ES EXECUTIVE SUMMARY

ES.1 INTRODUCTION

On April 7, 2014, San Diego Gas & Electric Company (SDG&E) submitted Application 14-04-011 seeking a Certificate of Public Convenience and Necessity (CPCN) with the CPUC for its proposed Sycamore-Peñasquitos 230-Kilovolt (kV) Transmission Line Project (Proposed Project), whereby SDG&E seeks to construct, operate, and maintain a new 16.7 mile long 230-kV transmission line between the existing Sycamore Canyon Substation and the existing Peñasquitos Substation between the City of San Diego and the City of Poway in San Diego County (County), California. The proposed transmission line would be composed of four segments (A, B, C, and D), as illustrated in Figure ES.1-1.

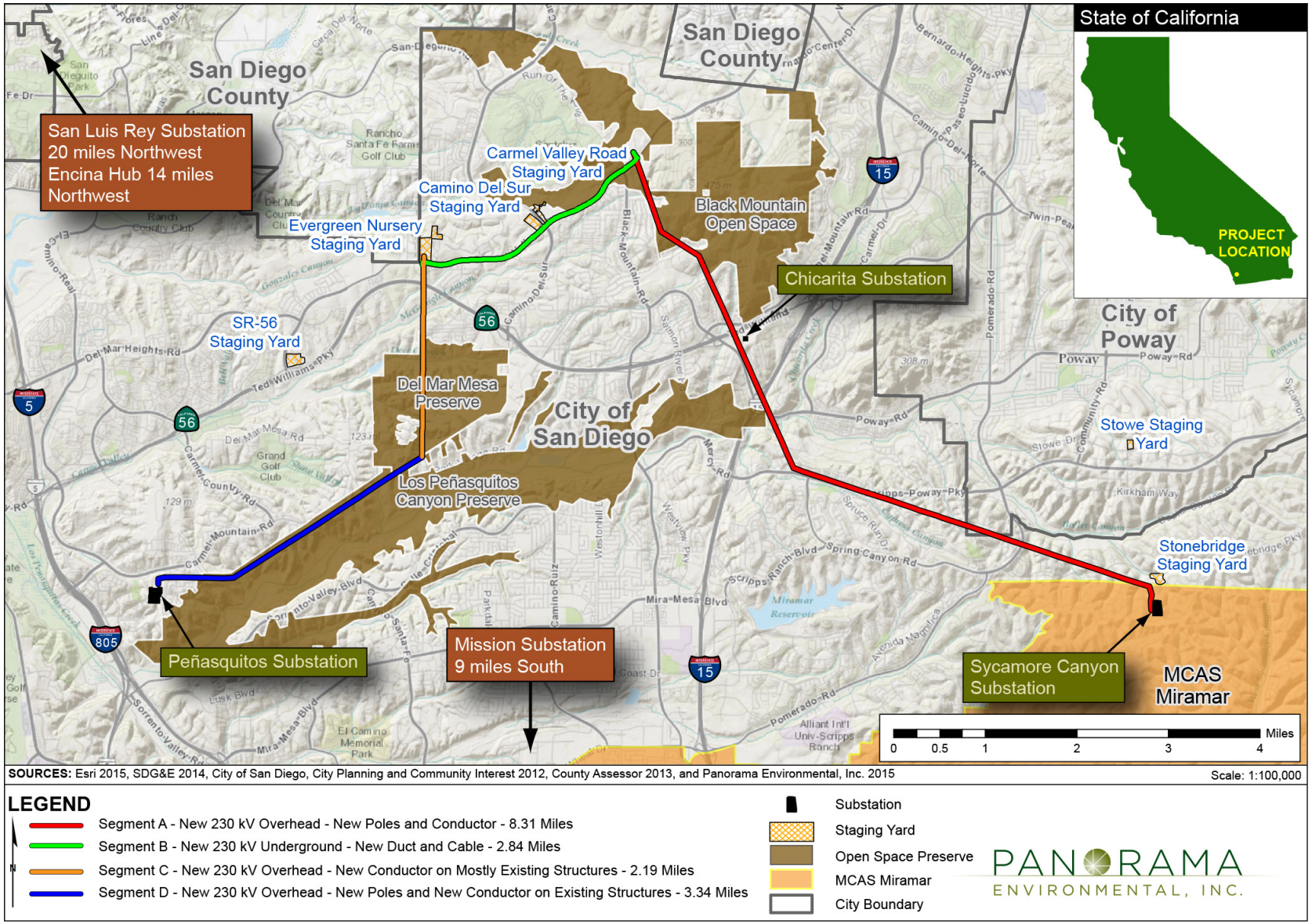
This ~~Draft~~ Environmental Impact Report (EIR) has been prepared by the California Public Utilities Commission (CPUC), as lead agency under the California Environmental Quality Act (CEQA), to inform the public and to meet the needs of local, State, and federal permitting agencies to consider the Proposed Project as described by SDG&E, and alternatives to the Proposed Project.

This EIR has been prepared in accordance with CEQA and the CEQA Guidelines. The EIR describes the Proposed Project, identifies the existing environment that the Proposed Project would affect, and discloses the environmental impacts that would result from the construction and operation of the Proposed Project including direct, indirect, and cumulative impacts. The EIR also identifies mitigation measures, which, if adopted by the CPUC or other responsible agencies, would avoid or minimize the Proposed Project's significant environmental impacts. Additionally, the EIR analyzes alternatives to the Proposed Project that could avoid or minimize significant environmental impacts. CEQA Guidelines §15123 require inclusion of a summary within the ~~Draft~~ EIR to identify significant effects with recommended mitigation measure(s) and alternatives that would reduce or avoid the effect, as well as areas of controversy, and issues to be resolved.

ES.1.1 CPUC Conclusion Regarding Environmentally Superior Alternative

One of the factors the CPUC will consider in deciding whether to approve the Proposed Project are its environmental characteristics in comparison to other, potentially feasible alternatives that could reduce or avoid the Proposed Project's significant environmental impacts while still meeting most of the objectives of the project. All of the alternatives evaluated in the ~~Draft~~ EIR are briefly described and illustrated in Section ES 5: Alternatives Fully Evaluated in the EIR. The CPUC has identified the Environmentally Superior Alternative, as required by CEQA Guidelines §15126.6(d) and (e)(2). The Environmentally Superior Alternative is Alternative 5: Pomerado Road to Miramar Area North Combination Underground/Overhead. After Alternative 5, the alternative with the fewest environmental impacts would be the combination

Figure ES.1-1 Project Location



of ~~Alternative 3: Los Peñasquitos Canyon Preserve—Mercy Road Underground~~ Alternative 2 and Alternative 4: Segment D 69-kV Partial Underground Alignment, with Proposed Project components in all other locations. The Proposed Project and Alternative 3: Los Peñasquitos Canyon Preserve—Mercy Road Underground with no modifications would have greater environmental impacts than all other alternatives and combinations except the No Project Alternative. The No Project Alternative would have greater environmental impacts than any of the alternatives analyzed in the ~~Draft~~ EIR.

ES.1.2 No Project Alternative

The No Project considers the reasonably foreseeable actions that would be implemented by SDG&E if the Proposed Project were not approved. The No Project Alternative includes seven ~~three~~ transmission system upgrades that are considered to be the most likely actions that would occur in the absence of the Proposed Project or alternatives to the Proposed Project, based on SDG&E's need to comply with North America Electric Reliability Corporation (NERC), Western Electricity Coordinating Council (WECC), and California Independent System Operator (CAISO) reliability criteria. Overall, implementation of the No Project Alternative would have more ~~less~~ severe environmental impacts than the Proposed Project and ~~most of~~ the alternatives considered in this EIR.

ES.1.3 Contents of the ~~Draft~~ EIR

Due to the size of the document, the ~~Draft~~ EIR includes both paper and electronic materials, divided as follows:

ES.1.3.1 Printed Materials

- Final EIR Notice of Availability
- Preface to Final EIR
- Section 1: Introduction
- Section 2: Public Review Process
- Section 3: Comments and Responses
- Section 4: References
- Attachment 1: Draft EIR Public Review Materials
- Attachment 2: Agency Correspondences
- Attachment 3: EMF Data for Project Alternatives
- Attachment 4: Park Village Road Measurements
- Attachment 5: Summary and Detailed Tables of Vegetation Community Impacts
- Acronyms and Abbreviations
- Glossary
- Executive Summary
- Modified Draft EIR Chapters 1 through 9 with Figures
- ~~Appendix A: Detailed Project Route Maps~~
- ~~Appendix B: Proposed Project Pole Details~~
- ~~Appendix C: Magnetic Field Management Plan~~
- ~~Appendix D: Alternatives Screening Report~~

- ~~Appendix E: Detailed Alternative Route Maps~~
- ~~Appendix F: Aesthetics Resources Supporting Information~~
- ~~Appendix H: Cultural Resources Supporting Information~~
- ~~Appendix I: Draft Fire Prevention Plan~~
- ~~Appendix K: City of San Diego Multiple Species Conservation Plan Consistency~~

ES.1.3.2 Electronic Materials on DVD

The DVD includes all of the printed materials listed above as well as the following items:

- Appendix A: Detailed Project Route Maps
- Appendix B: Proposed Project Pole Details
- Appendix C: Magnetic Field Management Plan
- Appendix D: Alternatives Screening Report
- Appendix E: Detailed Alternative Route Maps
- Appendix F: Aesthetic Resources Supporting Information
- Appendix G: Biological Resources Supporting Information
- Appendix H: Cultural Resources Supporting Information
- Appendix I: Draft Fire Prevention Plan
- Appendix J: Air Quality and Greenhouse Gas Supporting Information
- Appendix K: City of San Diego Multiple Species Conservation Plan Consistency
- Appendix L: SDG&E BMP Manual
- Appendix M: Transportation and Traffic Supporting Information
- Appendix N: Hazards and Hazardous Materials Supporting Information
- Appendix O: Geotechnical Study for the Proposed Project

ES.2 BACKGROUND AND DESCRIPTION OF PROPOSED PROJECT

ES.2.1 Project Background

In 2005 and 2006, SDG&E filed an application (A.05-12-014) and then refiled an application (A.06-08-010) with the CPUC for a CPCN to construct the Sunrise Powerlink Project. The Coastal Link was one segment of the Sunrise Powerlink Project. The Coastal Link consisted of a proposed 13.6-mile-long 230-kV line with new towers between Sycamore Canyon and Peñasquitos Substations. The Coastal Link would have required upgrades to the Sycamore Canyon and Peñasquitos Substations.

The CPUC approved the Sunrise Powerlink Project in December 2008 in Decision 08-12-058, but the Commission did not approve the Coastal Link portion, instead adopting the Rancho Peñasquitos Coastal Link Alternative. The Coastal Link Alternative made the proposed Coastal Link 230-kV transmission line segment unnecessary by identifying transformer and reconductoring projects that would reduce costs and minimize impacts.

In 2012, SDG&E's ability to operate its bulk electric transmission system became constrained by the unanticipated early retirement of the San Onofre Nuclear Generating Station (SONGS). Further constraints are anticipated by the future retirement of coastal Once-Through Cooling

generation. These constraints were not anticipated when the Sunrise Powerlink Project was approved.

SDG&E filed a CPCN application and a Proponent's Environmental Assessment (PEA) for the Proposed Project on April 7, 2014. A portion of Proposed Project Segments A and D follow the alignment of the Coastal Link portion of the Sunrise Powerlink Project. Proposed Project Segment A extends further north to Carmel Valley Road, Segment B is located north of SR-56 within Carmel Valley Road, and Segment C connects Segment D to Carmel Valley Road. The central portion of the Coastal Link project was located underground south of SR-56 and connected directly to Segment D of the Proposed Project. This central portion of the Coastal Link alignment is not included in SDG&E's current CPCN application for the Proposed Project.

ES.2.2 Project Location and Right of Way

The areas affected by implementation of the Proposed Project would be located in the west-central area of San Diego County, in the cities of San Diego, Poway, and Carlsbad, and partially on Marine Corps Air Station (MCAS) Miramar. The proposed transmission installation activities would be located within SDG&E right-of-way (ROW) easements and roads with franchise agreement rights. Easement widths within the Proposed Project segments are 200 feet in Segment A, 100 feet in Segment C, and 300 feet in Segment D. Franchise agreement rights in Segment B would accommodate a 16-foot wide construction corridor with a 30-foot wide corridor at vault locations. All access associated with the Proposed Project would be via SDG&E easements and franchise agreement rights, including SDG&E's existing easement in MCAS Miramar.

ES.2.3 Proposed Project

The proposed 230-kV transmission line would be comprised of approximately 13.9 miles installed overhead and approximately 2.8 miles would be underground. Additionally, minor modifications of four existing substations would occur as part of the Proposed Project. Several locations would be used for staging areas throughout construction of the Proposed Project. Details of the Proposed Project are summarized below.

ES.2.3.1 Transmission Line Segments

Segment A: Sycamore Canyon Substation to Carmel Valley Road

SDG&E would construct an approximately 8.31-mile long 230-kV transmission line on new tubular steel poles from the Sycamore Canyon Substation to Carmel Valley Road. Two existing transmission lines would be reconductored and relocated to new tubular steel poles (TSPs), and the wooden poles associated with the two existing transmission lines would be removed. One existing 138-kV power line would be reconductored and relocated to the new TSPs between the Sycamore Canyon Substation and the northern terminus of Segment A. A portion of the relocated 138-kV power line would be undergrounded as it enters the Sycamore Canyon Substation. Optical ground wire would be installed along the top of the new structures and would function as a communication cable and new shield wire.

Segment B: Underground Carmel Valley Road
SDG&E would construct an approximately 2.84-mile long 230-kV underground transmission line in Carmel Valley Road. One cable pole structure would be placed at each end of the undergrounded segment for a total of two cable poles in Segment B. One double-circuit steel lattice tower would be removed at the western reach of the segment. Fiber optic cable would be installed with the underground transmission line.

Segment C: Carmel Valley Road to Peñasquitos Junction
SDG&E would install approximately 2.19 miles of 230-kV conductor on existing steel lattice structures and one new TSP between Carmel Valley Road and Peñasquitos Junction. Peñasquitos Junction is located at the intersection of Segments C and D in the Del Mar Mesa Preserve. One steel lattice tower would be removed at the Peñasquitos Junction. Two existing transmission lines would be reconductored and bundled on the existing structures in Segment C. Existing shield wire on top of existing 230-kV steel lattice towers would be replaced with new optical ground wire.

Segment D: Peñasquitos Junction to Peñasquitos Substation
SDG&E would install approximately 3.34 miles of 230-kV conductor on existing double-circuit steel lattice towers and a TSP between the Peñasquitos Junction and the Peñasquitos Substation. SDG&E would also consolidate two existing 69-kV power lines onto new 69-kV TSPs that would replace existing wood structures. Additionally, two TSPs would replace existing wood poles outside the Peñasquitos Substation. The wooden structures would be removed. Existing shield wire on top of existing 230-kV steel lattice towers would be replaced with new optical ground wire.

ES.2.3.2 Substation Modifications

Sycamore Canyon Substation
SDG&E would modify Sycamore Canyon Substation to facilitate the new 230-kV transmission line connection by transferring five existing transmission lines from existing bay positions to new bay positions, and adding a new circuit breaker.

Peñasquitos Substation
SDG&E would modify Peñasquitos Substation to facilitate the new 230-kV transmission line connection by adding two circuit breakers and four disconnects.

Chicarita, San Luis Rey and Mission Substations
Minor alterations may be made to the San Luis Rey Substation (located in Oceanside) and the Mission Substation (located in San Diego), including adjusting relays and upgrading protection on remaining lines.

ES.2.3.3 Encina Hub Modifications
SDG&E would remove an existing San Luis Rey—Mission 230-kV transmission line from service (i.e., de-energize line and leave it in place) to create an open position for the proposed

230-kV power line in Segment C. The Encina Hub reconfiguration would relocate the remaining portion of the San Luis Rey—Mission 230-kV power line and another 230-kV power line.

ES.2.3.4 Mission—San Luis Rey Phase Transposition

SDG&E would reverse the positions of the existing 230-kV line phase components between the Mission Substation and the Peñasquitos Junction (intersection of Segments C and D) in order to accommodate the proposed bundling of power lines within Segment C to accommodate placement of the new 230-kV line.

ES.2.3.5 Temporary Staging Yards

The Proposed Project would utilize approximately 75 acres of temporary construction staging yards for vehicles equipment refueling, pole assemblage, open storage of material and equipment, construction trailers, portable restrooms, parking, lighting, possibly generator use for temporary power in construction trailers, and incidental landing areas for helicopters. Six staging locations have been identified by SDG&E at this time, including the Camino Del Sur, Carmel Valley Road, Evergreen Nursery, State Route (SR)-56, Stonebridge Parkway, Stowe staging yards. In addition, material storage would occur at the Peñasquitos Substation, San Luis Rey Substation, Mission Substation, and Sycamore Canyon Substation.

ES.2.3.6 Access Roads

Construction would primarily take place within the existing SDG&E ROW easements and access roads and public roadways. Most work areas would be accessible by vehicle on unpaved SDG&E-maintained access roads. Access roads would be used for vehicle parking and turn-around, and specific construction site staging.

ES.3 PROPOSED PROJECT OBJECTIVES

ES.3.1 SDG&E's Project Objectives

SDG&E explains in their CPCN application and PEA that the Proposed Project is needed to meet state environmental and energy policy goals, and to ensure the bulk power system is in compliance with applicable North American Electric Reliability Corporation (NERC), Western Electric Coordinating Council (WECC) and California Independent System Operator (CAISO) transmission planning criteria.

SDG&E's stated objectives of the Proposed Project are to:

- Meet the California Independent System Operator (CAISO) 2012–2013 Transmission Plan Functional Specifications for a new 230-kV transmission line between the Sycamore Canyon and Peñasquitos Substations by:
  - Ensuring the SDG&E bulk electric system continues to meet North American Electric Reliability Corporation, Western Electricity Coordinating Council, and CAISO reliability criteria;

  - Promoting compliance with State of California policy goals related to renewable integration and Once-Through Cooling retirement[1];
  - Economically and reliably meeting the San Diego metropolitan area's forecasted load growth;
  - Delivering energy more efficiently to the load center in San Diego; and
- Locate the proposed facilities along existing transmission and power line corridors, SDG&E ROW, SDG&E-owned property, and San Diego franchise rights-of-way.

ES.3.2 California Public Utilities Commission Project Objectives

Having taken into consideration the objectives set forth by SDG&E above, the CPUC identified three basic project objectives. These objectives are used by the CPUC to define and evaluate a range of reasonable alternatives to the Proposed Project. The evaluation of alternatives in this EIR provides information on whether each alternative could feasibly accomplish most or all of these project objectives. The three CPUC project objectives are presented and explained below.

CPUC Project Objective 1: Maintain long-term grid reliability in the absence of San Onofre Nuclear Generating System (SONGS) generation

CPUC Project Objective 1 reflects the goal of mitigating the loss of nuclear power generation at SONGS. SONGS was taken offline in 2012 and permanent retirement of the nuclear power plant began in June 2013 (CEC 2015). The retirement of SONGS resulted in the loss of 2,150 MW of generation in the Los Angeles and San Diego region (*Ibid.*). The San Diego region in particular lost access to over 700 MW of generation to support its load (i.e., energy demand). The reduction of generation resources supporting SDG&E load via Path 44 (the five 230-kV lines from SONGS feeding into the San Luis Rey and Talega Substations) needs to be replaced.

CAISO evaluated alternatives to mitigate the loss of electric generation at SONGS in its 2012-2013 Transmission Plan (CAISO 2013). Dynamic reactive support in the SONGS Talega area, Huntington Beach synchronous condensers and additional generation of electricity in San Diego County are part of the overall strategy for mitigating the loss of electric generation at SONGS, but are not a part of CPUC Project Objective 1. This CPUC project objective is focused on adding transmission capacity to increase delivery of existing energy resources to meet NERC, WECC and CAISO planning criteria for system reliability.

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[1] *Once-Through Cooling* - cooling systems that use water's cooling capacity a single time. These cooling systems draw substantial quantities of water and discharge them at higher temperatures back into the source water body. The California's State Water Resources Control Board (SWRCB) adopted the *Policy on the Use of Coastal and Estuarine Waters for Power Plant Cooling* in the year 2010 that requires 19 existing power plants to retire this "once-through" practice by the year 2020.

CPUC Project Objective 2: Deliver energy more efficiently to the load center in San Diego
CPUC Project Objective 2 reflects the goal of alleviating congestion on the power lines out of Sycamore Canyon Substation. Electricity is currently delivered into Sycamore Canyon Substation from the Suncrest 500/230-kV substation and energy is delivered out of Sycamore Canyon Substation by lower capacity 138-kV and 69-kV power lines. The lower capacity 138-kV and 69-kV power lines out of Sycamore Canyon Substation become congested under normal operating conditions (CAISO 2013). This congestion results in thermal overloads on power and transmission lines in SDG&E's system during peak summer demand.

CPUC Project Objective 3: Support deliverability of renewable resources identified in SDG&E's Renewable Portfolio Standard (RPS) portfolio
CPUC Project Objective 3 reflects the goals of delivering renewable resources in SDG&E's RPS portfolio. Table ES.3-1 summarizes the renewable energy in SDG&E's RPS portfolio. This objective is related to CPUC Project Objective 2 because delivery of renewable energy entering Sycamore Canyon Substation via Sunrise Powerlink is constrained by the 138-kV and 69-kV electrical system. Additional capacity is needed to deliver renewable energy in San Diego's RPS portfolio that enters San Diego via Sunrise Powerlink.

Table ES.3-1 Summary of Renewable Generation in San Diego RPS Portfolio

		Renewable Generation by Portfolio (MW)		
Area	Cost Constrained	Commercial Interest	Environmental	High DG
Imperial – SDGE	220	921	921	220
Imperial – IID	920	1,219	1,219	920
San Diego South	384	384	384	0
Baja	0	100	0	0
Arizona	550	550	550	550
Non-CREZ – SDGE	17	17	17	17
SDGE DGs	405	405	426	490

Source: CAISO 2013

ES.4 SUMMARY OF PUBLIC INVOLVEMENT ACTIVITIES

During preparation of the ~~Draft~~ EIR, the CPUC implemented an extensive public participation process for the Proposed Project. Section ES.4.1 summarizes the outreach efforts and public scoping meetings and Section ES.4.2 summarizes major concerns identified by the public and agencies during the public scoping periods.

ES.4.1 Scoping Process

ES.4.1.1 Notice of Preparation of an Environmental Impact Report

The CPUC issued the Notice of Preparation (NOP) for the EIR on August 11, 2014, to inform the public and agencies of its intention to prepare an EIR. Additionally, the NOP solicited comments on the scope of the ~~Draft~~ EIR. The 30-day scoping period began on August 18, 2014, and ended on September 16, 2014. The CPUC mailed 6,365 notices to public agencies and members of the public. Twenty tribes were contacted in mid-August 2014 to invite them to participate in the scoping process.

ES.4.1.2 Scoping Meetings

In addition to soliciting written scoping comments through public notifications, the CPUC held three public scoping meetings to solicit comments for consideration in determining the scope of the ~~Draft~~ EIR. The scoping meetings were held on August 25, 2014 and August 26, 2014 at the Double Tree Golf Resort in San Diego, California. Fifty-eight individuals attended the scoping meetings.

ES.4.1.3 Agency Consultation

Three agencies (U.S. Fish and Wildlife Service [USFWS], California Department of Fish and Wildlife [CDFW], and City of San Diego) expressed interest in a face-to-face meeting with the CPUC and its environmental consultant to learn more about the Proposed Project. The CPUC and its environmental consultant also held conference calls with an additional four agencies including the Federal Aviation Administration (FAA), MCAS Miramar, the City of San Diego Park and Recreation Department, and the City of San Diego Public Utilities Department.

During the meetings and conference calls, the CPUC presented the Proposed Project to the agencies, answered questions, and solicited informal input on any issues and concerns with the project. The CPUC also provided a project factsheet and identified additional information that the agencies requested regarding the Proposed Project. This information was provided after the meetings by e-mail and mail to the requesting agencies.

ES.4.1.4 Facilitation of Project Information

An EIR e-mail address list was created, and a telephone hotline and Internet site for project information were established. The Internet site was used to post all the public environmental documents (including the~~is~~ Draft and Final versions of this EIR) and to announce upcoming public meetings. All public notices appeared on the CPUC's project website:

http://www.cpuc.ca.gov/Environment/info/panoramaenv/Sycamore_Penasquitos/index.html

Throughout the process, the CPUC has been available for questions and comments at (650) 373-1200 or by e-mail at sycamorepenasquitos@panoramaenv.com.

ES.4.2 Areas of Controversy/Public Scoping Issues

During the scoping period, comments were received from four agencies, one tribe, five organizations, and 88 individuals. Another two organizations and 34 individuals provided comments outside of the scoping period. Scoping comments were documented in a scoping

report published in September 2014. The key comment topics in these written and oral comments are summarized in Table ES.4-1.

Table ES.4-1 Summary of Scoping Comments

Environmental Issue / CEQA Area	Potential Issue or Impacts
Alternatives	• Consider alternative overhead and underground transmission line alignments and alternative pole locations • Consider use of distributed generation of renewables
Aesthetics	• Address how additional towers, poles, and lines would impede views from homes, schools, roadways, trails, and parks • Address visual impacts of heavy construction equipment and temporary sanitary facilities at staging yards • Ensure photosimulations accurately illustrate visual impacts from the existing and proposed towers and lines
Biological Resources	• Conduct protocol-level surveys for sensitive species prior to release of the Draft EIR • Avoid development or conversion of wetland acreage or wetland habitat values • Consider the presence of vernal pools • Address potential impacts to wildlife habitat and corridors within the City of San Diego Multi-Habitat Planning Area and the Los Peñasquitos Canyon Preserve
Fire and Fuels Management	• Address the risk of wildfires and implementation of fire management, especially in the Los Peñasquitos Canyon Preserve
Hazards and Hazardous Materials	• Consider potential safety impacts to students, parents, and educational programs and facilities resulting from hazards, including hazardous materials • Consider potential safety impacts from staging at Torrey Santa Fe staging yard where there is only one entrance and exit to the community
Hydrology	• Address impacts to water quality in Los Peñasquitos Creek and Los Peñasquitos Lagoon
Land Use and Planning	• Identify proposed staging yard locations and use • Address placement of towers and transmission and power lines near homes, especially within Segments A and D
Noise	• Address noise impacts during construction and operation of the Proposed Project, including increase in corona noise from ambient noise levels • Address construction noise within the City of San Diego's Multi-Habitat Planning Area during sensitive species breeding seasons
Recreation	• Consider recreation impacts to the Los Peñasquitos Canyon Preserve, particularly regarding potential trail closures during project construction
Transportation and Traffic	• Address increased traffic congestion and safety risks due to worker access to staging yards • Address access into and out of the Del Mar Mesa Preserve
Other	• Consider impacts on public health from increase in EMF • Consider impacts on property and home values

ES.5 PROJECT ALTERNATIVES

ES.5.1 CEQA Requirements for Selection of Alternatives

The EIR analyzes in detail five alternatives to the Proposed Project, including two cable pole relocation alternatives and three alternative route segments along the Proposed Project route, as well as the No Project Alternative. An additional ~~36~~ 38 alternatives were considered in a screening process and eliminated from further review.

ES.5.1.1 Reasonable Range of Alternatives

CEQA Guidelines (Section 15126(a)) state that:

> An EIR shall describe a reasonable range of alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives.

CEQA Guidelines Section 15364 defines feasibility as:

> …capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors.

Consideration of a No Project Alternative is a requirement of CEQA. The No Project Alternative, which is a scenario developed to define the actions that may be implemented if the Proposed Project is not approved or constructed, is analyzed fully in the EIR. The No Project Alternative is described further in Section ES.5.4.

ES.5.1.2 Alternative Screening Process – Consideration of Alternatives for Evaluation or Elimination

Potential alternatives to the Proposed Project were suggested by the public during public scoping. Other potential alternatives were developed by the CPUC or presented by SDG&E in its PEA. In total, ~~41~~ 43 potential alternatives were identified, ranging from minor adjustments to SDG&E's Proposed Project route or pole location, to entirely different transmission line routes, to electrical system alternatives.

The following screening criteria were used to select a reasonable range of alternatives:

- Would the alternative meet most of the basic project objectives?
- Would the alternative be potentially feasible considering economic, environmental, legal, social, and technological factors?
- Would the alternative substantially lessen or avoid any of the significant effects of the Proposed Project?

After an alternative has been retained for analysis, the process for comparison of alternatives is based solely on the environmental impacts of each alternative as compared with the Proposed Project and other alternatives. The comparison process does not re-consider the extent to which each alternative met the original screening criteria.

Other factors considered, in accordance with CEQA Guidelines (Section 15126.6(f)), were site suitability, economic viability, availability of infrastructure, general plan consistency, other regulatory limitations, jurisdictional boundaries, and proponent's control over alternative sites. Economic factors or costs of the alternatives were not considered in the screening of alternatives because CEQA Guidelines require consideration of alternatives capable of eliminating or reducing significant environmental effects even though they may "impede to some degree the attainment of project objectives, or would be more costly" (Section 15126.6(b)). The detailed results of the alternatives screening analysis are contained in the EIR Appendix D: Alternatives Screening Report.

ES.5.2 Alternatives Fully Evaluated in the EIR

Alternatives to the Proposed Project were screened according to CEQA Guidelines to determine those alternatives to carry forward for analysis in the EIR and alternatives to eliminate from detailed consideration.

Five alternatives were retained for detailed analysis after the screening:

- **Alternative 1:** Eastern Cable Pole at Carmel Valley Road (Option 1b)
- **Alternative 2:** Eastern Cable Pole at Pole P40 and Underground Alignment Through City Open Space (2a) or City Water Utility Service Road (2b)
- **Alternative 3:** Los Peñasquitos Canyon Preserve—Mercy Road Underground
- **Alternative 4:** Segment D 69-kV Partial Underground Alignment
- **Alternative 5:** Pomerado Road to Miramar Area North Combination Underground/Overhead

The five alternatives ~~retailed~~ retained for analysis are illustrated on Figures ES.5-1 and ES.5-2. These alternatives are described in Chapter 3 and evaluated within each environmental impact discussion of Chapter 4 of this EIR, following the analysis of the Proposed Project impacts. Additional detailed maps of each alternative are presented in Appendix E of this EIR. The Proposed Project and alternatives are analyzed at an equal level of detail.

ES.5.2.1 Alternative 1: Eastern Cable Pole at Carmel Valley Road (Option 1b)

Alternative 1 is a cable pole relocation alternative along the Proposed Project route that would eliminate the impacts associated with the proposed installation of a tubular steel cable pole north of Carmel Valley Road at the northern end of Black Mountain Ranch Community Park. Specifically, Eastern Cable Pole Option 1b at Carmel Valley Road is an alternate option for cable pole P41—the cable pole that would be used to transfer the transmission line from overhead to underground at the eastern end of Segment B (Figure ES.5-1). Instead of a using a tubular steel cable pole north of Carmel Valley Road at the northern end of Black Mountain Ranch Community Park as proposed, the Eastern Cable Pole Option 1b at Carmel Valley Road would use a single tubular steel cable pole approximately ~~150~~ 210 feet high located immediately south of Carmel Valley Road within existing SDG&E ROW.

Eastern Cable Pole Option 1b would replace an existing single-circuit wood H-frame structure approximately 83 feet in height that currently supports TL 13825. Eastern Cable Pole Option 1b

Figure ES.5-1 Cable Pole Alternatives Retained for EIR Analysis

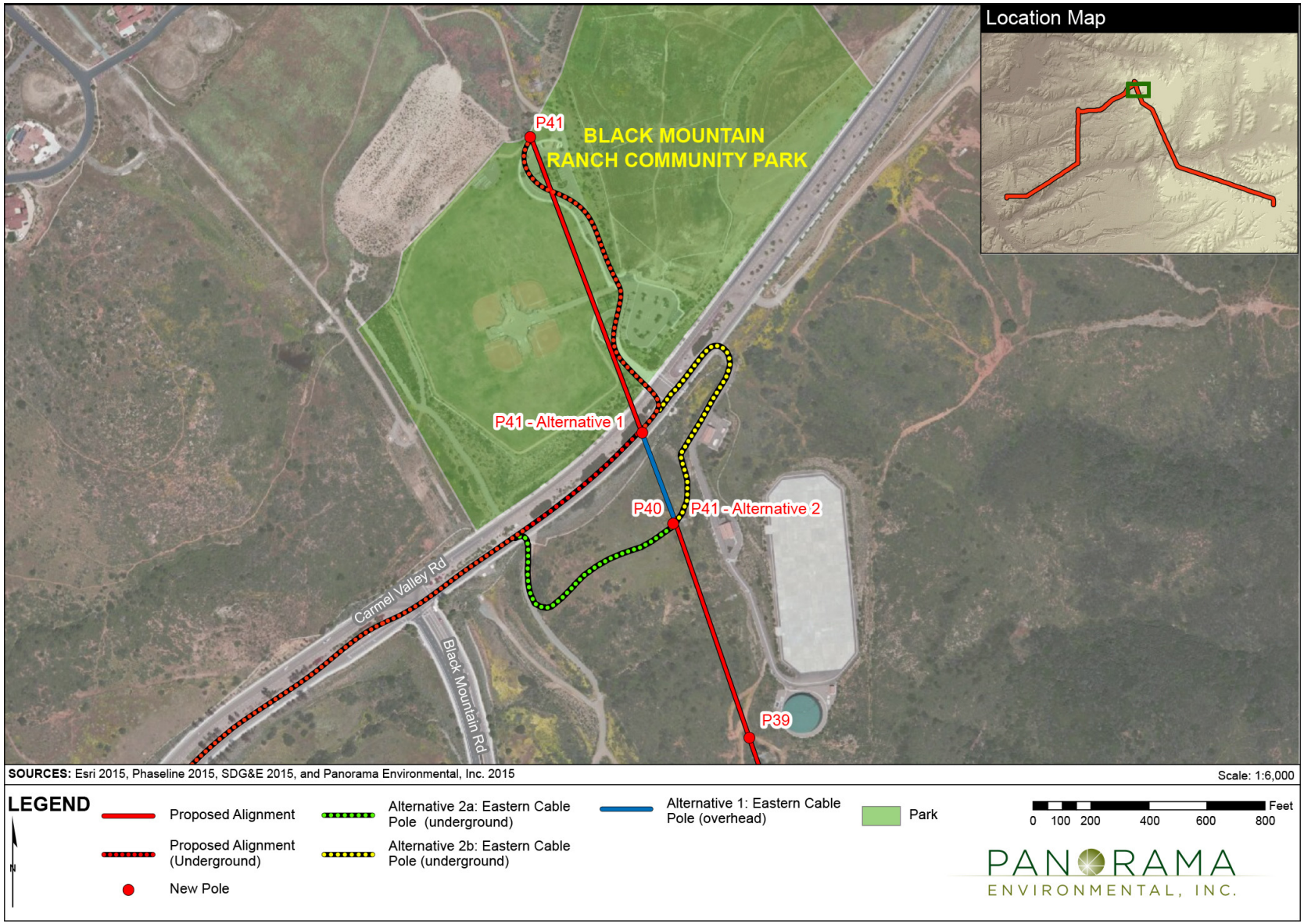
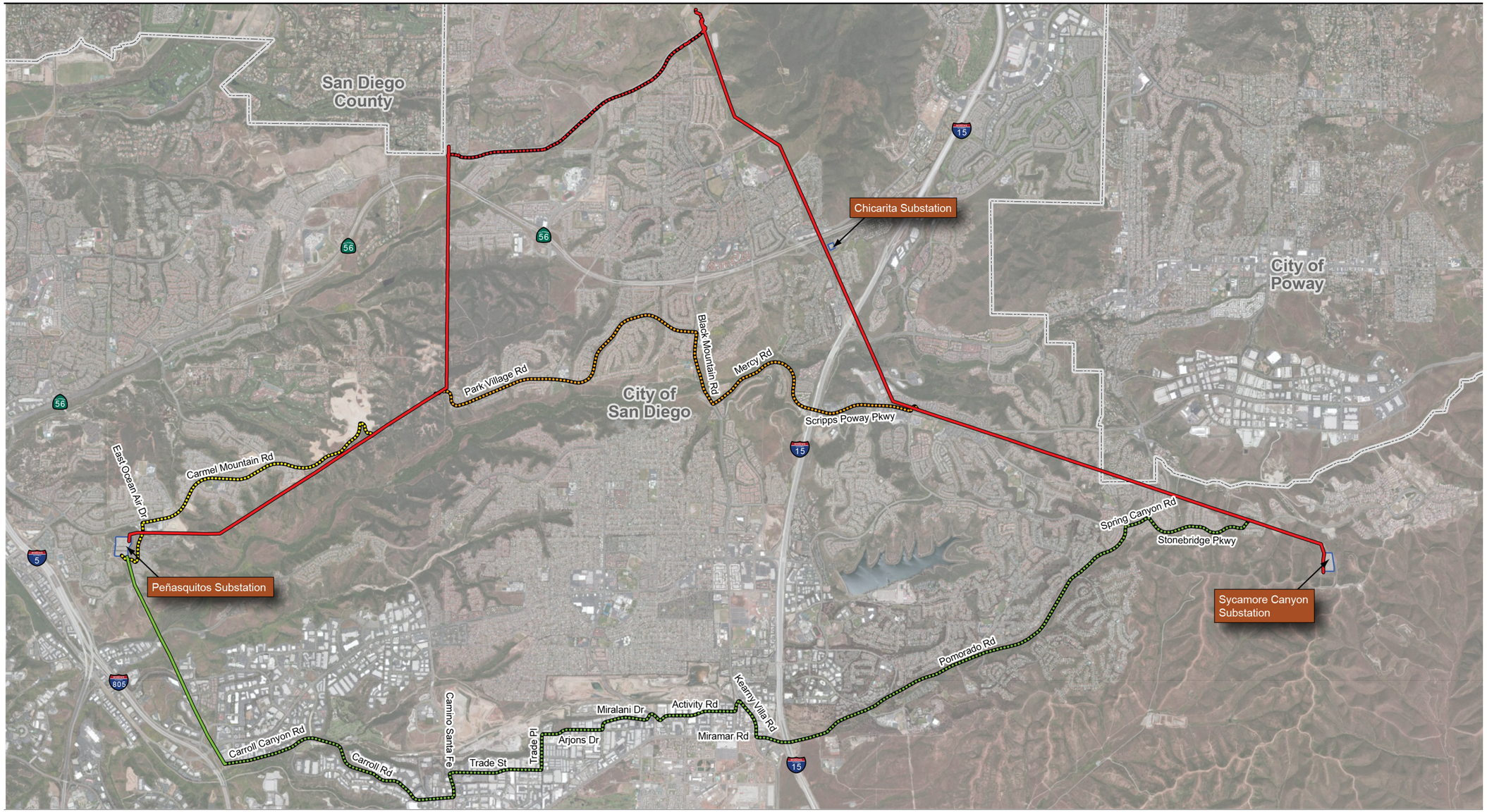


Figure ES.5-2 Routing Alternatives Retained for EIR Analysis (Alternatives 3, 4, and 5)



SOURCES: Esri 2015, SDG&E 2015, and Panorama Environmental, Inc. 2015

Scale: 1:50,000

LEGEND

- Proposed Alignment (overhead)
- Proposed Alignment (underground)
- Alternative 3: Los Penasquitos Canyon Preserve - Mercy Road Underground Alternative
- Alternative 4: Segment D 69kV Partial Underground Alignment
- Alternative 5: Pomerado Road to Miramar Area North Combination Underground/Overhead Alternative (overhead)
- Alternative 5: Pomerado Road to Miramar Area North Combination Underground/Overhead Alternative (underground)
- City Boundary

Miles: 0 0.25 0.5 1 1.5 2

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would require a shorter underground segment compared to the Proposed Project because it would not require an underground line and splice vault within the driveway and parking area at Black Mountain Ranch Community Park.

This alternative would reduce significant and unavoidable impacts to recreation and traffic and transportation (i.e., loss of parking) in Black Mountain Ranch Community Park without resulting in substantially greater environmental impacts.

ES.5.2.2 Alternative 2: Eastern Cable Pole at Pole P40 and Underground Alignment through City Open Space or City Water Utility Service Road

Alternative 2 is a cable pole relocation alternative along the Proposed Project route that would eliminate the impacts associated with the proposed installation of a tubular steel cable pole north of Carmel Valley Road at the northern end of Black Mountain Ranch Community Park. This alternative is an alternate option for cable pole P41—the cable pole that would be used to transfer the transmission line from overhead to underground at the eastern end of Segment B. Instead of using a double-circuit monopole structure about 350 feet north of Carmel Valley Road within Black Mountain Ranch Community Park, Alternative 2 (both Alternative 2a and 2b) would use a cable pole south of Carmel Valley Road at the approximate location of the first proposed TSP within existing SDG&E ROW.

Alternative 2a

From the Alternative 2 cable pole, the underground line heads southwest following the approximate alignment of an existing unpaved access road for 600 feet to a main access road (an extension of Emden Road). The underground line turns north at approximately Black Mountain Road and follows this road for approximately 400 feet to Carmel Valley Road. The underground alignment would travel through City of San Diego dedicated park land and Multiple Species Conservation Plan (MSCP) open space areas near Emden Road and Carmel Valley Road (Figure ES.5-1).

Alternative 2b

From the Alternative 2 cable pole, the underground line would be routed northeast for about 250 feet within the SDG&E ROW, then the alignment would turn east for about 110 feet to the paved service road within the City of San Diego's Black Mountain Reservoir facility north of the ROW. The underground transmission line would be located within this road for approximately 350 feet to Carmel Valley Road (Figure ES.5-1).

This alternative would reduce significant and unavoidable impacts to recreation and traffic and transportation (i.e., loss of parking) in Black Mountain Ranch Community Park without resulting in substantially greater environmental impacts.

ES.5.2.3 Alternative 3: Los Peñasquitos Canyon Preserve-Mercy Road Underground

Alternative 3 is a routing alternative along the Proposed Project route that would avoid the northern portion of Segment A and all of Segments B and C. This alternative would install 5.9 miles of underground transmission line starting at a new cable pole where the existing SDG&E ROW crosses Ivy Hill Road and ending at a new cable pole approximately ~~550~~450 feet

west of the Peñasquitos Junction (i.e., where Proposed Project Segments C and D meet). The underground alignment would follow Scripps Poway Parkway, Mercy Road, Black Mountain Road, and finally Park Village Road. Alternative 3 would bypass the northern half of Proposed Project Segment A and all of Proposed Project Segments B and C avoiding 6.4 miles of overhead transmission line construction in Segments A and C.

This alternative would avoid a substantial amount of land use/visual effects to residents in the northern portion of Segment A and biological resource impacts in Black Mountain Ranch and Del Mar Mesa Preserves in Segments A and C.

ES.5.2.4 Alternative 4: Segment D 69-kV Partial Underground Alignment

Alternative 4 is a routing alternative along the Proposed Project route that would eliminate the impacts from new TSP installation along 2.8 miles of Segment D.

This alternative would construct a double-circuit 69-kV underground power line starting at two new cable poles in Proposed Project Segment D near existing lattice tower E17. The underground alignment would follow Carmel Mountain Road and East Ocean Air Drive, ending at the Peñasquitos Substation. Within Proposed Project Segment D, an existing 69-kV line would be removed from the existing steel lattice towers, and a second 69-kV power line on existing H-frame structures would be de-energized and left in place. Construction within Proposed Project Segment D would be reduced under Alternative 4. The 230-kV transmission line would be installed on the existing steel lattice towers similar to the Proposed Project; however, the H-frame structures would not be removed, and no new TSPs would be installed between lattice tower E17 and the Peñasquitos Substation.

This alternative would avoid significant aesthetic impacts to the community near Segment D and biological resource impacts in Los Peñasquitos Canyon Preserve.

ES.5.2.5 Alternative 5: Pomerado Road to Miramar Area North Combination Underground/Overhead

Alternative 5 is a routing alternative located within an entirely new alignment from the Proposed Project. Alternative 5 would underground the majority of the transmission line described as part of the Proposed Project along a new route with the exception of the east and west ends where the transmission line would be in an overhead position within existing SDG&E ROWs. This alternative would exit the Sycamore Substation at MCAS Miramar overhead westerly within an existing SDG&E ROW toward Stonebridge Parkway. The transmission line would transition to underground beneath Stonebridge Parkway in the vicinity of Greenstone Court, then continuing underground in Pomerado Road, Miramar Road, Kearny Villa Road, Black Mountain Road, Activity Road, Camino Ruiz, Miralani Drive, Arjons Drive, Trade Place, Camino Santa Fe, Carroll Road/Carroll Canyon Road and Scranton Road. The transmission line would either remain underground within the Pomerado/Miramar bridge or temporarily transition overhead where it would cross I-15 via two new cable poles and potentially two new interset poles. At the western end of the underground portion, the line would transition back to overhead structures located within an existing SDG&E ROW heading northward into the Peñasquitos Substation. Alternative 5 would avoid construction within the

Proposed Project alignment with exception of approximately 3,400 feet of existing SDG&E ROW in Segment A connecting to the Sycamore Canyon Substation.

Alternative 5 could utilize the same staging yards and materials storage areas as the Proposed Project and up to eight additional staging yards for Alternative 5 equipment staging and materials storage. The Alternative 5 staging yards locations are shown on Figure ES.5-3. The Alternative 5 staging yards would be used for materials storage during Alternative 5 underground transmission line construction activities (trenching, vault installation, and cabling). Helicopter activities (landing and fueling) would not occur at these staging yards; Proposed Project staging yards would be used where helicopter activities are required.

This alternative would substantially reduce environmental effects from aesthetics and corona noise to residential areas and avoid impacts within Black Mountain Ranch, Del Mar Mesa, and Los Peñasquitos Canyon Preserves.

ES.5.3 Alternatives Eliminated from Further Consideration

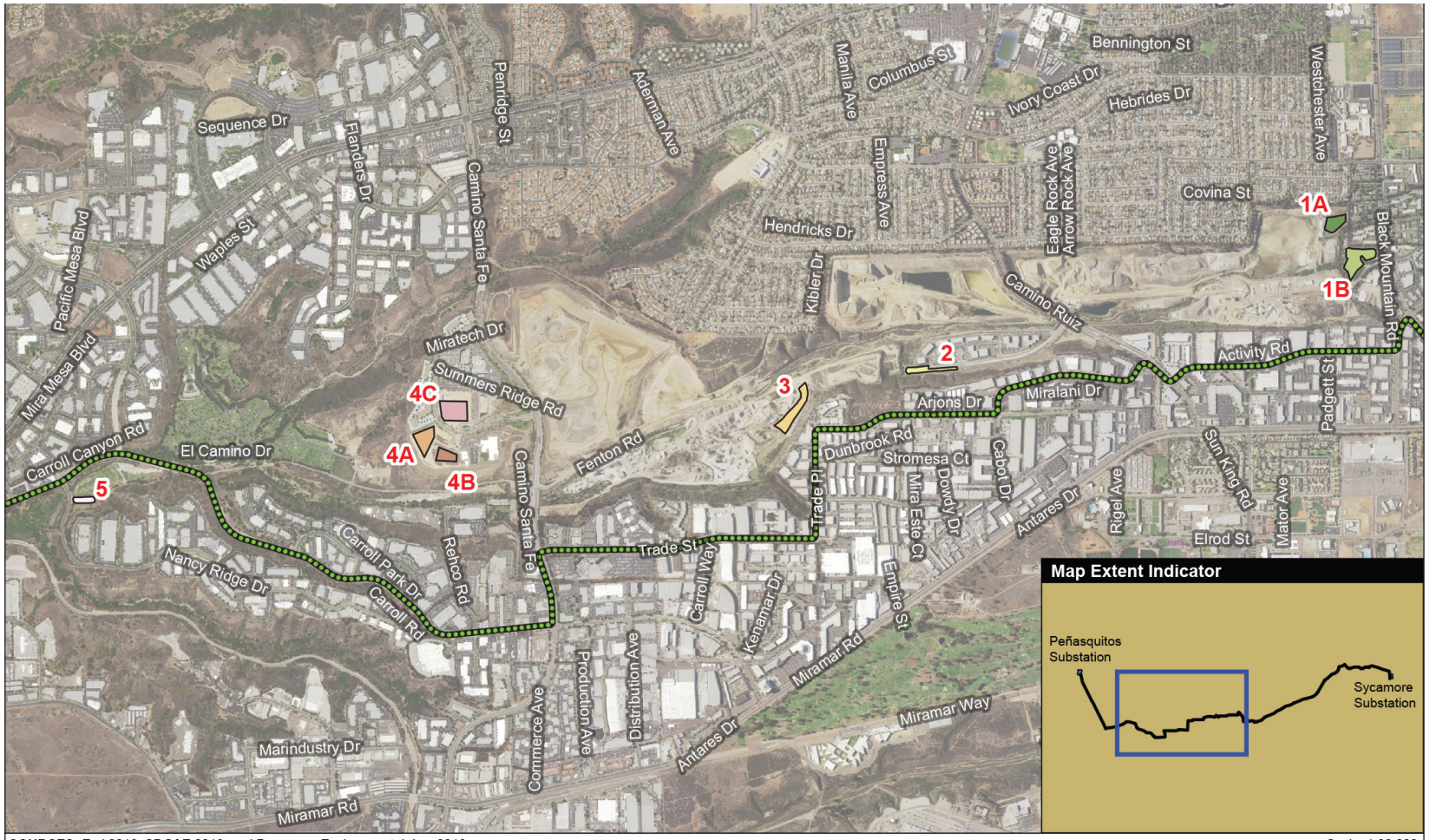
In addition to the five alternatives evaluated, ~~36~~ 38 other alternatives were considered and eliminated by a screening process. Reasons for elimination are described in Appendix D: Alternatives Screening Report and include (a) inability to meet most basic project objectives, (b) infeasibility due to legal, technical, or regulatory reasons, or (c) inability to reduce overall environmental impacts in comparison to the Proposed Project. The eliminated alternatives are described and evaluated in detail within Appendix D. The eliminated alternatives include cable pole relocation, transmission alignment alternatives, electrical system alternatives, and non-wire alternatives.

ES.5.4 No Project Alternative

CEQA Guidelines Section 15126.6(e) calls for considering the effects of not implementing a project, known as the No Project Alternative. The analysis of the No Project Alternative must discuss the existing conditions at the time the Notice of Preparation was published (August 11, 2014), as well as: "what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services" (CEQA Guidelines Section 15126.6(e)(2)). In other words, the scenario evaluates the outcomes or actions that likely would take place without the project.

Under the No Project Alternative, construction and operation of the Sycamore-Peñasquitos 230-kV transmission line would not occur. If neither the Proposed Project nor any of the five alternatives is ~~not~~ approved, there are potential NERC reliability criteria violations that SDG&E would need to mitigate to avoid fines (up to $1 million per day per violation). The No Project Alternative therefore considers the actions that SDG&E would likely take to comply with NERC reliability criteria.

Figure ES.5-3 Alternative 5 Staging Yards



Seven ~~Three~~ upgrades are considered part of the No Project Alternative:

- New Mission—Peñasquitos 230-kV Transmission Line
- Second Poway—Pomerado 69-kV Power Line
- Second Miguel—Bay Boulevard 230-kV Transmission Line
- Second Sycamore Canyon—Scripps 69-kV Power Line
- Upgrade Miguel—Mission 230-kV Transmission Lines 1 and 2
- Upgrade Artesian—Bernardo 69-kV Power Lines 1 and 2
- Upgrade Bernardo—Felicita Tap—Felicita 69-kV Power Line ~~Series Reactor[2] at Sycamore Canyon Substation~~

The corridors for these upgrades are shown on Figure ~~ES.5-3~~ ES.5-4.

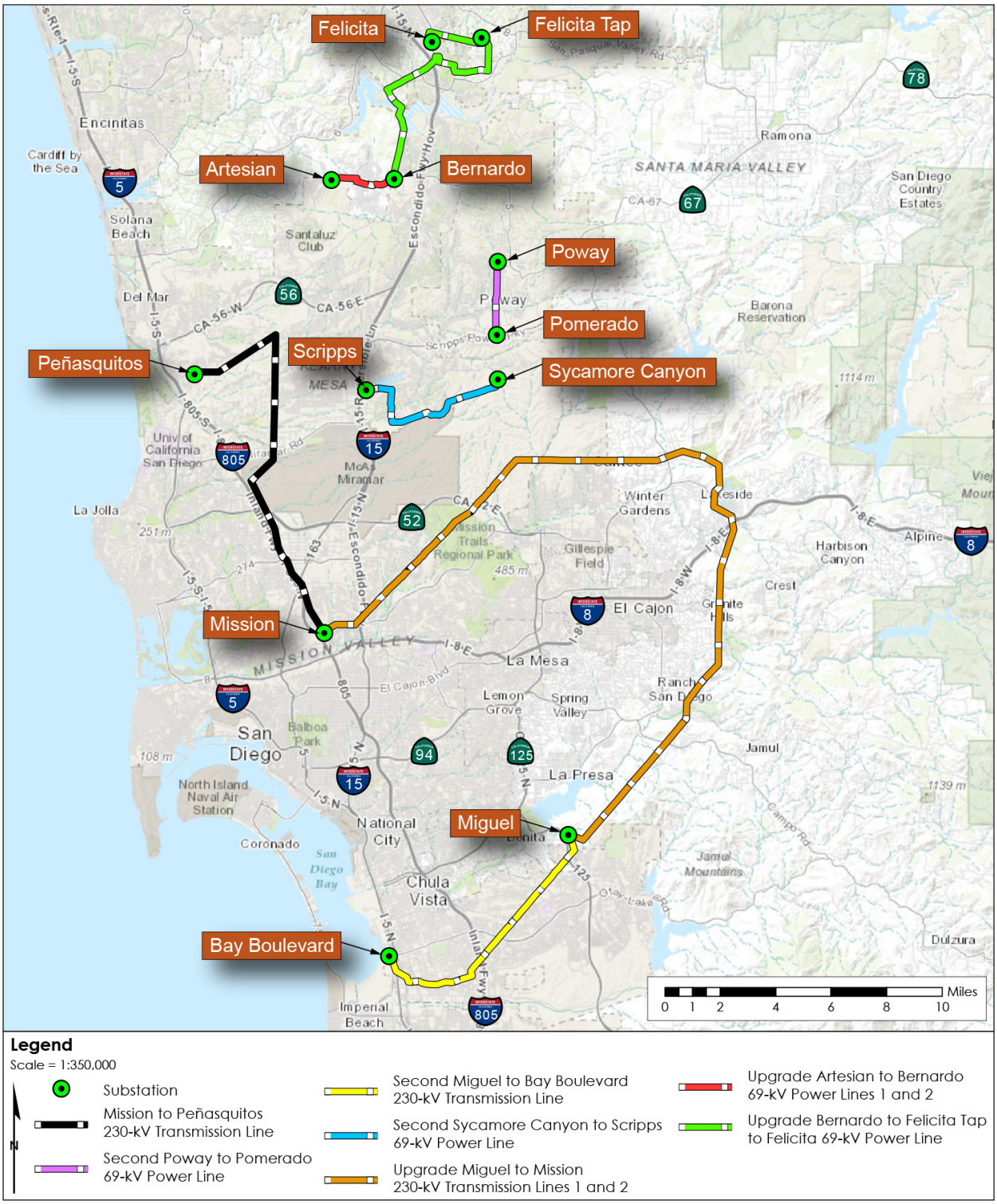
The Mission—Peñasquitos transmission line and Second Poway—Pomerado power line were separately approved by CAISO in the 2014-2015 Transmission Plan. The Mission—Peñasquitos transmission line consists of a new 230-kV transmission line between Mission Substation and Peñasquitos Substation (15 miles via Peñasquitos Junction)[3]. The Second Poway—Pomerado 69-kV power line, Second Miguel—Bay Boulevard 230-kV transmission line, and Second Sycamore Canyon—Scripps 69-kV power line would either be constructed on new wood or steel poles adjacent to the existing transmission/power lines, or the existing lines would be reconstructed on new double-circuit poles and the existing poles would be removed. ~~Poway—Pomerado 69-kV power line or the existing Poway—Pomerado line would be reconstructed on new double-circuit poles and the existing wood poles would be removed for approximately 2.6 miles. Additionally a series reactor within the Sycamore Canyon Substation on the Sycamore—Scripps 69-kV line would be constructed as part of the No Project Alternative.~~

Upgrades to the Miguel—Mission 230-kV transmission lines, Artesian—Bernardo 69-kV power lines, and Bernardo—Felicita Tap—Felicita 69-kV power line would involve removing old 230-kV or 69-kV conductor from existing transmission and power lines and stringing new conductor along the alignment within existing ROW. In a few locations, existing poles may not adequately support the new conductor. In these locations, existing poles would be removed and new poles would be constructed in approximately the same location.

~~[2] Series reactors are used to help control power flows in the transmission grid. When a series reactor is placed in a line, it increases the impedance of that line, causing less power to flow through that line. By causing less power to flow through the line, the reactor shunts that power onto other lines, reducing or eliminating the potential for thermal overloads on the line the reactor is placed on.~~

[3] SDG&E is currently developing a proposed plan of service for the CAISO-approved Mission—Peñasquitos 230-kV transmission line and has not yet determined the final route or system configuration for the project. Load flow studies, engineering, and route development remain to be completed, and there is a possibility that the final plan of service will look significantly different than what was initially proposed by CAISO (SDG&E 2015b).

Figure ES.5-4 ~~3~~ No Project Alternative (Revised)



Source: ESRI, raster, vector, and on-line GIS Data resources 2016

This alternative would avoid impacts within Black Mountain Ranch, Del Mar Mesa, and Los Peñasquitos Canyon Preserves; however, it would require construction in San Diego National Wildlife Refuge, Serra Mesa Ruffin Open Space, Scripps Mira Mar Open Space, and Selzer Regional Park. ~~and~~ The majority of the activities would require overhead construction and would reduce impacts from underground construction within roadways. The alternative would require construction activity along more miles of overhead transmission and power lines (83~~17.6~~ miles) than the Proposed Project (13.9 miles).

ES.6 SUMMARY OF IMPACTS

ES.6.1 Introduction

This section summarizes the environmental impacts of the Proposed Project and alternatives. For each resource area, the analysis first presents a summary of impacts for the Proposed Project. Significant impacts are described, as well as recommended mitigation measures that would reduce significant impacts. The mitigation measures are discussed briefly in this section and the full text of the mitigation measures is presented in Table ES.10-1 at the end of the Executive Summary. The analysis presents a summary of impacts for each alternative to the Proposed Project, including the No Project Alternative.

ES.6.1.1 Summary of Proposed Project Significant and Unavoidable Impacts

The Proposed Project would have nine significant and unavoidable impacts in the following resource areas: aesthetics, transportation and traffic, noise, and recreation. The Proposed Project would have significant impacts that can be mitigated to a less than significant level in nine resource areas: biological resources, cultural resources, paleontological resources, geology and soils, hydrology and water resources, hazards and hazardous materials, fire and fuels management, air quality, and utilities and public service systems. Impacts in two resource areas would be less than significant without mitigation: agricultural resources and greenhouse gases. The Proposed Project would have no impact to land use or population and housing.
Table ~~ES-6.2~~ ES.6-2 provides a summary of the significant and unavoidable impacts for the Proposed Project.

ES.6.2 Biological Resources

The analysis evaluated impacts of the Proposed Project and alternatives on special-status species, riparian habitat, wetlands, or other sensitive natural communities. Activities associated with the Proposed Project and the project alternatives were also evaluated for conflicts with habitat conservation plans and local policies or ordinances that protect biological resources.

Table ~~ES-6.2~~ ES.6-2 Summary of All Significant and Unavoidable Impacts for the Proposed Project

Resource Area	Significant and Unavoidable Impacts
Aesthetics	**Aesthetics-3:** Substantially degrade the existing visual character or quality of the site and its surroundings.
Transportation and Traffic	**Traffic-1:** 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. **Traffic-2:** 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. **Traffic-8:** The project would result in inadequate parking capacity.
Noise	**Noise-1:** Expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance or applicable standards of other agencies. **Noise-3:** Result in a substantial permanent increase in ambient noise levels in the project vicinity above existing noise levels. **Noise-4:** Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity during construction.
Recreation	**Recreation-3:** Substantially disrupt activities in a public recreational area. **Recreation-4:** Substantially decrease the value of a public recreational resource.

ES.6.2.1 Proposed Project Impacts on Biological Resources

Construction and operation of the Proposed Project would result in impacts to special-status species and sensitive vegetation communities, including:

- Direct impacts to special-status vegetation and wildlife species through vegetation removal, grading, and equipment and vehicle activity
- Indirect impacts to special-status species and wildlife from fugitive dust, sedimentation, invasive species proliferation, and hazardous material spills
- Vegetation removal and degradation of wetland, vernal pool, or riparian habitat from earth disturbance during construction
- Impacts to sensitive vegetation communities from vegetation removal during access and grading of work sites
- Impacts to avian species as a result of collisions with power lines

Significant impacts to biological resources would be reduced through implementation of mitigation that would require biological monitoring and reporting, preparation and implementation of a worker environmental awareness program, minimization of impact areas, revegetation of temporary disturbance areas, control of fugitive dust, erosion and sediment control, buffers for nesting birds, hazardous material control and clean-up, vernal pool avoidance and minimization, compensation for temporary and permanent habitat loss, preparation and implementation of a weed control plan, and minimization of impacts for

jurisdictional waters and wetlands. Mitigation is consistent with SDG&E's Natural Communities Conservation Plan, the City of San Diego Multiple Species Conservation Program, and MCAS Miramar Integrated Natural Resource Management Plan. Impacts to biological resources would be less than significant with mitigation.

ES.6.2.2 Project Alternative Impacts on Biological Resources

Alternative 1: Eastern Cable Pole at Carmel Valley Road
The cable pole relocation would involve disturbance of sensitive habitats and associated special-status species in the area of grading for the cable pole and surrounding retaining wall. The impact to biological resources would be reduced through implementation of the Proposed Project mitigation measures. Impacts would be less than significant with mitigation. The impact to special-status species and habitat would be less than the Proposed Project because the area of habitat disturbance would be reduced.

Alternatives 2a or 2b: Eastern Cable Pole at Pole 40 and Underground Alignment through City Open Space or City Water Utility Service Road
The cable pole relocation would involve vegetation removal and disturbance of sensitive habitats during cable pole installation and underground duct bank construction through open space areas. The impact to biological resources would be reduced through implementation of the Proposed Project mitigation measures. The impact would be less than significant with mitigation. Both underground options, Alternative 2a and Alternative 2b, would result in greater impacts to sensitive vegetation communities than the Proposed Project because they would both require trenching in a City MSCP Preserve.

Alternative 3: Los Peñasquitos Canyon Preserve – Mercy Road Underground
The cable poles on either end of the underground alignment and the underground transmission line from the end of Park Village Road to the western cable pole would be located in natural areas containing sensitive vegetation communities and habitat for special-status species. The impact to biological resources would be reduced through implementation of the Proposed Project mitigation measures and impacts would be less than significant with mitigation. The underground alignment from Ivy Hill Drive to Peñasquitos Junction within City roads would have no impact on sensitive habitats. The impact to special-status species and habitat including vernal pools and riparian areas would be substantially less than the Proposed Project because the alternative eliminates construction within Black Mountain Ranch Preserve and Del Mar Mesa Preserve.

Alternative 4: Segment D 69-kV Partial Underground Alignment
The two cable poles at the eastern end of the underground alignment would be located in sensitive habitat in Los Peñasquitos Canyon Preserve. The impact to biological resources would be reduced through implementation of the Proposed Project mitigation measures. The impact would be less than significant with mitigation. The underground alignment would have no impact on special-status species or sensitive habitats because the underground alignment would be located within paved City roads. The impact to special-status species and habitat including

vernal pools would be less than the Proposed Project because the alternative substantially reduces the number of new TSPs within Los Peñasquitos Canyon Preserve.

Alternative 5: Pomerado Road to Miramar Areas North Combination Underground/Overhead
Five new poles in the eastern overhead portion of the Alternative 5 alignment would be located in sensitive habitats and would result in impacts to special-status species and habitats. The impact to biological resources would be reduced through implementation of the Proposed Project mitigation measures. Impacts would be less than significant with mitigation. The 11.5-mile long underground alignment would be located within City roads and would have no impact on sensitive habitats. The western overhead portion of the alternative would locate the transmission line on existing poles; there would be temporary disturbance of habitats during access for installation of the new conductor for 2.1 miles. The impact to special-status species, sensitive habitats, riparian areas, and wetlands would be less than the Proposed Project because the alternative would require 11 fewer miles of new overhead transmission line by constructing the transmission line underground in paved roads.

ES.6.2.3 No Project Alternative Impacts on Biological Resources

The No Project Alternative would include improvements within approximately 83 miles of existing SDG&E ROW. The No Project Alternative would include construction of four additional transmission and power lines, the majority of which would be overhead. The No Project Alternative would also require reconductoring three existing transmission and power lines throughout San Diego County. ~~The new Mission – Peñasquitos transmission line and second Poway – Pomerado Power line would require new overhead transmission and power lines for 17.6 miles.~~ The No Project Alternative would result in impacts to special-status species and sensitive vegetation communities through the installation and removal of poles and access to work areas for conductor installation. The No Project Alternative would result in impacts to San Diego Wildlife Preserve and to critical habitat for coastal California gnatcatcher, Arroyo toad, and Otay tarplant, San Diego fairy shrimp. The No Project Alternative would result in greater impacts to special-status species and wildlife than the Proposed Project. ~~While the No Project Alternative requires more miles of new transmission and power lines, the No Project Alternative would have less impact to special-status species and wildlife because the No Project Alternative would avoid impacts to Black Mountain Ranch and Del Mar Mesa Preserves.~~

ES.6.3 Aesthetics

This analysis evaluates impacts of the Proposed Project and alternatives on aesthetics from construction and operation of project facilities. The presence of construction equipment, vehicles, materials, workforce, nighttime lighting, and increased traffic during construction are evaluated for their potential to degrade the existing visual character or quality of the landscape. The long-term presence of project structures and lighting as well as impacts from vegetation removal and land scarring are also evaluated for their potential to degrade the existing visual character or quality of the landscape.

ES.6.3.1 Proposed Project Impacts on Aesthetics

Construction of the Proposed Project would cause the following temporary impacts on aesthetic resources:

- Visual contrast and degradation of the visual quality due to the presence of construction equipment, materials, and workforce
- Impacts from night lighting during construction
- Glare from construction materials and fences

The impact on aesthetics would be reduced through implementation of mitigation measures to screen staging yards from view, minimize night lighting at project facilities, and reduce glare from construction materials and fences. These impacts would be less than significant with mitigation.

Long-term impacts on aesthetic resources include the following:

- Long-term visual contrast resulting from the removal of vegetation and construction of access roads and retaining walls
- Long-term visual contrast from the presence of Proposed Project transmission structures, lighting and marker balls required by the Federal Aviation Administration
- Glare from specular conductor and steel poles

Long-term impacts on aesthetics would be reduced through implementation of mitigation measures to minimize vegetation removal and ground disturbance, revegetate temporary disturbance areas, reduce color contrast of retaining walls and poles, and treat structure surfaces to reduce glare. Impacts on visual quality would remain significant and unavoidable.

ES.6.3.2 Project Alternative Impacts on Aesthetics

Alternative 1: Eastern Cable Pole at Carmel Valley Road

The cable pole at Carmel Valley Road would have significant and unavoidable impacts on the scenic quality of views from Carmel Valley Road and from Black Mountain Ranch Community Park because the cable pole would contrast significantly with the surrounding visual character. The impact to aesthetics would be reduced through implementation of the Proposed Project mitigation measures. The aesthetic impact of the cable pole would remain significant and unavoidable. The aesthetic impact would be ~~less~~ greater than the Proposed Project because the the cable pole would be taller than the Proposed Project cable pole and would be visible from the surrounding area including Carmel Valley Road, Black Mountain Ranch Community Park and Black Mountain Ranch Open Space~~viewer sensitivity for motorists is less than the viewer sensitivity for recreationists in Black Mountain Ranch Open Space area due to the shorter duration of motorist views compared to recreationist views~~.

Alternatives 2a or 2b: Eastern Cable Pole at Pole 40 and Underground Alignment through City Open Space or City Water Utility Service Road
The cable pole south of Carmel Valley Road that would be used to transition the overhead line to underground in both options 2a and 2b would be fully visible from Black Mountain Ranch Community Park ball fields. The impact to aesthetics would be reduced through implementation of the Proposed Project mitigation measures. The aesthetic impact of the cable pole would remain significant and unavoidable. The Alternative 2 cable pole would have a greater impact on visual quality than the Proposed Project cable pole because the Alternative 2 cable pole would have increased visibility from Black Mountain Ranch Community Park and would also be visible from Carmel Valley Road.

Alternative 3: Los Peñasquitos Canyon Preserve – Mercy Road Underground
The cable pole at the western end of the underground alignment would contrast significantly with the existing visual quality and natural habitat of Los Peñasquitos Canyon. The impact to aesthetics would be reduced through implementation of the Proposed Project mitigation measures. The aesthetic impact of the western cable pole would remain significant and unavoidable. The alternative would substantially reduce significant and unavoidable impacts of the Proposed Project by locating the transmission line underground within City roads thereby eliminating the installation of new overhead transmission line and structures within the northern portion of Segment A and all of Segment C.

Alternative 4: Segment D 69-kV Partial Underground Alignment
The two cable poles at the eastern end of the underground alignment would contrast significantly with the existing visual quality and natural habitat of Los Peñasquitos Canyon. The same mitigation measures that would apply to the Proposed Project would apply to this alternative; however, the impact of the cable poles would remain significant and unavoidable. The alternative would substantially reduce significant and unavoidable impacts of the Proposed Project by locating the 69-kV power lines underground within City roads and eliminating the installation of new double-circuit TSPs for 2.8 miles in Segment D.

Alternative 5: Pomerado Road to Miramar Areas North Combination Underground/Overhead
The Alternative 5 eastern cable pole, retaining wall, and marker balls would contrast significantly with the existing visual quality of the area. The impact to aesthetics would be reduced through implementation of the Proposed Project mitigation measures. The aesthetic impact of the cable pole would remain significant and unavoidable. The alternative would avoid the majority of the Proposed Project aesthetic impacts by locating the transmission line underground within City roads. This eliminates most of the overhead transmission line including TSPs, conductor, marker balls, and retaining walls.

ES.6.3.3 No Project Alternative Impacts on Aesthetics
The No Project Alternative would have the same impact as the Proposed Project in Segment D because the No Project Alternative will require installation of a 230-kV line in the same corridor as the Proposed Project. The No Project Alternative would also degrade visual quality in the Poway area through installation of a new 69-kV power line. These impacts would be significant

and unavoidable. Aesthetic impacts from the No Project Alternative would be greater ~~less~~ than the Proposed Project because the No Project Alternative would require more ~~fewer~~ miles of new poles or pole replacements (wood to steel) in areas with high viewer sensitivity than the Proposed Project.

ES.6.4 Cultural Resources

The cultural resources impact analysis considers whether the Proposed Project or alternatives would impact known historic properties or previously undiscovered resources. These previously undiscovered resources could include prehistoric and historical archaeological sites and buried Native American human remains.

ES.6.4.1 Proposed Project Impacts on Cultural Resources

Project-related ground disturbance, including vegetation removal, grading, trenching, and excavation for pole installation would not result in adverse effects to known CRHR-eligible historical or archaeological resources because no CRHR-eligible resources are located within Proposed Project impact areas. Ground-disturbing construction activities could disturb or destroy previously undiscovered resources or human remains, which would be a significant impact. This adverse effect would be reduced through implementation of mitigation measures to monitor for cultural resources during construction, train workers to recognize resources, prepare a monitoring report post-construction, and follow specific procedures upon the discovery of human remains. Impacts to cultural resources from construction of the Proposed Project would be less than significant with mitigation.

ES.6.4.2 Project Alternative Impacts on Cultural Resources

Alternative 1: Eastern Cable Pole at Carmel Valley Road

Construction of Alternative 1 would decrease the risk of disturbance or destruction of cultural resources compared to the Proposed Project because the alternative would eliminate ground disturbance for an underground transmission line to connect Segments A and B. However, a risk would still remain. The same mitigation described for the Proposed Project would apply to this alternative, and impacts would be less than significant with mitigation.

Alternatives 2a or 2b: Eastern Cable Pole at Pole 40 and Underground Alignment through City Open Space or City Water Utility Service Road

Construction of Alternative 2 would decrease the risk of disturbance or destruction of cultural resources compared to the Proposed Project because the alternative would involve less ground disturbance than the Proposed Project. However, a risk would still remain. The same mitigation described for the Proposed Project would apply to this alternative, and impacts would be less than significant with mitigation.

Alternative 3: Los Peñasquitos Canyon Preserve – Mercy Road Underground

Alternative 3 would have a greater potential to encounter and damage previously undiscovered cultural resources due to increased earth disturbance from underground construction. The same mitigation described for the Proposed Project would apply to this alternative, and impacts would be less than significant with mitigation.

Alternative 4: Segment D 69-kV Partial Underground Alignment
Alternative 4 would have a greater potential to encounter and damage previously undiscovered cultural resources due to increased earth disturbance from underground construction. The same mitigation described for the Proposed Project would apply to this alternative, and impacts would be less than significant with mitigation.

Alternative 5: Pomerado Road to Miramar Areas North Combination Underground/Overhead
Alternative 5 would have a greater potential to encounter and damage previously undiscovered cultural resources due to increased earth disturbance from underground construction. The same mitigation described for the Proposed Project would apply to this alternative, and impacts would be less than significant with mitigation.

ES.6.4.3 No Project Alternative Impacts on Cultural Resources

Ground-disturbing construction activities associated with the No Project Alternative ~~Mission – Peñasquitos 230 kV transmission line and Poway – Pomerado 69 kV power line~~ would include vegetation removal, grading, pole removal, and pole installation. These activities could result in significant impacts on both known and previously undiscovered historical and archaeological resources within the transmission corridors. ~~There would be no impact from installation of a series reactor at Sycamore Canyon Substation because the reactor would not involve new areas of ground disturbance.~~

ES.6.5 Paleontological Resources

The paleonteological resources impact analysis considers whether the Proposed Project or alternatives would result in the destruction or damage of significant paleontological resources.

ES.6.5.1 Proposed Project Impacts on Paleontological Resources

Ground-disturbing activities including grading, trenching, and excavation could result in physical destruction of eight previously recorded paleontological resources and other previously undiscovered paleontological resources. Mitigation measures to minimize or avoid impacts to paleontological resources include monitoring areas of moderate to high paleontological sensitivity, noting monitoring areas in construction plans, and following specific procedures upon discovery of unique paleontological resources, which includes avoidance. Impacts to paleontological resources from construction of the Proposed Project would be less than significant with mitigation.

ES.6.5.2 Project Alternative Impacts on Paleontological Resources

Alternative 1: Eastern Cable Pole at Carmel Valley Road
Construction of Alternative 1 would reduce the risk of disturbance or destruction of paleontological resources compared to the Proposed Project because this alternative would eliminate ground disturbance for an underground transmission line to connect Segments A and B. However, a risk would still remain. The same mitigation described for the Proposed Project would apply to this alternative, and impacts would be less than significant with mitigation.

Alternatives 2a or 2b: Eastern Cable Pole at Pole 40 and Underground Alignment through City Open Space or City Water Utility Service Road
The construction of Alternatives 2a and 2b would decrease the risk of disturbance or destruction of paleontological resources compared to the Proposed Project because these alternatives would involve less ground disturbance from construction of a shorter underground connection between Segments A and B than the Proposed Project. However, a risk would still remain. The same mitigation described for the Proposed Project would apply to these alternatives, and impacts would be less than significant with mitigation.

Alternative 3: Los Peñasquitos Canyon Preserve – Mercy Road Underground
Alternative 3 would have a greater potential to encounter and damage significant paleontological resources due to increased earth disturbance from underground construction in areas of moderate to high paleontological sensitivity. The same mitigation described for the Proposed Project would apply to this alternative, and impacts would be less than significant with mitigation.

Alternative 4: Segment D 69-kV Partial Underground Alignment
Alternative 4 would have a greater potential to encounter and damage significant paleontological resources due to increased earth disturbance from underground construction in areas of moderate to high paleontological sensitivity. The same mitigation described for the Proposed Project would apply to this alternative, and impacts would be less than significant with mitigation.

Alternative 5: Pomerado Road to Miramar Areas North Combination Underground/Overhead
Alternative 5 would have a greater potential to encounter and damage significant paleontological resources due to increased earth disturbance from underground construction in areas of moderate to high paleontological sensitivity. The same mitigation described for the Proposed Project would apply to Alternative 5, and impacts would be less than significant with mitigation.

ES.6.5.3 No Project Alternative Impacts on Paleontological Resources
Ground-disturbing construction activities associated with the No Project Alternative ~~Mission – Peñasquitos 230 kV transmission line and Poway – Pomerado 69 kV power line~~ would include vegetation removal, grading, pole removal, and pole installation. These activities could result in significant impacts on both previously recorded and previously undiscovered paleontological resources within the transmission corridors. ~~There would be no impact from installation of a series reactor at Sycamore Canyon Substation because the reactor would not involve new areas of ground disturbance.~~

ES.6.6 Geology, Soils, and Mineral Resources
The geology and soils impact analysis considers the potential for surface fault rupture, groundshaking, landslides, liquefaction, or problematic soils (such as expansive or corrosive soils) to damage structures or components of the Proposed Project or alternatives. Project

activities are also evaluated for their potential to trigger or accelerate erosion or slope failure (including landslides).

ES.6.6.1 Proposed Project Impacts on Geology, Soils, and Mineral Resources

The Proposed Project poles would be subject to geologic hazards including:

- Strong seismic ground shaking
- Damage from landslide, liquefaction, or expansive and collapsible soils

The Proposed Project could also cause increased erosion and loss of top soil from earth disturbing construction activities. These impacts would be reduced through mitigation measures requiring design of facilities to current seismic standards, geotechnical investigation and design of foundations to address landslides, liquefaction, and expansive soils, and implementation of sediment and erosion control measures. Impacts would be less than significant with mitigation.

The Proposed Project would not impact mineral resources.

ES.6.6.2 Project Alternative Impacts on Geology, Soils, and Mineral Resources

Alternative 1: Eastern Cable Pole at Carmel Valley Road

Alternative 1 could cause erosion and loss of topsoil from construction of the cable pole and

foundation along Carmel Valley Road. The impact to geology and soils would be reduced through implementation of the Proposed Project mitigation measures. Impacts would be less than significant with mitigation. Alternative 1 impacts to geology and soils would be less than the Proposed Project because Alternative 1 involves less soil disturbance.

Alternative 1 would not impact mineral resources.

Alternatives 2a or 2b: Eastern Cable Pole at Pole 40 and Underground Alignment through City Open Space or City Water Utility Service Road

Alternative 2a and 2b could cause erosion and loss of top soil from construction of the cable pole and underground trench to Carmel Valley Road. The impact to geology and soils would be reduced through implementation of the Proposed Project mitigation measures. Impacts would be less than significant with mitigation. Alternative 2a and 2b impacts to geology and soils would be less than the Proposed Project because Alternative 2a and 2b involve less soil disturbance than the Proposed Project.

Alternative 2 would not impact mineral resources.

Alternative 3: Los Peñasquitos Canyon Preserve – Mercy Road Underground

The Alternative 3 western cable pole could be subject to landslides or expansive soils. The alternative could also result in erosion and loss of topsoil from ground disturbance during construction. The Alternative 3 underground transmission line within roads would not cause the loss of topsoil because there is no topsoil in the roadway. The impacts to geology and soils would be reduced through implementation of the Proposed Project mitigation measures.

Impacts would be less than significant with mitigation. Alternative 3 impacts to geology and soils would be less than the Proposed Project because Alternative 3 requires substantially fewer structures in expansive or collapsible soils or areas that are prone to landslide. Alternative 3 also has less potential for topsoil loss due to construction within existing roads.

Alternative 3 would not impact mineral resources.

Alternative 4: Segment D 69-kV Partial Underground Alignment
The Alternative 4 cable poles could be subject to landslides or expansive soils. The alternative could also result in erosion and loss of topsoil from ground disturbance during construction. The Alternative 4 underground power lines within roads would not cause the loss of topsoil because there is no topsoil in the roadway. The impacts to geology and soils would be reduced through implementation of the Proposed Project mitigation measures. Impacts would be less than significant with mitigation. Alternative 4 impacts to geology and soils would be less than the Proposed Project because Alternative 4 requires substantially fewer structures in expansive or collapsible soils or areas that are prone to landslide. Alternative 4 also has less potential for topsoil loss due to construction within existing roads.

Alternative 4 would not impact mineral resources.

Alternative 5: Pomerado Road to Miramar Areas North Combination Underground/Overhead
The Alternative 5 cable poles could be subject to landslides, liquefaction, or expansive and collapsible soils. The alternative could also result in erosion or loss of topsoil from ground disturbance during construction. The Alternative 5 underground transmission line would not be subject to geologic hazards or loss of topsoil because the underground alignment would be constructed in roadways with underlying road base where there is no topsoil. The impacts to geology and soils would be reduced through implementation of the Proposed Project mitigation measures. Impacts would be less than significant with mitigation. Alternative 5 impacts to geology and soils would be substantially less than the Proposed Project because Alternative 5 eliminates nearly all of the Proposed Project structures within areas of geologic hazard and minimizes disturbance in area containing topsoil.

Alternative 5 would not impact mineral resources.

ES.6.6.3 No Project Alternative Impacts on Geology, Soils, and Mineral Resources

The No Project Alternative would require new poles that could be subject to landslides, liquefaction, or expansive and collapsible soils. The No Project Alternative could also cause erosion or loss of topsoil from installation and removal of poles. The No Project Alternative would have a greater ~~less~~ impact on geology and soils than the Proposed Project because the No Project Alternative would require a total of approximately 83 miles of construction ~~1 less mile of pole/structure replacements~~, resulting in ~~less~~ increased loss of top soil and potential for erosion. This impact would be significant, but could be reduced through standard mitigation practices.

ES.6.7 Hydrology and Water Resources

The hydrology and water resources impact analysis evaluates whether the Proposed Project or alternatives would deplete groundwater supplies or interfere with groundwater recharge, cause erosion, siltation, or flood damage, or degrade water quality or violate a water quality standard or waste discharge requirement.

ES.6.7.1 Proposed Project Impacts on Hydrology and Water Resources

Construction of the Proposed Project would have the following impacts on hydrology and water resources:

- Cause sedimentation from ground disturbance in violation of water quality standards in Los Peñasquitos Creek and Los Peñasquitos Lagoon
- Spills of hazardous materials could violate water quality standards or degrade water quality
- Increase erosion and sedimentation from vegetation removal and grading
- Require dewatering of shallow groundwater, if encountered

These impacts would be reduced through implementation of mitigation requiring implementation of a Stormwater Pollution Prevention Plan (SWPPP), dewatering management, and proper handling and clean-up of hazardous materials. Impacts would be less than significant with mitigation.

ES.6.7.2 Project Alternative Impacts on Hydrology and Water Resources

Alternative 1: Eastern Cable Pole at Carmel Valley Road

Alternative 1 would require grading and earth disturbance around the cable pole that could cause erosion and water quality impacts. The impacts to hydrology and water resources would be reduced through implementation of the Proposed Project mitigation measures. Impacts would be less than significant with mitigation. Alternative 1 would have less impact on hydrology and water quality than the Proposed Project because the alternative would involve less ground disturbance and associated potential for erosion.

Alternatives 2a or 2b: Eastern Cable Pole at Pole 40 and Underground Alignment through City Open Space or City Water Utility Service Road

Alternative 2 would require grading and earth disturbance around the cable pole and along the Alternative 2a or 2b underground transmission line that could cause erosion and water quality impacts. The impacts to hydrology and water resources would be reduced through implementation of the Proposed Project mitigation measures. Impacts would be less than significant with mitigation. Alternative 2 (both options 2a and 2b) would have less impact on hydrology and water quality than the Proposed Project because the alternative would involve less ground disturbance and associated potential for erosion.

Alternative 3: Los Peñasquitos Canyon Preserve – Mercy Road Underground

Alternative 3 grading and earth disturbance and use of hazardous materials during installation of the cable poles and underground transmission line could impact hydrology and water resources. The alternative could also impact water quality from underground construction

across drainages along Park Village Road and near the western cable pole. Impacts to hydrology and water resources would be reduced through implementation of the Proposed Project mitigation measures and an additional mitigation measure that restricts the timing of construction within drainages. Impacts would be less than significant with mitigation. Alternative 3 would have a greater impact on hydrology and water resources than the Proposed Project because Alternative 3 involves more construction in proximity to Los Peñasquitos Creek and therefore has a greater potential for water quality impacts from sedimentation or hazardous materials.

Alternative 4: Segment D 69-kV Partial Underground Alignment
Alternative 4 grading and earth disturbance and use of hazardous materials during installation of the cable poles and underground transmission lines could impact hydrology and water resources. Impacts to water quality would be reduced through implementation of the Proposed Project mitigation measures. Impacts would be less than significant with mitigation. Alternative 4 would have less impact on hydrology and water resources than the Proposed Project because Alternative 4 avoids earth work in Los Peñasquitos Canyon.

Alternative 5: Pomerado Road to Miramar Areas North Combination Underground/Overhead
Alternative 5 could impact hydrology and water resources from grading, earth disturbance, use of hazardous materials, and underground crossing of drainages. Additionally, the alternative would place the transmission line underground within a 100-year floodplain where the transmission line could be impacted by scour. Impacts to hydrology and water resources would be reduced through implementation of the Proposed Project mitigation measures. Additional mitigation would be applied to Alternative 5 that restricts the timing of construction within drainages and requires the transmission line to be constructed below the scour depth for underground crossings of the 100-year floodplain. Impacts would be less than significant with mitigation. Overall, Alternative 5 would have less impact on hydrology and water resources because the alternative would require less water, has less potential for dewatering, and requires less earthwork near Los Peñasquitos Creek.

ES.6.7.3 No Project Alternative Impacts on Hydrology and Water Resources

The No Project Alternative could impact hydrology and water resources from grading, earth disturbance and use of hazardous materials. The impact would be significant, but could be reduced through standard mitigation practices. The No Project Alternative requires additional crossings of waterbodies that are tributary to Los Peñasquitos Creek and Lake Hodges and would have greater potential to cause water quality degradation or violate water quality standards. The No Project Alternative would have a greater impact on hydrology and water resources than the Proposed Project.

ES.6.8 Transportation and Traffic

The analysis of transportation and traffic impacts considers whether the Proposed Project or alternatives would require the temporary closure of travel lanes or roadways, result in unacceptable levels of service on roadways or the short-term elimination of parking spaces,

damage roads, or create hazards for vehicle or air traffic. Project operations are evaluated for their potential to impact aviation safety and activities at public airports.

ES.6.8.1 Proposed Project Impacts on Transportation and Traffic

Construction of the Proposed Project would have the following impacts on traffic and transportation:

- Decreased Level of Service from increased vehicle traffic on area roads and lane closures
- Temporary lane closures during underground transmission line construction
- Temporary closure of I-15 during overhead transmission line stringing
- Temporary closure of bicycle lanes and pedestrian paths
- Increased hazards for vehicles from ingress/egress at staging yards and open trenches in roadways
- Delays to emergency access
- Increased hazards for air traffic from helicopter use
- Temporary loss of parking at Black Mountain Ranch staging yard

These impacts would be reduced through mitigation measures that require timing of deliveries to avoid peak commute hours, restrict road closures to non-peak hours, maintain access to driveways and intersections, coordination with emergency responders, detours for bicyclists and pedestrians, and notice of lane closures. Temporary impacts on ~~level of service and~~ parking would remain significant and unavoidable.

Operation of the Proposed Project could increase hazards for air traffic. This impact would be reduced through compliance with FAA notification requirements and compliance with FAA requirements for structures and transmission lines requiring notification. Operational impacts would be less than significant with mitigation.

ES.6.8.2 Project Alternative Impacts on Transportation and Traffic

Alternative 1: Eastern Cable Pole at Carmel Valley Road

Alternative 1 would impact transportation and traffic from temporary closure of bicycle lanes and pedestrian paths, temporary lane closure, and increased hazards from construction next to the roadway. These impacts would be reduced through implementation of the Proposed Project mitigation measures. An additional mitigation measure would apply to reduce impacts from loss of parking in Black Mountain Ranch Community Park. Impacts would be less than significant with mitigation. Alternative 1 would avoid significant impacts from the loss of parking. The impact to transportation and traffic from Alternative 1 would be less than the Proposed Project.

Alternatives 2a or 2b: Eastern Cable Pole at Pole 40 and Underground Alignment through City Open Space or City Water Utility Service Road

Alternative 2 would impact transportation and traffic from temporary closure of bicycle lanes and pedestrian paths, temporary lane closure, and increased hazards from construction of the duct bank and vault at Carmel Valley Road. These impacts would be reduced through

implementation of the Proposed Project mitigation measures. An additional mitigation measure would apply to reduce impacts from loss of parking in Black Mountain Ranch Community Park. Impacts would be less than significant with mitigation. Alternative 2 would avoid significant impacts from the loss of parking. The impact to transportation and traffic from Alternative 2 would be less than the Proposed Project.

Alternative 3: Los Peñasquitos Canyon Preserve – Mercy Road Underground
Alternative 3 would impact transportation and traffic from reduced level of service, temporary lane closures, hazards from open trenches in the roadway, closure of bike lanes, and delays to emergency responders. These impacts would be reduced through implementation of the Proposed Project mitigation measures. An additional mitigation measure requires coordination with school bus service providers and assistance with relocation of bus stops. Impacts to level of service would remain significant and unavoidable.-Alternative 3 would have greater impacts to transportation and traffic than the Proposed Project due to an additional 2.5 miles of temporary lane closure during underground transmission line construction.

Alternative 4: Segment D 69-kV Partial Underground Alignment
Alternative 4 would impact transportation and traffic from reduced level of service, temporary lane closures, hazards from open trenches in the roadway, closure of bicycle lanes, and delays to emergency responders. These impacts would be reduced through implementation of the Proposed Project mitigation measures. Impacts to level of service would remain significant and unavoidable. Alternative 4 would have greater impacts to transportation and traffic than the Proposed Project due to increased lane closures from an additional underground construction within roadways.

Alternative 5: Pomerado Road to Miramar Areas North Combination Underground/Overhead
Alternative 5 construction would impact transportation and traffic from reduced level of service, temporary lane closures, hazards from open trenches in the roadway, closure of bicycle lanes, temporary closure of bus stops, and delays to emergency responders. These impacts would be reduced through implementation of the Proposed Project mitigation measures. An additional mitigation measure requires coordination with bus and transit services and assistance with relocation of bus stops. Impacts to level of service would remain significant and unavoidable. Alternative 5 would have greater impacts to transportation and traffic than the Proposed Project due to increased lane closures from an additional 8.7 miles of underground construction within roadways and significant impact on LOS.

Operation of Alternative 5 could increase hazards for air traffic. This impact would be reduced through compliance with FAA notification requirements and compliance with FAA requirements for structures and transmission lines requiring notification. Operational impacts would be less than significant with mitigation.

ES.6.8.3 No Project Alternative Impacts on Transportation and Traffic

The No Project Alternative would impact transportation and traffic from temporary closure of Caltrans highways and increased hazards to air traffic due helicopter use and potential conflicts

with the MCAS Miramar airport. These impacts would be significant. Implementation of mitigation measures similar to those for the Proposed Project would reduce the impacts to less than significant. The No Project Alternative would have a greater ~~less~~ impact on transportation and traffic than the Proposed Project because the No Project Alternative would increase the number of miles affected by construction and involve ~~avoid~~ underground construction in roads, requiring ~~avoiding~~ traffic delays and hazards from underground duct bank construction and vault installation within the roadway.

ES.6.9 Noise

The analysis of impacts related to noise considers whether construction of the Proposed Project or alternatives would substantially disturb sensitive receptors, violate local rules, standards, or ordinances, or cause groundborne vibration. Operation and maintenance of the project is evaluated for its potential to increase ambient noise levels due to corona noise or routine inspection and maintenance activities.

ES.6.9.1 Proposed Project Impacts on Noise

Construction of the Proposed Project would have the following impacts on noise:

- Generation of noise from construction equipment, vehicles, and helicopters at work areas and staging yards that would exceed local noise standards
- Cause a substantial temporary or periodic increase in noise levels from construction equipment, vehicles, and helicopters working in proximity to sensitive receptors
- Cause groundborne vibration from blasting

These impacts would be reduced through implementation of mitigation measures requiring notification of residents and response to noise complaints, use of noise suppression techniques, implementation of a blasting plan, and avoiding work near schools during periods of active instruction. The impact from a substantial increase in noise and exceedance of noise standards would remain significant and unavoidable.

Operation of the Proposed Project would result in a substantial permanent increase in ambient noise levels from corona noise. This impact would be reduced through use of corona rings and response to corona noise complaints. The impact from a permanent increase in noise due to corona would remain significant and unavoidable.

ES.6.9.2 Project Alternative Impacts on Noise

Alternative 1: Eastern Cable Pole at Carmel Valley Road

Alternative 1 could result in significant noise impacts from blasting at the cable pole location. This impact would be reduced through implementation of the Proposed Project blasting mitigation measure. Impacts would be less than significant with mitigation. The impact to noise from Alternative 1 would be similar to the Proposed Project.

Alternatives 2a or 2b: Eastern Cable Pole at Pole 40 and Underground Alignment through City Open Space or City Water Utility Service Road
Alternative 2 could result in significant noise impacts from blasting at the cable pole location. This impact would be reduced through implementation of the Proposed Project blasting mitigation measure. Impacts would be less than significant with mitigation. The impact to noise from Alternative 2 would be similar to the Proposed Project.

Alternative 3: Los Peñasquitos Canyon Preserve – Mercy Road Underground
Alternative 3 would result in significant noise impacts from a temporary increase in noise levels and exceedance of noise standards during underground construction. These impacts would be reduced through implementation of the Proposed Project mitigation measures. The impact to noise from temporary construction activities would remain significant and unavoidable. Alternative 3 would have less impact on noise than the Proposed Project because Alternative 3 would eliminate the corona noise from the proposed overhead transmission line in the northern portion of Segment A and all of Segment C.

Alternative 4: Segment D 69-kV Partial Underground Alignment
Alternative 4 would result in significant noise impacts from a temporary increase in noise levels and exceedance of noise standards during underground construction. These impacts would be reduced through implementation of the Proposed Project mitigation measures. The impact to noise from temporary construction activities would remain significant and unavoidable. Alternative 4 would have the slightly lower impact on noise because Alternative 4 would avoid the use of helicopters associated with stringing of the 69-kV power lines.

Alternative 5: Pomerado Road to Miramar Areas North Combination Underground/Overhead
Alternative 5 could result in significant noise impacts from a temporary increase in noise levels and exceedance of noise standards during underground construction and use of Alternative 5 staging yards. These impacts would be reduced through implementation of the Proposed Project mitigation measures. The impact to noise from temporary construction activities would remain significant and unavoidable. Alternative 5 would have less impact on noise than the Proposed Project because Alternative 5 would eliminate the corona noise by relocating approximately 11 miles of the overhead transmission line underground.

ES.6.9.3 No Project Alternative Impacts on Noise
The No Project alternative would result in significant impacts from a temporary and permanent increase in noise levels. These impacts would be significant and unavoidable. The Mission—Peñasquitos transmission line would result in similar impacts to Segment D of the Proposed Project. The No Project Alternative would have a greater impact on permanent corona noise than the Proposed Project because an additional 10 ~~1.2~~ miles of new 230-kV transmission line would be located overhead.

ES.6.10 Land Use and Planning
The land use impact analysis considers whether the Proposed Project or alternatives would conflict with an approved land use.

ES.6.10.1 Proposed Project Impacts on Land Use and Planning

The Proposed Project would not conflict with an approved land use. There would be no impact on land use or planning.

ES.6.10.2 Project Alternative Impacts on Land Use and Planning

The project alternatives would not conflict with an approved land use. There would be no impact on land use or planning.

ES.6.10.3 No Project Alternative Impacts on Land Use and Planning

The No Project Alternative would not conflict with an approved land use. There would be no impact on land use or planning.

ES.6.11 Recreation

The recreation impact analysis considers whether the Proposed Project or alternatives would restrict access to recreational areas, damage a recreational resource, or change the character of a recreation area such that its recreational value would be diminished.

ES.6.11.1 Proposed Project Impacts on Recreation

Construction of the Proposed Project would have the following impacts on recreation:

- Result in temporary closure of public recreational areas or portions of recreational areas including parks and trails during overhead transmission line stringing, pole installation, and underground duct bank construction within or across a recreational area
- Cause damage to recreational facilities from earthwork associated with pole installation and removal within recreational areas
- Cause environmental impacts through construction of temporary trail detours
- Impact the recreational value of public recreational areas from construction disturbance of recreational areas

These impacts would be reduced through mitigation measures that require coordination with the parks and notification of the public prior to park closure, maintaining access to trails during stringing through safety procedures, park restoration to pre-construction conditions, and use existing alternative trails for detours. Impacts to recreational resources would remain significant and unavoidable because the Proposed Project could still require temporary closure of public parks during heavy use periods when the closures would conflict with scheduled recreational activities.

Operation of the Proposed Project would have impacts on the recreational value of the resource from views of the new transmission infrastructure and corona noise. The impact on open space trails would be significant and unavoidable as the introduction of industrial elements into an open space recreational area could deter recreationists from using the recreational areas thereby increasing impacts on other areas. These impacts would be reduced through mitigation measures requiring revegetation of temporarily disturbed areas, surface treatment to reduce glare, and corona rings. These impacts would be significant and unavoidable because the visual

contrast of the new poles and wires would remain high and the corona noise would remain substantial.

ES.6.11.2 Project Alternative Impacts on Recreation

Alternative 1: Eastern Cable Pole at Carmel Valley Road
Alternative 1 would require transmission line stringing within Black Mountain Ranch Community Park that could cause physical deterioration of the park and impact temporary access to the park. The same mitigation measures that apply to the Proposed Project would apply to Alternative 1. Impacts would be less than significant with mitigation. Alternative 1 would have less impact on recreation than the Proposed Project because Alternative 1 would eliminate two poles within Black Mountain Ranch Community Park and would reduce the duration of temporary park closure.

Alternatives 2a or 2b: Eastern Cable Pole at Pole 40 and Underground Alignment through City Open Space or City Water Utility Service Road
Alternative 2 (both 2a and 2b) would require transmission line stringing within Black Mountain Ranch Community Park that could cause physical deterioration of the park and impact temporary access to the park. The same mitigation measures that apply to the Proposed Project would apply to Alternative 2. Impacts would be less than significant with mitigation. Alternative 2 would have less impact on recreation than the Proposed Project because Alternative 2 would eliminate two poles within Black Mountain Ranch Community Park and would reduce the duration of temporary park closure.

Alternative 3: Los Peñasquitos Canyon Preserve – Mercy Road Underground
Alternative 3 would require construction of the underground transmission line across a trail and installation of a new cable pole near a trail junction within Los Peñasquitos Canyon Preserve. The construction could cause temporary closure and physical deterioration of the trail. These impacts would be reduced through implementation of the Proposed Project mitigation measures. Alternative 3 would avoid trails in the northern portion of Segment A and all of Segment C and would avoid Black Mountain Ranch Community Park.

Alternative 4: Segment D 69-kV Partial Underground Alignment
Alternative 4 would require installation of two cables poles near a trail and underground power line construction within an access road in Los Peñasquitos Canyon Preserve. The construction could cause temporary closure and physical deterioration of a nearby trail and the access road. These impacts would be reduced through implementation of the Proposed Project mitigation measures. Alternative 4 would have less impact on recreation than the Proposed Project due to elimination of new TSPs on and near trails within Los Peñasquitos Canyon Preserve.

Alternative 5: Pomerado Road to Miramar Areas North Combination Underground/Overhead
Alternative 5 would require stringing across Sycamore Canyon Park and across trails within Los Peñasquitos Canyon Preserve. Stringing activities could result in temporary closures of recreational areas and detours of trails. The impact would be reduced through implementation of the Proposed Project mitigation measures. Impacts would be less than significant with

mitigation. The impact to recreation would be substantially reduced by Alternative 5 because Alternative 5 would eliminate all new TSPs within open space recreational areas and would eliminate the construction within Black Mountain Ranch Community Park.

ES.6.11.3 No Project Alternative Impacts on Recreation

The No Project Alternative would have impacts from trail closures and temporary detours during installation of new poles in open space areas near trails. These impacts would be significant. Implementation of mitigation measures similar to the Proposed Project would reduce some ~~the~~ impacts on recreation to a less than significant level. The No Project Alternative would have greater ~~less~~ impact on recreation than the Proposed Project because it would involve construction along 85 miles and would require ~~avoid~~ impacts to public parks.

ES.6.12 Hazards and Hazardous Materials

The analysis of impacts related to hazards and hazardous materials considers whether the Proposed Project or alternatives would harm the public, project workers, or the environment through the improper handling, storage, or accidental release of hazardous materials. The analysis also considers the potential for project construction to mobilize contaminants (including pesticides, herbicides, and other toxic materials) through ground disturbing activities, including grading and excavation.

ES.6.12.1 Proposed Project Impacts on Hazards and Hazardous Materials

Construction and operation of the Proposed Project could result in worker exposure or contamination of soil or water resources through accidental releases of hazardous materials or the disturbance and mobilization of one site of known soil contamination. Within MCAS Miramar, the Proposed Project could result in the disturbance of unexploded ordnance, and potential blasting for excavation at pole locations could impact the public if shrapnel is projected from a detonation site. Use of helicopters to transport heavy materials would also pose a hazard to the public, and temporary road closures for underground construction could delay emergency response teams. Operation of the transmission line could expose workers and the public to excessive shock hazards.

These significant impacts would be minimized through mitigation measures that require the preparation and implementation of plans to contain and cleanup accidental spills and leaks; properly handle, store, and dispose of hazardous materials; protect workers and the public from exposure to hazardous materials; direct helicopter traffic; and identify and clear hazardous zones prior to blasting. Other mitigation measures include soil and groundwater inspections prior to excavations, traffic detours, and conducting a study to assess the inductive interference effects of the transmission line on nearby conductive objects. Impacts would be less than significant with mitigation.

ES.6.12.2 Project Alternative Impacts on Hazards and Hazardous Materials

Alternative 1: Eastern Cable Pole at Carmel Valley Road

Construction would involve use of the same hazardous materials and equipment as the Proposed Project, blasting could be used for excavation, temporary road closures would be

necessary for underground construction, and the transmission line would present the same risk of excessive shock hazards. These impacts would be reduced through implementation of the Proposed Project mitigation measures, and impacts would be less than significant with mitigation.

Alternatives 2a or 2b: Eastern Cable Pole at Pole 40 and Underground Alignment through City Open Space or City Water Utility Service Road
Construction would involve use of the same hazardous materials and equipment as the Proposed Project, blasting could be used for excavation, temporary road closures would be necessary for underground construction, and the transmission line would present the same risk of excessive shock hazards. These impacts would be reduced through implementation of the Proposed Project mitigation measures, and impacts would be less than significant with mitigation.

Alternative 3: Los Peñasquitos Canyon Preserve – Mercy Road Underground
Construction would involve use of the same hazardous materials and equipment as the Proposed Project, blasting could be used for excavation, temporary road closures would be necessary for underground construction, and the transmission line would present the same risk of excessive shock hazards. These impacts would be reduced through implementation of the Proposed Project mitigation measures, and impacts would be less than significant with mitigation.

Alternative 4: Segment D 69-kV Partial Underground Alignment
Construction would involve use of the same hazardous materials and equipment as the Proposed Project, blasting could be used for excavation, temporary road closures would be necessary for underground construction, and the transmission line would present the same risk of excessive shock hazards. These impacts would be reduced through implementation of the Proposed Project mitigation measures, and impacts would be less than significant with mitigation.

Alternative 5: Pomerado Road to Miramar Areas North Combination Underground/Overhead
Construction would involve use of the same hazardous materials and equipment as the Proposed Project, blasting could be used for excavation, temporary road closures would be necessary for underground construction, and the transmission line would present the same risk of excessive shock hazards. These impacts would be reduced through implementation of the Proposed Project mitigation measures, and impacts would be less than significant with mitigation. Alternative 5 has a greater potential to create a hazards impact than the Proposed Project due to close proximity to hazardous materials sites and more temporary road closures.

ES.6.12.3 No Project Alternative Impacts on Hazards and Hazardous Materials

Construction of the No Project Alternative would require the use of hazardous materials and equipment, including helicopters, similar to those used for the Proposed Project and could accidentally release or spill hazardous materials. Ground disturbance may encounter contaminated soil and groundwater on or near sites of known previous hazardous materials

storage or spills, or unanticipated contamination from unreported spills. The Mission—Peñasquitos 230-kV transmission line would traverse through MCAS Miramar, which would present the risk of disturbing unexploded ordnance. Temporary road closures may be required, which would impact emergency response teams, and blasting may be required during excavation, which would present the same risks as the Proposed Project from shrapnel. The series reactor at Sycamore Canyon Substation would require the use of mineral oil, which could pose a hazard if a spill were to occur. These impacts would be significant, but would be reduced through standard mitigation practices similar to the Proposed Project. The No Project Alternative has a greater potential to encounter hazardous materials and create a hazardous impact than the Proposed Project due to construction within MCAS Miramar and new structures near the runway.

ES.6.13 Fires and Fuels Management

The analysis of impacts related to fire and fuels considers whether construction of the Proposed Project or alternatives would increase the probability of a wildland fire or result in a vegetation fuel mix that increases ignition potential and rate of fire spread. The operational presence of project structures is evaluated for the potential to increase the probability of a wildland fire or interfere with fire suppression efforts.

ES.6.13.1 Proposed Project Impacts on Fires and Fuels Management

Construction of the Proposed Project has the potential to:

- Ignite wildland fires through sparks or heat from welding, vehicles parked on dry grass, or improperly discarded smoking materials
- Increase the risk of fire ignition or spread through the introduction of invasive or weedy vegetation

These impacts would be reduced through mitigation measures including preparation and implementation of a Final Fire Prevention Plan that addresses the ignition sources in the area, maintaining emergency access for fire personnel, keeping water tanks on site, and maintaining proper conductor clearances. Impacts would be less than significant with mitigation.

Operation of the Proposed Project could cause arcing if a conductor comes in contact with debris or vegetation. The Proposed Project would not measurably increase the risk of wildfire from arcing because there are existing transmission and power lines adjacent to the Proposed Project. Impacts during operation would be less than significant.

ES.6.13.2 Project Alternative Impacts on Fires and Fuels Management

Alternative 1: Eastern Cable Pole at Carmel Valley Road

Construction of the Alternative 1 cable pole near wildlands could ignite a wildfire or increase the risk of fire ignition. These impacts would be reduced through implementation of the Proposed Project mitigation measures. Impacts would be less than significant with mitigation. Alternative 1 would have less impact on fires and fuels than the Proposed Project because the

alternative would require less construction in wildland areas and less risk of fire ignition than the Proposed Project.

Alternatives 2a or 2b: Eastern Cable Pole at Pole 40 and Underground Alignment through City Open Space or City Water Utility Service Road
Construction of the Alternative 2 cable pole and underground duct bank under Option 2a or 2b within wildlands could ignite a wildfire and increase the risk of fire ignition. These impacts would be reduced through implementation of the Proposed Project mitigation measures. Impacts would be less than significant with mitigation. Alternative 2 would have a greater impact on fire and fuels than the Proposed Project because the Alternative 2 underground duct bank construction would require more activities within wildlands that could ignite a wildfire than the Proposed Project.

Alternative 3: Los Peñasquitos Canyon Preserve – Mercy Road Underground
Alternative 3 cable poles and underground transmission line construction near Los Peñasquitos Canyon wildland areas could ignite a wildfire because these construction activities increase the risk of fire ignition. These impacts would be reduced through implementation of the Proposed Project mitigation measures. Impacts would be less than significant with mitigation. Alternative 3 would have less impact on fires and fuels than the Proposed Project because the underground transmission line would require less construction in wildland areas and less risk of fire ignition than the Proposed Project.

Alternative 4: Segment D 69-kV Partial Underground Alignment
Alternative 4 cable pole construction within Los Peñasquitos Canyon open space area could ignite a wildfire because this construction activity increases the risk of fire ignition. Impacts would be reduced through implementation of the Proposed Project mitigation measures. Impacts would be less than significant with mitigation. Alternative 4 would have less impact on fires and fuels than the Proposed Project because the underground transmission line would avoid installation of new poles and associated fire risk within Los Peñasquitos Canyon Preserve.

Alternative 5: Pomerado Road to Miramar Areas North Combination Underground/Overhead
Alternative 5 requires construction of five new TSPs and stringing of conductor in areas with high risk of wildfire ignition. The underground construction within roads is located adjacent to wildlands along portions of the alignment. Construction of the overhead and underground transmission line would increase the risk of wildfire ignition. The overhead transmission line would also have the potential to cause arcing; however, the overhead transmission line is located adjacent to existing transmission lines in both the eastern and western corridor and the increased risk of fire from arcing would be less than significant. The impacts to fires and fuels would be reduced through implementation of the Proposed Project mitigation measures. Impacts would be less than significant with mitigation. Alternative 5 would have less impact on fires and fuels than the Proposed Project because the underground transmission line substantially reduces the amount of construction that is required within and near open space areas.

ES.6.13.3 No Project Impacts on Fires and Fuels Management

The No Project Alternative would require construction within open space areas where the construction could ignite a wildfire. This impact would be significant. Implementation of standard mitigation measures similar to those for the Proposed Project could reduce the impact to less than significant. The No Project Alternative would have a greater impact on fire and fuels than the Proposed Project due to an increased amount of construction in wildland areas.

Operation of the transmission and power lines could also cause arcing; however, the new transmission and power lines would be located adjacent to existing transmission and power lines and the increased risk of fire would be less than significant.

ES.6.14 Air Quality

The analysis of impacts to air quality considers whether the Proposed Project or alternatives would be inconsistent with an approved air quality plan. Emissions are also evaluated against local, state, and federal air pollutant thresholds. Finally, the analysis considers whether project emissions would expose a substantial number of people to objectionable odors or expose sensitive populations to substantial pollutant concentrations.

ES.6.14.1 Proposed Project Impacts on Air Quality

Construction and operation of the Proposed Project would generate fugitive dust and vehicle and helicopter exhaust emissions, including TACs and odors from diesel-burning equipment. Construction and operation of the Proposed Project would produce fugitive dust emissions above the San Diego Air Pollution Control District's emissions threshold, which would be a significant impact. Impacts associated with fugitive dust emissions would be reduced through regular watering of disturbed areas and reduction of vehicle and equipment run-time, which are required by SDG&E's Applicant Proposed Measures (APMs). Impacts would be less than significant.

Construction could also result in non-adherence to the Regional Air Quality Strategy (RAQS). Mitigation would ensure compliance with the RAQS through following RAQS standards for architectural coatings. Impacts would be less than significant with mitigation.

ES.6.14.2 Project Alternative Impacts on Air Quality

Alternative 1: Eastern Cable Pole at Carmel Valley Road

Alternative 1 would reduce pollutant emissions compared to the Proposed Project because the alternative would avoid emissions from construction of an underground transmission line to connect Segments A and B. However, fugitive dust emissions would still exceed the emissions threshold. The same mitigation described for the Proposed Project would apply to this alternative, and impacts would be less than significant with mitigation.

Alternatives 2a or 2b: Eastern Cable Pole at Pole 40 and Underground Alignment through City Open Space or City Water Utility Service Road

Alternatives 2a and 2b would reduce pollutant emissions because the alternatives would involve less underground construction than the Proposed Project. However, fugitive dust

emissions would still exceed the emissions threshold. The same mitigation described for the Proposed Project would apply to these alternatives, and impacts would be less than significant with mitigation.

Alternative 3: Los Peñasquitos Canyon Preserve – Mercy Road Underground
Construction of Alternative 3 would exceed the emissions threshold for NOx due to increased underground construction, which would be a significant impact. Mitigation measures to minimize NOx emissions would require the use of vehicles and equipment that are more efficient and burn cleaner fuel; however, mitigation would not reduce emissions below the significance threshold, and impacts would remain significant and unavoidable.

Alternative 4: Segment D 69-kV Partial Underground Alignment
Construction of the underground transmission line under Alternative 4 would likewise exceed the emissions threshold for NOx, which would be a significant impact. Mitigation measures to minimize NOx emissions would require 1) the use of vehicles and equipment that are more efficient and burn cleaner fuel, and 2) the phasing of construction such that underground construction would not occur simultaneously along the two underground segments. Emissions would be reduced to below the significance threshold, and impacts would be less than significant with mitigation.

Alternative 5: Pomerado Road to Miramar Areas North Combination Underground/Overhead
Construction of Alternative 5 would exceed the emissions threshold for NOx due to increased underground construction, which would be a significant impact. Mitigation measures to minimize NOx emissions would require the use of vehicles and equipment that are more efficient and burn cleaner fuel; however, mitigation would not reduce emissions below the significance threshold, and impacts would remain significant and unavoidable.

ES.6.14.3 No Project Alternative Impacts on Air Quality

Construction of the No Project Alternative would generate fugitive dust and vehicle and helicopter exhaust emissions from pole replacements and installation of the series reactor. Pollutant emissions would likely not exceed emissions thresholds if construction were phased to minimize simultaneous construction along ~~multiple parts of the Mission – Peñasquitos and Poway – Pomerado~~ all of the No Project Alternative transmission corridors. Impacts would be less than significant.

ES.6.15 Greenhouse Gases

The analysis of greenhouse gas impacts considers whether the Proposed Project or alternatives would generate greenhouse gas emissions that would have a significant impact on the environment or conflict with a greenhouse gas emission reduction plan, policy, or regulation.

ES.6.15.1 Proposed Project Impacts on Greenhouse Gases

Construction and operation of the Proposed Project would generate GHGs from use of vehicles, equipment, and helicopters. GHG emissions would not exceed the SCAQMD emissions threshold. Impacts would be less than significant. No mitigation is required.

Construction could result in conflict with CARB's Climate Change Scoping Plan if organic waste is disposed of at a landfill. Mitigation would require proper disposal of organic waste into a greenwaste recycling program or other alternative to a landfill. Impacts would be less than significant with mitigation.

Construction could also result in conflict with the San Diego County and City Climate Action Plans due to temporary closure of bike lanes and sidewalks during underground construction. Mitigation measures to ensure the Proposed Project would not conflict with these plans include preparation of a Construction Transportation Management Plan (CTMP) and providing notification of bike lane and sidewalk closures. Impacts would be less than significant with mitigation.

ES.6.15.2 Project Alternative Impacts on Greenhouse Gases

Alternative 1: Eastern Cable Pole at Carmel Valley Road
Alternative 1 would reduce GHG emissions compared to the Proposed Project because the alternative would avoid emissions from construction of an underground transmission line to connect Segments A and B. Impacts would be less than significant. No mitigation is required.

Impacts associated with conflicts with applicable plans would be the same as the Proposed Project. The same mitigation described for the Proposed Project would apply to this alternative, and impacts would be less than significant with mitigation.

Alternatives 2a or 2b: Eastern Cable Pole at Pole 40 and Underground Alignment through City Open Space or City Water Utility Service Road
Alternatives 2a and 2b would reduce GHG emissions because the alternatives would involve less underground construction than the Proposed Project. Impacts would be less than significant. No mitigation is required.

Impacts associated with conflicts with applicable plans would be the same as the Proposed Project. The same mitigation described for the Proposed Project would apply to this alternative, and impacts would be less than significant with mitigation.

Alternative 3: Los Peñasquitos Canyon Preserve – Mercy Road Underground
Construction of Alternative 3 would increase GHG emissions because this alternative would involve more underground construction, and therefore greater use of diesel-burning equipment, than the Proposed Project. However, GHG emissions would not exceed the emissions threshold, and impacts would be less than significant. No mitigation is required.

Impacts associated with conflicts with applicable plans would be the same as the Proposed Project. The same mitigation described for the Proposed Project would apply to this alternative, and impacts would be less than significant with mitigation.

Alternative 4: Segment D 69-kV Partial Underground Alignment
Construction of Alternative 4 would increase GHG emissions because this alternative would involve more underground construction, and therefore greater use of diesel-burning

equipment, than the Proposed Project. However, GHG emissions would not exceed the emissions threshold, and impacts would be less than significant. No mitigation is required.

Impacts associated with conflicts with applicable plans would be the same as the Proposed Project. The same mitigation described for the Proposed Project would apply to this alternative, and impacts would be less than significant with mitigation.

Alternative 5: Pomerado Road to Miramar Areas North Combination Underground/Overhead
Construction of Alternative 5 would increase GHG emissions because this alternative would involve more underground construction, and therefore greater use of diesel-burning equipment, than the Proposed Project. However, GHG emissions would not exceed the emissions threshold, and impacts would be less than significant. No mitigation is required.

Impacts associated with conflicts with applicable plans would be the same as the Proposed Project. The same mitigation described for the Proposed Project would apply to this alternative, and impacts would be less than significant with mitigation.

ES.6.15.3 No Project Alternative Impacts on Greenhouse Gases

Construction of the No Project Alternative would generate GHG emissions from pole replacements and new pole installation ~~and installation of the series reactor~~. Even though the No Project Alternative involves more miles of construction, the Proposed Project would have greater impacts to GHG because of more underground construction. GHG emissions would not exceed the emissions threshold because the activity level for construction would be less than the Proposed Project. The Proposed Project GHG emissions would be less than significant; therefore, impacts associated with the No Project Alternative would be less than significant.

ES.6.16 Agriculture and Forestry Resources

The agriculture and forestry resource analysis considers the potential for the Proposed Project and the alternatives to convert FMMP-designated Farmland to non-agricultural use, conflict with existing zoning for agricultural or forestry use, or create other changes in the existing environment that would impair the use of agricultural or forest land.

ES.6.16.1 Proposed Project Impacts on Agriculture and Forestry Resources

Construction of the Proposed Project would result in the following impacts to agricultural resources:

- Conversion of 0.6 acres of FMMP mapped Farmland to non-agricultural use
- Temporary interruption of an agricultural operation at Evergreen Nursery

The impact from conversion of Farmland to non-agricultural use would be less than significant due to the small area of impact and lack of existing agricultural uses in the area. The impact from temporary interruption of agricultural operations would be reduced through mitigation requiring coordination with Evergreen Nursery. Impacts would be less than significant with mitigation.

The Proposed Project would not impact forestry resources.

ES.6.16.2 Project Alternative Impacts on Agriculture and Forestry Resources

Alternative 1: Eastern Cable Pole at Carmel Valley Road
Alternative 1 would convert 0.2 acre of FMMP mapped Farmland of Local Importance to non-agricultural use. This conversion would have a less than significant impact on agricultural resources. Alternative 1 impacts to agricultural resources would be comparable to the Proposed Project.

Alternative 1 would not impact forestry resources.

Alternatives 2a or 2b: Eastern Cable Pole at Pole 40 and Underground Alignment through City Open Space or City Water Utility Service Road
Alternative 2 would impact up to 0.3 acres of FMMP mapped grazing land. This conversion of grazing land would have a less than significant impact on agricultural resources. Alternative 2 impacts to agricultural resources would be comparable to the Proposed Project.

Alternative 2 would not impact forestry resources.

Alternative 3: Los Peñasquitos Canyon Preserve – Mercy Road Underground
Alternative 3 would not impact agricultural or forestry resources. Alternative 3 would have less impact to agricultural resources than the Proposed Project because it would eliminate Proposed Project impacts to agricultural resources in the northern portion of Segment A.

Alternative 4: Segment D 69-kV Partial Underground Alignment
Alternative 4 would not impact agricultural or forestry resources. Alternative 4 would have less impact to agricultural resources than the Proposed Project because it would eliminate Proposed Project impacts to agricultural resources in the majority of Segment D.

Alternative 5: Pomerado Road to Miramar Areas North Combination Underground/Overhead
Alternative 5 would impact agricultural resources through installation of a cable pole within an area mapped as FMMP-designated grazing land and through use of Alternative 5 staging yards 1A, 1B, and 3 within areas zoned for agricultural use. This impact to agricultural resources would be less than significant. Alternative 5 impacts to agricultural resources would be less than the Proposed Project because Alternative 5 would avoid conversion of designated farmland to non-agricultural use in the majority of the Proposed Project.

Alternative 5 would not impact forestry resources.

ES.6.16.3 No Project Alternative Impacts on Agriculture and Forestry Resources
The No Project Alternative could impact agricultural resources from conversion of designated agricultural land to non-agricultural use. The No Project Alternative impacts on agricultural resources would be less than significant. The No Project Alternative would have a slightly greater impact on agricultural resources than the Proposed Project because the alternative could impact Farmland of Statewide Importance.

ES.6.17 Population and Housing

The population and housing impact analysis considers whether the Proposed Project or alternatives would induce population growth or displace existing housing or people.

ES.6.17.1 Proposed Project Impacts on Population and Housing

The Proposed Project would not induce population growth and would not displace housing or people. There would be no impact on population and housing.

ES.6.17.2 Project Alternative Impacts on Population and Housing

The five project alternatives carried forward would not induce population growth and would not displace housing or people. There would be no impact on population and housing.

ES.6.17.3 No Project Impacts on Population and Housing

The No Project Alternative would not induce population growth and would not displace housing or people. There would be no impact on population and housing.

ES.6.18 Utilities and Public Service Systems

The utilities and public service systems analysis considers whether there would be an increase in the need for public services and utilities, a disruption of existing pipelines and utility systems, a collocation accident, or increased corrosion of utility pipelines due to construction and operation of the Proposed Project or alternatives.

ES.6.18.1 Proposed Project Impacts on Utilities and Public Service Systems

Construction of the proposed transmission line would:

- Temporarily increase the risk of fire and need for fire services
- Result in increased response times for emergency services due to road closures and construction traffic
- Require the use of water for dust control and compaction that could strain local water systems
- Increase the risk of a collocation accident with existing pipelines and utility lines

Operation of the project transmission line could also cause corrosion on adjacent utility lines. Recommended mitigation measures to reduce the severity of these adverse effects include the use of non-potable water for construction, preparation and implementation of a fire management plan, preparation of traffic control plans, coordination with emergency responders, coordination with pipeline and utility owners in the project vicinity and marking of utilities prior to construction, and installation of cathodic protection where necessary. Impacts to utilities and service systems would be less than significant with mitigation.

ES.6.18.2 Project Alternative Impacts on Utilities and Public Service Systems

Alternative 1: Eastern Cable Pole at Carmel Valley Road

Alternative 1 could increase the risk of fire, result in increased response time due to lane closure, and cause a collocation accident with existing pipelines. These impacts would be reduced through implementation of the Proposed Project mitigation measures. Impacts would be less than significant with mitigation. Alternative 1 would have less impact on public services

and utilities than the Proposed Project because the alternative would have less potential conflicts with utilities and would generate less waste.

Alternatives 2a or 2b: Eastern Cable Pole at Pole 40 and Underground Alignment through City Open Space or City Water Utility Service Road
Alternative 2 (both Options 2a and 2b) could increase the risk of fire, result in increased response time due to lane closure, cause a collocation accident with existing pipelines, and cause corrosion on adjacent utilities. These impacts would be reduced through implementation of the Proposed Project mitigation measures. Impacts would be less than significant with mitigation. Alternative 2a would have less impact on utilities than the Proposed Project due to fewer conflicts with utilities; however, Alternative 2b is located underground within a utility access road and would have greater conflicts and associated impacts on utilities than the Proposed Project.

Alternative 3: Los Peñasquitos Canyon Preserve – Mercy Road Underground
Alternative 3 could increase emergency response times due to lane closure, cause a collocation accident during underground transmission line construction, and could cause corrosion on adjacent utilities. These impacts would be reduced through implementation of the Proposed Project mitigation measures. Impacts would be less than significant with mitigation. Alternative 3 would have a greater impact on utilities and service systems than the Proposed Project due to increased construction near utilities, increased temporary lane closure, and increased potential for induced current impacts.

Alternative 4: Segment D 69-kV Partial Underground Alignment
Alternative 4 could increase emergency response times due to lane closure, cause a collocation accident during underground power line construction, and could cause corrosion on adjacent utilities. These impacts would be reduced through implementation of the Proposed Project mitigation measures. Impacts would be less than significant with mitigation. Alternative 4 would have a greater impact on utilities and service systems than the Proposed Project due to increased construction near utilities, increased temporary lane closure, and increased potential for induced current impacts.

Alternative 5: Pomerado Road to Miramar Areas North Combination Underground/Overhead
Alternative 5 could increase emergency response times due to lane closure, increase fire demand services, cause a collocation accident during underground power line construction, and cause corrosion on adjacent utilities. These impacts would be reduced through implementation of the Proposed Project mitigation measures. Impacts would be less than significant with mitigation. Alternative 5 would have a greater impact on utilities and service systems than the Proposed Project due to increased construction near utilities, increased temporary lane closure, and increased potential for induced current impacts.

ES.6.18.3 No Project Alternative Impacts on Utilities and Public Service Systems

The No Project Alternative could increase fire demand services, cause a collocation accident during construction, and cause corrosion on adjacent utilities. These impacts would be significant. These impacts could be reduced to less than significant through implementation of

standard mitigation measures. The No Project Alternative would have a greater ~~less~~ impact on utilities and service systems because the No Project Alternative involves ~~avoids~~ underground construction within roadways, as well as 66 more miles of construction activities. ~~and therefore reduces the risk of impacts on buried utilities.~~

ES.7 CUMULATIVE IMPACTS

The following section summarizes cumulative impacts (CEQA Guidelines §15130) of the Proposed Project and alternatives. A detailed analysis of the cumulative impacts is included in Chapter 5 of the EIR.

ES.7.1 Cumulative Impacts

Under CEQA, "a cumulative impact consists of an impact which is created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts" (CEQA Guidelines §15130(a)(1)). Cumulative impacts can result from "individually minor but collectively significant projects taking place over a period of time" (CEQA Guidelines §15355). An EIR must discuss cumulative impacts if the incremental effect of a project, combined with the effects of other projects is "cumulatively considerable" (CEQA Guidelines §15130(a)). Such incremental effects are to be "viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects" (CEQA Guidelines §15164(b)(1)). Together, these projects comprise the cumulative scenario for the cumulative analysis.

ES.7.2 Cumulative Project Mission—Peñasquitos 230-kV Transmission Line

One of the cumulative projects, the Mission—Peñasquitos 230-kV Transmission Line shares the same corridor as the Proposed Project. A new 230-kV transmission line was approved by CAISO in the 2014 – 2015 Transmission Plan that would connect the Mission and Peñasquitos Substations. The CAISO-approved Mission—Peñasquitos 230-kV transmission line would involve reconfiguring the southern 10-mile portion of the existing Mission—San Luis Rey 230-kV transmission line TL 23001 between the Mission Substation and Peñasquitos Junction to form part of the new Mission—Peñasquitos 230-kV transmission line (CAISO 2015). An additional new 230-kV transmission line would then be installed between Peñasquitos Junction and the Peñasquitos Substation to complete the new circuit between these substations.

From Peñasquitos Junction to Peñasquitos Substation, the new 230-kV transmission line would be installed on a new set of approximately sixteen TSPs in SDG&E ROW following the same alignment as Segment D of the Proposed Project. The new transmission line would require installation of either new 230-kV TSPs adjacent to the proposed 69-kV TSPs or installation of the new 230-kV transmission line on the existing steel lattice tower (opposite side from the Proposed Project 230-kV transmission line) and relocation of the existing 138-kV power line to new 138-kV TSPs. In either case, the Mission—Peñasquitos 230-kV transmission line would add three conductors and a new set of TSPs approximately 65 south of the Proposed Project double-circuit 69-kV TSPs within Los Peñasquitos Canyon.

(Note: The Mission—Peñasquitos 230-kV line is also considered as an alternative to the Proposed Project [refer to the Appendix D: Alternatives Screening Report] and is a component of the No Project Alternative [refer to the No Project Alternative description in Chapter 3: Alternatives and the No Project Alternative analysis in Chapter 4: Environmental Analysis]).

ES.7.3 Summary of Cumulative Impacts

Table ES.7-1 provides a brief summary of the potential for the Proposed Project in combination with other projects, to result in cumulatively significant environmental impacts, and compares the contribution from each alternative and the Proposed Project to the cumulative impact. In each instance, the evaluation identifies whether the cumulative impact would be significant, and whether the alternative's contribution would be considerable. Similar to the Proposed Project, none of the alternatives would result in impacts to Forestry Resources, Land Use, Mineral Resources, or Population and Housing. Therefore, none of the alternatives would contribute to cumulative impacts on Forestry Resources, Land Use, Mineral Resources, or Population and Housing; these resource topics are not included in Table ~~ES 7.1~~ ES.7-1.

Table ES.7-1 Cumulative Analysis of Proposed Project and Alternatives

Impact Area	Proposed Project	Alternative 1: Eastern Cable Pole at Carmel Valley Road	Alternative 2: Eastern Cable Pole at Pole P40	Alternative 3: Los Peñasquitos Canyon Preserve-Mercy Road Underground Alternative	Alternative 4: Segment D 69 kV Partial Underground Alignment	Alternative 5: Pomerado Road to Miramar Area North Combination Underground/Overhead Alternative
Biological Resources	Less than significant contribution to cumulative impact on biological resources with mitigation	Decreased contribution to biological impacts due to elimination of stringing activities in Black Mountain Ranch Open Space Preserve	Increased contribution to biological impacts due to underground duct bank in sensitive open space habitats; contribution is less than significant with mitigation	Decreased contribution to impacts due to elimination of construction in Black Mountain Ranch Open Space and Del Mar Open Space Preserves	Decreased contribution to impacts due to elimination of new poles for 2.8 miles in Los Peñasquitos Canyon Preserve	Decreased contribution to impacts due to underground construction in roads for 11.5 miles and avoidance of new structures in Preserves
Aesthetics	Significant and unavoidable contribution to cumulative impact on aesthetic resources due to project impact on visual quality	~~Decreased~~ Increased aesthetic impacts on Black Mountain Ranch Community Park, Black Mountain Ranch Open Space, ~~; increased aesthetic impacts on~~ and Carmel Valley Road.	No change	Decreased contribution to impacts due to elimination of new overhead transmission line in northern portion of Segment A and all of Segment C	Decreased contribution to impacts due to elimination of new poles for 2.8 miles in Segment D	Decreased contribution due to elimination of the majority of the overhead transmission line

Impact Area	Proposed Project	Alternative 1: Eastern Cable Pole at Carmel Valley Road	Alternative 2: Eastern Cable Pole at Pole P40	Alternative 3: Los Peñasquitos Canyon Preserve-Mercy Road Underground Alternative	Alternative 4: Segment D 69 kV Partial Underground Alignment	Alternative 5: Pomerado Road to Miramar Area North Combination Underground/Overhead Alternative
Cultural Resources	Less than significant cumulative impact on cultural resources with mitigation	No change	No change	Increased contribution to impacts due to increased underground construction and potential for inadvertent discoveries; contribution is less than significant with mitigation	Increased contribution to impacts due to increased underground construction and potential for inadvertent discoveries; contribution is less than significant with mitigation	Increased contribution to impacts due to increased underground construction and potential for inadvertent discoveries; contribution is less than significant with mitigation
Paleontological Resources	Less than significant cumulative impact on paleontological resources with mitigation	No change	No change	Increased contribution to impacts due to increased underground construction and potential for inadvertent discoveries; contribution is less than significant with mitigation	Increased contribution to impacts due to increased underground construction and potential for inadvertent discoveries; contribution is less than significant with mitigation	Increased contribution to impacts due to increased underground construction and potential for inadvertent discoveries; contribution is less than significant with mitigation
Geology and Soils	Less than significant cumulative impact on soil and slope stability with mitigation	No change	No change	Decreased contribution to impact due to reduction of new areas of soil disturbance	Decreased contribution to impact due to reduction of new areas of soil disturbance	Decreased contribution to impact due to reduction of new areas of soil disturbance

Impact Area	Proposed Project	Alternative 1: Eastern Cable Pole at Carmel Valley Road	Alternative 2: Eastern Cable Pole at Pole P40	Alternative 3: Los Peñasquitos Canyon Preserve-Mercy Road Underground Alternative	Alternative 4: Segment D 69 kV Partial Underground Alignment	Alternative 5: Pomerado Road to Miramar Area North Combination Underground/Overhead Alternative
Hydrology and Water Resources	Less than significant cumulative impact on water resources with mitigation	No change	No change	Increased contribution to impact due to increased work in Los Peñasquitos Canyon in proximity to Los Peñasquitos Creek; contribution is less than significant with mitigation	Decreased contribution to impact due to reduction of new areas of soil disturbance	Decreased contribution to impact due to reduction of new areas of soil disturbance
Transportation and Traffic	Significant and unavoidable contribution to cumulative impact on traffic due to road closures, increased construction related traffic, and emergency access interference	Decreased contribution to parking impact due to elimination of underground line in Black Mountain Community Park parking lot	Decreased contribution to parking impact due to elimination of underground line in Black Mountain Community Park parking lot	Increased contribution to impact due to increased duration of road closures and increased trip generation	Increased contribution to impact due to increased duration of road closures and increased trip generation	Increased contribution to impact due to increased duration of road closures and increased trip generation

Impact Area	Proposed Project	Alternative 1: Eastern Cable Pole at Carmel Valley Road	Alternative 2: Eastern Cable Pole at Pole P40	Alternative 3: Los Peñasquitos Canyon Preserve-Mercy Road Underground Alternative	Alternative 4: Segment D 69 kV Partial Underground Alignment	Alternative 5: Pomerado Road to Miramar Area North Combination Underground/Overhead Alternative
Noise	Significant and unavoidable contribution to cumulative impact on noise due to temporary construction related noise and corona noise affecting sensitive receptors	No change	No change	Decreased contribution to impact due to elimination of new overhead transmission line and associated corona noise in northern portion of Segment A and all of Segment C	Decreased contribution to impact due to decreased use of helicopters	Decreased contribution to impact due to elimination of new overhead transmission line and associated corona noise in the majority of Segment A and all of Segments C and D
Recreation	Significant and unavoidable contribution to cumulative impact on recreation due to temporary loss of park access and long-term impacts on the value of public recreational resources	Decreased contribution to impact due to elimination of cable pole in Black Mountain Ranch Community Park	Decreased contribution to impact due to elimination of cable pole in Black Mountain Ranch Community Park	Decreased contribution to impact due to elimination of transmission line in Black Mountain Ranch Community Park and trails in Black Mountain Ranch Open Space and Del Mar Mesa Open Space	Decreased contribution to impact due to elimination of new poles in Los Peñasquitos Canyon Open Space	Decreased contribution to impact due to elimination of transmission line in Black Mountain Ranch Open Space, Del Mar Mesa Open Space, and Black Mountain Ranch Community Park

Impact Area	Proposed Project	Alternative 1: Eastern Cable Pole at Carmel Valley Road	Alternative 2: Eastern Cable Pole at Pole P40	Alternative 3: Los Peñasquitos Canyon Preserve-Mercy Road Underground Alternative	Alternative 4: Segment D 69 kV Partial Underground Alignment	Alternative 5: Pomerado Road to Miramar Area North Combination Underground/Overhead Alternative
Hazards and Hazardous Materials	Less than significant cumulative impact from hazards and hazardous materials with mitigation	No change	No change	Increased contribution to impact due to higher emissions near sensitive receptors; contribution is less than significant with mitigation	No change	Increased contribution to impact due to increased open hazardous material sites along the underground alignment; contribution is less than significant with mitigation
Fire and Fuels Management	Less than significant contribution to cumulative impact on fire and fuels management with mitigation	No change	No change	Decreased contribution to impact due to reduced construction in areas with flammable vegetation	Decreased contribution to impact due to reduced construction in areas with flammable vegetation	Decreased contribution to impact due to reduced construction in areas with flammable vegetation
Air Quality	Less than significant contribution to cumulative impact on air quality	No change	No change	Increased contribution to air quality impacts due to greater criteria pollutant emissions; contribution is significant and unavoidable	Increased contribution to air quality impacts due to greater criteria pollutant emissions; contribution is less than significant with mitigation	Increased contribution to air quality impacts due to greater criteria pollutant emissions; contribution is significant and unavoidable

Impact Area	Proposed Project	Alternative 1: Eastern Cable Pole at Carmel Valley Road	Alternative 2: Eastern Cable Pole at Pole P40	Alternative 3: Los Peñasquitos Canyon Preserve-Mercy Road Underground Alternative	Alternative 4: Segment D 69 kV Partial Underground Alignment	Alternative 5: Pomerado Road to Miramar Area North Combination Underground/Overhead Alternative
Greenhouse Gases	Less than significant contribution to cumulative impact on greenhouse gases	No change	No change	Increased contribution to greenhouse gas emission due to increased equipment activity during construction; contribution is less than significant	Increased contribution to greenhouse gas emission due to increased equipment activity during construction; contribution is less than significant	Increased contribution to greenhouse gas emission due to increased equipment activity during construction; contribution is less than significant
Agriculture	Less than significant cumulative impact on agriculture	No change	No change	No change	No change	No change
Utilities and Service Systems	Less than significant cumulative impact on utilities and public service systems with mitigation	No change	Increased contribution to induced current impacts on buried utilities; no cumulative impacts from induced current	Increased contribution to induced current impacts on buried utilities; no cumulative impacts from induced current	Increased contribution to induced current impacts on buried utilities; no cumulative impacts from induced current	Increased contribution to induced current impacts on buried utilities; no cumulative impacts from induced current

ES.8 COMPARISON OF THE PROPOSED PROJECT AND ALTERNATIVES

This ~~Draft~~ EIR analyzes the environmental impacts of Proposed Project as well as alternatives that were developed as a result of public and agency input during the scoping process. The EIR presents an analysis for the Proposed Project and five alternatives to the Proposed Project, including two cable pole relocation alternatives and three alternative route segments along the Proposed Project route, as well as the No Project Alternative. As documented in detail in the Alternatives Screening Report (see EIR Appendix D), ~~36~~ 38 additional alternatives were also considered but eliminated from detailed consideration. The CPUC identified the Environmentally Superior Alternative, as required by CEQA Guidelines §15126.6(e)(2), in the ~~Draft~~ EIR.

ES.8.1 Methodology for Alternatives Comparison

The following methodology was used to compare alternatives in this EIR:

- **Step 1: Identification of Alternatives.** A screening process (described in Chapter 3 of the EIR) was used to evaluate ~~41~~ 43 alternatives to the Proposed Project. That screening process identified two cable pole alternatives and three routing alternatives for analysis in the EIR. A No Project Alternative was also identified. No other potentially feasible alternatives meeting most of the basic project objectives were identified that would avoid or substantially lessen any of the Proposed Project's significant impacts.
- **Step 2: Determination of Environmental Impacts.** The environmental impacts of the Proposed Project and the alternative route segments and cable poles were evaluated. The significant and unavoidable impacts that would occur with the Proposed Project, as well as those that would be created and/or eliminated by each alternative, are summarized. It should be noted that alternatives that replace only a portion of the Proposed Project would require combination with the remainder of the Proposed Project or other alternatives to form a complete alternative route conveying 230-kV transmission between the Sycamore Canyon and Peñasquitos substations. As a result, an "area of comparison" was developed in order to determine the project impacts for only the comparable portion of the route that would be replaced by the alternative.
- **Step 3: Comparison of Proposed Project and Alternatives.** The environmental impacts of the Proposed Project were compared to those of each alternative to determine the environmentally superior alternative. To evaluate the various alternatives along the Proposed Project route, the impacts of the Proposed Project within the "area of comparison" were compared to the impacts of the alternative, as identified in the impact analysis. The Proposed Project was then compared to the No Project Alternative.

Determining an environmentally superior alternative requires balancing many environmental factors. In order to identify the environmentally superior alternative, the most important

impacts in each resource area were identified and compared. If an alternative is not considered environmentally superior for any resource area and there are no significant unavoidable impacts, it is not ranked and it is stated that there is no preference for the alternative in terms of that resource area. The comparisons presented in this chapter highlight situations where a route or alternative would create impacts in one area as a consequence of avoiding impacts to another area.

ES.8.2 Identify Environmentally Superior Alternative

Alternatives are compared in Chapter 6 of this ~~Draft~~ EIR. CEQA requires the Lead Agency to identify the "Environmentally Superior Alternative." The CPUC has identified the Environmentally Superior Alternative, as required by CEQA Guidelines §15126.6(d) and (e)(2). Additional information on the impacts of the Proposed Project and each alternative is presented in Section ES.6 and ES.7 of this Executive Summary, and the comparison of alternatives is presented in greater detail in Section 6 of the ~~Draft~~ EIR. The ranking is based only on the level of environmental effects as determined in the EIR analysis. The highest ranked potentially feasible alternative that achieves most or all basic project objectives is Alternative 5: Pomerado/Miramar Area North Combination Underground/Overhead. The results of the comparisons of alternatives are presented below, with the Environmentally Superior Alternative shown first and the least environmentally preferable alternative shown last. The least environmentally preferred would be the Proposed Project or Alternative 3 with no modifications. The No Project Alternative would not achieve most basic project objectives.

Section 6.2.1 of the EIR has been revised to reflect changes in the ranking of alternatives, as shown below. Alternative 3 is ranked comparable to the Proposed Project with no modifications and it appears in two places in the ranking: once in ranking #4 and once in ranking #7. Alternative 3 appears twice because the combination of Alternative 4 with the Proposed Project or Alternative 3 (ranking #4) would be environmentally preferable to either the Proposed Project with no modifications or Alternative 3 alone (ranking #7).

1. Alternative 5: Pomerado Road to Miramar Area North Combination Underground/Overhead
   ~~Combination of Alternative 3: Los Peñasquitos Canyon Preserve – Mercy Road Underground and Alternative 4: Segment D 69 kV Partial Underground Alignment, with Proposed Project in Segment A between the Sycamore Canyon Substation and Ivy Hill Drive~~
   ~~No Project Alternative[1]~~
   ~~Alternative 3: Los Peñasquitos Canyon Preserve-Mercy Road Underground, with Proposed Project in Segment A between the Sycamore Canyon Substation and Ivy Hill Drive and Segment D~~
   ~~Combination of Alternative 1: Cable Pole at Carmel Valley Road and Alternative 4: Segment D 69 kV Partial Underground Alignment, with Proposed Project in Segments A, B, and C~~

2. Combination of Alternative 2: Eastern Cable Pole at P40 and Underground Alignment through City Open Space and Alternative 4: Segment D 69-kV Partial Underground Alignment, with Proposed Project in Segments A, B, and C
3. Combination of Alternative 1: Cable Pole at Carmel Valley Road and Alternative 4: Segment D 69-kV Partial Underground Alignment, with Proposed Project in Segments A, B, and C
4. Alternative 4: Segment D 69-kV Partial Underground Alignment, with:
   a. Proposed Project in Segments A, B, and C; or
   b. Alternative 3: Los Peñasquitos Canyon Preserve —Mercy Road Underground with Proposed Project in Segment A between the Sycamore Canyon Substation and Ivy Hill Drive and Segment D

   ~~Alternative 1: Cable Pole at Carmel Valley Road, with Proposed Project in all other locations~~
5. Alternative 2: Eastern Cable Pole at Pole P40 and Underground Alignment through City Open Space or City Water Utility Service Road, with Proposed Project in all other locations
6. Alternative 1: Eastern Cable Pole at Carmel Valley Road, with Proposed Project in all other locations
7. Proposed Project or Alternative 3: Los Peñasquitos Canyon Preserve —Mercy Road Underground with Proposed Project in Segment A between the Sycamore Canyon Substation and Ivy Hill Drive and Segment D
8. No Project Alternative

In making a final decision on the project, the CPUC will consider the environmental impacts of the Proposed Project as compared to the project alternatives, as well as relevant economic, social, legal, technological and other considerations.

ES.8.3 Comparison of Proposed Project and the Alternatives

The EIR identifies two cable pole location and three routing alternatives to the Proposed Project. These alternatives were developed to reduce the Proposed Project's significant and unavoidable impacts related to the visual character and visual quality of the site and its surroundings, construction traffic, construction and operation noise, and access to recreational areas. The characteristics of the two cable pole and three routing alternatives that are analyzed in the EIR are summarized in Table ES.8-1.

ES.8.3.1 Proposed Project vs. Cable Pole Alternatives (Alternatives 1, 2a, and 2b)

This section compares the Proposed Project cable pole P41 to the cable pole alternatives which includes Alternative 1: Eastern Cable Pole Option 1b at Carmel Valley Road, Alternative 2a: Eastern Cable Pole Option with Underground Alignment in City Open Space, and Alternative 2b: Eastern Cable Pole Option with Underground Alignment in City Utility Service Road. The cable pole alternatives would eliminate the need for a tubular steel at the existing cable pole P41 (located at the northern end of Black Mountain Ranch Community Park), including activities involved with removing the pole such as relocating stringing sites and the

Table ES.8-1 Summary of Alternatives Analyzed

Alternative Name	Description	Summary of Combining with other Alternatives
Alternative 1: Eastern Cable Pole Option 1b at Carmel Valley Road	• Relocates the cable pole in Black Mountain Ranch Community Park to immediately south of Carmel Valley Road	• Would be implemented in combination with the Proposed Project in Segments A, B (with the exception of the cable pole), and C • Could be combined with Alternative 4 in Segment D
Alternative 2a: Eastern Cable Pole option with Underground Alignment in City Open Space	• Relocates the cable pole in Black Mountain Ranch Community Park to proposed pole location P40 south of Carmel Valley Road • Includes underground transmission line in designated City parkland	• Would be implemented in combination with the Proposed Project in Segments A, B (with the exception of the cable pole), and C • Could be combined with Alternative 4 in Segment D
Alternative 2b: Eastern Cable Pole Option with Underground Alignment in City Utility Service Road	• Relocates the cable pole in Black Mountain Ranch Community Park to the same location as Alternative 2a • Includes underground transmission line in City Black Mountain Reservoir access road	• Would be implemented in combination with the Proposed Project in Segments A, B (with the exception of the cable pole), and C • Could be combined with Alternative 4 in Segment D
Alternative 3: Los Peñasquitos Canyon–Mercy Road Underground	• Replaces construction in the northern portion of Segment A, and all of Segments B and C with underground construction for 5.8 miles within City roads • Includes cable poles on either end of the underground alignment	• Would be implemented in combination with the Proposed Project in the southern portion of Segment A (to Ivy Hill Drive) and in Segment D between Peñasquitos Junction and P48 • Could be combined with Alternative 4 in Segment D
Alternative 4: Segment D 69-kV Partial Underground Alignment	• Avoids the majority of new TSPs in Los Peñasquitos Canyon in Segment D • Includes two cable~~s~~ poles to transition to underground and ~~tow~~ two underground 69-kV duct banks within City roads for 3.1 miles	• Would be implemented in combination with the Proposed Project in the southern portion of Segment A (to Ivy Hill Drive) and in Segment D between Peñasquitos Junction and P48 • Could be combined with Alternative 3 to avoid the northern portion of Segment A, and all of Segments B and C • Could be combined with either Alternative 1 or 2 to avoid the cable pole in Black Mountain Ranch Community Park
Alternative 5: Pomerado Road to Miramar Area North Combination Underground/ Overhead	• Constructed in a completely new alignment • Includes 11.5 miles of underground transmission line in City roads and 2.8 miles of overhead transmission line • Requires only 10 new structures for overhead construction	• Would be implemented in combination with the Proposed Project poles 1through 4 from Sycamore Canyon Substation (0.7 mile). Avoids all other portions of the Proposed Project.

underground transmission line to Carmel Valley Road (Segment B of the Proposed Project). The alternatives would transfer from overhead to underground using cable pole P41 south of Carmel Valley Road. The cable pole alternatives are described in greater detail under Section ES.5.

Summary of Impacts

The Proposed Project would have ~~four~~ three significant and unavoidable impacts on aesthetics, transportation and traffic, and recreation within the relevant geographical location that the cable pole alternatives would reroute, the areas adjacent to and including cable poles P40 and P41. Cable pole Alternatives 1, ~~would have one significant and unavoidable impact in~~ on ~~aesthetics. Cable pole Alternatives~~ 2a, and 2b would each have ~~two~~ one significant and unavoidable impacts to aesthetics and recreation. The cable pole alternatives would eliminate the significant and unavoidable impacts to recreation and parking access that would result from the Proposed Project by not constructing the tubular steel cable pole P41 at the northern end of Black Mountain Ranch Community Park to transfer the transmission line from overhead to underground at the eastern end of Segment B.

The transition from a transmission line overhead to underground at cable pole P40, south of Carmel Valley Road, as opposed to cable pole P41 within the Black Mountain Ranch Community Park ~~would reduce the significant visual impact in the vicinity of the park. Additionally, the cable pole alternatives~~ would result in less than significant impacts or impacts that are less than significant with mitigation within thirteen resource areas for Alternative 1, 2a, and 2b~~and twelve resource areas for Alternative 2a and 2b~~.

The cable pole alternatives would not substantially increase the significant and unavoidable environmental impacts from degradation of the visual character or quality of the area. The cable pole alternatives would reduce the trenching area needed for the underground transmission alignment and lower associated impacts, as opposed to the Proposed Project. Alternative 1 would involve trenching within the previously disturbed alignment for Carmel Valley Road to erect a new tubular steel pole. Trenching for Alternative 2a would occur along the south side of Carmel Valley Road from cable pole P40 extending through previously undisturbed open space. Trenching for Alternative 2b would also occur along the south side of Carmel Valley Road from cable pole P40 extending through a paved service road which is within the SDG&E ROW.

Conclusion

With respect to aesthetic, transportation and traffic, and recreational impacts, Alternative ~~1~~ 2 would be environmentally superior as compared to the Proposed Project by reducing the significant and unavoidable impacts to aesthetics, parking, and recreation access identified within the analysis for the Proposed Project. Alternative 1 would require the least amount of trenching and the trenching would occur within a previously disturbed roadway resulting in a reduction of the less than significant impacts identified within the area of analysis for the Proposed Project for cultural resources, geology and soils, and hydrology and water resources; however, Alternative 1 would require a much taller cable pole than the Proposed Project or Alternative 2 and would result in more severe impacts to visual quality. ~~The proposed cable~~

~~pole P41 as part of Alternative 1 would also be located at a lower elevation along the roadway, which would screen a portion of the cable pole from views at the park and nearby open space areas.~~ Alternative 2, ~~s~~Similar to the Proposed Project, would result in a significant and unavoidable impact to visual quality, but Alternative 2 would have the least impact on visual quality of the alternatives considered ~~would remain~~.

ES.8.3.2 Proposed Project vs. Alternative 3: Los Peñasquitos Canyon Preserve—Mercy Road Underground

This section compares the Proposed Project from Ivy Hill Drive to Peñasquitos Junction (northern portion of Segment and all of Segments B and C) to Alternative 3: Los Peñasquitos Canyon Preserve - Mercy Road Underground Alternative. Alternative 3 would underground the transmission line between Segment A at Ivy Hill Drive and Peñasquitos Junction.

Summary of Impacts

The Proposed Project would have nine significant and unavoidable impacts to aesthetics, transportation and traffic, noise, and recreation within the transmission alignment between Segment A at Ivy Hill Drive and Peñasquitos Junction. The Proposed Project would result in less than significant impacts or impacts that are less than significant with mitigation within eleven resource areas. Neither the Proposed Project nor Alternative 3 would have impacts on land use, forestry resources, or population and housing.

Alternative 3 would result in ~~nine~~ eight significant and unavoidable impacts to aesthetics, air quality, noise, ~~recreation,~~ and transportation and traffic. Alternative 3 would result in less than significant impacts or impacts that are less than significant with mitigation within ~~nine~~ ten resource areas. Alternative 3 would eliminate the significant and unavoidable impacts to recreation and parking access identified under the Proposed Project by not constructing a tubular steel cable pole at the northern end of Black Mountain Ranch Community Park. Alternative 3 would reduce permanent corona noise levels by placing the overhead transmission line underground and would reduce temporary noise levels by avoiding helicopter use. Compared to the Proposed Project, Alternative 3 would increase the generation of NO_x and CO_2e emissions through higher usage of diesel-powered equipment. Alternative 3 would also result in more severe community impacts including noise, air quality, fugitive dust, and traffic impacts than the Proposed Project.

Conclusion

~~With respect to aesthetic, recreation, and biological resource impacts, Alternative 3 would be environmentally preferred to the Proposed Project because it would minimize significant and unavoidable impacts to visual character due to undergrounding the transmission line (with the exception of the two new cable poles), as well as reducing the significant and unavoidable impacts to recreational access and recreational value and permanent noise. Similar to the Proposed Project, significant and unavoidable impacts to visual character from the two cable poles, temporary and permanent noise levels, and traffic levels of service would remain. Alternative 3 would also create significant and unavoidable impacts to air quality due to additional emissions during construction resulting from the increased vehicle and equipment~~

~~activity required for underground construction. The significant and unavoidable air quality impacts from Alternative 3 would be temporary and limited to the 10 month construction period for Alternative 3.~~

The overall environmental impact from Alternative 3 would be comparable to the Proposed Project. Alternative 3 would minimize significant and unavoidable impacts on visual character (the transmission line would be mostly underground with the exception of the two cable poles) and would reduce the Proposed Project significant and unavoidable impacts on recreational access and corona noise. Alternative 3 would also reduce Proposed Project biological impacts by avoiding construction within Preserve areas. Alternative 3 would have a greater impact on traffic flow, emergency access, construction noise, and air quality than the Proposed Project. Impacts on traffic flow and emergency access would increase because Alternative 3 would include approximately double the length of underground construction within roadways compared to the Proposed Project. Construction of Alternative 3 would produce noise from underground construction in very close proximity to homes along a longer underground route than the Proposed Project. Alternative 3 would also create significant and unavoidable impacts on air quality due to additional emissions during construction. The significant and unavoidable air quality impacts from Alternative 3 would be temporary and limited to the 10 month construction period for Alternative 3. The overall impacts of Alternative 3 and the Proposed Project are equivalent.

ES.8.3.3 Proposed Project vs. Alternative 4: Segment D 69-kV Partial Underground Alignment

This section compares the Proposed Project to Alternative 4: Segment D 69-kV Partial Underground Alignment. Alternative 4 would underground a portion of the transmission line between cable pole P48 and Peñasquitos Substation.

Summary of Impacts

The Proposed Project would result in seven significant and unavoidable impacts on aesthetics, noise, transportation and traffic, and recreation within the area of comparison between the cable pole near existing lattice tower E17 ~~P48~~ and Peñasquitos Substation. Additionally, the Proposed Project would result in less than significant impacts or impacts that are less than significant with mitigation within eleven resource areas.

Alternative 4 would have ~~seven~~ six significant and unavoidable impacts on aesthetics (cable pole), noise, ~~recreation,~~ and transportation and traffic. Alternative 4 would result in less than significant impacts or impacts that are less than significant with mitigation within ~~ten~~ eleven resource areas. Alternative 4 would reduce the impact to visual character and recreational value by locating the power lines underground, avoiding the Proposed Project new TSPs and overhead 69-kV lines between cable pole P48 and Peñasquitos Substation. Additionally Alternative 4 would reduce temporary noise impacts by reducing helicopter use as compared to the Proposed Project. Alternative 4 would increase temporary road closures and generate higher NO_x and CO_2e emissions through higher usage of diesel-powered equipment as

compared to the Proposed Project. These air quality emissions could be reduced to less than significant with mitigation.

Conclusion

With respect to aesthetic, recreation, and biological resource impacts, Alternative 4 would be environmentally preferred to the Proposed Project because it would minimize long-term significant and unavoidable impacts to aesthetics. Significant and unavoidable impacts to visual character from Alternative 4 would be limited to the eastern cable poles. Similar to the Proposed Project, Alternative 4 would result in significant and unavoidable impacts to temporary noise levels, and traffic levels of service. Alternative 4 would not avoid the permanent impact to noise from corona because the transmission line would still be installed overhead in Segment D.

ES.8.3.4 Proposed Project vs. Alternative 5: Pomerado Road to Miramar Area North Combination Underground/Overhead

This section compares the Proposed Project to Alternative 5: Pomerado Road to Miramar Area North Combination Underground/Overhead. Alternative 5 reroutes the majority of the transmission to an underground alignment to the south of the alignment proposed under the Proposed Project, with a small portion transitioned to overhead lines from Carroll Canyon Road to Peñasquitos Substation.

Summary of Impacts

The Proposed Project would have nine significant and unavoidable impacts in aesthetics, noise, recreation, and transportation and traffic between Segment A at Stonebridge Parkway and Peñasquitos Substation. Additionally, the Proposed Project would result in less than significant impacts or impacts that are less than significant with mitigation within eleven resource areas.

Alternative 5 would have eight significant and unavoidable impacts in air quality, aesthetics, noise, and transportation and traffic. Similar to the Proposed Project, Alternative 5 would result in less than significant impacts or impacts that are less than significant with mitigation within eleven resource areas. Alternative 5 would eliminate the significant and unavoidable impacts to recreation and parking access that would result from the Proposed Project by not constructing a tubular steel cable pole at the northern end of Black Mountain Ranch Community Park to transfer the transmission line from overhead to underground at the eastern end of Segment B. Alternative 5 would reduce permanent noise levels to less than significant by placing the transmission line underground and reduce temporary noise levels by substantially reducing helicopter use. Alternative 5 would also reduce significant and unavoidable impacts on recreational value by avoiding installation of new steel poles in recreational open space areas. Compared to the Proposed Project, Alternative 5 would result in additional traffic impacts by contributing more construction vehicle trips to area roadways and requiring a greater amount of temporary road closures. Additionally Alternative 5 would increase the generation of NO_x and CO_2e emissions through higher usage of diesel-powered equipment as compared to the Proposed Project.

ES.8.4 Conclusion of the Environmentally Superior Alternative

Alternative 5 would be the Environmentally Superior Alternative because it would minimize significant and unavoidable impacts to aesthetics, noise, and recreation. Significant and unavoidable impacts to visual quality would be limited to one cable pole and the alternative would avoid all other significant and unavoidable aesthetic impacts of the Proposed Project. Alternative 5 would also substantially reduce significant and unavoidable noise impacts by reducing potential for corona noise generation. Alternative 5 would avoid significant and unavoidable impacts on recreational value by eliminating new structures in open space recreational areas. Alternative 5 would also further reduce impacts that are less than significant with mitigation on biological resources, hydrology, geology and soils, and fires and fuels.

ES.9 COMPARISON OF THE PROPOSED PROJECT WITH THE NO PROJECT ALTERNATIVE

In the absence of the Proposed Project SDG&E is obligated to maintain system reliability and would need to pursue actions to alleviate thermal overloads in the system. The No Project Alternative would encompass those activities and is described above under ES.5.4 and in further detail in Chapter 3. The No Project Alternative would encompass events or actions that are reasonably expected to occur in the foreseeable future in the event the Sycamore—Peñasquitos 230-kV transmission line project were not approved. Those activities include the following:

- New Mission—Peñasquitos 230-kV Transmission Line
- Second Poway—Pomerado 69-kV Line
- Second Miguel—Bay Boulevard 230-kV Transmission Line
- Second Sycamore Canyon—Scripps 69-kV Power Line
- Upgrade Miguel—Mission 230-kV Transmission Lines 1 and 2
- Upgrade Artesian—Bernardo 69-kV Power Lines 1 and 2
- Upgrade Bernardo—Felicita Tap—Felicita 69-kV Power Line
- ~~Installation of a series reactor at Sycamore Canyon Substation~~

All of the No Project Alternative activities would involve overhead transmission or power lines. ~~Both the 15-mile-long Mission—Peñasquitos 230-kV transmission line and 2.6-mile-long Poway—Pomerado 69-kV line would be overhead.~~ The No Project Alternative would require approximately 35 ~~17.6~~ miles of new and 48 miles of reconductored overhead and potentially underground transmission and power lines compared with 13.3 miles of overhead transmission line for the Proposed Project. ~~The No Project Alternative would not require underground transmission or power lines.~~

ES.9.1 Summary of Impacts

The No Project Alternative would not substantially reduce any significant and unavoidable impacts of the Proposed Project. The No Project Alternative would have a greater impact than the Proposed Project on 15 resource areas covering a larger geographic area than the Proposed Project. ~~The No Project Alternative would have less impact than the Proposed Project in ten~~

~~resource areas. The No Project Alternative would reduce significant and unavoidable impacts to aesthetics, recreation, and transportation and traffic because the No Project Alternative would require fewer miles of pole replacements, would not disrupt activities within a recreational area, and would have less than significant impacts on level of service and no impact on parking.~~ The alternative would increase the severity of impacts on noise because the alternative would result in additional miles of above ground 230-kV transmission line in close proximity to residents. The significant and unavoidable impact to aesthetics would remain in Segment D because the No Project Alternative would require the same construction as the Proposed Project in that area. Significant and unavoidable impacts of aesthetics and recreation would increase due to construction along more miles than the Proposed Project.

ES.9.2 Conclusion

The No Project Alternative would not reduce the any significant and unavoidable impacts of the Proposed Project and would increase impacts due to the greater number of miles affected by construction and the presence of additional transmission lines. ~~on Aesthetics, Transportation and Traffic, and Recreation; however, the No Project Alternative would increase significant and unavoidable permanent noise impacts due to more miles of overhead transmission line. The No Project Alternative is environmentally superior to the Proposed Project. The No Project Alternative is not the Environmentally Superior Alternative because Alternative 5 would further reduce the long-term impacts of the Proposed Project on Aesthetics and Noise. Alternative 5 is the Environmentally Superior Alternative because it provides the greatest overall reduction of environmental impacts.~~

ES.10 IMPACT SUMMARY AND MITIGATION TABLE

Table ES.10-1 on the following pages summarizes all identified impacts of the Proposed Project, provides the mitigation measures that would be implemented to reduce significant impacts, and defines the level of significance after implementation of mitigation.

Table ~~ES-10.1~~ ES.10-1 Summary of Impacts and Mitigation for the Proposed Project

Significance Thresholds and Impacts (*Level of Significance*)	Mitigation Measures
Biological Resources	
Impact Bio-1: Potential for substantial adverse effect from project construction, either directly or through habitat modifications, on any plant species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS. ***(Less than significant with mitigation)***	**Mitigation Measure Biology-1a: General Field Personnel Behavior Requirements.** All field personnel shall abide by the following general behavior requirements: 1. Vehicles must be kept on approved access roads. A 15 mile-per-hour speed limit shall be observed on dirt access roads. Vehicles shall be turned around in established or designated areas only. 2. No wildlife, including rattlesnakes, may be harmed, except to protect life and limb. 3. Firearms shall be prohibited except for those used by security personnel. 4. Feeding of wildlife shall not be allowed. 5. SDG&E personnel shall not bring pets to work areas in order to minimize harassment or killing of wildlife and to prevent the introduction of destructive domestic animal diseases to native wildlife populations. 6. Parking or driving underneath oak trees shall not be allowed in order to protect root structures except in established traffic areas. 7. Plant or wildlife species shall not be collected for pets or any other reason. 8. Littering shall not be allowed. SDG&E shall not deposit or leave any food or waste in any work area. 9. Wildfires shall be prevented or minimized by exercising care when driving and by not parking vehicles where catalytic converters can ignite dry vegetation. In times of high fire hazard, trucks shall carry water and shovels, or fire extinguishers in the field. The use of shields, protective mats, or other fire prevention methods shall be used during grinding and welding to prevent or minimize the potential for fire. Care shall be exhibited when smoking in permitted areas. Smoking is not permitted within City of San Diego Open Space. 10. Field crews shall refer environmental issues including wildlife relocation, dead or sick wildlife, hazardous waste, or questions about avoiding environmental impact to a biologist(s) approved by the CPUC and the USFWS and CDFW. Other CPUC- and USFWS- or CDFW-biologists or experts in wildlife handling may need to be brought in for assistance with wildlife relocations.
	Mitigation Measure Biology-1b: Environmental Training Program. An environmental training program shall be developed and presented to all crew members prior to the beginning of all project construction. The training shall describe special-status plant and wildlife species and sensitive habitats that could occur within project work areas, protection afforded to these species and habitats, and avoidance and minimization measures required to avoid and/or minimize impacts from the project. Penalties for violations of environmental laws shall also be incorporated into the training session. Each

Significance Thresholds and Impacts (*Level of Significance*)	Mitigation Measures
	crewmember shall be provided with an informational training handout and a decal to indicate that he/she has attended the training. The roles and responsibilities of CPUC-, USFWS-, and CDFW-approved biologist(s) and other environmental representatives shall be identified in the Mitigation Monitoring, Compliance, and Reporting Program and discussed during the training. All new construction personnel shall receive this training before beginning work on this project. A copy of the training and training materials shall be provided to CPUC for review and approval at least 30 days prior to the start of construction. Training logs and sign-in sheets shall be provided to CPUC on a monthly basis. As needed, in-field training shall be provided to new on-site construction personnel by the environmental compliance supervisor or a qualified individual who shall be identified by SDG&E's Project Biologist, or initial training shall be recorded and replayed for new personnel.
	Mitigation Measure Biology-1c: Pre-Activity Surveys. The CPUC-, USFWS-, and CDFW-approved biologist(s) shall conduct a pre-activity survey for all activities occurring off of access roads in sensitive habitats. The pre-activity survey shall be conducted no earlier than 30 days prior to surface disturbance. The results of the pre-activity survey shall be documented by the Qualified Biologist in a pre-activity survey report. The pre-activity survey report shall be submitted to the CPUC for review and approval prior to the start of construction, and the results shall be submitted to CDFW and USFWS as required by any regulatory permits or approvals. The pre-activity study report shall include the following: • Type, location, and size of project • Date, time, weather, surrounding land uses • Evaluation of type and quality of habitat • Work description and methods which will be used to avoid or minimize ground disturbance, including biological monitoring during construction • Anticipated impacts and proposed mitigation • Map of location of work area In those situations where the Qualified Biologist cannot make a definitive species identification, the Qualified Biologist shall make a determination based on the available evidence and professional expertise. In order to ensure that habitats are not inadvertently impacted, the CPUC-, USFWS-, and CDFW-approved biologist shall flag boundaries of habitat which must be avoided. When necessary, the CPUC-, USFWS-, and CDFW-approved biologist shall also demark appropriate equipment laydown areas, vehicle turn around areas, and pads for placement of large construction equipment such as cranes, bucket trucks, augers, etc. When appropriate, the CPUC-, USFWS-, and CDFW-approved biologist shall make office and/or field presentations to field staff to review and become familiar with

Significance Thresholds and Impacts (*Level of Significance*)	Mitigation Measures
	natural resources to be protected on a project site-specific basis. Avoidance of habitat for thread-leaved brodiaea is prioritized over minimization and mitigation. SDG&E shall maintain a library of special-status plant species locations, known to SDG&E, occurring within the project BSA. "Known" means a verified population either extant or documented using record data. Information on known sites may come from a variety of record data sources including local agency Habitat Conservation Plans, pre-activity surveys, or biological surveys conducted for environmental compliance of the project. Plant inventories shall be consulted as part of pre-activity survey procedures.
	Mitigation Measure Biology-1d: Maintenance, Repair, and Construction of Facilities ~~Procedures~~. SDG&E shall implement the following measures pertaining to maintenance, repair, and construction of facilities: 1. Maintenance, repair and construction activities shall be designed and implemented to minimize new disturbance, erosion on manufactured and other slopes, and off-site degradation from accelerated sedimentation, and to reduce maintenance and repair costs. 2. Routine maintenance of all facilities shall include visual inspections on a regular basis, conducted from vehicles driven on the project access roads where possible. If it is necessary to inspect areas which cannot be seen from the roads, the inspection shall be done on foot or from the air. 3. Erosion shall be minimized on access roads and other locations primarily with water bars. The water bars are mounds of soil shaped to direct flow and prevent erosion. 4. Hydrologic impacts shall be minimized through the use of state-of-the-art technical design and construction techniques to minimize ponding, eliminate flood hazards, and avoid erosion and siltation into any creeks, streams, rivers, or bodies of water by use of Best Management Practices. 5. When siting new facilities, every effort shall be made to cross wetland habitat perpendicular to the watercourse, spanning the watercourse to minimize the amount of disturbance to riparian area. 6. During repair or maintenance of facilities in a streambed, water may be temporarily diverted as long as the natural drainage patterns are restored after disturbance to minimize the impact of the disturbances and to help re-establish or enhance the native habitat. Erosion control during construction in a streambed in the form of intermittent check dams and culverts shall also be considered to prevent alteration to natural drainage pattern and prevent siltation. 7. Impact to wetlands shall be minimized by avoiding pushing soil or brush into washes or ravines. 8. During work on facilities, all trucks, tools, and equipment shall be kept on existing access roads or cleared areas, to the extent possible. 9. The CPUC-, USFWS-, and CDFW-approved biologist shall approve of an activity prior to working in any ~~sensitive~~ natural area where disturbance to habitat may be unavoidable.

Significance Thresholds and Impacts (*Level of Significance*)	Mitigation Measures
	10. Insulator washing shall be allowed from access roads if other applicable protocols in this mitigation measures are followed. 11. Brush clearing around facilities for fire protection shall not be conducted from January 15 through August 31 (to avoid the general bird nesting season) without prior approval by the CPUC-, USFWS-, and CDFW-approved biologist. The CPUC-, USFWS-, and CDFW-approved biologist shall make sure that the habitat contains no active nests, burrows, or dens prior to clearing. 12. In the event that a special-status plant species is located within the area required to be cleared for fire protection purposes, SDG&E shall notify the USFWS (for ESA-listed plants), and CDFW (for CESA-listed plants), in writing, of the plant's identity and location and of the proposed activity, which will result in a take of such plant. Notification shall occur ten working days prior to such activity, during which time USFWS or CDFW may remove such plant(s). If neither USFWS nor CDFW have removed such plant(s) with the ten working days following the notice, SDG&E may proceed to complete its fire clearing and cause a take of such plant(s) consistent with SDG&E's take coverage for the ESA- or CESA-listed plants. When fire clearing is necessary in instances other than around power poles, and the potential for impacts to special-status species exist, SDG&E shall follow the pre-activity survey and notification procedures in Mitigation Measure Biology-1c, above. Wire stringing shall be allowed year-round in sensitive habitats if the conductor is not allowed to drag on the ground or in brush and vehicles remain on access roads. 13. Maintenance of cut and fill slopes shall consist primarily of erosion repair. In situations where revegetation would improve the success of erosion control, planting or seeding with native hydroseed mix may be done on slopes. 14. Spoils created during maintenance operations shall be disposed of only on previously disturbed areas designated by the CPUC-, USFWS-, and CDFW-approved biologist, or used immediately to fill eroded areas. Cleared vegetation shall be hauled to a permitted disposal location. 15. The CPUC-, USFWS-, and CDFW-approved biologist shall be contacted to perform a pre-activity survey when vegetation trimming is planned in sensitive habitat~~s~~. Whenever possible, trees in sensitive habitat~~s~~ such as native riparian, woodland, or scrub vegetation shall be scheduled for trimming in non-sensitive times (i.e., outside of breeding or nesting seasons). 16. No new facilities and activities shall be planned that would disturb vernal pools, their watersheds, or impact their natural regeneration. Continued historic maintenance of existing infrastructure utilizing existing access roads shall be allowed to continue in areas containing vernal pool habitat, provided no such habitat located within these roads would be impacted by project activities. New construction of overhead infrastructure which spans vernal pool habitats shall be allowed as long as the placement of facilities or the associated construction activities in no way impact the vernal pools.

Significance Thresholds and Impacts (*Level of Significance*)	Mitigation Measures
	17. If any previously unidentified dens, burrows, nests, or special-status plants are located on any project site after the pre-activity survey, the CPUC-, USFWS-, and CDFW-approved biologist shall be contacted. The CPUC-, USFWS- and CDFW-approved biologist shall determine how to best avoid or minimize impacting the resource by considering such methods as project or work plan redevelopment, equipment placement or construction method modification, seasonal/time of day limitations, etc. 18. The CPUC-, USFWS-, and CDFW-approved biologist(s) shall conduct monitoring as recommended in the pre-activity survey report. At completion of work, the CPUC-, USFWS-, and CDFW-approved biologist(s) shall check to verify compliance, including observing that flagged areas have been avoided and that reclamation has been properly implemented. Also at completion of work, the CPUC-, USFWS-, and CDFW-approved biologist(s) shall be responsible for removing all habitat flagging from the construction site. 19. The CPUC-, USFWS-, and CDFW-approved biologist(s) shall conduct checks on mowing procedures to ensure that mowing is limited to a 12-foot wide area on straight portions of the road (slightly wider on radius turns), and that the mowing height is no less than four inches. 20. Supplies or equipment where wildlife could hide (e.g., pipes, culverts, pole holes) shall be inspected prior to moving or working on them to reduce the potential for injury to wildlife. Supplies or equipment that cannot be inspected, or from which animals cannot be removed, shall be capped or otherwise covered at the end of each work day to avoid animal entrapment. Old piping or other supplies that have been left open shall not be capped until inspected and any species found in them allowed to escape. Ramping shall be provided in open trenches when necessary. If an animal is found entrapped in supplies or equipment, such as a pipe section, the supplies or equipment shall be avoided and the animal(s) left to leave on its own accord, except as otherwise authorized by the CPUC-, USFWS- and CDFW-approved biologist. Refer to Mitigation Measure 1a, Item 10 for wildlife relocations. 21. All steep-walled trenches or excavations used during construction shall be inspected twice daily (early morning and evening) to protect against wildlife entrapment. If wildlife is located in the trench or excavation, the CPUC, USFWS-, and CDFW-approved biologist(s) shall be called immediately to remove it if it cannot escape unimpeded. 22. Large amounts of fugitive dust could interfere with photosynthesis. Fugitive dust created during clearing, grading, earth-moving, excavation or other construction activities shall be controlled by regular watering. At all times, fugitive dust emissions will be controlled by limiting on-site vehicle speed to 15 miles per hour. 23. Before using pesticides in areas where burrowing owls may be found, a pre-activity survey shall be conducted.

Significance Thresholds and Impacts (*Level of Significance*)	Mitigation Measures
	Mitigation Measure Biology-1e: Maintenance of Access Roads. Maintenance of access roads shall consist of: 1. Repairing erosion by grading, adding fill, and compacting it. In each case of repair, the total area of disturbance shall be minimized by careful access and use of appropriately sized equipment. Repairs shall be done after pre-activity surveys conducted by the CPUC-, USFWS-, and CDFW-approved biologist(s). 2. Controlling vegetation through grading, which shall be used only where the vegetation obscures the inspection of facilities, access may be entirely lost, or the threat of facility failure or fire hazard exists. The graded access road width shall not exceed 12 feet on straight portions (radius turns may be slightly wider). 3. Maintenance work on access roads shall not expand the existing road bed. 4. Material for filling in road ruts shall never be obtained from the sides of the road, which contain habitat, without approval from CPUC-, USFWS-, and CDFW-approved biologist.
	Mitigation Measure Biology-1f: Construction ~~Protocols for~~ of New Access Roads Protocols. Construction of new permanent spur roads shall comply with the following: 1. New spur roads shall be designed in coordination with the wildlife agencies and preserve managers and priority shall be given to placement of spur roads in previously disturbed areas and areas which require the least amount of construction grading. 2. Construction of new ~~temporary~~ access roads shall be allowed year-round, providing the soil is dry and no natural ponding has occurred. Every effort shall be made to avoid constructing roads during the nesting season. During the nesting season, the presence or absence of nesting species shall be determined by the CPUC-, USFWS-, and CDFW-approved biologist. If nesting birds are detected, appropriate avoidance and minimization recommendations, as described in Mitigation Measures Biology-7 and Biology-8, shall be followed.
	Mitigation Measure Biology-1g: Survey Work Protocols. SDG&E shall implement the follow measures during survey work: 1. Brush clearing for foot path or line-of-sight cutting shall not be allowed from February through September without prior approval from the CPUC-, USFWS-, and CDFW-approved biologist, who will ensure the brush clearing activity, does not adversely affect a special-status species or nesting birds. 2. SDG&E survey personnel shall keep vehicles on existing access roads. No clearing of brush shall be allowed from February through September without prior approval from the CPUC-, USFWS-, and CDFW-approved biologist, who will ensure the brush clearing activity, does not adversely affect a special-status species or nesting birds. 3. Hiking off roads or paths for survey data collection shall be allowed year round as long as other protocols are met.

Significance Thresholds and Impacts (*Level of Significance*)	Mitigation Measures
	Mitigation Measure Biology-2: Compensatory Mitigation for Special Status Plants. All ~~special-status~~ federal and/or State listed and/or CRPR Rare Plant Rank 1B or 2B species plant populations (i.e., thread-leaved brodiaea, San Diego button-celery, Nuttall's scrub oak, decumbent goldenbush, summer holly, long-spined spineflower, spineshrub, and coast barrel cactus) shall be staked or flagged by a qualified biologist approved by the CPUC, USFWS, and CDFW if they fall within the limits of work. All stakes, flagging, or fencing shall be removed no later than 30 days after construction is complete. Impacts to special-status plant species shall be avoided to the extent feasible. Where impacts to special-status plant species are unavoidable, the impact shall be quantified and compensated through off-site land preservation and/or plant salvage and relocation per the direction of the USFWS and/or CDFW. Where off-site land preservation is biologically preferred, the land shall contain comparable special-status plant resources as the impacted lands and shall include long-term management and legal protection assurances to the satisfaction of the CPUC. Off-site mitigation land shall be identified prior to the start of construction. The establishment of long-term land management and legal protection assurances must be completed within 12 months of construction start. Where salvage and relocation is demonstrated to be feasible and biologically preferred by the wildlife agencies, it shall be conducted pursuant to a CPUC-, USFWS-, and CDFW-approved salvage and relocation plan that details the methods for salvage, stockpiling, and replanting, as well as the characteristics of the receiver sites. The salvage and relocation plan shall also define the monitoring strategy with a minimum of annual monitoring for 5 years ~~and~~ or until success criteria are met. If the salvage and relocation fails to meet the established success criteria after 5 years, maintenance and monitoring shall extend beyond the 5-year period until the criteria are met, or unless otherwise approved by the CPUC. Success criteria shall include a minimum of: • A surveyed population size count roughly equal to or greater than the number of individuals transplanted (This total may include both transplanted individuals that have survived as well as any additional supplemental plantings following the initial transplantation that have survived at least two growing seasons at the receiver site.), • Less than 5 percent cover of invasive weeds within the restoration area, and • Eradication of any noxious invasive weeds. Any salvage and relocation plans must be approved by CDFW, USFWS, and CPUC at least 30 days prior to project construction.
	Mitigation Measure Biology-3: Weed Control Plan. SDG&E shall prepare and implement a comprehensive, adaptive Weed Control Plan for pre-construction and long-term invasive, non-native species abatement. Developed land shall be excluded from weed control. Where SDG&E owns the property, the Weed Control Plan shall include specific weed abatement methods, practices, and treatment timing developed specifically for the Project area by qualified individuals with at least 5 years of weed control experience within San Diego County. The Weed Control Plan shall address control methods and issues controlling invasive non-native species within all vegetation communities

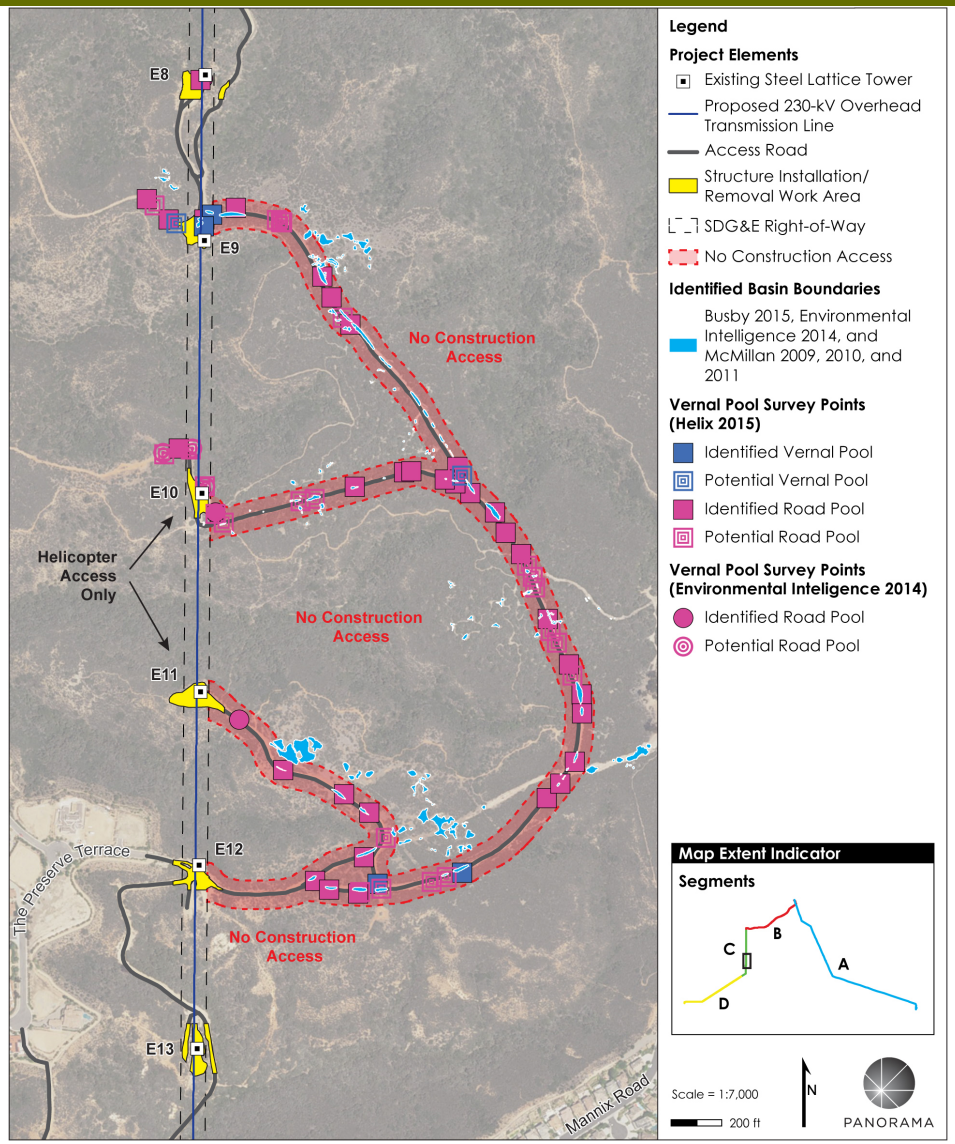
Significance Thresholds and Impacts (*Level of Significance*)	Mitigation Measures
	and land cover types found along the Project alignment ~~in consultation with the San Diego County Agriculture Commissioner's Office and the California Invasive Plant Council (Cal-IPC)~~. On ROW easement on MCAS Miramar, the Weed Control Plan shall incorporate all appropriate and legal U.S. Marine Corps-stipulated regulations. The Weed Control Plan shall be submitted to MCAS Miramar for final authorization of weed control methods, practices, and timing prior to implementation of weed control on MCAS Miramar. The Weed Control Plan shall be submitted to the City of San Diego for final authorization of weed control methods, practices, and timing prior to implementation of any weed control within the City of San Diego MHPA. The Weed Control Plan shall include the following: • A pre-construction weed inventory shall be conducted by surveying the entire ROW and areas immediately adjacent to the ROW where access permission is obtained, as well as at all ancillary facilities associated with the Project ~~project~~ for weed populations that: (1) are considered by the San Diego County Agriculture Commissioner ~~or~~, MCAS Miramar (for ROW on MCAS Miramar), or City of San Diego (for ROW within the City of San Diego MHPA) as being a priority for control, (2) are weed populations that are rated High or Moderate for negative ecological impact in the California Invasive Plant Inventory (online) Database (Cal-IPC 2006 [and 2007 update]; http://www.cal-ipc.org/ip/inventory/index.php) or are weed species of concern to MCAS Miramar (for ROW on MCAS Miramar), and (~~2~~3) aid and promote the spread of wildfires in San Diego County. Prolific wildfire promoting species such as brome grasses (*Bromus* sp.) shall be mapped but not targeted for control outside of Project impact areas. These populations shall be mapped and described according to density and area covered. These plant species shall be treated prior to construction or at a time when treatments would be most effective based on phenology according to control methods and practices for invasive weed populations included in the Weed Control Plan ~~designed in consultation with the San Diego County Agriculture Commissioner's Office and Cal-IPC~~, or required by MCAS Miramar~~,~~ or City of San Diego ~~as appropriate~~. • ~~A pre-construction weed inventory shall also be conducted by surveying areas that will be directly impacted by the project for weed populations that are rated High or Moderate for negative ecological impact in the California Invasive Plant Inventory (online) Database (Cal-IPC 2006 [and 2007 update]; http://www.cal-ipc.org/ip/inventory/index.php) or are weed species of concern to MCAS Miramar (for ROW on MCAS Miramar). These plant species shall be treated prior to construction or at a time when treatments would be most effective based on phenology according to control methods and practices for invasive weed populations designed in consultation with Cal-IPC and MCAS Miramar (for treatment in ROW on MCAS Miramar).~~ • Weed control treatments shall include all legally permitted methods to be used in the following prioritized order: preventative, manual, mechanical, and chemical. All

Significance Thresholds and Impacts (*Level of Significance*)	Mitigation Measures
	treatments shall be applied with the authorization of the ~~San Diego County Agriculture Commissioner and,~~ MCAS Miramar~~,~~ and City of San Diego as appropriate. The application of herbicides shall be in compliance with all state and federal laws and regulations under the prescription of a Pest Control Advisor (PCA) and implemented by a Licensed Qualified Applicator. Where manual and/or mechanical methods are used, disposal of the plant debris will be within an approved landfill area within San Diego County ~~follow the regulations set by the San Diego County Agriculture Commissioner~~ . The timing of the weed control treatment shall be determined for each plant species in consultation with the PCA for the Project, ~~San Diego County Agriculture Commissioner, Cal IPC,~~ and with MCAS Miramar~~,~~ and City of San Diego as appropriate, with the goal of controlling populations before they start producing seeds. For the lifespan of the project (i.e., as long as the project is physically present), long-term measures to control the introduction and spread of weeds in the project area shall be taken as follows. – From the time construction begins until 2 years after construction is complete, annual surveying for new invasive weed populations and the monitoring of identified and treated populations shall be required in the survey areas described above. After this time, surveying for new invasive weed populations and monitoring of identified and treated populations shall be required at an interval of every two years. However, the treatment of weeds shall occur on a minimum annual basis, unless otherwise approved by the PCA, ~~the San Diego County Agriculture Commissioner, Cal IPC, and~~ MCAS Miramar, and City of San Diego as appropriate. – During project construction and operation/maintenance, all seeds and straw materials shall be certified weed free, and all gravel and fill material shall also be certified weed free ~~by the San Diego County Agriculture Commissioner's Office.~~ – During project construction, vehicle and boot wash stations shall be provided.
	Mitigation Measure Fire-1: Final Fire Prevention Plan. See below.
	Mitigation Measure Fire-2: Maintain Emergency Access. See below.
	Mitigation Measure Fire-3: Water Tanks. See below.
	Mitigation Measure Fire-4: Conductor Clearance. See below.
Impact Bio-2: Potential for substantial adverse effect from project construction, either directly or through habitat modifications, on any invertebrate species	**Mitigation Measure Biology-3: Weed Control Plan.** See above.
	Mitigation Measure Biology-4: Compensatory Mitigation for Vernal Pools. SDG&E shall implement the following measures to avoid and minimize impacts to San Diego fairy shrimp ~~and vernal pool fairy shrimp~~ and their potential vernal pool and road pool habitats:

Significance Thresholds and Impacts (*Level of Significance*)	Mitigation Measures
identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS. **(*Less than significant with mitigation*)**	• SDG&E shall presume presence of San Diego fairy shrimp ~~and vernal pool fairy shrimp~~ in all vernal pools and road pools within and outside of the transmission line Segments C and D BSA and avoid the access roads with these pools to the maximum extent practicable. • If complete avoidance is not feasible, SDG&E may perform a survey of the pools during the wet season, identify the number and size of pools, and record whether they support indicator vernal pool plant species. • All impacts to vernal pools, with or without special-status species present, shall be mitigated at a 3:1 ratio. Mitigation may occur on-site provided a sufficient number of degraded pools exist in the vicinity and SDG&E receives approval from CPUC, USFWS, and CDFW for restoration and/or enhancement of the degraded pools. Otherwise, mitigation shall be implemented off-site at a pre-approved vernal pool restoration area. Mitigation credits, as approved by CPUC, CDFW, and USFWS, may be accumulated and used through advance creation, restoration, and enhancement of vernal pool basin area. The areas pre-approved by CPUC, USFWS, and CDFW for creation, restoration, and/or enhancement of vernal pool basin area shall be of high quality (e.g., Carmel Mesa or Otay Mesa) and shall support special-status species impacted by the project. Pre-approved vernal pool mitigation areas shall be managed and monitored pursuant to a Management Plan approved by CPUC, CDFW, and USFWS. If SDG&E does not mitigate at a pre-approved vernal pool restoration area, then CPUC, CDFW, and USFWS concurrence on an acceptable mitigation site is required prior to any impacts to vernal pools. Recognizing that restoration efforts may vary somewhat, SDG&E shall prepare a detailed vernal pool restoration plan based on a generalized approach for vernal pool restoration which has been previously approved by USFWS and CDFW in SDG&E's NCCP. If further refinements to this generalized approach are necessary, CPUC, USFWS, and CDFW will respond to the restoration plan within 30 days. • No impacts to vernal pools shall occur until adequate mitigation for impacts to vernal pools and special-status vernal pool species has been secured off-site or a restoration plan has been approved by CPUC, CDFW, and USFWS for any mitigation outside of pre-approve vernal pool restoration areas. • No construction access shall be allowed at any time on the access road in transmission line Segment C between poles E9 and E12 as shown in Figure 4.1-4 due to the substantial number of existing vernal pools and road rut pools present within and immediately adjacent to the access road. ~~Orange construction~~ Green snow fencing shall be installed at the end points of the restricted access with a moveable post that allows for a 4-foot wide opening. Temporary signage shall be posted on the fencing stating, "No construction access permitted." The no construction access area shall be monitored by a CPUC-, USFWS-, and CDFW-approved biologist to ensure no vehicle access or entry occurs throughout the duration of construction.

Significance Thresholds and Impacts (*Level of Significance*)	Mitigation Measures
	• Rather than assume listed San Diego fairy shrimp presence, SDG&E may conduct a USFWS protocol, wet season survey of the vernal pools and road rut pools for listed San Diego fairy shrimp. The survey shall be conducted by an individual that holds a recovery permit for San Diego fairy shrimp ~~and vernal pool fairy shrimp~~ pursuant to section 10(a)(1)(A) of the ESA. If these surveys are conducted, impacts to vernal pools ~~fairy shrimp shall require mitigation through an off-site approved vernal pool restoration area or restoration plan as described above,~~ (with or without San Diego fairy shrimp), and road rut pools supporting listed San Diego fairy shrimp shall require mitigation through an off-site approved vernal pool restoration area or restoration plan as described above and no mitigation would be required for road ruts pools that do not support special status species • Where access roads containing pools are used and the roads are not first repaired under the scenarios listed above, the following measures shall apply during project construction and operation/maintenance: – The delineation of all pool boundaries (i.e., the pool exclusion/buffer zone noted in APM BIO-4) shall be staked/flagged prior to the start of work. – A qualified biological monitor (see APM BIO-4), who holds a recovery permit for San Diego fairy shrimp ~~and vernal pool fairy shrimp~~ pursuant to section 10(a)(1)(A) of the ESA, shall be present to monitor access road use. – Helicopters shall be used where vehicle access is restricted by the exclusion zone(s) of the delineated pool(s) as determined by the qualified biological monitor. – The qualified biological monitor shall have the authority to halt any project activity that is deemed to be impacting, or potentially impacting, a pool. The qualified biological monitor shall consult with the work supervisor, and if necessary, the USFWS to resolve the issue. – All staking/flagging shall be removed by the biological monitor following completion of work. – A minimum of 150 feet shall be provided between pools and all staging, parking, and storage areas.

Significance Thresholds and Impacts (*Level of Significance*)	Mitigation Measures



Significance Thresholds and Impacts (*Level of Significance*)	Mitigation Measures
	Mitigation Measure Biology-5: Pre-Activity Surveys for QCB. SDG&E shall conduct a pre-activity survey for QCB in all project work areas and along all project access roads within the current USFWS survey area for QCB (USFWS 2014b) to determine areas of suitable QCB habitat. In areas where no suitable QCB habitat is found during the pre-activity survey, construction may occur at any time, consistent with the HCP for the QCB (i.e., the operational protocols in the 1995 Subregional NCCP), and no QCB mitigation shall be required. If suitable QCB habitat is present, and construction cannot avoid the suitable habitat, then one of the following shall occur: • A USFWS protocol, adult, flight-season survey for the QCB shall be conducted by an individual that holds a recovery permit for the QCB pursuant to section 10(a)(1)(A) of the ESA. The survey shall be conducted within suitable QCB habitat areas to determine whether or not the habitat is occupied by QCB. In areas where there is no QCB detected, construction activities may proceed without further review, and the suitable QCB habitat shall be mitigated at a 1:1 ratio per the methods in the HCP for the QCB. • If QCB are detected, efforts shall be made to avoid impacts to the occupied habitat. Impacts to occupied habitat shall be mitigated at a 2:1 ratio per the methods in the HCP for the QCB. • If the timing of the project will not allow for an adult, flight-season surveys to determine the presence or absence of QCB, presence of QCB will be assumed in all suitable habitats, and mitigation for impacts shall occur at a 2:1 ratio per the methods in the HCP for the QCB. If impacts to occupied QCB habitat (as determined by surveys or where QCB presence is assumed) are greater than one acre, SDG&E shall confer with USFWS to ensure that the activity's impact will not cause the permanent loss of QCB habitat.
Impact Bio-3: Potential for substantial adverse effect from project construction, either directly or through habitat modifications, on any amphibian species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS. ***(Less than significant with mitigation)***	**Mitigation Measure Biology-3: Weed Control Plan.** See above.
	Mitigation Measure Biology-4: Compensatory Mitigation for Vernal Pools. See above.
	Mitigation Measure Biology-6: Compensatory Mitigation for Impacts to Habitat. SDG&E shall restore temporarily impacted areas ~~to pre-construction conditions~~ following construction according to the performance criteria described below and/or shall purchase/dedicate suitable habitat for preservation to off-set permanently impacted areas. Restoration of some vegetation communities in temporarily impacted areas may not be possible if those areas are subject to vegetation management to maintain proper clearance between transmission lines and vegetation, for example. In those instances, the mitigation shall consist of off-site acquisition and preservation of the vegetation community. Restoration of temporarily impacted areas involves recontouring the land, replacing the topsoil (if it was collected), planting seed and/or container stock, maintaining (i.e., weeding,

Significance Thresholds and Impacts (*Level of Significance*)	Mitigation Measures

replacement planting, supplemental watering, etc.), and monitoring the restored area for a period of 5 years ~~and~~ or until year 5 success criteria are met.

SDG&E shall prepare a Habitat Restoration Plan that shall be subject to approval by the CPUC, USFWS, CDFW, City of San Diego (for restoration within City of San Diego MHPA), and MCAS Miramar (for restoration on MCAS Miramar) prior to habitat impacts. Required mitigation ratios are provided by habitat type in Table 4.1-10. In cases where the impacts to sensitive vegetation communities occur in the City of San Diego MHPA, the mitigation shall also occur in the MHPA. The Habitat Restoration Plan shall also identify, if applicable, the ~~need~~ potential for reintroduction and/or increasing MSCP-covered species populations within habitat restoration areas if those covered species were affected by the Proposed Project.

Table 4.1-10 Required Habitat Mitigation Ratios

Vegetation Community	Mitigation Ratio	
	Temporary	Permanent[1]
Diegan Coastal Sage Scrub		
Diegan coastal sage scrub	1:1	1:1
Diegan coastal sage scrub in the MHPA	1:1	2:1
Diegan coastal sage scrub-Disturbed	1:1	1:1
Diegan coastal sage scrub-Disturbed in the MHPA	1:1	2:1
Diegan coastal sage scrub-Revegetated	1:1	1:1
Diegan coastal sage scrub-Revegetated in the MHPA	---	2:1
Coastal Sage Scrub		
Coastal sage-chaparral scrub	0.5:1	1:1
Coastal sage-chaparral scrub in the MHPA	1:1	2:1
Chaparral		

Significance Thresholds and Impacts (*Level of Significance*)	Mitigation Measures		
	Chamise chaparral	0.5:1	1:1
	Chamise chaparral in the MHPA	1:1	2:1
	Chamise chaparral-disturbed	0.5:1	1:1
	Chamise chaparral-disturbed in the MHPA	1:1	2:1
	Scrub oak chaparral	1:1	1:1
	Scrub oak chaparral in the MHPA	2:1	2:1
	Southern mixed chaparral	0.5:1	1:1
	Southern mixed chaparral in the MHPA	1:1	2:1
	Southern mixed chaparral-disturbed	0.5:1	1:1
	Southern mixed chaparral-disturbed in the MHPA	1:1	2:1
	Grassland		
	Native grassland	1:1	1:1
	Native grassland in the MHPA	2:1	2:1
	Non-native grassland	0.5:1	1:1
	Non-native grassland in the MHPA	---	2:1
	Freshwater Marsh		
	Freshwater marsh	---	1:1
	Vernal Pool		
	San Diego Mesa Vernal Pool	3:1	3:1
	Riparian		
	Southern riparian scrub	---	1:1

Significance Thresholds and Impacts (*Level of Significance*)	Mitigation Measures		
	Mule fat scrub	---	1:1
	Mulefat scrub in MHPA	---	2:1
	Southern willow scrub	---	1:1
	Southern willow scrub in MHPA	---	2:1
	Tamarisk scrub in MHPA	---	2:1
	Southern coast live oak riparian forest	---	1:1
	Southern coast live oak riparian forest in MHPA	---	2:1
	Note: [1] Mitigation ratios for permanent impacts are consistent with SDG&E's NCCP; 1:1 for permanent impacts outside a preserve and 2:1 for permanent impacts inside a preserve.		

The Restoration Plan shall include the following performance criteria:

- Percent cover and composition shall be similar to the conditions of a nearby reference site, defined as variation of no more than 10 percent absolute cover from the reference site cover and species composition condition.
- Maintenance and monitoring for restoration shall be for ~~a minimum of~~ 5 years or until success criteria are met~~, even if established success criteria are met before the end of 5 years~~. Compensation planting areas shall be monitored eight times in Year 1, six times per year in Years 2 and 3, and 4 times per year in Years 4 and ~~5~~ above.
- Compensation planting areas shall be monitored for invasive plants in the first 5 years following replanting. Invasive plant monitoring shall occur eight times in Year 1, six times per year in Years 2 and 3, and 4 times per year in Years 4 and 5. If invasive plants are found during the 5-year monitoring period, they shall be removed as necessary to support meeting the cover and vegetation composition success criteria.
- If the restoration fails to meet the established success criteria after the maintenance and monitoring period, maintenance and monitoring shall extend beyond the 5-year period until the criteria are met or unless otherwise approved by the CPUC.
- Maintenance and monitoring shall be conducted following a prescribed schedule to assess progress and identify potential problems with the restoration. Remedial action (e.g., additional

Significance Thresholds and Impacts (*Level of Significance*)	Mitigation Measures
	planting, weeding, erosion control, use of container stock, supplemental watering, etc.) shall be taken by an experienced, licensed Habitat Restoration Contractor during the maintenance and monitoring period if necessary to ensure the success of the restoration. Any impacts associated with unauthorized activity (e.g., exceeding approved construction footprints or implementing the Habitat Management Plan after the allowed timeframe of 18 months following the initiation of any vegetation disturbing activities) shall be mitigated at a 5:1 ratio. Restoration of the unauthorized impacts shall be credited at a 1:1 ratio (i.e., mitigated by in-place habitat restoration); the remaining 4:1 shall be acquired and preserved off-site. For areas where habitat restoration cannot meet mitigation requirements, as determined by the Habitat Restoration Specialist in coordination with CPUC, USFWS, CDFW, and MCAS Miramar (for restoration on MCAS Miramar), off-site purchase and dedication of habitat (or as otherwise prescribed by MCAS Miramar for restoration on MCAS Miramar) shall be provided at the mitigation ratios provided in Table 4.1-10. ***Mitigation Parcels/Habitat Management Plans.*** All off-site mitigation parcels shall be approved by the CPUC, USFWS, CDFW and MCAS Miramar (as applicable) and must be acquired, or their acquisition must be assured~~, before the line is energized~~. To demonstrate that such parcels will be acquired, SDG&E shall submit a Habitat Acquisition Plan at least 120 days prior to any ground disturbing activities for CPUC, USFWS, CDFW, and MCAS Miramar (as applicable) review and approval. The Habitat Acquisition Plan shall include, but shall not be limited to: • Legal descriptions and maps of all parcels to be acquired; • Schedule that includes phasing relative to impacts; • Documentation demonstrating that the mitigation parcel(s) provides high quality habitat roughly equivalent in composition to the habitats that would be impacted by the project and at appropriate acreages; • Timing of conservation easement recording; • Initiation of habitat management activities relative to acquisition; and • Assurance mechanisms (e.g., performance bonds to assure adequate funding) for any parcels not actually acquired prior to vegetation disturbing activities. A Habitat Management Plan shall be prepared by a biologist and approved by the CPUC, USFWS, CDFW, and MCAS Miramar (as applicable) for all acquired off-site mitigation parcels. The Habitat Management Plan must be approved in writing by these agencies (as applicable) within 18 months of ~~prior to~~ the initiation of any vegetation disturbing activities. The Habitat Management Plan shall provide direction for the preservation and in-perpetuity management of all acquired, off-site mitigation parcels. The Habitat Management Plan shall include, but shall not be limited to: • Adequate SDG&E funding for the preparation and implementation of the HMP

Significance Thresholds and Impacts (*Level of Significance*)	Mitigation Measures
	• Legal descriptions of all mitigation parcels approved by the CPUC, USFWS, CDFW, and MCAS Miramar (for mitigation parcels to be acquired for MCAS Miramar impacts) • Baseline biological data for all mitigation parcels • Designation of a land management entity approved by the CPUC, USFWS, CDFW, and MCAS Miramar (for mitigation parcels to be acquired for MCAS Miramar impacts) to provide in-perpetuity management • A Property Analysis Record prepared by the designated land management entity that explains the amount of funding required to implement the Habitat Management Plan • Designation of responsible parties and their roles (e.g., provision of endowment by SDG&E to fund the Habitat Management Plan and implementation of the Habitat Management Plan by the designated land management entity) • Management specifications including, but not limited to, regular biological surveys to compare with the baseline data; invasive, non-native species control; fence/sign replacement or repair; public education; trash removal; and annual reports to CPUC, USFWS, CDFW, and MCAS Miramar (for mitigation parcels to be acquired for MCAS Miramar impacts)
Impact Bio-4: Potential for substantial adverse effect from project construction, either directly or through habitat modifications, on any reptile species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS. ***(Less than significant with mitigation)***	**Mitigation Measure Biology-1a, 1b, 1c,** and **1d:** See above. **Mitigation Measure Biology-3: Weed Control Plan.** See above. **Mitigation Measure Biology-4: Compensatory Mitigation for Vernal Pools.** See above. **Mitigation Measure Biology-6: Compensatory Mitigation for Impacts to Habitat.** See above.
Impact Bio-5: Potential for substantial adverse effect from project construction, either directly or through habitat modifications, on any avian species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS. ***(Less than significant with mitigation)***	**Mitigation Measure Biology-3: Weed Control Plan.** See above. **Mitigation Measure Biology-7: Mitigation for Bird Species.** This measure applies to all work areas in which any construction-related activities must be conducted during the nesting bird season (generally between January 15 and August 31, but may be earlier or later depending on species, location, and weather conditions). ***Nesting Bird Survey Requirements.*** If work is scheduled to occur during the avian nesting season, nesting bird surveys shall be conducted according to the following provisions: 1. Nest surveys shall occur within ~~48 hours~~ 5 days prior to the start of ground-disturbing construction or vegetation trimming or removal activities. If there is no work in an area for 7 days, it shall be considered a new work area if construction, vegetation trimming, or vegetation removal begins again.

Significance Thresholds and Impacts (*Level of Significance*)	Mitigation Measures
	2. Surveys shall be conducted with sufficient survey duration and intensity of effort necessary for the identification of active nests, which is defined as once birds begin constructing, preparing, or using a nest for egg-laying. A nest is no longer an "active nest" if abandoned by the adult birds or once fledglings are no longer dependent on the nest". Surveys shall include nests of protected species within vegetation identified for removal and/or pruning, and within ~~a~~ the following buffers of active work areas: ~~1 mile buffer for golden eagle, 0.5 mile buffer for Swainson's hawk,~~ 0.25-mile buffer for white-tailed kite~~;~~ ~~and~~ 500-foot buffer for other ~~avian and~~ raptor species. 3. Surveys shall be conducted during locally appropriate dates for nesting seasons determined in consultation with the USFWS and CDFW; note that generally the season is between January 15 and August 31 but may be earlier or later depending on species, location, and weather conditions. Species-specific nesting seasons for some species are identified below. 4. The surveys shall be conducted by a CPUC, USFWS-, and CDFW-approved qualified biologist. 5. Survey results shall be provided to CPUC, USFWS, and CDFW prior to initiating construction activities. 6. Work areas within which significant noise is not generated, such as work performed manually, by hand or on foot, and/or that would not cause significant disturbances to nesting birds (e.g., operating switches, driving on access roads, normally occurring activities at substations, and activities at staging and laydown areas) do not need to be surveyed prior to use. None of these activities shall result in physical contact with a nest. ***Avoid Impacts on Nesting Birds.*** During the nesting season (generally between January 15 and August 31) raptor nests that are located within a 500-foot buffer from a work location ~~and a 1-mile buffer for golden eagle and 0.5 mile buffer for Swainson's hawk,~~ shall be evaluated by a CPUC-, USFWS-, and CDFW-approved qualified biologist to determine whether the raptor nest is active. No trees with active raptor nests shall be removed during nesting season. No additional measures shall be implemented if active nests are more than the following distances from the nearest work areas: ~~(a) 1 mile for golden eagle, (b) 0.5 mile for Swainson's hawk,~~ (~~c~~ a) 0.25 mile for white-tailed kite, (~~d~~ b) 500 feet for raptors, Coastal California gnatcatcher, and least bell's vireo, (~~e~~ c) 250 feet for passerine birds in open space areas, or (~~f~~ d) 150 feet for common (non-special-status) passerine birds in residential, commercial, and industrial areas. Buffers shall not apply to construction-related traffic using existing roads where the use of such roads is not limited to project-specific use (i.e., county roads, highways, farm roads, or other private roads). Where road use is limited to project-specific use, a buffer reduction or approval to drive through a buffer shall be obtained as described below under "Buffer Reduction". As appropriate, exclusion techniques may be used for any construction equipment that is left unattended for more than 24 hours to reduce the possibility of birds nesting in the construction equipment. An example of an exclusion technique is covering equipment with tarps.

Significance Thresholds and Impacts (*Level of Significance*)	Mitigation Measures
	Buffer Reduction. The specified buffers from nesting birds may be reduced on a case-by-case basis if, based on compelling biological or ecological reasoning (e.g., the biology of the bird species, concealment of the nest site by topography, land use type, vegetation, level of project activity, and level of pre-existing disturbance on site), it is determined by a CPUC-, USFWS-, and CDFW-approved qualified biologist that implementation of a specified smaller buffer distance will still avoid nest abandonment and failure. This requirement includes buffer reductions or temporary buffer incursions for project-related use of roads where no stopping, standing, or other work activities shall occur in the buffer. Requests to reduce standard buffers or for temporary buffer incursions must be submitted to CPUC's independent biologist for review. Requests to reduce buffers must include: • Species • Location • Pre-existing conditions present on site • Description of the work to be conducted within the reduced buffer • Size and expected duration of proposed buffer reduction • Reason for the buffer reduction • Name and contact information of the CPUC-, USFWS-, and CDFW-approved qualified biologist(s) who requested the buffer reduction and will conduct subsequent monitoring • Proposed frequency and methods of monitoring necessary for the nest given the type of bird and surrounding conditions CPUC's independent biologist shall respond to SDG&E's request for a buffer reduction (and buffer reduction terms) within 1 business day; if a response is not received, SDG&E may proceed with the buffer reduction until CPUC's independent biologist can review and approve or deny the buffer reduction request. If SDG&E proceeds with a reduced buffer, nests shall be monitored on a daily basis during construction activities. If the buffer reduction request is denied, or if the qualified biologist determines that the nesting bird(s) are not tolerant of project activity, the specified buffer(s) listed above in this measure shall be implemented. Non-special-status species found building nests within the work areas after specific project activities begin may be tolerant of that specific project activity; however, the CPUC-, USFWS-, and CDFW-approved qualified biologist shall implement an appropriate buffer or other appropriate measures to protect the nest after taking into consideration the position of the nest, the bird species nesting on site, the type of work to be conducted, and duration of the construction disturbance. In these cases, the proposed buffer or other measures must be approved by CPUC's independent biologist through the buffer reduction process outlined in this measure, if buffers are less than those specified in this measure. These nests shall be monitored on a daily basis and only during construction activities (no monitoring required during periods when no work is conducted) by a qualified biologist until the qualified biologist has determined that the young have fledged or construction ends within the work area (whichever

Significance Thresholds and Impacts (*Level of Significance*)	Mitigation Measures
	occurs first). If the qualified biologist determines that the nesting bird(s) are not tolerant of project activity, the buffer outlined above in this measure shall be implemented. ***Specific Requirements for Coastal California Gnatcatcher and Least Bell's Vireo.*** Where there is potential nesting habitat for the coastal California gnatcatcher or least Bell's vireo within or adjacent to the MHPA, construction or operation/maintenance noise that exceeds the existing baseline noise level for a site by more than 3 dB hourly average or an hourly average threshold of 60 decibels, whichever is higher, shall be avoided during these species' breeding seasons as follows: coastal California Gnatcatcher March 1 through August 15, and least Bell's vireo March 15 through September 15. If avoidance is not possible during the breeding season, SDG&E shall work with a qualified acoustician approved by the CPUC, USFWS, and CDFW to develop and implement noise attenuation measures. The following measures shall be adhered to when project activities during the breeding season occur within riparian habitats that may support vireo and flycatcher: • A biologist knowledgeable of vireo and/or flycatcher biology and ecology, approved by the CPUC, USFWS, and CDFW, will survey within the project impact footprint and a 300-foot buffer (within riparian scrub) before clearing vegetation or project construction to check for vireo and/or flycatcher nesting activity. Should an active nest be located in the impact footprint, then work will be suspended until the nest is vacated. • Biological buffers of at least 100 feet will be maintained adjacent to active nests. For project activities during the breeding season adjacent to known occupied vireo and/or flycatcher nesting habitat, the biologist will monitor nesting bird activity. If the biologist determines that nesting birds are being disrupted by project activities, then work will be suspended until effective minimization measures (e.g., noise attenuation structures) developed in coordination with the CPUC, USFWS, and CDFW are in place or until after the breeding season is completed. Any lighting required during project activities will be shielded and directed away from vireo and/or flycatcher habitat to ensure that these areas are not artificially illuminated. ***Avian Protection on Power Lines.*** The project shall include collision-reducing techniques for transmission lines (based on Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2012; Avian Power Line Interaction Committee [APLIC] 2012). ***Monitoring and Reporting.*** All nests with a reduced buffer shall be monitored on a daily basis during construction activities by a CPUC-, USFWS-, and CDFW-approved qualified biologist until the qualified biologist has determined that the young have fledged or until one week after construction ends within the reduced buffer/work area (whichever occurs first). Nest locations and exclusion buffers shall be mapped (using geographic information systems [GIS]) for all nests identified. This information shall be maintained in a database and shall be provided to CPUC, CDFW, and USFWS. A monthly written report shall be submitted to CPUC, CDFW, and USFWS for construction within a reduced buffer and shall include the following: information included in buffer

Significance Thresholds and Impacts (*Level of Significance*)	Mitigation Measures
	reduction requests, work conducted within the work site, duration of work activities and related buffer reduction, information on nest success (eggs, young, and adults). No avian reporting shall be required for construction occurring outside of the nesting season and if construction activities do not occur within a reduced buffer during any calendar month. A final report shall be submitted to CPUC, CDFW, and USFWS at the end of each nesting season summarizing all avian-related monitoring results and outcomes for the duration of project construction. Nests located in areas of existing human presence and disturbance, such as in yards of private residences, or within commercial and or industrial properties, are likely acclimated to disturbance and do not need to be monitored, as determined by the CPUC-, USFWS-, and CDFW-approved qualified biologist and approved by CPUC's independent biologist.
	Mitigation Measure Biology-8: Burrowing Owl Monitoring and Mitigation Plan. SDG&E shall prepare a Burrowing Owl Monitoring and Mitigation Plan (BOMMP) consistent with the CDFW Staff Report on Burrowing Owl Mitigation (CDFW 2012). SDG&E shall submit the Draft BOMMP to CDFW and CPUC. SDG&E shall be required to obtain approval from CDFW on the BOMMP prior to construction. SDG&E shall provide the approved BOMMP to the CPUC 30 days prior to construction. In accordance with the Staff Report on Burrowing Owl Mitigation (CDFW 2012) and CDFW-approved BOMMP, SDG&E shall conduct a pre-construction take avoidance survey for the burrowing owl prior to initiating ground disturbance activities. In areas where owl presence is not found, construction may proceed without further mitigation. If western burrowing owl occupancy on site is confirmed during pre-construction take avoidance surveys, SDG&E shall implement the CDFW-approved Burrowing Owl Monitoring and Mitigation Plan in coordination with CDFW.
Impact Bio-6: Potential to have a substantial adverse effect from project construction, either directly or through habitat modifications, on any mammalian species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS. ***(Less than significant with mitigation)***	**Mitigation Measure Biology-1a, 1b, 1c,** and **1d:** See above.
	Mitigation Measure Biology-9: San Diego Desert Woodrat Mitigation. A CPUC-approved qualified biologist shall conduct a preconstruction survey to identify potential San Diego desert woodrat houses within the project work areas and within 5 feet of the edge of the work areas to avoid direct take of woodrats. All woodrat houses shall be documented and reported through the MMCRP. Woodrat houses found within the work site or within 5 feet from a work site shall be flagged or fenced for avoidance. If impacts to a woodrat house located within a work site are unavoidable, a CPUC-approved qualified biologist, prior to construction and outside of the breeding season (April through June), shall dismantle the house by hand, removing the materials layer by layer to allow for adult woodrats to escape. If young are present and found during the disassembling process, the CPUC-approved qualified biologist shall leave the site for at least 24 hours to allow for the rats to relocate their young on their own. This step shall be repeated as needed until the young have been relocated by the parent woodrats. Once the nest is vacant, the disassembly process shall be completed and the nest sticks shall be collected and moved to another suitable nearby location to allow for nest

Significance Thresholds and Impacts (*Level of Significance*)	Mitigation Measures
	reconstruction. Piles of cut vegetation/slash shall be retained near the work site prior to nest dismantling to provide refuge for woodrats that may become displaced.
	Mitigation Measure Biology-10: Mitigation for Special-Status Bat Species. Prior to construction, suitable special-status bat habitat shall be assessed by a CPUC- and CDFW-approved, qualified biologist in trees within a 50-foot buffer of active work areas and in any structures with suitable special-status bat roosting habitat within a 100-foot buffer of active work areas (e.g., bridges). If an active special-status bat maternity roost is found in a tree or structure, the approved biologist shall define an appropriate limited or no-work exclusion buffer surrounding the special-status bat maternity roost ~~based on the bat species, numbers, and roost type (i.e., individuals, small group, or potential maternal colony), the type of work to occur, and the duration of the work-related disturbance~~. The limited work or exclusion areas shall remain in effect until the approved biologist determines that the work would no longer be a disturbance to the roost. A reduction in the buffer may be approved by the qualified biologist if there is a change in the type of work to be conducted. The limited work or exclusion buffer shall not apply to construction-related traffic using existing roads where the use of such roads is not limited to project-specific use (i.e., county roads, highways, farm roads, or other private roads) and shall not apply if the roost(s) is/are located in a residential, commercial, or industrial area. The boundaries of the limited or no work buffer shall be clearly marked by the approved biologist. The approved biologist shall inspect construction and roost sites when construction is occurring to ensure the integrity of the limited or no-work buffer and to ensure that the size of the buffer is adequate based on site conditions and construction-generated noise, dust, etc. All bat roosts documented during pre-construction surveys shall be reported through the MMCRP.
Impact Bio 7: Potential to have a substantial adverse effect from project operation and maintenance, 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 the USFWS. ***(Less than significant with mitigation)***	**Mitigation Measure Biology-1a** and **1e:** See above.
	Mitigation Measure Biology-3: Weed Control Plan. See above.
	Mitigation Measure Biology-7: Mitigation for Bird Species. See above.
Impact Bio-8: Potential to cause a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional	**Mitigation Measure Biology-3: Weed Control Plan.** See above.
	Mitigation Measure Biology-4: Compensatory Mitigation for Vernal Pools. See above.
	Mitigation Measure Biology-6: Compensatory Mitigation for Impacts to Habitat. See above.

Significance Thresholds and Impacts (*Level of Significance*)	Mitigation Measures
plans, policies, or regulations, or by CDFW or USFWS. ***(Less than significant with mitigation)***	**Mitigation Measure Biology-11: Reseeding for Fires.** Should a fire occur and be determined by the CPUC's Consumer Protection and Safety Division or the California Department of Forestry and Fire Protection (Cal Fire) to be caused by the project, SDG&E shall reseed all natural areas — both public and private — that are burned as a result of the project-caused fire. Reseeding shall continue until the native vegetation community is reestablished. For example, arid chaparral requires a minimum 10-year period to reestablish an adequate seed bank and thereby resist vegetation type conversion. A reseeding plan shall be developed with input from Cal Fire ~~and,~~ CPUC, and City of San Diego (for ROW within and adjacent to City of San Diego MHPA) based on a native seed mix. Seeds shall be raked into the soil to avoid seed consumption, and reseeding shall be carried out once to coincide with the rainy season (October 1 through April 1) to increase the likelihood of germination success. SDG&E shall provide a written report documenting all reseeding activities to the CPUC. SDG&E shall make a good faith effort to obtain approval to reseed on private lands, as appropriate, and documentation of this good faith effort shall be submitted to the CPUC upon request. Specific reseeding requirements stipulated in this mitigation measure shall be subject to approval and modification by any public land-owning agency.
Impact Bio-9: Potential to cause 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.), or on state protected waters through direct removal, filling, hydrological interruption, or other means. ***(Less than significant with mitigation)***	**Mitigation Measure Biology-3: Weed Control Plan.** See above. **Mitigation Measure Biology-4: Compensatory Mitigation for Vernal Pools.** See above. **Mitigation Measure Biology-6: Compensatory Mitigation for Impacts to Habitat.** See above. **Mitigation Measure Biology-11: Reseeding for Fires.** See above.
Impact Bio-10: Potential to 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. ***(Less than significant; no mitigation required)***	
Impact Bio-11: Potential to conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. ***(No impact)***	

Significance Thresholds and Impacts (*Level of Significance*)	Mitigation Measures
Impact Bio-12: Potential to conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plan. **(*No impact*)**	
Aesthetics	
Impact Aesthetics-1: Have an adverse effect on a scenic vista or substantially damage scenic resources. **(*No impact*)**	
Impact Aesthetics-2: Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway. **(*No impact*)**	
Impact Aesthetics-3: Substantially degrade the existing visual character or quality of the site and its surroundings. **(*Significant and unavoidable*)**	**Mitigation Measure Aesthetics-1: Replace Landscape Trees.** SDG&E shall coordinate with the City of San Diego to replace any landscape trees within City of San Diego road right-of-way that are impacted during construction. SDG&E may either directly replace the trees, if approved by the City of San Diego, or SDG&E may pay a fee to the City of San Diego for replacement of the landscape trees. Tree replacement shall occur at 1:1 ratio. All replacement trees shall be maintained for a period of 5 years. Any trees that do not survive during the maintenance period shall be replaced.
	Mitigation Measure Aesthetics-2: Retaining Wall Screening. Retaining walls shall use blocks that accommodate plants along the wall face. The block color shall be similar in hue and value to the native soil or up to 2 shades darker. All retaining walls shall be planted with native, drought tolerant vegetation common to the area. SDG&E shall submit a retaining wall design and vegetation plan to the CPUC for review and approval. The retaining wall design shall show the planting pockets in the blocks and the color of the blocks for all project retaining walls. SDG&E shall not order or procure the blocks until CPUC approves the design and color of the blocks. The vegetation plan shall include a list of all species to be planted in the retaining walls and the container size for the plantings. Vegetation planted in the retaining walls shall be maintained and watered as needed until plant material is established. Plants that die shall be replaced with similar specimens. SDG&E shall monitor the vegetation planted in the retaining wall pockets for three years or until plants are fully established.

Significance Thresholds and Impacts (*Level of Significance*)	Mitigation Measures
	Mitigation Measure Aesthetics-3: Facilities Color Treatment Plan. SDG&E shall prepare a Facilities Color Treatment Plan describing the application of colors to all new structures. The proposed color treatments shall minimize visual intrusion and contrast by matching the new structure's color to the adjacent existing structures and surroundings. Ancillary structures shall use colors that are congruent with the landscape in which they are proposed. Color treatments shall reduce new structure contrast making new structures less noticeable. The Plan shall be submitted to CPUC for review and approval at least 90 days prior to ordering the first structure to be color treated. The Facilities Color Treatment Plan shall include: • Specification, and 11 x 17 inch color simulations at real-world scale, of the treatment proposed for use on project structures from identified KOPs. Structures include TSPs, retaining wall faces, and fences for cable poles and staging areas. • List of each major project structure, specifying the color and finish proposed • Two sets of brochures and/or color chips for the proposed color for each project element • A detailed schedule for completion of the treatment • A procedure to ensure proper treatment maintenance for the life of the project SDG&E shall not specify to the vendors the treatment of any structures treated during manufacture or perform the final treatment on any structures treated onsite during construction until SDG&E receives notification of approval of the Color Treatment Plan by the CPUC.
	Mitigation Measure Aesthetics-4: Cable Pole Screening. SDG&E shall prepare a Landscape Plan that details the landscape treatment and fence design around the cable poles. The Landscape Plan shall include vegetation to screen the base of the cable pole and fence to the extent feasible. Vegetation around the cable pole shall consist of container plantings due to the need to visually screen the cable pole. The vegetation type selected shall be drought-tolerant and compatible with the surrounding vegetation communities. Within City of San Diego Open Space Parks, vegetation shall consist of locally native species and shall be approved by the City of San Diego's MSCP Biologist. Vegetation planted around the cable pole shall be maintained and watered as needed until plant material is established. Plants that die shall be replaced with similar specimens. SDG&E shall monitor the vegetation around the cable pole ~~for a minimum of three years and~~ until all container plants are fully established. SDG&E shall submit the Landscape Plan to the CPUC for review and approval at least 60 days prior to construction of the cable pole. No work shall be conducted at the cable pole prior to CPUC approval of the Landscape Plan.

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Impact Aesthetics-4: Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area. ***(Less than significant with mitigation)***	**Mitigation Measure Aesthetics-5: Nighttime Lighting.** SDG&E shall ensure that all nighttime lighting used for construction is shielded and pointed down and directed away from surrounding properties and adjacent natural habitats.
Cultural Resources	
Impact Cultural-1: Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines §15064.5. ***(Less than significant with mitigation)***	**Mitigation Measure Cultural Resources-1: Cultural Resources Monitoring, Evaluation, and Treatment of Resources.** Archaeological monitoring shall be conducted during ground disturbing activities (i.e., grubbing, brushing, vegetation clearing, excavation, grading, etc.) in areas with high potential to discover historical and archaeological resources, as mapped on Figures 4.3-1 through 4.3-7. Monitoring teams shall work under the direct supervision of a CPUC-approved cultural resources specialist/archaeologist. Monitoring teams shall include one qualified archaeological monitor and one Native American monitor. In the event that ground disturbing activities simultaneously occur in multiple locations, a monitoring team shall be required at each location. If the CPUC-approved cultural resources specialist/archaeologist determines that the potential for cultural resources is low after initial ground-disturbance, the CPUC-approved cultural resources specialist/archaeologist may determine that monitoring is no longer required in that location. If previously undiscovered resources are identified during construction, all construction activities within 50 feet (15 meters) of the resource shall halt, and the monitoring team shall flag-off the area and notify the equipment operator, on-site supervisor, and the CPUC-approved cultural resources specialist/archaeologist of the finds. Construction efforts shall be temporarily diverted, and the CPUC-approved cultural resources specialist/archaeologist shall evaluate the resource and determine whether it is (1) eligible for the CRHR (and thus a historic resource for purposes of CEQA); or (2) a unique archaeological resource as defined by CEQA. If the resource is determined to be neither a unique archaeological nor a historical resource, work may commence in the area. If the resource meets the criteria for either a historical or unique archaeological resource, or both, work shall remain halted within 50 feet (15 meters) of the area of the find, and the CPUC-approved cultural resources specialist/archaeologist shall consult with CPUC staff and SDG&E's Cultural Resource Specialist regarding methods to ensure that no substantial adverse change would occur to the significance of the resource pursuant to CEQA Guidelines Section 15064.5(b). Preservation in place (i.e., avoidance) is the preferred method of mitigation for impacts on cultural resources and shall be required to mitigate impacts to previously undiscovered resources. Other methods of mitigation, described below, shall only be used if the CPUC-approved cultural resource specialist/ archaeologist determines the method would provide equivalent or superior mitigation of the impacts to the resource. The alternative methods of mitigation may include data recovery and documentation of the information contained in the site to answer questions about local prehistory (see Mitigation Measures

Significance Thresholds and Impacts (*Level of Significance*)	Mitigation Measures
	Cultural Resources-3 and Cultural Resources-4). The methods and results of evaluation or data recovery work at an archaeological find shall be documented in a professional-level technical report to be filed with the California Historical Resources Information System (CHRIS). Work in the area may commence upon completion of treatment, as approved by the CPUC. If data recovery of resources is necessary, additional archaeologists shall perform the excavation while the monitoring team(s) continues to monitor construction.
Impact Cultural-2: Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines §15064.5. ***(Less than significant with mitigation)***	**Mitigation Measure Cultural Resources-1: Cultural Resources Monitoring, Evaluation, and Treatment of Resources.** See above.
	Mitigation Measure Cultural Resources-2: Worker Training. Proposed Project personnel shall receive training regarding the appropriate work practices necessary to effectively implement the APMs and mitigation measures, including the potential for exposing subsurface cultural resources, including human remains. Training shall be required for all personnel before construction commences and repeated for all new personnel before they begin work on the Project. This training program shall be submitted to the CPUC for approval at least 30 days before the start of construction and include procedures to be followed upon the discovery or suspected discovery of archaeological materials and human remains, consistent with the procedures set forth in Mitigation Measure Cultural Resources 1~~, 2~~ and ~~5~~ Cultural Resources-4.
	Mitigation Measure Cultural Resources-3: Monitoring Report. Upon completion of archaeological monitoring, SDG&E shall prepare a report that summarizes monitoring efforts and the results, analyses, and conclusions of the monitoring program. The report shall be submitted to the CPUC within 60 days of the close of construction. If no archaeological resources are discovered during construction, a letter report shall be submitted to the CPUC summarizing monitoring efforts. If archaeological resources are identified during construction, the report shall be consistent with the California Archaeological Resources Management Reports (ARMR) and commensurate with the nature and significance of the identified resource(s). All archaeological material shall be curated at a recognized curation facility unless the Tribe or Band requests that the Native American artifacts be reburied on site. Any newly identified cultural resources shall be recorded with the SCIC.
Impact Cultural-3: Disturb human remains, including those interred outside of formal cemeteries. ***(Less than significant with mitigation)***	**Mitigation Measure Cultural Resources-1: Cultural Resources Monitoring, Evaluation, and Treatment of Resources.** See above.
	Mitigation Measure Cultural Resources-2: Worker Training. See above.
	Mitigation Measure Cultural Resources-3: Monitoring Report. See above.

Significance Thresholds and Impacts (*Level of Significance*)	Mitigation Measures
	Mitigation Measure Cultural Resources-4: Procedures for Discovery of Human Remains. In the event that human remains or suspected human remains are identified, SDG&E shall comply with California law (Heath and Safety Code Section 7050.5; PRC Sections 5097.94, 5097.98, and 5097.99). The area shall be flagged off and all construction activities within 50 feet (15 meters) of the find shall immediately cease. The CPUC-approved cultural resources specialist/archaeologist and SDG&E shall be immediately notified, and the cultural resources specialist/archaeologist shall examine the find. If the CPUC-approved cultural resources specialist/ archaeologist determines that there may be human remains, SDG&E shall immediately contact the Medical Examiner at the San Diego County Coroner's office. The Medical Examiner has two (2) working days to examine the remains after being notified by SDG&E. If the Medical Examiner believes the remains are Native American, he/she shall notify the California Native American Heritage Commission (NAHC) within 24 hours. If the remains are not believed to be Native American, the appropriate local law enforcement agency will be notified. The NAHC will immediately notify the person it believes to be the most likely descendant (MLD) of the remains, and the MLD has 48 hours to make recommendations to the landowner or representative for the respectful treatment or disposition of the human remains and any associated grave goods. If the MLD does not make recommendations within 48 hours, the remains shall be reinterred in the location they were discovered and the area of the property shall be secured from further disturbance. If there are disputes between the landowners and the MLD, the NAHC shall mediate the dispute and attempt to find a solution. If the mediation fails to provide measures acceptable to the landowner, the landowner or their representative shall reinter the remains and associated grave goods and funerary objects in an area of the property secure from further disturbance. The location of any reburial of Native American human remains shall not be disclosed to the public and shall not be governed by public disclosure requirements of the California Public Records Act, Cal. Govt. Code § 6250 et seq., unless otherwise required by law. The Medical Examiner shall withhold public disclosure of information related to such reburial pursuant to the specific exemption set forth in California Government Code Section 6254(r).
Paleontological Resources	
Impact Paleontology-1: Potential to directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. ***(Less than significant with mitigation)***	**Mitigation Measure Paleontology-1: Paleontological Monitoring.** Paleontological monitoring shall be required for all ground-disturbing activities that occur in formations determined to have a moderate to high paleontological sensitivity; ground-disturbing activities that occur areas with indeterminate, low, or marginal paleontological sensitivity may be conducted on a part-time basis at the discretion of the qualified paleontologist, and areas with zero paleontological sensitivity will not require monitoring. Paleontological monitoring shall be conducted by a qualified paleontological monitor under the direction of a CPUC-approved, qualified paleontologist. The qualified paleontologist shall have a Master's or PhD in paleontology, have knowledge of the local paleontology, and be familiar with paleontological procedures and techniques.

Significance Thresholds and Impacts (*Level of Significance*)	Mitigation Measures
	Paleontological monitoring shall also be required for all construction activities that require excavation, grading, or augering of 5 feet in diameter or greater at depths greater than 5 feet only in areas where these activities will disturb previously undisturbed strata in moderate to high paleontologically sensitive formations.
	Mitigation Measure Paleontology-2: Note ~~Paleontological~~ Monitoring Areas on Plans. All project areas that would require paleontological monitoring shall be noted on construction drawings and plans. A CPUC-approved, qualified paleontologist shall attend pre-construction meetings, as needed, to consult with the excavation and grading contractor concerning the schedule for excavations and other surface disturbance, paleontological field techniques, and safety issues.
	Mitigation Measure Paleontology-3: Avoidance of Resources or Other Methods of Mitigation. In the event that a previously unidentified paleontological resource is uncovered during project implementation, all ground-disturbing work within 50 feet (15 meters) of the discovery shall be halted. A CPUC-approved, qualified paleontologist shall inspect the discovery and determine whether further investigation is required. If the discovery can be avoided and no further impacts will occur, no further effort shall be required. If the resource cannot be avoided and may be subject to further impact, the qualified paleontologist shall evaluate the resource and determine whether it is "unique" under CEQA, Appendix G, part V. If the resource is determined to be unique, ~~T~~the determination and associated plan for protection of the resource shall be provided to CPUC for review and approval. If the resource is determined not to be unique, work may commence in the area. If the resource is determined to be a unique paleontological resource, work shall remain halted, and the qualified paleontologist shall consult with SDG&E and CPUC staff regarding methods to ensure that no substantial adverse change would occur to the significance of the resource pursuant to CEQA. Preservation in place (i.e., avoidance) is the preferred method of mitigation for impacts to paleontological resources and shall be required unless there are other equally effective methods. Other methods may be used but must ensure that the fossils are recovered, prepared, identified, catalogued, and analyzed according to current professional standards under the direction of a qualified paleontologist. All recovered fossils shall be curated at an accredited and permanent scientific institution according to Society of Vertebrate Paleontology standard guidelines (SVP 2010) standards. Work may commence upon completion of treatment, as approved by CPUC. A final summary report shall be completed. This report shall include discussions of the methods used, stratigraphy exposed, fossils collected, and significance of recovered fossils. The report shall also include an itemized inventory of all collected and catalogued fossil specimens.

Significance Thresholds and Impacts (*Level of Significance*)	Mitigation Measures
Geology and Soils	
Impact Geology Soils Minerals-1: Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: rupture of a known earthquake fault; strong seismic ground-shaking; seismic-related ground failure including liquefaction; or landslides. ***(Less than significant with mitigation)***	**Mitigation Measure Geology-1: Geotechnical Investigation for Liquefaction.** The design level geotechnical investigations to be performed by SDG&E shall include investigations that assess the potential for liquefaction to affect the Project and all associated facilities, specifically at tubular steel pole locations in areas with potential liquefaction-related impacts. Where these hazards are found to occur, appropriate engineering design and construction measures shall be incorporated into the project designs as deemed appropriate by the a California-licensed Geotechnical Engineer or Certified Engineering Geologist. Design measures that would mitigate liquefaction-related impacts could include construction of pile foundations, ground improvement of liquefiable zones, and incorporation of slack in cables to allow ground deformations without damage to structures. Study results and proposed solutions to mitigate liquefaction shall be provided to the CPUC for review and approval at least 60 days before final project design.
	Mitigation Measure Geology-2: Geotechnical Investigation for Landslides. The design-level geotechnical surveys conducted by SDG&E shall include slope stability analyses in areas of planned grading and excavation that cross and are immediately adjacent to hills and mountains. These surveys shall acquire data that shall allow identification of specific areas with the potential for unstable slopes, landslides, earth flows, and debris flows along the approved transmission line route and in other areas of ground disturbance, such as grading for access and spur roads. The investigations shall include an evaluation of subsurface conditions, identification of potential landslide hazards, and shall provide information for development of excavation plans and procedures. If the results of the geotechnical survey indicate the presence of unstable slopes at or adjacent to Project structures, appropriate support and protection measures shall be designed and implemented to maintain the stability of slopes adjacent to newly graded or re-graded access roads, work areas, and project structures during and after construction, and to minimize potential for damage to project facilities. These design measures shall include, but are not limited to, retaining walls, visquene, removal of unstable materials, and avoidance of highly unstable areas. SDG&E shall document compliance with this measure prior to the final project design by submitting a report to the CPUC for review and approval at least 60 days before construction. The report shall document the investigations and detail the specific support and protection measures that shall be implemented.
Impact Geology Soils Minerals-2: Result in substantial soil erosion or the loss of topsoil ***(Less than significant with mitigation)***	**Mitigation Measure Biology-6: Compensatory Mitigation for Impacts to Habitat.** See above.

Significance Thresholds and Impacts (*Level of Significance*)	Mitigation Measures
Impact Geology Soils Minerals-3: Be located on a geologic unit of soil that is unstable, or that would become unstable as a result of the project, and expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse ***(Less than significant with mitigation)***	**Mitigation Measure Geology-1: Geotechnical Investigation for Liquefaction.** See above.
	Mitigation Measure Geology-2: Geotechnical Investigation for Landslides. See above.
	Mitigation Measure Geology-3: Assess Potential for Collapsible and Expansive Soils. The design-level geotechnical surveys shall identify areas with potentially expansive or collapsible soils and include appropriate design features, including excavation of potentially expansive or collapsible soils during construction and replacement with engineered backfill, ground-treatment processes, and redirection of surface water and drainage away from expansive foundation soils. Studies shall conform to industry standards of care and American Society for Testing and Materials standards for field and laboratory testing. Study results and proposed solutions shall be provided to the CPUC for review and approval at least 60 days before construction. The report shall document the investigations and detail the specific support and protection measures that shall be implemented.
Impact Geology Soils Minerals-4: Be located on expansive soil, as defined in Table 181-B of the Uniform Building Code (1994), creating substantial risks to life or property ***(Less than significant with mitigation)***	**Mitigation Measure Geology-3: Assess Potential for Collapsible and Expansive Soils.** See above.
Impact Geology Soils Minerals-5: 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. ***(No impact)***	
Impact Geology Soils-6: Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state. ***(No impact)***	
Impact Geology Soils Minerals-7: 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 ***(No impact)***	

Significance Thresholds and Impacts (*Level of Significance*)	Mitigation Measures
Hydrology and Water Quality	
Impact Hydro-1: Violate any water quality standards or waste discharge requirements. **(*Less than significant with mitigation*)**	**Mitigation Measure Hydrology-1: SWPPP and Treatment of Shallow Groundwater Discharge.** SDG&E shall prepare a Stormwater Pollution Prevention Plan in compliance with the State Water Resources Control Board Construction General Permit CAS000002 (Order No. 2012-0006-DWQ) and City of San Diego Stormwater Standards Manual (2012). Project construction plans and the SWPPP shall be submitted to the CPUC and the City of San Diego for review and approval prior to construction. The SWPPP shall address erosion and sedimentation control, groundwater dewatering procedures, hazardous materials identification, handling, disposal and emergency spill procedures, and any other best management procedures necessary to prevent sediment or contaminants from entering Los Peñasquitos Creek. Groundwater extracted during construction dewatering shall not be discharged to any surface waters or storm drains. If dewatering is necessary, the water shall either be used: (i) to irrigate upland areas, (ii) for dust control, or (iii) as makeup for a construction process (e.g., concrete production). If dewatering of contaminated groundwater is necessary, the water shall be disposed of in accordance with all applicable laws and procedures described in the SWPPP.
	Mitigation Measure Hydrology-2: Restrict Dust Control Water Usage. Water shall only be applied under APM AIR-1 to maintain moist soils. No water shall be applied during or immediately following rain events when soils are already damp. Dust control water shall be applied in a manner that does not create or contribute to runoff.
	Mitigation Measure Biology-4: Compensatory Mitigation for Vernal Pools. See above.
	Mitigation Measure Biology-6: Compensatory Mitigation for Impacts to Habitat. See above.
	Mitigation Measure Hazards-2: Spill Prevention, Control, and Countermeasures Plan. See below.
Impact Hydro-2: 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. **(*Less than significant with mitigation*)**	**Mitigation Measure Hydrology-3: Reclaimed Water Use for Irrigation.** Water for operation and maintenance activities, including irrigation of restoration areas, shall be obtained solely from reclaimed water sources. Groundwater shall not be used.

Significance Thresholds and Impacts (*Level of Significance*)	Mitigation Measures
Impact Hydro-3: 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. ***(Less than significant with mitigation)***	**Mitigation Measure Hydrology-1: SWPPP and Treatment of Shallow Groundwater Discharge.** See above.
	Mitigation Measure Hydrology-2: Restrict Dust Control Water Usage. See above.
Impact Hydro-4: 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. ***(Less than significant; no mitigation required)***	
Impact Hydro-5: 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. ***(Less than significant; no mitigation required)***	
Impact Hydro-6: Otherwise substantially degrade water quality. ***(Less than significant with mitigation)***	**Mitigation Measure Hazards-2: Spill Prevention, Control, and Countermeasures Plan.** See below.
Impact Hydro-7: Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map. ***(No impact)***	
Impact Hydro-8: Locate structures that would impede or redirect flood flows within a 100-year flood hazard area. ***(No impact)***	

Significance Thresholds and Impacts (*Level of Significance*)	Mitigation Measures
Impact Hydro-9: 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. **(*Less than significant; no mitigation required*)**	
Impact Hydro-10: Cause inundation by seiche, tsunami, or mudflow. **(*Less than significant; no mitigation required*)**	
Transportation and Traffic	
Impact Traffic-1: 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. **(*Significant and unavoidable*)**	**Mitigation Measure Traffic-1: Construction Transportation Management Plan.** SDG&E shall develop and implement a project-specific Construction Transportation Management Plan (CTMP). SDG&E shall submit the plan to CPUC for review and approval at least 30 days prior to construction. The CTMP shall conform to the California Joint Utility Traffic Control Committee's Work Area Protection and Traffic Control Manual. The CTMP shall include provisions for the following: • Implementation of standard safety practices, including installation of appropriate barriers between work zones and transportation facilities, placement of appropriate signage, and use of traffic control devices. • Use of flaggers and/or signage to guide vehicles through or around construction zones using proper techniques for construction activities including staging yard entrance and exit. • Alternate traffic routes and the use of construction personnel carpools or shuttles to avoid roads that are operating at LOS D or lower. • Traffic detours for any road or lane closures with appropriate signage marking the detours. • Timing of worker commutes and material deliveries to avoid peak commuting hours. • Timing of lane and road closures. • Locations that would be accessed and receive material deliveries via helicopter. • Plans for construction worker parking and transportation to work sites • Methods for keeping roadways clean. • Storage of all equipment and materials in designated work areas in a manner that minimizes traffic obstructions and maximizes sign visibility. • Limiting of vehicles to safe speed levels according to posted speed limits, road conditions, and weather conditions. • Coordination with public transit providers.

Significance Thresholds and Impacts (*Level of Significance*)	Mitigation Measures
	• Routing of trucks to avoid minor roads, where possible, to reduce congestion and potential asphalt damage. • Repair of asphalt and other road damage (e.g., curb and gutter damage, rutting in unpaved roads) caused by construction vehicles. • Detours for cyclists and pedestrians when bike lanes or sidewalks must be closed. • Abiding by encroachment permit conditions, which shall supersede conflicting provisions in the CTMP. The CTMP must at a minimum comply with the requirements of the appropriate City ~~of the City of San Diego and the City of Poway~~ and must be submitted to the respective cities for review and approval at least 60 days prior to commencing construction activities.
Impact Traffic-2: 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. **(*Significant and unavoidable*)**	**Mitigation Measure Traffic-1: Construction Transportation Management Plan.** See above.
Impact Traffic-3: 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. **(*Less than significant with mitigation*)**	**Mitigation Measure Traffic-2: ~~Helicopter Lift Plan~~ Congested Area Plan.** Prior to construction, helicopter contractors shall coordinate helicopter activities for the project with the regional FAA office and obtain any required approvals to operate helicopters. FAA coordination shall include submittal of a ~~Helicopter Lift Plan~~ Congested Area Plan prepared by the helicopter operator to obtain approval for the helicopter operations for all routes ~~within 1,500 feet of residences or~~ that would cross over "congested areas" as described in 14 CFR 133.33. The ~~Helicopter Lift Plan~~ Congested Area Plan will identify ~~the location of the lift,~~ anticipated work dates, a detailed description of the work to be performed, ~~any required notifications or coordination to local agencies or adjacent property owners to restrict work area access,~~ any safety hazard control measures that are required, and appropriate emergency procedures and emergency landing area(s). Helicopter contractors shall provide the CPUC with all required approvals, documents, and conditions of work prior to conducting helicopter activities for the project.
Impact Traffic-4: Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). **(*Less than significant with mitigation*)**	**Mitigation Measure Traffic-1: Construction Transportation Management Plan.** See above. **Mitigation Measure Traffic-3: Post-Construction Road Repair.** Prior to construction, SDG&E shall conduct a pre-construction road condition assessment along Carmel Valley Road and entrances and exits to all staging yards. SDG&E shall submit the pre-construction road condition assessment to the CPUC and the local jurisdiction (e.g., City of San Diego or City of Poway). If damage to roads occurs

Significance Thresholds and Impacts (*Level of Significance*)	Mitigation Measures
	as a result of project construction or construction vehicle traffic, SDG&E shall restore damaged roadways within 60 days after the completion of construction at their own expense under the direction of and to the construction standard of the affected local jurisdiction to ensure that impacted roads are adequately repaired.
	Mitigation Measure Traffic-4: Temporary Traffic Control Measures. ~~To mitigate the risk of the conductor falling onto traveled roadways during wire stringing operations,~~ Prior to conductor stringing, SDG&E shall determine whether a temporary ~~temporarily close~~ road~~s~~ closure or ~~incorporate~~ temporary support measures to protect traffic, such as guard structures or netting across roadways that would catch and support the conductor above traffic, would be necessary in the event that tension control of the conductor is lost during installation. The selected temporary measures to be incorporated shall be identified on construction plans and installed by SDG&E in advance of construction and shall remain in place until the conductor is clipped into support hardware on the transmission line structures. SDG&E shall implement all traffic control procedures and measures defined in Mitigation Measure Traffic-1 during installation of temporary support measures or temporary road closure.
	Mitigation Measure Traffic-5: Highway Closure Plans. SDG&E shall prepare and submit to Caltrans closure plans as part of the encroachment permit application at least 30 days prior to crossings of SR-56 and I-15. The plans shall require that closure or partial closure of SR-56 and I-15 be limited to off-peak, non-daytime hours, from 10 PM to 5 AM, and that signage be posted prior to the closure to alert drivers of the closure in accordance with Caltrans requirements. Highway closure times will be reviewed and approved by Caltrans to minimize delay to SR-56 and I-15 traffic. The plan shall also outline suggested detours to use during the closures, traffic, including routes and signage. No work shall begin in Caltrans right-of-way until the encroachment permit and Highway Closure Plan are approved by Caltrans. Should emergency evacuation occur prior to or during the highway closure, the closure shall be delayed or ceased to allow unimpeded flow of traffic.
	Mitigation Measure Traffic-6: Restrict Road Closures and Maintain Access. SDG&E shall restrict all necessary lane closures or obstructions ~~on major roadways~~ associated with overhead or underground construction activities to off-peak periods to reduce traffic delays. Lane closures must not occur between 6:00 and 9:30 AM and between 3:30 and 6:30 PM, unless otherwise directed in writing by the responsible public agency issuing an encroachment permit. SDG&E shall coordinate with schools prior to construction within 1,000 feet of school property to ensure entryways to schools are not blocked during peak drop-off and pick-up hours. Underground work areas within intersections or traffic lanes shall be adequately covered with steel plating prior to 3:30 PM to allow uninterrupted traffic flow during peak traffic periods. All residents within 300 feet of proposed temporary lane or road closures shall be notified ~~within~~ at least 7 days ~~of~~ prior to a temporary lane or road closure. SDG&E shall maintain travel through intersections at all times during construction. Access to driveways including entrances to residential communities shall be maintained at all times during construction. SDG&E or its

Significance Thresholds and Impacts (*Level of Significance*)	Mitigation Measures
	construction contractors shall provide the ability to quickly lay a temporary steel plate trench bridge upon request in order to ensure driveway access to schools, businesses, and residences and shall provide continuous access to properties when not actively constructing the underground cable alignment. In the event of a nearby fire or other emergency, steel plating shall be placed over underground work areas and construction equipment shall be removed from the partially or fully closed roadways, as needed, to permit uninterrupted traffic flow.
	Mitigation Measure Traffic-7: Closure Notification and Detours. Where construction results in temporary closures of sidewalks and other pedestrian facilities, SDG&E shall provide temporary pedestrian access, through detours or safe areas along the construction zone. Where construction activity results in bike route or bike path closures, appropriate detours shall be defined. Signs shall be placed along the closed bike path a minimum of 7 days prior to bike path closure notifying bicyclists of the proposed construction activities and duration of bike path closure. Notifications posted along the bike path shall include the locations of detours and alternate routes to avoid conflicts with the construction area.
Impact Traffic-5: Result in inadequate emergency access**. (*Less than significant with mitigation*)**	**Mitigation Measure Traffic-1: Construction Transportation Management Plan.** See above.
	Mitigation Measure Traffic-6: Restrict Road Closures and Maintain Access. See above.
	Mitigation Measure Traffic-8: Notify Emergency Personnel of Road Closures. SDG&E shall notify local emergency personnel (i.e., fire departments, police departments, ambulance, and paramedic services) at least 1 week prior to lane or road closures. The notice shall include location(s), date(s), time(s), and duration of closure(s), and a contact number for SDG&E project personnel.
Impact Traffic-6: The project would conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities. **(*Less than significant with mitigation*)**	**Mitigation Measure Traffic-1: Construction Transportation Management Plan.** See above.
	Mitigation Measure Traffic-7: Closure Notification and Detours. See above.
Impact Traffic-7: Cause temporary road and lane closures that would temporarily disrupt traffic flow. **(*Less than significant with mitigation*)**	**Mitigation Measure Traffic-5: Highway Closure Plan.** See above.
	Mitigation Measure Traffic-6: Restrict Road Closures and Maintain Access. See above.

Significance Thresholds and Impacts (*Level of Significance*)	Mitigation Measures
Impact Traffic-8: The project would result in inadequate parking capacity. **(*Significant and unavoidable*)**	**Mitigation Measure Traffic-9: Notification of Temporary Parking Closures.** SDG&E shall notify the public of any temporary parking space closures. Notification of temporary parking space closure shall be made through multiple media such as local newspapers and on-site postings at least 14 days prior to any closures.
	Mitigation Measure Traffic-10: Avoid Parking Loss during Periods of Heavy Use. SDG&E shall coordinate with the City of San Diego Department of Parks and Recreation regarding the timing and location of stringing activities within Black Mountain Ranch Community Park. SDG&E shall avoid impacts to any parking spaces within the park during the periods of heavy recreational use identified by the City. SDG&E shall provide documentation of City of San Diego approval of use of the parking lot to the CPUC at least 30 days prior to any construction activities that would result in the loss of parking spaces within Black Mountain Ranch Community Park.
Noise	
Impact Noise-1: Expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance or applicable standards of other agencies. **(*Significant and unavoidable*)**	**Mitigation Measure Noise-1: Resident Notification and Complaints.** SDG&E shall provide notice by mail at least 1 week prior to construction activities to all sensitive receptors and residences within 500 feet of construction sites, staging yards, and access roads, and within 1,000 feet of helicopter fly yards and flight paths. SDG&E shall also post notices in public areas, including recreational use areas, within 300 feet of the project alignment and construction work areas. The announcement shall state ~~specifically~~ where and when construction will occur in the area. For areas that would be exposed to helicopter noise, the announcement shall provide ~~specific~~ details on the schedule of the dates, times, and duration of helicopter activities. Notices shall provide tips on reducing noise intrusion, for example, by closing windows facing the planned construction. SDG&E shall identify and provide a public liaison person before and during construction to respond to concerns of neighboring receptors, including residents, about noise construction disturbance. SDG&E shall also establish a toll-free telephone number for receiving questions or complaints during construction and develop procedures for responding to callers. Procedures for reaching the public liaison officer via telephone or in person shall be included in the above notices and also posted conspicuously at the construction site(s). SDG&E shall address all complaints within 1 week of when the complaint is filed. SDG&E shall provide monthly reports with records of complaints and responses to the CPUC. These reports shall be provided to CPUC within 15 days of the end of the month.
	Mitigation Measure Noise-2: Noise-suppression Techniques. SDG&E shall implement the following noise-suppression techniques to avoid possible violations of local rules, standards, and ordinances from construction noise: • Night and ~~weekend~~ Sunday construction activities shall be limited to activities that will not produce noise greater than 40 dBA at the nearest receptor (school, residence, hospital, or place

Significance Thresholds and Impacts (*Level of Significance*)	Mitigation Measures
	of worship). Construction activities permitted to occur during nights and ~~weekends~~ Sundays include: • Arrival and departure of workers at staging yards • Construction management tailboard meetings • Staging yard operations including maintenance of equipment and material deliveries • Security operations in yards and at locations where equipment/material is stored on the ROW overnight • SDG&E shall apply for and obtain ~~variances~~ a construction noise permit from the City of San Diego and the City of Poway for construction activities that must occur outside of the daytime hours allowed by local ordinances in each jurisdiction. SDG&E shall submit a copy of approved ~~variances~~ construction noise permit to the CPUC at least two weeks prior to construction activities requiring the variance. The CPUC will not authorize any work outside of locally permitted construction hours that would exceed local standards without an approved ~~variance~~ construction noise permit. • Sound walls or acoustic blankets shall be temporarily installed to shield adjacent residences from stationary equipment (e.g., generators) where residences are located within 200 feet and schools are located within 300 feet of the equipment and where adequate room for sound walls or acoustic blankets exists. The sound walls or acoustic blankets shall have a height of no less than 3 feet greater than noise-generating piece(s) or parts of equipment, a Sound Transmission Class (STC) of 19 or greater, and a surface with a solid face from top to bottom without any openings or cutouts along the face or at the base of the barrier. If sound walls or acoustic blankets would not reduce noise levels to below acceptable limits or if an oversight agency (i.e., City of San Diego or Caltrans) does not approve of the installation of sound walls within encroachment permits and/or traffic control plans, SDG&E shall offer to relocate affected residents depending on the location of the residences and the level of construction noise for the duration of the noise-generating activity. • Construction traffic shall be routed away from residences and schools, where feasible. • Unnecessary construction vehicle use and idling time shall be minimized. The ability to limit construction vehicle idling time is dependent upon the sequence of construction activities and when and where vehicles are needed or staged. If a vehicle is not required for use immediately or continuously for construction activities, its engine shall be shut off.
	Mitigation Measure Noise-3: Helicopter Take-off and Landing Areas. Helicopter takeoff and landing areas shall be located a minimum of 300 feet from the nearest sensitive receptor. Helicopter takeoff and landing shall only occur from the hours of 7 AM to 7 PM in the City of San Diego and 7 AM to 5 PM in the City of Poway. No helicopter takeoff and landing areas shall be permitted at the Evergreen Nursery staging yard due to the close proximity of sensitive receptors adjacent to this staging yard.

Significance Thresholds and Impacts (*Level of Significance*)	Mitigation Measures
	Mitigation Measure Noise-4: Corona Rings. SDG&E shall install corona rings on all insulators to minimize the effects of corona along the 230-kV transmission line.
	Mitigation Measure Noise-5: ~~Respond to~~ Corona Noise Complaints. SDG&E shall respond to third-party complaints of corona noise generated by operation of the transmission line by investigating the complaints and by implementing feasible and appropriate measures (such as wash insulators, repair damaged conductors, insulators, or other hardware). As part of SDG&E's repair inspection and maintenance program, the transmission line shall be patrolled, and damaged insulators or other transmission line materials, which could cause excessive noise, shall be repaired or replaced.
Impact Noise-2: Expose persons to or generate excessive groundborne vibration or groundborne noise levels. ***(Less than significant with mitigation)***	**Mitigation Measure Hazards-1: Site-Specific Blasting Plan.** See below.
Impact Noise-3: Result in a substantial permanent increase in ambient noise levels in the project vicinity above existing noise levels. ***(Significant and unavoidable)***	**Mitigation Measure Noise-4: Corona Rings.** See above.
	Mitigation Measure Noise-5: Respond to Corona Noise Complaints. See above.
Impact Noise-4: Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity during construction. ***(Significant and unavoidable)***	**Mitigation Measure Noise-1: Resident Notification and Complaints.** See above.
	Mitigation Measure Noise-2: Noise-suppression Techniques. See above.
	Mitigation Measure Noise-3: Helicopter Take-off and Landing Areas. See above.
	Mitigation Measure Noise-6: Coordinate ~~Helicopter~~ Construction Activity with Schools. SDG&E shall coordinate with local schools at least 48 hours prior to helicopter activities within 1,000 feet of a school to schedule helicopter activities and transmission line construction activities, including power pole installation and trenching activities. SDG&E shall file a Congested Area Plan with the FAA (see Mitigation Measure Traffic-2) and file all relevant helicopter information with the Department of Transportation Aeronautical Division when using helicopters to conduct transmission line construction activities with 1,000 feet of a school. No activities shall be allowed within 300 feet of school properties at times when classes are in session. Helicopter activities and construction near schools shall be conducted outside of active instruction periods (e.g., before school, after school, during lunch or classroom breaks). Schools shall be notified of any helicopter activities that would ~~increase the noise level at classrooms by 5 dBA or more~~ occur within 1,000 feet of school property at least 30 days prior to helicopter use.
	Mitigation Measure Hazards-1: Site Specific Blasting Plan. See below.

Significance Thresholds and Impacts (*Level of Significance*)	Mitigation Measures
Impact Noise-5: Located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport and would expose people residing or working in the project corridor to excessive noise levels. **(*Less than significant; no mitigation required*)**	
Impact Noise-6: Located within the vicinity of a private airstrip and would expose people residing or working in the project corridor to excessive noise levels. **(*No impact*)**	
Land Use and Planning	
Impact Land-1: Physically divide an established community. **(*No impact*)**	
Impact Land-2: Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect. **(*No impact*)**	
Impact Land-3: Conflict with any applicable HCP or NCCP. **(*No impact*)**	

Significance Thresholds and Impacts (*Level of Significance*)	Mitigation Measures
Recreation	
Impact Recreation-1: 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. **(*Less than significant with mitigation*)**	**Mitigation Measure Recreation-1: Pre- and Post-Construction Report.** Prior to the start of construction, SDG&E shall prepare a Preconstruction Parks and Trails Condition Report that documents the existing condition of project work areas in preserves and parks (e.g., Black Mountain Ranch Community Park, Sycamore Canyon Park, Los Peñasquitos Canyon Preserve), and where multi-use trails are present in work areas, including both designated trails and unofficial trails along access roads. At a minimum, the report shall include text descriptions and accompanying photographs for each resource located in a work area. ~~The report shall also include a description of any special circumstances that may impede restoration of the site to near pre-project conditions.~~ The Preconstruction Parks and Trails Condition Report shall be submitted to the CPUC no less than 30 days prior to construction. SDG&E shall repair all damage to parks and trails (e.g., rutting and ground disturbance) caused by construction vehicles and equipment once construction is completed in each work area in a timely manner (no more than 30 days). Following construction for the entire project, SDG&E shall prepare a Post-Construction Parks and Trails Restoration Report that documents the parks and trails restoration effort. The post-construction report shall describe which resources were impacted and avoided, as well as photographs of the impacted sites prior to and following restoration. The Post-Construction Parks and Trails Report shall be submitted to the CPUC for review and approval following completion of all repairs and no later than ~~150~~ 60 days after construction completion in the area. SDG&E shall complete all park and trail repairs to the satisfaction of the CPUC.
	Mitigation Measure Traffic-3: Post-Construction Road Repair. See above.
Impact Recreation-2: Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment. **(*Less than significant with mitigation*)**	**Mitigation Measure Recreation-2: Use of Existing Trails and Access Roads.** SDG&E shall use existing trails~~,~~ and roads ~~paths, and walkways~~ that are not marked for closure by park officials for any temporary trail detours~~. or~~ Alternatively, SDG&E may place alternate access routes on the perimeter of project work areas in areas that have been surveyed and are free of sensitive biological or cultural resources. ~~that~~ Alternative access routes within project work areas will be restored following construction.
Impact Recreation-3: Substantially disrupt activities in a recreational area. **(*Significant and unavoidable*)**	**Mitigation Measure Recreation-3: Maintain Access to Recreational Facilities.** ~~Prior to construction within Black Mountain Ranch Community Park,~~ SDG&E shall coordinate the temporary closure of any public baseball or soccer fields and parking spaces with the City of San Diego and authorized park officer at least 90 days prior to construction within a park to avoid peak use of the facilities. SDG&E shall maintain a safe pedestrian access path between the parking lot and baseball fields ~~that would not be impacted~~ during construction.

Significance Thresholds and Impacts (*Level of Significance*)	Mitigation Measures
	Mitigation Measure Recreation-4: Flag Person at Trail Crossings. To avoid trail closures during overhead wire stringing, SDG&E shall position a flag person ~~man~~ (similar to traffic controllers) at each trail crossing location to direct trail users when it is safe to pass.
	Mitigation Measure Traffic-7: Closure Notification and Detours. See above.
Impact Recreation-4: Substantially reduce the value of a recreational resource. ***(Significant and unavoidable)***	**Mitigation Measure Aesthetics-2: Retaining Wall Screening.** See above.
	Mitigation Measure Aesthetics-3: Facilities Color Treatment Plan. See above.
	Mitigation Measure Aesthetics-4: Cable Pole Screening. See above.
	Mitigation Measures Biology-6: Compensatory Mitigation for Impacts to Habitat. See above.
	Mitigation Measure Noise-4: Corona Rings. See above.
	Mitigation Measure Noise-5: Respond to Corona Noise Complaints. See above.
Hazards and Hazardous Materials	
Impact Hazards-1: Potential to create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. ***(Less than significant with mitigation)***	**Mitigation Measure Hazards-1: Site Specific Blasting Plan.** The construction contractor shall ensure compliance with all relevant local, state, and federal regulations relating to blasting activities. ~~through the development and submittal of~~ SDG&E or its contractor shall prepare site-specific blasting plan~~s~~, notification requirements, and monitoring procedures for each blasting location proposed as required below: ***Blasting Plan.*** A site-specific blasting plan shall be prepared prior to rock blasting in any location where blasting is required. Each blasting plan must include noise and vibration calculations, blasting methods, surveys of existing structures and other built facilities, and distance calculations to estimate the area of effect where vibration levels would exceed 0.2 in/sec PPV or noise levels would exceed 90 dBA as a result of the blasting. The blasting plan shall identify a hazardous zone for people during blasting. The hazardous zone shall be defined as the area where a person could be injured or killed if they were to be located in that zone during controlled detonation. Personnel and members of the public shall be located outside of the hazardous zone. The blasting plan shall include methods to verify that personnel or members of the public are located outside of the hazardous zone. In addition, the blasting plan shall identify the trails that are adjacent to the blasting sites and that would require temporary closure during blasting activities. Finally, the blasting plan would require that SDG&E coordinate with MCAS Miramar to identify any locations where controlled detonation would be prohibited because the detonation site is located near unexploded ordnances.

Significance Thresholds and Impacts (*Level of Significance*)	Mitigation Measures
	Blasting plans shall be submitted to ~~the CPUC and~~ the City of San Diego for review and approval before blasting at each site. City-approved Blasting Plans shall be submitted to the CPUC for review prior to blasting at each site. SDG&E's contractor shall prepare daily blasting-related reports that include: Blast Report, Seismograph Monitoring Report, Inspection Report, Blasting Complaint Report, and Pre-Blast Inspection Report. ***Notification.*** SDG&E shall notify all sensitive receptors within 500 feet of the area of effect at least 1 week prior to the blasting event. The notification shall include the time and location of the blasting and provide best management practices that people can use to reduce the noise level experienced at the time of the blasting (i.e., stay indoors and close windows). The notification shall include phone numbers for a public liaison and complaint hotline as required by Mitigation Measure Noise-1. SDG&E shall also alert nearby residents immediately prior to blasting by sounding warning signals/sirens. ***Monitoring.*** Immediately prior to controlled detonation, SDG&E personnel shall visually verify that no people are located within the hazardous zone. SDG&E shall follow all required monitoring protocols described in the blasting plan. ***Minimize Damage.*** Adjacent structures within 500 feet of blasting locations shall be surveyed prior to blasting to determine their vulnerability to damage and to document their current physical exterior condition. Blasting shall not be allowed where damage to vulnerable structures is likely to occur; a chemical agent for rock fracturing or a rock anchoring or mini-pile system shall be used instead in such circumstances. The following provisions shall be employed to minimize risk of damage to structures in the area: • Blasting mats shall be employed to eliminate flyrock. • SDG&E's contractor shall employ proper stemming in the drill holes to control flyrock. Stemming shall be left at the top of blast holes to control/eliminate airblast. If any structure is inadvertently adversely affected by construction vibration, the structure shall be restored to conditions equivalent to those prior to blasting. SDG&E shall then fairly compensate the owner of any damaged structure for lost use.
	Mitigation Measure Hazards-2: Spill Prevention, Control, and Countermeasure Plan. As part of the Safety and Environmental Awareness Program (SEAP), SDG&E shall prepare a site-specific Spill Prevention, Control, and Countermeasure (SPCC) Plan for sites that are subject to the SPCC program (e.g., sites where the total aggregate capacity of aboveground oil storage containers exceeds 1,320 gallons) that will identify spill prevention and response measures ~~and Best Management Practices (BMPs)~~, systems, and devices. The plan will emphasize site-specific physical conditions to improve hazard prevention (e.g., identification of flow paths to nearest water bodies). An SDG&E-designated representative shall be identified to ensure that all hazardous materials and safety plans are followed throughout the construction period. Best Management Practices (BMPs) identified in the project Stormwater Pollution Prevention Plan (SWPPP) and spill prevention and response

Significance Thresholds and Impacts (*Level of Significance*)	Mitigation Measures
	measures identified in the SPCC Plan shall be implemented during project construction to minimize the risk of an accidental release and to provide the necessary information for emergency response. A copy of the project SEAP shall be submitted to the CPUC at least 30 days prior to construction. All construction personnel shall be required to attend SEAP training prior to conducting any work on the project site. Training attendance sheet(s) shall be submitted to the CPUC on a monthly basis.
	Mitigation Measure Hazards-3: Hazardous Substance Control and Emergency Response Plan. SDG&E shall prepare and incorporate methods and techniques to minimize the exposure of the public to potentially hazardous materials during all phases of project construction and post-construction operation into a Hazardous Substance Control and Emergency Response Plan (HSCERP). The HSCERP ~~shall be part of the project specific SWPPP and shall~~ be submitted to CPUC for recordkeeping at least 30 days prior to project construction. The HSCERP measures shall require implementation of appropriate control methods and approved containment (e.g., use of partial or total enclosures, hazardous material handling methods and employee training, ventilation requirements) and spill control practices for construction and on-site hazardous material storage. All hazardous materials and hazardous wastes shall be handled, stored, and disposed of in accordance with all applicable regulations by personnel qualified to handle hazardous materials. With the exception of wood poles, the plan shall specify that all hazardous materials shall be collected and stored in project-specific containers until they are transported to an appropriately licensed and permitted waste disposal facility ~~and transported to an SDG&E service center designated as a SDG&E consolidation site~~. Wood poles shall be transported off site once removed from the ground and temporarily stored in project-specific containers at an SDG&E facility. As containers are filled, poles shall be transported to an appropriately licensed Class I landfill or the compost-lined portion of a solid waste landfill. The HSCERP measures shall also include, but not be limited to, the following: • Proper disposal of contaminated soils • Daily inspection of vehicles and equipment parking near sensitive resource areas during construction and spill containment procedures • Emergency response and reporting procedures to address hazardous material releases • Adequate operation and safety buffering and grounding measures • Fueling of any vehicles, equipment, and helicopters in staging yards or on streets paved with secondary containment and away from sensitive resource areas (e.g., preserves, designated open space areas, conserved habitat) The measures shall specify that emergency spill supplies and equipment shall be available to respond in a timely manner if an incident should occur. Response materials such as oil-absorbent material, tarps, and storage drums shall be available at the project site at all times during construction and shall be used as needed to contain and control any minor releases.

Significance Thresholds and Impacts (*Level of Significance*)	Mitigation Measures
	Mitigation Measure Hazards-4: Uncover Existing Utility Pipelines. SDG&E shall excavate ("pothole") to the top of any buried existing utilities, including pipelines, that are located within 10 feet of a proposed excavation (e.g., pole foundation, retaining wall footing, duct bank, or vault structure) to verify the location of the existing utility prior to initiating excavation work. Potholing work shall be performed using a non-destructive method (e.g., air vacuum extraction) that will not damage an existing pipeline once it is encountered. Potholing work shall be conducted under the oversight of a representative of the appropriate utility company. Potholing shall reveal the top of the pipeline only and shall not go any deeper than the top of the pipe so as to not damage the pipe in any way. Two potholes shall be excavated at each associated foundation location so that the orientation of existing pipelines can be verified. Potholes shall be backfilled with stockpiled soil once the location and orientation of the pipeline has been verified and marked. The utility company representative shall verify and approve that backfill and compaction of the potholes has been performed adequately. If the pipeline is located within the footprint of a proposed pole foundation, no pole foundation excavation work shall commence until SDG&E and CPUC have been notified and the pole location has been relocated sufficiently far away from the buried pipeline.
	Mitigation Measure Utilities-2: Coordinate with XO Communications. See below.
	Mitigation Measure Biology-3: Weed Control Plan. See above.
Impact Hazards-2: Potential to 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. ***(Less than significant with mitigation)***	**Mitigation Measure Hazards-1: Site-specific Blasting Plan.** See above.
	Mitigation Measure Hazards-2: Spill Prevention, Control, and Countermeasures Plan. See above.
	Mitigation Measure Hazards-3: Hazardous Substance Control and Emergency Response Plan. See above.
	Mitigation Measure Hazards-4: Uncover Existing Utility Pipelines. See above.
	Mitigation Measure Utilities-3: Notify Utility Companies and Adjust Underground Work Locations. See below.
	Mitigation Measure Biology-3: Weed Control Plan. See above.
Impact Hazards-3: Potential to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school. ***(Less than significant with mitigation)***	**Mitigation Measure Hazards-2: Spill Prevention, Control, and Countermeasures Plan.** See above.
	Mitigation Measure Hazards-3: Hazardous Substance Control and Emergency Response Plan. See above.
	Mitigation Measure Biology-3: Weed Control Plan. See above.

Significance Thresholds and Impacts (*Level of Significance*)	Mitigation Measures
Impact Hazards-4: Potential to be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment. ***(Less than significant ~~with mitigation~~)***	~~**Mitigation Measure Hazards-5: Soil and Groundwater Testing.** Soil samples shall be taken from representative foundation depths prior to construction excavation for TSP P26 and shall be tested to determine the presence and extent of gasoline and other hydrocarbons. The sampling and testing plan shall be prepared and conducted by an appropriate California licensed professional and sent to a California Certified laboratory. Soil and groundwater samples shall be tested at a California Certified Laboratory. A report documenting the areas proposed for sampling, and the process to be used for sampling and testing shall be submitted to the CPUC for review and approval at least 60 days before construction. Results of the laboratory testing and recommended resolutions for handling of excavation material found to exceed regulatory requirements shall be submitted to the CPUC 30 days prior to construction.~~ ~~In the event that soils to be excavated are found to be contaminated, the excavated soil shall be treated as hazardous materials and disposed of in compliance with state and federal regulations and SDG&E operational procedures. Effective dust suppression procedures will be used in construction areas to reduce airborne emissions of these contaminants and reduce the risk of exposure to workers and the public. Regulatory agencies for the State of California (DTSC or RWQCB) and San Diego County shall be contacted by SDG&E or its contractor to plan handling, treatment, and/or disposal options.~~
Impact Hazards-5: Potential to be located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport and result in a safety hazard for people residing or working in the project corridor. ***(No impact)***	
Impact Hazards-6: Potential to be located within the vicinity of a private airstrip and result in a safety hazard for people residing or working in the project corridor. ***(Less than significant; no mitigation required)***	
Impact Hazards-7: Potential to impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. ***(Less than significant with mitigation)***	**Mitigation Measure Traffic-1: Construction Transportation Management Plan.** See above.
	Mitigation Measure Traffic-6: Restrict Road Closures and Maintain Access. See above.
	Mitigation Measure Traffic-8: Notify Emergency Personnel of Road Closures. See above.

Significance Thresholds and Impacts (*Level of Significance*)	Mitigation Measures
Impact Hazards-8: Potential to create a significant hazard to air traffic from installation of new transmission lines and structure. ***(Less than significant; no mitigation required)***	
Impact Hazards-9: Potential to create a significant hazard to the public or the environment through the transport of heavy materials with helicopters. ***(Less than significant with mitigation)***	**Mitigation Measure Traffic-2: ~~Helicopter Lift Plan~~ Congested Area Plan.** See above.
Impact Hazards-10: Potential to expose people to a significant risk of injury or death involving unexploded ordnance during project construction. ***(Less than significant with mitigation)***	**Mitigation Measure Hazards-6: Unexploded Ord~~i~~nance Investigation.** As part of the NEPA review and Tier 1 application process required for construction within MCAS Miramar, SDG&E shall comply with Naval Sea Systems Command (NAVSEA) OP 5 safety requirements for shore-based operations. SDG&E shall perform a survey of identified Formerly Used Defense Sites (FUDS) database sites prior to the start of construction to identify potential unexploded ordnance locations. SDG&E shall obtain a trained contractor for the pre-construction survey, personnel training, and removal of all unexploded ordnance that are found in the Project area. An unexploded ordnance investigation of known and potential areas used by the military along the ROW shall be undertaken by a trained contractor. If unexploded ordnance are found, they shall be removed by the trained ~~personnel~~ contractor. To comply with NAVSEA OP 5 requirements, ~~A~~ all personnel involved in excavation, grading, or ROW clearing shall be educated by the trained contractor to recognize unexploded ordnance.
Impact Hazards-11: Potential to expose workers or the public to excessive shock hazards. ***(Less than significant with mitigation)***	**Mitigation Measure Hazards-7: Induced Current Touch Study.** SDG&E shall identify both aboveground and underground objects (e.g., metal fences or buried metal utility lines) in the vicinity of the proposed 230-kV transmission line that may potentially present a shock hazard to the public, due to induced currents or voltages. SDG&E shall prepare an Induced Current Touch study that evaluates the conductive and inductive interference effects of the proposed 230-kV transmission line on the identified objects. The Induced Current Touch study shall model the conductive objects using the maximum anticipated voltage for the proposed 230-kV line and shall consider the construction details for the transmission line. The study shall also construct a model using fault conditions. The maximum acceptable touch voltage under steady-state conditions is 15 volts and the threshold for fault conditions is specified in ANSI/IEEE Standard 80. In the event that the modeled induced current voltage of a conductive objective exceeds maximum touch voltage thresholds, SDG&E shall install grounding or other appropriate measures to protect the public from hazardous shocks. The Induced Current Touch study shall include the model voltage results of conductive objects prior to implementation of grounding measures and after implementation of grounding measures.

Significance Thresholds and Impacts (*Level of Significance*)	Mitigation Measures
	Sixty days prior to commencing construction, SDG&E shall provide the Induced Current Touch study to the CPUC, for review. The Induced Current Touch study shall include the criteria and approach that was used to determine what facilities could present a shock, the results of the model prior to implementation of grounding measures, details of the grounding or other measures to be installed, and the results of the model after implementation of the grounding measures.
Fire and Fuels Management	
Impact Fire-1: 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. **(*Less than significant with mitigation*)**	**Mitigation Measure Fire-1: Final Fire Prevention Plan.** SDG&E shall prepare and adhere to a Final Fire Prevention Plan (a.k.a. "Fire Plan") specifically tailored for the Proposed Project. The Final Fire Plan shall include, among other provisions, requirements for carrying emergency fire suppression equipment on all construction and employee or contractor vehicles and equipment, restricting smoking and idling vehicles, and restricting construction during red flag warnings. The Final Fire Plan shall be submitted to CPUC for approval at least 30 days prior to construction. The Final Fire Plan shall, at a minimum, include all of the provisions of the Preliminary Draft Fire Plan (Appendix I) and the elements listed below: • During Project construction, SDG&E shall implement ongoing fire patrols during the fire season as defined each year by local, state, and federal fire agencies. These dates vary from year to year, generally occurring from late spring through dry winter periods. • During Red Flag Warning events, as issued daily by the National Weather Service, all construction and maintenance activities shall cease, with an exception for transmission line testing, repairs, unfinished work, or other specific activities which may be allowed if the facility/equipment poses a greater fire risk if left in its current state. A transmission line may be tested if the loss of another transmission facility could lead to system instability or cascading outages. • All construction crews and inspectors shall be provided with radio and cellular telephone access that is operational in all Proposed Project work areas and access routes to allow for immediate reporting of fires. Communication pathways and equipment shall be tested and confirmed operational each day prior to initiating construction activities at each construction work site. All fires shall be reported to the fire agencies with jurisdiction in the area immediately upon discovery of the ignition. • All construction personnel shall be trained in fire-safe actions, initial attack firefighting, and fire reporting. All construction personnel shall be trained and equipped to extinguish small fires in order to prevent them from growing into more serious threats. All construction personnel shall ~~carry at all times a laminated card~~ be provided a hard hat sticker listing pertinent telephone numbers for reporting fires and defining immediate steps to take if a fire starts. Information on ~~contact cards~~ hard hat stickers shall be updated and redistributed to all construction personnel, and outdated ~~cards~~ hard hat stickers destroyed, prior to the initiation of construction activities on the day the information change goes into effect.

Significance Thresholds and Impacts (*Level of Significance*)	Mitigation Measures
	Mitigation Measure Fire-2: Maintain Emergency Access. SDG&E and/or its contractors shall have fire suppression equipment on all construction vehicles. Construction personnel shall be required to park vehicles away from dry vegetation. SDG&E and/or its contractors shall contact and coordinate with the MCAS Miramar Fire Department and applicable local fire departments (i.e., City of San Diego and City of Poway) prior to construction to determine the appropriate amounts of fire equipment to be carried on construction vehicles and to coordinate fire suppression activities. SDG&E shall submit verification of its consultation with MCAS Miramar and local fire departments to CPUC at least 30 days prior to construction. SDG&E shall ensure that construction personnel, construction equipment, and aerial operations do not create obstructions to firefighting equipment or crews. Emergency ingress and egress to access roads shall ~~remain unobstructed at all times~~ be maintained per the Construction Transportation Management Plan (required by Mitigation Measure Traffic-1), and SDG&E shall notify residents and emergency personnel of road or lane closures as required by Mitigation Measures Traffic-6 and Traffic-8. Construction in the work area shall cease in the event of a fire within 1,000 feet of the work area. The work area includes the transmission line right-of-way (ROW), construction laydown and staging areas, pull sites, access roads, parking pads, and any other sites adjacent to the ROW where construction personnel are active or where equipment is in use or stored. Should a wildfire occur within 1 mile of a work area, helicopters in use by SDG&E shall immediately cease construction activities and not restart aerial operations until authorized by the appropriate fire agency.
	Mitigation Measure Fire-3: Water Tanks. SDG&E and/or its contractors shall have water tanks and/or water trucks sited/available at active Project sites for fire protection during Project construction. Prior to construction, SDG&E and its contractors shall contact and coordinate with the MCAS Miramar Fire Department and applicable local fire departments (i.e., City of San Diego and City of Poway) to determine the appropriate minimum capacity and locations for the water tanks if water trucks are not used. SDG&E shall submit verification of its consultation with MCAS Miramar and local fire departments to CPUC at least 30 days prior to construction.
	Mitigation Measure Fire-4: Conductor Clearance. SDG&E shall establish adequate conductor clearances prior to energizing the Project by removing all vegetation from within 15 radial feet of new and relocated overhead conductors under maximum sag and sway. Only trees and vegetation with a mature height of 15 feet or less shall be permitted within the ROW. In addition, tree branches that overhang the ROW within 15 horizontal feet of any conductor shall be trimmed or removed, as appropriate, including those on steep hillsides that may be many vertical feet above the facility. Cleared vegetation shall either be removed or chipped and spread onsite in piles no higher than 6 inches. During Project construction, SDG&E shall maintain adequate conductor clearances by inspecting the growth of vegetation along the entire length of the overhead transmission line ~~at least once each~~

Significance Thresholds and Impacts (*Level of Significance*)	Mitigation Measures
	~~spring~~ and documenting the survey and results in a report submitted to the CPUC ~~before June 1 of each year~~ annually during construction. Conductor clearance of 15 radial feet under maximum sag and sway shall be maintained at all times. Maximum sag and sway shall be computed based on ambient temperatures of no less than 120 degrees Fahrenheit and wind gusts of no less than 100 miles per hour.
Air Quality	
Impact Air-1: Conflict with or obstruct implementation of the applicable air quality plan. **(*Less than significant with mitigation*)**	**Mitigation Measure Air-1: RAQS Architectural Coating Standards.** All coatings, sealants, adhesives, solvents, asphalt, and architectural coatings shall be in conformance with CARB's Suggested Control Measure for Architectural Coatings, and with SDAPCD's VOC Rules 61, 66.1, 67.0, and 67.17.
Impact Air-2: Violate any air quality standard or contribute substantially to an existing or projected air quality violation. **(*Less than significant with mitigation*)**	**Mitigation Measure Air-2: Tier 3 Exhaust Emission Standards.** A minimum of 30 percent of all vehicles and equipment used during construction shall meet a minimum of EPA's Tier 3 exhaust emission standards.
	Mitigation Measure Air-3: Dust Control Management Plan. SDG&E shall submit a Dust Control Management Plan to the CPUC for review and approval no less than 30 days prior to construction. The Dust Control Management Plan shall contain measures that provide for conformance to SDAPCD Rule 55 requirements including: 1. No person shall engage in construction or demolition activity in a manner that discharges visible dust emissions into the atmosphere beyond the property line for a period or periods aggregating more than 3 minutes in any 60 minute period; and 2. Visible roadway dust as a result of active operations, spillage from transport trucks, erosion, or track-out/carry-out shall: a. Be minimized by the use of any of the following or equally effective track-out/carry-out and erosion control measures that apply to the project or operation: track-out gates or gravel beds at each egress point, wheel-washing at each egress during muddy conditions, soil binders, chemical soil stabilizers, geotextiles, mulching, or seeding; and for outbound transport trucks: using secured tarps or cargo covering, watering, or treating of transported material; and b. Be removed at the conclusion of each work day when active operations cease, or every 24 hours for continuous operations. If a street sweeper is used to remove any track-out/carry out, only PM10-efficient street sweepers certified to meet the most current South Coast Air Quality Management District Rule 1186 requirements shall be used. The use of blowers for removal of track-out/carry-out is prohibited under any circumstances. Measures to comply with visible dust emissions restrictions could include:

Significance Thresholds and Impacts (*Level of Significance*)	Mitigation Measures
	• Watering or applying soil stabilizers to areas with loose dust • Ceasing earthmoving activities when sustained (i.e., a period or periods of time aggregating more than 3 minutes in any 60 minute period) wind speed exceeds 20 miles per hour • Covering soil stockpiles
Impact Air-3: Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors). ***(Less than significant; no mitigation required)***	
Impact Air-4: Expose sensitive receptors to substantial pollutant concentrations. ***(Less than significant with mitigation)***	**Mitigation Measure Air-3: Dust Control Management Plan.** See above.
Impact Air-5: Create objectionable odors affecting a substantial number of people. ***(Less than significant; no mitigation required)***	
Greenhouse Gases Emissions	
Impact GHG-1: Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment. ***(Less than significant; no mitigation required)***	
Impact GHG-2: Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emission of greenhouse gases. ***(Less than significant with mitigation)***	**Mitigation Measure GHG-1: Disposal of Organic Matter.** In accordance with requirements in Assembly Bill 1826, SDG&E shall dispose of organic waste (defined in PRC Section 42649.8(c) as food waste, green waste, landscape and pruning waste, nonhazardous wood waste, ad food-soiled paper waste that is mixed in with food waste) removed on and after April 1, 2016 by means other than transporting to a landfill if the amount of organic waste meets or exceeds eight cubic yards per week. On and after January 1, 2017, SDG&E shall dispose of organic waste by means other than transporting to a landfill if the amount of organic waste meets or exceeds four cubic yards per week. Options for non-landfill disposal may include composting on previously disturbed SDG&E land, self-hauling organic

Significance Thresholds and Impacts (*Level of Significance*)	Mitigation Measures
	waste for recycling, or participating in a greenwaste recycling program in accordance with subdivision (b) of AB 1826. SDG&E shall notify the CPUC of the disposal method at least 30 days prior to construction.
	Mitigation Measure Traffic-1: Construction Transportation Management Plan. See above.
	Mitigation Measure Traffic-7: Closure Notification and Detours. See above.
Agriculture and Forestry	
Impact Agriculture Forestry-1: Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use. **(*Less than significant; no mitigation required*)**	
Impact Agriculture Forestry-2: Conflict with existing zoning for agricultural use or a Williamson Act contract. **(*Less than significant; no mitigation required*)**	
Impact Agriculture Forestry-3: Conflict with existing zoning for, or cause rezoning of, forest land (as defined in PRC Section 12220(g)), timberland (as defined in PRC Section 4526), or timberland zoned Timberland Production (as defined in Government Code Section 51104 (g)). **(*No impact*)**	
Impact Agriculture Forestry-4: Result in the loss of forest land or conversion of forest land to non-forest use. **(*No impact*)**	

Significance Thresholds and Impacts (*Level of Significance*)	Mitigation Measures
Impact Agriculture Forestry-5: Involve other changes in the existing environment that, due to their location or nature, could result in conversion of Farmland to nonagricultural use or forest land to non-forest use. ***(No impact)***	
Impact Agriculture Forestry-6: Interfere with active agricultural operations, or convert land used for active agricultural operations to an incompatible use. ***(Less than significant with mitigation)***	**Mitigation Measure Agriculture-1: Coordinate with Evergreen Nursery Property Management.** SDG&E shall coordinate the following actions with the Evergreen Nursery property manager no less than 30 days prior to development of the Evergreen Nursery Staging Yard and conductor stringing activities in Segment C: • Coordinate the location of the staging yard to a mutually suitable position within the approximately 50-acre nursery operation • Communicate conductor stringing activities on the site, such as the anticipated schedule for staging activities and conductor stringing • Communicate potential disruptions from construction activities (e.g., noise, dust, traffic, and access restrictions) • Communicate safety considerations for nursery staff and patrons (e.g., avoidance areas and the use of signs and barriers). • SDG&E shall provide verification of completed preconstruction conditions to the CPUC. Documentation shall be submitted to CPUC verifying condition and communication requirements. Following the completion of staging and conductor stringing at the site, SDG&E shall coordinate with the Evergreen Nursery property manager to ensure that sites used for staging within the nursery are returned to near pre-construction conditions.
Population and Housing	
Impact Population Housing-1: Potential to induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure). ***(No impact)***	

Significance Thresholds and Impacts (*Level of Significance*)	Mitigation Measures
Impact Population Housing-2: Potential to displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere. **(*No impact*)**	
Impact Population Housing-3: Potential to displace substantial numbers of people, necessitating the construction of replacement housing elsewhere. **(*No impact*)**	
Utilities and Public Service Systems	
Impact Utilities-1: Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board. **(*Less than significant; no mitigation required*)**	
Impact Utilities-2: 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. **(*Less than significant; no mitigation required***	
Impact Utilities-3: 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. **(*Less than significant; no mitigation required*)**	

Significance Thresholds and Impacts (*Level of Significance*)	Mitigation Measures
Impact Utilities-4: Have sufficient water supplies available to serve the project from existing entitlements and resources, or require new or expanded entitlements. **(*Less than significant with mitigation*)**	**Mitigation Measure Utilities-1: Reclaimed Water Use for Dust Control.** The water supply for project construction activities (e.g., dust control, soil compaction) shall be obtained from non-potable sources and ensured in a water contract through a local water agency or district. SDG&E shall provide verification that water will be obtained from a non-potable source to the CPUC a minimum of 60 days prior to the start of construction.
	Mitigation Measure Hydrology-3: Reclaimed Water Use for Irrigation. See above.
Impact Utilities-5: Result in a determination by the wastewater treatment provider that 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. **(*Less than significant; no mitigation required*)**	
Impact Utilities-6: Not be serviced by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs. **(*Less than significant; no mitigation required*)**	
Impact Utilities-7: Not comply with federal, state, and local statutes and regulations related to solid waste. **(*No impact*)**	
Impact Utilities-8: Cause substantial deterioration or damage to gas, water, or sewer pipelines or communications lines. **(*Less than significant with mitigation*)**	**Mitigation Measure Utilities-2: Coordinate with XO Communications.** SDG&E shall coordinate the relocation of the ADSS communication line with NextLink (XO Communications) at least 30 days prior to the start of construction. SDG&E shall allow NextLink adequate time to either remove the ADSS communication line from the transmission corridor or move the line on to the new 230-kV structures prior to the removal of the existing H-frame structures.
	Mitigation Measure Utilities-3: Notify Utility Companies and Adjust Underground Work Locations. SDG&E shall notify all utility companies with utilities located within or crossing SDG&E ROW and franchise agreement area to locate and mark existing underground utilities along the entire length of the alignment at least 30 days prior to construction. No subsurface work shall be conducted that would conflict with (i.e., directly impact or compromise the integrity of) a buried utility. In the event of a conflict, the project underground alignment shall be realigned vertically and/or horizontally, as appropriate, to avoid other utilities and provide adequate operational and safety buffering. In instances where separation between City of San Diego sewer mains and the underground duct bank

Significance Thresholds and Impacts (*Level of Significance*)	Mitigation Measures
	alignment is less than 10 feet, SDG&E shall submit the intended construction methodology to the City of San Diego Public Utilities Department Water and Sewer Development Section for approval at least 30 days prior to construction. Construction methods shall be adjusted as necessary to assure that the integrity of existing sewer mains is not compromised.
	Mitigation Measure Utilities-4: Cathodic Protection. SDG&E shall prepare an AC interference study that evaluates the AC interference effects of the proposed 230-kV transmission line on nearby parallel metallic pipelines. The study shall construct a model using the maximum anticipated voltage for the proposed 230-kV transmission line and shall consider the construction details for the transmission line, including conductor arrangement. In addition, SDG&E shall identify utility facilities in the vicinity of the proposed 230-kV transmission line that may be susceptible to corrosion due to induced currents or voltages. For all utilities identified with a corrosion potential, SDG&E shall coordinate with the owner of the utility and use data gathered in the AC interference study to determine appropriate design measures to protect the utility from corrosion such as ground mats or gradient control wires for cathodic protection of the buried utility pipelines. The study, summary of coordination with potentially affected utilities, and details of any design measures to be installed shall be submitted to the CPUC for review and approval at least 60 days prior to initiation of construction.
	Mitigation Measure Hazards 4: Uncover Existing Utility Pipelines. See above.
Impact Public Services-1: Result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, or the need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for fire protection, police protection, schools, parks, or other public facilities. ***(Less than significant with mitigation)***	**Mitigation Measure Fire-1: Final Fire Prevention Plan.** See above.
	Mitigation Measure Recreation-1: Pre- and Post-Construction Report. See above.
	Mitigation Measure Recreation-2: Use of Existing Trails and Access Roads. See above.
	Mitigation Measure Traffic-1: Construction Transportation Management Plan. See above.
	Mitigation Measure Traffic-6: Restrict Road Closures and Maintain Access. See above.
	Mitigation Measure Traffic-8: Notify Emergency Personnel of Road Closures. See above.