrictions (as outlined within Section 3.8) potential impacts relating to cultural resources will remain less than significant.

4.5.6 Applicant Proposed Measures

The Proposed Project has no potentially significant impacts relating to cultural resources; therefore, no APMs are proposed.

4.5.7 Detailed Discussion of Significant Impacts

Based upon the preceding analysis, no significant impacts relating to cultural resources are anticipated from the Proposed Project.

4.5.8 References

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4.6 GEOLOGY, SOILS AND MINERAL RESOURCES

Would the project:		Potentially Significant Impact	Potentially Significant Unless APMs Incorporated	Less than Significant Impact	No Impact
a.	Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
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.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii.	Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii.	Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv.	Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b.	Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c.	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d.	Be located on expansive soil, as defined by article 1803.5 of the California Building Code, creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e.	Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f.	Result in the loss of availability of a known mineral resource that would be of value to the region and residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g.	Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

4.6.1 Introduction

This section of the PEA describes existing geologic, soil, and mineral resources within the Proposed Project area and potential impacts related to these resources that could result from construction, operation, and maintenance of the Proposed Project.

Proposed Project construction activities would comply with all relevant federal, state, and local regulatory requirements. With implementation of project design features, construction, operation, and maintenance of the Proposed Project are expected to have less than significant impacts related to geologic, soil, and mineral resources.

4.6.2 Methodology

Preparation of this section was primarily based on review of geologic literature and unpublished documents that cover the Proposed Project area. These included publications from the USGS, the California Department of Conservation, San Diego County, and a geotechnical study prepared for the Proposed Project. Maps and aerial photographs were also reviewed. The Proposed Project description was reviewed and potential for impacts related to geologic resources and hazards was evaluated based on the existing geologic and soil conditions as determined by the data review.

4.6.3 Existing Conditions

4.6.3.1 Regulatory Setting

The key regulatory requirements relevant to the assessment of Proposed Project impacts related to geologic, soil, and mineral resources include the following:

- a) The Alquist-Priolo Special Studies Act of 1972 (Alquist-Priolo Act) which, in part, required the California Division of Mines and Geology (now the California Geological Survey) to compile maps of the surface traces of all known active faults in the State; and
- b) CPUC G.O. 95, which designates rules and regulations for overhead electric line engineering.

4.6.3.2 Topographic Setting

The Proposed Project traverses variable terrain ranging from relatively flat-lying valley floors to steep rocky slopes. Elevations range from a low of approximately 1,500 feet amsl at the Creelman Substation on the west end to a high of approximately 3,300 feet amsl on a peak near the community of Santa Ysabel at the east end.

4.6.3.3 Geologic Setting

Regional Setting

The Proposed Project area is located within the southern Peninsular Ranges Physiographic Province, which is characterized by northwest-trending fault-bounded mountain ranges, broad intervening valleys, and low-lying coastal plains. The province has a long and active geologic history. In general, the Peninsular Ranges province is underlain by Jurassic metavolcanic and metasedimentary rocks and by Cretaceous igneous rocks of the Southern California batholith.

The Proposed Project occurs on a block of igneous basement rock bounded by the Elsinore Fault Zone to the northeast and by the Newport-Inglewood-Rose Canyon fault zone to the west. Most of the Proposed Project alignment is mapped as igneous rock types. A total of approximately 1.4

miles of the alignment is mapped to have sedimentary rock at shallow depth overlying the igneous basement.

Proposed Project Geologic Setting

Geologic units that occur along the Proposed Project alignment are summarized in Table 4.6-1, Geologic Units Along the Proposed Project Alignment.

Table 4.6-1: Geologic Units Along the Proposed Project Alignment

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.
Tp	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.
Jcr	Cuyamaca Reservoir Granodiorite	Jurassic	Granodiorite and tonalite intrusions.
Jm	Undifferentiated Plutonic Rocks	Jurassic/Cretaceous	Granotoid plutons.
Source: VO Engineering, 2011.			

The majority of the Proposed Project alignment occurs in geology consisting of crystalline basement rocks at or near the surface. The pole locations occurring in sedimentary geologic units are shown in Table 4.6-2, Pole Locations in Sedimentary Geology.

Table 4.6-2: Pole Locations in Sedimentary Geology

Symbol	Unit Name	Age	Pole Numbers
Qya	Young Alluvial Deposits	Recent (Holocene)	P51, P75
Qoc	Old Colluvial Deposits	Quaternary	P59 – P64
Tp	Poway Group/Ballena Gravels	Tertiary	P22 – P32

4.6.3.4 Faulting and Seismicity

The Alquist-Priolo Act required the California Division of Mines and Geology (now the California Geological Survey) to compile maps of the surface traces of all known active faults in the State. By definition, an active fault is one that is “sufficiently active and well-defined,” with evidence of surface displacement within Holocene time (about the last 11,000 years). Active fault zones are the locations in the State with the most potential for surface fault rupture. A potentially active fault is one that has evidence of displacement within the Quaternary Period (last 1.6 million years). Potentially active faults are considered to also represent possible surface rupture hazards, although to a lesser degree than active faults. In contrast to active or potentially active faults, faults considered inactive have not moved in the last 1.6 million years.

The Proposed Project occurs within the area of two USGS 7.5 minute quadrangle maps: (1) Ramona Quadrangle; and (2) Santa Ysabel Quadrangle. There are no known active or potentially active faults or Alquist-Priolo Act earthquake fault zones in these quadrangles. The closest known active faults are those associated with the Elsinore Fault Zone fault located approximately 2.6 miles to the northeast. The Elsinore Fault Zone is a major dextral strike-slip fault zone that is part of the overall San Andreas Fault System that accommodates up to 5 millimeters per year of Pacific-North American plate boundary slip. In the Proposed Project vicinity, the Elsinore Fault Zone cuts diagonally across various Peninsular Range batholiths to the east of the Proposed Project alignment.

The San Jacinto and San Andreas Fault zones occur further to the northeast, approximately 24 miles and 50 miles, respectively. These and the Elsinore Fault Zone are regional faults that have the potential to produce high-magnitude earthquakes in the Proposed Project region, Fault type and average slip rates for these faults are shown in Table 4.6-3, Key Faults within the Region. The Proposed Project area is located in Seismic Zone 4 under the Uniform Building Code. The USGS estimates that the maximum peak horizontal ground acceleration in the Proposed Project area with a probability of occurrence of 10 percent in 50 years (recurrence interval of approximately 500 years) is between 0.3g and 0.4g where “g” is equal to the acceleration of gravity.

Table 4.6-3: Key Faults within the Region

Fault Name	Type of Fault	Slip Rate (mm/yr)
Elsinore (Julian Section)	Dextral-Reverse	1-5
San Jacinto (Coyote Creek Section)	Right-Lateral	1-5
San Andreas (Coachella Section)	Right-Lateral	>5
Sources: USGS, 2012.		

Fault Rupture

There are no known active or potentially active faults or Alquist-Priolo Act earthquake fault zones within the Proposed Project footprint area. Therefore, there are no locations within the Proposed Project footprint area that are prone to surface fault rupture.

Strong Seismic Shaking

Strong ground motion or intensity of seismic shaking during an earthquake is dependent on the distance from the epicenter of the earthquake, the magnitude of the earthquake, and the geologic conditions underlying and surrounding the area. All of southern California is considered to be a seismically active region. The San Diego County area is subject to strong seismic shaking from regional earthquakes that may occur on active faults that occur in the region. Active faults close enough to the Proposed Project route to cause strong seismic ground shaking are listed in Table 4.6-3.

4.6.3.5 Geologic Hazards

Subsidence

The primary causes of most subsidence are human activities, including groundwater or petroleum withdrawal from large alluvial basins with thick accumulations of unconsolidated sediments, and drainage of organic soils. Regional lowering of land elevation occurs gradually over time. Subsidence is not a significant risk for the Proposed Project because it does not occur over any large alluvial basins, and because the Proposed Project occurs primarily on crystalline or consolidated rock and does not involve the withdrawal of fluid from geologic materials.

Landslides

Landslide potential can be high in steeply sloped areas. Human factors such as over-steepening/overloading of slopes or introduction of excessive water in soil pores or joints and fractures in rock can also lead to landslides. The principal natural factors contributing to landslides are topography, geology and precipitation. The Proposed Project area is comprised primarily of igneous rock that is inherently strong and not particularly susceptible to landslides, and the Proposed Project area does not cross terrain identified to have landslide susceptibility.

Nevertheless, in areas of locally steep terrain, there is potential for rock falls and other mass wasting.

Liquefaction and Lateral Spreading

Liquefaction is a seismic phenomenon in which loose, saturated, cohesionless soils behave similar to a fluid when subjected to high-intensity ground shaking. An increase in pore pressure occurs as the soil attempts to compact in response to the shaking, resulting in less grain-to-grain soil contact and, therefore, loss of strength. Liquefaction occurs when three general conditions exist: shallow groundwater (40 feet below ground surface or less); low-density, fine-grained sandy soils; and high-intensity ground motion. Effects of liquefaction on level ground can include sand boils, settlement, and bearing capacity failures below structural foundations.

An evaluation for liquefaction potential along the Proposed Project alignment was conducted by VO Engineering, Inc. (2011) and determined that four pole locations could potentially be subject to liquefaction in the event of a large earthquake: Pole Nos. P103; R107; P114; and P129. It is estimated that total settlement ranging between 2 to 4 inches could occur in the vicinity of these sites in the event of a major earthquake.

Lateral spreads involve lateral displacement of large, intact soil blocks down gentle slopes or in the direction of a steep free face such as a stream bank. Lateral spreading can occur in fine-grained, sensitive soils such as quick clays, particularly if remolded or disturbed by construction and grading. Loose, granular soils present on gentle slopes and underlain by a shallow water table commonly produce lateral spreads through liquefaction. Conditions conducive to lateral spreading include gentle surface slope, a shallow water table, and liquefiable cohesionless soil. These conditions commonly are found along streams banks, canals, or cut slopes in recent alluvial or deltaic deposits. The potential for lateral spreading in the Proposed Project area is low due to the predominantly igneous character of geologic materials and absence of topographic features susceptible to lateral spreading.

Soil Collapse

Soil collapse occurs when added moisture causes bonds between soil particles to weaken, which allows the soil structure to collapse and the ground surface to subside. Collapsible soils are generally low-density, fine-grained combinations of clay and sand left by mudflows that have dried, resulting in the formation of small air pockets in the subsurface. The addition of moisture reduces the strength of the soil, resulting in collapse or subsidence. Geotechnical studies conducted for the Proposed Project did not identify conditions susceptible to soil collapse at any of the proposed pole locations.

4.6.3.6 Soils

The geotechnical study for the Proposed Project evaluated soils at the proposed pole locations and results of grain size analysis data indicates that the soils are predominantly sand with fines characterized as Uniform Soil Classification System (USCS) symbols of “SC” and “SM” (sand with plastic and non-plastic fines, respectively). Additionally, silty or clayey fine sands (USCS symbol “ML”) and inorganic low-plasticity clays (USCS symbol “CL”) occur at some pole locations.

4.6.3.7 Mineral Resources

There are no known significant mineral resources along the Proposed Project route. There are no Mineral Resource Zone (MRZ)-2 designated mineral resource areas. The MRZ-2 designation encompasses areas where the State has determined adequate information indicates that significant mineral deposits are present, or where it is judged that a high likelihood exists for their presence. The Proposed Project occurs in an existing ROW with no identified significant mineral resources. No mineral rights would be affected.

4.6.4 Potential Impacts

4.6.4.1 Significance Criteria

Thresholds of impact significance were derived from Appendix G of the *CEQA Guidelines*. Under these guidelines, the Proposed Project could have a potentially significant impact to geology and soils if it would:

- a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
 - 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;
 - iii. Seismic-related ground failure, including liquefaction; or
 - iv. Landslides;
- b) Result in substantial soil erosion or the loss of topsoil;
- c) Be located on a geologic unit that is unstable, or that would become unstable as a result of the project, and potentially result in on-site or off-site landsliding, lateral spreading, subsidence, liquefaction, or collapse;
- d) Be located on expansive soil, as defined by article 1803.5 of the CBC, creating substantial risk to life or property; or
- 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.

Mineral Resources

Impacts to mineral resources may be considered significant if they:

- a) Result in the loss of availability of a known mineral resource that would be of value to the region and residents of the state; or
- 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.

4.6.4.2 Question 6a(i) – 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?

Construction– No Impact

No portion of the Proposed Project is located in an Alquist-Priolo Act earthquake fault zone. There are no active or potentially active faults crossing the Proposed Project route. The closest known active fault is the Elsinore Fault Zone located approximately 2.6 miles to the northeast of the Santa Ysabel Substation. No recognized active faults underlie the Proposed Project area; therefore, no impacts from fault rupture are expected.

Operation & Maintenance – No Impact

As noted above, no portion of the Proposed Project is located in an Alquist-Priolo Act earthquake fault zone, there are no active or potentially active faults crossing the Proposed Project route, the closest known active fault is the Elsinore Fault Zone located approximately 2.6 miles to the northeast of the Santa Ysabel Substation, and no recognized active faults underlie the Proposed Project area.

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 constitute the baseline against which the impacts of the Proposed Project are evaluated. The Proposed Project is the reconstruction of existing electric facilities within the same general alignment and no portion of the existing lines and facilities are located in an Alquist-Priolo Act earthquake fault zone, nor are there any active or potentially active faults in proximity to the Proposed Project facilities or along the TL 637 route. 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. Therefore, the operations and maintenance of the Proposed Project would not result in any potential impacts relating to fault rupture.

4.6.4.3 Question 6a(ii) – Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?

Construction – Less than Significant Impact

As noted above, no portion of the Proposed Project is located in an Alquist-Priolo Act earthquake fault zone, there are no active or potentially active faults crossing the Proposed Project route, the closest known active fault is the Elsinore Fault Zone located approximately 2.6 miles to the northeast of the Santa Ysabel Substation, and no recognized active faults underlie

the Proposed Project area. Nonetheless, all of southern California is considered to be a seismically active region, and the San Diego County area is subject to strong seismic shaking from regional earthquakes that may occur on active faults that occur outside of the Proposed Project area. However, because of the short construction period and the low likelihood of a moderate to large earthquake to occur during this time, the potential for construction personnel to experience strong seismic ground shaking is low. Due to the short construction period, the risk of exposure of people or structures to strong seismic ground shaking during construction is less than significant.

Operation & Maintenance – No Impact

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 constitute the baseline against which the impacts of the Proposed Project are evaluated. 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. Therefore, no impacts are anticipated.

4.6.4.4 Question 6a(iii) – Expose people or structures to potential substantial adverse effects, including seismic-related ground failure, including Liquefaction?

Construction – Less Than Significant Impact

Shaking from a moderate to large regional earthquake can potentially result in liquefaction where groundwater is shallow (i.e., within 40 feet of ground surface) and soils consist of uncompacted, granular materials.

An evaluation for liquefaction potential along the Proposed Project alignment was conducted by VO Engineering, Inc. (2011) and determined that four pole locations could potentially be subject to liquefaction in the event of a large earthquake: Pole Nos. P103; R107; P114; and P129. It is estimated that total settlement ranging between 2 to 4 inches could occur in the vicinity of these sites in the event of a major earthquake. Pursuant to project design features (refer to Section 3.8), pole foundations at these locations have been designed to account for the possibility of liquefaction to reduce the risk of damage to constructed facilities to less than significant levels. Because of the short construction period and the low likelihood of a large earthquake occurring during this time, the risk of construction personnel being exposed to earthquake-induced liquefaction is less than significant.

Operation & Maintenance – Less Than Significant Impact

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 constitute the baseline against which

the impacts of the Proposed Project are evaluated. 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. Pursuant to project design features, pole foundations at locations where liquefaction could occur have been designed to account for the possibility of liquefaction to reduce the risk of damage to constructed facilities to less than significant levels.

4.6.4.5 Question 6a(iv) – Expose people or structures to potential substantial adverse effects, including landslides?

Construction – Less than Significant Impact

The Proposed Project area is not highly susceptible to landslides due to the typical high strength of the crystalline basement rocks that make up the steeper slopes in the region. However, rock falls, rock slides or other mass wasting may occur at steeper slopes in the Proposed Project area. Five pole sites are located on or adjacent to sloping terrain: Pole Nos. P22; P23; P48; P49; and P110. One pole location is in an area potentially susceptible to rockfall (Pole No. P51). Pursuant to project design features (refer to Section 3.8), pole foundations at these locations have been designed to account for the possibility of erosion, slumps and slope failures and would reduce the risk of damage to constructed facilities from rockfalls or other mass wasting. Project design features will ensure that the risk of damage to Proposed Project structures will remain less than significant. Due to the short construction period, the risk of exposure of people or structures to mass movements during construction is less than significant.

The Proposed Project would result in minimal ground disturbance in steep slope areas. Access will be confined to existing routes, and areas without existing access will be reached by footpaths. Disturbances at pole sites will be stabilized when work is complete. Considering the low susceptibility of the area to landslides, the absence of substantial grading work, and stabilization of work areas upon completion of work, the potential for construction of the Proposed Project to adversely impact slope stability is less than significant.

Operation & Maintenance – Less Than Significant Impact

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 constitute the baseline against which the impacts of the Proposed Project are evaluated. As noted above, disturbances at poles sites will be stabilized when work is complete. 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. Pursuant to project design features, pole foundations located on or adjacent

to sloping terrain and the pole location potentially susceptible to rockfall have been designed to account for the possibility of erosion, slumps and slope failures. The risk of damage to constructed facilities from rockfalls or other mass wasting would therefore be less than significant level.

4.6.4.6 Question 6b – Result in substantial soil erosion or the loss of topsoil?

Construction – Less Than Significant Impact

Construction would occur along the existing ROW/power line corridor and would use existing access roads. Soil erosion or loss of topsoil could result from minor ground disturbing activities at pole sites, where needed, during construction.

Soil erosion and topsoil loss would be controlled by implementing SDG&E's *BMP Manual* during design and construction of the Proposed Project. In addition, the Proposed Project would comply with the General Permit for Discharges of Stormwater Runoff Associated with Construction Activity (Construction General Permit) which would include the preparation of a SWPPP (see Section 4.8, Hydrology and Water Quality for additional information on the Construction General Permit). Surface disturbance would be minimized to the extent consistent with safe and efficient completion of the Proposed Project. Once temporary surface disturbances are complete, temporary construction impact areas would be stabilized. Therefore, impacts to soil erosion and loss of topsoil would be less than significant.

Operation & Maintenance – No Impact

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 constitute the baseline against which the impacts of the Proposed Project are evaluated. 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. Therefore the Proposed Project's operation and maintenance would have no impacts relating to soil erosion or loss of topsoil.

4.6.4.7 Question 6c – Be located on a geologic unit that is unstable, or that would become unstable as a result of the project, and potentially result in on-site or off-site landsliding, lateral spreading, subsidence, liquefaction, or collapse?

Construction – Less than Significant Impact

The potential for liquefaction and landslide related impacts are addressed in Sections 4.6.4.4 and 4.6.4.5, respectively.

As described in Section 4.6.3.5, Geologic Hazards, lateral spreading is not a material hazard for the Proposed Project. Therefore, the risk of lateral spreading during construction is less than significant.

Construction would have no subsidence impact because the Proposed Project does not involve the withdrawal of subsurface fluids that can cause subsidence, nor would it impact sedimentary materials that are particularly prone to subsidence.

As described in Section 3.6.3.5, collapsible soil deposits are not anticipated to be present in the Proposed Project construction areas.

Operation & Maintenance – No Impact

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 constitute the baseline against which the impacts of the Proposed Project are evaluated. 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.

There is nothing about the Proposed Project operations and maintenance that differs from the existing conditions in terms of subsidence or collapsible soils, and thus there are no potential impacts as a result of subsidence or collapsible soils associated with the Proposed Project.

4.6.4.8 Question 6d – Be located on expansive soil, as defined by article 1803.5 of the California Building Code, creating substantial risk to life or property?

Construction – Less Than Significant Impact

Expansive soils are clayey soils that have a high plasticity index. Typical shallow reinforced concrete spread footing foundations, such as those for buildings and other foundations covering a considerable area of ground, can be affected by expansive soils if such soils are present close to the ground surface. The Proposed Project does not include any spread footing foundations that could be adversely affected by expansive soils. Expansive soils have been identified at two pole locations (Pole Nos. P39 and P147) and the footings at these locations will not be adversely affected. Considering that the Proposed Project does not include any foundations susceptible to damage from expansive soils, the limited expansive soils that are present do not create a substantial risk to life or property and impacts would be less than significant.

Operation & Maintenance – No Impact

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 constitute the baseline against which the impacts of the Proposed Project are evaluated. 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. As with the baseline condition, operation and maintenance of the Proposed Project would not include activities that have the potential to impact or be impacted by expansive soils. Therefore, no impact is expected.

4.6.4.9 Question 6e – Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

Construction and Operation & Maintenance – No Impact

The Proposed Project would not involve the installation of a septic tank or alternative wastewater disposal system; therefore, no impact would occur.

4.6.4.10 Question 6f – Result in the loss of availability of a known mineral resource that would be of value to the region and residents of the state?

Construction and Operation & Maintenance – No Impact

No mineral resources are known to exist along the Proposed Project route, nor are any designated in the vicinity of the Proposed Project by the *San Diego County General Plan*. Therefore, the Proposed Project would not result in the loss of availability of a known mineral resource and no impact would occur.

4.6.4.11 Question 6g – Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

Construction and Operation & Maintenance – No Impact

No mineral resources are known to exist along the Proposed Project route, nor are any designated in the vicinity of the Proposed Project by the *San Diego General Plan*. Therefore, the Proposed Project would not result in the loss of availability of a locally important mineral resource recovery site and no impact would occur.

4.6.5 Project Design Features and Ordinary Construction/Operating Restrictions

The Proposed Project has been designed and would be constructed consistent with SDG&E's policy to implement the SDG&E's *BMP Manual*. This manual includes design and construction BMPs to control soil erosion.

Proposed Project facilities would be designed and constructed to comply with the following standards and regulations:

- CPUC G.O. 95, which designates rules and regulations for overhead electric line engineering;
- Construction General Permit, which will require the preparation and implementation of a SWPPP including BMP measures to control soil erosion (refer to Section 4.8, Hydrology and Water Quality for additional information on the Construction General Permit).

The Proposed Project is designed to minimize ground and soil disturbance through use of existing access routes and other disturbed lands. Footpaths will be used to access pole locations that do not have existing access.

Implementation of the engineering and regulatory standards, practices and guidelines, previously described in this section, and the project design features and ordinary construction restrictions described in Section 3.8, would ensure that any potential impact from soil erosion, mass wasting, and liquefaction would remain less than significant.

4.6.6 Applicant Proposed Measures

The Proposed Project has no potentially significant impacts relating to geology, soils, and mineral resources; therefore, no APMs are proposed.

4.6.7 Detailed Discussion of Significant Impacts

Based upon the preceding analysis, no significant impacts relating to geology, soils, or mineral resources are anticipated from the Proposed Project.

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4.7 HAZARDS AND HAZARDOUS MATERIALS

Would the project:		Potentially Significant Impact	Potentially Significant Unless APMs 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b.	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c.	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d.	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e.	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f.	For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g.	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h.	Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

4.7.1 Introduction

This section of the PEA describes the existing conditions and potential Proposed Project-related impacts from hazards or hazardous materials associated with the construction, operation, and maintenance of the Proposed Project. Potential impacts relating to hazards and hazardous materials would be less than significant through implementation of project design features and ordinary construction and operating restrictions, as well as through adherence to applicable laws and regulations.

4.7.2 Methodology

4.7.2.1 Hazardous Materials and Wastes Database Search

The State of California Department of Toxic Substances Control (DTSC) maintains the EnviroStor public website that provides detailed information on hazardous waste permitted and corrective action facilities, as well as existing site cleanup information. The SWRCB maintains the GeoTracker public website that provides information on hazardous material sites that impact groundwater, especially sites requiring groundwater remediation. The Proposed Project area was reviewed utilizing both databases in order to identify known sites with existing hazardous materials or waste usage or contamination that could affect the Proposed Project.

4.7.2.2 Emergency/Evacuation Plans and Local Municipality Planning Documents

Emergency response and evacuation documents from San Diego County were reviewed and analyzed for hazardous materials response procedures, evacuation routes, and policies that may be applicable to the Proposed Project. The scope of the Proposed Project was analyzed with respect to all existing emergency response and evacuation plans within the Proposed Project vicinity in order to identify any potential conflicts that may result from construction, operation, or maintenance of the Proposed Project.

The *San Diego County General Plan* was reviewed for goals, objectives, and policies pertaining to hazardous materials or waste storage, handling, utilization or disposal. Any inconsistencies identified between the Proposed Project and said goals, objectives, and policies were analyzed with respect to the significance criteria (see Section 4.7.4.1) in order to determine the presence or absence of potential significant impacts.

4.7.3 Existing Conditions

4.7.3.1 Regulatory Setting

The following section provides an overview of pertinent federal, state and local hazardous materials and safety regulations applicable to the Proposed Project.

Federal

Resource Conservation and Recovery Act

The federal Resource Conservation and Recovery Act of 1976 (RCRA) established a program administered by the USEPA for the regulation of the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA was amended in 1984 by the Hazardous and Solid Waste Act (HSWA), which affirmed and extended the "cradle to grave" system of regulating hazardous wastes. The use of certain techniques for the disposal of some hazardous wastes was specifically prohibited by HSWA. Individual states may implement hazardous waste programs under RCRA with USEPA approval.

Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), which is often commonly referred to as Superfund, is a federal statute that was enacted in 1980 to address abandoned sites with hazardous waste disposal and/or contamination (42 USC 9601, et seq.). CERCLA was amended in 1986 by the Superfund Amendments and Reauthorization Act (SARA) and by the Small Business Liability Relief and Brownfields Revitalization Act of 2002. CERCLA establishes prohibitions and requirements concerning closed and abandoned hazardous waste sites; establishes liability of persons responsible for releases of hazardous waste at these sites; and establishes a trust fund to provide for cleanup when no responsible party could be identified. The trust fund is funded largely by a tax on the chemical and petroleum industries. CERCLA also provides federal jurisdiction to respond directly to releases or impending releases of hazardous substances that may endanger public health or the environment.

Occupational Safety and Health Administration

The Occupational Safety and Administration (OSHA) regulations intended to create a safe workplace are found at 29 CFR, Part 1910, Subpart H, and include procedures and standards for safe handling, storage, operation, remediation, and emergency response activities involving hazardous materials and waste. Section 1910.120 (Hazardous Waste Operations and Emergency Response) contains requirements for worker training programs, medical surveillance for workers engaging in the handling of hazardous materials or wastes and hazardous material, and waste site emergency and remediation planning, for those who are engaged in one of the following operations as specified by Sections 1910.120(a)(1)(i-v) and 1926.65(a)(1)(i-v):

- Clean-up operations required by a governmental body, whether federal, state, local, or other, involving hazardous substances, that are conducted at uncontrolled hazardous waste sites;
- Corrective actions involving clean-up operations at sites covered by RCRA, as amended (42 USC 6901, et seq.);
- Voluntary clean-up operations at sites recognized by a federal, state, local, or other governmental body as uncontrolled hazardous waste sites;
- Operations involving hazardous wastes that are conducted at treatment, storage, and disposal facilities regulated by Title 40 CFR Parts 264 and 265 pursuant to RCRA, or by agencies authorized under agreement with USEPA to implement RCRA regulations; or
- Emergency response operations for releases of, or substantial threats of releases of, hazardous substances regardless of the location of the hazard.

The Occupational Safety and Health Act of 1970 contains specific regulations that ensure worker safety in the presence of certain hazardous substances, such as lead and asbestos.

Cleveland National Forest Fire Plan

The *Cleveland National Forest Fire Plan* sets forth provisions that outline the responsibility of the Special Use Authorization Holder (SDG&E) in preventing and responding to fires within the Special Use Authorization Area. These provisions include operational guidelines, tool and equipment specifications, and specific conditions under which construction activities must be

scaled down or halted altogether until the dangerous conditions abate. The *Cleveland National Forest Fire Plan* is included as Appendix 4.7-B.

State

California Code of Regulations, Title 22, Chapter 11, Article 2, Section 66261

The California Code of Regulations (CCR), Title 22, Chapter 11, Article 2, Section 66261 provides the following definition:

A hazardous material is a substance or combination of substances which, because of its quantity, concentration, or physical, chemical or infectious characteristics, may either (1) cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or (2) pose a substantial present or potential hazard to human health or environment when improperly treated, stored, transported or disposed of or otherwise managed.

According to CCR Title 22 (Chapter 11 Article 3), 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, contaminated or is being stored prior to proper disposal.

Soil that is excavated from a site containing hazardous materials would be a hazardous waste if it exceeded specific CCR Title 22 criteria. Remediation (cleanup and safe removal/disposal) of hazardous wastes found at a site is required if excavation of these materials is performed; it may also be required if certain other activities are proposed. If soil or groundwater at a contaminated site does not meet the regulated characteristics required to be defined as hazardous waste, remediation of the site may be required by regulatory agencies subject to jurisdictional authority. Cleanup requirements are determined on a case-by-case basis by the agency taking lead jurisdiction.

California Hazardous Waste Control Law

The California Hazardous Waste Control Law (HWCL) is administered by the CalEPA to regulate hazardous wastes within the State of California. While the HWCL is generally more stringent than RCRA (for example, asbestos containing materials are considered to be hazardous under HWCL, but are not regulated under RCRA), both the state and federal laws apply in California. The DTSC is the primary agency in charge of enforcing both the federal and state hazardous materials laws. The DTSC regulates hazardous waste, oversees the cleanup of existing contamination, and pursues avenues of reducing the hazardous waste produced in California. The DTSC regulates hazardous waste in California under the authority of RCRA, the HWCL and the California Health and Safety Code.

The HWCL, under CCR Title 22, Chapter 11, Appendix X, lists 791 chemicals and about 300 common materials which 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.

California Occupational Safety and Health Administration

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 workplace. Cal/OSHA standards are generally more stringent than federal regulations, although Cal/OSHA has adopted and implements all of the OSHA standards within the state of California. The employer is required to monitor worker exposure to listed hazardous substances and notify workers of exposure (8 CCR Sections 337-340). The regulations specify requirements for employee training, availability of safety equipment, accident-prevention programs, and hazardous substance exposure warnings. Similar to the federal OSHA, Cal/OSHA contains requirements to prevent worker exposure to certain types of hazardous substances in the work place, such as asbestos and lead. It is important to note that while Cal/OSHA has adopted the OSHA standards, the Cal/OSHA regulations are often more stringent than the OSHA standards.

Hazardous Materials Disclosure Programs

The Unified Program administered by the State of California consolidates, coordinates, and makes consistent the administrative requirements, permits, inspections, and enforcement activities for the state's environmental and emergency management programs, which include Hazardous Materials Release Response Plans and Inventories (business plans), the California Accidental Release Prevention Program, and the Underground Storage Tank Program. The Unified Program is implemented at the local government level by Certified Unified Program Agencies (CUPAs).

California Public Utilities Commission

CPUC originally adopted G.O. 95 in 1941 (<http://162.15.7.24/PUBLISHED/Graphics/112890.PDF>). G.O. 95 governs the design, construction, and maintenance of overhead electrical lines. Rule 31.1 of G.O. 95 generally requires that overhead electrical lines be designed, constructed, and maintained in accordance with accepted good practices for the given conditions known at the time. Rule 35 of G.O. 95 establishes requirements for tree trimming.

On January 18, 2012, after a three year rulemaking to review measures to reduce fire hazards associated with overhead power lines and communication facilities, the CPUC issued D.12-01-032 which adopted significant revisions to G.O. 95, G.O. 165, and G.O. 166, Inspection Requirements for Electric Distribution and Transmission¹ Facilities. Phase I and Phase II revisions to the G.O.'s addressed vegetation management practices, inspection cycles, corrective maintenance timeframes and other fire reduction measures in fire threat zones.

Local

San Diego County

The Hazardous Materials Division within the San Diego County Department of Environmental Health (DEH) is certified by CalEPA as the local CUPA for San Diego County, regulating

¹ The term "Transmission" as used within this section of the PEA refers to a specific CPUC decision (D.12-01-032) and is not intended to suggest that TL 637 is designed for immediate or eventual operation at 200kV or above.

hazardous material business plans, hazardous waste and tiered permitting, underground storage tanks, and above ground petroleum tanks and risk management.

The Safety Element of the *San Diego County General Plan* contains the following goals and policies regarding hazardous materials:

Goal S-11: Controlled Hazardous Material Exposure. Limited human and environmental exposure to hazardous materials that pose a threat to human lives or environmental resources.

Policy S-11.1: Land Use Location. Require that land uses involving the storage, transfer, or processing of hazardous materials be located and designed to minimize risk and comply with all applicable hazardous materials regulation.

Policy S-11.3: Hazards-Sensitive Uses. Require that land uses using hazardous materials be located and designed to ensure sensitive uses, such as schools, hospitals, day care centers, and residential neighborhoods, are protected. Similarly, avoid locating sensitive uses near established hazardous materials users or High Impact Industrial areas where incompatibilities would result.

Policy S-11.4: Contaminated Lands. Require areas of known or suspected contamination to be assessed prior to reuse. The reuse shall be in a manner that is compatible with the nature of the contamination and subsequent remediation efforts.

Policy S-11.5: Development Adjacent to Agricultural Operations. Require development adjacent to existing agricultural operations in Semi-Rural and Rural Lands to adequately buffer agricultural areas and ensure compliance with relevant safety codes where pesticides or other hazardous materials are used.

SDG&E Standards, Plans and Procedures

SDG&E’s Electric Standard Practice 113.1 (Wildland Fire Prevention and Fire Safety)

SDG&E’s Electric Standard Practice 113.1 constitutes SDG&E’s wildland fire prevention and fire safety standards for all activities, including construction activities such as those included as part of the Proposed Project. The purpose of *Electric Standard Practice 113.1* is to formalize procedures and routine construction practices that will, among other things: improve SDG&E’s ability to prevent the start of any fire; set standards for tools and equipment to assist with rapid response to small fires; incorporate federal, state and local requirements into standard business practices; establish “Red Flag Warning” restrictions; set criteria for when a formal fire plan is required; and establish a template and requirements for formal fire plans.

SDG&E Fire Prevention Plan

The *SDG&E Fire Prevention Plan* was prepared in compliance with Commission Decision 12-01-032 (Fire Safety Order) and provides “a comprehensive inventory of the organizational and operational activities that SDG&E undertakes in order to address the risk of fire in the SDG&E service territory.”

SDG&E undertakes and implements numerous fire prevention and safety programs, procedures, and protocols and the *SDG&E Fire Prevention Plan* includes descriptions of SDG&E fire prevention and safety procedures and programs including, but not limited to, the following:

- Fire threat and risk area mapping;
- Operational practices to reduce the risk of fires;
- Fire prevention outreach and training programs;
- Field practice guidelines;
- Advanced vegetation management;
- Fire Potential Index; and
- Fire-hardening programs and practices, including:
 - Design standards
 - Construction standards
 - Facility inspection
 - Oversight of activities in rural areas
 - Wood-to-Steel Projects

As part of SDG&E's fire threat and risk mapping program, SDG&E utilizes network of 145 weather stations to monitor for high risk weather conditions, such as extreme winds. The SDG&E Wood-to-Steel Projects involve replacing existing 69kV power lines located in fire threat zones and high risk fire areas with new steel poles (replacing existing wood poles) that meet current fire prevention design standards. The Proposed Project is an SDG&E Wood-to-Steel Project.

TL 637 Project Fire Plan

As described in Section 3.8.3, a Project-Specific Fire Plan was developed for the Proposed Project *TL 637 Project Fire Plan*, consistent with *Electric Standard Practice 113.1*, the *SDG&E Fire Prevention Plan*, and the *Cleveland Forest Master Use Plan* and *Cleveland National Forest Fire Plan* (for areas within the Cleveland National Forest). The *TL 637 Project Fire Plan* (refer to Appendix 4.7-C, *TL 637 Project Fire Plan*) identifies risk-related activities as well as measures (including tools and procedures) to address said risks.

4.7.3.2 Emergency Response and Evacuation Regulations and Adopted Plans

Within the Proposed Project area, emergency response is handled first and primarily by the individual municipal agency with jurisdictional authority. Mutual aid, response, and emergency management are available from State government agencies where appropriate or by direct request of the local agency. The standard emergency response procedures and for each of the relevant jurisdictions are outlined within the following subsections.

The State of California

The State Emergency Plan outlines the emergency management system for use during all emergencies within the State of California. The State Emergency Plan is developed, maintained,

and implemented by the California Office of Emergency Services (OES). The State Emergency Plan defines the “policies, concepts, and general protocols” for the proper implementation of the California Standardized Emergency Management System (SEMS). The SEMS is an emergency management protocol that agencies within the State of California must follow during multi-agency response efforts whenever state agencies are involved.

San Diego County

San Diego County Office of Emergency Services

The San Diego County OES coordinates the County-wide response effort in the event of a disaster situation. OES is responsible for notifying appropriate agencies in the event of a disaster, as well as coordinating all responding agencies. The Unified Disaster Council is the governing body of OES, and is chaired by the Chair of the San Diego County Board of Supervisors, and includes representatives from the 18 incorporated cities of the County. OES serves as staff to the Unified Disaster Council and acts as a liaison between the incorporated cities, the State Office of Emergency Services and Federal Emergency Management Agency (FEMA), as well as non-governmental agencies such as the American Red Cross. OES, along with numerous regional partners have completed two important public safety preparedness plans related to disaster evacuations and recovery:

The San Diego Operational Area Evacuation Plan – The San Diego Operational Area Evacuation Plan is intended to be used as a template, as cities throughout the County continue to develop their individual evacuation plans. The Plan outlines procedures and organizational structures that can be used for a coordinated regional evacuation effort. Transportation routes and capacities are identified in addition to countywide shelter space and considerations for special needs populations.

The San Diego Operational Recovery Plan – The San Diego Recovery Plan is designed to provide guidance to jurisdictions and organizations within the County of San Diego as they continue their own recovery planning. The San Diego Recovery Plan addresses short and long-term restoration plans for communities impacted by disaster, including issues such as: debris removal, coordination of financial assistance and housing, economic recovery, and measures to reduce or eliminate the effects of future incidents.

The San Diego County OES also prepared and implements the San Diego County Multi-Jurisdictional Hazard Mitigation Plan. The Multi-Jurisdictional Hazard Mitigation Plan identifies hazards that could potentially affect any or all portions of the County as well as measures for the prevention and minimization of such hazards. The Multi-Jurisdictional Hazard Mitigation Plan was prepared in accordance with the Federal Disaster Mitigation Act of 2000. The preparation of the Multi-Jurisdictional Hazard Mitigation Plan qualifies the County for post-disaster funds from the Hazard Mitigation Grant Program.

San Diego County General Plan

The Safety Element of the *San Diego County General Plan* contains goals and policies pertaining to public safety and emergency response. Specifically:

Public Safety

Policy S-1.1: Minimize Exposure to Hazards. Minimize the population exposed to hazards by assigning land use designations and density allowances that reflect site specific constraints and hazards.

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.

Policy S-1.3: Risk Reduction Programs. Support efforts and programs that reduce the risk of natural and man-made hazards and that reduce the time for responding to these hazards.

Policy S-1.5: Post-disaster Reconstruction. Participate in the development of programs and procedures that emphasize coordination between appropriate public agencies and private entities to remove debris and promote the rapid reconstruction of the County following a disaster event and facilitate the upgrading of the built environment as expeditiously as possible.

Emergency Response

Goal S-2: Emergency Response. Effective emergency response to natural or human-induced disasters that minimize the loss of life and damage to property, while also reducing disruptions in the delivery of vital public and private services during and following a disaster.

4.7.3.3 Hazardous Materials Setting

Hazardous materials would be used and stored during construction, operation, and maintenance of the Proposed Project. The following subsections describe the types and amounts of hazardous materials present, or potentially present, along the Proposed Project alignment including existing wastes and materials (hazardous materials sites) and typical hazardous materials utilized during construction, operation, and maintenance.

Hazardous Materials Utilized during Construction

Construction activities would involve the periodic and routine transport of common potentially hazardous materials such as hydrocarbon fuels, lubricating oils, internal combustion engine oils, cartridges containing primer for ignition and nitrocellulose propellant for gas production in the event that blasting is necessary, transmission fluid, and various hydraulic fluids.

Hazardous Materials Utilized During Operation and Maintenance

Operation and Maintenance of the Proposed Project would not be substantially different from existing operation and maintenance practices and activities that SDG&E currently performs along TL 637 and at the Creelman and Santa Ysabel Substations. Operation and maintenance of the Proposed Project would be subject to the same laws and regulations governing the handling

and disposal of hazardous materials. All relevant local, state and federal regulations will be followed.

Hazardous Materials Sites within or Adjacent to the Proposed Project

Table 4.7-1: Hazardous Materials Sites Adjacent to the Proposed Project, lists all hazardous materials sites within the immediate vicinity of the TL 637 ROW or substations that could potentially impact the Proposed Project, public, or the environment.

Table 4.7-1: Hazardous Materials Sites Adjacent to the Proposed Project

Site Name, Address, and Closest Proposed Project Structure	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

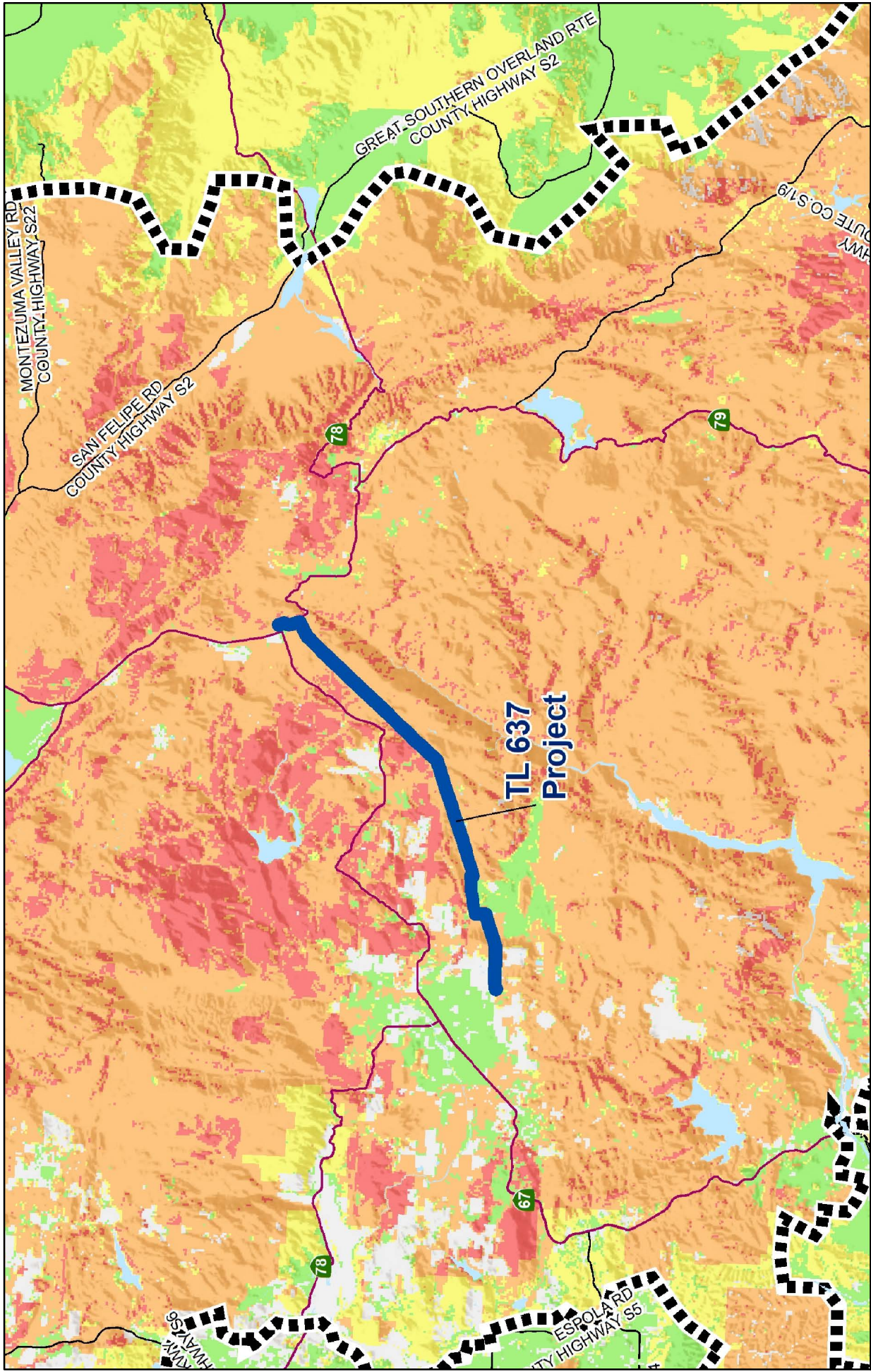
4.7.3.4 Hazards Setting

Existing Electric Substations and Power Line Facilities

The Proposed Project includes the replacement of existing electric power line and distribution and facilities. It is located entirely within or adjacent to existing electric power lines, distribution facilities and substations and does not include the installation of new electric power line facilities in areas where similar facilities do not already exist. These existing facilities constitute the baseline from which potential hazard and hazardous materials impacts were evaluated.

Fire Hazards

Much of the Proposed Project alignment is located within and is surrounded by undeveloped land that is subject to the potential of wildland fires. SDG&E has designated areas within its service territory as a Fire Threat Zone based on Cal Fires Wildland Fire Threat mapping assessment and local factors such as humidity, air temperature, prevalence of strong winds, and existing fuel type (see Figure 4.7-1, Fire Hazard Severity Map). These areas are designated as such due to the wildland fire threat relative to the fuel, weather, and topography of the area with ratings of moderate, high, very high and extreme.



Tie-Line 637 Wood-To-Steel Project
Fire Threat Zone Map
Figure 4.7-1

FRAP Fire Threat

- Little or No Threat
- Moderate
- High
- Very High
- Extreme

Tie-Line 637 Alignment

- Tie-Line 637 Alignment
- SDG&E Fire Threat Zone Boundary

Created For:
Brad Carter

Created By:
CTRC

Date: 2/25/2013

SDG&E is providing this map with the understanding that the map is not survey grade.

Source: CAL FIRE, Fire and Resource Assessment Program "Fire Threat" Data; SDG&E

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BACK OF FIGURE 4.7-1

Within the Proposed Project area, SDG&E has designated areas as being in the Fire Threat Zone with ratings of very high to extreme fire danger and highest risk fire areas. However, fire hazard designations are based in part on extreme weather conditions (do not occur all the time) and the status of the fire threat will vary based on the local, site specific conditions. These conditions are monitored and assessed daily by SDG&E. Therefore, even though the Proposed Project may be located within the geographic boundaries of areas designated as fire threat areas, the actual fire threat does not exist if the required local atmospheric conditions are not present.

SDG&E has developed operating protocols and safety standards that minimize the risk of wildland fires during SDG&E construction activities. Specifically, wildland fire prevention during construction is governed internally within SDG&E through implementation of a *TL 637 Project Fire Plan*, and compliance with the *Cleveland National Forest Fire Plan*.

The Safety Element of the *San Diego County General Plan* contains goals and policies pertaining to public safety and emergency response with specific regard to fire hazards:

Goal S-3: Minimized Fire Hazards. Minimize injury, loss of life, and damage to property resulting from structural or wildland fire hazards.

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.

Policy S-3.2: Development in Hillsides and Canyons. Require development located near ridgelines, top of slopes, saddles, or other areas where the terrain or topography affect its susceptibility to wildfires to be located and designed to account for topography and reduce the increased risk from fires.

Policy S-3.6: Fire Protection Measures. Ensure that development located within fire threat areas implement measures that reduce the risk of structural and human loss due to wildfire.

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.

4.7.3.5 Schools

The closest schools to the Proposed Project alignment are Ramona High School and Pierce Middle School, located approximately 0.7 mile northwest of the Creelman Staging Yard. Barnett Elementary School is located approximately 0.5 mile from the Proposed Project area, and Spencer Valley Elementary School is located approximately 1.7 miles southeast of the Santa Ysabel Substation.

4.7.3.6 Hospitals

There are no hospitals located in the immediate vicinity of the Proposed Project. The closest hospital to the Proposed Project is the Pomerado Hospital, located approximately 11 miles west of the Creelman Substation.

4.7.3.7 Airports

There are no airports, public or private, within the immediate vicinity of the Proposed Project. The closest public airport to the Proposed Project is the Ramona Airport, located approximately 3.4 miles west-northwest of the Creelman Substation. The closest private airports to the Proposed Project are the Flying J Private Airport (located approximately 1.8 miles northwest of the TL 637 alignment) and the Hoffman Private Airport (located approximately 4.9 miles northwest of the Santa Ysabel Substation).

The Proposed Project is subject to the goals and policies pertaining to airports as outlined in Section 7, Safety Element, Goals and Policies, of the *San Diego County General Plan*, specifically:

Policy S-15.3: Hazardous Obstructions within Airport Approach and Departure. Restrict development of potentially hazardous obstructions or other hazards to flight located within airport approach and departure areas or known flight patterns and discourage uses that may impact airport operations or do not meet Federal or State aviation standards.

4.7.4 Potential Impacts

4.7.4.1 Significance Criteria

Thresholds of impact significance were derived from Appendix G of the *CEQA Guidelines*. Under these guidelines, the Proposed Project could have a potentially significant impact regarding hazards and hazardous materials if it would:

- a) Create a significant hazard to public health 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;
- c) 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 two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area;

- 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; or
- 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.

4.7.4.2 Question 7a - Create a significant hazard to public health or the environment through the routine transport, use, or disposal of hazardous materials?

Construction – Less Than Significant Impact

As stated in Section 4.7.3.3 above, vehicles and equipment used for construction could contain or require the temporary, short-term use of potentially hazardous substances, such as fuels, lubricating oils, and hydraulic fluids. The potential exists for an accidental release of hazardous materials during construction and refueling activities. The release of these materials has the potential to impact construction workers, the public and the environment if they are not properly contained and removed. Potential impacts from the release of these materials would be addressed by the implementation of construction BMPs and, as well as the adherence to relevant state and federal hazardous materials laws and regulations. SDG&E, and all contractors involved in the construction of the Proposed Project, would implement standard operational procedures to ensure that potential impacts resulting from hazardous material transport, use, storage and disposal remain less than significant.

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 construction contractor would also implement (in addition to regulatory and SDG&E requirements) their own compliance management programs to ensure that regulatory requirements are adhered to and that worker and public safety are secured.

In the unlikely case that blasting is required to construct the Proposed Project, blasting supplies would be transported and used in accordance with all relevant federal, state and local regulations, including requirements for container labeling and other hazard communication requirements. In the event that the handling or disposal of transformers is required, SDG&E would implement standard spill prevention and cleanup procedures, and recycle or dispose of the transformers at an SDG&E approved, government licensed facility.

Operation & Maintenance – No Impact

SDG&E currently maintains and operates existing electric power, distribution and substation facilities throughout the Proposed Project area, 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 constitute the baseline against which the impacts of the Proposed Project are evaluated. 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. All herbicides utilized during maintenance around power line poles would follow SDG&E's existing procedures for application of herbicides and would not be substantially different from current herbicide utilization within the Proposed Project area. Therefore, there would be no impacts.

4.7.4.3 Question 7b - Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Construction – Less than Significant Impact

As discussed under Section 4.7.4.2, construction of the Proposed Project will include the handling and use of common hazardous materials such as fuels and lubricants. While the potential for upset conditions to cause a release of these materials during transport does exist, the chances of this occurring are considered to be low, and therefore the risk of upset or accident conditions leading to a significant hazard from the transport of hazardous waste is also considered to be low. The use of these materials during construction will not require frequent transportation or the transportation of unusually large amounts of the materials. In addition, SDG&E's standard practices would further minimize the potential risk of upset and/or accidental release of hazardous substances creating a significant adverse environmental effect. Therefore, impacts are anticipated to be less than significant.

Operation & Maintenance – No Impact

As discussed under Section 4.7.4.2, operation and maintenance of the Proposed Project would decrease slightly compared to current operation and maintenance activities. Therefore, no impacts are anticipated to occur.

4.7.4.4 Question 7c - Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Construction – No Impact

No existing or proposed schools exist within 0.25 miles of the Proposed Project alignment. The closest schools to the Proposed Project alignment are Ramona High School, located approximately 0.7 miles northwest of the Creelman Staging Yard, Barnett Elementary School, located approximately 0.5 mile from the TL 637 alignment, and Spencer Valley Elementary School, located approximately 1.7 miles southeast of the Santa Ysabel Substation. With the implementation of standard operational procedures as well as BMPs, construction of the Proposed Project is not expected to result in the release of hazardous emissions, or hazardous materials in the vicinity of sensitive receptors. Construction of the Proposed Project will include the handling and use of hazardous substances (refer to Section 4.7.3.3), however, the utilization

and transport of these materials does not represent a significant risk to any existing schools and no impacts are anticipated.

Operation & Maintenance – No Impact

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 constitute the baseline against which the impacts of the Proposed Project are evaluated. 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. Therefore, no impacts relating to the emission or handling of acutely hazardous materials or waste are anticipated.

4.7.4.5 Question 7d - Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

Construction – No Impact

A review of standard and supplemental environmental databases indicate that the Proposed Project is not located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. However, there are three active hazardous materials sites meeting the criteria outlined in Government Code Section 65962.5 near the Santa Ysabel Substation, as outlined on Table 4.7-1. Mountain Proflame Gas (LP) located at 30275 Hwy 78, is listed as an open site assessment with potential contaminants of concern listed as diesel fuel affecting soil quality. This site is classified as a Category 1 site, characterized by soil or groundwater contamination that does not pose an immediate human health threat, and does not extend off-site onto neighboring parcels. Santa Ysabel (Formerly Chevron), located at 30350 Hwy 78 is listed as a leaking underground storage tank cleanup site, with gasoline being the potential contaminant of concern. This site is listed as Category 3, which indicates a large or complex site that may have significant soil and groundwater contamination and/or threaten human health. The Santa Ysabel Old Barn Site, located at 21800 Washington Street is listed as an open site assessment, with no contaminant profile provided. This site is classified as a Category 1 site, characterized by soil or groundwater contamination that does not pose an immediate human health threat, and does not extend off-site onto neighboring parcels.

Proposed Project construction will not occur on any of these three sites such that construction would be likely to result in a significant hazard to the project, environment, or public. Therefore, no impacts are anticipated.

Operation & Maintenance – No Impact

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 constitute the baseline against which the impacts of the Proposed Project are evaluated. 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. Therefore, no impacts relating to existing hazardous materials or waste sites are anticipated.

4.7.4.6 Question 7e - For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

Construction – No Impact

The Proposed Project is not located within an existing airport land use plan, and the closest public airport (Ramona Airport) is located approximately 3.4 miles from the Proposed Project location (refer to Section 4.7.3.7). Construction of the Proposed Project would include the utilization of light- and medium-duty helicopters. Helicopter operators will coordinate with local air traffic control and comply with all relevant regulations to ensure that no conflicts with other air traffic occur. Therefore, construction of the Proposed Project would not result in a safety hazard for people residing or working in the Proposed Project area and no impacts are anticipated.

Operation & Maintenance – No Impact

The Proposed Project is not located within an existing airport land use plan, and the closest public airport is located approximately 3.4 miles from the Proposed Project locations (refer to Section 4.7.3.7). While the Proposed Project does include the installation of vertical structures (power line poles), new poles would not be located in areas that do not already have similar structures. SDG&E determined that two poles required noticing to the FAA. The FAA conducted an aeronautical study under the provisions of 49 USC Section 44718 and Title 14 of the CFR Part 77; and determined there is no hazard to air navigation and aerial marking lights/balls are not required. As such, the Proposed Project would not result in a safety hazard for people residing or working in the Proposed Project area. Therefore, no impacts are anticipated.

4.7.4.7 Question 7f - For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

Construction – No Impact

The Proposed Project is not located within the immediate vicinity of a private airstrip. The closest private airstrip is located approximately 1.8 miles from the Proposed Project (refer to Section 4.7.3.7). Construction of the Proposed Project would include the utilization of

helicopters. Helicopter operators will coordinate with local air traffic control and comply with all relevant regulations to ensure that no conflicts with other air traffic occur. Therefore, construction of the Proposed Project would not result in a safety hazard for people residing in the Proposed Project area and no impacts are anticipated.

Operation & Maintenance – No Impact

The Proposed Project is not located within the immediate vicinity of a private airstrip. The closest private airstrip is located approximately 1.8 miles from the Proposed Project (refer to Section 4.7.3.7). While the Proposed Project does include the installation of vertical structures (power line poles), new poles would not be located in areas that do not already have similar structures. SDG&E determined that two poles required noticing to the FAA. The FAA conducted an aeronautical study under the provisions of 49 USC, Section 44718 and Title 14 of the CFR, Part 77; and has determined there is no hazard to air navigation and aerial marking lights/balls are not required. As such, the Proposed Project would not result in a safety hazard for people residing or working in the project area. Therefore, no impacts are anticipated.

4.7.4.8 Question 7g - Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Construction – Less than Significant Impact

Proposed Project construction would not restrict and would not interfere with the San Diego Operational Area Evacuation Plan, or emergency response at the State and Operational Area levels under the State Emergency Plan and the SEMS.

Construction of the Proposed Project would include the utilization of helicopters. Helicopter operators will coordinate with local air traffic control and comply with all relevant regulations to ensure that no conflicts with other air traffic occur, including potential emergency response and evacuation.

Construction of the Proposed Project could involve partial closure of certain streets during construction activities. However, through access would be maintained during construction (as discussed in Section 4.14, Traffic and Transportation) and therefore impacts would be less than significant.

Operation & Maintenance – No Impact

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 constitute the baseline against which the impacts of the Proposed Project are evaluated. 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. Therefore, no impacts relating to the impairment of emergency response or evacuation plan are anticipated.

4.7.4.9 Question 7h - Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

Construction – Less than Significant Impact

As previously described in Section 4.7.3, the power lines associated with the Proposed Project are located within the SDG&E designated Fire Threat Zone. While construction of the Proposed Project would place construction workers temporarily within the designated Fire Threat Zone, construction work would be temporary and workers would only be within each distinct construction area for a relatively short amount of time.

Construction activities do have the potential to start a fire due to the increased presence of vehicles, equipment, and human activity in areas of elevated fire hazard severity. In particular, heat or sparks from construction vehicles or equipment have the potential to ignite dry vegetation. Construction of the Proposed Project, however, would not expose people or structures to significant risk of loss, injury or death involving wildland fires with implementation of SDG&E’s robust and comprehensive construction fire prevention program. Consistent with current SDG&E standard practices, SDG&E would implement fire prevention and protection BMPs, which typically include requirements for carrying emergency fire suppression equipment, conducting “tailgate meetings” that cover fire safety discussions, restrictions on smoking and idling vehicles, and construction restrictions during red flag warnings. As part of the Proposed Project SDG&E would also implement the *TL 637 Project Fire Plan* (refer to Appendix 4.7-C) to assist in safe practices to prevent fires with the Proposed Project area. The project-specific fire plan includes procedures and tools that are designed to minimize the risk of starting fires during construction and increase the ability to suppress a fire in the unlikely event that one is ignited. The project specific fire plan includes (but is not limited to) the following procedures:

- Minimum requirements for firefighting equipment (including size and response time requirements),
- Work limitations for “high” to “extreme” fire danger days, and
- Assignment of specific “Fire Patrol” to perform monitoring and first response onsite.

In addition, the Proposed Project would be subject to the *Cleveland National Forest Fire Plan* (refer to Appendix 4.7-B) during all construction activities located within the Cleveland National Forest boundaries. The *Cleveland National Forest Fire Plan* (refer to Section 4.7.3.1) ensures that all construction activities on forest land will be completed such that fires risks are minimized.

During construction activities within the Fire Threat Zone, workers would follow the *SDG&E Fire Prevention Plan*, *Electric Standard Practice 113.1*, the *TL 637 Project Fire Plan*, and the *Cleveland National Forest Fire Plan* to ensure that the risk of a fire event during construction of the Proposed Project is minimized. The relevant portions of these four documents are incorporated into the design of the Proposed Project, and will be used to ensure that potential

impacts relating to wildland fires remain less than significant. Therefore, any potential impacts from wildland fires would be less than significant.

Operation & Maintenance – No Impact

Operation and maintenance of the Proposed Project would not differ substantially from that of the existing facilities, except that potential fire hazards would be minimized following construction of the Proposed Project due to the fact that the power line poles that are being replaced are made of wood and the new power line poles would be made of steel and have greater clearance above the ground and existing vegetation as outlined below.

The purpose of the Proposed Project (fire hardening TL 637 through replacement of wood poles with steel poles) is specifically to minimize the risk of wildfires that exists when certain atmospheric conditions occur within geographic areas designated as fire threat areas. The Proposed Project would involve the removal of many wood poles and is therefore consistent with SDG&E's long-term plan to improve service reliability in fire-prone areas through fire hardening or other enhancements. The Proposed Project would replace existing wood pole structures with new steel pole structures, string new wire (thereby removing weak spliced locations), install only steel poles that would withstand extreme winds, increase phase spacing, and install longer polymer insulators to minimize the potential of faults caused by contamination which would improve system reliability during extreme weather conditions. With these design features, there would be reduced exposure of people or structures to loss, injury, or death involving wildland fires as compared to existing conditions. Thus, the Proposed Project would not result in any adverse impacts in this regard.

In addition, operation and maintenance of the Proposed Project would not require any additional workers than are currently required for operation and maintenance of TL 637 and the Creelman and Santa Ysabel Substations; the Proposed Project would therefore not increase the number of people exposed to potential wildland fires within the Proposed Project vicinity.

4.7.5 Project Design Features and Ordinary Construction/Operating Restrictions

4.7.5.1 Hazardous Materials

Potential impacts relating to the handling and use of hazardous materials are addressed through compliance with numerous state and federal regulations, including (but not limited to) the following:

- OSHA (specifically Section 1910.120 [Hazardous Waste Operations and Emergency Response]),
- Cal/OSHA (OSHA regulations), and
- DTSC (RCRA and HWCL).

4.7.5.2 Fire Threat and Hazards

Potential impacts relating to wildland fires during construction of the Proposed Project addressed through implementation project design features and ordinary construction/operating restrictions,

as outlined in Section 3.8, including the *TL 637 Project Fire Plan* and the *Cleveland National Forest Fire Plan* (refer to Appendices 4.7-B and 4.7-C, respectively).

4.7.6 Applicant Proposed Measures

The Proposed Project has no potentially significant impacts relating to hazards or hazardous materials; therefore, no APMs are proposed.

4.7.7 Detailed Discussion of Significant Impacts

Based on the preceding analysis, no significant impacts relating to hazards or hazardous materials are anticipated from the Proposed Project.

4.7.8 References

California Code of Regulations. 12-29-2006. Title 22, Chapter 11, Appendix X, List of Chemical Names and Common Names for Hazardous Wastes and Hazardous Materials.

California Public Utilities Commission. January 2006. *Rules for Overhead Electric Line Construction - General Order No. 95*.

Department of Toxic Substances Control. ENVIROSTOR Database. Online: <http://www.envirostor.dtsc.ca.gov/public/>. Accessed February and November, 2012.

Mountain Proflame Contamination Site Profile http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0608150736.

Occupational Safety and Health Act, Part 1910 – Occupational Health and Safety Standards. Accessed at: http://www.osha.gov/pls/oshaweb/owasrch.search_form?p_doc_type=STANDARDS&p_toc_level=1&p_keyvalue=1910

Occupational Safety and Health Act, Part 1904.29 – Recording and Reporting Occupational Injuries and Illness. Accessed at: http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=standards&p_id=12805

San Diego Gas & Electric Company. July, 2009. *Electric Standard Practice No. 113.1 – Wildland Fire Prevention and Fire Safety*.

San Diego Gas & Electric Company. December 2012. *Fire Prevention Plan*.

San Diego Gas & Electric Company. January 2013. *TL 637 Project Fire Plan*.

Santa Ysabel (formerly chevron) Contamination Site Profile http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0607302306.

Santa Ysabel Old Barn Contamination Site Profile http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0608129822.

State of California Office of Emergency Services. September 2009. *State of California Emergency Plan*.

State Water Resources Control Board. 2012. Geotracker online database. Online at: <http://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=ramona%2Cca>
Site Visited February and November 2012.

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4.8 HYDROLOGY AND WATER QUALITY

Would the project:		Potentially Significant Impact	Potentially Significant Unless APMs Incorporated	Less than Significant Impact	No Impact
a.	Violate any other water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b.	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c.	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d.	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on-or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e.	Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f.	Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g.	Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h.	Place within a 100-year flood hazard area, structures that would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i.	Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j.	Expose people or structures to inundation by seiche, tsunami or mud flow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

4.8.1 Introduction

This section of the PEA provides information about existing surface water, groundwater and analysis of potential impacts to hydrology, and water quality from construction, operation and

maintenance of the Proposed Project. The Proposed Project would result in less than significant impacts to hydrology and water quality with implementation of the Proposed Project's SWPPP, which is required by law, as well as SDG&E's *BMP Manual*.

4.8.2 Methodology

The hydrology and water quality in the Proposed Project area were evaluated by reviewing aerial photographs, FEMA maps for flood zones, and the *San Diego County General Plan*, in addition to the Biological Technical Report prepared for the Proposed Project. The San Diego RWQCB *Water Quality Control Plan for the San Diego Basin (9)* was reviewed to ensure compliance with state and local regulations. Wetland resources were identified during reconnaissance and habitat assessment surveys conducted in March 2012 and wetlands delineation field studies conducted in 2011 and 2012 (refer to Biological Technical Report included as Appendix 4.4-A).

4.8.3 Existing Conditions

In California, the regulation, protection and administration of water quality are carried out by the SWRCB and nine California RWQCBs. The Proposed Project is located within the San Diego Region governed by the San Diego RWQCB. The San Diego RWQCB, under the SWRCB, implements policies and programs that protect the quality of the regional water. These programs include preserving the existing water quality, enhancing water quality, and protecting the beneficial uses of regional water, as defined in the *Water Quality Control Plan for the San Diego Basin (9)*.

The San Diego Region includes most of San Diego County, parts of southwestern Riverside County and southwestern Orange County and is divided into 11 major hydrologic units. The Proposed Project is located within the San Dieguito hydrologic unit and the San Diego River hydrologic unit. Encompassing an area of about 350 square miles, the San Dieguito hydrologic unit includes the San Dieguito River and its tributaries, along with Santa Ysabel and Santa Maria Creeks, Lake Hodges, Sutherland and San Dieguito Reservoirs, and one coastal lagoon, the San Dieguito Slough. The San Diego River hydrologic unit encompasses an area of about 440 square miles, drained by the San Diego River. El Capitan, San Vicente, Cuyamaca, Jennings, and Murray reservoirs are the major storage facilities. San Vicente Reservoir, Murray Reservoir, Jennings, and Murray Reservoir store mainly Colorado River water, whereas, El Capitan mainly stores local runoff and some Colorado River water. Cuyamaca Reservoir stores only local runoff.

TL 637 is located within the unincorporated communities of Ramona and Santa Ysabel, California. The elevation range along TL 637 ranges from approximately 2,550 to 3,140 feet amsl.

The drainage features and wetland areas are fed by direct precipitation; dry season nuisance flows, stormwater runoff and/or snow melt from Volcan Mountain. The stream flow in the area of the Proposed Project is ephemeral and streams tend to become active after rainfall. The average monthly rainfall in the area varies from approximately 4.6 inches in January to less than 0.25 inch in June. Weather in the Proposed Project area is characterized by mild, wet winters and mild, dry summers, with most of the rainfall occurring between the months of November and

March. The topography of the area is varied, with streams generally occurring in the valleys between hills or in floodplain areas.

Four watersheds exist within the Proposed Project Survey Area: the Santa Maria, San Vicente, San Diego River, and Santa Ysabel watersheds (refer to Appendix 4.4-A of the Biological Resources section). The groundwater within the San Dieguito and San Diego River HUs in the vicinity of the Proposed Project site is characterized by the 27 groundwater basins that are produced from unconsolidated alluvial aquifer units. However, water demand is currently exceeding the amount of available groundwater resources in the region.

4.8.3.1 Regulatory Setting

According to the Biological Technical Report (Appendix 4.4-A) prepared for the Proposed Project, eleven poles (Pole Nos. P148, P149, P150, P103, P104, P105, P106, R107, P114, P152 and P129) are located within wet meadows that have been determined to be jurisdictional by the USACE and the San Diego RWQCB. Six poles (Pole Nos. R10, R169, R171, D167, R11, and R13) are located within a streambed/waters of the U.S. and State that has been determined to be jurisdictional by the CDFW, USACE, and the RWQCB. Steel plates will also be used to span over two jurisdictional areas to provide temporary access during construction. Project activity associated with all 17 poles and temporary steel plates to provide access will be carried out under non-notifying CWA Section 404 Nationwide Permit 12 issued by USACE, and a CWA Section 401 Certification from the RWQCB (File No. 11C-114). 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.

The following sections describe applicable federal, state, and local water quality requirements.

Federal

Clean Water Act

The CWA (33 USC Section 1251 *et seq.*), formerly the Federal Water Pollution Control Act of 1972, was enacted with the intent of restoring and maintaining the chemical, physical, and biological integrity of the waters of the United States. The CWA requires states to set standards to protect, maintain, and restore water quality through the regulation of point source and certain non-point sources discharges into surface water. Those discharges are regulated by the National Pollutant Discharge Elimination System (NPDES) permit process (CWA Section 402). The Proposed Project is under the jurisdiction of the San Diego RWQCB.

Section 401 of the Clean Water Act

Section 401 of the CWA requires that any activity, including river or stream crossings during road, pipeline, or power line construction, which may result in a discharge into a State waterbody, must be certified by the RWQCB. This certification ensures that the proposed activity does not violate state and/or federal water quality standards.

Section 404 of the Clean Water Act

Under Section 404 of the CWA, USACE regulates the discharge of dredged and/or fill material into waters of the United States. Waters of the United States include navigable waterways and wetlands adjacent to navigable waterways, and non-navigable waterways and wetlands adjacent to non-navigable waters that are contiguous with navigable waterways. The term “waters of the United States” is defined by 33 CFR Part 328 and currently includes (1) all navigable waters (including all waters subject to the ebb and flow of the tide), (2) all interstate waters and wetlands, (3) all other waters (e.g., lakes, rivers, intermittent streams) that could affect interstate or foreign commerce, (4) all impoundments of waters mentioned above, (5) all tributaries to waters mentioned above, (6) the territorial seas, and (7) all wetlands adjacent to waters mentioned above.

Nationwide Permits

Nationwide Permits are general Section 404 permits for categories of activities which have minimal impact on aquatic resources and meet certain conditions. Nationwide Permit 12, Utility Line Activities, authorizes activities required for the construction, maintenance, repair and removal of utility lines and associated facilities in waters of the United States, provided the activities do not result in the loss of greater than one-half acre of waters of the United States. Nationwide Permit 12 requires a preconstruction notification to the USACE district engineer before beginning the activity if the proposed activity results in discharges that result in the loss of greater than one-tenth acre of waters of the United States. The Proposed Project’s activity associated with the 17 poles in waters of the United States and temporary steel plates to provide access will not result in the loss of more than one-tenth acre of waters of the United States. The activity will therefore be carried out under non-notifying Nationwide Permit 12 issued by USACE.

National Flood Insurance Program

FEMA is responsible for determining flood elevations and floodplain boundaries based on USACE studies. FEMA is also responsible for distributing the Flood Insurance Rate Maps (FIRM) used in the National Flood Insurance Program (NFIP). These maps identify the locations of special flood hazard areas, including the 100-year floodplain. FEMA allows non-residential development in floodplains, but construction activities are restricted within flood hazard areas depending on the potential for flooding within each area. Federal regulations governing development in a floodplain are set forth in Title 44, Part 60 of the CFR and enable FEMA to require municipalities that participate in the NFIP to adopt certain flood hazard reduction standards for construction and development in 100-year floodplains.

Forest System Lands

The SWRCB designated the USFS as the Water Quality Management Agency for Forest System lands in California in 1981. The USFS meets its obligations for compliance with water quality standards by implementing state-certified and USEPA-approved BMPs. Practice 7-5 requires that Special Use Permits include measures to protect water quality, including conformance with other water quality agency permit requirements.

State

Streambed Alteration Agreements

California Fish and Wildlife Code Sections 1600–1616 require a Streambed Alteration Agreement for any project that may obstruct the natural flow of a river, stream, or lake; substantially change or use any material from the bed, channel, or bank of a river, stream, or lake; or deposit debris where it may pass into a river, stream, or lake. A project applicant must submit a complete notification package to CDFW describing the portions of a project that would:

- Substantially obstruct or divert the natural flow of a river, stream, or lake;
- Substantially change the bed, channel, or bank of a river, stream, or lake;
- Use any material from the bed, channel, or bank of a river, stream, or lake; or
- Deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into a river, stream, or lake.

The impacts associated with the 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.

California Porter Cologne Water Quality Control Act

The Porter Cologne Water Quality Control Act of 1967, 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 (9)*. Applicable constraints in the water quality control plans relate primarily to the avoidance of altering the sediment discharge rate of surface waters, and the avoidance of introducing toxic pollutants to the water resource. A primary focus of water quality control plans is to protect designated beneficial uses of waters, which range from drinking water quality to recreation and wildlife habitat. In addition, anyone proposing to discharge waste that could affect the quality of the waters of the state must make a report of the waste discharge to the RWQCB or SWRCB as appropriate, in compliance with Porter-Cologne.

National Pollutant Discharge Elimination System (NPDES) – Construction Stormwater Permits

The NPDES was authorized by the CWA and is administered in California by the SWRCB through the nine RWQCBs. The purpose of NPDES is to control the discharge of pollutants from point sources into waters of the United States. The SWRCB has issued a California Construction General Permit (Construction General Permit, Order No. 2009-009) under NPDES that applies to most construction activities in California. Coverage under the Construction General Permit is required for projects that disturb one acre or greater of soil, or less than one acre but part of a larger common plan of development or sale. The project applicant must submit a Notice of Intent to the SWRCB and a SWPPP that complies with the Construction General Permit requirements and receive a SWRCB-issued WDID number before starting construction activities. The project applicant must implement the SWPPP during construction, including

requirements for inspections and monitoring, and must revise the SWPPP and implement revisions as needed to protect storm water quality.

The SWPPP describes:

- The project location, site features, and the identification of materials and activities that may result in pollutant discharges;
- BMPs to be implemented during construction. The BMPs are selected to control erosion, discharge of sediments, and other potential impacts associated with construction activities;
- An inspection and maintenance program for BMPs; and
- A sampling and analysis plan for monitoring pollutant discharges to waterbodies.

The project applicant must submit a Notice of Termination to the SWRCB after completing a project subject to the Construction General Permit.

State Water Resources Control Board

The Proposed Project is within the San Diego Regional Board of the SWRCB. Each Regional Board adopts a Basin Plan intended to designate beneficial uses for surface and groundwaters, and sets narrative and numerical objectives for protection of the beneficial uses. Beneficial use designations include: Municipal and Domestic Supply (MUN), Agricultural Supply (AGR), Industrial Process Supply (PROC), Industrial Service Supply (IND), Groundwater Recharge (GWR), Freshwater Replenishment (FRSH), Navigation (NAV), Hydropower Generation (POW), Contact Water Recreation (REC-1), Non-contact Water Recreation (REC-2), Commercial and Sport Fishing (COMM), Aquaculture (AQUA), Warm Freshwater Habitat (WARM), Cold Freshwater Habitat (COLD), Inland Saline Water Habitat (SAL), Estuarine Habitat (EST), Marine Habitat (MAR), Wildlife Habitat (WILD), Preservation of Biological Habitats of Special Significance (BIOL), Rare, Threatened, or Endangered Species (RARE), Migration of Aquatic Organisms (MIGR), Spawning, Reproduction, and/or Early, Development (SPWN), and Shellfish Harvesting (SHELL).

In addition to a general antidegradation water quality objective which basically states that water quality that is better than stated objectives shall be maintained, the San Diego RWQCB has specific inland water quality objectives for water temperature, agricultural supply beneficial use, ammonia, bacteria, biostimulatory substances (e.g., nitrogen and phosphorus), boron, chlorides, color, dissolved oxygen, floating material, fluoride, pH, inorganic chemicals, iron, manganese, methylene blue, nitrate, oil and grease, organic chemicals, sodium, pesticides, phenolic compounds, radioactivity, drinking water, sediment, suspended solids, sulfate, taste and odor, total dissolved solids, toxicity, toxic pollutants, trihalomethanes, and turbidity. There are also specific groundwater objectives listed by groundwater basin.

Local*County of San Diego Watershed Protection, Stormwater Management and Discharge Control Ordinance*

San Diego County Code of Regulatory Ordinances Chapter 8 of Division 7 of Title 6 and the Stormwater Standards Manual were adopted in August 2003. The purposes of these ordinances are to:

- protect the health, safety, and general welfare of the County of San Diego residents;
- to protect water resources and to improve water quality;
- to cause the use of management practices by the County and its citizens that will 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 the County is compliant with applicable state and federal law.

The ordinance contains discharge prohibitions and requirements that vary depending on the type of land use activity and location in the County. The Stormwater Standards Manual of the ordinance sets out in more detail, by project category, what dischargers must do to comply with the ordinance and to receive permits for projects and activities that are subject to the ordinance. The ordinance and Stormwater Standards Manual define the requirements that are legally enforceable by the County in the unincorporated area of San Diego County.

The *Ramona Community Plan* (2010) 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 *Ramona Community Plan* contains the following relevant policies and goals:

Policy COS 1.1.6 Maintain watercourses with drainage areas of one to five square miles in their natural state, avoiding the use of pipes or concrete channels.

For all other policies related to hydrology and water quality, the *Ramona Community Plan* defers to the *County of San Diego General Plan*.

Central Mountain Subregional Plan

The *Central Mountain Subregional Plan* (2011) 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:

Community Character Policy 6: Creeks, rivers, and wetlands shall be preserved as scenic open space and should be maintained in as natural a state as possible.

Water Supply and Service Policy 2: Projects that would adversely affect groundwater supply should not be permitted, or should be fully mitigated if allowed.

Water Supply and Service Policy 3: Projects that would adversely impact groundwater quality shall not be permitted.

North Mountain Subregional Plan

The *North Mountain Subregional Plan* (2011) 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:

Land Use Policy 2: 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.

Conservation Policy 2: Cumulative effects of new development should be carefully regulated and the quality of groundwater constantly monitored.

Public Safety and Seismic Safety Policy 8: Encourage shaded fuel breaks and other forms of vegetation management to reduce fire damage.

County of San Diego General Plan

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:

- **COS-1.8 Multiple-Resource Preservation Areas.** Support the acquisition of large tracts of land that have multiple resource preservation benefits, such as biology, hydrology, cultural, aesthetics, and community character. Establish funding mechanisms to serve as an alternative when mitigation requirements would not result in the acquisition of large tracts of land.
- **COS-3.2 Minimize Impacts of Development.** Require development projects to:
 - Mitigate any unavoidable losses of wetlands, including its habitat functions and values; and

- Protect wetlands, including vernal pools, from a variety of discharges and activities, such as dredging or adding fill material, exposure to pollutants such as nutrients, hydromodification, land and vegetation clearing, and the introduction of invasive species.
- **COS-4.1 Water Conservation.** Require development to reduce the waste of potable water through use of efficient technologies and conservation efforts that minimize the County's dependence on imported water and conserve groundwater resources.
- **COS-5.1 Impact to Floodways and Floodplains.** Restrict development in floodways and floodplains in accordance with policies in the Flood Hazards section of the Safety Element.
- **COS-5.5 Impacts of Development to Water Quality.** Require development projects to avoid impacts to the water quality in local reservoirs, groundwater resources, and recharge areas, watersheds, and other local water sources.

Water Quality Control Plan for the San Diego Basin (9)

The Proposed Project is located within the San Diego Region governed by the San Diego RWQCB. The San Diego RWQCB, under the SWRCB, implements policies and programs that protect the quality of the regional water; these programs include preserving the existing water quality, enhancing water quality, and protecting the beneficial uses of regional water. The regional plan that sets the standards for compliance is the *Water Quality Control Plan for the San Diego Basin (9)*. The Basin Plan was prepared in accordance with the criteria in the California Porter-Cologne Water Quality Control Act, and other pertinent state and federal rules and regulations.

The *Water Quality Control Plan for the San Diego Basin (9)* describes water quality objectives for surface water in the Proposed Project area. Wildlife habitat, municipal, industrial, and agricultural supplies, and recreation are among the beneficial uses that the objectives seek to protect. The quality of surface water is affected by stormwater runoff and discharges from industrial, commercial, agricultural, and residential activities in the region. The San Diego RWQCB uses permits and other programs to regulate and reduce pollution of surface waters.

4.8.3.2 Hydrology and Water Quality Setting

Surface Water and Groundwater Resources

San Diego County's watersheds and geologic nature are characterized by its lagoons, lakes, reservoirs, rivers, and creeks. These water bodies capture the region's surface water runoff and become a blend of natural runoff and imported water. In addition to supporting natural habitat and supplying residents with potable water, these water bodies supply water for fire suppression and serve as popular recreation areas. Watersheds support lakes and reservoirs, which offer a variety of recreational activities, including fishing, boating, sailing, bike and horseback riding, and picnicking.

Chambers Group scientists conducted surveys along the Proposed Project, targeting suspected jurisdictional areas identified during the literature review from aerial and USGS topographic maps. Potential USACE, RWQCB, and CDFW jurisdictional areas were field-checked for the presence of definable channels and/or wetland vegetation, riparian habitat, soils, and hydrology. Field checks were not limited to suspected jurisdictional areas identified during the literature review; the entire Proposed Project Survey Area was assessed. Waters of the United States were identified pursuant to criteria outlined in Section 401 and Section 404 of the CWA. “Waters of the State” regulated by CDFW were identified pursuant to criteria outlined in Section 1600 of the Fish and Game Code. Sixty-seven drainages or features, potentially subject to USACE, CDFW, and RWQCB jurisdiction, are located within the Proposed Project area. All but 17 of these features have been avoided.

Watersheds

Four watersheds exist within the Proposed Project Survey Area: the Santa Maria, San Vicente, San Diego River, and Santa Ysabel watersheds (refer to Appendix 4.4-A of the Biological Resources section). The Santa Maria watershed is located at the western end of the Proposed Project in the unincorporated community of Ramona. The San Vicente watershed begins at the origin of San Vicente Creek east of Littlepage Road and spans the survey area to Simon Park in the unincorporated community of Ramona. The San Diego River watershed originates at the San Diego River located in the unincorporated community of Santa Ysabel and is fed by rainwater and snowmelt from Volcan Mountain. The Santa Ysabel watershed originates in Volcan Mountain in the unincorporated community of Santa Ysabel and is fed by rainwater and snowmelt from Volcan Mountain.

Santa Maria Creek, San Vicente Creek, the San Diego River, and Santa Ysabel Creek are relatively permanent waters¹ leading to several reservoirs and lakes. Santa Maria Creek does not flow directly within the Proposed Project but is fed by several ephemeral drainages that direct surface water only immediately after rain events. San Vicente Creek originates within the Proposed Project; however, perennial flow does not establish until after the inflow from Dye Creek, which is outside the Proposed Project Survey Area. The San Diego River does not flow directly within the Proposed Project but is fed by several ephemeral drainages and Dye Creek.

Eleven poles (Pole Nos. P148, P149, P150, P103, P104, P105, P106, R107, P114, P152 and P129) are located within wet meadows that have been determined jurisdictional by USACE and RWQCB. Six poles (Pole Nos. R10, R169, R171, D167, R11, and R13) are located within a streambed/water of the United States adjacent to Creelman Road that has been determined jurisdictional by all three agencies, USACE, RWQCB and CDFW.

Precipitation

Rainfall across San Diego County is variable, with most rain falling from November to April. Generally, the average rainfall is highest in the mountains and least along the coast and in the desert. Most of the county experiences light rainfall, although some of the central mountain areas receive more than 30 inches per year. The average seasonal precipitation along the coast is 10 inches or less. The amount increases with elevation as moist air is lifted and rain falls over

¹ The USACE defines relatively permanent waters as waters that typically flow year-round or have continuous flow at least seasonally (i.e., for at least three months per year).

the mountains. Some reporting points in the Cuyamaca and Volcan Mountain measure more than 35 inches per year, with areas on Mt. Palomar receiving up to 45 inches. Totals diminish rapidly with decreasing elevation on the eastern slopes of the mountains (rain shadow), with some desert stations reporting as low as 2.5 inches per season.

Groundwater

There are three types of aquifers within San Diego County; fractured rock aquifers, alluvial and sedimentary aquifers, and desert basins. Fractured rock underlines approximately 73 percent of the unincorporated area of San Diego County. Water-producing fracture locations and orientations in fractured rock aquifers are difficult to identify and predict, making the characteristics of different aquifers vary significantly. Alluvial and sedimentary aquifers comprise 13 percent of the unincorporated area of San Diego County. These aquifers are usually found in river and stream valleys, near the coast line, around lagoons and in the intermountain valleys. Desert basins make up 14 percent of the unincorporated area of San Diego County. These basins are located in the easternmost portions of the county and are characterized by extremely limited recharge, but typically have large storage capacities.

Surface Waters

Six poles (Pole Nos. R10, R169, R171, D167, R11, and R13) are located within a streambed/water of the United States adjacent to Creelman Road that has been determined jurisdictional by all three agencies, USACE, RWQCB, and CDFW.

Dye Creek is the only perennial stream within the Proposed Project area. There are several intermittent drainages including drainages in the Proposed Project area; the remaining drainages are characterized as ephemeral drainage features.

Wetlands

A total of 11 wetland areas are within a 50 foot radius around the proposed pole sites and other facilities. All wetland areas observed within the survey area are disturbed due to grazing activities and are comprised primarily of non-native grasses with scattered sedge and rush species. The vegetation is low lying due to grazing activities and provides minimal cover for wildlife species.

Floodplains

The Proposed Project does not cross or lie within the 100-year flood zones of any river. Flood zone information for the Proposed Project area is located on FEMA FIRMS.

Dam Failure Inundation Areas

The OES is responsible for the identification of inundation areas for dam failures in California. The Proposed Project is not located within an inundation area for dam failure.

4.8.4 Potential Impacts

This section describes potential impacts to hydrology and water resources as a result of the Proposed Project. Potential impacts would be less than significant through compliance with regulatory requirements for protection of surface water quality, and implementation of the SWPPP and BMPs, all of which are design features of the Proposed Project.

4.8.4.1 Significance Criteria

Thresholds of impact significance were derived from Appendix G of the *CEQA Guidelines*. Under these guidelines, the Proposed Project could have a potentially significant impact to hydrology and water quality if it would:

- a) Violate any water quality standards or waste discharge requirements;
- b) Substantially deplete groundwater supplies or interferes 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);
- c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that 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 that would result in flooding on- or off-site;
- e) Create or contribute to runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff;
- f) Otherwise substantially degrade water quality;
- g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map;
- h) Place structures within a 100-year flood hazard area which would impede or redirect flood flows;
- 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; or
- j) Cause inundation by seiche, tsunami, or mudflow.

4.8.4.2 Question 8a - Violate any water quality standards or waste discharge requirements?

Construction – Less than Significant Impact

The Proposed Project would not violate any water quality standards or waste discharge requirements. No new sources of point discharge water pollution would result from the proposed construction and upgrade of the existing power line.

The Proposed Project would disturb more than one acre and therefore requires coverage under an NPDES permit for storm water discharges during construction. SDG&E would obtain coverage under the Construction General Permit (Order No. 2009-009) and comply with its relevant requirements, including implementation of a SWPPP with BMPs for water quality protection. The Proposed Project would fall under the Linear Underground/Overhead Project (LUP) requirements of the Construction General Permit. LUP activities covered under the Construction General Permit include, but are not limited to, those activities necessary for the installation of underground and overhead linear facilities (e.g., conduits, substructures, poles, cables, wires, connectors, switching equipment, regulating equipment, transforming equipment, and associated ancillary facilities). This includes, but is not limited to: underground utility mark-out, potholing, concrete and asphalt cutting and removal, trenching, excavation, boring and drilling, access road re-establishment, cable/wire pull sites, substation construction, substructure installation, construction of foundations, pole installations, welding, concrete and/or pavement repair or replacement, and stockpile/borrow locations.

The Construction General Permit requires prevention of unauthorized discharges and implementation of a SWPPP with BMPs needed to prevent discharges from construction activities that would otherwise violate water quality standards. The Construction General Permit further requires inspections, monitoring, and reporting to ensure that BMPs are implemented and effective and modified if needed to ensure protection of water quality. SDG&E would implement BMPs consistent with the Construction General Permit requirements and its *BMP Manual*. The *SDG&E Subregional NCCP*, also contains protocols for avoiding and minimizing potential erosion and water quality issues. Specific requirements for LUPs are provided in the Order and Attachment A of the Construction General Permit (Order No. 2009-009). Other than the Construction General Permit, no waste discharge requirements apply to construction of the Proposed Project because no discharges other than stormwater are anticipated.

The Proposed Project would not violate any water quality standard or waste discharge requirement because SDG&E will comply with the regulatory requirements for protection of water quality, including implementation of the SWPPP and BMPs in accordance with SDG&E's *BMP Manual* and the *SDG&E Subregional NCCP*. Therefore, potential impacts would be less than significant.

Operation & Maintenance – No Impact

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 increase 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. Operation of the Proposed Project would not violate any water quality standards or waste discharge requirements. No new sources of point discharge water pollution would result from the operation or maintenance of the Proposed Project. Therefore, no impacts are anticipated.

4.8.4.3 Question 8b - Substantially deplete groundwater supplies or interferes 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)?

Construction – No Impact

The water demand from construction of the Proposed Project would be minor and short-term, would be met through existing municipal sources, and would not result in new ground water pumping. Surface disturbance would be limited and negligible compared to the affected watershed areas, so there would be no impact on ground water recharge.

Dewatering may be required during construction where localized shallow groundwater is encountered in structure foundation excavations or other project excavations. Dewatering may have localized effects on groundwater levels, but the effects would be isolated to a small area due to the short duration of pumping. Dewatering is not expected to affect area wells, which rely on deeper water-bearing zones. Potential dewatering on the Proposed Project is further discussed in Section 3.4.6. Pumped water that is not potentially contaminated with sediments or other materials would be discharged in accordance with requirements of the Construction General Permit. The water would be discharged near the extraction location and thereby returned to the local groundwater. Potentially contaminated water would be handled and disposed offsite in accordance with applicable state and federal laws. For these reasons, there would be no net deficit in aquifer volume or lowering of the groundwater table and no impact on ground water supplies or recharge. Therefore, no impacts related to groundwater supplies would occur.

Operation & Maintenance – No Impact

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 increase 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. Operation of the Proposed Project would not violate any water quality standards or waste discharge requirements. 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. There would be no net deficit in aquifer volume or lowering of the groundwater table and no impact on ground water supplies or recharge. Therefore, no impacts related to groundwater supplies would occur.

4.8.4.4 Question 8c - 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 that would result in substantial erosion or siltation on- or off-site?

Construction – Less than Significant Impact

Eleven poles (Pole Nos. P148, P149, P150, P103, P104, P105, P106, R107, P114, P152 and P129) are located within wet meadows that have been determined to be jurisdictional by USACE and RWQCB. Six poles (Pole Nos. R10, R169, R171, D167, R11, and R13) are located within a streambed/waters of the U.S. and the State that has been determined to be jurisdictional by CDFW, USACE and RWQCB. Steel plates will also be used to span over two jurisdictional areas to provide temporary access during construction. Project activity associated with all 17 poles and temporary steel plates will be carried out under non-notifying Nationwide Permit 12 issued by USACE, and a Section 401 Certification from the RWQCB. The impacts 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 and impacts are less than significant.

In addition, appropriate BMPs will be implemented to prevent erosion and offsite sedimentation into the 17 potentially jurisdictional areas. With implementation of project design features and ordinary construction restrictions, including BMPs, the Proposed Project would not substantially alter the existing drainage pattern of the site or area in a manner that would result in substantial erosion or siltation onsite or offsite. Erosion and siltation would be controlled and minimized, as discussed above, through the implementation of SDG&E standard operating procedures and protocol and BMPs, to be documented in the SWPPP. Therefore, impacts would be less than significant.

Operation & Maintenance – No Impact

Once construction of the Proposed Project is complete, the operation and maintenance associated with the Proposed Project would not substantially alter the existing drainage pattern of the site or area. 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 increase 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. Operation of the Proposed Project would not violate any water quality standards or waste discharge requirements. Any future maintenance-related construction projects would be evaluated under G.O. 131-D and CEQA for purposes of assessing whether further CPUC approval is required. Therefore, no impacts are anticipated.

4.8.4.5 Question 8d - 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 that would result in flooding on- or off-site?

Construction – No Impact

The Proposed Project would not substantially alter the existing drainage patterns of the affected areas in a manner that would result in flooding onsite or offsite. Minor road re-establishment of existing access roads may be required at the Proposed Project sites to ensure that existing access is adequate to accommodate installation of the new steel poles. However, such road work would be conducted only to maintain existing access roads that have since revegetated or rutted. These proposed road work and pole removal activities would not substantially increase the rate or amount of surface runoff in a manner that would result in flooding onsite or offsite. Therefore, no impacts related to flooding are anticipated.

Operation & Maintenance – No Impact

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 increase 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. Operation of the Proposed Project would not violate any water quality standards or waste discharge requirements. Any future maintenance-related construction projects would be evaluated under G.O. 131-D and CEQA for purposes of assessing whether further CPUC approval is required. Therefore, no impacts are anticipated.

4.8.4.6 Question 8e - Create or contribute to runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

Construction – Less than Significant Impact

The Proposed Project would not contribute a substantial amount of runoff that would exceed the capacity of the existing or planned storm water drainage systems. The Proposed Project would not increase impervious surfaces or otherwise alter the site so as to contribute to the volume of stormwater runoff on the sites. Additionally, in accordance with standard operating procedures and protocols, SDG&E would prepare a SWPPP and implement construction BMPs in order to avoid and minimize potential impacts to water quality. The Proposed Project would include changes to onsite grading and drainage but would not increase runoff or alter drainage patterns on- or off-site (see response to Question 8c, above). The Proposed Project would not adversely impact the capacity of existing storm water drainage systems because no substantive increase in runoff is expected and grading is designed to return runoff to existing drainages. As the Proposed Project will not result in the exceedance of the stormwater drainage capacity, the Proposed Project will not require modifications to the existing drainage systems.

SDG&E would comply with the Construction General Permit and would implement a SWPPP with BMPs for water quality protection. The Construction General Permit requires prevention of unauthorized discharges and implementation of BMPs needed to prevent discharges of polluted runoff. The Construction General Permit also requires inspections, monitoring, and reporting to ensure that polluted runoff is not occurring from the construction site.

SDG&E would implement BMPs in accordance with the Construction General Permit and its *BMP Manual*. Construction of the Proposed Project would not be a substantial source of polluted runoff considering the regulatory requirements for protection of water quality, including implementation of the SWPPP and BMPs. Therefore, potential impacts would be less than significant.

Operation & Maintenance – No Impact

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 increase 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. Operation of the Proposed Project would not violate any water quality standards or waste discharge requirements. Any future maintenance-related construction projects would be evaluated under G.O. 131-D and CEQA for purposes of assessing whether further CPUC approval is required. Therefore, no impacts are anticipated.

4.8.4.7 Question 8f - Otherwise substantially degrades water quality?

Construction and Operation & Maintenance – Less than Significant Impact

Construction of the Proposed Project would comply with the Construction General Permit, which includes implementation of a SWPPP with BMPs to prevent degradation of water quality from storm water runoff and other permitted discharges. No other discharges to surface or ground water are anticipated during construction. The Proposed Project would not otherwise substantially degrade water quality. Implementation of project design features and ordinary construction restrictions, including BMPs, would ensure that potential impacts to water quality remain less than significant. See the discussion of 4.8.4.2 and 4.8.4.6 above.

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 increase 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. Operation of the Proposed Project would not violate any water quality

standards or waste discharge requirements. Any future maintenance-related construction projects would be evaluated under G.O. 131-D and CEQA for purposes of assessing whether further CPUC approval is required. Therefore, no impacts are anticipated.

4.8.4.8 Question 8g - Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary, Flood Insurance Rate Map or other flood hazard delineation map?

Construction and Operation & Maintenance – No Impact

The Proposed Project does not involve the construction of housing. Therefore, no housing would be constructed within a 100-year flood hazard area as a result of the Proposed Project. Therefore, no impacts related to placement of housing in a 100-year floodplain would occur.

4.8.4.9 Question 8h – Place structures within a 100-year flood hazard area which would impede or redirect flood flows?

Construction and Operation & Maintenance – No Impact

The Proposed Project alignment is not located within in an area with the potential for 100-year floods. In addition, the proposed maintenance activities would not result in a significant impact due to the character of the work required (i.e., removal and installation of poles within the SDG&E ROW). No new structures would be constructed that would impede or redirect flood flow within a 100-year flood hazard area. As a result, the Proposed Project would not impact flood flows. Therefore, no impacts to 100-year floodplains would occur.

4.8.4.10 Question 8i - Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

Construction and Operation & Maintenance – No Impact

The County of San Diego Multi-Jurisdictional Hazard Mitigation plan identifies dam failure risk levels based on dam inundation map data. No dam inundation areas are located in the vicinity of the project area. In addition, the proposed maintenance activities would not result in exposure of people or structures to a risk of significant loss from flooding due to the character of the work required (i.e., removal and installation of poles within the SDG&E ROW).

The Proposed Project is an unmanned utility project and would not involve any construction within a dam inundation zone, nor does the pole replacement project involve the construction of facilities that involve people. Therefore, impacts related to loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or a dam, are not anticipated.

4.8.4.11 Question 8j – Cause inundation by seiche, tsunami, or mudflow?

Construction and Operation & Maintenance – No Impact

The Proposed Project, due to its inland locations and surrounding land characteristics, has little to no potential for being exposed to inundation by a seiche, tsunami, or mudflow. The Multi-

Jurisdictional Hazard Mitigation plan identifies areas that would be subject to tsunami, coastal erosion, and landslide. None of these areas are located in the vicinity of the Proposed Project area. Therefore, no impacts related to seiche, tsunami, or mudflow would occur.

4.8.5 Project Design Features and Ordinary Construction/Operating Restrictions

With implementation of the ordinary construction restrictions (as outlined within Section 3.8), potential impacts relating to hydrology and water quality will remain less than significant.

4.8.6 Applicant Proposed Measures

The Proposed Project has no potentially significant impacts relating to hydrology and water quality; therefore, no APMs are proposed.

4.8.7 Detailed Discussion of Significant Impacts

Based upon the preceding analysis, no significant impacts relating to hydrology and water quality are anticipated from the Proposed Project.

4.8.8 References

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U.S. Geological Service. 7.5 minute topographic quadrangle map for Santa Ysabel and Ramona, California.

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4.9 LAND USE AND PLANNING

Would the project:		Potentially Significant Impact	Potentially Significant Unless APMs Incorporated	Less than Significant Impact	No Impact
a.	Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b.	Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c.	Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

4.9.1 Introduction

This section of the PEA describes the existing land use and land use and zoning designations within the Proposed Project vicinity and the potential impacts to land use from construction, operation, and maintenance of the Proposed Project.

While the Proposed Project is not subject to local zoning regulations or discretionary land use approval, the Proposed Project is consistent with existing land uses (which include electric power and distribution facilities and substations), designated land uses, general plan and zoning designations. The Proposed Project would be constructed within existing SDG&E ROW and existing substation property boundaries. The Proposed Project would not physically alter or divide an established community. No impacts to land use and planning were identified.

4.9.2 Methodology

The land use analysis included a review of various land use plans, policies, and regulations for the community of Ramona including the *Ramona Community Plan*, the *North Mountain Subregional Plan*, the *Central Mountain Subregional Plan*, the *County of San Diego General Plan*, the *Simon Preserve Resource Management Plan*, the *North County MSCP*, the *East County MSCP*, and other relevant planning documents such as zoning ordinances and aerial photographs. The review also included the use of GPS data and interactive mapping software including Google Earth. Site visits to the Proposed Project area were also utilized to confirm existing land uses within and adjacent to the Proposed Project area. Agency documents and maps were utilized to verify jurisdictional boundaries and designated land uses.

4.9.3 Existing Conditions

4.9.3.1 Regulatory Setting

State

California Public Utilities Commission

Pursuant to Article XII, Section 8, of the California Constitution and the California Public Utilities Code, the CPUC has exclusive jurisdiction in relation to local government to regulate the design, siting, installation, operation, maintenance, and repair of electric facilities. Other state agencies have concurrent jurisdiction with the CPUC, as further described in the subsections that follow. Although local governments do not have the power to regulate activities related to electric power line and substation facilities, the CPUC encourages, and SDG&E participates in, cooperative discussions with affected local governments to address their concerns where feasible. As part of the environmental review process, SDG&E has considered relevant land use plans, policies, and issues, and has prepared this evaluation of the Proposed Project’s potential impacts to land use and planning. Further, SDG&E is obligated to obtain ministerial permits from local agencies as applicable to the Proposed Project.

Local

Communities of Ramona and Santa Ysabel

The *Ramona Community Plan* (2010) 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 1.1.10: Encourage a brush management program in conjunction with other public agencies to reduce wildfire hazards.

Safety Goal – S 1.1: Maximum protection to residents of the planning area from natural hazards such as earthquakes, flood, and fire, and provide adequate police protection and other emergency services.

Safety Policy – S 1.1.1: Promote the establishment of a fuel management program in conjunction with appropriate agencies for the protection of livestock and property in wildland areas.

Central Mountain Subregional Plan

The *Central Mountain Subregional Plan* (2011) 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:

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.

Fire Protection Policy 6: Encourage SDG&E to make a diligent effort to reduce the fire hazard potential of downed powerlines.

North Mountain Subregional Plan

The *North Mountain Subregional Plan* (2011) 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:

Public Safety and Seismic Safety Policy 1: Encourage controlled burning or mechanical brush thinning to reduce the fire hazard.

Public Safety and Seismic Safety Policy 6: Design and maintain trails and staging areas to address fire safety.

Public Safety and Seismic Safety Policy 8: Encourage shaded fuel breaks and other forms of vegetation management to reduce fire damage.

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. In order to maximize the effectiveness of the existing infrastructure, the Land Use Element encourages development in the existing unincorporated communities.

The *County of San Diego General Plan* contains the following relevant policies:

LU 4.6: Planning for Adequate Energy Facilities. Participate in the planning of regional energy infrastructure with applicable utility providers to ensure plans are consistent with the County’s General Plan and Community Plans and minimize adverse impacts to the unincorporated County.

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.

Habitat Conservation Plans

SDG&E NCCP

The Proposed Project falls within the area in which SDG&E’s utility operations are governed by *SDG&E’s Subregional NCCP*. As a part of the *SDG&E Subregional NCCP*, SDG&E has been issued incidental take permits (Permit PRT-809637) by the USFWS and the CDFW for 100 Covered Species. The *SDG&E Subregional NCCP* includes measures and operational protocols designed to minimize and avoid potential impacts to sensitive species. Refer to Section 4.4, Biological Resources for more information about the *SDG&E Subregional NCCP*.

The *SDG&E’s Subregional NCCP* expressly supersedes any other MCSPs or HCPs. The purpose of this provision in the *SDG&E’s Subregional NCCP* is to harmonize areas of overlap such that there is no conflict with other plans.

North County MSCP

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”. In order to maintain biodiversity and ecosystem health, the *North County Plan* incorporates goals including biological goals, economic goals, and social goals.

East County MSCP

A Plan for the East County MSCP is currently being developed but has not been finalized. This document will eventually provide guidelines for the 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.

Simon Preserve Resource Management Plan

The Simon Preserve is owned and managed by the County of San Diego. The Preserve is approximately 617 acres in size and is located in the community of Ramona. 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 *Simon Preserve 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.

South Coast Resource Management Plan

The Mt. Gower Preserve is located in the community of Ramona and contains approximately eight miles of multi-use trails. The BLM *South Coast Resource Management Plan (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 Mt. Gower Preserve is located within this BLM planning area, and is thus subject to the *South Coast Resource Management Plan*. This plan outlines measures that will maintain the recreational opportunities within the area, ensure compliance with habitat conservation plans, and continue the conservation and stewardship of these lands through collaboration with federal, state, and local agencies.

Mount Gower Open Space Preserve Rules and Regulations

The BLM-administered public lands within the Mt. Gower Preserve are under a lease to the San Diego County Parks and Recreation Department. The San Diego County Parks and Recreation Department provides Rules and Regulations for public use of the Preserve in *Mount Gower Open Space Preserve Rules and Regulations for Open Space Preserves (2000)*.

4.9.3.2 Land Use Setting










The Proposed Project is located entirely within unincorporated San Diego County, and runs through the communities of Ramona and Santa Ysabel (see Figure 4.9-1, Land Ownership in Proposed Project Vicinity). The Proposed Project area has County of San Diego General Plan land use designations of Semi-Rural Residential, Rural Lands, and Public Agency Lands (see Table 4.9-1, Designated and Existing Land Uses in the Proposed Project Area). The Proposed Project would be installed within existing SDG&E ROW and existing substation property boundaries.

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**Figure 4.9-1
TL-637**

Land Ownership Map

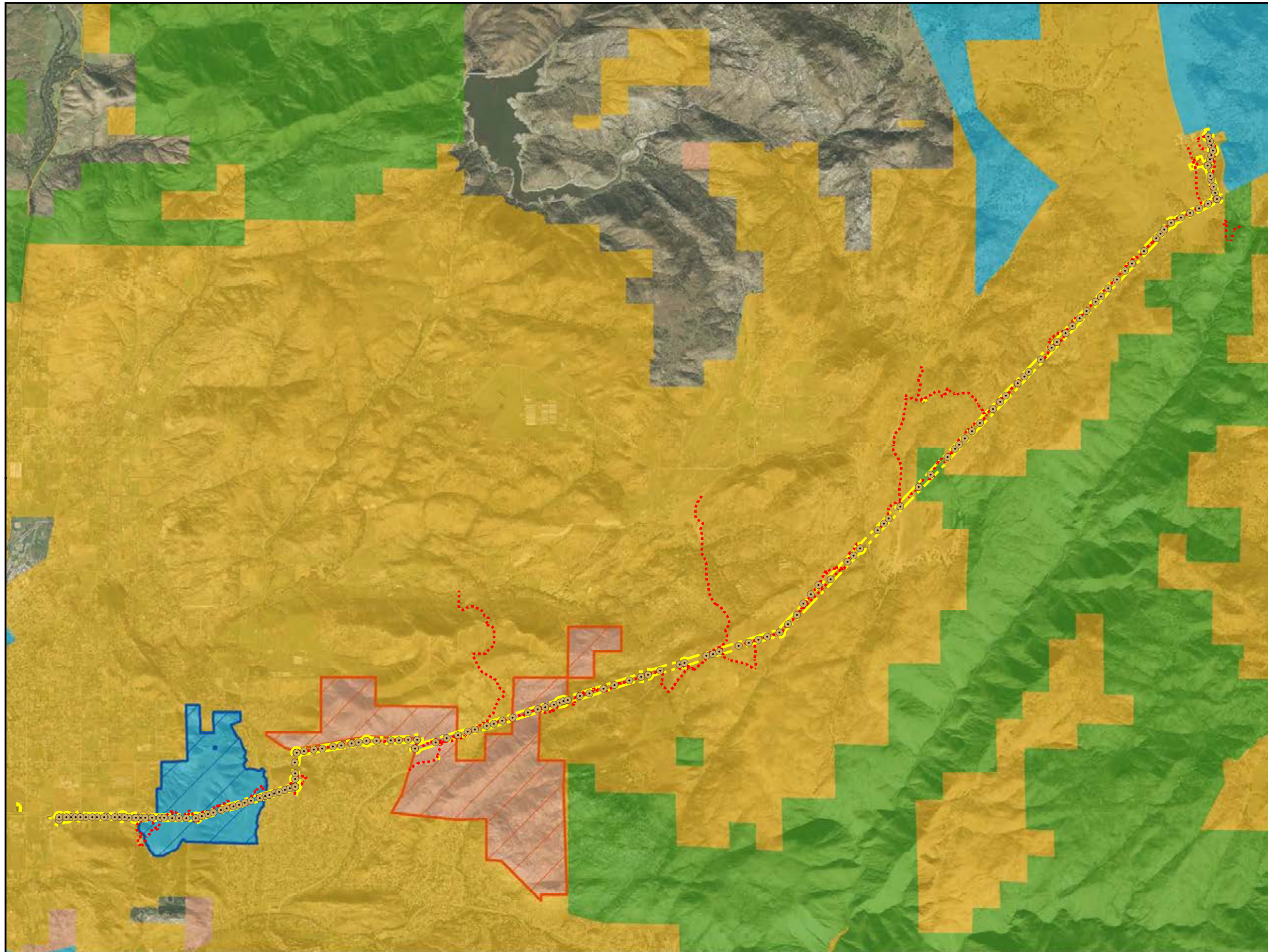
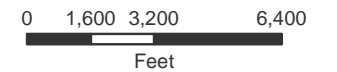
Version Date: 1/15/2013

-  Poles
-  Access
-  Survey Area
-  Staging Yards
-  String Sites
- Preserve Areas**
-  Mt. Gower Preserve
-  Simon Preserve
- Land Ownership Agency**
-  County of San Diego
-  Bureau of Land Management
-  United States Forest Service
-  Private

SDG&E is Providing this map with the understanding that it is not survey grade.



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Table 4.9-1: Designated and Existing Land Uses in the Proposed Project Area

Pole(s) and other Components	Community	General Plan Land Use Designation	Zoning Designation	Existing Land Use
Land Use Unit 1	Ramona	Public/Semi-Public Facilities & Semi-Rural Residential	Agriculture (A72, A70)	Existing electric power lines, existing substation, semi-rural residences
Land Use Unit 2	Ramona	Open Space – Conservation	Specific Plan (S88)	Existing electric power lines, Simon Preserve
Land Use Unit 3	Ramona	Specific Plan, Open Space – Conservation, and Semi-Rural Residential	Rural Residential (RR)	Existing electric power lines, residences
Land Use Unit 4	Ramona to Santa Ysabel	Public Agency Lands & Rural Lands	Agriculture (A70, A72)	Existing electric power lines, rural residences, grazing and ranching land, Mt. Gower Preserve, Cleveland National Forest
Land Use Unit 5	Santa Ysabel	Rural Lands, Semi-Rural Residential, and Rural Commercial	Agriculture, Rural Residential, and Commercial & Office, Open Space (A72, A70, RR, C36, C40, S80)	Existing electric power lines, existing substation, grazing lands, semi-rural residences, small commercial facilities
Staging Yards/Helicopter Landing Zones				
Creelman Staging Yard	Ramona	Semi-Rural Residential	Agriculture (A70)	Existing nursery, undeveloped land
Warnock Staging Yard	Ramona	Semi-Rural Residential	Agriculture (A72)	Grazing land
Wood Lot Staging Yard	Santa Ysabel	Rural Lands	Agriculture (A70)	Private property owner's storage area
Santa Ysabel Staging Yard	Santa Ysabel	Rural Lands	Agriculture (A72)	Grazing land
Mount Gower HLZ	Ramona	Open Space-Conservation	Specific Plan (S88)	Unpaved parking lot
Littlepage Road HLZ	Ramona/Santa Ysabel	Rural Lands	Agriculture (A72)	Open grazing land

Source: County of San Diego GIS Zoning and Property Tool (2012)

Land Use Unit 1 is located in the unincorporated community of Ramona within an area with General Plan land use designations of public/semi-public facilities and semi-rural residential and

is zoned as Agricultural (A70, A72) with some agricultural uses such as crop cultivation and pasture for cattle and horses. This segment of the Proposed Project alignment follows Creelman Lane and is bordered by semi-rural residential uses and undeveloped land and ends at the western boundary of Simon Preserve, a County open-space park.

Land Use Unit 2 is located within the Simon Preserve on lands with General Plan land use designation of open space – conservation and is zoned as Specific Plan (S88). Uses of the preserve include hiking, equestrian riding, and mountain biking. This segment of the Proposed Project alignment is surrounded by the preserve as it crosses the southern portion of the preserve in a west/east alignment and ends at its eastern boundary.

Land Use Unit 3 is located in the San Diego Country Estates subdivision consisting of tract residential development, on lands with General Plan land use designations of semi-rural residential, as well as specific plan and open space – conservation and is zoned as Rural Residential (RR). This segment of the Proposed Project alignment traverses between houses, starting in the west and continuing across Homeowners Association property heading north before turning east on the boundary of the subdivision between houses and the Mt. Gower Preserve.

Land Use Unit 4 is located in the Mt. Gower Preserve in the western portion of the unit, private property for most of the remainder of the unit, and two sites on Cleveland National Forest land. The Mt. Gower Preserve consists of 1,574 acres owned by the BLM and managed by the County of San Diego. Activities include hiking, equestrian riding, and mountain biking. The unit covers a large area of undeveloped ranchland and pastures in a northeasterly direction for approximately 9.7 miles. The area has General Plan land use designations of rural lands and public agency lands and is zoned as Agricultural (A70, A72). The main land uses are the preserve and agricultural uses of crop cultivation and ranchland for cattle and horses. Hiking, as well as deer and turkey hunting by owners and their guests, are incidental activities on these ranchlands. From Pole No. R66, this segment runs northeast across the preserve and ranchland to Pole No. P114. The segment then briefly crosses Cleveland National Forest land with Pole Nos. P115 and P116. The segment continues northeast across ranchland from Pole No. P117 to Pole No. P158.

Land Use Unit 5 is the eastern terminus of TL 637 and is comprised of a small amount of commercial uses, residential development, and the Santa Ysabel Substation in the rural community of Santa Ysabel. This segment has General Plan land use designations of rural lands, semi-rural residential, and rural commercial and is zoned as Agricultural, Rural Residential, Commercial & Office, and Open Space (A70, A72, RR, C36, C40, S80).

Staging Yards/Helicopter Landing Zones

The Creelman Staging Yard is located near the western terminus of the Proposed Project alignment, and is situated on SDG&E-owned land at the corner of Creelman Lane and Ashley Road in the unincorporated community of Ramona and can be accessed via Ashley Road. The staging yard has a General Plan land use designation of semi-rural residential, and is zoned as agricultural (A70).

The Warnock Staging Yard is located at the corner of Keyser Road and Warnock Road in the unincorporated community of Ramona and can be accessed via either road. The staging yard has a General Plan land use designation of semi-rural residential and is zoned as Agricultural (A72).

The Woodlot Staging Yard is located in a cleared storage area off an access road. It can be accessed by either of two existing private roads from Hwy 78 in the unincorporated community of Santa Ysabel. The staging yard has a General Plan land use designations of rural lands and is zoned as Agricultural (A70).

The Santa Ysabel Staging Yard is divided into two areas by an unpaved private road. The total area is approximately 6.5 acres. The largest area is located east of the private unpaved road leading off Grutly Street and is approximately 5.2 acres. The smaller area is west of the private unpaved road and is approximately 1.3 acres. The site is located on Grutly Street in the unincorporated community of Santa Ysabel and can be accessed via Washington Street from Hwy 78. This staging yard has a General Plan land use designation of rural lands and is zoned as Agricultural (A72).

All staging yards may also be used as helicopter landing zones, if necessary.

Helicopter Landing Zones

The Mt. Gower HLZ is located in the unpaved parking area for the Mt. Gower Preserve and is accessible from Gunn Stage Road. The site has a General Plan land use designation of open space – conservation and is zoned as Specific Plan (S88).

The Littlepage Road HLZ is located northeast of Pole No. P98. The site has a General Plan land use designation of rural lands and is zoned as Agricultural (A72).

In addition to these helicopter landing zones, the staging yards may also be used as potential helicopter landing zones.

4.9.4 Potential Impacts

4.9.4.1 Significance Criteria

Thresholds of impact significance were derived from Appendix G of the *CEQA Guidelines*. Under these guidelines, the Proposed Project could have a potentially significant impact to land use and planning if it 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; or
- c) Conflict with any applicable habitat conservation plan or natural community conservation plan.

4.9.4.2 Question 9a – Physically divide an established community?**Construction and Operation & Maintenance – No Impact**

The Proposed Project would replace existing electric power poles within SDG&E ROW and substation property boundaries. Temporary use of some areas outside of the existing ROW during construction would not divide an established community.

The Proposed Project would not interfere with existing surrounding uses and access would not be impacted by Proposed Project-related activities. Although the Proposed Project would not result in any road closures, some roads may be limited to one-way traffic at times to allow for the transport of materials to and from the Proposed Project site. However, one-way traffic control would be temporary and short-term and is not anticipated to create any new barriers or other divisions between uses or the greater community. The proposed pole replacement activities along the Proposed Project alignment between the Creelman and Santa Ysabel Substations would be limited to the removal, replacement, and installation of poles. All areas of temporary disturbance, including staging areas, would be restored to pre-construction conditions following the completion of the Proposed Project. Therefore, such construction activities would not divide an established community, and no impacts would occur.

Further, the Proposed Project would not divide established communities with respect to access. Impacts relating to access to recreational facilities are discussed in Section 4.12, Public Services and Section 4.13, Recreation. Impacts associated with construction within public roadways (and associated lane closures) are discussed in Section 4.14, Transportation and Traffic.

In addition, SDG&E currently maintains and operates existing electric power, distribution and substation facilities throughout the Proposed Project site. 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. Therefore, the operations and maintenance of the Proposed Project would not result in any potential impacts relating to the physical division of an established community.

4.9.4.3 Question 9b – Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?**Construction and Operation & Maintenance – No Impact**

As noted above, local land use plans, policies and regulations do not apply to the Proposed Project as a matter of law. As such, the underlying general plans and zoning ordinances are not “applicable” and the Proposed Project does not conflict with any applicable land use plan, policy,

or regulation of an agency with jurisdiction over the Proposed Project. SDG&E is obligated to obtain ministerial permits from local agencies as applicable to the Proposed Project.

Even assuming that the local land use plans, policies and regulations applied to the Proposed Project, due to the temporary nature of construction activities; the Proposed Project's compliance and consistency with existing land use plans, policies and regulations; and the existing electrical power infrastructure located within and adjacent to the Proposed Project area; there would be no impacts to existing land use plans, policies, or regulations as a result of the Proposed Project.

No changes in land use or zoning are required with the Proposed Project activities. The proposed pole replacement activities along the Proposed Project alignment between the Creelman and Santa Ysabel Substations would be limited to the removal, replacement, and installation of poles. The structures will be replaced within SDG&E ROW, and construction activities will take place mostly within SDG&E property and ROW. As stated within the County of San Diego zoning ordinance, utility corridors including power poles and lines are allowed uses within every land use designation as a "consistent use." Temporary staging areas and stringing sites located outside SDG&E ROW and/or easements will be used to construct the Proposed Project. The Creelman Staging Yard is located on land zoned as Agricultural (A70) at the intersection of Creelman Lane and Ashley Road, surrounded by land zoned as Agricultural (A70). Surrounding land uses include semi-rural residential development with grazing and horse pastures. The Warnock Staging Yard is located on land zoned as Agricultural (A72), and is surrounded by land zoned as Agricultural (A72). Surrounding land uses include semi-rural residential and grazing land. The Woodlot Staging Yard is located off a private access road and is zoned and surrounded by land zoned as Agricultural (A70). Surrounding land uses are ranchland. The Santa Ysabel Staging Yard is located on land zoned as Agricultural (A72), surrounded by land zoned for Agriculture (A72) and Rural Residential (RR). Surrounding land uses include ranchland and a small mix of commercial and residences in the rural community of Santa Ysabel. SDG&E communicates with local agencies (i.e., the County of San Diego) about the use of these temporary staging areas to ensure the avoidance of any temporary land use impacts. The use of these staging areas and stringing sites would be temporary and compatible with existing land uses or designation. Therefore, Proposed Project activities would not conflict with any applicable land use plan, policy, or regulation; and no impacts would occur.

Substitute or additional staging yards may be considered if necessary during construction. Any potential necessary staging yards would be located within previously disturbed areas, or paved areas, and would go through environmental review pursuant to the *SDG&E Subregional NCCP* and other SDG&E environmental review procedures prior to use.

The Proposed Project involves the replacement of existing electric facilities within SDG&E ROW and substation property and does not include the construction of any new electric power facilities in areas where similar facilities do not already exist. The Proposed Project is consistent with the plans, policies, and goals of the *Ramona Community Plan*, *Central Mountain Subregional Plan*, *North Mountain Subregional Plan*, and the *San Diego County General Plan*, as well as the zoning designations. In addition, there would be no change in the land use or land use designation of the existing SDG&E ROW and/or easement area. As the Proposed Project is part of SDG&E's long-term plan to improve reliability and reduce fire risks in fire-prone areas through fire hardening or other enhancements, it will advance local goals and policies regarding

minimization of fire risks. Therefore, Proposed Project activities would not conflict with any applicable land use plan, policy, or regulation; and no impacts would occur.

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." Therefore, no impacts to applicable land use plan, policy, or regulation are anticipated.

4.9.4.4 Question 9c – Conflict with any applicable habitat conservation plan or natural community conservation plan?

Construction and Operation & Maintenance – No Impact

The Proposed Project traverses Simon Preserve, which is managed under the *Simon Preserve Resource Management Plan*. In 1995 the preserve was acquired by the County of San Diego for incorporation into the *North County Multiple Species Conservation Program*. The Proposed Project also traverses the Mt. Gower Preserve, a BLM owned and County of San Diego administered preserve. The Mt. Gower Preserve is located within the draft North County MSCP Plan and the BLM South Coast Resource Management Plan. The eastern portion of the Proposed Project is also located within the East County MSCP, which has not yet been adopted. See Section 4.4, Biological Resources, for additional details regarding the *SDG&E Subregional NCCP*. *SDG&E's Subregional NCCP* supersedes other local HCP plans and does not conflict with the draft North County and East County MSCP Plans.

Moreover, the Proposed Project involves the reconstruction of existing power line and distribution facilities. SDG&E currently operates and maintains these facilities in compliance with the *SDG&E Subregional NCCP*. SDG&E's existing facilities and operations and maintenance activities constitute the baseline against which the impacts of the Proposed Project are evaluated. 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.

Therefore, there would be no impact.

4.9.5 Project Design Features and Ordinary Construction/Operating Restrictions

SDG&E will construct, operate, and maintain the Proposed Project pursuant to the project design features and ordinary construction and operating restrictions (refer to Section 3.8), including the *SDG&E Subregional NCCP*.

4.9.6 Applicant Proposed Measures

The Proposed Project has no potentially significant impacts relating to land use and planning; therefore, no APMs are proposed.

4.9.7 Detailed Discussion of Significant Impacts

Based upon the preceding analysis, no significant impacts relating to land use and planning are anticipated from the Proposed Project.

4.9.8 References

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U.S. Bureau of Land Management *South Coast Draft Resource Management Plan (2011)*. Online: http://www.blm.gov/ca/st/en/fo/palmsprings/Draft_Resource_Management_Plan_and_EIS.html. Site visited November 2012.

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4.10 NOISE

Would the project:		Potentially Significant Impact	Potentially Significant Unless APMs Incorporated	Less than Significant Impact	No Impact
a.	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b.	Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c.	A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d.	A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e.	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f.	For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

4.10.1 Introduction

This section of the PEA describes existing conditions and the potential effects of the Proposed Project in relation to noise and vibration. It includes a study of the noise impacts resulting from the construction and operation of the Proposed Project. The study identifies the location of any sensitive receptors and describes the ordinary construction restrictions that would be implemented to minimize noise during both construction and operation of the Proposed Project.

Construction noise-related impacts from the 69kV power line are expected to be short-term at any given location and therefore minimal. Construction noise, while varying according to the equipment in use, will be minimized by the attenuating effect of distance; the intermittent and short lived character of the noise; and the use of functional mufflers on all construction equipment. Further, the nature of construction to be performed for the 69kV power line dictates that construction activities and associated noise levels will move along the corridor and that no one residence will be exposed to significant noise levels for an extended period. When operational, the power line will not generate significant noise, and once completed the noise levels will return to the current conditions.

4.10.2 Methodology

Information regarding the potentially applicable noise standards was obtained from federal, state, regional, and local literature reviews. Evaluation of potential noise impacts from the Proposed Project included examining typical noise levels associated with the proposed construction equipment and resulting construction and operation activities. Data for construction equipment emissions were obtained from the literature. The analysis focuses on the construction and operation of the Proposed Project.

4.10.3 Existing Conditions

4.10.3.1 Regulatory Setting

Federal

There are no federal noise standards that directly regulate the noise from operation of electrical power lines or substation facilities. However, in 1974 the USEPA established guidelines for noise levels in order to protect the general population from any identified effects of noise. These guidelines are summarized in the Table 4.10-1, USEPA Guidelines.

Table 4.10-1: USEPA Guidelines

Sound Level Evaluation	Limit	Purpose of Guideline
L_{eq} (24)	70 dBA	Protect against hearing loss
L_{dn}	55 dBA	Protect against activity interference and annoyance in residential areas, farms, and other outdoors areas where quiet is a basis for use
L_{eq} (24)	55	Protect against outdoor activity interference where limited time is spent (e.g. school yards, playgrounds)
L_{dn}	45 dBA	Protect against indoor activity interference and annoyance in residences
L_{eq} (24)	45 dBA	Protect against indoor activity interference in school yards

These levels are not enforceable standards or regulations. They are provided in order to protect the public health and welfare, and to provide guidelines for the creation and implementation of local noise standards.

The following federal laws have been passed in order to regulate and limit noise levels.

Noise Pollution and Abatement Act of 1970

The Noise Pollution and Abatement Act of 1970 was passed in order to establish the Office of Noise Abatement and Control (ONAC) within the USEPA. ONAC is authorized to conduct investigations of noise, as well as its effect on public health and welfare. These investigations include the identification of noise sources, projected future noise levels, and the effects of the noise on people, property, and animals.

It was concluded in 1981 that noise issues were best handled at the state or local government level. ONAC's funding was phased out in 1982 as the primary responsibility of regulating noise was passed from the federal government to the state and local governments. Despite being defunded, the Noise Control Act of 1972 and the Quiet Communities Act of 1978 have not been rescinded by Congress and remain in effect. These Acts are described below.

Noise Control Act of 1972

The Noise Control Act of 1972 is a statute that initiated a federal program of regulating noise pollution, in order to protect human health and minimize the annoyance of noise to the general public. It set emission standards for virtually every source of noise, and informed local governments to their responsibilities in land use planning in order to address noise.

Quiet Communities Act of 1978

The Quiet Communities Act of 1978 amended the Noise Control Act. It promoted the development of effective state and local noise control programs, and provided funds for research. It also produced educational materials on the harmful effects of noise, and mitigation measures. The FAA, Federal Railroad Administration, DOT, and Department of Labor have since developed their own noise control programs. Each agency has set its own criteria.

Federal Transit Administration

The Federal Transit Administration, under the DOT, created a noise and vibration impact assessment manual. It provides guidance for evaluating construction, roadway, and railway noise sources. The manual also presents techniques for predicting and assessing potential noise and vibration impacts, primarily based on the receptor land use.

Federal Aviation Administration

The FAA has established a 65 decibels (dB) Community Noise Equivalent Level (CNEL) as the noise standard associated with aircraft noise. The CNEL is a time-weighted descriptor that applies penalties of 5 A-weighted sound level (dBA) to the evening hours and 10 dBA to the nighttime hours to account for the increased sensitivity to noise during the periods. The penalty values are added to the hourly equivalent sound levels (L_{eq}) prior to computing the weighted 24-hr CNEL level.

State*California Noise Control Act*

The California Noise Control Act states that excessive noise is a serious hazard to public health and welfare. It declares that exposure to certain levels of noise can result in damage, whether it be psychological, physiological, or even economic. This act declares that the State of California is responsible for protecting the health and welfare of its citizens, and must control, prevent, and abate hazardous noise.

California Department of Transportation- and Construction-Induced Vibration Guidance

This regulation provides practical guidance on addressing vibration issues associated with the construction, operation, and maintenance of Caltrans projects. Continuous/frequent intermittent vibration sources are significant when their peak particle velocity (PPV) exceeds 0.1 inch per second. Table 4.10-2, Human Response to Transient Vibration outlines some more specific criteria for human annoyance due to vibration. Though the guidance is non-enforceable, it provides the basis for evaluating potential vibration from the Proposed Project.

Table 4.10-2: Human Response to Transient Vibration

Human Response	PPV (inches/second)
Severe	2.0
Strongly Perceptible	0.9
Distinctly Perceptible	0.24
Barely Perceptible	0.035
Source: Caltrans, 2004	

Local*County of San Diego*

The County of San Diego Noise ordinance contains sound level limits and other noise regulations. Normal operation of the power lines and any associated equipment is limited to the noise limits summarized in Table 4.10-3, County of San Diego Sound Level Limits.

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Table 4.10-3: County of San Diego Sound Level Limits

Location	Time	One-Hour Average Sound Level Limits (dBA)
Residential, Agriculture, and Semi-Rural Zones with a General Plan Land Use Designation density of less than 10.9 dwelling units per acre	7 a.m. to 10 p.m.	50
	10 p.m. to 7 a.m.	45
Residential, Agriculture, and Semi-Rural Zones with a General Plan Land Use Designation density of 10.9 or more dwelling units per acre	7 a.m. to 10 p.m.	55
	10 p.m. to 7 a.m.	50
Commercial Zones	7 a.m. to 10 p.m.	60
	10 p.m. to 7 a.m.	55
Industrial Zones	Anytime	70-75*
* Varies based on exact designation of zone		
Source: San Diego County Code of Regulatory Ordinances, 2009		

The San Diego County Code provides separate limitations on construction noise, which is not subject to the limits in Table 4.10-3. Construction noise is prohibited outside the hours of 7 a.m. to 7 p.m., and is prohibited on Sundays and holidays. Construction noise is further limited to an average of 75 dB over an eight-hour period, 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.

Also provided in the County of San Diego Code are sound level limitations on impulsive noise. The Code limits impulsive noise at the property lines of the receiving occupied property use. These limitations are provided below as L₂₅ noise limits. The L₂₅ is the noise level exceeded 25 percent of the time; therefore, no impulse noise produced is to exceed the maximum sound level listed in the Table 4.10-4, County of San Diego Impulsive Sound Level Limits for more than 15 minutes in any hour-long measurement period.

Table 4.10-4: County of San Diego Impulsive Sound Level Limits

Occupied Property Use	Decibels (dBA)
Residential, village zoning or civic use	82
Agricultural, commercial or industrial use	85

In the event certain projects cannot conform to the requirements of the County noise ordinance, the County of San Diego Code expressly authorizes the County noise control officer to grant a variance to allow temporary deviations from those requirements. The variance process is outlined in Section 36.423 of the County Code and expressly applies to non-emergency work on a public utility facility. An application for a variance may be made to the county noise control

officer, who evaluates the request and determines if a variance will be issued. The evaluation includes review if the potential impact the noise may have on each property that would be affected, the value to the community of the work being done, and other factors.

San Diego County Noise Element

The San Diego County Noise Element addresses the County’s need to enforce California noise standards, the need for a land use and transportation planning program, and includes recommendations for reducing unnecessary noise in the acoustical environment. The majority of the element focuses on transportation noise. It also gives guidance on acceptable sound levels for new development. The noise element does not specifically address construction related noise.

4.10.3.2 Noise Setting

Overall Project Setting

The Proposed Project involves the replacement of existing wood poles with new weatherized steel poles along a 14-mile segment of TL 637. TL 637 is a 69kV, mostly single circuit power line located in the unincorporated communities of Ramona and Santa Ysabel, in San Diego County, California. It passes through densely vegetated and fire-prone areas, on public and private lands. This includes lands managed by the County of San Diego, BLM, and Cleveland National Forest.

Summary of Noise-Sensitive Receptors

The majority of the power line passes through rural residential and undeveloped areas, with some residences in close proximity to the Proposed Project on the western portion of the Proposed Project. Noise sensitive areas are considered to be any areas where there are dwelling units, or sites where frequent human uses occur. This includes residences, schools, libraries, hospitals, and public parks.

4.10.4 Potential Impacts

4.10.4.1 Significance Criteria

Thresholds of impact significance were derived from Appendix G of the *CEQA Guidelines*. Under these guidelines, the Proposed Project could have a potentially significant impact regarding noise if it would result in:

- a) 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 ground borne vibration or ground borne noise levels;
- c) 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;

- e) Exposure of people residing or working in the project area to excessive noise levels for a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public-use airport; or
- f) Exposure of people residing or working in the project area to excessive noise levels for a project within the vicinity of a private airstrip.

4.10.4.2 Question 10a – Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.

Construction – Less Than Significant Impact

Power Line

Construction of the Proposed Project is expected to take approximately nine months to complete. However, each pole installation site can be considered a separate construction site. Construction at each site will include clearing of the sites, foundation excavation, concrete placement, steel pole installation, and wire stringing. The existing wood poles will be completely removed, and the holes backfilled with soil from the pole replacement, except where pole removal will impact sensitive resources. Construction will require the temporary use of noise-generating equipment. The construction equipment to be used is similar to that used during typical public works projects. Typical noise levels from these construction sources are provided in Table 4.10-5, Typical Construction Sound Levels, for a reference distance of 50 feet.

Table 4.10-5: Typical Construction Sound Levels

Equipment	Maximum Noise Level at 50 feet (dBA)
Air Compressor	80 ⁽¹⁾
Auger	85 ⁽¹⁾
Wire Pulling Machine	80 ⁽²⁾
Mower	88 ⁽²⁾
Drill Rig	85 ⁽¹⁾
Grader	85 ⁽¹⁾
Hydraulic Rock-Splitting/Drilling Equipment	89 ⁽³⁾
Truck	85 ⁽¹⁾
Helicopter at Takeoff	90 ⁽⁴⁾
(1) Massachusetts Big Dig Noise Control (2) Ebasco, 1989 (3) Federal Highway Administration, 2006 (4) TRC, 2001	

It is important to note that the equipment presented will not generally be operated continuously, nor will the equipment always operate simultaneously. There will therefore be times when no

equipment is operating and noise will be at ambient levels. Typical usage factors for this type of construction equipment were applied to the above sound levels in order to arrive at the average sound level that may occur during a typical 8-hour workday. The usage factors account for the fact that equipment are not always operated at full throttle conditions, and are not used for an entire 8-hour workday. Table 4.10-6, Construction Sound Levels Adjusted for 8-Hour Day provides the construction sound levels, adjusted to reflect a typical eight hour day. Table 4.10-6 also provides the sound levels expected at various distances from any pole site, from 50 feet out to 1,000 feet.

Table 4.10-6: Construction Sound Levels Adjusted for 8-Hour Day

Equipment	Adjusted Noise Level for 8-hour Day (dBA)				
	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

The County of San Diego noise code exempts construction noise from the limits in Table 4.10-3, provided that construction occurs between the hours of 7 a.m. to 7 p.m., and, when measured over an eight hour day, to less than 75 dBA at an adjoining property line. Although daily construction activities cannot be predicted and will vary depending on conditions in the field, the data in Table 4.10-6 above reveals that it is possible that construction sound levels may exceed the 75 dBA limit at the few noise sensitive area (NSA) locations where construction will occur within 50 feet of a residential property line. NSAs along a majority of the route are much further away from where construction will occur, and construction noise levels in these areas will be much lower as shown in Table 4.10-6 above. Nonetheless, in the event construction noise is anticipated to exceed 75d BA at adjacent properties with NSAs located within 50 feet of construction activities, SDG&E will meet and confer with the County to discuss temporarily deviating from the requirements of the Noise Code, as described in the construction noise variance process (Code Section 36.423). This meet and confer process is an ordinary construction restriction. If requested by the County, SDG&E will evaluate the potential re-location of residents and/or the use of portable noise barriers.

Work in the proximity of any single general location on the power line will likely last no more than a few days to one week, as construction activities move along the corridor. Therefore, no single receptor will be exposed to significant noise levels for an extended period.

The noise levels presented in Tables 4.10-5 and 4.10-6 are those that would be experienced by people outdoors. A building will provide significant attenuation of associated construction noise impacts. For instance, sound levels can be expected to be up to 27 dBA lower indoors

with windows closed. Even in homes with the windows open, indoor sound levels can be reduced by up to 17 dBA.

Hydraulic rock drilling or rock blasting may be used to minimize the drilling time. Rock blasting, if utilized, would substantially reduce construction time at any one location as extensive digging in hard rock would not be required. Blasting would therefore have the effect of reducing potential noise impacts. Noise associated with these activities would occur intermittently, over short periods of time. Rock blasting, if used, is typically performed only once per day and would therefore not exceed the County's impulsive noise standards. In addition, should blasting be determined to be required, a noise and vibration calculation will be prepared and submitted to SDG&E Environmental Programs for review before blasting at each site. The construction contractor will be required to comply with all relevant local, state, and federal regulations relating to blasting activities.

As an additional ordinary construction restriction, functional mufflers will be maintained on all equipment minimize noise levels.

Staging Areas

In addition to the pole construction sites, there will be four staging areas in use during the Proposed Project. Staging areas will be used for refueling construction vehicles, pole assemblage, open storage of material and equipment, trailers, portable restrooms, parking, and lighting. Staging areas may also be utilized for helicopter landing zones. Noise generated at these sites will be intermittent, and typically associated with periodic movement of equipment in and out of the staging area. No construction will occur in the staging area. The staging areas and the distance to the nearest NSA for each are listed in Table 4.10-7, Project Staging Areas.

Table 4.10-7: Project Staging Areas

Staging Area	Distance/Direction to Nearest NSA
Warnock	125 feet / E
Creelman	650 feet / SW
Woodlot	650 feet / W
Santa Ysabel	100 feet / N

Sound levels associated with staging area use are anticipated to be below the County noise limits at nearby NSAs. Construction activities would not occur in the staging areas and therefore, the construction noise levels presented (refer to Tables 4.10-5 and 4.10-6) would not be generated. No noise impacts are anticipated to be associated with staging area use.

Helicopter Landing Zones

Helicopters may be required in order to remove the existing wood poles, install the replacement steel poles, and to string the new wires. The helicopters will utilize two landing zones, and potentially the four staging areas, for take-offs and landings. A typical helicopter noise level is 90 dBA at 50 feet (refer to Table 4.10-5). The proposed landing zones and staging areas are listed in Table 4.10-8, Project Helicopter Landing Zones and Associated Sound Levels, along

with the distance to the nearest NSA and the maximum sound levels that could be expected at the NSA.

Table 4.10-8: Project Helicopter Landing Zones and Associated Sound Levels

Helicopter Landing Zone	Distance/Direction to Nearest Noise Sensitive Area	Helicopter Noise Level
Mount Gower	1350 feet / NW	61 dBA
Littlepage Road	2150 feet / W	56 dBA
Warnock	400 feet / E ⁽¹⁾	71 dBA
Creelman	650 feet / SW	67 dBA
Woodlot	650 feet / W	67 dBA
Santa Ysabel	400 feet / N ⁽¹⁾	71 dBA

(1) Center of staging area would be used for helicopter takeoff and landing.

Calculated helicopter noise levels at the nearest NSAs are shown in Table 4.10-8 to be well below the County noise ordinance limit. Takeoffs and landings at the Santa Ysabel and Warnock Staging Areas, if they are utilized, would be limited to the center of the staging area in order to reduce noise levels at the nearest NSAs. No noise impacts are anticipated to occur for helicopter landing zone use. Helicopter usage for Proposed Project construction will be limited to those hours deemed acceptable for construction activities by the County of San Diego Noise Code (7 a.m. to 7 p.m.).

Operation & Maintenance – No Impact

The Proposed Project will not increase the voltage of the power lines over the existing condition. As such, any minimal corona noise levels would not change. Under normal circumstances, 69kV power lines do not produce a discernible noise. Modern power lines have been designed, and are constructed and maintained, to generate a minimum of corona-related noise. Under certain rain or fog conditions, corona noise can increase. Typical noise levels, under these conditions, should be less than 32 dBA at 50 feet. Under very heavy rainfall, the corona noise may increase to 44 dBA at 50 feet. However, this noise is generally masked by the sound of falling rain. Also, in most cases, people are indoors where the sound would be inaudible during these times.

Noise levels associated with the operation of the Proposed Project will not exceed the San Diego County noise ordinance. Short-term operational noise may be generated when regular or emergency maintenance is needed. However, this is consistent with the existing conditions, as periodic maintenance is currently conducted for the existing power line.

4.10.4.3 Question 10b – Exposure of persons to or generation of excessive ground borne vibration or groundborne noise levels.

Construction – No Impact

Construction activities have the potential to generate groundborne vibration and groundborne noise, depending on the type of construction equipment in use and the distance to the receiver.

The County of San Diego noise ordinance limits groundborne vibration; however, short-term construction is exempt from the standards.

The human response thresholds for vibration (refer to Table 4.10-2), indicate that vibration is barely perceptible with a PPV of 0.035. Table 4.10-9, Vibration Source Levels for Construction Equipment at 50 feet provides vibration source levels for some construction equipment, which have been normalized to a reference distance of 50 feet, which is approximately the closest any one single residence would be to any pole site.

Table 4.10-9: 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	

Referring to the data in Table 4.10-9, vibration levels would be below the barely perceptible response level. Because the closest residences are 50 feet or more away from where any construction would occur, no impacts are anticipated.

Vibration levels associated with rock blasting, if conducted, are site-specific and are dependent on soil/rock conditions at the site, the amount of explosive used, and the depth that the blasting occurs. In the unlikely event that rock blasting is used during construction, SDG&E will implement ordinary construction restrictions to ensure that any blasting activities comply with applicable laws, regulations, and ordinances; and that potential adverse effects from blasting activities located near NSAs will remain less than significant.

Operation & Maintenance – No Impact

SDG&E currently maintains and operates extensive 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. Therefore, no impacts due to vibration from operation and maintenance would occur.

4.10.4.4 Question 10c – A substantial permanent increase in ambient noise levels in the project vicinity above levels without the project.**Construction – No Impact**

Construction activities will be a temporary feature, performed over nine to eleven months. Therefore, no permanent increase in ambient noise levels would occur, and there would be no impact.

Operation & Maintenance – No Impact

As described in the response to Question 10a, the Proposed Project will not increase the voltage rating of the existing power line. As such, any minimal corona noise that currently occurs will not increase, and no noise impact would occur.

SDG&E currently maintains and operates extensive 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. Therefore, no impacts due to noise from operation and maintenance would occur.

4.10.4.5 Question 10d – A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.**Construction – Less Than Significant Impacts**

Impacts during construction have been outlined in the response to Question 10a. Construction activities along the power line will result in potential periodic noise impacts. However, such impacts will be temporary, localized, and intermittent. Ordinary construction restrictions (refer to Section 3.8, Project Design Features and Construction/Operation Restrictions) will be utilized in order to minimize noise impacts that occur during construction. Therefore, impacts would be less than significant.

Operation & Maintenance– No Impact

Impacts during operation and maintenance of the Proposed Project have been outlined in the responses to Questions 10a and 10c. No substantial temporary or periodic increases in ambient noise levels are expected; therefore, there would be no impact.

4.10.4.6 Question 10e – For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels.

Construction, Operation & Maintenance – No Impact

The Proposed Project is not located within two miles of a public airport. The nearest public airport is Ramona Airport, located approximately 3.1 miles from the Creelman Substation. The Proposed Project would not use this airport for construction, operation or maintenance. No impacts would occur.

4.10.4.7 Question 10f – For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels.

Construction, Operation & Maintenance – No Impact

The Proposed Project area is located within the vicinity of private airstrips. The Proposed Project would not use these airstrips for construction, operation or maintenance. No impacts would occur.

4.10.5 Project Design Features and Ordinary Construction/Operating Restrictions

With implementation of the ordinary construction restrictions (as outlined within Section 3.8) potential impacts relating to construction-generated noise will remain less than significant and the Proposed Project will comply with local noise ordinances.

4.10.6 Applicant Proposed Measures

The Proposed Project has no significant impacts relating to noise; therefore, no APMs are proposed.

4.10.7 Detailed Discussion of Significant Impacts

Based upon the preceding analysis, no significant impacts relating to noise are anticipated from the Proposed Project.

4.10.8 References

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4.11 POPULATION AND HOUSING

Would the project:		Potentially Significant Impact	Potentially Significant Unless APMs 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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b.	Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c.	Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

4.11.1 Introduction

This section of the PEA describes the existing conditions and potential project-related impacts to population and housing. The Proposed Project would not result in displacement of existing housing or people resulting in the construction of replacement housing, and would not increase capacity or extend service. The Proposed Project would not induce substantial population growth during construction or operation and maintenance. Therefore, no impacts are anticipated.

4.11.2 Methodology

Data used to conduct demographic and economic analyses were obtained primarily from statistical reports published by the United States Census Bureau and the California Department of Finance. A literature search was also conducted, which included City and County of San Diego publications supplemented by Internet searches of government websites, including the San Diego Association of Governments (SANDAG).

4.11.3 Existing Conditions

4.11.3.1 Population

The Proposed Project is located in unincorporated San Diego County, California. The alignment runs through the communities of Ramona and Santa Ysabel. The community of Ramona had a population of 40,261 people in 2010 and is projected to increase by 37 percent by 2020 to reach 55,024 people. No population data is available for Santa Ysabel. Unincorporated San Diego County had a population of 495,281 people in 2010 and includes 63 unincorporated communities; the population is projected to increase by 26.6 percent to reach 627,142 people in 2020. In 2010, San Diego County had a population of 3,104,084 people and the County is projected to grow to 3,391,010 people by 2020, an increase of 9.4 percent. Population figures

for the year 2010 and the projected population for 2020 is provided in Table 4.11-1, Total Population.

Table 4.11-1: Total Population

Community/County/Region	Population in 2010	Population Projections for 2020 ¹
Community of Ramona	40,261	55,024
Unincorporated San Diego County	495,281	627,142
San Diego County	3,104,084	3,391,010
<i>Source:</i>		
1. San Diego General Plan Update EIR 2011.		

4.11.3.2 Housing

Table 4.11-2, Total Housing Units and Vacancy Rates (2010-2012) summarizes the total housing units and vacancy rates. The community of Ramona has approximately 7,000 housing units with a vacancy rate of 1.8 percent. The unincorporated San Diego County vacancy rates are much higher at 8.03 percent and San Diego County is slightly lower at 6.66 percent. Table 4.11-3, Housing Needs Assessment (2011) identifies the amount of housing required to meet demand for all income levels.

Table 4.11-2: Total Housing Units and Vacancy Rates (2010-2012)

Community/County/Region*	Housing Units	Vacancy Rate (percent) ¹
Community of Ramona	7,083	6.4
Unincorporated San Diego County	175,031	8.03
San Diego County	1,170,267	6.66
<i>*Data for Community of Ramona is for 2010; data for San Diego County and unincorporated San Diego County is for 2012.</i>		
<i>Sources:</i>		
1. United States Census Bureau, 2010; State of California.		
2. Department of Finance, 2012, 2010; State of California.		

Table 4.11-3: Housing Needs Assessment (2011)

Community/County/Region	Very Low Income	Low Income	Moderate Income	Above Moderate Income	Total
Community of Ramona	Not Available	Not Available	Not Available	Not Available	Not Available
Unincorporated San Diego County	2,085	1,585	5,864	12,878	22,412
San Diego County	36,450	27,700	30,610	67,220	161,980
<i>Source:</i>					
1. City of San Diego, 2011.					

4.11.3.3 Temporary Housing

There are four hotels/motels in the community of Ramona: The Riviera Oaks Resort, San Diego Country Estates, San Vincent Golf Resort, and Ramona Valley Inn. Additional hotels/motels are located in the Cities of Escondido and Poway.

4.11.3.4 Employment and Income

Table 4.11-4, Total Employment and Unemployment (2011) summarizes employment statistics in the Proposed Project area for the year 2011. San Diego County had a slightly higher unemployment rate of 10.0 percent in 2011 than the community of Ramona at 9.2 percent.

Table 4.11-4: Total Employment and Unemployment (2011)

Community/County/Region	Number of Laborers	Unemployment Rate (percent)
Community of Ramona	9,100	9.2
Unincorporated San Diego County	Not Available	Not Available
San Diego County	1,598,200	10.0
<i>Source:</i>		
1. California Employment Development Department, 2012.		

As illustrated in Table 4.11-5, Median Household Income, the median incomes in the community of Ramona and unincorporated San Diego County are comparable at \$66,217 and \$66,689 respectively, while San Diego County's median household income is lower at \$61,247.

Table 4.11-5: Median Household Income

Community/County/Region	Median Household Income (\$)*
Community of Ramona	66,217
Unincorporated San Diego County	66,689
San Diego County	61,247
<i>* Community of Ramona and San Diego County data taken from 2011. Unincorporated San Diego County data from 2010.</i>	
<i>Sources:</i>	
1. Department of Finance, 2012; State of California.	
2. SANDAG, 2012.	

4.11.4 Potential Impacts

4.11.4.1 Significance Criteria

Thresholds of impact significance were derived from Appendix G of the *CEQA Guidelines*. Under these guidelines, the Proposed Project could have a potentially significant impact to population and housing if it would:

- a) Induce substantial population growth in the project 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; or
- c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

4.11.4.2 Question 11a - Induce substantial population growth in the project area either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Construction – No Impact

Construction activities are expected to last approximately nine months. During the three to four months of peak construction, SDG&E could employ up to approximately 140 workers per day (including construction monitors and support staff). SDG&E would supplement its workforce as required during construction from a contractor’s pool of experienced personnel, most of whom would be located within 30 miles of the Proposed Project. It is anticipated that much less than 140 workers would need to reside temporarily at local lodging establishments. Most of the monitors, inspectors, and other support staff will be from the existing labor pool, many of which will be SDG&E employees. The need for temporary lodging would therefore be on an as-need basis, and is anticipated to be primarily met by hotels and motels available in the community of Ramona and nearby cities. Due to the short duration of construction and existing local work force, construction of the Proposed Project is not anticipated to result in substantial population growth in the Proposed Project area. Any temporary increase in local population would be insignificant with respect to the total population of San Diego County, unincorporated San Diego County, and the community of Ramona. Construction of the Proposed Project would not result in any other increases in population as the Proposed Project would not provide access to previously inaccessible areas, extend public services to previously un-served areas, or cause new development elsewhere. Therefore, no impacts relating to substantial population growth are anticipated.

Operation & Maintenance – No Impact

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 constitute 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. The Proposed Project would not extend any existing electric infrastructure into any currently un-served areas. No full-time SDG&E staff would be required for new operation or maintenance purposes, and no new jobs would be required. Therefore, no impacts would occur to population or housing.

4.11.4.3 Question 11b – Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?**Construction and Operation & Maintenance – No Impact**

The Proposed Project is the reconstruction of existing electric facilities within existing SDG&E ROW and substation property. The Proposed Project would not displace any existing housing, as all of the replacement structures would be located within SDG&E's existing ROW. The Proposed Project would not require the construction of replacement housing elsewhere and no impacts would occur.

4.11.4.4 Question 11c – Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere**Construction and Operation & Maintenance – No Impact**

The Proposed Project is the reconstruction of existing electric facilities within existing SDG&E ROW and substation property. Construction, operation, and maintenance of the Proposed Project would not displace any people, therefore no impacts would occur.

4.11.5 Project Design Features and Ordinary Construction/Operating Restrictions

There are no project design features or ordinary construction/operating restrictions related to Population and Housing that are applicable to the Proposed Project.

4.11.6 Applicant Proposed Measures

The Proposed Project has no impact on population and housing; therefore, no APMs are proposed.

4.11.7 Detailed Discussion of Significant Impacts

Based on the preceding analysis, no significant impacts on population and housing have are anticipated from the Proposed Project.

4.11.8 References

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4.12 PUBLIC SERVICES

Would the project:		Potentially Significant Impact	Potentially Significant Unless APMs Incorporated	Less than Significant Impact	No Impact
a.	Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i.	Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii.	Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii.	Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv.	Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
v.	Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

4.12.1 Introduction

This section of the PEA describes local public services in the vicinity of the Proposed Project. Fire and police protection, public parks, schools, and other public facilities such as hospitals are addressed, and the potential effects resulting from the Proposed Project construction, operation, and maintenance are evaluated. Impacts from restricted access to existing parks and other recreational facilities are discussed in Section 4.13, Recreation.

4.12.2 Methodology

Public service, utilities, and service systems data were obtained from searches of local government websites and other local service informational resources. The review also included Google Earth maps, aerial photographs of the Proposed Project area, GIS data, and online maps.

4.12.3 Existing Conditions

4.12.3.1 Public Services Setting

Fire Protection

Fire Protection and Emergency Medical Services in the Ramona area are provided by the Ramona Municipal Water District (RMWD), which contracts with the California Department of Forestry and Fire Protection (CAL FIRE) for these services. These services include 33 full-time firefighters, 11 per day, covering three fire engines, one rescue unit, and two paramedic transport ambulances. The RMWD-Ramona Fire Department covers approximately 75 square miles.

Outside of the RMWD, services are provided by CAL FIRE; volunteer fire companies; and for federal lands surrounding the Ramona area, the USFS, and Cleveland National Forest.

There are three fire stations in Ramona, which house personnel and equipment 24 hours a day, 365 days every year. Fire Station 80, located at 829 San Vicente Road, is approximately 2 miles from the western end of the Proposed Project area. Fire Station 81, operated by the USFS, is approximately 2.8 miles from the portion of the Proposed Project area that crosses the San Diego Country Estates subdivision, and is located at 24462 San Vicente Road.

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 A Hwy 78 in Ramona, is approximately 3.5 miles from the Proposed 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 Proposed Project Area. Station 85 has a fire engine, rescue vehicle, brush vehicle, and water tender. Station 54 has a brush vehicle that holds 500 gallons of water.

There is a Mutual Aid agreement between CAL FIRE, Inter-Mountain Fire, the RMWD, and the San Diego Rural Fire Protection District, whose jurisdiction covers a portion of the Ramona Planning Area. Agreements with all fire service providers provide first-responder services for any emergency incident, known as the closest resource concept.

CAL FIRE and the USFS provide watershed and wildland fire protection services in the areas within their jurisdiction. CAL FIRE protects the State Responsibility Areas from one station located on Hwy 79. The USFS is responsible for fire protection of all federal wildlands. The USFS operates four stations within the Subregion: the Descanso Substation located on Viejas Grade Road; the Laguna Substation/Camp Ole in Mt. Laguna; the Glen Cliff Substation on Old Hwy 80, in the Pine Valley Area; and the Pine Hills Substation on Boulder Creek Road.

Law Enforcement

Law enforcement services are provided to the Ramona Community Planning Area by the San Diego County Sheriff’s Department. The department is comprised of approximately 4,000 employees, both sworn officers and professional support staff. In the unincorporated areas, the Sheriff’s Department provides generalized patrol and investigative services. San Diego County Sheriff’s Ramona Substation serves the community of Ramona and the San Diego Country Estates subdivision. The Ramona Substation provides law enforcement services to nearly 40,000 residents in an area of over 150 square miles. It is located at 1424 Montecito Road in Ramona, approximately 3 miles northwest of the Proposed Project area. The substation is staffed by one lieutenant, three sergeants, three detectives and 17 deputies. In addition, reciprocal-aid agreements are in effect with the neighboring City of Poway.

The County Sheriff provides basic law enforcement service to the Central Mountain Subregion. This area is within the Rural Division of the Sheriff’s Law Enforcement Operations Bureau, and is served by two sheriff substations. The Julian Substation serves an area of over 200 square miles and includes the community of Santa Ysabel. The substation is located at 2907 Washington Street in Julian, approximately 6.6 miles southeast of the Proposed Project area. Service in the Subregion is below the Sheriff Department’s acceptable response time of 12 minutes for priority calls and 24 minutes for non-priority calls in rural areas.

Within the Cleveland National Forest, law enforcement services are provided by the USFS, which employs approximately 590 law enforcement personnel nationwide. The authority for providing law enforcement services is described at 16 USC 551 and 559. The means to implement these authorities are found in 36 CFR 261 and Title 18 of the USC. Uniformed Law Enforcement Officers enforce Federal laws and regulations governing USFS Lands and resources.

Schools

San Diego County has 24 elementary school districts, six high school districts, 12 unified school districts, and 5 community college districts. The Ramona Unified School District includes five elementary schools, one middle school, two high schools, one combined middle school/high school, and one K-12 school. The Spencer Valley Elementary School District is located in Santa Ysabel, and includes one school that serves 2,266 students in grades kindergarten through 12.

There are four private schools in Ramona. Keystone Academy is a private school for grades 9-11 with 18 students, Montessori Children's Elementary school has 30 students in grades K-5, and Montessori Children's House has 23 students in grades K-7. Ramona Lutheran School serves preschool and grades K-8. There are no private schools in Santa Ysabel.

There are no schools within 0.25 mile of the Proposed Project. The closest school to the Proposed Project is the Barnett Elementary School located at 23925 Couna Way, Ramona, in the San Diego Country Estates development, approximately 0.5 mile from the Proposed Project.

Parks

The Proposed Project alignment crosses two preserves operated by the County of San Diego Department of Parks and Recreation, and the Cleveland National Forest. The 650-acre Simon Preserve includes 5 miles of trails and is open to hikers, equestrians, and mountain bikers. The 1,574-acre Mt. Gower Open Space Preserve is leased to the County by the BLM and consists of approximately 8 miles of trails and a primitive campground.

The Proposed Project also passes briefly through the boundaries of the Cleveland National Forest, at Pole Nos. P115 and P116.

Other Public Facilities

There are no hospitals or public libraries within 0.25 mile of the Proposed Project area. The closest hospital, Pomerado Hospital in Poway, is an acute care hospital that provides emergency services. It is approximately 12 miles west of the western end of the Proposed Project. Palomar Medical Center in the City of Escondido is also an acute care hospital with emergency services, and it is approximately 15 miles from the western end of the Proposed Project. The closest library is the Ramona branch of the County of San Diego public library system. The Ramona library branch is located on Main Street in Ramona, approximately 1.8 miles from the Creelman Substation.

4.12.4 Potential Impacts

4.12.4.1 Significance Criteria

Thresholds of impact significance were derived from Appendix G of the *CEQA Guidelines*. Under these guidelines, the Proposed Project could have a potentially significant impact to public services if it would:

- a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:
 - i. Fire protection;
 - ii. Police protection;
 - iii. Schools;
 - iv. Parks; and
 - v. Other public facilities.

4.12.4.2 Question 12a (i) – Impacts to fire protection?

Construction – No Impact

No emergency service providers are located within 0.25 mile of the Proposed Project alignment or adjacent to the affected substations. Construction of the Proposed Project would not result in significant temporary increases in local population, since it would be short-term and would not include any new facilities that would require new or expanded fire protection services.

SDG&E would implement the *TL 637 Project Fire Plan* a project-specific Fire Plan (refer to Section 4.7, Hazards and Hazardous Materials and Appendix 4.7-C), which exceeds fire prevention measures as stated in California Forestry Practice Rules; PRC 4:6 and SDG&E’s own wildland fire prevention procedures. In addition, portions of the Proposed Project occurring within the Cleveland National Forest must abide by the *Cleveland National Forest Fire Plan* (refer to Section 4.7 and Appendix 4.7-B). Therefore, construction project design features and ordinary construction/operating restrictions would minimize the potential increased need for fire protection services, and would not unduly burden local fire services. No impacts to fire protection services would occur.

Operation & Maintenance – No Impact

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 and would not require hiring any new workers or result

in any increase in local population. The Proposed Project, once operational, will reduce the risk of fire in the area and would therefore result in a reduction in potential need for local fire protection services. 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. Therefore, no adverse impacts relating to fire protection services would result.

4.12.4.3 Question 12a (ii) – Impacts to police protection?

Construction – No Impact

No emergency service providers are located within 0.25 mile of the Proposed Project alignment or adjacent to the affected substations. Construction of the Proposed Project would not result in significant temporary increases in local population, since it would be short-term and would not include any new facilities that would require new or expanded police services.

Construction activities associated with the Proposed Project would not unduly burden local police services. At the completion of each work day, construction crews would lock up and secure each worksite to prevent theft or vandalism associated with work equipment or supplies. Therefore, construction would not create any need for new or expanded police service and there would be no impacts.

Operation & Maintenance – No Impact

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. As a result, there would be no impact to police protection services.

4.12.4.4 Question 12a (iii) – Impacts to schools?

Construction – No Impact

There are no schools within 0.25 mile of the Proposed Project area. Barnett Elementary School is the closest school, located approximately 0.5 mile from the alignment. The Proposed Project would not affect school enrollment since construction of the Proposed Project is short-term and temporary. The duration of construction activities is sufficiently short that workers are not likely to re-locate to the local area. Thus, the Proposed Project construction work force would not be expected to generate new students for the area's schools. No new or physically altered schools would be necessary as a result of the Proposed Project and no impacts to schools would result from construction of the Proposed Project.

Operation & Maintenance – No Impact

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. As a result, there would be no impact to schools as a result of operation and maintenance.

4.12.4.5 Question 12a (iv) – Impacts to parks?**Construction – No Impact**

The Proposed Project would not require the construction of new recreational facilities as it would not result in substantial or permanent increase in the local population. Construction activities within the preserves may be considered as an increased use of the recreational areas; however, the construction activity would be temporary in nature and would not cause substantial physical deterioration of the preserves. Because no new recreational facilities would be required and no substantial physical deterioration would occur, there would be no impacts to parks.

Additional discussion of temporary closures of portions of parks during construction of the Proposed Project is included within Section 4.13, Recreation.

Operation & Maintenance – No Impact

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. As a result, there would be no impact to parks as a result of operation and maintenance.

4.12.4.6 Question 12a(v) – Impacts to other public facilities (hospitals)?

Construction – No Impact

No additional need for libraries or hospitals would be required as a result of construction. The Proposed Project would not increase the demand for, or alter the level of, local public services required because it would not measurably increase local population or housing needs during construction. Therefore, the Proposed Project would not create a need for new hospitals or other public services and there would be no impact.

Operation & Maintenance – No Impact

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. As a result, there would be no impact to hospitals or libraries as a result of operation and maintenance.

4.12.5 Project Design Features and Ordinary Construction/Operating Restrictions

With implementation of project design features and ordinary construction and operations restrictions as outlined in Section 3.8, potential impacts relating to public services will remain less than significant.

4.12.6 Applicant Proposed Measures

The Proposed Project has no potentially significant impacts relating to public services; therefore, no APMs are proposed.

4.12.7 Detailed Discussion of Significant Impacts

Based upon the preceding analysis, no significant impacts relating to public services are anticipated from the Proposed Project.

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4.13 RECREATION

Would the project:		Potentially Significant Impact	Potentially Significant Unless APMs 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b.	Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

4.13.1 Introduction

This section of the PEA describes the existing conditions and potential project-related impacts to recreational areas as a result of short- or long-term conditions associated with the implementation of the Proposed Project. In addition, this section analyzes consistency with any applicable recreational plans or policies. A recreation area is defined herein as any site or facility that is used for recreational activities, including national, State, county, city or private parks or trails; open space; cultural center or museum; campground; or private recreational site such as a golf course, amusement park, or amphitheater. No significant impacts are anticipated to occur during construction, operation, or maintenance of the Proposed Project.

4.13.2 Methodology

The recreation analysis within this section involved a review of various documents including aerial photographs of the Proposed Project area, the *Ramona Community Plan*, the *County of San Diego General Plan*, the *Simon Preserve Resource Management Plan*, the BLM’s *South Coast Resource Management Plan*, and other relevant government planning documents were reviewed to identify potential recreational resources within the Proposed Project area as well as online information sources. The review also included the use of GIS data. Site visits confirmed existing recreational resources within the Proposed Project area.

4.13.3 Existing Conditions

Segments of the Proposed Project are located within Simon Preserve and Mt. Gower Preserve, and are located near public trails within both preserves. The segment within Simon Preserve extends across the preserve for a total distance of approximately 1.1 miles. Within Mt. Gower Preserve segments cross through two portions of the preserve, with the two segments totaling approximately 1.1 miles of distance within the preserve boundaries. The Simon Preserve is a 617-acre preserve located outside of the community of Ramona, and has over five miles of multi-use trails available for use including a 550-foot climb to Ramona Peak. The Simon Preserve is open to hikers, mountain bikers, and equestrians. The Mt. Gower Preserve is a 1,574-acre preserve located southeast of the community of Ramona, and includes approximately eight miles

of trails. The area is open to hikers, mountain bikers, and equestrians. The preserve features dense chaparral, meadows, oak woodlands, and shaded stream habitats that provide a wide range of habitats for wildlife. In addition, there is a youth area available for groups up to 50 individuals, and water and restrooms are available at the trailhead. The public lands within the Mt. Gower Preserve are under a lease to the San Diego County Parks and Recreation Department. BLM retains ownership of these lands. SDG&E will place signs near the affected trailheads, advising the public of the Proposed Project and potential temporary impacts to trail users.

4.13.3.1 Regulatory Background

Communities of Ramona and Santa Ysabel

The *Ramona Community Plan* (2010) provides guidance for the community of Ramona and the surrounding area, including the San Diego Country Estates. 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 developed based on analysis by the Ramona Community Planning Group.

The *Ramona Community Plan* contains the following relevant policies and goals:

Policy COS 2.1.22: Require regional and local recreational facilities are in harmony with the community character.

The *Central Mountain Subregional Plan* (2011) provides guidance to the communities of Cuyamaca, Descanso, Guatay, Pine Valley, and Mount Laguna. The *Central Mountain Subregional Plan* is a portion of the *San Diego County General Plan* that provides goals and policies for the included communities.

The *Central Mountain Subregional Plan* contains the following relevant policies and goals:

Scenic Highways and Visual Resources Goal 1: The protection and enhancement of scenic views, wildlife habitats, native plant materials, historical and recreational resources within scenic highway corridors.

Open Space Goal 2: A system of open space that preserves unique natural features, enhances recreational opportunities, conserves scenic resources, and retains the peaceful beauty of the subregion.

Recreation Goal 1: Encourage coordination among public agencies providing recreational amenities.

Recreation Goals 6: Provide a system of parks, open space, riding and hiking trails, indoor and outdoor recreational facilities which will preserve the rural mountain lifestyle sought by the residents of Pine Valley and Descanso Planning Areas.

The *North Mountain Subregional Plan* (2011) provides guidance to the communities of Santa Ysabel, Warner Springs, Palomar Mountain, Mesa Grande, Sunshine Summit, Ranchita, and Oak

Grove. The *North Mountain Subregional Plan* is a portion of the *San Diego County General Plan* that provides goals and policies for the included communities.

County of San Diego

The County of San Diego General Plan Conservation and Open Space Element

The *County of San Diego General Plan Conservation and Open Space Element* provides guidance for future growth in the County of San Diego related to the conservation of natural and cultural resources, protection of open space, and provision of parks and recreational opportunities. The Conservation and Open Space Element discusses goals and policies involving the conservation of biological resources, water resources, agricultural resources, cultural resources, paleontological resources, mineral resources, visual resources, air quality, and recreational facilities. The Conservation and Open Space element contains the following relevant policies:

COS-23.1 Public Access. Provide public access to natural and cultural (where allowed) resources through effective planning that conserves the County's native wildlife, enhances and restores a continuous network of connected natural habitat and protects water resources.

Simon Preserve Resource Management Plan

The Simon Preserve is approximately 617 acres in size and is located from approximately 2 miles southeast of the City 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 *Simon Preserve 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. The Simon Preserve is open to the public for passive recreation, and includes designated trails as well as maintenance roads used as informal trails. However, off-road vehicle activity, hunting, fishing, swimming, camping, smoking, off-trail biking, and littering are prohibited activities within the Simon Preserve.

South Coast Resource Management Plan

The Mt. Gower Preserve is located southeast of the community of Ramona and contains approximately eight miles of multi-use trails. The BLM *South Coast Resource Management Plan (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 Mt. Gower Preserve is located within this BLM planning area, and is thus subject to the *South Coast Resource Management Plan*. This plan outlines measures that will maintain the recreational opportunities within the area, ensure compliance with habitat conservation plans, and continue the conservation and stewardship of these lands through collaboration with federal, state, and local agencies.

Mt. Gower Open Space Preserve Rules and Regulations

The BLM-administered public lands within the Mt. Gower Preserve are under a lease to the San Diego County Parks and Recreation Department. The San Diego County Parks and Recreation Department provides Rules and Regulations for public use of the Preserve in *Mt. Gower Open Space Preserve Rules and Regulations for Open Space Preserves (2000)*.

4.13.4 Potential Impacts

4.13.4.1 Significance Criteria

Thresholds of impact significance were derived from Appendix G of the *CEQA Guidelines*. These guidelines note when a proposed project could have a potentially significant impact to recreation, as follows:

- 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; or
- b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

4.13.4.2 Question 13a – Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

Construction – Less than Significant Impact

The Proposed Project does not require the construction of new recreational facilities; and it would not increase the use of existing neighborhood and regional parks or other recreational facilities, as it would not result in an increase in population. Segments of the Proposed Project are located within Simon Preserve and Mt. Gower Preserve, near public trails. During construction it may be necessary to temporarily close off sections of trails in order to keep the public at safe distances away from the construction area. The Mt. Gower HLZ is located within a County park parking lot within the Mt. Gower Preserve, and would require coordination during construction to maintain a proper safety buffer between the public utilizing these facilities and the construction areas. The helicopter use at this site would be limited as it would only be needed to remove one pole. This work will be done mid-week to minimize disruption to trail users, as the parking lot will be closed while the helicopter is in use. One segment of existing fence may have to be temporarily removed to allow for construction vehicle access. SDG&E will coordinate with the County of San Diego Parks and Recreation Department for the anticipated duration of construction. Signs will be placed at the affected trailheads, informing trail users of the Proposed Project and potential temporary impacts to trails. The construction activities within the preserves may be considered as an increased use of the recreational areas; however, the construction activity will be temporary in nature and not cause substantial physical deterioration of the preserves.

Though these temporary disruptions in the use of trails may be a temporary inconvenience to users of these trails, other public recreational options would remain available during the closures

– including other parts of both preserves and other open space parks such as the Santa Ysabel West and Santa Ysabel East Preserves located approximately 1.5 miles to the northwest and northeast of the Proposed Project. Construction-related impacts to recreation at the open space preserves would be less than significant.

Visitors to the recreational facilities in the area may experience a slight temporary increase in noise, dust, and odors from construction equipment and helicopter use during construction of the Proposed Project. These increases would occur periodically and intermittently over a period of no longer than nine months, as described further in Section 4.3, Air Quality and Section 4.10, Noise. In addition, air quality and noise impacts would be minimized with the implementation of the APMs described in Section 4.3, Air Quality and Section 4.10, Noise. As a result, impacts to recreation as a result of construction of the Proposed Project would be less than significant.

SDG&E has incorporated several design features into the Proposed Project description in order to minimize any temporary impacts that could occur. These design features are listed below in 4.13.5, Policies, Standards, Regulations, and Project Design Features.

Operation & Maintenance – No Impact

The Proposed Project would not create a need for additional housing or long-term population immigration that would result in a permanent increase in park use. No new employees would be hired to operate or maintain the Proposed Project facilities.

SDG&E currently maintains and operates extensive 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. Therefore, no impacts to recreation uses are anticipated.

4.13.4.3 Question 13b – Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

Construction and Operation & Maintenance – No Impact

The Proposed Project does not include recreational facilities or require the construction or expansion of any existing recreational facilities which might have an adverse physical effect on the environment; therefore, there are no impacts.

4.13.5 Project Design Features and Ordinary Construction/Operating Restrictions

With implementation of the project design features and ordinary construction restrictions (as outlined within Section 3.8) potential impacts relating to recreation and recreational facilities will remain less than significant.

4.13.6 Applicant Proposed Measures

The Proposed Project has no significant impacts relating to recreation or recreational facilities; therefore, no APMs are proposed.

4.13.7 Detailed Discussion of Significant Impacts

Based on the preceding analysis, no significant impacts relating to recreation are anticipated from the Proposed Project.

4.13.8 References

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4.14 TRANSPORTATION AND TRAFFIC

Would the project:		Potentially Significant Impact	Potentially Significant Unless APMs 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c.	Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d.	Substantially increase hazards due to a design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e.	Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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 supporting alternative transportation (e.g. bus turnouts, bicycle racks)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

4.14.1 Introduction

This section of the PEA describes the existing conditions and potential project-related impacts to transportation and traffic as a result of short- and long-term conditions associated with the implementation of the Proposed Project. A summary of the existing roadways, transit services, airports, and bicycle facilities, as well as a description of the regulatory setting for transportation and traffic, are presented. Also, an analysis of transportation and traffic impacts that would result from the Proposed Project is provided. Construction generated traffic would be minimal and limited in duration. Operation and maintenance traffic generation would be the same as that of existing conditions. The Proposed Project is located adjacent to several public roadways, but would not have a significant impact on transportation and traffic in the area and would not conflict with any adopted alternative transportation policies.

4.14.2 Methodology

The data regarding transportation and traffic were primarily obtained through relevant literature and internet research. The *County of San Diego General Plan*, the *Ramona Community Plan*, the *Central Mountain Subregional Plan*, the *North Mountain Subregional Plan*, and the *SANDAG* transportation publications were reviewed. In addition, a site visit was conducted to public roadways that could be directly affected by the Proposed Project.

4.14.3 Existing Conditions

4.14.3.1 Regulatory Setting

Construction projects that cross public transportation corridors are subject to local, state, and federal encroachment permits. Obstruction of navigable air space also may require approval. The following summarizes the transportation and traffic regulations that may be relevant to the construction of electric facilities, such as the Proposed Project.

Federal

All airports and navigable airspace not administered by the Department of Defense are under the jurisdiction of the 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 or extending at a ratio greater than 50 to one (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 notification to the FAA. In addition, the FAA requires a Helicopter Lift Plan for operating a helicopter within 1,500 feet of residences.

State

The use of California state highways for use other than normal transportation purposes may require written authorization or an encroachment permit from Caltrans. Caltrans has jurisdiction over the state's highway system and is responsible for protecting the public and infrastructure. Caltrans reviews all requests from utility companies that plan to conduct activities within its ROW. Encroachment permits may include conditions or restrictions that limit when construction activities can occur within or above roadways under the jurisdiction of Caltrans.

Regional

County of San Diego

San Diego County requires that the placement of any structures on, over, or under county roads obtain an encroachment permit to be approved by the Department of Public Works as required by San Diego County Code of Regulatory Ordinances Section 71.

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* Mobility

Element provides a framework for a balanced, multi-modal transportation system for the movement of people and goods within the unincorporated areas of the County of San Diego.

The *County of San Diego General Plan* does not contain any policies that apply generally to construction projects.

San Diego Association of Governments

SANDAG serves as the regional planning agency for the entire San Diego County. SANDAG is responsible for planning and allocating local, state, and federal funds for the region's transportation network. State law and the California Transportation Commission require SANDAG to adopt a 20-year regional transportation plan every four years, which considers improvements to freeways, state highways, transit, and regional bicycle and pedestrian routes.

Communities of Ramona and Santa Ysabel

The communities of Ramona and Santa Ysabel are governed by the *Ramona Community Plan*, the *Central Mountain Subregional Plan*, and the *North Mountain Subregional Plan*. The Local Road Network portion of the *Ramona Community Plan* provides guidance on proper road networks to maintain the character of the community. The Circulation and Mobility portion of the *Central Mountain Subregional Plan* describes the existing conditions within the communities and outlines policies that discourage increases in traffic volumes, minimize traffic congestion, and improve traffic flow. The *North Mountain Subregional Plan* has similar policies throughout its Land Use and Circulation sections.

4.14.3.2 Local Transportation System Overview

The Proposed Project is located in a mostly rural area between the communities of Ramona and Santa Ysabel. The Detailed Route Map (refer to Appendix 3-B) shows the location of the Proposed Project area and the existing roadway network. The daily traffic volumes and Level of Service (LOS) E Capacity of major local roadways is shown in Table 4.14-1, Average Weekday Traffic Volumes for Project Area Major Roadways. This list also includes the classification and number of lanes information for each roadway.

Most of the roadways in the Ramona community area operate at an LOS of D or better.

4.14.3.3 Freeways and State Routes

Access to the Proposed Project is primarily provided by Hwys 78, 79, and 67. These routes are two-lane roads, except for a portion of Hwy 67, which was improved to four lanes from the Ramona Community Plan Area boundary to Archie Moore Road. Although regional access is provided by Hwy 67, the Proposed Project is located in closer proximity to Hwy 78, as well as various arterial, collector, and private roads. Hwy 78 is a rural highway that provides interregional access from the City of Escondido, through the communities of Ramona and Julian, to the Salton Sea. Hwy 79 is a paved north-south, two-lane highway traversing central San Diego County. The Proposed Project ROW is located west of Hwy 79. Hwys 79 and 78 merge in Santa Ysabel.

4.14.3.4 Arterial Roads

An arterial road is a major or main route with traffic capacity just below that of highways. Arterial roads are designed to transfer traffic between neighborhoods and communities, and have intersections with collector and other arterial streets. The major arterial road in the vicinity of the Proposed Project is San Vicente Road.

San Vicente Road is classified as a Major Road in the County of San Diego Circulation Element. A “Major Road” in the County of San Diego is classified as having four lanes of travel; and access to these roads is managed through requiring new development to provide access roads, signalized intersections, and common driveways. San Vicente Road is a paved four-lane, east-west road within the San Diego Country Estates development. The Proposed Project ROW is located east and north of San Vicente Road.

4.14.3.5 Collector Roads

A collector road has a lower traffic capacity than any other type road. Collector roads function as connecting road links between arterial roads and local roads to lead traffic throughout communities and occasionally to freeways. The public collector and local roads in the vicinity of the Proposed Project include Ashley Road, Creelman Lane, Warnock Drive, Keyes Road, Big Sky Road, Arena Way, Open View Road, Harvest Point Way, Vista Ramona Road, Rutherford Road, Del Amo Road, Gunn Stage Road, Old Julian Highway, Littlepage Road, Sawday Truck Trail, Grutly Street, Cabrillo Street, Helvetia Street, William Tell Street, Columbia Street, and Washington Street. Private local roads in the vicinity of the Proposed Project include Cinnamon Rock Road, Oak Hollow Road, and West Side Road.

Table 4.14-1: Average Weekday Traffic Volumes for Project Area Major Roadways

Roadway	Cross Street	Jurisdiction	Classification	Number of Lanes	Average Weekday Traffic Volume	LOS E Capacity
Hwy 78	3rd Street	Caltrans	Highway	2	12,100	16,200
Hwy 67/ Main Street	10 th Street/ Hwy 78	Caltrans	Highway	2 - 4	26,700	16,200 – 34,200
Hwy 79	Hwy 78	Caltrans	Highway	2	1,800	16,200
San Vicente Road	Gunn Stage Road	San Diego County	Major Road	4	7,000	34,200
Ashley Road	7 th 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
Vista Ramona Road	Old Julian Highway	San Diego County	Community Collector	2	3,200	16,200

Table 4.14-1 (cont): Average Weekday Traffic Volumes for Project Area Major Roadways

Roadway	Cross Street	Jurisdiction	Classification	Number of Lanes	Average Weekday Traffic Volume	LOS E Capacity
Gunn Stage Road	San Vicente Road	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

Sources: County of San Diego General Plan Update Traffic and Circulation Assessment 2010, Appendix G Traffic And Circulation Assessment; SANDAG. Transportation Data and Traffic Counts.

4.14.3.6 Airports

The Ramona Airport is located approximately 3.2 miles west (4.6 miles by road) of the western terminus of the Proposed Project and is operated by the San Diego County Department of Public Works. The Ramona Airport is classified as a “general aviation airport,” and the airport has an Airport Land Use Compatibility Plan in place. The runway is paved and is approximately 5,000 feet in length. The Ramona Airport is the third busiest airport in the County’s regional air transportation network with an average of approximately 155,000 operations annually.

4.14.3.7 Public Transportation

Bus

Public transportation in the vicinity of the Proposed Project is provided on a limited basis by the North County Transit District. The only two bus routes in the vicinity of the Proposed Project are the Ramona FLEX Commuter and the Ramona FLEX Middyay. These two bus routes both travel from the Escondido Transit Center to downtown Ramona, off of Main Street. Both of these bus lines also require reservations. The route travels along Hwy 78 from Escondido to Ramona, where it then turns onto Main Street to continue to downtown Ramona. Therefore, the bus lines are not located along the Proposed Project route.

Bicycle Facilities

There are no designated bicycle paths within the Proposed Project.

4.14.4 Potential Impacts

The Proposed Project would involve the replacement of existing poles to improve the reliability of the utility system. The Proposed Project is more likely to affect transportation facilities or increase traffic during the construction phase of the Proposed Project than during the operation and maintenance phase, as operations and maintenance activities currently occur on TL 637. The TL 637 poles and lines already exist in the area and no increase in activity is expected once the new facilities are in service. Therefore, the transportation analysis focuses on the construction phase and potential construction-related impacts to traffic and transportation.

4.14.4.1 Significance Criteria

Thresholds of impact significance were derived from Appendix G of the *CEQA Guidelines*. Under these guidelines, the Proposed Project could have a potentially significant impact to transportation and traffic if it 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; or
- 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.

4.14.4.2 Question 14a - Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?**Construction – No Impact**

Project activities would not result in the generation of traffic that would substantially affect existing circulation. Local traffic may be temporarily affected by the movement of construction vehicles and equipment to and from the areas where pole replacements would occur.

For areas where Proposed Project construction activities may potentially affect traffic (the poles immediately adjacent to roadways), SDG&E would prepare and implement a traffic control plan to ensure the efficient routing and movement of vehicle traffic through or around construction areas. Roads that could potentially need traffic control due to adjacent pole work are listed in Table 4.14-2, Potential Roadways Impacted by Pole Work.

Table 4.14-2: Potential Roadways Impacted by Pole Work

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
Littlepage Road	P93, and two guard structures
SR78	P161, P162, and two guard structures
SR 79	Two guard structures

It is anticipated that approximately 50 vehicles would be at each staging area at any given time, including construction personnel vehicles and construction vehicles operating out of the staging area. In general, construction personnel vehicles would make two trips daily: one trip to the staging area at the beginning of the day and one trip from the staging area at the end of each day. Similarly, each construction vehicle typically would make two trips daily: one trip from the staging area at the beginning of the construction day and one trip back to the staging area at the end of the construction day. Therefore, construction traffic in the vicinity of each staging yard would result in temporary increase of approximately 100 daily vehicle trips. As shown in Table 4.14-1, the major roadways for the Proposed Project route are operating well below the LOS E level. Therefore, the temporary minor increase in daily vehicle trips will not significantly increase congestion or cause the roadways to operate at a LOS E or LOS F as a result of the Proposed Project.

Due to the low volume and periodic nature of ingress and egress to the staging yards, impacts to existing traffic load and capacity of the street systems in the Proposed Project area would not result in any conflict with plans, ordinances or policies establishing measures of effectiveness for the performance of the circulation system. Additionally, implementation of a traffic control plan, prepared by the project engineer or contractor and subject to approval by the County, would ensure that potential construction-related traffic impacts would not result in any such conflict.

Operation & Maintenance – No Impact

SDG&E currently maintains and operates extensive 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. Therefore, no impacts to traffic are anticipated.

4.14.4.3 Question 14b – 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 highway?

Construction – No Impact

The congestion management program for the County of San Diego is administered through the SANDAG 2050 Regional Transportation Plan. This plan offers goals, measures, and projects that could help improve the traffic and congestion due to future growth in the region. The plan focuses on providing more comprehensive public transportation, reducing the amount of emissions related to transportation, providing social equity within communities, and reducing travel time. The 2050 Regional Plan does not outline specific areas where problems exist; rather it provides direction on general areas of improvement for the County’s transportation system.

In addition, the *Ramona Community Plan* (2011) identifies roads in the community that are subject to traffic impacts. The roadways that become impacted due to local traffic, especially on weekends, include Hwy 67/Main Street which provides the main traffic route through the community of Ramona. The Proposed Project is not located in the vicinity of Hwy 67/Main Street.

As previously discussed in the response to Question 14a, the Proposed Project construction-related traffic would result in minimal, temporary increase in the existing daily traffic.

The Proposed Project will not have a direct impact as the temporary increase of approximately 100 daily vehicle trips will not significantly increase congestion or cause the roadways to operate at a LOS E or LOS F as a result of the Proposed Project, as shown in Table 4.14-1. Construction activities will not conflict with any relevant congestion management programs or any other standards established by the county congestion management agency. Therefore, the Proposed Project will have no impacts relating to existing LOS standards or other adopted traffic control standards.

Operation & Maintenance – No Impact

SDG&E currently maintains and operates extensive 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. Therefore, no impacts to traffic are anticipated.

4.14.4.4 Question 14c – 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?

Construction – Less than Significant Impact

The Proposed Project would not significantly impact air traffic patterns. Due to site conditions, a helicopter may be used in some areas for replacement of poles during construction. Helicopter operators will coordinate with local air traffic control and comply with relevant FAA regulations to prevent any adverse impacts due to increased air traffic. The poles requiring helicopter use are limited in number; however, the exact number of poles requiring helicopters for installation or removal has not been determined at this time. In addition, a Helicopter Lift Plan would be prepared and implemented for the construction phase of the Proposed Project, as required by the FAA. As a result, project-related impacts on air traffic patterns would be less than significant.

Operation & Maintenance – No Impact

As described previously, SDG&E does not anticipate that any additional helicopter use beyond that currently required for their existing facilities would be necessary to operate or maintain the Proposed Project. As a result, there would be no impact to air traffic patterns due to the operation and maintenance of the Proposed Project.

4.14.4.5 Question 14d – Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Construction and Operations & Maintenance – No Impact

Construction of the Proposed Project would not necessitate any temporary or permanent modification to existing public roadways or other transportation facilities, therefore there would be no increase in hazards due to a design feature. In addition, the Proposed Project consists of the replacement of existing electric facilities within existing SDG&E ROW and does not introduce any use that does not currently exist.

None of the proposed power line structures would be located closer to any public roadways than the existing structures. As previously discussed, temporary road or lane closures may be required during construction to provide safety to the public and worker during certain activities. SDG&E would ensure that proper safety measures are in place for those activities including proper signage, orange cones, and flaggers. In addition, the Proposed Project would not require development of additional circulation routes; and therefore, no potentially hazardous roadway design features would result.

Operation and maintenance activities associated with the Proposed Project would occur within SDG&E's ROW. Access for these activities would be provided from existing public roads, or existing access roads. As a result, there would be no impact.

4.14.4.6 Question 14e – Result in inadequate emergency access?**Construction – Less than Significant Impact**

The Proposed Project would not result in inadequate emergency access to the areas where construction activities would occur or within the nearby vicinity. All streets would remain open to emergency vehicles at all times throughout construction. SDG&E would prepare a traffic control plan where project construction activities may impact traffic. A County of San Diego traffic control plan will be necessary for the Proposed Project and a Caltrans Encroachment Permit and Caltrans traffic control plan will be necessary for the poles immediately adjacent to Hwy 78 and Hwy 79 for the reconditioning activities across Hwys 78 and 79.

Details regarding emergency access related to low-flying aircraft are addressed in Section 4.7, Hazards and Hazardous Materials. Potential impacts related to low-flying aircraft in emergency response situations are less than significant. Therefore, impacts related to emergency access are considered less than significant.

Operation & Maintenance – No Impact

SDG&E currently maintains and operates extensive 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. Regular operation and maintenance activities would not require any planned road closures. Therefore, no impacts to emergency vehicle access are anticipated.

4.14.4.7 Question 14f – Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?**Construction – No Impact**

Construction of the Proposed Project would occur almost exclusively within existing SDG&E ROW areas. The Proposed Project would not involve activities that would conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, including bus transportation in the area. Therefore, no impacts would occur.

Operation & Maintenance – No Impact

The operation and maintenance activities for the Proposed Project would not change from the current practices, which require less than one vehicle trip per day, on average. Rail, bus, and bicycle traffic are not affected by current operation and maintenance activities, and there would

be no change to the activities as a result of the Proposed Project. Therefore, no impact to rail, bus, and bicycle traffic are anticipated.

4.14.5 Project Design Features and Ordinary Construction/Operating Restrictions

With implementation of the project design features and ordinary construction restrictions (as outlined within Section 3.8) potential impacts relating to construction traffic will remain less than significant.

4.14.6 Applicant Proposed Measures

The Proposed Project has no potentially significant impacts relating to transportation and traffic; therefore, no APMs are proposed.

4.14.7 Detailed Discussion of Significant Impacts

Based on the preceding analysis, no significant impacts relating to transportation and traffic are anticipated from the Proposed Project.

4.14.8 References

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4.15 UTILITIES AND SERVICE SYSTEMS

Would the project:		Potentially Significant Impact	Potentially Significant Unless APMs Incorporated	Less than Significant Impact	No Impact
a.	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b.	Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c.	Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d.	Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed? In making this determination, the City shall consider whether the project is subject to the water supply assessment requirements of Water Code Section 10910, et. Seq. (SB 610), and the requirements of Government Code Section 664737 (SB 221).	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e.	Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project’s projected demand in addition to the provider’s existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f.	Be served by a landfill with sufficient permitted capacity to accommodate the project’s solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g.	Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

4.15.1 Introduction

This section of the PEA describes the existing conditions and potential project-related impacts to utilities and service systems. Utilities and service systems include water infrastructure and supply, wastewater, solid waste disposal, utilities (electricity and natural gas), and communications. Less than significant impacts may occur to utility and service systems (water supply), as well as to local landfill capacity from construction of the Proposed Project. The Proposed Project would have a positive impact on the reliability of electric utility services within the San Diego County service territory.

4.15.2 Methodology

Utilities and service systems data were obtained from searches of local government websites and other local service informational resources. Solid waste information for construction and demolition activities was provided by SDG&E.

4.15.3 Existing Conditions

4.15.3.1 Regulatory Setting

State

California Integrated Waste Management Board Solid Waste Policies, Plans and Regulations

The Integrated Waste Management Act of 1989 (PRC 40050 et seq. or AB 939, codified in PRC 40000), administered by the California Department of Resources Recycling and Recovery, requires all local and county governments to adopt a Source Reduction and Recycling Element to identify means of reducing the amount of solid waste sent to landfills. This law set reduction targets at 25 percent by the year 1995 and 50 percent by the year 2000. Senate Bill 1016 (2007) builds on AB 939 by implementing simplified measures of performance toward meeting solid waste reduction goals.

Local

San Diego County

Portions of the Proposed Project are located in the unincorporated communities of Ramona and Santa Ysabel as well as the San Diego Country Estates; the growth and development of these communities is generally governed by the *San Diego County General Plan*, as adopted August, 2011. With specific regard to the General Plan, the following goals and policies are potentially relevant:

Goal LU-4: Inter-Jurisdictional Coordination. Coordination with the plans and activities of other agencies and tribal governments that relate to issues such as land use, community character, transportation, energy, other infrastructure, public safety, and resource conservation and management in the unincorporated County and the region.

Policy LU-4.6: Planning for Adequate Energy Facilities. Participate in the planning of regional energy infrastructure with applicable utility providers to ensure plans are consistent with the County's General Plan and Community Plans and minimize adverse impacts to the unincorporated County.

Within the framework of the General Plan exists specific Community Plans, as well as Subregional Plans that are designed to guide the physical development of unincorporated communities, as well as clearly define the character, aesthetic, values and densities of each community. The community of Ramona and the San Diego Country Estates are both subject to the *Ramona Community Plan* as adopted in August 2011. With specific regard to the *Ramona Community Plan*, the following policy is potentially relevant:

Policy LU 5.1.7 – Encourage local service district and utility companies to conform to the adopted Community Plan.

The community of Santa Ysabel is subject to both the *North Mountain Subregional Plan* and the *Central Mountain Subregional Plan*, as adopted in August 2011.

4.15.3.2 **Water**

Approximately two-thirds of the water sources for southern California are located in northern California. The State Water Project brings water from northern California to southern California via the California Aqueduct. The San Diego County Water Authority imports approximately 80 percent of San Diego County's water supply. Roughly 30 percent of this is supplied through the State Water Project; the Colorado Aqueduct, operated by the Metropolitan Water District of Southern California supplies the remaining 50 percent of San Diego County's imported water supply. The County relies on local sources and conservation methods to supply 20 percent of its water supply. The Proposed Project is located within portions of the unincorporated community of Ramona and the San Diego Country Estates, both serviced by the RMWD, and the unincorporated community of Santa Ysabel, which is serviced by the Wynola Water District.

4.15.3.3 **Sewer**

The majority of sewage treatment and disposal in unincorporated San Diego County is handled either by regional systems maintained by public water or sewer districts, small wastewater treatment facilities operated by independent districts or the County, or on-site underground sewage disposal systems (septic tanks). The RMWD provides sewer services within four sewer service boundary areas accounting for approximately 90 percent of the Ramona Community Planning Area. The unincorporated community of Ramona lies within the Activated Sewer Powers Area, and the San Diego Country Estates lies within the San Vicente Sewer Service Area. The unincorporated community of Santa Ysabel is not located within the service territory of any public or private sewer districts, and utilizes septic systems for sewage storage.

4.15.3.4 **Solid Waste**

There are seven active landfills in San Diego County that serve both incorporated and unincorporated communities. It is estimated that there is sufficient landfill capacity for thirty years considering current landfill expansions, and proposed new landfills. Otay Landfill (Solid Waste Information System [SWIS] No. 37-AA-0010), is a private facility with permitted capacity of 61,154,000 cubic yards a year. The Otay Landfill has approximately 24,514,000 cubic yards of capacity remaining as of November 2012, and is expected to be active until the year 2028; Otay Landfill is expected to be the primary receiver of solid waste generated by the Proposed Project.

4.15.3.5 **Utilities**

SDG&E provides both gas and electric utilities to the communities of Ramona, San Diego Country Estates (census-designated place), and Santa Ysabel. SDG&E provides energy service to 3.4 million people through 1.4 million electric meters and 850,000 natural gas meters in San Diego and southern Orange counties, with a service territory spanning approximately 4,100 square miles.

4.15.3.6 Communications

Communications services are provided by numerous providers in unincorporated San Diego County, including Time Warner Cable and Cox Communications. These companies offer telephone and internet services in San Diego County.

4.15.4 Potential Impacts

4.15.4.1 Significance Criteria

Thresholds of impact significance were derived from Appendix G of the *CEQA Guidelines*. Under these guidelines, the assessment of the Proposed Project should look to whether the Proposed Project would:

- a) Exceed wastewater treatment requirements of the applicable RWQCB;
- 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;
- c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;
- 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 the 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; or
- g) Comply with federal, state, and local statutes and regulations related to solid waste.

4.15.4.2 Question 15a – Exceed wastewater treatment requirements of the applicable RWQCB?

Construction – No Impact

The Proposed Project is an unmanned utility project and would not generate additional wastewater, require any alteration of existing sewer systems or septic tanks, or affect wastewater treatment facilities. Therefore, no impacts to wastewater treatment requirements would occur. The proposed scope of work for the construction phase requires minimal volumes of water for the purpose of mixing grout for use in micropile foundation installation at approximately 87 pole installation sites. The water used for this purpose becomes incorporated into the grout/cement mixture and is not discharged as a wastewater byproduct.

Operation & Maintenance – No Impact

The Proposed Project is an unmanned utility project with the purpose of upgrading power line reliability, as well as minimizing maintenance efforts in the future. 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, operations and maintenance activities constitute the baseline against which the impacts of the Proposed Project are evaluated, and activities for the Proposed Project would decrease slightly compared to baseline conditions, and current operations do not exceed the RWQCB's wastewater treatment requirements. Therefore the Proposed Project's operations and maintenance would not exceed wastewater treatment requirements of the San Diego RWQCB. Furthermore, future operations and maintenance construction activities would be evaluated under G.O. 131-D and CEQA, as applicable, for purposes of assessing any future impacts relating to wastewater treatment requirements.

4.15.4.3 Question 15b – Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Construction – No Impact

The Proposed Project is an unmanned utility project and would not generate a demand for water services, nor does the Proposed Project generate a demand for wastewater facilities and services. Although water would be utilized during construction of the Proposed Project in order to control dust on access roads, and to prepare grout for micropile foundations, this demand would not require or result in the construction or expansion of water or wastewater treatment facilities. No new landscaping or irrigation is proposed. There would not be any need for new or expanded water or wastewater treatment facilities because the construction water needs would be minimal and temporary; therefore, no impact would occur.

Operation & Maintenance – No Impact

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 operations and maintenance activities constitute the baseline against which the impacts of the Proposed Project are evaluated. Upon completion of construction activities, TL 637 will operate unmanned, with minimal maintenance efforts required (slightly less than existing, baseline conditions). Included in the scope of work for the Proposed Project is the replacement of existing porcelain insulators with standardized polymer insulators which will reduce maintenance activities as well as reduce water volume usage as the newly installed polymer insulators do not require annual washing. The volume of water required for the operation of the line would be materially less than is required under existing conditions, and therefore no new wastewater treatment would be required due to operation. Any future operations and maintenance construction activities would be evaluated under G.O. 131-D and CEQA, as applicable, for purposes of assessing potential impacts relating to new water or wastewater treatment facilities. Therefore, no impacts are anticipated.

4.15.4.4 Question 15c – Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Construction – No Impact

The Proposed Project is an unmanned utility project and will not generate a substantial amount of additional stormwater runoff because the amount of impervious area will not be substantially altered. The Proposed Project would not result in the construction of new stormwater drainage facilities or expansion of existing facilities; therefore, there would be no impacts to stormwater drainage facilities. The Proposed Project is required to obtain coverage under the Construction General Permit through the SWRCB. The Construction General Permit requires the development and implementation of a SWPPP. SDG&E has prepared a SWPPP, which is subject to approval by the San Diego RWQCB Region 9. The Proposed Project will not require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects. Therefore, no impacts are anticipated.

Operation & Maintenance – No Impact

SDG&E currently maintains and operates existing electric power, distribution and substation facilities throughout the Proposed Project area, 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 constitute the baseline against which the impacts of the Proposed Project are evaluated, and 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. Therefore, operations and maintenance activities would not require construction of new or expanded water or wastewater facilities. The Proposed Project is an unmanned utility project and will not generate a substantial amount of additional stormwater runoff because the amount of impervious area will not be substantially altered. Any future operations and maintenance construction activities would be evaluated under G.O. 131-D and CEQA, as applicable, for purposes of assessing potential future impacts relating to stormwater drainage facilities. Therefore, no impacts are anticipated.

4.15.4.5 Question 15d – Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

Construction – Less Than Significant Impact

Water is anticipated to be the primary means for dust control during construction of the Proposed Project. Water would be brought to the site in trucks specially equipped to allow for the dispersal of water onto unpaved disturbed areas where road re-establishment or routine movement of construction vehicles occurs. It is estimated that approximately 2,250,000 gallons of water could be used for dust control over the duration of construction. The proposed scope of work for the construction phase also requires minimal volumes of water for the purpose of mixing grout for use in micropile foundation installation at 87 pole installation sites. Water used

during construction of the Proposed Project will be acquired by the construction contractors from existing local water sources. It is anticipated that water used during construction could come from either local private land owners or local municipal sources, such as the RMWD. It is anticipated that the Proposed Project will be sufficiently served by existing local water resources and will not cause need for new or expanded entitlements or other water supply resources. Therefore, impacts to water supply will be minimal and less than significant.

Operation & Maintenance – No Impact

The Proposed Project is an unmanned utility project that involves the replacement or enhancement of existing facilities and would not result in expanded development. SDG&E's existing facilities and operations and maintenance activities constitute the baseline against which the impacts of the Proposed Project are evaluated, and 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. There would not be an increase in water demand that warrants expanding existing entitlements. Any future operations and maintenance construction activities would be evaluated under G.O. 131-D and CEQA, as applicable, for purposes of assessing potential impacts to water supply. Therefore, no impacts are anticipated.

4.15.4.6 Question 15e – Result in the determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Construction – No Impact

The Proposed Project is an unmanned utility project, and wastewater generation during construction is not anticipated to require direct support from the local waste water treatment system. Construction activities will be served by portable sanitary systems which will not be connected to the local waste water system. Stormwater runoff during construction activities will be managed through compliance with the SWPPP and would not require additional commitment from the local waste water provider. Therefore, no impacts to wastewater treatment providers are anticipated.

Operation & Maintenance – No Impact

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 constitute the baseline against which the impacts of the Proposed Project are evaluated, and 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. Therefore, current wastewater treatment provider commitments are not anticipated to be altered as a result of the Proposed Project. Any future operations and maintenance construction

activities would be evaluated under G.O. 131-D and CEQA, as applicable, for purposes of assessing potential impacts to waste water service. Therefore, no impacts are anticipated.

4.15.4.7 Question 15f – Be served by a landfill with sufficient permitted capacity to accommodate the project’s solid waste disposal needs?

Construction – Less Than Significant Impact

During construction activities, some waste would be generated due to pole removal activities as well as due to general construction activities (i.e. personal waste generated by workers and personnel). Table 4.15-1, Capacity of Landfills Serving the Proposed Project, outlines data for landfill capacity for likely landfills that could serve the Proposed Project. SDG&E would arrange profiling and disposal of solid waste as a result of pole removal and construction. If SDG&E qualified environmental staff determines that the material is nonhazardous and qualifies as non-impacted, the contractor would handle the waste in accordance with federal, state, and local regulations and dispose of the waste for recycling or permanent disposal at a nearby licensed landfill. Treated wood products and all conductors, insulators, and other pole hardware would be recycled or disposed of as appropriate. The conductors, hardware, and insulators would be sent to a metal recycler. Excess soil from excavation of trenches or new pole installations may also be transported to a local recycling or appropriately permitted waste disposal facility if the soil is not re-used onsite or otherwise recycled (refer to Section 3.4). Note that excess soil will be re-used onsite wherever possible and only transported offsite as the final option. SDG&E is typically able to re-use soil on site during wood-to-steel projects, like the Proposed Project, where extensive grading and excavation is not required.

Table 4.15-1: Capacity of Landfills Serving the Proposed Project

Facility	Total Capacity (million cubic yards)	Remaining Capacity (million cubic yards)	Maximum Permitted Throughput (tons/day)
<i>Landfill Class III</i>			
Otay Landfill	61.1	24.5	5,830
Total	61.1	24.5	5,830
<i>Landfill Class I, II</i>			
Kettleman Hill-B18 Nonhaz Codisposal	10.7	6.0	8,000
Clean Harbors Buttonwillow, LLC	14.3	Not Available ¹	10,482
Total	-	-	-
<i>Notes:</i>			
¹ Although the remaining capacity is not provided for the Clean Harbors Buttonwillow LLC, its closure date is anticipated to be January 2040, and therefore, it is assumed that there is remaining capacity at the Clean Harbors Buttonwillow LLC facility.			
Source: CalRecycle. 2012. SWIS. Online: http://www.calrecycle.ca.gov/SWFacilities/Directory/SearchList/List Site visited November 12, 2012.			

Some treated wood products may not be recyclable, and such wood products would be disposed appropriately at a licensed landfill in accordance with local, State and Federal regulations. A likely recipient for material that cannot be recycled is the Otay Landfill (SWIS No. 37-AA-0010), a private facility with permitted capacity of 61,154,000 cubic yards (refer to Table 4.15-1, Capacity of Landfills Serving the Proposed Project). The Otay Landfill has approximately 24,514,904 cubic yards of capacity remaining as of March 2012, and is expected to be active until the year 2028. This landfill has adequate capacity to handle the minimal amount of unrecyclable waste that may be generated by Proposed Project construction. Ordinary construction restrictions have been incorporated into the Proposed Project (refer to Section 3.8); as a result, any associated impacts to landfills would be less than significant.

Operation & Maintenance – No Impact

Once operational, the Proposed Project will not routinely generate waste, and waste generation would not differ substantially from current conditions. SDG&E's existing facilities, operations and maintenance activities constitute the baseline against which the impacts of the Proposed Project are evaluated, and activities 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 operations and maintenance construction activities would be evaluated under G.O. 131-D and CEQA, as applicable, for purposes of assessing potential impacts to solid waste capacity. Therefore, no impacts are anticipated.

4.15.4.8 Question 15g – Comply with federal, state, and local statutes and regulations related to solid waste?

Construction – No Impact

As analyzed in response to Question 15f, solid waste produced during construction would be recycled or disposed of a nearby licensed facility, such as the Otay Landfill. Management and disposal of solid waste would comply with all applicable federal, state, and local statutes and regulations. Therefore, no impacts are anticipated.

Operation & Maintenance – No Impact

SDG&E currently maintains and operates existing electric power, distribution and substation facilities throughout the Proposed Project site. SDG&E's existing operations and maintenance activities constitute the baseline against which the impacts of the Proposed Project are evaluated, and the solid waste being generated as part of the Proposed Project would not materially increase in frequency or intensity, and overall operations and maintenance activities are anticipated to decrease slightly compared to baseline conditions. Any future operations and maintenance construction activities would be evaluated under G.O. 131-D and CEQA, as applicable, for purposes of assessing potential impacts relating to solid waste regulations. Therefore, no impacts are anticipated.

4.15.5 Project Design Features and Ordinary Construction/Operating Restrictions

Waste generated during construction, operation, and maintenance of the Proposed Project will be handled and disposed of according to all applicable local, state, and federal regulations as well as

SDG&E ordinary construction and operating restrictions (refer to Section 3.8). Adherence to applicable solid waste regulations and implementation of SDG&E ordinary construction and operating restrictions for solid waste handling will ensure that any potential impacts relating to solid waste are less than significant.

4.15.6 Applicant Proposed Measures

The Proposed Project has no potentially significant impacts relating to utilities and service systems; therefore, no APMs are proposed.

4.15.7 Detailed Discussion of Significant Impacts

Based on the preceding analysis, no significant impacts relating to utilities and service systems are anticipated from the Proposed Project.

4.15.8 References

- CalRecycle. 2012. *Solid Waste Information System (SWIS)*. Online: <http://www.calrecycle.ca.gov/SWFacilities/Directory/SearchList/List>. Site visited November 14, 2012.
- San Diego County. 2011. *General Plan*. Online: <http://www.sdcountry.ca.gov/pds/generalplan.html>
- San Diego County Department of Public Works. 2012. Online: <http://www.sdcountry.ca.gov/dpw/engineer/wasteh2o.html> Site visited November 2012.
- San Diego County. 2011. *General Plan Update Ramona Community Plan*. Online: http://www.sdcountry.ca.gov/pds/docs/CP/Ramona_CP.pdf. Site visited December 11, 2012.
- San Diego County Water Authority. 2012. Online: <http://www.sdcwa.org/san-diego-county-water-sources> Site visited November 2012.

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4.16 CUMULATIVE IMPACTS

4.16.1 Introduction

This section of the PEA discusses potential cumulative impacts related to the construction, operation, and maintenance of the Proposed Project. The purpose of the Proposed Project is to increase fire safety and system reliability along TL 637 between the Creelman and Santa Ysabel Substations, as described further in Section 2.0, Proposed Project Purpose and Need. As explained within Sections 4.1 through 4.15, no significant impacts were identified for the Proposed Project.

The Proposed Project is the reconstruction of an existing 69kV wood power line. The Proposed Project is located within existing SDG&E ROW, where SDG&E currently maintains and operates existing electric power, distribution and substation facilities. The existing power line facilities would be removed and rebuilt within existing SDG&E ROW, and some areas that are currently disturbed would be restored and/or allowed to revegetate. Approximately seven poles would be removed and not replaced (e.g. removed from service), and approximately 1,170 feet of power line (three poles) that is currently located within jurisdictional water resources (wet meadow) would be relocated outside of the jurisdictional waters. SDG&E's existing facilities and operations and maintenance activities are included in the baseline for evaluating the impacts of the Proposed Project.

Permanent impacts associated with the construction of the Proposed Project would be offset considerably or entirely by the removal of existing facilities, some of which would be eliminated and not replaced with new structures. For example, in terms of permanent impacts from ground disturbance associated with construction of the Proposed Project, the Proposed Project would provide a net reduction in permanent impacts, as existing facilities would be removed, some poles would not be replaced and other poles would be relocated to eliminate existing impacts to jurisdictional or sensitive resources. With respect to potential permanent impacts on aesthetics, the Proposed Project will rebuild the existing power line in substantially the same alignment as the existing TL 637 facilities and within SDG&E's existing ROW. As discussed in Section 4.1, the visual impacts of the Proposed Project are incremental and not significant. Therefore, the Proposed Project would not contribute to any cumulatively significant permanent impacts as a result of construction of the Proposed Project.

Similarly, operation and maintenance of the Proposed Project would not be substantially different from existing, baseline conditions, and would be slightly less than baseline 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. Therefore, The Proposed Project would not contribute to any cumulatively significant impacts during operation and maintenance activities in any of the resource areas evaluated under CEQA.

4.16.2 Significance Criteria

CEQA defines a cumulative impact as one “*which is created as a result of the project...together with other [past, present, and future] projects causing related impacts.*” Cumulative impacts refer to two or more individual effects which, when considered together, are considerable and cumulatively exceed the criteria established for each resource area as described in Sections 4.1 through 4.15 of the PEA. In such cases, the Proposed Project’s contribution is analyzed to determine whether it is cumulatively considerable. *CEQA Guidelines* Section 15064(h)(1) further explains that:

...when assessing whether a cumulative effect requires an [Environmental Impact Report], the lead agency shall consider whether the cumulative impact is significant and [whether] the project’s incremental effect, though individually limited, is ‘cumulatively considerable.’

Applying this qualitative standard necessarily requires application of judgment based on the facts of a particular project subject to CEQA.

Further, the significance of an impact may be weighed against the overall effect as both increases and decreases in impacts may balance one another. As noted in the *CEQA Guidelines*:

The mere existence of significant cumulative impacts caused by other projects alone shall not constitute substantial evidence that the proposed project’s incremental effects are cumulatively considerable.”

4.16.3 Timeframe of Analysis

For the purpose of this cumulative impacts analysis, the Proposed Project is defined in terms of construction duration as well as post-construction operation and maintenance activities. SDG&E anticipates that construction of the Proposed Project would take a total of approximately nine months, spanning from January through September 2014. Operation and maintenance of the Proposed Project would occur for the foreseeable future following the completion of construction.

4.16.4 Area of Analysis

In accordance with *CEQA Guidelines* Section 15130(b), past, present, and planned/reasonably foreseeable future projects located within one mile of the Proposed Project were reviewed in order to identify any projects that could, when combined with the Proposed Project, create a cumulatively considerable effect. The analysis of potential cumulative impacts was limited to within approximately one mile of the Proposed Project components because this distance was estimated to be the furthest that the Proposed Project impacts, if any, could extend.

4.16.5 Methodology

Existing conditions and reasonably foreseeable projects were identified within a one-mile radius of each Proposed Project component. Information was gathered from internet searches of local planning department and state agency websites and correspondence with agency staff. The

websites of the following entities were reviewed and/or these agencies contacted regarding development projects, road and utility improvement projects, and capital investment projects:

- SDG&E,
- County of San Diego,
- CPUC,
- CEC,
- CAISO,
- Cleveland National Forest, and
- Caltrans.

4.16.6 Existing/Operating Projects

The Proposed Project is generally surrounded by rural (mainly open space) with some limited residential and commercial development near the Santa Ysabel and Creelman Substations and between Pole Nos. D40 and P65. Section 4.9, Land Use and Planning, outlines all of the specific existing land uses for the entire Proposed Project vicinity.

4.16.7 Foreseeable Projects Inventory

For the purposes of this document, “reasonably foreseeable” refers to projects that federal, state, or local agency representatives have knowledge of resulting from a formal application process. Table 4.16-1, Planned and Proposed Projects within One Mile of the Proposed Project Area, lists known projects that are within one-mile of the Proposed Project facilities with the potential to create cumulative impacts. A total of four such projects have been identified within one-mile of the Proposed Project. Figure 4.16-1, Foreseeable Projects Map, depicts the location of each project with respect to the Proposed Project components.

Projects are included that are located within one mile of the Proposed Project and are of sufficient size and type such that, when combined with the Proposed Project, there would be a potential for cumulative effects on the environment. For example, small-scale discretionary projects like usage permit projects (such as liquor license applications) that are internal to an existing building or development and have no potentially significant impact to the environment, modifications to existing individual homes or businesses that do not result in any increases in noise, traffic, air emissions, etc. (i.e. architectural modifications to existing structures such as patios, decks, fences, and awnings), and site-specific residential developments (including swimming pools, backyard renovations, and second story additions), do not create incremental environmental impacts that, when added with the impacts from the Proposed Project, could potentially result in a cumulatively significant impact.

Table 4.16-1: Planned and Proposed Projects within One Mile of the Proposed Project Area

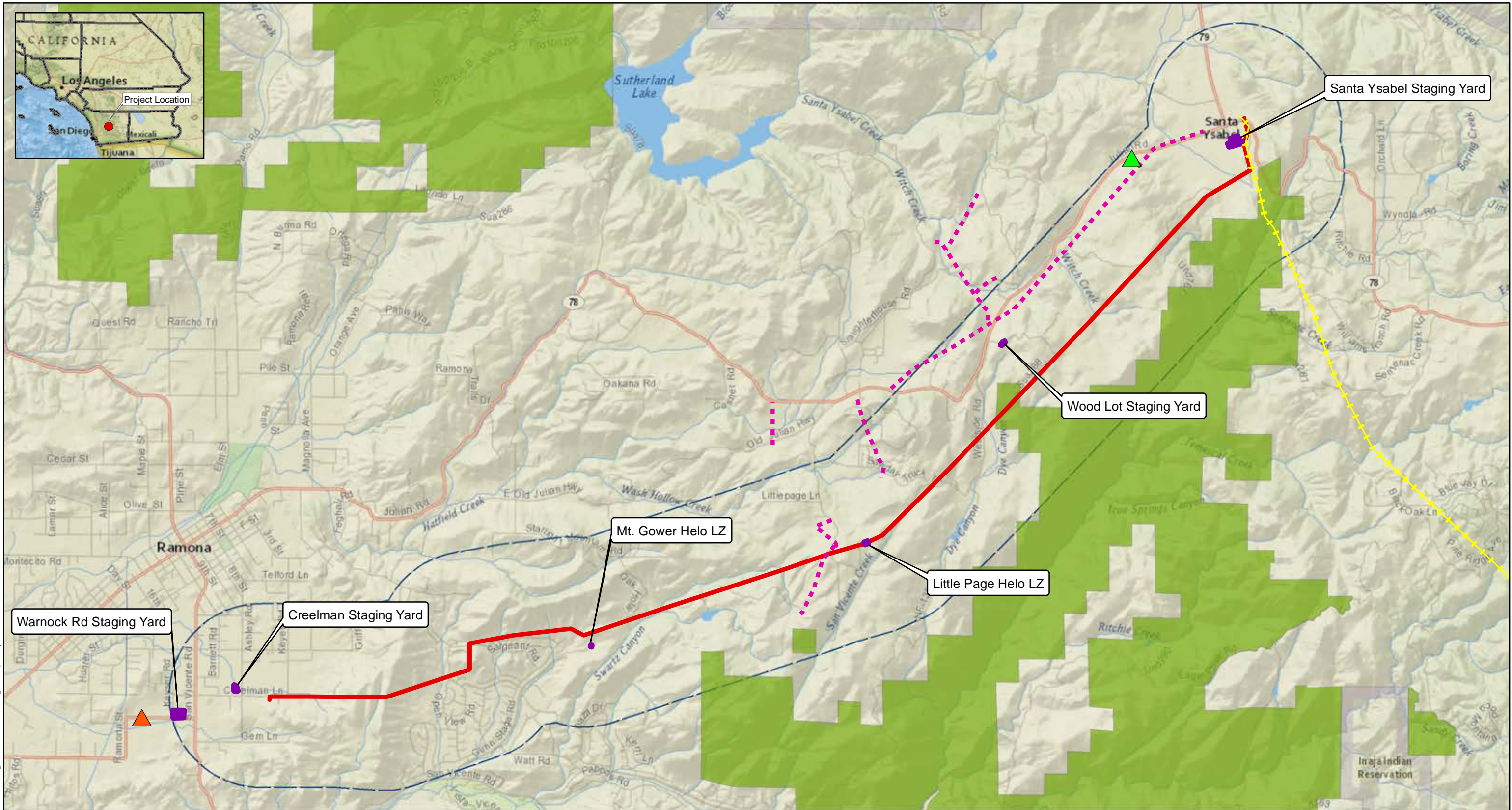
Project Name	Project Location ¹	Approximate Distance from the Proposed Project ¹	Project Description/Size	Anticipated Construction Schedule	
				Begin	End
TL 626 Wood-to-Steel project	Cleveland National Forest and surrounding private lands	Immediately adjacent to approximately 16 miles from Proposed Project	Proposed wood-to-steel re-construction of existing 69kV power line. The TL 626 project is one of 11 power line and distribution line fire hardening projects included in SDG&E’s application to the USFS for a Master Special Use Permit to maintain electrical facilities within the Cleveland National Forest and one of five 69kV power line fire hardening projects included in SDG&E’s application to the CPUC for a Permit to Construct for Power Line Reconstruction Projects (collectively, CNF MSUP/PTC) ² . TL 626 is the only project in the CNF MSUP/PTC within ten miles of the Proposed Project and only a small portion of TL 626 is within one mile of the Proposed Project. The Proposed Project and the TL 626 project both propose to replace approximately 12 poles and conductor where TL 637 and 626 are co-located on double-circuit structures. These 12 structures will be replaced as part of whichever project proceeds first.	TBD	TBD
Circuit 222 Wood-to-Steel project	Private lands southwest of Santa Ysabel	Immediately adjacent to approximately 1.8 miles from TL 637. Circuit 222 crosses TL 637 at Pole No. P94.	Replacement of approximately 300 wood distribution poles with new weathering 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.	September 2013	February 2014
Sol Orchard SD-5 - Santa Ysabel	Julian Road (Hwy 78), approximately one mile west of Hwy 79.	Approximately 1.2 miles west of Santa Ysabel Substation and 0.9 mile northwest of Pole No. P142	Proposed 7.17 acres of photovoltaic panels located on 78.70 acre site. Project not yet approved.	No construction schedule set ³	

Table 4.16-1 (cont.): Planned and Proposed Projects within One Mile of the Proposed Project Area

Project Name	Project Location ¹	Approximate Distance from the Proposed Project ¹	Project Description/Size	Anticipated Construction Schedule	
				Begin	End
Sol Orchard Solar Farm	Ramona Street and 1650 Warnock Drive	Approximately 0.30 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 DPLU Oct 19, 2012	2 nd quarter 2013	4 th quarter 2013
Feral Pig Control	Cleveland National Forest, All Districts	Varies, project covers a large portion of Cleveland National Forest	The Cleveland National Forest proposes to reduce and, where possible, eliminate further impacts from increasing numbers of non-native wild pigs on 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.	Project begin - Oct 2012	No end date listed

Notes:
¹Refer to Figure 4.16-1 for locations of all of the projects listed in this table and locations relative to the Proposed Project facilities.
²As proposed by SDG&E, the anticipated construction schedule for the Proposed Project (January through September of 2014) would not coincide with construction of TL 626, which is anticipated to be constructed in late 2014. Moreover, the Proposed Project would only coincide with CNF MSUP/PTC projects that are more than 20 miles from the Proposed Project and therefore not cumulatively considerable.
³Project application has not seen recent activity from the applicant and no plan for construction or issuance of permits currently exists. Project remains on this list because the case file is still open and the project could still move forward.
 Sources: <https://publicservices.sdcounty.ca.gov/CitizenAccess/>, San Diego County Planning Department, Cleveland National Forest, SDG&E Cleveland National Forest Master Special Use Permit Preliminary Plan of Development (SDG&E 2012), SDG&E Permit to Construct Power Line Replacement Projects (SDG&E 2012)

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GISD&E_TL 637 PEANXD\TL637_ProximityToProjects.mxd

Created For: Brad Carter
 Created By: TRC
 Date: 2/13/2013

SDG&E is providing this map with the understanding that the map is not survey grade.

- Tie-Line 637 Alignment
- 1-mile Buffer
- Staging Yards and Helicopter Landing Zones
- ++ Tie-Line 626 Wood-to-Steel Project
- - - Circuit 222 Wood-To-Steel Project
- ▲ Sol Orchard Solar Farm Project
- ▲ Sol Orchard SD-5 (Santa Ysabel) Project
- Feral Pig Management Project

Tie-Line 637 Wood-To-Steel Project
 Foreseeable Projects Map
Figure 4.16-1



Data Source: SDG&E; County of San Diego; California Protected Areas Database, July 2012; Basemap Source: National Geographic, Esri, DeLorme, NAVTEQ, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, IPC

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BACK OF FIGURE 4.16-1

4.16.8 Potential Cumulative Impacts

This section of the PEA discusses potential cumulative impacts associated with the Proposed Project. As discussed in Section 4.16.2, cumulative impacts are those impacts that result from a combination of effects from the Proposed Project and other past, present, or planned, approved, or otherwise probable future projects. In order for cumulatively significant impacts to result, projects must generally share two factors in common; schedule and location. Thus, for cumulative impacts to occur, the Proposed Project must occur within the vicinity of other projects and be either constructed or operated at the same time, such that impacts associated with the project can combine for a net effect greater than either project taken individually. Projects that were not within one mile of the Proposed Project and would not likely be constructed or operated at the same time as the Proposed Project are not analyzed herein.

The potential cumulative impacts are analyzed for the following resource areas:

- Aesthetics,
- Agriculture and Forestry,
- Air Quality and Greenhouse Gases,
- Biological Resources,
- Cultural Resources,
- Geology and Soils,
- Hazards and Hazardous Materials,
- Hydrology and Water Quality,
- Land Use and Planning,
- Noise,
- Population and Housing,
- Public Services,
- Recreation.
- Transportation and Traffic, and
- Utilities and Service Systems.

For each of these resource areas, only the areas in which a potential cumulative impact exists are discussed. Where there is no potential for the Proposed Project to create an adverse effect relating to an individual CEQA Appendix G criterion, no potential for cumulative effects were deemed possible and the particular criterion is not discussed. At the beginning of each subsection below, the specific criterion with no potential for impacts are listed. Where there is potential for adverse impact, the pertinent CEQA Appendix G significance criteria are discussed and the Proposed Project's contribution of any cumulatively considerable effects is analyzed.

No impacts were identified relating to the following CEQA Appendix G resource areas; therefore there is no discussion of potential cumulative impacts relating to these resource areas:

- Agriculture and Forestry Resources,
- Mineral Resources,
- Land Use and Planning,
- Population and Housing, and
- Public Services.

4.16.8.1 Aesthetics

The Proposed Project would not have any impacts associated with the following CEQA Appendix G significance criteria relating to aesthetics or visual resources during construction or operations and maintenance:

- Substantial adverse effects on scenic vistas (Question 1a),
- Substantial damage to scenic resources (Question 1b), and
- New light or Glare (Question 1d).

Therefore, there would be no potential for cumulatively considerable impacts associated with these significance criteria and the above listed criteria are not further discussed herein. The remaining aesthetics-related impacts are discussed below for construction, operation, and maintenance of the Proposed Project.

Construction

Overall Visual Character

Construction of the Proposed Project is anticipated to have temporary, less than significant impacts on the overall visual character of the surrounding area. Similarly, the projects listed in Table 4.16-1 would also result in temporary impacts in this regard. Where construction of multiple projects overlap, and construction equipment and activities are visible within the same viewsheds, impacts would be cumulatively considerable. The Proposed Project could contribute to cumulative effects on the overall visual character of the surrounding area in conjunction with the following projects, assuming that construction activities overlap:

- TL 626 project,
- Circuit 222 project,
- Sol Orchard Solar Farm project, and
- Sol Orchard SD-5 (Santa Ysabel) project.

However, there are currently no plans for construction of the Sol Orchard SD-5 (Santa Ysabel) project, the Sol Orchard Solar Farm project will be constructed prior to planned construction of the Proposed Project, and construction of the TL 626 project is not anticipated to occur concurrently with the Proposed Project. Active construction of the Circuit 222 project would not occur within one mile of active construction of the Proposed Project, unless specifically requested by a land owner. If construction of the Proposed Project and the Circuit 222 project

were to be purposefully overlapped, it would be only in limited, specific areas for the purpose of reducing impacts to adjacent land owner(s). Construction would occur utilizing common access roads, staging yards, and would share other common construction support services and land uses such that any potential combined impact is minimized. The Circuit 222 project is an independent distribution line project that is located entirely within private lands, and therefore the construction schedule is at the sole discretion of SDG&E. SDG&E can therefore ensure that construction of the two projects will typically not overlap, regardless of the eventual construction schedule for TL 637 (which is subject to the issuance of a PTC by the CPUC). Therefore construction activities for the Proposed Project would not be visible within a common viewshed along with construction activities associated with any of the projects listed in Table 4.16-1. The CPUC has discretionary approval authority over both the Proposed Project and the TL 626 project; therefore, the CPUC could ensure that potentially significant cumulative impacts would not occur, should construction of the two projects overlap, by coordinating with SDG&E to ensure that construction on the TL 626 would not proceed in the immediate vicinity of the Proposed Project while the Proposed Project is under construction. As proposed by SDG&E (based on the current anticipated TL 626 schedule), the anticipated construction schedule for the Proposed Project (January through September of 2014) would not coincide with the TL 626 project.

Therefore, construction of the Proposed Project is not anticipated to contribute to any significant cumulative adverse impacts relating to the overall visual character of the Proposed Project area.

Operation & Maintenance

Overall Visual Character

Operation and maintenance of the Proposed Project is anticipated to have less than significant impacts on the overall visual character of the surrounding area.

Some of the projects listed in Table 4.16-1 could result in significant changes to the overall visual character of the surrounding area, most notably the Santa Ysabel Solar Farm and the Sol Orchard Solar Farm. However, these projects are not located in the immediate vicinity of the Proposed Project and are therefore not likely to create a cumulatively considerable effect in combination with the Proposed Project. The Sol Orchard SD-5 project is located approximately 1.2 miles west of the Santa Ysabel Substation and the Sol Orchard Solar Farm project is located approximately 1.3 miles west of the Creelman Substation.

With respect to the TL 626 and Circuit 222 projects, significant cumulative effects are also not anticipated because the Proposed Project, TL 626, and Circuit 222 facilities would be very similar, and located in very similar alignment to current existing electric power and distribution facilities. All three projects represent reconstruction of existing electric facilities in locations where similar facilities already exist. Therefore, the Proposed Project is not anticipated to contribute to any cumulatively considerable adverse effects on the overall visual character of the Proposed Project area.

4.16.8.2 Air Quality and Greenhouse Gases

As outlined in Section 4.3, Air Quality and Greenhouse Gases, there is no potential for impacts to occur during operation and maintenance of the Proposed Project because operation and

maintenance activities will be slightly less than current, baseline operation and maintenance activities. Therefore, there would be no potential for cumulatively considerable impacts associated with operation and maintenance. Potential cumulative impacts associated with operation and maintenance of the Proposed Project are not further discussed herein. Air quality and GHG-related construction impacts are discussed below for the Proposed Project.

Construction

Construction of the Proposed Project is anticipated to result in less than significant short-term impacts to air quality standards, compliance with the RAQS and SIP, exposure of sensitive receptors to pollutant emissions, creation of objectionable odors, generation of GHGs, and compliance with GHG plans, policies, and regulations. The potential for cumulatively considerable effects relating to these significance criteria is discussed below.

Compliance with the RAQS and SIP

Construction of the Proposed Project would result in short-term, temporary emissions of criteria pollutants. These emissions would not constitute non-compliance with the RAQS and SIP as construction is not anticipated to result in emissions that would exceed APCD thresholds. Four of the other projects listed in Table 4.16-1 could either result in emissions greater than the APCD thresholds individually, or when combined with the Proposed Project. However, none of those projects are currently anticipated to have construction overlap with the Proposed Project construction (January through September of 2014), except for potential limited overlap between the Proposed Project and the Circuit 222 project. The Circuit 222 project involves distribution only, and is located within private lands; therefore the construction schedule can be implemented directly by SDG&E such that overlaps between the Proposed Project and the Circuit 222 project would typically be avoided. However, if a land owner requested that construction on the Circuit 222 and Proposed Project occur at the same time within their property, SDG&E would limit the combined number of crews and construction equipment such that no net increase in emissions sources would occur; and therefore cumulative emissions would not exceed significance thresholds. Upon receipt of a request to have the Proposed Project and the Circuit 22 project constructed at one time, SDG&E project management and Environmental Programs staff for both projects will participate in a construction coordination meeting to ensure that the combined construction activities do not result in cumulatively considerable impacts relating to construction emissions. Therefore cumulative impacts, if any, would be less than significant.

The CPUC has discretionary approval authority over both the Proposed Project and the TL 626 project; therefore, the CPUC could ensure that potentially significant cumulative impacts would not occur, should construction of the Proposed Project and TL 626 projects overlap, by coordinating with SDG&E to ensure that construction on the TL 626 project would not proceed in the immediate vicinity of the Proposed Project while the Proposed Project is under construction. As proposed by SDG&E (based on the current anticipated TL 626 schedule), the anticipated construction schedule for the Proposed Project (January through September of 2014) would not coincide with the TL 626 project.

Therefore, no significant cumulatively considerable adverse effects are anticipated relating to compliance with the RAQS and SIP.

Air Quality Standards

As stated above and within Section 4.3, Air Quality and Greenhouse Gases, emissions from construction of the individual segments of the Proposed Project would result in less than significant, short-term, temporary impacts relating to emission of the criteria pollutants. Similar to the Proposed Project, some of the projects listed in Table 4.16-1 would also result in short-term impacts to air quality. Therefore, cumulatively considerable adverse effects could result where construction activities for multiple projects occur simultaneously in the same general vicinity. The only projects with the potential to have simultaneous construction activities with the Proposed Project are the TL 626 and Circuit 222 projects. Similar to the Proposed Project, these projects would result in temporary, short-term emissions of criteria pollutants above existing, baseline conditions. The CPUC has discretionary approval authority over both the Proposed Project and the TL 626 project; therefore, the CPUC could ensure that potentially significant cumulative impacts would not occur, should construction of the two projects overlap, by coordinating with SDG&E to ensure that construction on the TL 626 would not proceed in the immediate vicinity of the Proposed Project (portions of the TL 626 project are located greater than 10 miles from the Proposed Project) while the Proposed Project is under construction. As proposed by SDG&E (based on the current anticipated TL 626 schedule), the anticipated construction schedule for the Proposed Project (January through September of 2014) would not coincide with the TL 626 project. Therefore, no cumulatively considerable impacts are anticipated.

The Circuit 222 project involves distribution only, and is located within private lands: therefore the construction schedule can be implemented directly by SDG&E such that overlaps between the Proposed Project and the Circuit 222 project would typically be avoided. However, if a land owner requested that construction on the Circuit 222 and Proposed Project occur at the same time within their property, SDG&E would limit the combined number of crews and construction equipment such that no net increase in emissions sources would occur; and therefore cumulative emissions would not exceed significance thresholds. Upon receipt of a request to have the Proposed Project and the Circuit 22 project constructed at one time, SDG&E project management and Environmental Programs staff for both projects will participate in a construction coordination meeting to ensure that the combined construction activities do not result in cumulatively considerable impacts relating to construction emissions. Therefore cumulative impacts relating to emissions of criteria pollutants, if any, would be less than significant.

Therefore, no significant cumulatively considerable adverse effects are anticipated relating to exceedance of APCD air quality standards.

Exposure of Sensitive Receptors

The Proposed Project was determined to have less than significant impacts relating to emissions of TACs during construction activities. These less than significant impacts are related to emissions of diesel particulate matter, which has been identified as having carcinogenic and chronic health effects. However, the duration of construction dictates that emissions would not occur long-term, and would occur in multiple, varying locations, thus diluting the potentially harmful emission throughout the length of the Proposed Project area. While the projects listed in Table 4.16-1 could have similar potential effects relating to exposure to sensitive receptors, these

impacts would similarly be associated with construction activities, which are by nature short-term compared to carcinogenic and chronic exposure periods established by CARB and the Office of Environmental Health Hazard Assessment guidelines. In addition, only the TL 626 and Circuit 222 projects have the potential to have overlapping construction with the Proposed Project. The CPUC has discretionary approval authority over both the Proposed Project and the TL 626 projects; therefore, the CPUC could ensure that potentially significant cumulative impacts would not occur, should construction of the two projects overlap, by coordinating with SDG&E to ensure that construction on the TL 626 project would not proceed in the immediate vicinity of the Proposed Project while the Proposed Project is under construction. As proposed by SDG&E (based on the current anticipated TL 626 schedule), the anticipated construction schedule for the Proposed Project (January through September of 2014) would not coincide with the TL 626 project. Therefore, cumulatively considerable impacts are not anticipated with respect to the TL 626 project.

The Circuit 222 project involves distribution only, and is located within private lands: therefore the construction schedule can be implemented directly by SDG&E such that overlaps between the Proposed Project and the Circuit 222 project would typically be avoided. However, if a land owner requested that construction on the Circuit 222 and Proposed Project occur at the same time within their property, SDG&E would limit the combined number of crews and construction equipment such that no net increase in emissions sources would occur; and therefore cumulative emissions of TACs would not be significant. In addition, where the Proposed Project and the Circuit 222 project are located within 0.5 mile (near Pole No. P94), no potential sensitive receptors are present in the immediate vicinity (within approximately 450 feet). Therefore the potential for increased, cumulative adverse effects to sensitive receptors is considered to be low. Impacts, if any, would be less than significant.

Objectionable Odors

Construction of the Proposed Project is anticipated to have less than significant impacts associated with the emission of objectionable odors. Typical odor nuisances include emissions of substances such as hydrogen sulfide, ammonia, chlorine, and other sulfide-related compounds. No substantial sources of these pollutants would exist during construction of the Proposed Project, and none of the projects identified in Table 4.16-1 are likely to result in the emission of any of these substances during construction or operation, because none of them are the type of project that typically uses odor-producing compounds. Construction equipment and construction operations for the Proposed Project and the cumulative projects would emit trace pollutants that could be considered to have objectionable odors, such as diesel exhaust. However, these odors would be temporary in nature and are localized in effect. Only the TL 626 and Circuit 222 projects have the potential to have overlapping construction with the Proposed Project. The CPUC has discretionary approval authority over both the Proposed Project and the TL 626 projects; therefore, the CPUC could ensure that potentially significant cumulative impacts would not occur, should construction of the two projects overlap, by coordinating with SDG&E to ensure that construction on the TL 626 project would not proceed in the immediate vicinity of the Proposed Project while the Proposed Project is under construction. As proposed by SDG&E (based on the current anticipated TL 626 schedule), the anticipated construction schedule for the Proposed Project (January through September of 2014) would not coincide with the TL 626 project. Therefore, cumulatively considerable impacts are not anticipated with respect to the TL 626 project.

The Circuit 222 project involves distribution only, and is located within private lands: therefore the construction schedule can be implemented directly by SDG&E such that overlaps between the Proposed Project and the Circuit 222 project would typically be avoided. However, if a land owner requested that construction on the Circuit 222 and Proposed Project occur at the same time within their property, SDG&E would limit the combined number of crews and construction equipment such that no net increase in emissions sources would occur; and therefore cumulative emissions of TACs would not be significant. In addition, where the Proposed Project and the Circuit 222 project are located within 0.5 mile (near Pole No. P94), no potential sensitive receptors are present in the immediate vicinity (within approximately 450 feet). Therefore the potential for increased, cumulative adverse effects relating to objectionable odors is considered to be low. Impacts, if any, would be less than significant.

Greenhouse Gas Emissions

The Proposed Project would result in GHG emissions during construction. These emissions would be below the County of San Diego's and SCAQMD's threshold of 10,000 metric tons of carbon dioxide equivalents annually for industrial projects. Impacts are therefore anticipated to be less than significant.

All GHG emissions can be considered to have a cumulative effect, and potential cumulative impacts associated with GHG emissions can be considered a state-wide effect. Existing thresholds were developed with this in mind. While construction of the Proposed Project could combine with construction of other projects, cumulative emissions would not likely result in total GHG emissions that could exceed the threshold (note that the Proposed Project's amortized GHG emissions represent less than 1 percent of the GHG threshold of 10,000 metric tons), and any cumulative impacts would not substantially hinder the long-term reduction of GHG emissions within the State of California. Therefore, cumulative effects are less than significant.

Compliance with Adopted GHG Plans, Policies, and Regulations

Construction of the Proposed Project would comply with AB 32 and CARB requirements for the reduction of GHG emissions. Construction emissions were also determined to be below the County of San Diego and SCAQMD's significance threshold for GHG. Therefore, impacts are anticipated to be less than significant. Even if the Proposed Project's effect on compliance with adopted GHG policies and plans were evaluated in combination with the TL 626 and Circuit 222 projects, the combination of these three projects would not likely exceed the significance threshold (note that the Proposed Project's amortized GHG emissions represent less than one percent of the GHG threshold of 10,000 metric tons), and the resulting impacts would not likely substantially hinder the long-term reduction of GHG emissions within the State of California. Therefore, cumulatively considerable adverse effects are not anticipated from construction of the Proposed Project.

4.16.8.3 Biological Resources

The Proposed Project would not have any impacts associated with the following CEQA significance criteria relating to biological resources during construction or operations and maintenance:

- Conflict with local policies and ordinances (Question 4e), and
- Conflict with adopted habitat conservation plans (Question 4f).

In addition, the Proposed Project would not have any impacts during operation and maintenance activities. Therefore, there is no potential for cumulative impacts associated with these significance criteria or operation and maintenance of the Proposed Project. The remaining biological resources-related impacts are discussed below for construction of the Proposed Project.

Construction

Impacts to Protected Species, Habitats, or Species Movement/Migration¹

Construction of the Proposed Project is anticipated to have less than significant impacts relating to state and federally listed species, protected habitats, and species movement and/or migration. Impacts to native vegetation communities resulting from the construction of power lines, access roads, other support facilities, and temporary construction areas can be cumulatively significant when assessed with other projects in the vicinity. As illustrated in Table 4.16-1, there are four projects that could result in impacts that could be cumulatively considerable when assessed with the Proposed Project, as follows:

- TL 626 project,
- Circuit 222 project,
- Sol Orchard Solar Farm project, and
- Sol Orchard SD-5 (Santa Ysabel) project.

The majority of the Proposed Project’s permanent impacts would be limited to areas that are not highly sensitive, with the exception of approximately 0.023 acre of impacts to sensitive habitat (refer to Section 4.4.4.3) including open oak woodland, chaparral, and coastal sage scrub/chaparral mix, and disturbed wetland. The areas of permanent impacts from poles or access roads do not occur all in one place but rather are spread across the length of the power line in locations that are predominantly undeveloped and therefore continue to have substantial acreage of land available for biological resources and wildlife migration despite the Proposed Project’s impact.

Cumulative impacts within a region are most effectively minimized by comprehensive plans that address the impacts of regional growth on wildlife and its habitats. SDG&E has developed and implemented a regional, multi-species conservation program within its southern California range, known as the *SDG&E Subregional NCCP*. The *SDG&E Subregional NCCP* was developed in accordance with the California NCCP Act to avoid, minimize, and mitigate for regionally cumulative impacts to biological resources. Impacts to sensitive habitat are fully addressed through the *SDG&E Subregional NCCP*; therefore the Proposed Project’s impacts to sensitive

¹ Consistent with the discussion of permanent impacts to vegetation and habitat in Section 4.4, Biological Resources, potential permanent cumulative impacts resulting from construction of new facilities are discussed within the Construction impacts section to provide consistency with implementation of the *SDG&E Subregional NCCP*, which addresses avoidance and minimization measures for biological resources.

habitat would not be significant. Implementation of operational protocols in the *SDG&E Subregional NCCP* would ensure that any other cumulative impacts to biological resources would not be significant. Similarly, all other projects listed in Table 4.16-1 would be required to mitigate any impacts to state and federally listed species and/or habitats through compliance with State and Federal ESAs, CWA, and applicable local habitat conservation plans. Therefore, any impacts to biological resources from other projects listed in Table 4.16-1 would also be mitigated, and as such, cumulatively considerable impacts to biological resources would be less than significant.

4.16.8.4 Cultural Resources

Operation and maintenance of the Proposed Project is not anticipated to have impacts on cultural resources. Therefore, no cumulative impacts would result from this significance criterion or operation and maintenance of the Proposed Project. The remaining cultural resources-related impacts are discussed below for construction of the Proposed Project.

Construction

Construction of the Proposed Project is anticipated to have less than significant impacts relating to cultural and paleontological resources (refer to Section 4.5, Cultural Resources) and less than significant impacts to human remains. The Proposed Project has been designed to avoid known cultural resources and project design features and ordinary construction restrictions (refer to Section 3.8) would ensure that any potential impacts relating to unanticipated discovery would be less than significant. For construction projects that occur within undisturbed soil units, potentially significant impacts to buried cultural resources can occur. Potential impacts can also occur where historic, cultural, and paleontological resources have been identified.

As illustrated in Table 4.16-1, there are four projects that are within a one-mile radius of the Proposed Project and are potentially large enough to have a regionally significant impact. However, impacts to cultural resources are site-specific, and as such are not expected to combine with the development of other projects to cumulatively increase the risk of impacting historic or prehistoric archaeological or paleontological resources or human remains. Potential impacts are evaluated on a case-by-case basis. While the TL 626 and Circuit 222 projects would result in ground disturbance within the immediate vicinity of the Proposed Project, these two projects will also be designed to avoid known cultural resources and would be subject to the same project design features and ordinary construction restrictions as the Proposed Project. As such, the Proposed Project's contribution to cumulative impacts related to cultural resources would be less than significant.

4.16.8.5 Geology, Soils, and Mineral Resources

The Proposed Project would not have any impacts associated with the following CEQA Appendix G significance criteria relating to geology, soils, and mineral resources during construction or operations and maintenance:

- Alquist-Priolo Earthquake Faults (Question 6a[i]), and
- Soils incapable of supporting septic system use (Question 6e).

In addition, as outlined in Section 4.6, Geology, Soils and Mineral Resources, there is only the potential for significant impacts during operation and maintenance of the Proposed Project relating to seismic and geologic hazards. Therefore, potential cumulative impacts for operation and maintenance are limited to seismic and geologic hazards. The remaining geology and soils impacts are discussed below for construction and operation and maintenance of the Proposed Project.

Construction

Seismic and Geologic Hazards

Construction of the Proposed Project is anticipated to have less than significant impacts relating to seismic and geologic hazards (refer to Section 4.6, Geology, Soils, and Mineral Resources). Potential geologic hazards, such as seismic shaking, liquefaction, and landslides, could adversely affect the Proposed Project, as well as most of the projects listed within Table 4.16-1. However, these potential impacts are largely avoided through adherence to project design features and engineering standards, which are generally applicable to all of the projects listed in Table 4.16-1 (note that SDG&E projects are subject to the same standards as private development projects, however, all projects would be designed to account for geologic hazards). Furthermore, construction activities are short-term, and workers are not exposed to potential risks for long periods of time (i.e. only during work hours). Finally, construction activities would not occur at the same site, thereby reducing the probability of multiple construction crews (i.e. from different projects) substantially increasing the number of people exposed to potential risks during construction activities at one location. Therefore, any potential cumulative impacts would be less than significant.

Soil Erosion and Loss of Topsoil

Construction of the Proposed Project would have less than significant impacts relating to soil erosion and loss of topsoil. The following projects could result in similar impacts during construction activities, and are located in close proximity to the Proposed Project:

- TL 626 project,
- Circuit 222 project,
- Sol Orchard Solar Farm project, and
- Sol Orchard SD-5 (Santa Ysabel) project.

While these projects could have impacts relating to soil erosion and loss of topsoil in the immediate vicinity of the Proposed Project, all of these projects (including the Proposed Project) would be subject to NPDES requirements, including the preparation of a SWPPP. Adherence to NPDES requirements and erosion control BMPs included within the SWPPPs would ensure that the cumulative effects from the combined projects would be less than significant.

Operation and Maintenance

Seismic and Geologic Hazards

Operation and maintenance of the Proposed Project is anticipated to have less than significant impacts relating to seismic and geologic hazards (refer to Section 4.6, Geology, Soils, and Mineral Resources). Potential geologic hazards, such as seismic shaking, liquefaction, and landslides, could adversely affect the Proposed Project, as well as most of the projects listed within Table 4.16-1. However, these potential impacts are largely avoided through adherence to design and engineering standards, which are applicable to all of the projects listed in Table 4.16-1. Therefore, any potential cumulative impacts would be less than significant.

4.16.8.6 Hazards and Hazardous Materials

The Proposed Project would not have any impacts associated with the following CEQA significance criteria relating to hazards and hazardous materials during construction or operations and maintenance:

- Hazardous Emissions within one-quarter mile of school (Question 7c),
- Sites listed pursuant to Government Code Section 65962.5 (Question 7d),
- Airport land use plans (Question 7e), and
- Private airstrip safety hazards (Questions 7f).

In addition, as outlined in Section 4.7, Hazards and Hazardous Materials, there is no potential for adverse impacts during operation and maintenance of the Proposed Project.

Therefore, there would be no potential for cumulatively considerable impacts associated with these significance criteria or operation and maintenance of the Proposed Project. The remaining hazards and hazardous materials-related impacts are discussed below for construction of the Proposed Project.

Construction

Routine Transport and Handling of Hazardous Materials and Wastes

The Proposed Project would result in less than significant impacts associated with the routine handling and transport of hazardous materials as well as for potential accident or upset conditions. None of the projects outlined within Table 4.16-1 are likely to involve large-scale utilization of hazardous or acutely hazardous substances (such as chemical plants, refineries, or heavy manufacturing) and as such the possibility of a cumulatively considerable threat from the routine transport or reasonably foreseeable accident or upset conditions involving these hazardous materials is considered to be less than significant. While construction of the two solar farm projects could involve the transportation and use of specialized substances that could exhibit hazardous properties, construction of the two solar projects is not anticipated to overlap with construction of the Proposed Project and therefore no cumulative impacts are anticipated in this regard.

Emergency Response and Evacuation

The Proposed Project would not interfere with any emergency plans. Refer to discussion for cumulative impacts associated with traffic and transportation under Section 4.16.8.10 (Transportation and Traffic) below.

Fire Hazards

Construction of the Proposed Project is anticipated to have less than significant impacts relating to fire hazards (refer to Section 4.7, Hazards and Hazardous Materials). Construction of the Proposed Project through vegetated areas, including areas designated as Very High Fire Threat Zones, could be cumulatively considerable with other projects that would involve construction in the same areas. The projects outlined in Table 4.16-1 are either not located in heavily vegetated areas or are not in the immediate vicinity of the Proposed Project construction areas. With respect to potentially cumulatively considerable impacts resulting from construction of the Proposed Project and the projects outlined in Table 4.16-1, impacts would be less than significant because the two solar projects are not anticipated to be constructed simultaneously with the Proposed Project and the TL 626 and Circuit 222 projects would be subject to the same fire prevention and safety plans, standards, and procedures as the Proposed Project (refer to Section 4.7, Hazards and Hazardous Materials). In addition, because the Proposed Project and TL 626 project are both subject to the discretionary authority of the CPUC, the CPUC could ensure that potentially significant cumulative impacts would not occur, should construction of the two projects overlap, by coordinating with SDG&E to ensure that construction on the TL 626 would not proceed in the immediate vicinity of the Proposed Project while the Proposed Project is under construction. As proposed by SDG&E (based on the current anticipated TL 626 schedule), the anticipated construction schedule for the Proposed Project (January through September of 2014) would not coincide with the TL 626 project. Therefore, cumulatively considerable impacts are not anticipated with respect to the TL 626 project.

The Circuit 222 project involves distribution only, and is located within private lands: therefore the construction schedule can be implemented directly by SDG&E such that overlaps between the Proposed Project and the Circuit 222 project would typically be avoided. However, if a land owner requested that construction on the Circuit 222 and Proposed Project occur at the same time within their property, SDG&E would limit the combined number of crews and construction equipment such that no net increase in ignition sources would occur; and therefore cumulative fire hazards would not be significant. Upon receipt of any request to have the Proposed Project and the Circuit 222 project constructed at one time, SDG&E project management and Environmental Programs staff for both projects will participate in a construction coordination meeting to ensure that the combined construction activities do not result in cumulatively considerable impacts relating to increased fire hazard. Therefore the potential for increased, cumulative adverse effects relating to fire hazards is considered to be low. Impacts, if any, would be less than significant.

4.16.8.7 Hydrology and Water Quality

The Proposed Project would have less than significant impacts associated with the following CEQA significance criteria relating to hydrology and water quality during construction or operations and maintenance:

- Substantial depletion of groundwater (Question 8b),
- Substantial alteration of existing drainage resulting in flooding (Questions 8d),
- Placement of housing within 100-year flood hazard area (Question 8g),
- Placement of structures within 100-year flood hazard area (Question 8h),
- Exposure of people or structures to flooding (Question 8i), and
- Exposure of people or structures to seiche, tsunami, or mud flow (Question 8j).

In addition, as outlined in Section 4.8, Hydrology and Water Quality, there are no identified impacts during operation and maintenance of the Proposed Project.

Therefore, there would be no potential for cumulatively considerable impacts associated with these significance criteria or with operation and maintenance of the Proposed Project. The remaining hydrology and water quality-related impacts are discussed below for construction of the Proposed Project.

Construction

Stormwater, Erosion and Water Quality

Construction of the Proposed Project would result in less than significant impacts to water quality standards, stormwater, and other water quality. While construction of the Proposed Project has the potential to cause detrimental impacts to water quality, these potential adverse effects are minimized by complying with existing regulations, including NPDES and stormwater control regulations, and by implementing the SWPPP and SDG&E *BMP Manual*.

The projects listed in Table 4.16-1 would have a similar potential to degrade water quality during construction, but these projects would also be subject to existing water quality and stormwater regulations and would also generally be considered to have less than significant impacts on water quality. Pursuant to current project information, only the TL 626 and Circuit 222 projects could have overlapping construction with the Proposed Project. The TL 626 and Circuit 222 projects would include the same water quality, stormwater, and erosion control measures included as part of the Proposed Project, and can thus be expected to result in similar, less than significant impacts. As proposed by SDG&E (based on the current anticipated TL 626 schedule), the anticipated construction schedule for the Proposed Project (January through September of 2014) would not coincide with the TL 626 project. The Circuit 222 project involves distribution only, and is located within private lands; therefore the construction schedule can be implemented directly by SDG&E such that overlaps between the Proposed Project and the Circuit 222 project would typically be avoided. However, if a land owner requested that construction on the Circuit 222 and Proposed Project occur at the same time within their property, SDG&E would limit the combined number of crews and construction equipment such that any increase in soil disturbance would be minimized, mainly through the shared utilization of construction support land uses such as access roads and staging yards. Therefore the potential for increased, cumulative adverse effects relating to stormwater, erosion and water quality during construction is considered to be low. Impacts, if any, would be less than significant.

None of the projects outlined in Table 4.16-1 would likely involve direct discharges to surface waters that could result in significant adverse effects to surface water quality, although some of the projects could include impacts to jurisdictional features. Regardless, construction of the Proposed Project is not anticipated to result in significant adverse effects to surface water quality. No cumulatively considerable effects are anticipated. Overall, the Proposed Project is not anticipated to contribute to any cumulatively considerable adverse effects on water quality, and, should limited construction overlap occur, impacts are not anticipated to be significant.

Drainage Patterns

Construction of the Proposed Project would not result in substantial effects to the existing drainage patterns in the Proposed Project area. The Proposed Project would result in less than significant effects to 17 jurisdictional features, but would avoid impacting all other features within the Proposed Project area. Impacts are therefore anticipated to be less than significant. The Proposed Project does not involve extensive grading and earth-moving activities that could indirectly effect drainage patterns and flow rates. The Proposed Project does not include new impermeable surfaces that would substantially increase surface flow and would not actually impact existing drainages. While some of the projects listed in Table 4.16-1 could have similar effects to existing jurisdictional waters and/or existing flow patterns, these effects would be localized to each project site. Potential cumulative impacts are anticipated to be less than significant because all of the Projects in Table 4.16-1 that could involve extensive earth-moving activity are not located within the immediate vicinity of the Proposed Project and would not affect the same features as the Proposed Project. The TL 626 and Circuit 222 projects, which have overlapping segments with the Proposed Project, would also not involve extensive grading or earth moving, and would be designed to avoid drainages and other water features wherever feasible. As proposed by SDG&E (based on the current anticipated TL 626 schedule), the anticipated construction schedule for the Proposed Project (January through September of 2014) would not coincide with the TL 626 project. The Circuit 222 project involves distribution only, and is located within private lands: therefore the construction schedule can be implemented directly by SDG&E such that overlaps between the Proposed Project and the Circuit 222 project would typically be avoided. No direct impacts to drainages or jurisdictional features are anticipated where the Proposed Project is located in the immediate vicinity of the TL 626 or Circuit 222 projects. The net amount of work in these areas is not anticipated to create cumulatively significant adverse impacts to drainage patterns (including sedimentation effects) as all three projects would be subject to the same controls (e.g. SWPPP and *BMP Manual*), SDG&E projects are designed to avoid areas of significant drainage, and the required grading/earth moving is not extensive. The Proposed Project is therefore not anticipated to substantially contribute to any cumulatively considerable adverse effect on the existing drainage pattern or surface flow.

4.16.8.8 Noise

The Proposed Project would not have any impacts associated with the following CEQA Appendix G significance criteria relating to Noise during construction:

- Exposure to excessive groundborne vibration or noise (Question 10b),
- Substantial permanent increase in ambient noise (Question 10c),
- Effects associated with public airports (Question 10e), and
- Effects associated with private airports (Question 10f).

In addition, as outlined in Section 4.10, Noise, operation and maintenance of the Proposed Project would not result in any noise impacts.

Therefore, there is no potential for cumulative impacts associated with these significance criteria or with operation and maintenance. The remaining noise-related impacts are discussed below for construction of the Proposed Project.

Construction

Generation of Noise and Compliance with Noise Codes

As outlined in Section 4.10, Noise, construction of the Proposed Project would have less than significant impacts relating to noise generation. Construction of the Proposed Project would generate noise, as would the projects outlined in Table 4.16-1 that also involve construction. However, most of the projects outlined in Table 4.16-1 are not located in the immediate vicinity of Proposed Project (i.e. are located greater than 0.3 mile from Proposed Project features) and are therefore not likely to combine with Proposed Project-generated construction noise to create significant adverse effects. While the TL 626 and Circuit 222 projects are partially located in the immediate vicinity of the Proposed Project and have the potential to have construction occur simultaneously with the Proposed Project, construction of the three projects is not currently anticipated to overlap. As proposed by SDG&E (based on the current anticipated TL 626 schedule), the anticipated construction schedule for the Proposed Project (January through September of 2014) would not coincide with the TL 626 project. The majority of the TL 626 project would occur beyond one mile of the Proposed Project and would therefore not combine with the Proposed Project to create cumulatively considerable noise impacts. Where a section of the TL 626 project is common with the Proposed Project, TL 626 shares common structures with TL 637, and thus construction at this location would not be cumulatively considerable because additional noise-generating equipment would not be required.

The Circuit 222 project involves distribution only, and is located within private lands: therefore the construction schedule can be implemented directly by SDG&E such that overlaps between the Proposed Project and the Circuit 222 project would typically be avoided. However, if a land owner requested that construction on the Circuit 222 and Proposed Project occur at the same time within their property, SDG&E would limit the combined number of crews and construction equipment such that no net increase in noise generation sources would occur; and therefore potential cumulatively considerable noise effects would be minimized. Upon receipt of a request to have the Proposed Project and the Circuit 222 project constructed at one time, SDG&E project

management and Environmental Programs staff for both projects will participate in a construction coordination meeting to ensure that the combined construction activities do not result in cumulatively considerable impacts relating to construction emissions. In addition, where a portion of the Circuit 222 project is located in the immediate vicinity of the Proposed Project, no potential NSAs are located in close enough proximity to pole sites such that cumulatively considerable noise would result in significant impacts. All potential NSAs near Pole No. P94 (where Circuit 222 crosses TL 637) are located greater than approximately 450 feet from the pole sites. Therefore cumulative adverse impacts relating to noise, if any, would be less than significant.

As outlined in Section 4.10, Noise, construction of the Proposed Project would have less than significant impacts relating to local noise standards and ordinances following implementation of project design features and ordinary construction restrictions (refer to Section 3.8). The TL 626 and Circuit 222 projects would be subject to similar restrictions, and would similarly be anticipated to result in less than significant impacts. As discussed above, construction of the Proposed Project could occur in close proximity to the TL 626 and Circuit 222 projects in limited, specific locations. Where the Proposed Project and the TL 626 project require construction in close proximity to each other (potentially creating a cumulative exceedance of County Noise Codes) the two projects share structures (existing and proposed double circuit structures). Within this area, additional noise-generating equipment would not be required because the area of overlap is limited to one set of poles, which would require the same set of construction equipment as any other single section of power line. In addition, as proposed by SDG&E (based on the current anticipated TL 626 schedule), the anticipated construction schedule for the Proposed Project (January through September of 2014) would not coincide with the TL 626 project. Therefore, cumulative impacts to noise standards and ordinances, if any, would be less than significant.

Where construction of the Circuit 222 project and could occur in close proximity to the Proposed Project (only if requested by the adjacent land owner), the increase in construction equipment would be limited such that no net increase in noise generation sources would occur and the potential cumulative increase in noise levels would be limited. In addition, the area in the immediate vicinity of Pole No. P94 (where the Proposed Project and Circuit 222 project occur in close proximity) does not contain any potential NSAs within approximately 450 feet, thus limiting the potential adverse effect of construction noise. Therefore, cumulatively considerable impacts, if any, would be less than significant.

4.16.8.9 Recreation

The Proposed Project would not have any impacts associated with the following CEQA Appendix G criterion relating to recreation:

- Construction of new or expanded recreational facilities that could result in adverse impacts to the environment (Question 13b).

In addition, as outlined in Section 4.13, Recreation, there is no potential for significant impacts during operation and maintenance of the Proposed Project. Therefore, there is no potential for cumulative impacts associated with these significance criteria or operation and maintenance of

the Proposed Project. The remaining recreation-related impacts are discussed below for construction of the Proposed Project.

Construction

As discussed under Section 4.16.11, the Proposed Project would have less than significant temporary impacts associated with restricted access to certain parks and recreational facilities. However, the projects listed in Table 4.16-1 for the most part would not have similar effects in the same location as the Proposed Project. The TL 626 project would not involve construction within the same parks as the Proposed Project, and thus the two projects would not cumulatively restrict access to any parks. Construction of the Proposed Project and the Circuit 222 project would be coordinated by SDG&E such that construction of the two projects would typically not overlap. However, if a private land owner were to request that SDG&E construct the Proposed Project and Circuit 222 project at the same time, potential impacts at such an area would not be cumulatively significant as construction would be limited to common access points, staging yards, HLZs, and other applicable construction support land uses wherever feasible. Overlapping of direct construction activities (i.e. pole installation and removal) would also be limited to private lands, where public recreational activities typically do not occur. Concurrent construction would also limit the total impact by limiting the number of times construction crews and equipment are present at any given location. Therefore, cumulative impacts associated with restricted access to existing parks and recreational facilities, if any, are anticipated to be less than significant.

4.16.8.10 Transportation and Traffic

The Proposed Project would not have any impacts associated with the following CEQA Appendix G significance criteria relating to transportation and traffic during construction:

- Traffic congestion and LOS (Question 14a),
- Conflict with congestion management plan (Question 14b),
- Increase in design hazard (Question 14d), and
- Impacts to public transit (Question 14f).

In addition, as discussed in Section 4.14, Transportation and Traffic, the Proposed Project would not have any impacts relating to transportation and traffic during operation and maintenance. Therefore, there is no potential for cumulative impacts associated with these significance criteria or operations and maintenance. The remaining traffic and transportation-related impacts are discussed below for construction of the Proposed Project.

Construction

Change in Air Traffic Control Patterns

The Proposed Project would result in less than significant impacts to air traffic patterns due to utilization of helicopters during construction. Three other projects (TL 626, Circuit 222, and the Feral Pig Control projects) could also utilize helicopters during either construction or operation. The Proposed Project, Circuit 222 project, and TL 626 project would utilize light- to medium-

duty helicopters during construction. For the Proposed Project, Circuit 222 project, and TL 626 project, helicopter operators would coordinate with local air traffic control and comply with applicable FAA regulations to prevent any adverse impacts due to increased air traffic. The same is assumed to be true for the Feral Pig Control project, should helicopters be utilized. Therefore, any cumulatively considerable effects are anticipated to be less than significant.

Emergency Access

Construction of the Proposed Project would result in less than significant impacts to emergency access (refer to Section 4.14, Transportation and Traffic). While the TL 626 and Circuit 222 projects could also result in similar impacts, these impacts would not typically be located in close enough vicinity to the Proposed Project for the effects of the two projects to create cumulatively considerable effects on emergency access. In addition, as proposed by SDG&E (based on the current anticipated TL 626 schedule), the anticipated construction schedule for the Proposed Project (January through September of 2014) would not coincide with the TL 626 project. The Circuit 222 project involves distribution only, and is located within private lands: therefore the construction schedule can be implemented directly by SDG&E such that overlaps between the Proposed Project and the Circuit 222 project would typically be avoided. However, if a private land owner were to request that construction of the Proposed Project and the Circuit 222 project occur simultaneously within their property, within their property, SDG&E would limit the combined number of crews and construction equipment such that any increase in construction traffic and equipment would be minimal. With no net increase in construction crews and equipment, any increase in construction traffic would be limited to support services, such as engineering and environmental monitors. Therefore, any increase in construction traffic would not be anticipated to result in significant cumulatively significant adverse effects on emergency access. Therefore, cumulative impacts to emergency vehicle access, if any, would be less than significant.

4.16.8.11 Utilities and Service Systems

The Proposed Project would not have any impacts associated with the following CEQA Appendix G significance criteria relating to utilities and service systems during construction or operations and maintenance:

- Wastewater treatment requirements (Question 15a),
- New water or wastewater facilities (Question 15b),
- New stormwater facilities (Question 15c),
- Wastewater treatment services (Question 15e), and
- Compliance with solid waste regulations (Question 15g).

In addition, operation and maintenance of the Proposed Project is not anticipated to have any impacts relating to utilities and service systems. Therefore, there is no potential for cumulative impacts associated with these significance criteria or operations and maintenance. The remaining utilities and service system-related impacts are discussed below for construction of the Proposed Project.

Construction

Water Supply

Construction of the Proposed Project will use water, mainly for the purpose of dust control. The Proposed Project will obtain water for dust control and other construction needs from existing local sources by the construction contractors. Both solar projects, the TL 626 project and the Circuit 222 project would also likely require water during construction. The source would likely be local, similar to the source for the Proposed Project. However, only the TL 626 and Circuit 222 projects have the potential to have construction overlap with the Proposed Project. The majority of the TL 626 project would not occur in the immediate vicinity of the Proposed Project, and the water use for the TL 626 and Circuit 222 projects and the Proposed Project would be temporary. In addition, as proposed by SDG&E (based on the current anticipated TL 626 schedule), the anticipated construction schedule for the Proposed Project (January through September of 2014) would not coincide with the TL 626 project. Finally, SDG&E will ensure that the Circuit 222 project will typically not have overlapping construction with the Proposed Project, and therefore the two projects are not anticipated to result in cumulatively considerable impacts. However, if construction of the Circuit 222 project and the Proposed Project do occur simultaneously pursuant to request by an adjacent land owner, construction activities on Circuit 222 would be limited such that additional water use would not likely be sufficiently large enough to result in a significant increase in demand on local water supply. Therefore, cumulative impacts to water supply, if any, would be less than significant.

Solid Waste and Landfill Capacity

Construction of the Proposed Project would result in less than significant impacts to solid waste (landfill) capacity. While almost all of the projects listed in Table 4.16-1 would have a similar potential to impact solid waste and landfill capacity, the existing local landfill system has ample capacity for the foreseeable future, and none of the projects listed in Table 4.16-1 would likely result in large amounts of solid waste generation. In addition, only the TL 626 and Circuit 222 projects have the potential to have overlapping construction with the Proposed Project. However, as proposed by SDG&E (based on the current anticipated TL 626 schedule), the anticipated construction schedule for the Proposed Project (January through September of 2014) would not coincide with the TL 626 project. The Circuit 222 project involves distribution only, and is located within private lands: therefore the construction schedule can be implemented directly by SDG&E such that overlaps between the Proposed Project and the Circuit 222 project would typically be avoided. However, if construction of the Circuit 222 project and the Proposed Project do occur simultaneously pursuant to request by an adjacent land owner, construction activities on Circuit 222 would be limited such that additional waste generation would not likely be sufficiently large enough to result in a significant degradation of existing landfill capacity (as outlined in Table 4.15-1, the Otay Landfill has an existing capacity of approximately 24.5 million cubic yards). Therefore, cumulative impacts to solid waste and landfill capacity, if any, would be less than significant.

4.16.9 Project Design Features and Ordinary Construction/Operating Restrictions

SDG&E would implement project design features and adhere to ordinary construction and operating restrictions, as outlined in Section 3.8. While the design features and ordinary

restrictions ensure the Proposed Project complies with applicable regulations, ordinances, and standards, they would also avoid significant adverse impacts to the project, public, and environment.

4.16.10 Applicant Proposed Measures

While potentially significant cumulative impacts could occur due to simultaneous construction between the Proposed Project, the TL 626 project, and the Circuit 222 project, the anticipated construction schedule proposed by SDG&E for the Proposed Project (January through September of 2014) would not coincide with the TL 626 project. The CPUC could coordinate with SDG&E to ensure that TL 626 construction activities would not occur in the immediate vicinity of the Proposed Project while the Proposed Project is under construction, thereby avoiding potential cumulatively considerable impacts. The Circuit 222 project involves distribution only, and is located within private lands: therefore the construction schedule can be implemented directly by SDG&E such that overlaps between the Proposed Project and the Circuit 222 project would typically be avoided. However, if an adjacent land owner requests that construction of the Circuit 222 project and the Proposed Project occur simultaneously or in sequence, additional construction equipment and crews will be limited such that no net increase in crews and equipment would result. In addition, construction activities would utilize the same construction support land uses (i.e. access roads, staging areas, and HLZs), and all construction would be performed in compliance with the project design features and ordinary construction and operating restrictions outlined in Section 3.8. Therefore, no potentially significant cumulative impacts are anticipated (refer to Sections 4.16.8.1 through 4.16.8.11 above) and no APMs would be needed in order to ensure impacts are less than significant.

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5.0 DETAILED DISCUSSION OF SIGNIFICANT IMPACTS

In accordance with the PEA Checklist issued by the CPUC on October 7, 2008, this section:

- Identifies the potentially significant impacts that would result from the construction, operation, or maintenance of the Proposed Project;
- Discusses the alternatives that were evaluated in determining the Proposed Project and the justification for the selection of the preferred alternative; and
- Discusses the Proposed Project's potential to induce growth in the area.

5.1 APPLICANT PROPOSED MEASURES TO MINIMIZE SIGNIFICANT EFFECTS

The Proposed Project will not result in significant, unavoidable, adverse effects (refer to Sections 4.1 through 4.16). Therefore, no APMs are proposed.

5.2 DESCRIPTION OF PROJECT ALTERNATIVES TO MINIMIZE SIGNIFICANT EFFECTS

5.2.1 Introduction

The CPUC PEA Checklist directs public utilities to provide a summary of alternatives that would meet most of the objectives of the Proposed Project and an explanation as to why they were not chosen as the Proposed Project. The CPUC PEA Checklist further requires that the discussion of alternatives include alternatives capable of substantially reducing or eliminating any significant environmental effects, even if the alternative(s) substantially impede the attainment of the project objectives, and are more costly.

5.2.2 Methodology

In accordance with the CPUC PEA Checklist, this section considers the following potential alternatives:

- No Project Alternative;
- Wood-to-Wood Replacement Project Alternative;
- Underground Project Alternative; and
- Minor Relocations Alternative.

The Proposed Project involves the replacement of existing wood structures with steel structures for the purpose of increasing the fire safety and reliability of TL 637 in light of the high fire risks in the area. The Proposed Project has been designed to avoid and minimize potential adverse environmental effects (refer to Sections 3.0 and 4.1 through 4.15). Section 4 confirms that there

are no significant impacts associated with the Proposed Project. This section of the PEA considers whether any of the alternatives meet the Proposed Project Objectives and whether any of the alternatives reduce potential adverse impacts.

5.2.3 Proposed Project Objectives

As outlined in Section 2.0, Proposed Project Purpose and Need, the objectives for the Proposed Project are;

1. Increase the Fire Safety and Service Reliability of TL 637, and existing 69kV power line (fundamental objective)
2. Minimize Potential Adverse Environmental Effects
3. Locate Proposed Facilities within Existing Utility Corridors to the Extent Feasible

5.2.4 Alternatives Considered but Rejected

SDG&E evaluated several alternatives based upon feasibility and ability to fulfill the Proposed Project objectives, especially the fundamental objective of increasing fire safety and service reliability (Objective No. 1). Feasible alternatives that meet the fundamental objectives were not found. Each alternative that was considered but rejected is discussed in detail in the following sections.

5.2.4.1 No Project Alternative

CEQA requires consideration of a “No Project Alternative.” The purpose of the No Project Alternative is to enable decision-makers to compare the impacts of approving the Proposed Project against the impacts of not approving the Proposed Project. The No Project Alternative assumes TL 637 would not be replaced in its entirety and poles would be replaced on a pole-by-pole basis in a piecemeal fashion, pursuant to standard maintenance needs and practices.

Attainment of Project Objectives by the No Project Alternative

SDG&E would not be able to meet the Proposed Project’s fundamental objective (Objective No. 1) if the No Project Alternative was selected. Wood power poles, regardless of specifications or age, do not meet the standards for fire prevention as outlined within G.O. 95 and within current SDG&E design standards. Therefore, the No Project Alternative would not meet the Proposed Project Objective of fire hardening TL 637. In addition, the No Project Alternative would entail continued operation and maintenance wood poles in a high fire risk area and four wood poles in a wet meadow. Therefore the environmental impacts associated with baseline environmental conditions would not be reduced, as with the Proposed Project.

Avoidance or Reduction of Potentially Significant Impacts

The Proposed Project does not pose any significant impacts, therefore the No Project Alternative would not reduce or avoid any potentially significant impacts associated with the Proposed Project. As noted above, the No Project Alternative would entail continued operation and maintenance of wood poles in a high fire risk area and four wood poles in a wet meadow. Although the No Project Alternative would not result in the identified impacts (refer to PEA

Sections 4.1 through 4.15), it would not reduce any of the environmental impacts associated with baseline environmental conditions. The Proposed Project would result in increased fire safety in the Proposed Project area, whereas the No Project Alternative would not provide for this increase in fire safety. The No Project Alternative would not bring the entire line into compliance with current SDG&E design standards and G.O. 95, except over time as poles are replaced one-by-one.

Conclusion

The No Project Alternative would not meet the fundamental objective of the Proposed Project (Objective No. 1) because it would not increase fire safety along TL 637. Therefore, SDG&E rejected the No Project Alternative.

5.2.4.2 Wood-to-Wood Replacement Project Alternative

The Wood-to-Wood Replacement Project Alternative would include the replacement of existing TL 637 wood structures with new wood structures. The Wood-to-Wood Replacement Project would match the Proposed Project except that no steel poles would be used.

Attainment of Project Objectives by the Wood-to-Wood Replacement Project Alternative

SDG&E would not be able to meet the Proposed Project's fundamental objective (Objective No. 1) if the Wood-to-Wood Replacement Project Alternative was selected. Wood power line poles, regardless of specifications or age, do not meet the standards for fire prevention as outlined within G.O. 95 and within current SDG&E design standards. New wood poles would not meet key design situations, such as the extreme wind loading case and known local weather conditions. Therefore, the Wood-to-Wood Replacement Project Alternative would not meet the Proposed Project Objectives. In addition, the Wood-to-Wood Replacement Project Alternative would entail continued operation and maintenance of approximately 156 wood poles in a high fire risk area. Therefore the environmental impacts of wildland fire risk associated with baseline environmental conditions would not be reduced, as with the Proposed Project.

Avoidance or Reduction of Potentially Significant Impacts

The Proposed Project does not pose any significant impacts, therefore the Wood-to-Wood Replacement Alternative would not reduce or avoid any potentially significant impacts associated with the Proposed Project. Nonetheless, the Wood-to-Wood Replacement Project Alternative would result in similar construction impacts to those described for the Proposed Project (refer to Sections 4.1 through 4.15) as the construction methods, equipment, and work force would be very similar between the two projects. However, the Wood-to-Wood replacement Project Alternative would have greater potential long term impacts relating to fire risk as compared to the Proposed Project. Therefore, the Wood-to-Wood Alternative would not avoid or reduce potential significant impacts.

Conclusion

The Wood-to-Wood Replacement Project Alternative would not meet the fundamental objective of the Proposed Project (Objective No. 1) because it would not increase fire safety along TL 637. Therefore, the Wood-to-Wood Replacement Project Alternative was rejected by SDG&E.

5.2.4.3 Underground Project Alternative

The Underground Project Alternative would include the replacement of the existing TL 637 overhead power line with a new, completely underground 69kV power line. The Underground Project Alternative would include the removal of the same existing wood structures that will be removed as part of the Proposed Project; however, the Underground Project Alternative would require new underground easement. The Underground Project Alternative would include new underground cable installation along the current TL 637 route, including new splice vaults and cable poles, as needed. Construction of the Underground Project Alternative would result in approximately 17 acres of temporary impact area, approximately 34,200 cubic yards of cut (from excavation of new trench) and would almost assuredly require extensive blasting in order to construct new trenches along the TL 637 alignment.

Attainment of Project Objectives by the Underground Project Alternative

Objective No. 1: Increase Fire Safety and Service Reliability

The Underground Project Alternative would meet Objective No. 1 as it would remove the existing wood poles and overhead power lines that do not meet G.O. 95 and current SDG&E design standards. The new TL 637 would be placed in an underground position, which would effectively increase fire safety and service reliability along TL 637. Important fire safety factors such as fuel type, climate, and wind speed do not have the same effect on underground lines as they do on overhead lines. Therefore, the Underground Project Alternative would meet Objective No. 1.

Objective No. 2: Limit Potential Adverse Environmental Effects

The Underground Project Alternative would limit impacts in a few areas, such as aesthetics, however the process of constructing underground power lines is more intensive than overhead line construction and disturbance areas and work space requirements greatly increase during underground line construction. It is estimated that construction of TL 637 would require approximately 17 acres of disturbance area (not counting staging yards and other temporary construction areas) and approximately 34,200 cubic yards of cut. The Underground Project Alternative would be constructed and operated pursuant to the same laws, regulations, standards, and project design features that limit potential adverse environmental impacts for the Proposed Project (refer to Section 3.8 and Sections 4.1 through 4.15). However, the nature of underground construction (such as the amount of area needed for construction and the amount and nature of equipment used) dictates that impacts associated with underground construction often cannot be limited or avoided. The Underground Project Alternative would reasonably result in greater impacts to almost all of the resource areas analyzed within the PEA (refer to Sections 4.1 through 4.15), especially those with spatially-sensitive resources such as biology, cultural resources, agriculture, soils, and geologic hazards. The more intensive nature of underground construction would also likely result in greater impacts to air quality (due to increased equipment requirements), increased traffic impacts where new underground lines would be located within or perpendicular to existing roadways, water supply (due to increased water needs for dust control relating to the increased disturbance footprint), and increased waste generation due to the excess dirt from the trenches (a large portion of the excavated soil will have to be disposed of offsite as

the duct bank will occupy much of the volume of the trenches). Therefore, the Underground Project Alternative does not meet Objective No. 2.

Objective No. 3: Located Proposed Facilities within Existing Utility Corridors to the Extent Feasible

While detailed engineering for the Underground Project Alternative has not been performed, the route for the Underground Project Alternative would utilize the same route as the Proposed Project, to the greatest extent feasible. Therefore, the Underground Project Alternative could theoretically meet Objective No. 3 to the same extent the Proposed Project would. However, underground construction is subject to different design and constructability limitations than overhead construction, and most often overhead power lines can be installed in many places that underground lines cannot. For example, overhead lines can be designed and constructed such that areas that represent construction challenges can be easily avoided, often by spanning over them. These areas typically include (but are not limited to) the following:

- Areas of extreme variance in topography (such as steep slopes),
- Areas of unsuitable soil (including areas of bedrock),
- Environmentally sensitive areas (including sensitive habitats and cultural resources),
- Water features (including wetlands, streams, and other jurisdictional features), and
- Existing anthropogenic features (such as roads, railroads, buildings, parks, etc.).

Construction of underground lines becomes more complicated where the above features are encountered, and construction becomes either more expensive, leads to greater impacts (where resources are not avoided), requires a longer route (in order to avoid areas where construction cannot occur, or all of the above). For example, with respect to the TL 637 area, existing geologic conditions would most likely dictate that construction of an underground power line would require extensive blasting.

When underground lines are designed, important features that limit the location of the line are taken into account and the overall route length is most often significantly longer than an overhead line that shared the same endpoints would be. The existing TL 637 alignment contains many potential features that would affect the design of an underground power line, including steep slopes, open space preserves, sensitive habitat, unsuitable soils (bedrock), and existing anthropogenic features. Therefore, while an engineered underground route has not been prepared for the TL 637 line, it is likely that any feasible underground TL 637 route would require some location outside of the existing utility corridors to make this alternative feasible and ensure that costs are reasonable and prudent. The Underground Project Alternative would not meet Objective No. 3.

Avoidance or Reduction of Potentially Significant Impacts

The Proposed Project does not pose any significant impacts, therefore the Underground Project Alternative would not reduce or avoid any potentially significant impacts associated with the Proposed Project. Moreover, the Underground Project Alternative would result in greater impacts to almost all of the resource areas analyzed within the PEA (refer to Sections 4.1

through 4.15). As described above, construction of underground facilities involves a more physically intensive construction process that typically requires greater area, more work and equipment hours (including vastly increased requirement for blasting), and a longer construction schedule. In addition, construction of underground lines is subject to a greater amount of construction limitations. These factors dictate that adverse impacts from construction of an underground power line will most often be greater than the impacts when compared to a comparable overhead line.

Re-construction of TL 637 within an underground position would reasonably result in greater impacts than the Proposed Project, especially within those resource areas that contain spatially located elements (such as biological resources, water resources, cultural resources, agricultural and forestry resources, and soils). The more labor and equipment intensive construction could also result in greater impacts associated with the emission of criteria pollutants, traffic congestion (potentially higher number of trips and greater direct impact to existing public roadways), solid waste generation, storm water and waste water generation, and water usage. Therefore, the Underground Project Alternative would result in greater impacts when compared to the Proposed Project.

Conclusion

The Underground Project Alternative would meet the fundamental objective of the Proposed Project (Objective No. 1) because it would increase fire safety and service reliability. However, the Underground Project Alternative would not meet Objective Nos. 2 and 3 to the same extent as the Proposed Project. Furthermore, the Underground Project Alternative would result in greater impacts to resource areas such as biological resources, cultural resources, air quality, water resources, and traffic. Finally, construction of underground power lines on the TL 637 route could increase construction costs by approximately 75 million dollars when compared to overhead construction. The difference in cost between overhead and underground construction is more pronounced where topographical variability and geological constraints are present, as which the TL 637 alignment. For these reasons, SDG&E rejected the Underground Project Alternative.

5.2.4.4 Minor Relocations Alternative

The Minor Relocations Alternative would mirror the Proposed Project except for two areas where, under the Minor Relocations Alternative, the re-constructed TL 637 would be located more closely to the existing TL 637 alignment. Specifically, the Minor Relocation Alternative would include the following two deviations from the Proposed Project:

- The existing distribution line on the north side of Creelman Lane would not be consolidated and underbuilt on the new TL 637 pole line located on the south side of Creelman Lane; and
- The approximately 1,170-foot segment of TL 637 between Pole Nos. P103 and P105 would be reconstructed in its current location, within an existing wet meadow.

Attainment of Project Objectives by the Minor Relocations Alternative

Objective No. 1: Increase Fire Safety and Service Reliability

The Minor Relocations Alternative would meet Objective No. 1 as it would replace the existing wood power poles with new steel poles, and would increase fire safety and service reliability in the same manner as the Proposed Project (refer to Section 2.0, Proposed Project Purpose and Need).

Objective No. 2: Limit Potential Adverse Environmental Effects

The Minor Relocations Alternative would be constructed and operated pursuant to the same laws, regulations, standards, and project design features that limit potential adverse environmental impacts for the Proposed Project (refer to Section 3.8 and Sections 4.1 through 4.15). However, re-construction of the TL 637 power line within its existing location within the wet meadow area would result in greater impacts to the meadow during both construction, operation, and maintenance when compared to the Proposed Project. In addition, the non-consolidation of distribution and TL 637 along Creelman Lane near the Creelman Substation would result in a net increase in the number of poles located along Creelman Lane, when compared to the Proposed Project. Therefore, while the Proposed Project and the Minor Relocations Alternative are very similar, the Minor Relocations Alternative would have greater impacts than the Proposed Project and therefore does not fully meet Objective No. 2.

Objective No. 3: Located Proposed Facilities within Existing Utility Corridors to the Extent Feasible

The Minor Relocations Alternative meets Objective No. 3 in the same manner as the Proposed Project (refer to Section 2.0, Proposed Project Purpose and Need).

Avoidance or Reduction of Potentially Significant Impacts

The Proposed Project does not pose any significant impacts, therefore the Minor Relocations Alternative would not reduce or avoid any potentially significant impacts associated with the Proposed Project. Moreover, as described above, the Minor Relocations Alternative would include the replacement of poles within an existing wet meadow, which would result in greater impacts during construction, operation, and maintenance when compared to the Proposed Project. The Minor Relocations Alternative would also result in a new increase in the number of poles along Creelman Lane, when compared to the Proposed Project. All other impacts would reasonably be considered to be similar; however, the Minor Relocations Alternative would not reduce any potentially significant impacts when compared to the Proposed Project.

Conclusion

While the Minor Relocations Alternative meets Objective Nos. 1 and 3 in the same manner as the Proposed Project, it does not meet Objective 2 as well as the Proposed Project, would result in greater impacts within an existing wet meadow, and would not reduce any impacts associated with the Proposed Project. Therefore, SDG&E rejected the Minor Relocations Alternative.

5.3 GROWTH-INDUCING IMPACTS

CEQA requires a lead agency to review and discuss whether a project would foster economic or population growth, either directly or indirectly, in the surrounding environment. The *CEQA Guidelines* consider a project to be growth-inducing if it fosters economic or population growth or the construction of additional housing, either directly or indirectly, in the surrounding area. New employees hired for proposed commercial and industrial development projects and population growth resulting from residential development projects represent *direct* forms of growth. Other examples of *indirect* forms of growth-inducing projects are the expansion of urban services into previously undeveloped areas or the removal of major obstacles to growth, such as transportation corridors and potable water supply.

Consistent with the *CEQA Guidelines*, the Proposed Project could be considered to have growth-inducing impacts if it would either directly or indirectly foster economic or population growth within the communities of Ramona and Santa Ysabel, or remove existing obstacles to growth in these areas above what would be expected without the Proposed Project. The Proposed Project could also have a growth-inducing impact if it would provide a substantial amount of new employment, create a substantial new burden on existing communities, provide access to previously inaccessible areas or extend public services to previously un-served areas, or cause new development elsewhere (outside of the San Diego County area).

As explained previously, the Proposed Project generally entails the replacement of an existing 69kV wood power line with a new 69kV steel power line. No increase or expansion of capacity is proposed. Although the Proposed Project would improve electrical service reliability in the San Diego County service area, implementation of the Proposed Project would not result in any significant growth-inducing environmental effects.

5.3.1 Economic or Population Growth

5.3.1.1 Background and Anticipated Growth in the Proposed Project Area

As outlined in Section 4.11, Population and Housing, San Diego County is projected to grow to a total population of 3,391,010 by the year 2020, an increase of approximately 286,926 people (or approximately 9.4 percent) as predicted by the Population and Housing Element of the San Diego General Plan Update Environmental Impact Report (August 2011). Population within the community of Ramona is anticipated to grow to 55,024 (from 40,261). This increase represents growth of approximately 36.7 percent above 2010 populations. No population data is available for Santa Ysabel.

5.3.1.2 Growth and the Proposed Project

The Proposed Project would be implemented to continue SDG&E’s long-term fire hardening efforts, thereby improving fire safety and service reliability of an existing electrical system spanning between two existing developed areas. These areas are subject to severe weather conditions—including extreme temperatures, high winds and ice—necessitating electric system improvements. The Proposed Project is not being implemented in advance of growth but, rather, in response to necessary fire-safety and service reliability requirements for existing development in San Diego County. As discussed in Chapter 2.0, Proposed Project Purpose and Need, SDG&E is legally required to adhere to reliability requirements consistent with CPUC General

Orders, CAISO Tariff provisions, NERC/FERC requirements, and SDG&E internal standards. The Proposed Project would not increase housing, bring in new services, or improve the existing infrastructure system (with the exception of increasing reliability of the existing line). Instead, the Proposed Project is designed to ensure consistency of the existing services with reliability requirements and to reduce existing fire risks identified in the Project area.

The Proposed Project involves the replacement of an existing 69kV wood power line with a new 69kV steel power line. The capacity of TL 637 will not increase or expand. The Proposed Project will accommodate existing and projected demand in the service area by improving system reliability and fire hardening TL 637, which will reduce the risk of potential fire hazard impacts under certain atmospheric conditions. If these improvements are not implemented, deterioration of services and an increased likelihood of system instability will result. The Proposed Project will not directly or indirectly foster growth or remove obstacles to economic or population growth in the area.

5.3.2 New Employment

The Proposed Project involves the replacement of an existing 69kV wood power line with a new 69kV steel power line. The capacity of TL 637 will not increase or expand. The Proposed Project would provide short-term construction employment, but no new permanent employment increase. Construction activities are expected to take approximately 9 months under normal conditions. During peak construction times, SDG&E would employ up to approximately 50 workers per day during normal conditions or up to approximately 140 workers during the peak of construction. SDG&E would supplement its workforce as needed during construction from a contractor's pool of experienced personnel. It is anticipated that less than 50 workers would need to reside temporarily at local lodging establishments. The limited, temporary nature of employment for this pool of workers would not result in long-term growth within the Proposed Project area.

Operation and maintenance activities for the Proposed Project would be performed by current SDG&E personnel, and no new jobs would be required. As a result, the Proposed Project would not induce any increase in employment.

5.3.3 Extended Access or Public Services

The Proposed Project involves the replacement of an existing 69kV wood power line with a new 69kV steel power line. The capacity of TL 637 will not increase or expand. The Proposed Project would not provide access to previously inaccessible areas, or extend public services to any currently un-served areas. SDG&E currently provides electric service to the Proposed Project areas and the Proposed Project does not include the expansion of the electric system into areas that currently do not have electric service infrastructure. Therefore, the Proposed Project would not induce growth by extending access or public services (electric service infrastructure) into areas that are currently un-served.

5.3.4 Existing Community Services

The Proposed Project involves the replacement of an existing 69kV wood power line with a new 69kV steel power line. The capacity of TL 637 will not increase or expand. The Proposed

Project is an unmanned utility project, and no new or altered governmental services would be required as a result of project operations. The Proposed Project would not generate a demand for water, wastewater, or solid waste services, and its demand for local- and County-provided services, such as road improvements, law enforcement, and fire protection, will be negligible (see Section 4.11, Population and Housing; 4.12, Public Services; and 4.15, Utilities and Service Systems).

5.3.5 New Development

The Proposed Project involves the replacement of an existing 69kV wood power line with a new 69kV steel power line. The capacity of TL 637 will not increase or expand. The Proposed Project will not promote new development, either in the San Diego County area (including the communities of Ramona and Santa Ysabel) or elsewhere, because it is primarily a response to obviating the possibility of fire risks and improving the reliability of an existing electrical system for present and planned development. The Proposed Project will satisfy SDG&E's obligation to accommodate the demand that the development market and local governments have projected. The Proposed Project would not directly or indirectly cause or promote new development that would not otherwise be constructed, as approved through local land use approval processes.

5.3.6 Conclusion

The Proposed Project is the replacement of an existing 69kV wood power line with a new 69kV steel power line. The capacity of TL 637 will not increase or expand. The Proposed Project is designed to continue the implementation of SDG&E's long-term fire hardening efforts to improve the fire safety and service reliability of TL 637. Proposed pole replacements would increase system reliability and reduce risks associated with fire events, consistent with CPUC General Orders, NERC/FERC requirements, CAISO Tariff provisions, and SDG&E internal standards, which dictate requirement standards for corrective actions for variable safety and/or reliability risks (e.g., High Risk Fire Areas). Additional benefits of the Proposed Project would include the reduction of outage potential, improved contamination resistance, reduction of facility maintenance, maximization of equipment life span potential, installation of fiber optic for enhanced digital protective relay systems, and improved avian protection.

The Proposed Project would not create a new customer-level service or source of power that would indirectly allow for an increase in population, housing, or other development because the Proposed Project would not extend electrical service infrastructure into previously un-served areas. The Proposed Project would accommodate existing and planned power demands in SDG&E's service territory through increasing the electric system reliability and fire hardening TL 637. The Proposed Project would require new employment for construction activities; however, most of the construction force is anticipated to come from the existing local workforce from a pool of existing SDG&E electrical personnel and contractors. Operation and maintenance of the Proposed Project would be slightly less than existing operations and maintenance needs for TL 637 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. Therefore, the Proposed Project would not induce growth within the Proposed Project area.

List of Acronyms and Abbreviations

LIST OF ACRONYMS AND ABBREVIATIONS

Acronym	Name
AB	Assembly Bill
ACSR	aluminum conductor, steel reinforced
ACSS	aluminum conductor, steel support
ACTM	airborne toxic control measures
ADSS	All-Dielectric Self Support
AFY	acre-feet per year
amsl	above mean sea level
APLIC	Avian Power Line Interaction Committee
APM's	Applicant Proposed Measures
ASM	ASM Affiliates, Inc.
AW	alumoweld
Basin	San Diego Air Basin
BGEPA	Bald and Golden Eagle Protection Act
BLM	U.S. Bureau of Land Management
BMPs	Best Management Practices
<i>BMP Manual</i>	<i>Water Quality Construction BMPs Manual</i>
B.P.	before present
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CalEPA	California Environmental Protection Agency
Cal Fire	California Department of Forestry and Fire Protection
CAGN	coastal California gnatcatcher
CALISO	California Independent System Operator
Cal NAGPRA	California Native American Graves Protection and Repatriation Act
Cal/OSHA	California Occupational Safety and Health Administration
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CBC	California Building Code
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compliance, and Liability Act
CESA	California Endangered Species Act

LIST OF ACRONYMS AND ABBREVIATIONS

Acronym	Name
CFR	Code of Federal Regulations
CFSP	Community Fire Safety Program
CH ₄	methane
CHRIS	California Historic Resource Information System
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CO	carbon monoxide
CO ₂	carbon dioxide
CO _{2e}	carbon dioxide equivalents
Construction General Permit	General Permit for Discharge of Stormwater Runoff Associated with Construction Activity
CPUC	California Public Utilities Commission
CRHR	California Register of Historical Resources
CRPR	County Rare Plant Register
CUPA	Certified Unified Program Agencies
CWA	Clean Water Act
dB	decibels
dBA	A-weighted sound level
DEH	San Diego County Department of Environmental Health
DOT	U.S. Department of Transportation
DTSC	Department of Toxic Substances Control
ESA	Endangered Species Act
°F	Fahrenheit
FAA	Federal Aviation Administration
FE	federally endangered
FEMA	Federal Emergency Management Agency
FERC	Federal Energy Regulatory Commission
FIRM	Flood Insurance Rate Maps
FHWA	Federal Highway Administration
FMMP	Farmland Mapping and Monitoring Program
FPS	Fully Protected Species
FT	federally threatened
Construction General Permit	General Permit for and Discharges of Stormwater Runoff Associated with Construction Activity
GHGs	Greenhouse gases

LIST OF ACRONYMS AND ABBREVIATIONS

Acronym	Name
GIS	geographic information system
G.O.	General Order
GPS	Global Positioning System
HCP	Habitat Conservation Plan
HFC	hydrofluorocarbons
HLZ	Helicopter Landing Zone
HP	horsepower
HSWA	Hazardous and Solid Waste Act
HU	hydrologic unit
HWCL	California Hazardous Waste Control Law
Hwy	Highway
IPCC	Intergovernmental Panel on Climate Change
kg	kilogram
KOP	Key Observation Point
kV	kilovolt
lbs	pounds
L_{dn}	Day-night equivalent noise level
L_{eq}	Equivalent sound level
LOS	Level of Service
LUP	Linear Underground/Overhead Project
MBTA	Migratory Bird Treaty Act
MHPA	Multi-Habitat Planning Area
MLD	most likely descendent
MMT	millions of metric tons
MSCP	Multiple Species Conservation Plans
MT	metric tons
NAAQS	National Ambient Air Quality Standards
NAGPRA	Native American Graves Protection and Repatriation Act
NAHC	Native American Heritage Commission
NCCP	Natural Community Conservation Plan
NEPA	National Environmental Policy Act
NERC	North American Electric Reliability Corporation
NFIP	National Flood Insurance Program
NHPA	National Historical Preservation Act
No.	number
N_2O	nitrous oxide

LIST OF ACRONYMS AND ABBREVIATIONS

Acronym	Name
NO ₂	nitrogen dioxide
NO _x	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NSA	noise sensitive area
NWI	National Wetlands Inventory
OES	California Office of Emergency Services
OHWM	Ordinary High Water Mark
ONAC	Office of Noise Abatement and Control
OSHA	Occupational Safety and Health Administration
O ₃	ozone
PAL	project activity level
Pb	lead
PCR	Post-Construction Report
PEA	Proponent's Environmental Assessment
PFCs	perflouorocarbons
PM _{2.5}	particulate matter less than 2.5 microns in diameter
PM ₁₀	particulate matter less than 10 microns in diameter
ppm	parts per million
PPV	peak particle velocity
PRC	Public Resources Code
Proposed Project	Proposed Tie-Line 637 Wood-to-Steel Project
PRPA	Paleontological Resources Preservation Act
PSR	Pre-activity Study Report
PTC	Permit to Construct
PVC	polyvinyl chloride
QCB	Quino Checkerspot Butterfly
Rapanos	Rapanos v. United States and Carabell v. United States
RAQS	Regional Air Quality Strategy
RCRA	Resource Conservation and Recovery Act of 1976
RMWD	Ramona Municipal Water District
ROG	reactive organic gas
ROW	right-of-way
RPW	Relatively Permanent Water
RTP	Regional Transportation Plan

LIST OF ACRONYMS AND ABBREVIATIONS

Acronym	Name
RWQCB	Regional Water Quality Control Board
SANDAG	San Diego Association of Governments
SARA	Superfund Amendments and Reclamation Act
SCAQMD	South Coast Air Quality Management District
SCIC	South Coastal Information Center
SDAPCD	San Diego Air Pollution Control District
SDG&E	San Diego Gas & Electric Company
SDNHM	San Diego Natural History Museum
SEMS	California Standardized Emergency Management System
SF ₆	sulfur hexafluoride
SIP	State Implementation Plan
SMF	Single-Mode Fiber
SO ₂	sulfur dioxide
SO _x	sulfur oxides
SPTs	Standard Penetration Tests
SSC	Species of Special Concern
SWANCC	Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers
SWIS	Solid Waste Information System
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminants
TL	Tie-Line
TNWs	traditionally navigable waters
USACE	United States Army Corps of Engineers
USC	United States Code
USCS	Uniform Soil Classification System
USDA	United States Department of Agriculture
USEPA	United States Environmental Protection Agency
USFS	U.S. Forest Service
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
VOC	volatile organic compound
VP	viewpoint

LIST OF ACRONYMS AND ABBREVIATIONS

Acronym	Name
WL	Watch List
Williamson Act	California Land Conservation Act of 1965

PEA Preparers and Contributors

PEA PREPARERS AND CONTRIBUTORS

The following individuals contributed to the preparation of the San Diego Gas & Electric Company Tie-Line 637 Wood-to-Steel Project Proponent's Environmental Assessment.

Task/Section	Person and Title	Organization
Project Management	Bradley Carter, PE, Project Manager	SDG&E
	Elisha Back, Principal	TRC
General, Technical, and Peer Reviewers	Bradley Carter, PE, Project Manager Deborah Collins, ASCP, Senior Environmental Specialist Tania Curulla, EIT, CPESC, CPSWQ, QSD, Project Engineer Terry DeVore, Contract Administrator Robert Fletcher, Environmental Specialist Vinh Huynh, Engineer II Eric Johnson, PE, Engineer II Barbara Montgomery, Project Manager Hashim Navrozali, Principal Environmental Specialist Eden Nguyen, Senior Planner Rebecca Ross, Senior Transmission Engineering Designer Rachel Ruston, Senior Cultural Resource Specialist Tamara Spear, Environmental Specialist Brian Swanson, Land Management Representative Mike Thomas, Contract Administrator	SDG&E
	Elisha Back, Principal Mark Cassidy, Senior Project Manager Kathleen Cooney, Lead Planner Josh Taylor, Lead Planner	TRC

Task/Section	Person and Title	Organization
General, Technical, and Peer Reviewers (cont.)	Meghan Directo, Associate Environmental Planner Paula Fell, Senior Environmental Planner Mike McEntee, Vice President, Biology Paul Morrissey, Senior Biologist Janea Russell, Associate Environmental Planner	Chambers Group
1.0 PEA Summary	Elisha Back, Principal Joshua Taylor, Lead Planner	TRC
2.0 Project Purpose and Need	Bradley Carter, PE, Project Manager Deborah Collins, ASCP, Senior Environmental Specialist Vinh Huynh, Engineer II Rebecca Ross, Senior Transmission Engineering Designer Darren Weim, PE, Electric Distribution Engineering Manager	SDG&E
	Elisha Back, Principal Joshua Taylor, Lead Planner	TRC
3.0 Project Description	Bradley Carter, PE, Project Manager Deborah Collins, ASCP, Senior Environmental Specialist Vinh Huynh, Engineer II Eric Johnson, PE, Engineer II Eden Nguyen, Senior Planner Rebecca Ross, Senior Transmission Engineering Designer	SDG&E
	Elisha Back, Principal Joshua Taylor, Lead Planner	TRC

Task/Section	Person and Title	Organization
4.1 Aesthetics	Chuck Cornwall, Principal Marsha Gale, Managing Principal	Environmental Vision
4.2 Agriculture and Forestry Resources	Kathleen Cooney, Lead Planner	TRC
4.3 Air Quality and GHG	Valorie Thompson, PhD, Principal	Scientific Resources Associated
4.4 Biological Resources	Robert Fletcher, Environmental Specialist	SDG&E
	Heather Franklin, Associate Biologist Sarah Harris, Associate Biologist Paul Morrissey, Senior Biologist Seth Reimers, Staff Biologist Jeremy Smith, Associate Biologist	Chambers Group
4.5 Cultural and Paleontological Resources	Susan Underbrink, RPA, Senior Archaeologist	TRC
4.6 Geology, Soils, and Minerals Resources	Joe Stenger, PG, Project Director	TRC
4.7 Hazards and Hazardous Materials	Nathan Gerrells, Planner Joshua Taylor, Lead Planner	TRC
4.8 Hydrology and Water Quality	Meghan Directo, Associate Environmental Planner Paula Fell, Senior Environmental Planner	Chambers Group
4.9 Land Use and Planning	Meghan Directo, Associate Environmental Planner Paula Fell, Senior Environmental Planner Janea Russell, Associate Environmental Planner	Chambers Group

Task/Section	Person and Title	Organization
4.10 Noise	Anthony Agresti, Senior Project Manager Taylor VanHouten, Environmental Scientist	TRC
4.11 Population and Housing	Kathleen Cooney, Lead Planner April Farmer, Planner	TRC
4.12 Public Services	Kathleen Cooney, Lead Planner	TRC
4.13 Recreation	Meghan Directo, Associate Environmental Planner Paula Fell, Senior Environmental Planner Janea Russell, Associate Environmental Planner	Chambers Group
4.14 Transportation and Traffic	Meghan Directo, Associate Environmental Planner Paula Fell, Senior Environmental Planner	Chambers Group
4.15 Utilities and Service Systems	Nathan Gerrells, Planner Joshua Taylor, Lead Planner	TRC
4.16 Cumulative Impacts	Nathan Gerrells, Planner Joshua Taylor, Lead Planner Susan Underbrink, RPA, Senior Archaeologist	TRC
5.0 Detailed Discussion of Significant Environmental Impacts	Joshua Taylor, Lead Planner	TRC
5.2 Alternatives	Bradley Carter, PE, Project Manager Deborah Collins, ASCP, Senior Environmental Specialist Vinh Huynh, Engineer II Rebecca Ross, Senior Transmission Engineering Designer	SDG&E
	Joshua Taylor, Lead Planner	TRC

Task/Section	Person and Title	Organization
5.3 Growth-Inducing Impacts	Julie Allison, Lead Planner Joshua Taylor, Lead Planner	TRC
Graphics	Ileana Bradford, GIS Specialist Patrick Huls Land Services Department	TRC Chambers Group SDG&E