SAN DIEGO GAS & ELECTRIC COMPANY

DOCUMENTATION FOR COMPLIANCE WITH THE OPINION GRANTING A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY (CPCN)

NOTICE TO PROCEED REQUEST FOR

POMERADO SUBSTATION UPGRADES SEGMENT 22 OF THE SUNRISE POWERLINK PROJECT

JUNE 2010

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1.0 Introduction

San Diego Gas & Electric Company (SDG&E) will construct a new electric transmission line between the existing Imperial Valley and Sycamore Canyon Substations. The Sunrise Powerlink 230-kilovolt/500-kilovolt (kV) transmission line project (Project) will traverse approximately 120 miles between the El Centro area of Imperial County and Southwestern San Diego County, in Southern California. The Project right-of-way (ROW) and related facilities are consistent with the Final Environmentally Superior Southern Route (FESSR or Route), as identified in the Final Environmental Impact Report/Environmental Impact Statement (FEIR/EIS) issued in October 2008 by the California Public Utilities Commission (CPUC) as the lead State agency under the California Environmental Quality Act (CEQA), and the U.S. Department of the Interior: Bureau of Land Management (BLM) as the lead Federal agency under the National Environmental Policy Act (NEPA). The Route has been assigned mileposts (MP), which range from the Imperial Valley Substation (MP 0) to the Sycamore Canyon Substation (MP 118). The Project consists of five portions, designated as Links. These Links differentiate between voltage and construction type (overhead, underground, and substation construction). Additionally, several construction support elements, such as construction yards and pull sites will be necessary in order to erect the transmission line.

This linear Project, like others of this magnitude and type, necessitates construction in phases. There are a number of reasons for constructing a linear project in segments, as construction cannot occur simultaneously along the entire Project. One reason is related to the dependence upon a large quantity and variety of construction materials. These materials must be received at several locations along the alignment in phases, in preparation for construction on a particular date. These locations will serve as a material laydown, staging, and assembly of pre-determined structures in proximity to these areas.

Another reason for phased construction is that there are Sunrise related projects that modify facilities within existing substations such as Pomerado. These various projects cannot be built at the same time because of the specialized nature of the work and the limited availability of qualified work crews who will be completing the work at each of these substations and cannot do so in a concurrent fashion. Additionally and more importantly, the outages that are necessary for construction cannot be granted al all of the facilities simultaneously. This would cause severe disruption to the operation of the system. As a result, substation work must proceed sequentially.

Lastly, SDG&E storage and construction yard set-up must occur prior to construction start. The lead time for pre-ordering underground cable and steel tower design and fabrication ranges from nine to eighteen months, depending upon design issues and factory commitments. Once purchased, a delivery schedule cannot be finalized until the design phase is completed and fabrication begins.

Ample quantities of both cable and towers need to be on hand at the beginning of construction to provide for an uninterrupted construction work flow. Unless large quantities of these materials are stockpiled prior to the start of construction, work stoppages due to unavailable materials would likely occur. Work stoppages create a high likelihood of incurring additional impacts due to the need to demobilize and remobilize work forces. Overall, it is more efficient and less impactful to avoid work disruption wherever possible.

Not only does the quantity of these materials play a role, but the size of the cable reels and towers is a factor as well. The cable reels are 13.5 feet high by 8 feet wide and will require a storage footprint equal to a small garage for storage. Each tower requires about one-half acre of storage area. SDG&E does not have existing yards with the capacity to store these materials.

Early set-up of construction yards will allow the project to begin with confidence knowing that there are enough materials on hand to avoid work stoppages. The length and remoteness of this Project requires the creation of multiple construction and storage yards that are strategically placed in various segments of the project. This allows for more efficient use of resources and a reduction in transportation and other impacts.

In order to select the optimal locations for the construction yards, the Sunrise team reviewed a number of variables to ensure that impacts are minimized to the extent feasible. The size and location of these yards were generally selected to include previously disturbed areas where little or no additional impacts will occur. The work at various substations is a similar situation, as all of the substation work is proposed to occur within the fenced limits of these previously disturbed properties. Each Notice to Proceed (NTP) request outlines the applicable mitigation measures and the specific impacts that are associated with that NTP request and the measures that have been and will be taken to avoid, minimize, or mitigate the identified impacts. The sequencing of construction facilitates efficient work and minimal environmental impacts.

Pomerado Substation Upgrades

Reconductoring of the existing 69 kV transmission line from Sycamore Substation to Elliot Substation was presented in the certified Final Environmental Impact Report/Environmental Impact Statement (FEIR/EIS); however, the associated upgrades at the Pomerado Substation necessary to accommodate the reconductoring were not presented. The proposed upgrades to the existing Pomerado Substation were addressed in the revised mapbook and Project Modification Report (PMR) that was submitted to the CPUC on May 14, 2010 (page T-154). As incorporated in the mapbook and PMR, no substantial changes to the effects of the Final Environmentally Superior Southern Route (FESSR) and no new significant impacts would result from these upgrades. The upgrades are required to accommodate the overall operation of SDG&E's existing electric transmission and distribution system as well as the Project in accordance with California Independent System Operator (CAISO), State and Federal electric power system reliability criteria, and voltage fluctuation concerns.

Upgrades will include the installation of four 69-kV/40 kA circuit breakers and ten 69-kV/2000 A disconnect switches to accommodate the increased ratings on transmission lines, TL6915 and TL6923. All work will take place in previously disturbed areas within the existing Substation fence-line. The new structures and equipment will be similar to those already in place. Installing upgrades will not require ground disturbance such as grading.

Installing upgrades at the Pomerado Substation in advance of the 2012 completion date of the Project will maintain system reliability. Construction activities at Pomerado are anticipated to begin July 2010 upon issuance of a Notice to Proceed from the CPUC and are scheduled to be completed within six months.

NTP Title	Pomerado Substation Upgrades
2.0 Description of Site & Proposed Activities	
Segment	Segment 22
2.1 Site Location & Description	
	The Pomerado Substation is located at 13375 Stowe Drive, Poway, CA, 92064. The enclosed area of the substation site (APN 317-810-33) is 1.36 acres in size and is located between Stowe Drive and Blaisdell Place (see Appendix B). The Pomerado Substation is located in an industrial area north of Scripps Poway Parkway. The Substation is a previously disturbed and developed site that is owned by SDG&E. The Pomerado Substation is a 69-kV to 12-kV distribution substation that serves the southern Poway and east Scripps Ranch areas. The Pomerado Substation includes a 69-kV yard with associated 69-kV circuit breakers, potential transformers (PTs), and switches. Additionally, there are three 69-/12-kV transformers, three 12-kV capacitors, and three sections of 12-kV switchgear. There is one control house (approximately 22 feet wide by 40 feet in length or 880 square feet) at the Substation.
2.2 Description of Project Activities	
2.2.1 Proposed Work Activities	The scope of work for the Pomerado Substation facility includes installation of four 69-kV/40 kA circuit breakers and ten 69-kV/2000 A disconnects to accommodate the increased ratings on transmission lines, TL6915 and TL6923. The new circuit breakers and disconnects will be installed throughout the 69-kV yard. Other associated equipment to be installed will include a new aluminum pipe bus, its associated jumpers and hardware. Protection relay panels will also be replaced. Additional lighting will not be installed at the Substation. The new structures and equipment will be similar to the respective structures and equipment already in place at the Substation. A description of the proposed work activities for the Pomerado Substation upgrades are as follows: • Erect Structures and Equipment - Structures will be delivered on a trailer pulled by a semi/tractor trailer rig into the Substation and assembled as much as possible while on the ground. Bolts and insulators will be attached by hand, using wrenches. • Equipment Wiring and Testing - Equipment wiring and testing will occur near the end of each phase of construction. After each piece of equipment is erected and set in place, control wire will be pulled between the equipment and the control house. The control wire will terminate at control panels both inside the equipment and the control house. Once the terminations are complete, crews will test the equipment operation and control functions. Equipment used for this work consists of pick- up trucks to deliver small equipment and testing vans for transporting crews and testing equipment. All work associated with this Substation upgrade will take place within the existing fence-line of the Substation, on previously disturbed land. There will be no increase in the total acreage of the Substation, and no additional buildings will be constructed. As previously mentioned, these upgrades are necessary to alleviate existing operational issues and to support the future addition of the Sunrise Powerlink line to the existing SDG&E system.

NTP Title	Pomerado Substation Upgrades
2.2.2 Ground Disturbance	Pomerado Substation is a developed site and a previously disturbed area. The proposed upgrade work as described in Section 2.2.1 will be conducted entirely in the pre-disturbed areas within the Substation fence-line. Since there are no foundations or conduits being installed, ground disturbance will not be necessary.
2.2.3 Geotechnical Testing	The design of the proposed Substation upgrades is based on historical geotechnical testing and a geotechnical engineer has determined that new geotechnical studies are not required since no new structures or foundations will be installed. As a result, no ground-disturbing activities are required.
2.2.4 Access	Access to the Substation is via two existing driveways located off Stowe Drive and one existing driveway off Blaisdell Place. Stowe Drive is located to the north of Pomerado Substation and Blaisdell Place is located to the south of the Substation. All workers, equipment, and materials will utilize these existing driveways. Deliveries will be routed from I-15, Scripps Poway Parkway, Parkway Centre Drive, and to the entrances off Stowe Drive or Blaisdell Place. These roadways are under jurisdiction of the City of Poway, City of San Diego, and Caltrans. Existing drives will be used on-site.
2.2.5 Parking	Parking for construction personnel will occur only within the Substation fence-line.
2.2.6 Safety & Security	All entrances are controlled with gates and security. SDG&E protocols exist to ensure the safety and security of personnel, materials, and property when on-site at the Substation. These protocols meet California Occupational Health and Safety Administration (CALOSHA) safety requirements. The Substation is enclosed by an eight-foot high perimeter wall. Existing security at the Substation includes perimeter surveillance, alarm systems, gates, and lighting.
2.2.7 Equipment and Materials	The following equipment and materials are proposed for the Pomerado Substation Upgrades: **<u>Erect Structures and Equipment</u>** 1. Large Trucks 2. Large Crane 3. Semi-Trailer Truck and Pickup Trucks 4. Materials 4.1. Ten 69-kV disconnects 4.2. Four 69-kV circuit breakers 4.3. Associated jumpers, aluminum bus, control cable and protective relay panels **<u>Equipment Testing and Wiring</u>** 1. Testing Vans 2. Pickup Trucks 3. Hand Tools and Meters 4. Wiring and Protective Relay Panels In addition, as per hazardous communication requirements, Material Safety Data Sheets will be available for any chemicals or hazardous materials to be located on site. It is anticipated that any materials brought on site will either be less than the reporting threshold required by Hazardous Materials Business Plan (HMBP) requirements or transported off-site at the end of the work day. Should there be a need to bring

NTP Title	Pomerado Substation Upgrades
	reportable quantities of materials on site for either temporary or permanent storage, the existing HMBP will be amended to include those additional materials. A copy of the HMBP and current Unified Program Facility Permit issued by San Diego County is provided in Appendix D.
2.2.8 Transport of Equipment, Materials, and Personnel	Up to 15 SDG&E employees will be working on the Substation upgrades. Personnel will travel to and from the Pomerado site in SDG&E-owned vehicles from the SDG&E Kearny Transmission Construction and Maintenance facility located at 5488 Overland Avenue in San Diego (a travel distance of 13.1 miles) or from the SDG&E Miramar facility located at 6875 Consolidated Way in San Diego (a travel distance of 10 miles). The upgrade of the Pomerado Substation will not require temporary closure of any roadway and will not restrict the movement of emergency vehicles. The number of vehicle trips associated with worker commutes and equipment transportation will not result in unstable flow, fluctuations in volumes of traffic, or cause substantial drops in operating speeds on surrounding roadways. Construction will have no effect on aviation facilities or traffic. Construction activities will not disrupt bus or rail transit or impede pedestrian movements, bike trails, or affect the supply of parking spaces. Work activities will not conflict with planned transportation projects in the area, and there will be no deterioration of surrounding roadway surfaces. Large substation equipment and materials will be delivered to the Substation via semi-trucks, with approximately three deliveries during a six month construction period. Smaller equipment and materials will be delivered from SDG&E's Kearny facility or Miramar facility to the Substation in SDG&E vehicles or smaller flatbed trucks.
2.2.9 Drainage	SDG&E will implement best management practices (BMPs) under a Storm Water Management Plan (SWMP) being prepared for Pomerado Substation. *SDG&E's Water Quality Construction BMP Manual* will be referenced for BMP implementation and maintenance. A copy of this document is included in Appendix C. All BMPs are designed to prevent and avoid sediment within surface water runoff and protect the landscape from erosion in accordance with WQ-APM-4 (see Appendix A). A National Pollutant Discharge Elimination System (NPDES) general permit for storm water discharges associated with construction activities is being obtained and a supporting Storm Water Pollution Prevention Plan (SWPPP) is being developed. A copy of the NOI confirmation and WDID number and the SWPPP will be submitted to the CPUC prior to construction.
2.2.10 Rock Surfacing	Any areas within the Substation that are not paved or covered with concrete foundations will be surfaced with an approximate four-inch layer of untreated, ¾-inch nominal crushed run rock. The rock will be applied to the finished grade surface after all upgrades have been completed.
2.2.11 Demobilization	Upon completion of the work, the remaining areas of the Pomerado Substation will be restored to as close to pre-construction conditions as feasible. This will include clean-up of the site, removal of unused materials, and collection and proper disposal of any wastes, trash, and debris, regardless of how it was generated.
2.3 Work Activity Timeline	
2.3.1 Construction Sequencing	The new equipment will be set and erected once the old equipment is removed from their existing foundations. If necessary, control cable will be pulled to the equipment, followed

NTP Title	Pomerado Substation Upgrades
	by termination and testing. Site restoration and stabilization will be conducted following the completion of all work activities.
2.3.2 Activity Schedule	Construction of upgrades at the Pomerado Substation is anticipated to begin in July 2010 and will be completed within six months.

PRE-CONSTRUCTION COMPLIANCE STATUS TABLE AS APPLIED TO THE POMERADO SUBSTATION NTP REQUEST			
Mitigation Measures	***Task Title***	***Task Text***	***Comments***
Cells highlighted in white are not applicable to this NTP.			
Cells highlighted in yellow are conditions of the NTP and shall be fulfilled with documentation submitted to the CPUC prior to construction			
Cells highlighted in grey have been fulfilled.			
Cells highlighted in purple will be fulfilled during construction.			
Cells highlighted in green are conditions of the USFWS Biological Opinion. Please note that color of the comment field for these conditions indicates the fulfillment status.			
BIOLOGICAL RESOURCES			
B-1a: Provide restoration/compensation for impacted sensitive vegetation communities.	Locate surface disturbing components in previously disturbed areas	Surface-disturbing components of the project shall be located in previously disturbed areas or where habitat quality is poor to the extent possible, and disturbance of vegetation and soils shall be minimized.	There will be no ground disturbing activities as part of the proposed scope of work.
B-1a: Provide restoration/compensation for impacted sensitive vegetation communities.	Use construction mats to minimize disturbance	Temporary construction mats may be used to minimize vegetation and soil disturbance only where deemed appropriate by the qualified biologist (see Mitigation Measure B-1c). The construction mats shall not be left on the ground for more than three weeks. Use of construction mats shall be considered a temporary impact to vegetation and shall be mitigated in accordance with this mitigation measure.	There will be no ground disturbance at the substation; therefore, this mitigation measure is not applicable.
B-1a: Provide restoration/compensation for impacted sensitive vegetation communities.	Restore sensitive vegetation communities to pre-construction conditions	If avoidance of sensitive vegetation communities is not feasible due, for example, to physical or safety constraints, the Applicant shall restore temporarily impacted areas to pre-construction conditions following construction (or emergency repairs) and shall permanently block off all public access to them, 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. In those instances, the mitigation shall consist of off-site acquisition and preservation of the vegetation community instead.Any area that can be preserved as intact or restored habitat, or if it contains any species (plant or animal) that require project-related compensatory mitigation will qualify as offsite mitigation lands. Restoration involves recontouring the land, replacing the topsoil (if it was collected), planting seed and/or container stock, and maintaining (i.e., weeding, replacement planting, supplemental watering, etc.) and monitoring the restored area for a period five years (or less if the restoration meets all success criteria). The success of the restoration	There will be no ground disturbance or impacts to sensitive vegetation communities at the substation; therefore, this mitigation measure is not applicable.
B-1a: Provide restoration/compensation for impacted sensitive vegetation communities.	Maintain amd monitor restoration in ABDSP for 5 years	Restoration in ABDSP shall be maintained and monitored for a minimum of five years.	The substation is not located in ABDSP; therefore, this mitigation measure is not applicable.
B-1a: Provide restoration/compensation for impacted sensitive vegetation communities.	Double mitigation ratios on lands already in mitigation	In cases where the impacts to sensitive vegetation communities occur on lands already in use as mitigation for other projects, the mitigation ratios shall be doubled, as is standard practice in San Diego County.	There will be no ground disturbance or impacts to sensitive vegetation communities at the substation; therefore, this mitigation measure is not applicable.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
B-1a: Provide restoration/compensation for impacted sensitive vegetation communities.	Delineate all limits of construction	All limits of construction shall be delineated with orange construction fencing.	Project activities will be limited to previously disturbed areas within the substation fence-line; therefore, this mitigation measure is not applicable.
B-1a: Provide restoration/compensation for impacted sensitive vegetation communities.	Coordinate gate installation 60 days prior to construction	SDG&E shall coordinate with the authorized officer for the applicable federal, State, or local land owner/administrator at least 60 days before construction in order to determine if gates shall be installed on access roads, especially trails that would be dually used as access roads, to prevent unauthorized vehicular access to the ROW. Gate installation shall be required at the discretion of the land management agency. On trails proposed for dual use as access roads, gates shall be wide enough to allow horses, bicycles, and pedestrians to pass through.	Project activities will be limited to previously disturbed areas within the substation fence-line and gate installation will not be necessary; therefore, this mitigation measure is not applicable.
B-1a: Provide restoration/compensation for impacted sensitive vegetation communities.	Submit documentation of coordination 30 days prior to construction	SDG&E shall document its coordination efforts with the administering agency of the road/trail and provide this documentation to the CPUC, BLM, and all affected jurisdictions 30 days prior to construction.	Project activities will be limited to previously disturbed areas within the substation fence-line and gate installation will not be necessary; therefore, this mitigation measure is not applicable.
B-1a: Provide restoration/compensation for impacted sensitive vegetation communities.	Post signs on access road gates prohibiting unauthorized users	Signs prohibiting unauthorized use of the access roads shall be posted on the installed gates.	Project activities will be limited to previously disturbed areas within the substation fence-line and gate installation will not be necessary; therefore, this mitigation measure is not applicable.
B-1a: Provide restoration/compensation for impacted sensitive vegetation communities.	Provide funding for off-road vehicle patrols	To control unauthorized use of project access roads by off-road vehicle enthusiasts, SDG&E shall provide funding to land management entities responsible for areas set aside for habitat conservation to provide for off-road vehicle enforcement patrols. The responsible land management entities will formulate what funding is reasonable to control unauthorized use of project access roads.	Existing access roads will be utilized at Pomerado Substation; therefore, this mitigation measure is not applicable.
B-1a: Provide restoration/compensation for impacted sensitive vegetation communities.	Mitigate for impacts by unauthorized activity	Any impacts associated with unauthorized activity (e.g., exceeding approved construction footprints) shall be mitigated at a 5:1 ratio (5.5:1 in FTHL MA). 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 (or 4.5:1 in FTHL MA) shall be acquired off site.	There will be no ground disturbance or impacts to sensitive vegetation communities at the substation; therefore, this mitigation measure is not applicable.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
B-1a: Provide restoration/compensation for impacted sensitive vegetation communities.	Submit a Habitat Restoration Plan	Areas to be restored shall include all areas temporarily impacted by construction, such as tower construction sites, laydown/staging areas, temporary access and spur roads, and existing tower locations where towers are removed. Where onsite restoration is planned, the Applicant shall identify a qualified Habitat Restoration Specialist to be approved by the CPUC, BLM, State Parks (for restoration in ABDSP), USDA Forest Service (for alternatives with restoration on National Forest lands), and the Wildlife Agencies. The Habitat Restoration Specialist shall prepare and implement a Habitat Restoration Plan, for restoring temporarily impacted sensitive vegetation communities, to be approved by the CPUC, Wildlife Agencies, BLM, State Parks (for ABDSP restoration), and USDA Forest Service (for National Forest land restoration). The Applicant shall work with the CPUC, BLM, Wildlife Agencies, and State Parks until a plan is approved by all. This Habitat Restoration Plan must be approved in writing by the above-listed agencies prior to the initiation of any vegetation disturbing activities.Hydroseeding, drill seeding, or an otherwise proven restoration technique shall be utilized on all disturbed surfaces using a locally endemic native seed mix approved by the CPUC, Wildlife Agencies, BLM, State Parks (for ABDSP restoration), and USDA Forest Service (for National Forest land restoration).The Habitat Restoration Plan shall incorporate Desert Bioregion Revegetation/Restoration Guidance measures for restoration of temporary impacts to desert scrub and dune habitats. These measures generally include alleviating soil compaction, returning the surface to its original contour, pitting or imprinting the surface to allow small areas where seeds and rain water can be captured, planting seedlings that	There will be no ground disturbance or impacts to sensitive vegetation communities at the substation; therefore, this mitigation measure is not applicable.
B-1a: Provide restoration/compensation for impacted sensitive vegetation communities.	Maintain and monitor habitat restoration for 5 years	The restoration of habitat shall be maintained and monitored for five years after installation by an experienced, licensed Habitat Restoration Contractor, or until established success criteria identified in the Restoration Plan (specified percent cover of native and non-native species, species diversity, and species composition as compared with an undisturbed reference site) are met. Maintenance and monitoring for restoration in ABDSP shall be for a minimum of five years, even if established success criteria are met before the end of five years. 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 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. If the restoration fails to meet the established success criteria after the maintenance and monitoring period, maintenance and monitoring shall extend beyond the five-year period until the criteria are met or unless otherwise approved by the CPUC, BLM, State Parks (for ABDSP restoration), USDA Forest Service (for alternatives with restoration on National Forest lands), and the Wildlife Agencies.	There will be no ground disturbance or impacts to sensitive vegetation communities at the substation; therefore, this mitigation measure is not applicable.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
B-1a: Provide restoration/compensation for impacted sensitive vegetation communities.	Mitigate for impacted habitat	For areas where habitat restoration cannot meet mitigation requirements, as determined by the Habitat Restoration Specialist in coordination with CPUC, BLM, State Parks (for ABDSP restoration), USDA Forest Service (for alternatives with restoration on National Forest lands), and the Wildlife Agencies, offsite purchase and dedication of habitat shall be provided at the mitigation ratios provided in Table D.2-7 for the Proposed Project (see Impacts to Vegetation Communities and Required Mitigation tables in alternatives sections for the alternatives) or as otherwise required by the Wildlife Agencies, ABDSP, or USDA Forest Service (supersedes the mitigation ratios in BIO APM 1).The mitigation ratios for habitat acquisition and preservation shall follow those in Table D.2-7 for the Proposed Project (see Impacts to Vegetation Communities and Required Mitigation tables in alternatives sections for the alternatives).	There will be no ground disturbance or impacts to sensitive habitat at the substation; therefore, this mitigation measure is not applicable.
B-1a: Provide restoration/compensation for impacted sensitive vegetation communities.	Mitigate for the loss of native trees and tree trimming	Mitigation for loss of native trees or native tree trimming shall be provided by (1) acquiring and preserving habitat within which the trees occur and/or (2) restoring (i.e., planting) trees on land that would not be subject to vegetation clearing (either in the Applicant's ROW and/or on land acquired and preserved). Any land to be used for this mitigation shall be approved by the CPUC, BLM, State Parks (for ABDSP restoration), USDA Forest Service (for alternatives with restoration on National Forest lands), and the Wildlife Agencies.	There are no trees located at the Pomerado Substation; therefore, this mitigation measure is not applicable.
B-1a: Provide restoration/compensation for impacted sensitive vegetation communities.	Monitor trimmed native trees for 3 years	For all trimmed native trees, the trees shall be monitored for a period of three years. If a trimmed tree declines or suffers mortality during that period, the tree shall be replaced in-kind (by species) at a 2:1 or 5:1 ratio as recommended by the CDFG (see below). If a tree does not decline or suffer mortality, no mitigation shall be required.	There are no trees located at the Pomerado Substation; therefore, this mitigation measure is not applicable.
B-1a: Provide restoration/compensation for impacted sensitive vegetation communities.	Mitigate for native tree removal	Native trees that are removed shall be replaced in-kind (by species) as follows: • Trees less than five inches diameter at breast height (DBH) shall be replaced at 3:1 • Trees between five and 12 inches DBH shall be replaced at 5:1 • Trees between 12 and 36 inches shall be replaced at 10:1 • Trees greater than 36 inches shall be replaced at 20:1	There are no trees located at the Pomerado Substation; therefore, this mitigation measure is not applicable.
B-1a: Provide restoration/compensation for impacted sensitive vegetation communities.	Mitigate trimmed trees	Native trees that are trimmed shall be replaced in-kind (by species) as follows: • Trees less than 12 inches DBH shall be replaced at 2:1 • Trees greater than 12 inches DBH shall be replaced at 5:1	There are no trees located at the Pomerado Substation; therefore, this mitigation measure is not applicable.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
B-1a: Provide restoration/compensation for impacted sensitive vegetation communities.	Maintain and monitor all restoration for 10 years	All restoration shall be maintained and monitored for a minimum of 10 years. The restoration shall be directed according to a Habitat Restoration Plan approved by the CPUC, BLM, State Parks (for ABDSP restoration), USDA Forest Service (for National Forest land restoration), and the Wildlife Agencies.	There will be no ground disturbance or impacts to sensitive vegetation communities at the substation; therefore, this mitigation measure is not applicable.
B-1a: Provide restoration/compensation for impacted sensitive vegetation communities.	Acquire off-site mitigation before line is energized	All offsite mitigation parcels shall be approved by the CPUC, BLM, Wildlife Agencies, State Parks (for impacts to ABDSP), and USDA Forest Service (for alternatives with impacts to National Forest lands) and must be acquired or their acquisition must be assured before the line is energized.	There will be no ground disturbance or impacts to sensitive vegetation communities at the substation; therefore, this mitigation measure is not applicable.
B-1a: Provide restoration/compensation for impacted sensitive vegetation communities.	Submit a Habitat Acquisition Plan 120 days prior to construction	SDG&E shall submit a Habitat Acquisition Plan at least 120 days prior to any ground disturbing activities. The Plan shall be submitted to the CPUC, BLM, the Wildlife Agencies, State Parks (for impacts in ABDSP) and USDA Forest Service (for impacts on National Forest Lands) for review and approval, and 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; 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.	There will be no ground disturbance or impacts to sensitive habitat at the substation; therefore, this mitigation measure is not applicable.
B-1a: Provide restoration/compensation for impacted sensitive vegetation communities.	Submit a Habitat Management Plan	A Habitat Management Plan shall be prepared by a biologist approved by the CPUC, BLM, Wildlife Agencies, State Parks (for mitigation parcels to be part of ABDSP), and USDA Forest Service (for mitigation parcels to be National Forest lands) for all acquired offsite mitigation parcels. The Habitat Management Plan must be approved in writing by the CPUC, BLM, Wildlife Agencies, State Parks (for mitigation parcels to be part of ABDSP), and USDA Forest Service (for mitigation parcels to be National Forest lands) prior to the initiation of any vegetation disturbing activities. The Applicant shall work with the CPUC, BLM, Wildlife Agencies, State Parks, and USDA Forest Service until a plan is approved by all. The Habitat Management Plan shall provide direction for the preservation and in-perpetuity management of all acquired, offsite mitigation parcels. The Habitat Management Plan shall include, but shall not be limited to: • Legal descriptions of all mitigation parcels approved by the CPUC, BLM, Wildlife Agencies, State Parks (for mitigation parcels to be part of ABDSP), and USDA Forest Service (for mitigation parcels to be National Forest lands) • Baseline biological data for all mitigation parcels • Designation of a land management entity approved by the CPUC, BLM, Wildlife Agencies, State Parks (for mitigation parcels to be part of ABDSP), and USDA Forest Service (for mitigation parcels to National Forest lands) to provide in-perpetuity management; continued in B-1a-8b-1.	There will be no ground disturbance or impacts to sensitive habitat at the substation; therefore, this mitigation measure is not applicable.
G-CM-14:**Minimize disturbance.**	Locate surface-disturbing activities in previously disturbed areas, to the extend practical.	To the extent practicable, surface-disturbing components of the project will be located in previously disturbed areas or where habitat quality is poor to minimize disturbance of vegetation and soils.	See B-1a

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
G-CM-15:Temporary construction mats.	Use of construction mats.	Temporary construction mats may be used to minimize vegetation and soil disturbance only where deemed appropriate by the qualified biologist. The construction mats will not be left on the ground for more than three weeks.	See B-1a
G-CM-15:Temporary construction mats.	Incorporate impact of using mats into HRP (G-CM-16).	Use of construction mats will be considered a temporary impact to vegetation and will be incorporated into the Habitat Restoration Plan per conservation measure G-CM-16.	See B-1a
G-CM-16:Habitat Restoration Plan.	Habitat Restoration Plan approval.	SDG&E will prepare and implement a Habitat Restoration Plan, approved by the CPUC, BLM, USFS, and Wildlife Agencies, for all temporarily impacted project areas. The Habitat Restoration Plan must be approved in writing by the above listed agencies prior to the initiation of any vegetation disturbing activities. Restoration involves recontouring the land, replacing the topsoil (if it was collected), planting seed and/or container stock, and maintaining (i.e., weeding, replacement planting, supplemental watering, etc.) and monitoring the restored area for a period of five years (or less if the restoration meets all success criteria). The compensation ratios listed in Table 2 will apply to impacts from emergency repairs during the construction phase. In cases where the impacts to sensitive vegetation communities occur on lands previously preserved to offset impacts from other projects, the mitigation ratios will be doubled, as is standard practice in San Diego County.	See B-1a
G-CM-16:Habitat Restoration Plan.	Impacts, compensation, and a qualified habitat restoration specialist.	Areas to be restored will include all areas temporarily impacted by construction, such as tower construction sites, laydown/staging areas, temporary access and spur roads, and existing tower locations where towers are removed. Restoration of some habitats 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. In those instances, impacts will be considered permanent, and the compensation will consist of offsite land acquisition and preservation. Where onsite restoration is planned, SDG&E will identify specialist will prepare and implement the Habitat Restoration Plan. Hydroseeding, drill seeding, or an otherwise proven restoration technique will be use on all disturbed surfaces using a locally endemic native seed mix approved by the CPUC, BLM, USFS, and Wildlife Agencies to restore the area to its original condition. The Habitat Restoration Plan will incorporate the measures identified in the May 25, 2006, Memorandum of Understanding (MOU) among Edison Electric Institute, USFS, BLM, Service, National Park Service, and Environmental Protection Agency (EPA) (Edison	See B-1a
G-CM-16:Habitat Restoration Plan.	Temporary impacts to desert scrub and dune habitats.	For restoration of temporary impacts to desert scrub and dune habitats, a separate Habitat Restoration Plan will be developed for desert vegetation communities and incorporate Desert Bioregion Revegetation/Restoration Guidance measures. These measures generally include alleviating soil compaction, returning the surface to its original contour, pitting or imprinting the surface to allow small areas where seeds and rain water can be captured, planting seedlings that have acquired the necessary root mass to survive without watering, planting seedlings in the spring with herbivory cages, broadcasting locally collected seed immediately prior to the rainy season, and covering the seeds with mulch.	See B-1a

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
G-CM-16:Habitat Restoration Plan.	Maintenance and monitoring.	The restoration of habitat will be maintained and monitored for five years after installation by an experienced, licensed habitat restoration contractor, or until established success criteria identified in the Restoration Plan (e.g., specified percent cover of native and nonnative species, species diversity, and species composition as compared with an undisturbed reference site) are native and nonnative species, species diversity, and species composition as compared with an undisturbed reference site) are met. Maintenance, monitoring, and reporting will be conducted following a prescribed schedule to assess progress and identify potential problems with the restoration. Remedial action (e.g., additional planting, weeding, erosion control, use of container stock, supplemental watering, etc.) will be taken by an experienced, licensed Habitat Restoration Contractor during the maintenance and monitoring period if necessary to ensure the success of the restoration. If the restoration fails to meet the established success criteria after the maintenance and monitoring period, maintenance and monitoring will extend beyond the five-year period until the criteria are met or unless otherwise approved by the CPUC, BLM, USFS and Wildlife Agencies. For areas where habitat restoration cannot meet	See B-1a
G-CM-17:Habitat Management Plan.	Habitat Management Plan.	SDG&E will purchase/dedicate suitable habitat for preservation, at ratios identified in Table 2, to offset permanently impacted areas. A Habitat Management Plan(s) will be required for all offsite parcels and must be approved, in writing, by the CPUC, BLM, USFS, and Wildlife Agencies prior to the initiation of any vegetation clearing activities. The Habitat Management Plan(s) shall include, but will not be limited to: • Legal descriptions of all parcels approved by the CPUC, BLM, USFS, and Wildlife Agencies; • Legal descriptions of all parcels approved by the CPUC, BLM, USFS, and Wildlife Agencies; • Management specifications including, but not limited to, regular biological surveys to compare with baseline; exotic, non-native species control; fence/sign replacement or repair, public education; trash removal; and annual reports to the CPUC, BLM, USFS, and Wildlife Agencies; • Baseline biological data for all parcels; • Designation of a land management entity approved by the CPUC, BLM, USFS, and Wildlife Agencies to provide in-perpetuity management; • A Property Analysis Record (PAR) prepared by the designated land management entity that explains the amount of	See B-1a
G-CM-17:Habitat Management Plan.	Off-site compensation and property acquisition.	All off-site compensation parcels will be approved by the CPUC, BLM, USFS, and Wildlife Agencies and must be acquired or their acquisition must be assured through a mechanism such as a performance bond prior to ground disturbing activities. To demonstrate that such parcels will be acquired, SDG&E will submit a Habitat Acquisition Plan at least 120 days prior to any ground disturbing activities. The Plan will be submitted to the CPUC, BLM, Wildlife Agencies, and USFS for review and approval and will include, but not be limited to: legal descriptions and maps of all parcels proposed to be acquired; acquisition schedule that includes phasing relative to impacts; 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. SDG&E will fully fund an endowment for in-perpetuity management of all parcels acquired to off-set the permanent impacts of this project. The endowment will be based on the PAR included in the Habitat Management Plan(s) for these parcels and will be	See B-1a
G-CM-26:**Delineate construction limits.**	Delineate construction limits.	All limits of construction will be delineated with orange construction fencing. During and after construction, entrances to access roads will be gated to prevent the unauthorized use of these roads by the general public. Signs prohibiting unauthorized use of the access roads will be posted on these gates.	See B-1a

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
G-CM-28:**Limit road/trail access during construction.**	Coordinate w/land officer 60 days prior to initiating construction to determine the use of gates and signs at access roads.	To limit new or improved accessibility into the area, SDG&E shall coordinate with the authorized officer for the applicable Federal, State, or local land owner/administrator at least 60 days before construction in order to determine if gates shall be installed on existing and new access roads, especially trails that will be used as access roads, to prevent unauthorized vehicular access to the ROW. Gate installation shall be required at the discretion of the land management agency. On trails proposed for dual use as access roads, gates shall be wide enough to allow horses, bicycles, and pedestrians to pass through. SDG&E shall document its coordination efforts with the administering agency of the road/trail and provide this documentation to the CPUC, BLM, and all affected jurisdictions 30 days prior to construction. Signs prohibiting unauthorized use of the access roads shall be posted on these gates.	See B-1a
G-CM-29:**Fund off-road vehicle enforcement patrols.**	Provide funding.	To control unauthorized use of project access roads by off-road vehicle enthusiasts, SDG&E shall provide funding to land management entities responsible for areas set aside for habitat conservation to provide for off-road vehicle enforcement patrols. The responsible land management entities will formulate what funding is reasonable to control unauthorized use of project access roads.	See B-1a
G-CM-34:**Tree trimming guidelines.**	Tree trimming guidelines.	To offset the loss of native trees or native tree trimming, SDG&E shall (1) acquire and preserve habitat where the trees occur and/or (2) restore (i.e., planting) trees on land that will not be subject to vegetation clearing (either in SDG&E's ROW and/or on land acquired and preserved). Any land to be used for this compensation shall be approved by the CPUC, BLM, USFS (for loss of trees on National Forest lands), and Wildlife Agencies. For habitat acquisition and preservation, the compensation ratios shall follow those in Table 2. For all trimmed native trees, the trees shall be monitored for a period of three years. If a trimmed tree declines or suffers mortality during that period, the tree shall be replaced inkind (by species) at a 2:1 or 5:1 ratio as recommended by the CDFG (see below). If a tree does not decline or suffer mortality, no compensation shall be required. For restoration (planting trees), these guidelines, based on recommendations from the CDFG, shall be followed: Native trees that are removed shall be replaced in-kind (by species) as follows: • Trees less than 12.7 cm (5 in) diameter at breast height (DBH) shall be replaced at 3:1 • Trees between 13 and 31 cm (5 and 12 in) DBH shall be replaced at 5:1 • Trees between 31 and 91cm (12 and 36 in) DBH shall be replaced at 10:1 • Trees greater than 91 cm (36 in) DBH shall be replaced at 20:1 Native trees that are trimmed shall be replaced in-kind (by species) as follows: • Trees less than 30 cm (12 in) DBH shall be replaced at 2:1 • Trees greater than 30 (12 in) DBH shall be replaced at 5:1 All native tree restoration shall be maintained and monitored for a minimum of 10 years. The restoration shall be directed according to a Habitat Restoration Plan approved by the	See B-1a

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
G-CM-45:**Habitat preservation for O&M activities.**	Purchase/dedicate suitable habitat for preservation.	SDG&E will purchase/dedicate suitable habitat for preservation to offset areas permanently impacted by O&M activities. The preservation for O&M activities will be at the same ratios provided in Table 2 for construction activities. A Habitat Management Plan(s) will be required for all off-site parcels and must be approved in writing by the CPUC, BLM, USFS, and Wildlife Agencies. SDG&E may choose to establish conservation banks or purchase conservation credits from existing conservation banks, other than the conservation bank established for SDG&E's Subregional Plan (SDG&E 1995), to provide an efficient process to offset the anticipated minor impacts resulting from O&M activities.	See B-1a
B-1c: Conduct biological monitoring.	Provide biological monitoring and perform periodic inspections once or twice a week	Monitoring shall be provided by a qualified biologist approved by the CPUC, BLM, State Parks (for monitoring in ABDSP), USDA Forest Service (for alternatives that require monitoring on National Forest lands), and the Wildlife Agencies to ensure that all impacts occur within designated limits. Monitoring entails communicating with contractors, taking daily notes, and ensuring that the requirements of the APMs and mitigation measures are being met by being present during construction activities including all initial grubbing and clearing of vegetation. A qualified biologist employed by SDG&E shall be present during maintenance involving ROW repair requiring ground disturbance (i.e., grading/repair of access road and work areas and spot repair of areas subject to flooding or scouring). Biological monitoring of these maintenance activities is to prevent impacts to vegetation communities or wildlife habitat not within the permanent project impact footprint or to record and report unauthorized impacts outside the footprint to the CPUC, BLM, State Parks (for monitoring in ABDSP), USDA Forest Service (for alternatives that require monitoring on National Forest lands), and the Wildlife Agencies to ensure the unauthorized impacts are mitigated in accordance with Mitigation Measure B-1a.The qualified biologist shall conduct monitoring for any area subject to disturbance from construction and the maintenance activities listed above (or access roads used during maintenance activities in the case of vernal pools/water-holding basins; see Mitigation Measure B-1b). The qualified biologist shall perform periodic inspections of construction once or twice per week, as defined by the Wildlife Agencies, depending on the sensitivity of the resources.	This mitigation measure will be fulfilled during construction; therefore, it is not applicable as a pre-construction requirement. During construction, a qualified biological monitor with the authority to issue stop work orders will be on-site and periodic inspections will be performed.
B-1c: Conduct biological monitoring.	Send weekly monitoring reports	The qualified biologist shall send weekly monitoring reports to the CPUC and BLM and shall record any reduction or increase in construction impacts so that mitigation requirements can be revised accordingly. The final impact/mitigation calculations shall be submitted to the CPUC, BLM, State Parks (for monitoring in ABDSP), USDA Forest Service (for alternatives that require monitoring on National Forest lands), and the Wildlife Agencies for review and approval.	This mitigation measure will be fulfilled during construction; therefore, it is not applicable as a pre-construction requirement. During construction, monitoring reports will be prepared and submitted on a weekly basis.
B-1c: Conduct biological monitoring.	Send annual monitoring reports	The qualified biologist shall send annual monitoring reports of maintenance activities to the CPUC, BLM, State Parks (for monitoring of maintenance activities in ABDSP), and USDA Forest Service (for alternatives that require monitoring of maintenance activities on National Forest lands) that describe the types of maintenance that occurred, at what locations they occurred, and whether or not there were unauthorized impacts that require mitigation.	This mitigation measure will be fulfilled post construction; therefore, it is not applicable as a pre-construction requirement. Monitoring reports of maintenance activities will be prepared and submitted annually.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
B-1c: Conduct biological monitoring.	Qualified biologists shall handle all environmental issues and have the authority to issue stop work orders	The Applicant, its contractors and subcontractors, and their respective project personnel, shall refer all environmental issues, including wildlife relocation, sick or dead wildlife, hazardous waste, or questions about environmental impacts to the qualified biologist. Experts in wildlife handling (e.g., Project Wildlife) may need to be brought in by the qualified biologist for assistance with wildlife relocations. The qualified biologist shall immediately notify the CPUC, BLM, State Parks (for monitoring in ABDSP), USDA Forest Service (for alternatives that require monitoring on National Forest lands), the Wildlife Agencies, and SDG&E of any significant events, including impacts outside the construction zone or maintenance impacts outside the authorized permanent impact footprints if they are discovered during construction or monitoring of maintenance activities. The qualified biologist shall have the authority to issue stop work orders if any part of the mitigation measures or APMs are being violated. Reinitiation of work following a stop work order shall only occur when the CPUC, BLM, State Parks (for impacts in ABDSP), USDA Forest Service (for alternatives with impacts on National Forest lands), and the Wildlife Agencies are satisfied that the impacts have been fully documented, that compensation for these impacts shall be made, and that any additional protection measures they deem necessary shall be undertaken.	This mitigation measure will be fulfilled during construction; therefore, it is not applicable as a pre-construction requirement. A qualified biological monitor with the authority to issue stop work orders will be on-site during construction activities.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
G-CM-1: **Biological monitoring during construction.**	Provide biological monitoring and perform periodic inspections once or twice a week	A qualified biologist will monitor all work areas to ensure that all impacts occur within designated limits. Monitoring entails communicating with contractors, taking daily notes, and ensuring that the requirements of the Conservation Measures are met by being present during construction activities including all initial grubbing and clearing of vegetation. The qualified biologist will conduct monitoring for any area subject to disturbance from construction activities. The qualified biologist will perform periodic inspections of construction once or twice per week, as defined by the Wildlife Agencies (the Service and CDFG, collectively), depending on the sensitivity of the resources. The qualified biologist will send weekly monitoring reports to the CPUC and BLM and will record any reduction or increase in construction impacts so that compensation requirements can be revised accordingly. The final impact calculations will be submitted to the CPUC, BLM, USFS (for sections of the Project that require monitoring on National Forest lands), and Wildlife Agencies for review and approval. • SDG&E, its contractors and subcontractors, and their respective project personnel, will refer all environmental issues, including wildlife relocation, sick or dead wildlife, hazardous waste, or questions about environmental impacts to the qualified biologist. Experts in wildlife handling (e.g., Project Wildlife) may need to be brought in by the qualified biologist for assistance with wildlife relocations. • The qualified biologist will have the authority to issue stop work orders if any part of the Conservation Measures are being violated. The qualified biologist will immediately notify the CPUC, BLM, USFS and Wildlife Agencies of any significant events discovered during the monitoring. Reinitiation of work following a stop work order will only occur when the CPUC, BLM, USFS, and Wildlife Agencies are satisfied that the impacts have been fully documented, that compensation for these impacts will be made, and that any additional protection measures they deem necessary will be undertaken.	See B-1c
G-CM-43:**Ground disturbance during O&M activities.**	Qualified biologist present during ROW restoration.	A qualified biologist employed by SDG&E will be present during maintenance involving ROW repair requiring ground disturbance (i.e., grading/repair of access road and work areas and spot repair of areas subject to flooding or scouring). The qualified biologist will send annual monitoring reports of maintenance activities to the CPUC, BLM, and USFS (for sections of the project that require monitoring of maintenance activities on National Forest lands) that describe the types of maintenance that occurred, at what locations they occurred, and whether or not there were impacts that required mitigation.	See B-1a
B-1k: Re-seed disturbed areas after a transmission line–caused fire.	Re-seed all public and private natural areas burned due to project-caused fire	Should a fire occur and be determined by the CPUC's Consumer Protection and Safety Division (CPSD) or the California Department of Forestry and Fire Protection (CAL FIRE) to be caused by the Proposed Project or a constructed alternative, the Applicant shall re-seed all natural areas - both public and private - that are burned as a result of the project-caused fire. Re-seeding shall be required for areas that have been burned due to the minimum 10-year period required for arid chaparral to establish an adequate seed bank and thereby resist vegetation type conversion.	This mitigation measure is not applicable to construction activities at the Pomerado Substation as there are no natural areas within the substation fence-line.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
B-1k: Re-seed disturbed areas after a transmission line–caused fire.	Develop re-seeding plan	A re-seeding plan shall be developed with input from Cal Fire, the U.S. Forest Service, BLM, and CPUC, based on a native seed mix. Seeds shall be raked into the soil to avoid seed predation, and re-seeding shall be carried out once to coincide with the rainy season (October 1 through April 1) to increase the likelihood of germination success. Specific re-seeding requirements stipulated in this mitigation measure shall be subject to approval and modification by any public landowning agency.	This mitigation measure is not applicable to construction activities at the Pomerado Substation, as there are no natural areas within the substation fence-line.
B-1k: Re-seed disturbed areas after a transmission line–caused fire.	Provide a report documenting all re-seeding activities	The Applicant shall provide a written report documenting all re-seeding activities to the CPUC. The Applicant shall make a good faith effort to obtain approval to re-seed on private lands as appropriate, and documentation of this good faith effort shall be submitted to the CPUC upon request.	This mitigation measure is not applicable to construction activities at the Pomerado Substation, as there are no natural areas within the substation fence-line.
G-CM-18:**Wildfires.**	Re-seeding of disturbed areas after a transmission line-caused fire.	To reduce adverse impacts from unnatural wildfires (type conversion, proliferation of exotic weed species), SDG&E will re-seed disturbed areas after a transmission line-caused fire. Should a fire occur and be determined by the CPUC's Consumer Protection and Safety Division (CPSD) or the California Department of Forestry and Fire Protection (CAL FIRE) to be caused by the SRPL Project, SDG&E will re-seed all natural areas - both public and private - that are burned as a result of the project-caused fire. Re-seeding will be required for areas that have been burned within the minimum 10-year period required for arid chaparral to establish an adequate seed bank and thereby resist vegetation type conversion. A re-seeding plan will be developed with input from Cal Fire, the USFS, BLM, CPUC, and Wildlife Agencies. Seeds shall be raked into the soil to avoid seed predation, and reseeding will be carried out once to coincide with the rainy season (October 1 through April 1) to increase the likelihood of germination success. SDG&E will provide a written report documenting all re-seeding activities to the BLM, CPUC, USFS, and Wildlife Agencies. SDG&E will make a good faith effort to obtain approval to re-seed on private lands as appropriate, and documentation of this good faith	See B-1k
B-1l: SDG&E shall continue to work with the USDA Forest Service to minimize impacts to the RCA between Structures 184 and 187.	Minimize impacts to the RCA between Structures 184 and 187 of the BCD South Option.	SDG&E shall continue to work with the USDA Forest Service to adjust the siting of project features to minimize impacts to the RCA located between Structures 184 and 187 of the BCD South Option. SDG&E shall continue to coordinate with the USDA Forest Service until the impacts to this RCA are fully resolved to the satisfaction of the USDA Forest Service.	The Pomerado Substation is not located between Structures 184 and 187 of the BCD South Option; therefore, this mitigation measure is not applicable.
B-2a: Provide restoration / compensation for impacted jurisdictional areas.	Avoid impacts to jurisdictional areas	Impacts to areas under the jurisdiction of the ACOE, Regional Water Boards, State Water Board, and CDFG shall be avoided to the extent feasible.	There are no jurisdictional areas within the substation; therefore, this mitigation measure is not applicable.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
B-2a: Provide restoration / compensation for impacted jurisdictional areas.	Mitigate impacted areas as required by wetland permitting	Where avoidance of jurisdictional areas is not feasible (including for emergency repairs), the Applicant shall provide the necessary mitigation required as part of wetland permitting by creation/restoration/preservation of suitable jurisdictional or equivalent habitat along with adequate buffers to protect the function and values of jurisdictional area mitigation. The location(s) of the mitigation would be determined in consultation with the CPUC, BLM, Wildlife Agencies, State Parks (for mitigation in ABDSP), USDA Forest Service (for alternatives with mitigation on National Forest lands), ACOE, Regional Water Boards, State Water Board, and CDFG as part of the wetland permitting process. It is anticipated that the sites would be in close proximity to the impacts or in the same watershed.	There are no jurisdictional areas within the substation; therefore, this mitigation measure is not applicable.
B-2a: Provide restoration / compensation for impacted jurisdictional areas.	Prepare jurisdictional delineation and impact assessment	A jurisdictional delineation and impact assessment shall be prepared based on the final alignment and final engineering plans when they are complete.	There are no jurisdictional areas within the substation; therefore, this mitigation measure is not applicable.
B-2a: Provide restoration / compensation for impacted jurisdictional areas.	Mitigate for jurisdictional wetland habitat	Mitigation ratios would range from 1:1 up to 4:1 and would depend on the sensitivity of the jurisdictional habitat and on the requirements of the wetland permitting agencies. The width of wetland buffers would also depend on the sensitivity of the jurisdictional habitat and on the requirements of the wetland permitting agencies. Recommended mitigation ratios for vegetation communities that generally occur in jurisdictional areas are provided in Table D.2-7 for the Proposed Project (see Impacts to Vegetation Communities and Required Mitigation tables in alternatives sections for the alternatives). It is anticipated that at least a 1:1 ratio of the mitigation would include creation of jurisdictional habitat so there would be no net loss of jurisdictional habitat.It is also anticipated that a 1:1 ratio would be required for impacts to jurisdictional non-wetland Waters of the U.S. in the form of wetland enhancement, restoration, or creation as determined in consultation with the permitting agencies.	There are no jurisdictional areas within the substation; therefore, this mitigation measure is not applicable.
B-2a: Provide restoration / compensation for impacted jurisdictional areas.	Obtain wetland permits prior to construction	Wetland permits shall be obtained from the ACOE, Regional Water Boards, State Water Board, and CDFG prior to initiating construction in jurisdictional areas.	There are no wetlands within the substation; therefore, this mitigation measure is not applicable.
B-2a: Provide restoration / compensation for impacted jurisdictional areas.	Delineate all limits of construction	All limits of construction shall be delineated with orange construction fencing and/or silt fencing.	Project activities will be limited to previously disturbed areas within the substation fence-line; therefore, this mitigation measure is not applicable.
B-2a: Provide restoration / compensation for impacted jurisdictional areas.	Remove all delineations no later than 30 days after construction is complete	All stakes, flagging, or fencing shall be removed no later than 30 days after construction is complete. If silt fencing is used to delineate the limits of construction or as part of implementation of erosion control BMPs, the silt fencing may be left in place longer than 30 days if erosion control is still necessary.	Project activities will be limited to previously disturbed areas within the substation fence-line; therefore, this mitigation measure is not applicable.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
B-2a: Provide restoration / compensation for impacted jurisdictional areas.	Install gates and signs at entrances of access roads	During and after construction, entrances to access roads shall be gated to prevent the unauthorized use of these roads by the general public. Signs prohibiting unauthorized use of the access roads shall be posted on these gates.	Project activities will be limited to previously disturbed areas within the substation fence-line and gate installation will not be necessary; therefore, this mitigation measure is not applicable.
B-2a: Provide restoration / compensation for impacted jurisdictional areas.	Mitigate impacts from unauthorized activity	Any impacts associated with unauthorized activity (e.g., exceeding approved construction footprints) shall be mitigated at a 5:1 ratio, unless otherwise directed by the ACOE, Regional Water Boards, State Water Board, and CDFG: restoration of the unauthorized impacts shall be credited at a 1:1 ratio; the remaining 4:1 (or 4.5:1 in FTHL MA) shall be acquired off site.	There are no jurisdictional areas within the substation; therefore, this mitigation measure is not applicable.
B-2a: Provide restoration / compensation for impacted jurisdictional areas.	Submit and implement Wetland Mitigation Plan	The Applicant shall identify a qualified Habitat Restoration Specialist to be approved by the CPUC, BLM, ACOE, Regional Water Boards, State Water Board, CDFG, State Parks (for restoration in ABDSP), and USDA Forest Service (for alternatives with restoration on National Forest lands). The Habitat Restoration Specialist shall prepare and implement a Wetland Mitigation Plan to be approved in writing by the CPUC, BLM, ACOE, Regional Water Boards, State Water Board, CDFG, State Parks (for ABDSP mitigation), and USDA Forest Service (for alternatives with mitigation on National Forest lands). The Applicant shall work with the above-listed agencies until a plan is approved by all.	There are no wetlands within the substation; therefore, this mitigation measure is not applicable.
B-2a: Provide restoration / compensation for impacted jurisdictional areas.	Maintain and monitor mitigated habitat for 5 years after installation	The mitigation of habitat shall be maintained and monitored for five years after installation, or until established success criteria (specified percent cover of native and non-native species, species diversity, and species composition as compared with an undisturbed reference site) are met, to assess progress and identify potential problems with the mitigation. Maintenance and monitoring in ABDSP shall be for a minimum of five years, even if established success criteria are met before the end of five years.Remedial action (e.g., additional planting, weeding, erosion control, use of container stock, supplemental watering, etc.) shall be taken during the maintenance and monitoring period if necessary to ensure the success of the mitigation.If the mitigation fails to meet the established performance criteria after the five-year maintenance and monitoring period, maintenance and monitoring shall extend beyond the five-year period until the criteria are met or unless otherwise approved by the CPUC, BLM, ACOE, Regional Water Boards, State Water Board, CDFG, State Parks (for ABDSP restoration), and USDA Forest Service (for alternatives with restoration on National Forest lands).	There will be no ground disturbance or impacts to sensitive habitat at the substation; therefore, this mitigation measure is not applicable.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
B-2a: Provide restoration / compensation for impacted jurisdictional areas.	Submit a Habitat management Plan	A Habitat Management Plan shall be prepared by a biologist approved by the CPUC, BLM, ACOE, Regional Water Boards, State Water Board, CDFG, State Parks (for mitigation parcels to be part of ABDSP), and USDA Forest Service (for mitigation parcels to be National Forest lands) for all acquired offsite mitigation parcels. The Habitat Management Plan must be approved in writing by the CPUC, BLM, Wildlife Agencies, State Parks (for mitigation parcels to be part of ABDSP), and USDA Forest Service (for mitigation parcels to be National Forest lands) prior to the initiation of any activities which may impact jurisdictional areas. The Applicant shall work with the above-listed agencies until a plan is approved by all. The Habitat Management Plan shall provide direction for the preservation and in-perpetuity management of all acquired, offsite mitigation parcels. The Habitat Management Plan shall include, but shall not be limited to: • Legal descriptions of all acquired or assured (as defined in Mitigation Measure B-1a) mitigation parcels approved by the CPUC, BLM, Wildlife Agencies, State Parks (for mitigation parcels to be part of ABDSP), and USDA Forest Service (for mitigation parcels to be National Forest lands);• Baseline biological data for all mitigation parcels • Designation of a land management entity approved by the CPUC, BLM, Wildlife Agencies, State Parks (for mitigation parcels to be part of ABDSP), and USDA Forest Service (for mitigation parcels to be National Forest lands) to provide in-perpetuity	There will be no ground disturbance or impacts to sensitive habitat at the substation; therefore, this mitigation measure is not applicable.
B-3a: Prepare and implement a Weed Control Plan.	Submit and implement a Weed Control Plan	The Applicant shall prepare and implement a comprehensive, adaptive Weed Control Plan for pre-construction and long-term invasive weed abatement. Where the Applicant owns the ROW property, the Weed Control Plan shall include specific weed abatement methods, practices and treatment timing developed in consultation with the San Diego County Agriculture Commissioner's Office and the California Invasive Plant Council (Cal IPC), or the tribal government, as appropriate. On the ROW easement lands administered by public agencies (BLM, USDA Forest Service (for alternatives routes within Cleveland National Forest lands), Wildlife Agencies, and State Parks (ABDSP) the Weed Control Plan shall incorporate all appropriate and legal agency-stipulated regulations.The Weed Control Plan shall be submitted to the ROW land-holding governmental agencies for final authorization of weed control methods, practices, and timing prior to implementation of the Weed Control Plan on public lands. ROW easements located on private lands shall include adaptive provisions for the implementation of the Weed Control Plan. Prior to implementation, the Applicant shall work with the landowners to obtain authorization of the weed control treatment that is required. State Parks shall have review and approval authority over the Weed Control	This mitigation measure is not applicable to construction activities at the Pomerado Substation. Construction activities will occur only within the previously disturbed, fenced substation fence-lines.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
B-3a: Prepare and implement a Weed Control Plan.	Conduct pre-construction weed inventory	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 can be secured) as well as at all ancillary facilities associated with the project for weed populations that: (1) are considered by the San Diego County Agriculture Commissioner or State Parks (for ROW within or adjacent to ABDSP) as being a priority for control; and (2) aid and promote the spread of wildfires (such as cheatgrass [Bromus tectorum], Saharan mustard [Brassica tournefortii] and medusa head [Taeniatherum caput-medusae]). These populations shall be mapped and described according to density and area covered. These species shall be treated (where access and permission can be secured) 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 the San Diego County Agriculture Commissioner's Office and Cal-IPC, or the tribal government, as appropriate. A pre-construction weed inventory shall be conducted by surveying areas that will be directly impacted by the project for weed populations that are rated High or	This mitigation measure is not applicable to construction activities at the Pomerado Substation. Construction activities will occur only within the previously disturbed, fenced substation fence-lines.
B-3a: Prepare and implement a Weed Control Plan.	Implement weed control treatments	Weed control treatments shall include all legally permitted chemical, manual and mechanical methods applied with the authorization of the San Diego County Agriculture Commissioner and the ROW easement land-holding agencies where 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 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, the San Diego County Agriculture Commissioner, State Parks (for treatment in ABDSP) and Cal-IPC, or the tribal government, as appropriate, with the goal of controlling populations before they start producing seeds.	This mitigation measure is not applicable to construction activities at the Pomerado Substation. Construction activities will occur only within the previously disturbed, fenced substation fence-lines.
B-3a: Prepare and implement a Weed Control Plan.	Annually survey for new invasive weeds for 2 years	From the time construction begins until two 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, State Parks (for treatment in ABDSP) and Cal-IPC.	This mitigation measure is not applicable to construction activities at the Pomerado Substation. Construction activities will occur only within the previously disturbed, fenced substation fence-lines.
B-3a: Prepare and implement a Weed Control Plan.	Ensure all seeds and other material are certified weed free	During project construction and operation/maintenance, all seeds and straw materials shall be certified weed free, and all gravel and fill material shall be certified weed free by the San Diego County Agriculture Commissioner's Office, or the tribal government, as appropriate.	This mitigation measure is not applicable to construction activities at the Pomerado Substation. Construction activities will occur only within the previously disturbed, fenced substation fence-lines.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
B-3a: Prepare and implement a Weed Control Plan.	Wash vehicles and equipment	During project construction and operation/maintenance, vehicles and all equipment shall be washed (including wheels, undercarriages, and bumpers) at an offsite washing facility (e.g., a car wash or truck wash) immediately before project construction begins and prior to returning to project construction should equipment be used in a different construction area. Tools such as chainsaws, hand clippers, pruners, etc. shall be washed at an offsite washing facility immediately before project construction begins and prior to returning to project construction should tools be used in a different construction area. Vehicles, tools, and equipment shall be washed at an offsite washing facility should these vehicles, tools, and equipment have been used in an area where invasive plants have been mapped during the pre-construction weed control inventory and as directed by the biological construction monitor, prior to entering a project area free of populations of invasive plants (as determined by the pre-construction weed control inventory). Vehicles, tools, and equipment used for maintenance shall be washed at an offsite washing facility immediately before each maintenance event. All washing shall take place where rinse water is collected and disposed of in either a sanitary sewer or landfill; an effort shall be	This mitigation measure is not applicable to construction activities at the Pomerado Substation. Construction activities will occur only within the previously disturbed, fenced substation fence-lines.
B-3a: Prepare and implement a Weed Control Plan.	Submit monthly wash logs during construction and annual logs during operation/maintenanc e	A written daily log shall be kept for all vehicle/equipment/tool washing that states the date, time, location, type of equipment washed, methods used, and staff present. The log shall include the signature of a responsible staff member. Logs shall be available to the CPUC, BLM, USDA Forest Service (for alternative routes within Cleveland National Forest lands), Wildlife Agencies, State Parks (for weeds in ABDSP), tribal governments (for weeds on tribal lands), and biological monitor for inspection at any time and shall be submitted to the CPUC on a monthly basis during construction and submitted annually to the CPUC during operation/maintenance	This mitigation measure is not applicable to construction activities at the Pomerado Substation. Construction activities will occur only within the previously disturbed, fenced substation fence-lines.
G-CM-20:Weed Control Plan.	Develop a Weed Control Plan for pre-construction and non-invasive weed abatement.	SDG&E will prepare and implement a comprehensive, adaptive Weed Control Plan for pre-construction and long-term invasive weed abatement. The Weed Control Plan will be approved by the BLM, USFS, and Wildlife Agencies before implementation Where SDG&E owns the ROW property, the Weed Control Plan will include specific weed abatement methods, practices, and treatment timing developed in consultation with the San Diego County Agriculture Commissioner's Office and the California Invasive Plant Council (Cal-IPC). On the ROW easement lands administered by public agencies (BLM, USFS, and Wildlife Agencies), the Weed Control Plan will incorporate all appropriate and legal agency stipulated regulations. The Weed Control Plan will be submitted to the ROW landholding public agencies for final authorization of weed control methods, practices, and timing prior to implementation of the Weed Control Plan on public lands. ROW easements located on private lands will include adaptive provisions for the implementation of the Weed Control Plan. Prior to implementation, SDG&E will work with the landowners to obtain authorization of the weed control treatment that is required.	See B-3a

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
G-CM-20:Weed Control Plan.	Contents of the Weed Control Plan.	The Weed Control Plan will include the following: • A pre-construction weed inventory will be conducted by surveying the entire ROW and areas immediately adjacent to the ROW (where access and permission can be secured), as well as at all ancillary facilities associated with the Project, for weed populations that: (1) are considered by the San Diego County Agriculture Commissioner as being a priority for control and (2) aid and promote the spread of wildfires (such as cheatgrass [Bromus tectorum], Saharan mustard [Brassica tournefortii] and medusa head [Taeniatherum caput-medusae]). These populations will be mapped and described according to density and area covered. These plant species will be treated (where access and permission can be secured) prior to construction or at a time when treatments will be most effective based on phenology according to control methods and practices for invasive weed populations designed in consultation with the San Diego County Agriculture Commissioner's Office and Cal-IPC, as appropriate. • For areas directly impacted by the Project, a pre-construction weed inventory will be conducted for those weed populations rated 'High' or 'Moderate' for negative ecological impact in the California Invasive Plant Inventory Database (Cal-IPC, 2006). These weed species will be treated prior to construction or at a time when treatments will be most effective based on phenology according to control methods and practices for invasive weed populations designed in consultation with Cal-IPC. • Weed control treatments will include all legally permitted chemical, manual, and mechanical methods applied with the authorization of the San Diego County Agriculture Commissioner and the ROW easement land-holding agencies where appropriate. The application of herbicides will 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 follow the regulations set by the San Diego County Agriculture Commissioner. The timing of the weed control treatment will be determined for each plant species in consultation with the PCA, the San Diego County Agriculture Commissioner, and Cal-IPC with the goal of controlling populations before they start producing seeds.	See B-3a
B-5a: Conduct rare plant surveys, and implement appropriate avoidance/ minimization/ compensation strategies.	Conduct surveys in the spring and submit a special status plant report	A qualified biologist shall survey for special status plants in the spring of a year with adequate rainfall prior to initiating construction activities in a given area. If a survey can not be conducted due to inadequate rainfall, then SDG&E shall consult with the Wildlife Agencies, State Parks (for impacts in ABDSP), and the USFS (for impacts on National Forest lands) to determine if construction may begin in the absence of survey data and what mitigation would be required, or whether construction would not be allowed until such data is collected. A report of special status plants observed shall be prepared and submitted for approval by the CPUC, BLM, State Parks (for activities in ABDSP), USDA Forest Service (for alternatives with activities on National Forest lands), and the Wildlife Agencies prior to activities which may impact the plant resources.	This mitigation measure is not applicable to construction activities at the Pomerado Substation. Construction activities will occur only within the previously disturbed, fenced substation fence-lines. Furthermore, there are no special status plant populations within the Pomerado Substation.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
B-5a: Conduct rare plant surveys, and implement appropriate avoidance/ minimization/ compensation strategies.	Stake or flag special status plant populations	All special status plant populations shall be staked or flagged by a qualified biologist approved by the CPUC, BLM, State Parks (for activities in ABDSP), USDA Forest Service (for alternatives with activities on National Forest lands), and the Wildlife Agencies.	There are no special status plant populations within the Pomerado Substation; therefore, this mitigation measure is not applicable.
B-5a: Conduct rare plant surveys, and implement appropriate avoidance/ minimization/ compensation strategies.	Remove all delineations no later than 30 days after construction is complete	All stakes, flagging, or fencing shall be removed no later than 30 days after construction is complete.	No delineation will be necessary as all construction activities will occur only within the previously disturbed, fenced substation fence-lines. Therefore, this mitigation measure is not applicable.
B-5a: Conduct rare plant surveys, and implement appropriate avoidance/ minimization/ compensation strategies.	Avoid impacts to federal and state listed plant species	Impacts to federal or State listed plant species shall first be avoided where feasible, and, where not feasible, impacts shall be compensated through salvage and relocation (salvage and relocation for plants in ABDSP shall be determined in consultation with, and approval of, State Parks) via a restoration program and/or offsite acquisition and preservation of habitat containing the plant at a 2:1 ratio. The CPUC, BLM, State Parks (for activities in ABDSP), USDA Forest Service (for alternatives with activities on National Forest lands), and the Wildlife Agencies shall decide whether the Applicant can restore rare plant populations or shall acquire habitat with rare plant populations off site (locations to be approved by the CPUC, BLM, State Parks [for activities in ABDSP], USDA Forest Service [for alternatives with activities on National Forest lands], and the Wildlife Agencies).	There are no rare plant species located within the previously disturbed substation; therefore, this mitigation measure is not applicable.
B-5a: Conduct rare plant surveys, and implement appropriate avoidance/ minimization/ compensation strategies.	Submit a Restoration Plan for federal and state listed plants	A qualified biologist shall prepare a Restoration Plan that shall indicate where restoration would take place. The restoration plan shall identify the goals of the restoration, responsible parties, methods of restoration implementation, maintenance and monitoring requirements, final success criteria, and contingency measures. The Applicant shall work with the CPUC, BLM, Wildlife Agencies, State Parks, and USDA Forest Service (for alternatives with restoration on National Forest lands) until a plan is approved by all.	There are no rare plant species located within the previously disturbed substation; therefore, this mitigation measure is not applicable.
B-5a: Conduct rare plant surveys, and implement appropriate avoidance/ minimization/ compensation strategies.	Avoid impacts to moderately sensitive plant species	Impacts to moderately sensitive plant species (i.e., BLM Sensitive, USDA Forest Service Sensitive, CNPS List 1 and 2 species) shall first be avoided where feasible, and, where not feasible, impacts shall be compensated through reseeding (with locally collected seed stock) or relocation to temporarily disturbed areas (reseeding and relocation of plants in ABDSP shall be determined in consultation with, and approval of, State Parks). Mitigation Measure B-1a would also provide habitat-based mitigation for these impacts.	There are no moderately sensitive plant species located within the previously disturbed substation; therefore, this mitigation measure is not applicable.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
B-5a: Conduct rare plant surveys, and implement appropriate avoidance/ minimization/ compensation strategies.	Submit a Restoration Plan for special status plant species	Where reseeding or salvage and relocation is required, the Applicant shall identify a qualified Habitat Restoration Specialist to be approved by the CPUC, BLM, State Parks (for restoration in ABDSP), USDA Forest Service (for alternatives with restoration on National Forest lands), and the Wildlife Agencies. The Habitat Restoration Specialist shall prepare and implement a Restoration Plan for reseeding or salvaging and relocating special status plant species to be approved by the CPUC, BLM, State Parks (for restoration in ABDSP), USDA Forest Service (for alternatives with restoration on National Forest lands), and the Wildlife Agencies in writing prior to impacting the plant resources. The Applicant shall work with the above-listed agencies until a plan is approved by all.	There are no special status plant populations within the Pomerado Substation; therefore, this mitigation measure is not applicable.
B-5a: Conduct rare plant surveys, and implement appropriate avoidance/ minimization/ compensation strategies.	Maintain and monitor reseeding/relocation for 5 years	The reseeding or relocation of plants shall be maintained and monitored for five years after installation, or until established success criteria are met, to assess progress and identify potential problems with the mitigation. The reseeding or relocation of plants in ABDSP shall be maintained and monitored for a minimum of five years, even if established success criteria are met before the end of five years. Remedial action (e.g., additional seeding, weeding, erosion control, use of container stock, supplemental watering, etc.) shall be taken during the maintenance and monitoring period if necessary to ensure the success of the restoration. If the restoration fails to meet the established performance criteria after the five-year maintenance and monitoring period, maintenance and monitoring shall extend beyond the five-year period until the criteria are met or unless otherwise approved by the CPUC, BLM, State Parks (for restoration in ABDSP), USDA Forest Service (for alternatives with restoration on National Forest lands), and the Wildlife Agencies.	There will be no ground disturbance or impacts to plant populations at the Pomerado Substation; therefore, this mitigation measure is not applicable.
B-5a: Conduct rare plant surveys, and implement appropriate avoidance/ minimization/ compensation strategies.	Submit a Habitat Management Plan	A Habitat Management Plan for any required, offsite mitigation shall be prepared by a biologist approved by the CPUC, BLM, Wildlife Agencies, State Parks (for mitigation parcels to be part of ABDSP), and USDA Forest Service (for mitigation parcels to be National Forest lands). The Habitat Management Plan must be approved in writing by the CPUC, BLM, Wildlife Agencies, State Parks (for mitigation parcels to be part of ABDSP), and USDA Forest Service (for mitigation parcels to be National Forest lands) prior to the initiation of any activities which may impact special status plant resources. The Applicant shall work with the CPUC, BLM, Wildlife Agencies, State Parks, and USDA Forest Service until a plan is approved by all. The Habitat Management Plan shall provide direction for the preservation and in-perpetuity management of all acquired offsite mitigation parcels. The Habitat Management Plan shall include, but shall not be limited to: • Legal descriptions of all acquired or assured (as defined in Mitigation Measure B-1a) offsite mitigation parcels approved by the CPUC, BLM, Wildlife Agencies, State Parks (for mitigation parcels to be part of ABDSP), and USDA Forest Service (for mitigation parcels to be National Forest lands) • Baseline biological data for all mitigation parcels • Designation of a land management entity approved by the CPUC, BLM, Wildlife Agencies, State Parks (for mitigation parcels to be part of ABDSP), and USDA Forest	There will be no ground disturbance or impacts to plant populations at the Pomerado Substation; therefore, this mitigation measure is not applicable.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
G-CM-32:**Conduct protocol surveys prior to initiating construction.**	Surveys for USFS listed species.	Prior to construction activities, SDG&E will conduct on-the-ground surveys (following Service protocols where they exist) for the following listed species where such surveys had not been conducted in 2007 and 2008, or for those species for which surveys in 2007 and 2008 were not reliable due to lack of sufficient rainfall. • San Diego Thornmint (Acanthomintha ilicifolia) • San Bernardino Bluegrass (Poa atropurpurea) • Willowy Monardella (Monardella viminea) • Quino Checkerspot Butterfly (Euphydryas editha quino) • Arroyo Toad (Bufo californicus) • Southwestern Willow Flycatcher (Empidonax traillii extimus) • Least Bell's Vireo (Vireo bellii pusillus) • Coastal California Gnatcatcher (Polioptila californica californica) • Stephen's Kangaroo Rat (Dipodomys stephensi)	This mitigation measure is not applicable to construction activities at the Pomerado Substation. Construction activities will occur only within the previously disturbed, fenced substation fence-lines. There are no sensitive species or associated habitat that exist within the Substation fence-lines.
SS-CM-1: San Diego Thornmint	Avoid Impacts to Thornmint	No impacts will occur to the thornmint population at and adjacent to MP 116 or to any thornmint occurrences between MP 114 and 119. To ensure the avoidance of impacts, SDG&E will consult with the Service regarding the final design and siting of all permanent and temporary impacts (e.g., towers, pads, access roads, staging areas, pull down areas, helipads, and fuel modification zones) between MP 114 and MP 119. In other areas where suitable thornmint habitat (i.e., gabbro and calcareous soils and a slope of 0 to 25 percent) exists, the area to be impacted will be surveyed for thornmint before any impacts may occur, per G-CM-32. All permanent and temporary impact areas will be sited at least 100 feet away from any known thornmint occurrences.	This mitigation measure is not applicable to construction activities at the Pomerado Substation. Construction activities will occur only within the previously disturbed, fenced substation fence-lines. There are no sensitive species or associated habitat that exist within the Substation fence-lines.
SS-CM-1: San Diego Thornmint	Implement Weed Control Plan (G-CM-20).	SDG&E will implement the Weed Control Plan described in G-CM-20 to ensure that intact thornmint populations are not impacted by nonnatives that could be introduced by this project.	This mitigation measure is not applicable to construction activities at the Pomerado Substation. Construction activities will occur only within the previously disturbed, fenced substation fence-lines. There are no sensitive species or associated habitat that exist within the Substation fence-lines.
SS-CM-2: San Diego Thornmint	Compensation of unavoidable impacts.	Impacts to San Diego thornmint will first be avoided where feasible, and where not feasible due to physical or safety constraints, impacts will be compensated through salvage and relocation via a restoration program, at a 1:1 ratio, and/or off-site acquisition and preservation of habitat, at a 2:1 ratio, containing the plant. The CPUC, BLM, USFS and Wildlife Agencies will decide whether the applicant can restore San Diego thornmint populations or will acquire habitat with San Diego thornmint (locations to be approved by the CPUC, BLM, USFS and Wildlife Agencies). A qualified biologist will prepare a Restoration Plan that will indicate where restoration will take place. The restoration plan will identify the goals of the restoration, responsible parties, methods of restoration implementation, maintenance and monitoring requirements, final success criteria, and contingency measures. The applicant will work with the CPUC, BLM, Wildlife Agencies, and USFS until a plan is approved by all parties.	This mitigation measure is not applicable to construction activities at the Pomerado Substation. Construction activities will occur only within the previously disturbed, fenced substation fence-lines. There are no sensitive species or associated habitat that exist within the Substation fence-lines.
G-CM-35:**Rare plant salvage.**	Rare plants shall be salvaged where avoidance is not feasible.	Plant species identified as rare by the land managing agency will be salvaged where avoidance is not feasible. Generally, salvage may include removal and stockpiling for replanting on site; removal and transplanting out of surface disturbance area; removal and salvage by private individuals; and removal and salvage by commercial dealers; or any combination. Plant or wildlife species will not be collected except by biological monitors specifically directed by the Wildlife Agencies to do so.	This mitigation measure is not applicable to construction activities at the Pomerado Substation. Construction activities will occur only within the previously disturbed, fenced substation fence-lines. There are no sensitive species or associated habitat that exist within the substation fence-lines.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
B-7a: Cover all steep-walled trenches or excavations used during construction to prevent the entrapment of wildlife (e.g., reptiles and small mammals).	Cover excavations or install fencing when not in use	BIO-APM-14 shall be modified to ensure that all steep-walled trenches or excavations used during construction shall be covered at all times except when being actively utilized. If the trenches or excavations cannot be covered, exclusion fencing (i.e., silt fencing) shall be installed around the trench or excavation, or it shall be covered to prevent entrapment of wildlife.	Steep-walled trenches or excavations are not proposed as part of the Pomerado Substation upgrade scope of work; therefore, this mitigation measure is not applicable.
B-7a: Cover all steep-walled trenches or excavations used during construction to prevent the entrapment of wildlife (e.g., reptiles and small mammals).	Inspect excavations 3 times per day and before backfilling	Open trenches, or other excavations that could entrap wildlife shall be inspected by the qualified biologist (see Mitigation Measure B-1c) a minimum of three times per day and immediately before backfilling.	Steep-walled trenches or excavation are not proposed as part of the Pomerado Substation upgrade scope of work; therefore, this mitigation measure is not applicable.
B-7a: Cover all steep-walled trenches or excavations used during construction to prevent the entrapment of wildlife (e.g., reptiles and small mammals).	Look under vehicles and equipment before moving for presence of wildlife	Employees and contractors shall look under vehicles and equipment for the presence of wildlife before movement. If wildlife is observed, no vehicles or equipment would be moved until the animal has left voluntarily or is removed by the qualified biologist.	This mitigation measure will be fulfilled during construction; therefore it is not applicable as a pre-construction requirement.
B-7a: Cover all steep-walled trenches or excavations used during construction to prevent the entrapment of wildlife (e.g., reptiles and small mammals).	Contact within 48 hours of finding a dead or injured listed species	Should a dead or injured listed species be found in a trench or excavation or anywhere in the construction zone or along an access road, the qualified biologist shall contact the CPUC, BLM, State Parks (for activities in ABDSP), USDA Forest Service (for alternatives with activities on National Forest lands), and the Wildlife Agencies within 48 hours of the finding. The qualified biologist shall report the species found, the location of the finding, the cause of death (if known), and shall submit a photograph and any other pertinent information.	This mitigation measure will be fulfilled during construction; therefore it is not applicable as a pre-construction requirement.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
G-CM-39:**Cover steep-walled trenches.**	Cover steep-walled trenches to avoid entrapping wildlife.	All steep-walled trenches or excavations used during construction will be covered at all times except when being actively utilized. If the trenches or excavations cannot be covered, exclusion fencing (i.e., silt fencing) will be installed around the trench or excavation, or it will be covered to prevent entrapment of wildlife. Open trenches, or other excavations that could entrap wildlife will be inspected by the qualified biologist a minimum of three times per day and immediately before backfilling. Should a dead or injured listed species be found in a trench or excavation or anywhere in the construction zone or along an access road, the qualified biologist will contact the CPUC, BLM, USFS, and Wildlife Agencies within 48 hours of detection. The qualified biologist will report the species found, the location of the finding, the cause of death (if known), and will submit a photograph and any other pertinent information. Construction holes left open over night will be covered. Covers will be secured in place nightly, prior to workers leaving the site, and will be strong enough to prevent livestock or wildlife from falling through and into a hole. Holes and/or trenches will be inspected prior to filling to ensure absence of mammals and reptiles. Excavations will be sloped on one end to provide an escape route for small mammals and reptiles.	See B-7a
G-CM-40:**Inspect vehicles for wildlife.**	Look under vehicles and around equipment for wildlife prior to use.	Employees and contractors will look under vehicles and equipment for the presence of wildlife before movement. If wildlife is observed, no vehicles or equipment will be moved until the animal has left voluntarily or is removed by the qualified biologist.	See B-7a
B-7b: Implement avoidance/ mitigation/ compensation according to the Flat-Tailed Horned Lizard Rangewide Management Strategy.	Mitigate impact by following all applicable measures in the Flat-Tailed Horned Lizard Rangewide Management Strategy	Mitigation for impacts to the FTHL shall follow all applicable measures in the Flat-Tailed Horned Lizard Rangewide Management Strategy (Flat-Tailed Horned Lizard Interagency Coordinating Committee, 2003). This mitigation includes, but is not limited to, locating impacts outside of MAs, delineating work limits, using existing roads, biological monitoring, and worker education. According to the Flat-Tailed Horned Lizard Rangewide Management Strategy (Flat-Tailed Horned Lizard Interagency Coordinating Committee, 2003), compensation for FTHL habitat impacts could involve purchase of FTHL habitat and/or monetary compensation as determined by the Flat-Tailed Horned Lizard Interagency Coordinating Committee. Impacts shall be mitigated at a 1:1 ratio for habitat outside a MA.Mitigation inside a MA shall be at a 3.5:1 ratio for temporary impacts (2.5:1 for disturbed habitat, developed land, or agriculture) and a 5.5:1 ratio for permanent impacts (4.5:1 for disturbed habitat, developed land, or agriculture). For the Proposed Project, the required mitigation for FTHL impacts(if offsite acquisition is the method of compensation) is 403.48 acres. On-site restoration requirements for the Project would be 232.84 acres. Any FTHL habitat acquired shall be approved by the Flat-Tailed Horned	This mitigation measure is not applicable to construction activities at the Pomerado Substation. There are no Flat-Tailed Horned Lizards or their associated habitat within the Substation.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
B-7b: Implement avoidance/ mitigation/ compensation according to the Flat-Tailed Horned Lizard Rangewide Management Strategy.	Submit a Habitat Management Plan	A Habitat Management Plan shall be prepared by a biologist approved by the Flat-Tailed Horned Lizard Interagency Coordinating Committee, CPUC, BLM, Wildlife Agencies, and State Parks (for land in ABDSP) for all acquired FTHL habitat. The Habitat Management Plan must be approved in writing by the Flat-Tailed Horned Lizard Interagency Coordinating Committee, CPUC, BLM, Wildlife Agencies, and State Parks (for land in ABDSP) prior to the initiation of any activities which may impact (directly or indirectly) the FTHL or its habitat. The Applicant shall work with the Flat-Tailed Horned Lizard Interagency Coordinating Committee, CPUC, BLM, Wildlife Agencies, and State Parks until a plan is approved by all. The Habitat Management Plan shall provide direction for the preservation and in-perpetuity management of all acquired FTHL habitat. The Habitat Management Plan shall include, but shall not be limited to: • Legal descriptions of all acquired or assured (as defined in Mitigation Measure B-1a) FTHL habitat approved by the Flat-Tailed Horned Lizard Interagency Coordinating Committee, CPUC, BLM, Wildlife Agencies, and State Parks (for mitigation parcels to be part of ABDSP) • Baseline biological data for all acquired FTHL habitat • Designation of a land management entity approved by the Flat-Tailed Horned Lizard Interagency Coordinating Committee, CPUC, BLM, Wildlife Agencies, and State Parks (for mitigation parcels to be part of ABDSP) to provide in-perpetuity management;	This mitigation measure is not applicable to construction activities at the Pomerado Substation. There are no Flat-Tailed Horned Lizards or their associated habitat within the Substation.
B-7c: Minimize impacts to Peninsular bighorn sheep and provide compensation for loss of critical habitat.	Limit activities in bighorn sheep critical habitat October 1-December 31 or maintain 1,500-foot ceiling for flights	With regard to timing of activities, construction and maintenance activities (including the use of helicopters) in bighorn sheep critical habitat shall be limited to outside the lambing season and the period of greatest water need, or a minimum ceiling of 1,500 feet for helicopter flights shall be maintained. The lambing season is January 1 through June 30. The period of greatest water need is May through September. Construction and maintenance activities in PBS critical habitat may occur during the lambing season and/or period of greatest water need if prior approval is obtained from the Wildlife Agencies.	This mitigation measure is not applicable to construction activities at the Pomerado Substation. There are no Peninsular bighorn sheep or their associated habitat within the Substation.
B-7c: Minimize impacts to Peninsular bighorn sheep and provide compensation for loss of critical habitat.	Provide funding to help reconnect PBS subpopulations	To help reconnect PBS subpopulations and at least partially offset impacts to the overall population of PBS caused by the project, the Applicant shall: • fund the design and construction of an overpass (for sheep) or tunnel (for vehicles) to facilitate PBS movement across a highway at a location determined by the USFWS (in coordination with State Parks and CDFG. Tunnel or overpass design must be approved by the Wildlife Agencies • fund removal of tamarisk and fences for the life of the project, and install and maintain water sources at locations determined by the USFWS (in coordination with State Parks and CDFG) • fund a minimum 10 year-long program to monitor the effects of the project on PBS behavior, movements, and dispersal in the project corridor (ten years is needed to measure the influence of the project while factoring in rainfall cycles, vegetative productivity, and drought). This program would be implemented by the Wildlife Agencies and State Parks following construction	This mitigation measure is not applicable to construction activities at the Pomerado Substation. There are no Peninsular bighorn sheep or their associated habitat within the Substation.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
B-7c: Minimize impacts to Peninsular bighorn sheep and provide compensation for loss of critical habitat.	Provide compensation for direct loss of critical habitat	Furthermore, the Applicant shall provide compensation for direct loss of critical habitat at a 5:1 ratio for permanent impacts and at a 3:1 ratio (including a combination of onsite restoration and offsite purchase) for temporary impacts with PBS critical habitat or other habitat acceptable to the Wildlife Agencies, BLM, and State Parks (for critical habitat in ABDSP). Impacts to PBS critical habitat must be mitigated within the same Critical Habitat Unit where the impacts occurred. For the Proposed Project, the required mitigation for PBS impacts includes offsite purchase of 525.7 acres and onsite restoration of 111.81 acres. The determination of impact acreage shall be based on the definition of critical habitat in effect as of the time of publication of the Final EIR/EIS.	This mitigation measure is not applicable to construction activities at the Pomerado Substation. There are no Peninsular bighorn sheep or their associated habitat within the Substation.
B-7c: Minimize impacts to Peninsular bighorn sheep and provide compensation for loss of critical habitat.	Submit a Habitat Management Plan	A Habitat Management Plan shall be prepared by a biologist approved by the CPUC, BLM, Wildlife Agencies, and State Parks for all acquired PBS habitat. The Habitat Management Plan must be approved in writing by the CPUC, BLM, Wildlife Agencies, and State Parks (for land in ABDSP) prior to the initiation of any activities which may impact (directly or indirectly) PBS or its habitat. The Applicant shall work with the CPUC, BLM, Wildlife Agencies, and State Parks until a plan is approved by all. The Habitat Management Plan shall provide direction for the preservation and in-perpetuity management of all acquired PBS habitat. The Habitat Management Plan shall include, but shall not be limited to: • Legal descriptions of all acquired or assured (as defined in Mitigation Measure B-1a) PBS habitat approved by the CPUC, BLM, Wildlife Agencies, and State Parks (for mitigation parcels to be part of ABDSP) • Baseline biological data for all acquired PBS habitat • Designation of a land management entity approved by the CPUC, BLM, Wildlife Agencies, and State Parks (for mitigation parcels to be part of ABDSP) 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	This mitigation measure is not applicable to construction activities at the Pomerado Substation. There are no Peninsular bighorn sheep or their associated habitat within the Substation.
SS-CM-22: Peninsular Bighorn Sheep	No construction during lambing season from January 1 through June 30 or period of greatest water need.	Construction activities (including the use of helicopters) in bighorn sheep designated critical habitat will be limited to outside the lambing season (January 1 through June 30) and the period of greatest water need (June 1 through September 30) as defined in the Recovery Plan. Construction activities in designated critical habitat may occur during the lambing season and/or period of greatest water need if prior approval is obtained from the Wildlife Agencies.	See B-7c
SS-CM-23: Peninsular Bighorn Sheep	Compensation for loss of occupied big horn sheep habitat.	Compensation for the loss of occupied bighorn sheep habitat will be implemented as follows. Permanent impacts to designated critical habitat will include 5:1 offsite acquisition and preservation of critical habitat. Temporary impacts to designated critical habitat will include 1:1 on-site restoration and 2:1 offsite acquisition and preservation of critical habitat. Any acquired habitat will be approved by the CPUC, BLM, and Wildlife Agencies.	See B-7c

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
SS-CM-24: Peninsular Bighorn Sheep	Big Horn Sheep Monitoring Plan.	A biological consultant approved by the Wildlife Agencies will be retained by SDG&E to collect data on bighorn sheep movements in the area during the construction phase. Prior to construction the biologist shall submit a bighorn sheep monitoring plan that meets the approval of the Wildlife Agencies.	See B-7c
SS-CM-24: Peninsular Bighorn Sheep	Helicopter flight paths over occupied habitat.	Helicopters shall follow regular flight corridors coinciding with the ROW to the maximum extent possible and avoid low-flying "short-cuts" or sight-seeing trips away from the project site. Helicopters shall avoid flying within 0.6 mi (1 km) of bighorn sheep water sources. Helicopter landing areas, vehicle parking sites, and fly yards shall be cited at least 0.6 mi (1 km) from bighorn sheep water sources and other key resource areas identified by the biologist.	See B-7c
SS-CM-24: Peninsular Bighorn Sheep	Cease construction within I-8 Island until sheep have left the area.	When bighorn sheep are detected within the I-8 Island, construction operations shall cease until bighorns leave the area as verified by the biologist.	See B-7c
SS-CM-25: Peninsular Bighorn Sheep	Fund the design and construction of new underpass/overpass to facilitate desert bighorn sheep movement across I-8.	To help reconnect desert bighorn sheep subpopulations and at least partially offset impacts to the overall population caused by the project, SDG&E will: • Fund the design and construction of an overpass or underpass (for sheep), or tunnel (for vehicles) to facilitate desert bighorn sheep movement across a highway at a location determined by the Service (in coordination with CDFG). Tunnel or overpass design must be approved by the Wildlife Agencies, and construction of the facility will be completed prior to connecting and energizing the proposed project to the grid.	See B-7c
SS-CM-25: Peninsular Bighorn Sheep	Fund, design, and construct a fencing system to prevent bighorn sheep from crossing I-8.	• Fund, design, and construct a system of fences to prevent bighorn sheep from crossing on the surface of westbound Interstate 8. The fencing shall be designed in consultation with Caltrans and the Wildlife Agencies to facilitate bighorn sheep movement through/across the island using structures currently present, such as the bridges spanning Devil's Canyon, and the culverts/low bridge along eastbound Interstate 8.	See B-7c
SS-CM-25: Peninsular Bighorn Sheep	Fund the removal of invasive species and hazardous fences.	• Fund removal of tamarisk, fountain grass, other invasive species, and hazardous fences for the life of the project in the action area, and install and maintain water sources per direction and at locations specified by the Wildlife Agencies for the life of the project.	See B-7c
SS-CM-25: Peninsular Bighorn Sheep	Fund a 10-year monitoring program of bighorn sheep behavior, movement, and dispersal.	• Fund a minimum 10-year-long program to monitor the effects of the project on bighorn sheep behavior, movements, and dispersal in the area from Carrizo Gorge south to the international boundary (10 years is needed to measure the influence of the project while factoring in rainfall cycles, vegetative productivity, and drought). This program will be designed and implemented by the Wildlife Agencies following construction. Funding for the project will be provided prior to completion of project construction and is estimated to cost $150,000 per year in 2008 dollars.	See B-7c
SS-CM-25: Peninsular Bighorn Sheep	Fund biennial surveys to be conducted by CDFG.	• The project proponent will provide sufficient funds to CDFG, or a third party designated by CDFG, to ensure five complete biennial aerial surveys from Carrizo Gorge to the international boundary, for the 10-year period beginning with the scheduled 2010 CDFG survey.	See B-7c

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
SS-CM-25: Peninsular Bighorn Sheep	Do not use bighorn sheep water sources for Project operation and maintenance purposes.	• Water used for operation and maintenance purposes will not be obtained from water sources used by bighorn sheep or other wildlife.	See B-7c
B-7d: Conduct burrowing owl surveys, and implement appropriate avoidance/ minimization/ compensation strategies	Conduct survey within 30 days prior to construction	A survey shall be conducted within 30 days prior to the initiation of construction by a qualified biologist to determine the presence or absence of the burrowing owl in the construction zone plus 250 feet beyond. In addition, the burrowing owl shall be looked for opportunistically as part of other surveys and monitoring required during project construction. If the burrowing owl is absent then no mitigation is required.	Surveys for nesting birds shall be conducted 10 days prior to construction and reported to the CPUC.
B-7d: Conduct burrowing owl surveys, and implement appropriate avoidance/ minimization/ compensation strategies.	No disturbance shall occur if burrowing owl is present	If the burrowing owl is present, no disturbance shall occur within 50 meters (approximately) 160 ft) of occupied burrows from September 1 through January 31 or within 75 meters (approximately 250 ft) of occupied burrows from February 1 through August 31 (CDFG, 1995).	There are no burrowing owls or their associated habitat within the Pomerado Substation; therefore, this mitigation measure is not applicable. If burrowing owls are discovered, provisions of this mitigation measure will be implemented.
B-7d: Conduct burrowing owl surveys, and implement appropriate avoidance/ minimization/ compensation strategies.	Inspect construction material daily	During construction, any pipe or similar construction material that is stored on site for one or more nights shall be inspected for burrowing owls by a qualified biologist before the material is moved, buried, or capped	There are no burrowing owls or their associated habitat within the Pomerado Substation; therefore, this mitigation measure is not applicable. If burrowing owls are discovered, provisions of this mitigation measure will be implemented.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
B-7d: Conduct burrowing owl surveys, and implement appropriate avoidance/ minimization/ compensation strategies.	Passively relocate owls prior to construction and outside of breeding season September 1-January 31	Passive relocation of owls shall be implemented prior to construction only at the direction of the CDFG and only if the above-described occupied burrow disturbance absolutely cannot be avoided (e.g., due to physical or safety constraints). Relocation of owls shall only be implemented during the non-breeding season (September 1 through January 31; CDFG, 1995). Passive relocation is defined as encouraging owls to move from occupied burrows to alternate natural or artificial burrows that are beyond 50 meters from the impact zone and that are within or contiguous to a minimum of 6.5 acres of preserved (or acquired and preserved if not already preserved) foraging habitat for each relocated owl (single owl or owl pair). Passive relocation is accomplished by first creating two artificial burrows in contiguous, preserved foraging habitat (if no natural burrows exist) for each occupied burrow that would be impacted; and second, installing one-way doors on occupied burrow entrances so owls can leave the burrow but not re-enter it. Following passive relocation, the area of impact and the preserved foraging habitat with alternate burrows are surveyed daily for one week to confirm owl use of alternate burrows before excavation of burrows in the impact zone. All passive relocation shall be conducted by a biologist approved by the CDFG. If the alternate burrows are not used by the relocated	There are no burrowing owls or their associated habitat within the Pomerado Substation; therefore, this mitigation measure is not applicable. If burrowing owls are discovered, provisions of this mitigation measure will be implemented.
B-7d: Conduct burrowing owl surveys, and implement appropriate avoidance/ minimization/ compensation strategies.	Mitigate for loss of burrowing owl habitat	The loss of occupied owl habitat shall be mitigated by acquiring and preserving other occupied habitat elsewhere (as explained below) per the Staff Report on Burrowing Owl Mitigation (CDFG, 1995) and the Burrowing Owl Survey Protocol and Mitigation Guidelines (The Burrowing Owl Consortium, 1993), or as otherwise determined in consultation with the CDFG. Impacted occupied habitat shall be mitigated by 1) acquiring and preserving occupied habitat at a rate of 1.5 times 6.5 acres (or 9.75 acres) per pair or single bird impacted, or 2) acquiring and preserving unoccupied habitat contiguous with currently occupied habitat at a rate of two times 6.5 acres (or 13 acres) per pair or single bird impacted, or 3) acquiring and preserving suitable unoccupied habitat at a rate of three times 6.5 acres (or 19.5 acres) per pair or single bird impacted. All acquired habitat shall be acceptable to the CDFG and shall be protected and managed for the burrowing owl in perpetuity. The survey required within 30 days prior to the initiation of construction will determine the presence or absence of the burrowing owl in the construction zone plus 250 feet beyond and whether or not the mitigation needs to be	There are no burrowing owls or their associated habitat within the Pomerado Substation; therefore, this mitigation measure is not applicable. If burrowing owls are discovered, provisions of this mitigation measure will be implemented.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
B-7d: Conduct burrowing owl surveys, and implement appropriate avoidance/ minimization/ compensation strategies.	Submit a Habitat Management Plan	A Habitat Management Plan shall be prepared by a biologist approved by the CPUC, BLM, CDFG, and State Parks (for land in ABDSP) for all acquired burrowing owl habitat. The Habitat Management Plan must be approved in writing by the CPUC, BLM, Wildlife Agencies, and State Parks (for land in ABDSP) prior to the initiation of any activities which may impact (directly or indirectly) the burrowing owl or its habitat. The Applicant shall work with the CPUC, BLM, Wildlife Agencies, and State Parks until a plan is approved by all. The Habitat Management Plan shall provide direction for the preservation and in-perpetuity management of all acquired burrowing owl habitat. The Habitat Management Plan shall include, but shall not be limited to: • Legal descriptions of all acquired or assured (as defined in Mitigation Measure B-1a) burrowing owl habitat approved by the CPUC, BLM, Wildlife Agencies, and State Parks (for mitigation parcels to be part of ABDSP) • Baseline biological data for all acquired burrowing owl habitat • Designation of a land management entity approved by the CPUC, BLM, Wildlife Agencies, and State Parks (for mitigation parcels to be part of ABDSP) 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 the Applicant to fund the Habitat Management Plan and implementation of the Habitat	There are no burrowing owls or their associated habitat within the Pomerado Substation; therefore, this mitigation measure is not applicable. If burrowing owls are discovered, provisions of this mitigation measure will be implemented.
B-7e: Conduct least Bell's vireo and southwestern willow flycatcher surveys, and implement appropriate avoidance/ minimization/ compensation strategies.	Conduct grading or brushing outside of breeding season September 16-March 14	All grading or brushing taking place within riparian habitats of the least Bell's vireo or southwestern willow flycatcher during construction shall be conducted from September 16 (October 1 in ABDSP) through March 14, which is outside the least Bell's vireo and southwestern willow flycatcher breeding seasons.	This mitigation measure is not applicable to construction activities at the Pomerado Substation. There are no least Bell's vireos or their associated habitat within the Substation.
B-7e: Conduct least Bell's vireo and southwestern willow flycatcher surveys, and implement appropriate avoidance/ minimization/ compensation strategies.	Survey within 10 days prior to initiating work in area	When conducting all other construction activities during the breeding season of March 15 through September 15 (September 30 in ABDSP) within 500 feet (USFWS, 2007b) of habitat in which least Bell's vireos and/or southwestern willow flycatchers are known to occur or have potential to occur, a biologist permitted by the USFWS shall survey for least Bell's vireos and southwestern willow flycatchers within 10 calendar days prior to initiating activities in an area. The results of the survey shall be submitted to the Wildlife Agencies for review and approval prior to initiating any construction activities.	This mitigation measure is not applicable to construction activities at the Pomerado Substation. There are no least Bell's vireos or their associated habitat within the Substation.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
B-7e: Conduct least Bell's vireo and southwestern willow flycatcher surveys, and implement appropriate avoidance/ minimization/ compensation strategies.	Survey once per week if species present	If least Bell's vireos or southwestern willow flycatchers are present, a permitted biologist shall survey for nesting vireos and flycatchers approximately once per week within 500 feet of the construction area (USFWS, 2007b), for the duration of the activity in that area during the breeding season.	This mitigation measure is not applicable to construction activities at the Pomerado Substation. There are no least Bell's vireos or their associated habitat within the Substation.
B-7e: Conduct least Bell's vireo and southwestern willow flycatcher surveys, and implement appropriate avoidance/ minimization/ compensation strategies.	Establish 300-foot buffer if active nest found	If/when an active nest is located, a 300 foot no-construction buffer zone (USFWS, 2007b) shall be established around each nest site; however, there may be a reduction of this buffer zone depending on site-specific conditions or the existing ambient level of activity. The Applicant shall contact Wildlife Agencies to determine the appropriate buffer zone. No construction shall take place within this buffer until the nest is no longer active unless there are physical or safety constraints.	This mitigation measure is not applicable to construction activities at the Pomerado Substation. There are no least Bell's vireos or their associated habitat within the Substation.
B-7e: Conduct least Bell's vireo and southwestern willow flycatcher surveys, and implement appropriate avoidance/ minimization/ compensation strategies.	Monitor noise if construction occurs within buffer	If construction must take place within the buffer, a qualified acoustician shall monitor noise as construction approaches the edge of the occupied vireo/flycatcher habitat as directed by the permitted biologist. If the noise meets or exceeds the 60 dB(A) Leq threshold, or if the biologist determines that the activities in general are disturbing the nesting activities, the biologist shall have the authority to halt construction and shall consult with the Wildlife Agencies, State Parks (for activities in ABDSP), and USDA Forest Service (for activities on National Forest lands) to devise methods to reduce the noise and/or disturbance. This may include methods such as, but not limited to, turning off vehicle engines and other equipment whenever possible to reduce noise, installing a protective noise barrier between the nesting birds and the activities, and working in other areas until the young have fledged. The permitted biologist shall monitor the nest daily until either activities are no longer within 300 feet of the nest, or the fledglings become independent of their nest.	This mitigation measure is not applicable to construction activities at the Pomerado Substation. There are no least Bell's vireos or their associated habitat within the Substation.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
B-7e: Conduct least Bell's vireo and southwestern willow flycatcher surveys, and implement appropriate avoidance/ minimization/ compensation strategies.	Provide mitigation for temporary and permanent impacts	Permanent impacts to occupied habitat and/or designated critical habitat shall include offsite acquisition and preservation of occupied habitat or designated critical habitat at a 3:1 ratio. Temporary impacts to occupied habitat or designated critical habitat shall include 1:1 onsite restoration and 2:1 offsite acquisition and preservation of occupied habitat and/or designated critical habitat. Impacts to least Bell's vireo or southwestern willow flycatcher critical habitat must be mitigated within the same Critical Habitat Unit where the impacts occurred. If a USFWS protocol, pre-construction survey, conducted in an area where presence of the vireo or flycatcher was assumed in this analysis (see Appendix 8B) determines that the species is absent, then the mitigation shall be reduced accordingly. Any acquired habitat shall be approved by the CPUC, BLM, Wildlife Agencies, State Parks (for mitigation parcels to be part of ABDSP), and USDA Forest Service (for mitigation parcels to be National Forest lands).	This mitigation measure is not applicable to construction activities at the Pomerado Substation. There are no least Bell's vireos or their associated habitat within the Substation.
B-7e: Conduct least Bell's vireo and southwestern willow flycatcher surveys, and implement appropriate avoidance/ minimization/ compensation strategies.	Submit a Habitat Management Plan	A Habitat Management Plan for any required, offsite mitigation shall be prepared by a biologist approved by the CPUC, BLM, Wildlife Agencies, State Parks (for mitigation parcels to be part of ABDSP), and USDA Forest Service (for mitigation parcels to be National Forest lands). The Habitat Management Plan must be approved in writing by the CPUC, BLM, Wildlife Agencies, State Parks (for mitigation parcels to be part of ABDSP), and USDA Forest Service (for mitigation parcels to be National Forest lands) prior to the initiation of any activities which may impact (directly or indirectly) the least Bell's vireo or southwestern willow flycatcher or its habitat. The Applicant shall work with the CPUC, BLM, Wildlife Agencies, State Parks, and USDA Forest Service until a plan is approved by all. The Habitat Management Plan shall provide direction for the preservation and in-perpetuity management of all acquired vireo or flycatcher habitat. The Habitat Management Plan shall include, but shall not be limited to: • Legal descriptions of all acquired or assured (as defined in Mitigation Measure B-1a) least Bell's vireo or southwestern willow flycatcher habitat approved by the CPUC, BLM, Wildlife Agencies, State Parks (for mitigation parcels to be part of ABDSP), and USDA Forest Service (for mitigation parcels to be National Forest lands) • Baseline biological data for all least Bell's vireo or southwestern willow flycatcher habitat • Designation of a land management entity approved by the CPUC, BLM, Wildlife Agencies, State Parks (for mitigation parcels to be part of ABDSP), and USDA Forest Service (for mitigation parcels to be National Forest lands) 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 the	This mitigation measure is not applicable to construction activities at the Pomerado Substation. There are no least Bell's vireos or their associated habitat within the Substation.
SS-CM-16:Least Bell's Vireo — location of project improvements	Construction outside of the breeding season.	During construction, all grading or brushing taking place within riparian habitats occupied by the vireo will be conducted outside the vireo breeding season (defined as March 15 through September 15).	See B-7e
SS-CM-16:Least Bell's Vireo — location of project improvements	Construction during the breeding season - survey 10 days prior to initiating activity.	When conducting all other construction activities during the breeding season within 152m (500ft) (Service 2007b) of occupied habitat, a biologist approved by the Service will survey for vireos within 10 days prior to initiating activities in the area. The results of the survey will be submitted to the Wildlife Agencies for review and approval prior to initiating and construction activities. o.	See B-7e

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
SS-CM-16:Least Bell's Vireo	Activity protocol for when vireos are present during construction.	• During construction, if vireos are present, a Service-approved biologist will survey daily for nesting vireos within 152 m (500 ft) of the construction area, for the duration of the activity in that area during the breeding season. If an active nest is located, a 91-m (300-ft) no-construction buffer zone will be established around each nest site; however, there may be a reduction of this buffer zone depending on site-specific conditions or the existing ambient level of activity. SDG&E will contact the Wildlife Agencies to determine the appropriate buffer zone. No construction will take place within this buffer zone until the nest has fledged or is no longer active. If construction must take place within the buffer, a qualified acoustician will monitor noise as construction approaches the edge of the occupied vireo habitat as directed by the permitted biologist. If the noise meets or exceeds the 60 dB(A) Leq threshold, or if the biologist determines that construction activities are disturbing nesting activities, the biologist will have the authority to halt construction and will consult with the Wildlife Agencies, BLM and USFS, to devise methods to reduce the noise and/or disturbance. This may include methods such as, but not limited to, turning off vehicle engines and other equipment whenever possible to	See B-7e
SS-CM-16:Least Bell's Vireo	Avoid impacts to jurisdictional water resources.	• Impacts to aquatic resources under the jurisdiction of the Corps of Engineers, Regional Water Boards, State Water Board, and CDFG will be avoided to the extent feasible. The avoidance of these resources will further minimize impacts to vireo.	See B-7e
SS-CM-17: Least Bell's Vireo	Compensation if avoidance is not feasible	To avoid impacts to vireo, towers, pads, pull stations, access roads, staging areas, and fly yards will be located outside of riparian vegetation, including occupied vireo habitat, where feasible. If avoidance is not feasible, compensation for the loss of suitable vireo habitat will be implemented as follows. Permanent impacts to suitable habitat will include 3:1 offsite acquisition and preservation of occupied habitat. Temporary impacts to occupied habitat will include 1:1 on-site restoration and 2:1 offsite acquisition and preservation of occupied habitat. Any acquired habitat will be approved by the CPUC, BLM, USFS, and Wildlife Agencies.	See B-7e
SS-CM-18:**Least Bell's Vireo**	Develop and implement brown-headed cowbird trapping program for USFS lands.	To minimize adverse impacts from loss of occupied habitat in the Cleveland National Forest, and to minimize predation and parasitism, SDG&E will develop and implement a brown-headed cowbird (Molothrus ater) trapping program, in consultation with the USFS.	See B-7e
B-7h: Implement appropriate avoidance/ minimization strategies for eagle nests.	No activities within 4,000 ft. of eagle nest during breeding season	No construction or maintenance activities shall occur within 4,000 feet of an eagle nest during the eagle breeding season (December through June).	No suitable eagle habitat exists within or adjacent to the Pomerado Substation; therefore this mitigation measure is not applicable.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
B-7i: Conduct Quino checkerspot butterfly surveys, and implement appropriate avoidance/ minimization/ compensation strategies	Determine suitable habitat areas of QCB	A biologist permitted by the USFWS shall determine suitable habitat areas (i.e., non-excluded areas per the 2002 USFWS protocol; USFWS, 2002b) within any designated USFWS QCB survey area (e.g., Survey Area 2) that would be impacted by project construction.	This mitigation measure is not applicable to construction activities at the Pomerado Substation. There are no Quino checkerspot butterflies or their associated habitat within the Substation.
B-7i: Conduct Quino checkerspot butterfly surveys, and implement appropriate avoidance/ minimization/ compensation strategies.	Conduct pre-construction protocol survey	A pre-construction, USFWS protocol presence/absence survey for the adult QCB shall be conducted within all suitable habitat for this species in the construction zone within any designated USFWS QCB survey area. The survey shall be conducted in a year where the QCB is readily observed at USFWS QCB-monitored reference sites to determine what areas are occupied by the QCB (i.e., any suitable habitat within 1 km of a current QCB sighting is considered occupied) and what areas are not occupied. The USFWS permitted biologist shall record the precise locations of QCB larval host plants within the construction zone (and 10 meters beyond) using GPS technology. If the protocol pre-construction survey is conclusive for determining absence of the QCB, then areas without the butterfly would not require mitigation.	This mitigation measure is not applicable to construction activities at the Pomerado Substation. There are no Quino checkerspot butterflies or their associated habitat within the Substation.
B-7i: Conduct Quino checkerspot butterfly surveys, and implement appropriate avoidance/ minimization/ compensation strategies.	Mitigation required if survey non-conclusive	If the protocol pre-construction survey is not conclusive for determining QCB absence (due to limited detectability per the 2002 protocol, for example), or if a survey is not conducted, then all suitable habitat areas would be considered potentially occupied and would require mitigation as follows. If construction occurs outside the larvae and adult activity season (June 1 through October 15) and stays at least 10 meters away from all host plant locations, then no mitigation is required (USFWS, 2007d). If construction occurs between October 16 and May 31 or within 10 meters of host plant locations, or within designated critical habitat, then (1) temporary impacts to the habitat shall be mitigated through onsite restoration of temporarily disturbed areas and offsite acquisition and preservation of an equal sized area of QCB-occupied habitat (a 2:1 mitigation ratio) and (2) permanent impacts shall be mitigated through offsite acquisition and preservation of QCB-occupied habitat (or QCB-designated critical habitat for impacts to designated critical habitat) at a 2:1 ratio (i.e., two acres acquired for each acre lost). Any acquired habitat shall be approved by the CPUC, BLM, Wildlife Agencies, State Parks (for	This mitigation measure is not applicable to construction activities at the Pomerado Substation. There are no Quino checkerspot butterflies or their associated habitat within the Substation.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
B-7i: Conduct Quino checkerspot butterfly surveys, and implement appropriate avoidance/ minimization/ compensation strategies.	Submit a Habitat Management Plan	A Habitat Management Plan for any required, offsite mitigation shall be prepared by a biologist approved by the CPUC, BLM, Wildlife Agencies, State Parks (for mitigation parcels to be part of ABDSP), and USDA Forest Service (for mitigation parcels to be National Forest lands). The Habitat Management Plan must be approved in writing by the CPUC, BLM, Wildlife Agencies, State Parks (for mitigation parcels to be part of ABDSP), and USDA Forest Service (for mitigation parcels to be National Forest lands) prior to the initiation of any activities which may impact (directly or indirectly) the QCB or its habitat. The Applicant shall work with the CPUC, BLM, Wildlife Agencies, State Parks, and USDA Forest Service until a plan is approved by all. The Habitat Management Plan shall provide direction for the preservation and in-perpetuity management of all acquired QCB habitat. The Habitat Management Plan shall include, but shall not be limited to: • Legal descriptions of all acquired or assured (as defined in Mitigation Measure B-1a) QCB habitat approved by the CPUC, BLM, Wildlife Agencies, State Parks (for mitigation parcels to be part of ABDSP), and USDA Forest Service (for mitigation parcels to be National Forest lands) • Baseline biological data for all QCB habitat • Designation of a land management entity approved by the CPUC, BLM, Wildlife Agencies, State Parks (for mitigation parcels to be part of ABDSP), and USDA Forest Service (for mitigation parcels to be National Forest lands) 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 the	This mitigation measure is not applicable to construction activities at the Pomerado Substation. There are no Quino checkerspot butterflies or their associated habitat within the Substation.
SS-CM-3:**Quino Checkerspot Butterfly**	A USFWS-permitted biologist must delineate suitable/occupied Quino habitat.	A biologist permitted by the Service will delineate suitable/occupied habitat areas that will be impacted by Project construction. Suitable habitat is defined as areas containing the primary constituent elements (PCEs) as outlined in the January 17, 2008, proposed revision to critical habitat (73 FR 3328) (see the "Status of the Species/Critical Habitat" section below for a discussion of the PCEs for Quino). Occupied Quino habitat is defined as contiguous suitable habitat containing the PCEs within 2 kilometers of a known Quino occurrence ("habitat-based population distribution") (73 FR 3328). Delineated suitable/occupied habitat and the results of the Quino protocol presence/absence surveys will be submitted to the Service for review and approval before an incidental take permit may be issued for this species. Impacts to Quino habitat will be determined by the amount of suitable/unoccupied habitat and/or occupied habitat that is proposed to be impacted indirectly and directly.	See B-7i
SS-CM-4:Quino Checkerspot Butterfly	Conduct a pre-construction presence/absence survey.	A pre-construction, Service protocol presence/absence survey for the adult Quino will be conducted within the delineated suitable/occupied habitat in the construction zone. Any surveys will be conducted in a year where Quino is readily observed at Service Quino-monitored reference sites to determine what areas are occupied by Quino (i.e., any suitable habitat within 1 km (0.6 mi) of a current Quino sighting is considered occupied) and what areas are not occupied. The biologist will record the precise locations of Quino larval host plants and nectar sources within the construction zone (and 10 meters beyond) using GPS technology.	See B-7i

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
SS-CM-4:Quino Checkerspot Butterfly	No species-specific compensation required in areas where survey is conclusive.	• If the protocol pre-construction Quino survey is determined by the Service to be conclusive, then areas found to be unoccupied by Quino will not require species-specific compensation.	See B-7i
SS-CM-4:Quino Checkerspot Butterfly	In the event of inconclusive surveys, consider all habitat occupied and compensate accordingly.	• If the Service determines that the protocol pre-construction survey is not conclusive for determining Quino absence (due to limited detectability per the 2002 protocol, for example), then all suitable habitat areas will be considered potentially occupied. SDG&E will avoid siting any permanent or temporary impacts within 1 km (1 mi) of any known or newly discovered Quino occurrences. If the SDG&E believes that impacts to Quino are unavoidable, it will provide evidence to such an effect to the Service for review and approval. Any approved impacts to Quino occupied or Quino suitable habitat will require compensation as follows. If construction occurs outside the larvae and adult activity season (June 1 through October 15), stays at least 10 m (33 ft) away from all host plant locations, and does not impact suitable habitat then no compensation is required (Service 2007a). If construction occurs between October 16 and May 31, is within 10 m (33 ft) of host plant locations, or removes suitable habitat then, (1) temporary impacts to the habitat will be mitigated at 2:1 through 1:1 on-site restoration of temporarily disturbed areas and 1:1 offsite acquisition and preservation of an equal sized, contiguous area of Quino-occupied habitat, and (2) permanent impacts will be compensated through 3:1 off-	See B-7i
SS-CM-4:Quino Checkerspot Butterfly	Host plant mapping during pre-construction surveys.	• If host plant mapping is not possible during the pre-construction survey (e.g., drought prevents plant germination), then all suitable habitat (i.e., non-excluded habitat per the 2002 protocol) will be considered occupied by the Quino and compensated under the assumption that Quino is present.	See B-7i
SS-CM-5:**Quino Checkerspot Butterfly**	Include habitat restoration in USFS's Recovery Plan for Quino Checkerspot Butterfly.	Any Service-approved restoration of impacted habitat will be conducted in areas with appropriate topographical and biological features to be determined by the Service, BLM, USFS and SDG&E. The details of the restoration shall be based on Appendix II of the Recovery Plan for the Quino Checkerspot Butterfly (Service 2003a) and described in a plan to be reviewed and approved by the Service. The restoration plan shall include, but not be limited to: (1) larval host plants (local stock, if possible) to be planted; (2) nectar resources; (3) irrigation needs and/or other establishment procedures; (4) timeline for implementation; (5) success criteria; (6) contingency measures for success criteria that are not met; (7) weed control measures; (8) monitoring program; and (9) implementation schedule. The restoration plan will be prepared and submitted to the Service prior to commencement of ground disturbance associated with the proposed project. The proposed project will not commence until the restoration begins. The restoration plan actions will be completed no later than completion of project construction. Success criteria will be modeled on undisturbed native plant communities in the vicinity of the proposed project and sites within the area known to be occupied by Quino.	See B-7i
SS-CM-6:**Quino Checkerspot Butterfly**	Quino habitat within the Jacumba Unit.	Due the extreme importance of the Quino population located in the Jacumba Unit of Quino critical habitat, SDG&E will consult with the Service regarding the final design and siting of all permanent and temporary impacts (e.g., towers, pads, access roads, staging areas, pull down areas, helipads, and fuel modification zones) within Quino critical habitat. SDG&E will work with the Service to ensure that no larvae or adults within critical habitat will be impacted by this project.	See B-7i

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
SS-CM-7:**Quino Checkerspot Butterfly**	Construction during Quino flight season.	No new construction will occur during the Quino flight season within 1 km (1 mi) of any known or newly discovered Quino occurrence. If it is not feasible to construct outside of the flight season in these instances, SDG&E must obtain written consent from the Service to proceed with construction.	See B-7i
SS-CM-26:**Quino Checkerspot Butterfly**	Re-grading and clearing of access roads to avoid consideration as a new Quino habitat impact.	If access roads in QCB-occupied or suitable habitat are maintained (i.e., regarded) and vegetation around structures is cleared at least once every two years, then no additional mitigation shall be required for this ongoing maintenance. If more than two years pass without re-grading or clearing, then the maintenance will be considered a new impact to Quino and would be compensated based on SS-CM-2.	See B-7i
SS-CM-27:**Quino Checkerspot Butterfly**	Emergency O&M activities will not require pre-activity surveys.	Some O&M activities associated with the project may need to be conducted on emergency basis. Under these circumstances, no pre-activity survey will be conducted and no Quino adult surveys will be conducted. SDG&E may take action immediately and must contact the Service within 24 hours after undertaking the activity to provide information on the location and emergency nature of the activity. Unavoidable impacts that occurred during emergency O&M activities will be mitigated at a 2:1 ratio.	See B-7i
B-7j: Conduct arroyo toad surveys, and implement appropriate avoidance/ minimization/ compensation strategies.	Conduct pre-construction protocol survey	A pre-construction, USFWS protocol survey shall be conducted for the toad in the construction zone (by a biologist permitted by the USFWS to handle the toad) where absence of the species has not been proven to conclusively define the impacts to occupied habitat. In the absence of this survey data, the mitigation acreages required below in B-7j-4 shall stand. Where the pre-construction survey determines the species is absent, the mitigation shall be reduced accordingly.	This mitigation measure is not applicable to construction activities at the Pomerado Substation. There are no arroyo toads or suitable habitat within the Substation.
B-7j: Conduct arroyo toad surveys, and implement appropriate avoidance/ minimization/ compensation strategies.	Remove toad riparian breeding habitat October-December	The removal of toad riparian breeding habitat shall occur from October through December to minimize potential impacts to breeding adults (including potential sedimentation impacts to toad eggs) and dispersing juveniles.	This mitigation measure is not applicable to construction activities at the Pomerado Substation. There are no arroyo toads or suitable habitat within the Substation.
B-7j: Conduct arroyo toad surveys, and implement appropriate avoidance/ minimization/ compensation strategies.	Install exclusion fencing if toad is present and monitor daily during construction	Where the toad is present (or assumed to be present if no pre-construction survey is conducted), the construction zone shall be fenced with exclusion fencing to prevent toad access to it. The fencing shall be a silt-screen type barrier comprised of a minimum 24 inch high fence with the remainder (minimum 12 inches) anchored firmly against the ground. The fence may be buried if necessary to exclude toad access. The fence locations shall be identified by a USFWS permitted biologist and adjusted as necessary. Exclusion fencing shall be monitored daily by a qualified biologist (see Mitigation Measure B-1c) and maintained in its original condition by construction personnel for the entire length of the construction period in toad habitat.	This mitigation measure is not applicable to construction activities at the Pomerado Substation. There are no arroyo toads or suitable habitat within the Substation.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
B-7j: Conduct arroyo toad surveys, and implement appropriate avoidance/ minimization/ compensation strategies.	Conduct pre- and post-exclusion fencing surveys	Pre- and post-exclusion fencing surveys within the construction zone shall be conducted for arroyo toads by a biologist permitted by the USFWS to handle the toad. Prior to construction commencement, a minimum of three surveys shall be conducted by this biologist following installation of the fencing and prior to construction activities: • One of these clearance surveys must take place no more than 24 hours prior to activity commencement • These surveys shall be conducted during appropriate climatic conditions and during the appropriate time of day or night to maximize the likelihood of encountering arroyo toads • If conditions are not appropriate for arroyo toad movement during surveys, the biologist may attempt to elicit a response from the toads during nights (i.e., at least one hour after sunset), provided that temperatures are above 50°F, by spraying the project area with water to simulate a rain event	This mitigation measure is not applicable to construction activities at the Pomerado Substation. There are no arroyo toads or suitable habitat within the Substation.
B-7j: Conduct arroyo toad surveys, and implement appropriate avoidance/ minimization/ compensation strategies.	Conduct daily surveys in the morning prior to work activities	After the three clearance surveys outlined above have been completed, daily surveys shall be conducted each morning prior to the continuation of construction or maintenance activity. Any toads found shall be relocated to appropriate similar habitat outside project impact areas.	This mitigation measure is not applicable to construction activities at the Pomerado Substation. There are no arroyo toads or suitable habitat within the Substation.
B-7j: Conduct arroyo toad surveys, and implement appropriate avoidance/ minimization/ compensation strategies.	Mitigate for the loss of occupied habitat	Mitigation for the loss of arroyo toad-occupied habitat shall be implemented as follows. Permanent impacts to occupied, arroyo toad breeding habitat shall include off-site acquisition and preservation of occupied arroyo toad breeding habitat at a 3:1 ratio. Permanent impacts to occupied, upland burrowing habitat shall include off-site acquisition and preservation of occupied, upland burrowing habitat at a 2:1 ratio. Temporary impacts to occupied breeding habitat shall include 1:1 on-site restoration and 2:1 off-site acquisition and preservation of occupied breeding habitat. Temporary impacts to occupied, upland burrowing habitat shall include 1:1 on-site restoration and 1:1 off-site acquisition and preservation of occupied, upland burrowing habitat. Any acquired arroyo toad habitat shall be approved by the CPUC, BLM, Wildlife Agencies, and USDA Forest Service (for mitigation parcels to be National Forest lands).	This mitigation measure is not applicable to construction activities at the Pomerado Substation. There are no arroyo toads or suitable habitat within the Substation.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
B-7j: Conduct arroyo toad surveys, and implement appropriate avoidance/ minimization/ compensation strategies.	Submit a Habitat Management Plan	A Habitat Management Plan for any required, off-site mitigation shall be prepared by a biologist approved by the CPUC, BLM, Wildlife Agencies, and USDA Forest Service (for mitigation parcels to be National Forest lands). The Habitat Management Plan must be approved in writing by the CPUC, BLM, Wildlife Agencies, and USDA Forest Service (for mitigation parcels to be National Forest lands) prior to the initiation of any activities which may impact (directly or indirectly) the arroyo toad or its habitat. The Applicant shall work with the CPUC, BLM, Wildlife Agencies, and USDA Forest Service until a plan is approved by all. The Habitat Management Plan shall provide direction for the preservation and in-perpetuity management of all acquired arroyo toad habitat. The Habitat Management Plan shall include, but shall not be limited to: • Legal descriptions of all acquired or assured (as defined in Mitigation Measure B-1a) arroyo toad habitat approved by the CPUC, BLM, Wildlife Agencies, and USDA Forest Service (for mitigation parcels to be National Forest lands) • Baseline biological data for all arroyo toad habitat • Designation of a land management entity approved by the CPUC, BLM, Wildlife Agencies, and USDA Forest Service (for mitigation parcels to be National Forest lands) 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 • Applicant to fund the Habitat Management Plan and implementation of the Habitat	This mitigation measure is not applicable to construction activities at the Pomerado Substation. There are no arroyo toads or suitable habitat within the Substation.
SS-CM-8:**Arroyo Toad**	Pre-construction Service protocol survey within suitable breeding habitat.	A pre-construction, Service protocol, survey will be conducted for the arroyo toad by a biologist approved by the Service to handle the toad in all areas of the project located within suitable arroyo toad breeding habitat. • The removal of toad riparian breeding habitat will occur from October through December to minimize potential impacts to breeding adults (including potential sedimentation impacts to toad eggs) and dispersing juveniles.	See B-7j

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
SS-CM-9:**Arroyo Toad**	Develop arroyo toad translocation monitoring program prior to initiating construction.	SDG&E will develop an arroyo toad translocation monitoring program to be implemented during all construction activities that have the potential to adversely affect the arroyo toad. This program will be coordinated with the Service, USFS, and BLM, and finalized prior to initiation of construction activities. This program will include the following requirements: • Prior to clearing, grubbing, and construction activities, Service-permitted biologists will monitor arroyo toad breeding activity in those project areas containing or adjacent to breeding habitat. The biologists will determine when egg clutches or larvae are no longer present in the waterway (generally late May at lower elevation, June at higher elevation). When sign of breeding is no longer evident, an exclusionary fence will be installed and clearance surveys initiated. • Prior to clearing, grubbing, and grading activities, arroyo toad temporary exclusionary fence will be constructed along the perimeter of the project footprint within or immediately adjacent to arroyo toad habitat (breeding and aestivation). The intent of the fence is to fully contain the area(s) to be impacted and to remove and exclude arroyo toads. Exclusionary fence in aestivation habitat will not be installed prior to May 1. The Service-permitted biologist will be present during the exclusionary fence installation, reconfigurations, breach repairs, and weekly during the breeding season. The fence will consist of fabric or plastic at least 0.6 m (2 ft) high, staked firmly to the ground with the lower 0.3 m (1 ft) of material stretching outward along the ground and secured with a continuous line of gravel bags. No digging or vegetation removal will be associated with the installation of the fence and all materials shall be removed when the Project is complete. The removal of some vegetation, without disturbing the soil, within the project	See B-7j
SS-CM-10:**Arroyo Toad**	Develop and implement predator control program in USFS lands.	To offset the loss of occupied and suitable arroyo toad habitat within the project area, and to offset indirect effects of he project on arroyo habitat, SDG&E will develop and implement an arroyo toad predator control program on USFS lands. The scope and methods for this program will be developed in consultation with the Service and USFS.	See B-7j
SS-CM-11:**Arroyo Toad**	Requirements for arroyo toad-occupied habitat loss.	Compensation for the loss of arroyo toad-occupied habitat will be implemented as follows. Permanent impacts to occupied arroyo toad breeding habitat will include 3:1 off-site acquisition and preservation of occupied arroyo toad breeding habitat. Permanent impacts to occupied upland burrowing habitat will include 2:1 off-site acquisition and preservation of occupied upland burrowing habitat. Temporary impacts to occupied breeding habitat will include 1:1 on-site restoration and 2:1 off-site acquisition and preservation of occupied breeding habitat. Temporary impacts to occupied upland burrowing habitat will include 1:1 on-site restoration and 1:1 off-site acquisition and preservation of occupied upland burrowing habitat. Any acquired habitat will be approved by the CPUC, BLM, USFS, and Wildlife Agencies.	See B-7j
SS-CM-12:**Arroyo Toad**	Daylight use of access roads to avoid/minimize impacts to arroyo toads.	To avoid and minimize impacts to arroyo toads, access road construction and use, with the exception of emergency situations, will occur during daylight hours (from 2 hours after sunrise to 2 hours before sunset) when amphibian movement is less frequent.	See B-7j

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
SS-CM-13:**Arroyo Toad**	No construction activities during arroyo toad breeding season.	No construction activities will take place during the arroyo toad breeding season (March 15-July 31) within suitable arroyo toad breeding habitat.	See B-7j
SS-CM-14:**Arroyo Toad**	Remove all temporary exclusion and construction fencing at conclusion of construction.	To avoid long-term impacts to wildlife movement, including, but not limited to arroyo toad movement on the project site, all temporary arroyo toad exclusion fencing and temporary construction fencing will be removed at the conclusion of construction activities.	See B-7j
SS-CM-15:**Arroyo Toad**	Do not locate improvements within arroyo toad upland aestivation and riparian breeding habitat.	Towers, pads, pull stations, access roads, staging areas, and fly yards will not be located within suitable/potential arroyo toad upland aestivation and riparian breeding habitat to the extent feasible. In cases where the applicant determines it is not feasible to fully avoid suitable/potential arroyo toad habitat, the applicant will consult with the Service to identify a site for the above-listed features that would avoid and minimize impacts to suitable/potential arroyo toad upland aestivation and riparian breeding habitat to the maximum extent.	See B-7j
B-7l: Conduct coastal California gnatcatcher surveys, and implement appropriate avoidance/ minimization/ compensation strategies.	Conduct brushing or grading in occupied habitat outside breeding season February 15-August 30	All brushing or grading taking place within occupied habitat of the coastal California gnatcatcher (defined as within 500 feet of any gnatcatcher sightings [USFWS, 2007b]) during construction shall be conducted from September 1 through February 14, which is outside the coastal California gnatcatcher breeding season.	This mitigation measure is not applicable to construction activities at the Pomerado Substation. There are no coastal California gnatcatchers or suitable habitat within the Substation.
B-7l: Conduct coastal California gnatcatcher surveys, and implement appropriate avoidance/ minimization/ compensation strategies.	Conduct survey within 10 days of initiating other activities in area and submit to agencies	When conducting all other construction activities during the coastal California gnatcatcher breeding season of February 15 through August 30, within habitat in which coastal California gnatcatchers are known to occur or have potential to occur: • A USFWS permitted biologist shall survey for coastal California gnatcatchers within 10 calendar days prior to initiating activities in an area; • The results of the survey shall be submitted to the Wildlife Agencies for review and approval prior to initiating any construction activities • If coastal California gnatcatchers are present, but not nesting, a USFWS permitted biologist shall survey for nesting coastal California gnatcatchers approximately once per week within 500 feet of the construction area for the duration of the activity in that area during the breeding season	This mitigation measure is not applicable to construction activities at the Pomerado Substation. There are no coastal California gnatcatchers or suitable habitat within the Substation.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
B-7l: Conduct coastal California gnatcatcher surveys, and implement appropriate avoidance/ minimization/ compensation strategies.	Establish 300-foot buffer if active nest found	If/when an active nest is located, a 300-foot no-construction buffer (USFWS, 2007b) shall be established around each nest site; however, there may be a reduction of this buffer zone depending on site-specific conditions or the existing ambient level of activity. The Applicant shall contact Wildlife Agencies to determine the appropriate buffer zone. To the extent feasible, no construction shall take place within this buffer until the nest is no longer active. If construction must take place within the 300-foot buffer, a qualified acoustician shall monitor noise as construction approaches the edge of the occupied gnatcatcher habitat as directed by the permitted biologist. If the noise meets or exceeds the 60 dB(A) Leq threshold, or if the biologist determines that the activities in general are disturbing the nesting activities, the biologist shall have the authority to halt construction and shall consult with the Wildlife Agencies to devise methods to reduce the noise and/or disturbance in the vicinity. This may include methods such as, but not limited to, turning off vehicle engines and other equipment whenever possible to reduce noise, installing a protective noise barrier between the nesting coastal California gnatcatchers and the	This mitigation measure is not applicable to construction activities at the Pomerado Substation. There are no coastal California gnatcatchers or suitable habitat within the Substation.
B-7l: Conduct coastal California gnatcatcher surveys, and implement appropriate avoidance/ minimization/ compensation strategies.	Mitigate the loss of occupied habitat and unoccupied designated critical habitat	Mitigation for the loss of coastal California gnatcatcher-occupied habitat shall be implemented as follows. Permanent impacts to occupied habitat shall include off-site acquisition and preservation of occupied habitat at a 2:1 ratio. Temporary impacts to occupied habitat shall be mitigated at a 2:1 ratio and shall include 1:1 on-site restoration and 1:1 off-site acquisition and preservation of occupied habitat. Mitigation for the loss of unoccupied designated critical habitat for the gnatcatcher shall be implemented as follows. Permanent impacts to unoccupied designated critical habitat shall include off-site acquisition and preservation of designated critical habitat at a 2:1 ratio. Temporary impacts to unoccupied designated critical habitat shall include 1:1 on-site restoration. Impacts to coastal California gnatcatcher critical habitat must be mitigated within the same Critical Habitat Unit where the impacts occurred. Any acquired coastal California gnatcatcher habitat shall be approved by the CPUC, BLM, Wildlife Agencies, and USDA Forest Service (for mitigation parcels to be National Forest lands).	This mitigation measure is not applicable to construction activities at the Pomerado Substation. There are no coastal California gnatcatchers or suitable habitat within the Substation.
B-7l: Conduct coastal California gnatcatcher surveys, and implement appropriate avoidance/ minimization/ compensation strategies.	Submit a Habitat Management Plan	A Habitat Management Plan for any required, off-site mitigation shall be prepared by a biologist approved by the CPUC, BLM, Wildlife Agencies, and USDA Forest Service (for mitigation parcels to be National Forest lands). The Habitat Management Plan must be approved in writing by the CPUC, BLM, Wildlife Agencies, and USDA Forest Service (for mitigation parcels to be National Forest lands) prior to the initiation of any activities which may impact (directly or indirectly) the coastal California gnatcatcher or its habitat. The Applicant shall work with the CPUC, BLM, Wildlife Agencies, and USDA Forest Service until a plan is approved by all. The Habitat Management Plan shall provide direction for the preservation and in-perpetuity management of all acquired coastal California gnatcatcher. The Habitat Management Plan shall include, but shall not be limited to: • Legal descriptions of all acquired or assured (as defined in Mitigation Measure B-1a) coastal California gnatcatcher habitat approved by the CPUC, BLM, Wildlife Agencies, and USDA Forest Service (for mitigation parcels to be National Forest lands) • Baseline biological data for all coastal California gnatcatcher habitat • Designation of a land management entity approved by the CPUC, BLM, Wildlife Agencies, and USDA Forest Service (for mitigation parcels to be National Forest lands) 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	This mitigation measure is not applicable to construction activities at the Pomerado Substation. There are no coastal California gnatcatchers or suitable habitat within the Substation.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
SS-CM-19:California Gnatcatcher	Conduct brushing or grading activities within occupied gnatcatcher habitat outside of the breeding season.	All brushing or grading taking place within occupied habitat of the coastal California gnatcatcher (defined as within 500 feet of any gnatcatcher sightings [USFWS, 2007b]) during construction will be conducted outside of the gnatcatcher breeding season (February 15 through August 31). When conducting all other construction activities during the gnatcatcher breeding season, within occupied habitat, the following avoidance measures must apply:	See B-7l
SS-CM-19:California Gnatcatcher	Monitor all vegetation clearing activities.	• Vegetation clearing outside of the breeding season (October 1 through February 14) will take place in the presence of a biological monitor approved by the Service. The monitor will walk ahead of vegetation removal equipment and ensure that gnatcatchers are not killed or injured as a direct result of vegetation removal activities. The monitor will have the authority to halt/suspend all activities until appropriate corrective measures have been completed. The monitor will also be required to report violations immediately to the Service and CDFG. This measure is required for construction activities only.	See B-7l
SS-CM-19:California Gnatcatcher	Conduct presence/absence survey 10 days prior to initiating construction activities. Conduct nest survey, as appropriate.	• A Service-approved biologist will survey for gnatcatchers within 10 days prior to initiating activities in an area. The results of the survey will be submitted to the Wildlife Agencies for review and approval prior to initiating any construction activities. If gnatcatchers are present, a Service-approved biologist will survey for nesting activity approximately once per week within 152 m (500 ft) of the construction area for the duration of the activity.	See B-7l
SS-CM-19:California Gnatcatcher	Establish no-construction barrier around active nests.	• If an active nest is located, a 91-m (300-ft) no-construction buffer (Service 2007b) will be established around each nest site; however, there may be a reduction of this buffer zone depending on site-specific conditions or the existing ambient level of activity. The applicant will contact the Wildlife Agencies to determine the appropriate buffer zone. To the extent feasible, no construction will take place within this buffer zone until the nest is no longer active. However, if construction must take place within the 91-m (300-ft) buffer, a qualified acoustician will monitor noise as construction approaches the edge of the occupied gnatcatcher habitat as directed by the permitted biologist. If the noise meets or exceeds the 60 dB(A) Leq threshold, or if the biologist determines that the activities in general are disturbing the nesting activities, the biologist will have the authority to halt construction and will consult with the Wildlife Agencies to devise methods to reduce the noise and/or disturbance in the vicinity. This may include methods such as, but not limited to, turning off vehicle engines and other equipment whenever possible to reduce noise, installing a protective noise barrier between the nesting gnatcatchers and the activities, and working in other areas until the	See B-7l
SS-CM-20:**California Gnatcatcher**	Compensate for loss of occupied gnatcatcher habitat.	Compensation for the loss of occupied gnatcatcher habitat will be implemented as follows. Permanent impacts to occupied habitat will include 2:1 offsite acquisition and preservation of occupied habitat. Temporary impacts to occupied habitat will include 1:1 onsite restoration and 1:1 off-site acquisition and preservation of occupied habitat. Impacts to occupied gnatcatcher designated critical habitat must be compensated within the same Critical Habitat Unit where the impacts occurred. Any acquired habitat will be approved by the CPUC, BLM, USFS, and Wildlife Agencies.	See B-7l

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
SS-CM-21:**California Gnatcatcher**	Compensate for loss of unoccupied gnatcatcher habitat.	Compensation for the loss of unoccupied designated critical habitat for the gnatcatcher will be implemented as follows. Permanent impacts to unoccupied designated critical habitat will include 2:1 offsite acquisition and preservation of designated critical habitat. Temporary impacts to unoccupied designated critical habitat will include 1:1 onsite restoration. Any acquired habitat will be approved by the CPUC, BLM, USFS, and Wildlife Agencies.	See B-7l
B-8a: Conduct pre-construction surveys and monitoring for breeding birds.	Clear vegetation August 16-January 14 and remove/trim trees September 16-December 31	All vegetation clearing, except tree trimming or removal, shall take place between August 16 and January 14 (i.e., outside of the general avian breeding season of January 15 through August 15). Tree removal or trimming shall take place between September 16 and December 31 (i.e., outside the raptor breeding season of January 1 through September 15).	This mitigation measure is not applicable to construction activities occurring at the Substation. There will be no vegetation clearing.
B-8a: Conduct pre-construction surveys and monitoring for breeding birds.	Conduct pre-construction avian breeding surveys within 10 days of initiating work January 1-September 15 and submit surveys	If project construction (not vegetation clearing or tree trimming/removal) cannot occur completely outside the general avian breeding season, then pre-construction surveys for non-listed bird species' nests shall be conducted by a qualified biologist within 100 feet of the construction zone within 10 calendar days prior to the initiation of construction that would occur between January 15 and August 15. The results of the survey shall be submitted to the Wildlife Agencies for review and approval prior to initiating any construction activities.	Although the Substation yard is devoid of vegetation, birds may nest within the yard on existing equipment and structures. A qualified biologist will conduct avian breeding surveys within the Substation and along the perimeter of the site within 10 calendar days prior to construction. Results of the surveys will be submitted to Wildlife Agencies for review and approval. If active nests are located, a buffer as defined in this measure will be established and monitored on a weekly basis to allow construction to proceed.
B-8a: Conduct pre-construction surveys and monitoring for breeding birds.	Conduct pre-construction raptor breeding surveys within 10 days of initiating work January 1-September 15 and submit surveys	If project construction (not vegetation clearing or tree trimming/removal) including the use of helicopters cannot occur completely outside the raptor breeding season, then pre-construction surveys for active raptor nests shall be conducted by a qualified biologist within 500 feet of the construction zone within 10 calendar days prior to the initiation of construction that would occur between January 1 and September 15. The results of the survey shall be submitted to the Wildlife Agencies for review and approval prior to initiating any construction activities.	Although the Substation yard is devoid of vegetation, birds may nest within the yard on existing equipment and structures. A qualified biologist will conduct avian breeding surveys within the Substation and along the perimeter of the site within 10 calendar days prior to construction. Results of the surveys will be submitted to Wildlife Agencies for review and approval. If active nests are located, a buffer as defined in this measure will be established and monitored on a weekly basis to allow construction to proceed.
B-8a: Conduct pre-construction surveys and monitoring for breeding birds.	Proceed with construction if no active nests observed	If no active nests are observed, construction may proceed.	This mitigation measure will be fulfilled during construction, as needed; therefore, it is not applicable as a pre-construction requirement.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
B-8a: Conduct pre-construction surveys and monitoring for breeding birds.	Proceed with construction if active nests found per conditions	If active nests are found, work may proceed provided that construction activity is 1) located at least 500 feet from raptor nests (USFWS, 2007b), 2) located at least 160 to 250 feet from occupied burrowing owl burrows (CDFG, 1995; see Mitigation Measure B-7d), 3) located at least 300 feet from listed bird species nests (see Mitigation Measure B-7e and B-7l), 4) located at least 100 feet from non-listed bird species nests, 5) noise levels do not exceed 60 dB(A)hourly Leq at the edge of nesting territories (American Institute of Physics, 2005) as determined by a qualified biologist in coordination with a qualified acoustician. There may be a reduction of these buffer zones depending on site-specific conditions or the existing ambient level of activity. The Applicant shall contact Wildlife Agencies to determine the appropriate buffer zone. In the case of raptors (except the burrowing owl), the noise level restriction stated above does not apply (USFWS, 2007b). For non-raptors and the burrowing owl, if the noise meets or exceeds the 60 dB(A) Leq threshold, or if the biologist determines that the construction activities are disturbing nesting activities, the biologist shall have the authority to halt the construction and shall devise methods to reduce the noise and/or disturbance in the vicinity. This may include methods such as, but not limited to, turning off vehicle engines and other equipment whenever possible to reduce noise, installing a protective noise barrier between the nest site and the construction activities, and working in other areas until the young have fledged. If noise levels still exceed 60 dB(A) Leq hourly at the edge of nesting territories and/or a no-construction buffer cannot be maintained, construction shall be deferred in that area until the nestlings have fledged.	This mitigation measure will be fulfilled during construction; therefore, it is not applicable as a pre-construction requirement. During construction, if active nests are located, a buffer as defined in this measure will be established and monitored on a weekly basis to allow construction to proceed.
B-8a: Conduct pre-construction surveys and monitoring for breeding birds.	Monitor active nests weekly until fledged	All active nests shall be monitored on a weekly basis until the nestlings fledge.	This mitigation measure will be fulfilled during construction, as needed; therefore, it is not applicable as a pre-construction requirement.
B-8a: Conduct pre-construction surveys and monitoring for breeding birds.	Report survey results and monitoring	The qualified biologist shall be responsible for documenting the results of the surveys and the ongoing monitoring and for reporting these results to the CPUC, BLM, Wildlife Agencies, State Parks (for construction in ABDSP), and USDA Forest Service (for alternatives with construction on National Forest lands).	Results of surveys will be submitted as required and a qualified biologist will continue to monitor the site as appropriate.
B-9a: Survey for bat nursery colonies.	Conduct habitat assessment prior to construction	A CDFG-approved biologist shall conduct a habitat assessment for bat nursery colonies prior to any construction activity.	This mitigation measure is not applicable to construction activities at the Pomerado Substation. There are no bats or areas with potential to support bat nursery colonies at the substation.
B-9a: Survey for bat nursery colonies.	Conduct survey prior to construction	The approved biologist shall conduct a survey for bat nursery colonies or signs of such colonies prior to construction.	This mitigation measure is not applicable to construction activities at the Pomerado Substation. There are no bats or areas with potential to support bat nursery colonies at the substation.
B-9a: Survey for bat nursery colonies.	No direct impacts to nursery colonies allowed	Direct impacts to a nursery colony site shall not be allowed, and approach of, or entrance to, an active nursery colony site shall be prohibited.	This mitigation measure is not applicable to construction activities at the Pomerado Substation. There are no bats or areas with potential to support bat nursery colonies at the substation.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
B-9a: Survey for bat nursery colonies.	Implement methods to minimize indirect impacts	Before any blasting or drilling in the vicinity of a nursery colony site, the CDFG-approved biologist shall work with the construction crew to devise and implement methods to minimize potential indirect impacts to the nursery colony site from falling rock or substantial vibration (while a nursery colony is active). The methods shall include an option to halt any construction activity that would cause falling rock, substantial vibration impacts, or any other construction-related impact (including lighting used for night work) to a nursery colony as determined by the approved biologist, until the colony is inactive. Should falling rock block the entrance to a nursery colony site, the contractor shall work with the approved biologist to re-open an entrance to the site.	This mitigation measure is not applicable to construction activities at the Pomerado Substation. There are no bats or areas with potential to support bat nursery colonies at the substation.
B-10a: Utilize collision-reducing techniques in installation of transmission lines.	Install transmission lines using Avian Power Line Interaction Committee standards	Applicant shall install the transmission lines utilizing Avian Power Line Interaction Committee standards for collision-reducing techniques as outlined in "Mitigating Bird Collisions with Power Lines: The State of the Art in 1994" (APLIC, 1994) as follows on B-10a-1a-1: • Placement of towers and lines shall not be located above existing towers and lines, topographic features, or tree lines to the maximum extent practicable • Power lines should be clustered in the vertical and horizontal planes aligned with existing geo-graphic features or tree lines, and located parallel (rather than perpendicular) to prevailing wind patterns to the maximum degree feasible • Additionally, overhead lines that are located in highly utilized avian flight paths shall be marked utilizing fixed mount Firefly Flapper/Diverters, swan flight diverter coils, or other diversion devices, if proven more effective, as to be visible to birds and to reduce avian collision with power lines. Where such markers are installed, the Applicant shall fund a study to determine the effectiveness of the markers as a collision prevention measure since there are few, if any, studies that show if such markers work, especially on	This mitigation measure is not applicable to construction activities at Pomerado Substation. No new transmission lines will be installed.
B-10a: Utilize collision-reducing techniques in installation of transmission lines.	Submit draft study protocol	The Applicant shall develop a draft study protocol and submit it to the Wildlife Agencies and State Parks, as well as to CPUC and BLM, for review. The applicant shall coordinate with the wildlife agencies and State Parks (for markers in ABDSP) to develop alternate collision protection measures.	This mitigation measure is not applicable to construction activities at Pomerado Substation. No new transmission lines will be installed.
B-10a: Utilize collision-reducing techniques in installation of transmission lines.	Implement an avian reporting system	The Applicant shall implement an avian reporting system for documenting bird mortalities to help identify problem areas. The reporting system shall follow the format in Appendix C of "Suggested Practices for Avian Protection On Power Lines: The State of the Art in 2006" (APLIC, 2006) or a similar format.	This mitigation measure is not applicable to construction activities at Pomerado Substation. No new transmission lines will be installed.
B-10a: Utilize collision-reducing techniques in installation of transmission lines.	Submit a draft reporting protocol and reporting system	The Applicant shall submit a draft reporting protocol and reporting system to the Wildlife Agencies and State Parks, as well as to CPUC and BLM, for review and approval. The Applicant shall continue to work with these agencies until approval of a final reporting protocol and reporting system is obtained.	This mitigation measure is not applicable to construction activities at Pomerado Substation. No new transmission lines will be installed.
B-10a: Utilize collision-reducing techniques in installation of transmission lines.	Implement methods to reduce mortalities	The Applicant shall develop and implement methods to reduce mortalities in identified problem areas. The methods shall be approved by the Wildlife Agencies, State Parks (for problem areas in ABDSP), CPUC, and BLM prior to implementation.	This mitigation measure is not applicable to construction activities at Pomerado Substation. No new transmission lines will be installed.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
B-10a: Utilize collision-reducing techniques in installation of transmission lines.	Document bird mortalities	Bird mortality shall continue to be documented in the problem areas per the avian reporting system to determine the effectiveness of the mortality reduction methods and to determine if new methods need to be developed.	This mitigation measure is not applicable to construction activities at Pomerado Substation. No new transmission lines will be installed.
B-11a: Prepare and implement a Raven Control Plan.	Submit a Raven Control Plan	The Applicant shall prepare and implement a Raven Control Plan where it occurs in FTHL habitat inside and outside FTHL MAs. The raven control plan shall include the use of raven perching/nesting deterrents (such as those manufactured by Prommel Enterprises, Inc. [www.ZENAdesign.com], Mission Environmental [www.missionenviro.co.za], or Kaddas Enterprises, Inc. [www.kaddas.com] and/or shall describe the procedure for obtaining a permit from the USFWS Law Enforcement Division to legally remove ravens. The plan shall identify the purpose of conducting raven control; provide training in how to identify raven nests and how to determine whether a nest belongs to a raven or a raptor species; describe the seasonal limitations on disturbing nesting raptors; and describe procedures for documenting the activities on an annual basis. The Applicant shall obtain approval of this plan from the USFWS prior to the start of construction. The Applicant shall work with the USFWS until approval of a plan is obtained.	No FTHL habitat or desert tortoise habitat occurs within the Pomerado Substation; therefore, this mitigation measure is not applicable.
G-CM-19:**Raven Control Plan.**	Prepare and implement a Raven Control Plan.	SDG&E will prepare and implement a Raven Control Plan, approved by the Wildlife Agencies, for portions of the SRPL Project route. The raven control plan will include the use of raven perching and nesting deterrents. The plan will identify the purpose of conducting raven control; provide training in how to identify raven nests and how to determine whether a nest belongs to a raven or a raptor species; describe the seasonal limitations on disturbing nesting raptors; describe raven control methods to be employed along the route; and describe procedures for documenting the activities on an annual basis.	See B-11a
B-12a: Conduct maintenance activities outside the general avian breeding season.	Educate maintenance workers	The Applicant shall educate all maintenance workers about the sensitivity of biological resources associated with the project and the necessity to avoid unauthorized impacts to them.	There are no sensitive biological resources within the Pomerado Substation; therefore, this mitigation measure is not applicable.
B-12a: Conduct maintenance activities outside the general avian breeding season.	Clear vegetation outside avian breeding season of February 15 - September 15	In areas not cleared of vegetation in the prior two years, all vegetation clearing, except tree trimming or removal, shall take place between September 16 and February 14 (i.e., outside of the general avian breeding season of February 15 through September 15).	No vegetation clearing will occur at the Pomerado Substation; therefore, this mitigation measure is not applicable.
B-12a: Conduct maintenance activities outside the general avian breeding season.	Trim trees outside raptor breeding season	Tree trimming or removal shall only take place between September 16 and December 31 (i.e., outside the raptor breeding season of January 1 through September 15).	No tree trimming will occur at the Pomerado Substation; therefore, this mitigation measure is not applicable.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
B-12a: Conduct maintenance activities outside the general avian breeding season.	Work with acoustician to measure noise prior to maintenance activity in breeding season	Other maintenance activities shall occur outside the general avian breeding season where feasible. For other maintenance activities that cannot occur outside the above-listed breeding seasons, a qualified biologist shall work with a qualified acoustician to determine if a maintenance activity would meet or exceed the 60 dB(A) Leq hourly noise threshold where nesting territories of the coastal California gnatcatcher, least Bell's vireo, southwestern willow flycatcher, and burrowing owl occur. If the noise threshold would not be met or exceeded at the edge of their nesting territories, then maintenance may proceed. If the noise threshold would be met or exceeded at the edge of their nesting territories, pre-maintenance surveys for nests of these species shall be conducted by a qualified biologist (USFWS permitted biologist for gnatcatcher, vireo, and flycatcher) within 300 feet of the maintenance area no more than seven days prior to initiation of maintenance that would occur between February 15 and August 30 for the gnatcatcher, March 15 and September 15 for the vireo, April 15 and September 15 for the flycatcher, and February 1 and August 31 for the burrowing owl. If active nests are found, work may proceed provided that methods, determined by the qualified acoustician to be effective,	There are no sensitive species within the Pomerado Substation; therefore, this mitigation measure is not applicable.
B-12a: Conduct maintenance activities outside the general avian breeding season.	Equipment and vehicles to remain on access roads and staging areas	At any time of year where maintenance would occur in occupied SKR habitat, all equipment and vehicles shall remain on existing access roads/staging areas (e.g., they shall not pull off the shoulder) to prevent the crushing of SKR burrows.	There is no SKR habitat within the Pomerado Substation; therefore, this mitigation measure is not applicable.
G-CM-50:Conduct brush clearing outside of the general avian breeding season.	Conduct brush clearing outside of the general avian breeding season.	Brush clearing and other construction activities will occur outside the general avian breeding season. All vegetation clearing, except tree trimming or removal, will take place between September 16 and February 14 (i.e., outside of the general avian breeding season of February 15 through September 15), when feasible. Tree trimming or removal will only take place between September 16 and December 31 (i.e., outside the raptor breeding season of January 1 through September 15). For brush clearing and/or other construction activities that cannot occur outside the above-listed breeding seasons, a qualified biologist will work with a qualified acoustician to determine if a the construction activity will meet or exceed the 60 dB(A) Leq hourly noise threshold where nesting territories of the gnatcatcher and vireo occur. If the noise threshold will not be met or exceeded at the edge of their nesting territories, then brush clearing and/or other construction activities may proceed. If the noise threshold will be met or exceeded at the edge of their nesting territories, pre-construction surveys for nests of these species will be conducted by a qualified biologist (Service-approved biologist for gnatcatcher, vireo,	See B-12a

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
G-CM-50:Conduct brush clearing outside of the general avian breeding season.	Implement noise reduction measures is active nests are found in area.	If active nests are found, work may proceed provided that methods, determined by the qualified acoustician to be effective, are implemented to reduce noise below the threshold. These methods include, but are not limited to, turning off vehicle engines and other equipment whenever possible and/or installing a protective noise barrier between a nesting territory and maintenance activities. If the qualified acoustician determines that no methods will reduce noise to below the threshold, maintenance will be deferred until the nestlings have fledged or the nest has failed, as determined the qualified biologist. Where noise-reducing methods are employed, active nests will be monitored by the qualified biologist on a weekly basis until maintenance is complete or until the nestlings fledge or fails, whichever comes first. The qualified biologist will be responsible for documenting the results of the pre-maintenance nest surveys and the nest monitoring and for reporting these results to the CPUC, BLM, USFS, and Wildlife Agencies.	See B-12a
G-CM-51:**Maintenance activities shall occur outside of the general avian breeding season.**	Maintenance activities shall occur outside of the general avian breeding season.	Maintenance activities will occur outside the general avian breeding season, where feasible. For other maintenance activities that cannot occur outside the above-listed breeding seasons, SDG&E will follow the requirements in G-CM-50 for noise reduction at nest sites.	See B-12a
B-12b: Conduct maintenance when arroyo toads are least active.	Avoid impacts to arroyo toads during maintenance	To avoid impacts to arroyo toads during project maintenance (specifically the use and maintenance of access roads within 2 kilometers of occupied toad habitat), use and maintenance of these access roads shall only occur between two hours after sunrise until two hours before sunset.	This mitigation measure is not applicable to construction activities at the Pomerado Substation. There are no arroyo toads or suitable habitat within the Substation.
B-12c: Maintain access roads and clear vegetation in Quino checkerspot butterfly habitat.	Regrade access roads and clear vegetation once every two years for no additional mitigation	If access roads in QCB-occupied or potentially occupied habitat (see Impact B-7J and Mitigation Measure B-7i) are maintained (i.e., regraded) and vegetation around structures is cleared at least once every two years, then no additional mitigation shall be required for this ongoing maintenance. If more than two years pass without regrading or clearing, then the maintenance shall be considered a new impact to QCB habitat and shall be mitigated as prescribed in Mitigation Measure B-7i (i.e., protocol pre-maintenance survey, biological monitoring, and avoidance or mitigation).	There is no Quino checkerspot butterfly habitat within the Pomerado Substation; therefore, this mitigation measure is not applicable.
BIO-APM-1: Survey for sensitive plants and wildlife	Submit protocol surveys for sensitive plant and wildlife	SDG&E would perform any detailed on-the-ground protocol surveys, with regard to specific sensitive plant or wildlife species whose habitat would be impacted by the project based on final design, in accordance with state or federal regulations or statutes. SDG&E would submit results of these surveys to the USFWS and CDFG.	Habitat for sensitive plant and animal species does not exist within the existing Substation fence-line. Construction activities will take place within the existing Substation which has a ground cover of crushed stone, pavement, or concrete. There is no vegetation or suitable habitat present within the substation and no impacts to biological resources will occur as a result of the upgrade activities. Therefore, this mitigation measure is not applicable.
BIO-APM-2: Compliance Training	Environmental training prior to construction	Prior to construction, all SDG&E's contractors, subcontractors and project personnel shall receive training regarding the appropriate work practices necessary to effectively implement the biological APMs and to comply with the applicable environmental laws and regulations including appropriate wildlife avoidance, and impact minimization procedures, the importance of these resources and the purpose and necessity of protecting them; and methods for protecting sensitive ecological resources.	A final Safe Worker and Environmental Awareness Program (SWEAP) DVD, approved by the CPUC on March 15, 2010, includes instructions for required work practices to effectively implement the biological resource mitigation measures and applicant proposed mitigation measures (APMs). SWEAP will be shown to all personnel and enforced throughout all phases of the Project.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
G-CM-4:**Training to effectively implement conservation measures.**	Training to implement conservation measures.	Prior to construction, all of SDG&E's contractors, subcontractors, and project personnel will receive training regarding the appropriate work practices necessary to effectively implement the Conservation Measures and to comply with the applicable environmental laws and regulations including appropriate wildlife avoidance and impact minimization procedures, the importance of these resources, and the purpose and necessity of protecting them.	See BIO-APM-2
BIO-APM-3: Access roads	Restrict vehicle movement to existing access roads	Except when not feasible due to physical or safety constraints, all project vehicle movement shall be restricted to existing access roads and access roads constructed as a part of the project and determined and marked by SDG&E in advance for the contractor, contractor-acquired accesses, or public roads.	All vehicle traffic will be on existing paved and unpaved areas of the Substation. Therefore, this mitigation measure does not apply.
BIO-APM-3: Access roads	Avoid constructing roads during nesting season and submit surveys if new roads needed during nesting season	New access road construction for the project shall be allowed year-round. When feasible, every effort shall be made to avoid constructing roads during the nesting season. When it is not feasible to keep vehicles on existing access roads or to avoid constructing new access roads during the nesting, breeding, or flight season, SDG&E shall perform a site survey, or more as appropriate, in the area where the work is to occur. This survey shall be performed to determine presence or absence of endangered nesting birds, or other endangered species in the work area. SDG&E shall submit results of this survey to the USFWS and CDFG and consult on reasonable mitigation measures to avoid or minimize for potential impacts, prior to vehicle use off existing access roads or the construction of new access roads. However, this survey shall not replace the need for SDG&E to perform detailed on-the-ground surveys otherwise required by BIO-APM-1.	No new access roads will be constructed for the substation upgrades; therefore, this mitigation measure is not applicable.
BIO-APM-3: Access roads	No parking or driving under oak trees	Parking or driving underneath oak trees is not allowed in order to protect root structures.	There are no oak trees at the Pomerado Substation; therefore, this mitigation measure does not apply.
BIO-APM-3: Access roads	Observe a 15 mph speed limit on dirt access roads	In addition to regular watering to control fugitive dust created during clearing, grading, earth-moving, excavation, and other construction activities which could interfere with plant photosynthesis, a 15-mile-per-hour speed limit shall be observed on dirt access roads to reduce dust and allow reptiles and small mammals to disperse.	This mitigation measure will be fulfilled during construction; therefore, it is not applicable as a pre-construction requirement.
G-CM-5:**Access road speed limit to minimize fugitive dust.**	Limit vehicle speeds on access roads to minimize fugitive dust.	In addition to regular watering to control fugitive dust created during clearing, grading, earth-moving, excavation, and other construction activities, which could interfere with plant photosynthesis, a 24 km (15 mi) per hour speed limit will be observed on dirt access roads to reduce dust and allow reptiles and small mammals to disperse.	See BIO-APM-3
G-CM-25:**Restrict vehicle movement to access roads.**	Restrict vehicle movement to access roads.	Except when not feasible due to physical or safety constraints, all project vehicle movement will be restricted to existing access roads and access roads constructed as a part of the project and determined and marked by SDG&E in advance for the contractor, contractor-acquired accesses, or public roads.	See BIO-APM-3
BIO-APM-4: Project area limits	Restrict project activity to disturbance areas	The area limits of project construction and survey activities would be predetermined based on the temporary and permanent disturbance areas noted on the final design engineering drawings, with activity restricted to and confined within those limits.	Construction activities will be limited to previously disturbed areas within the existing Substation site; therefore, this mitigation measure is not applicable.
BIO-APM-4: Project area limits	Keep survey vehicles on existing roads	Survey personnel shall keep survey vehicles on existing roads.	Construction activities will be limited to previously disturbed areas within the Substation site. Requirements for restriction of survey vehicles and crews to existing access roads or disturbed areas are not applicable to Substation upgrade activities.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
BIO-APM-4: Project area limits	Obtain prior approval for surveying activities in sensitive habitat	During project surveying activities, brush clearing for footpaths, line-of-sight cutting, and land surveying panel point placement in sensitive habitat shall require prior approval from the project biological resource monitor in conformance with the APMs.	Substation upgrade activities will not require brush clearing or disturbance of sensitive vegetation; therefore, this mitigation measure is not applicable.
BIO-APM-4: Project area limits	Hiking off roads or paths during survey data collection is permitted	Hiking off roads or paths for survey data collection is allowed year-round as long as other APMs are met.	Construction activities will be limited to pre-disturbed areas within the Substation. Therefore, this mitigation measure is not applicable.
BIO-APM-4: Project area limits	Do not apply dicoloring agents on rocks or vegetation	No paint or permanent discoloring agents shall be applied to rocks or vegetation to indicate limits of survey or construction activity where any sensitive biological resources or wildlife habitats are encountered in the field.	The SWEAP video was approved by the CPUC on March 15, 2010. This SWEAP will be shown to all project personnel and enforced throughout all phases of the Project and includes instructions prohibiting application of paint or permanent discoloring agents on rocks or vegetation to indicate survey or construction limits.
G-CM-6:Construction limits.	Keep all activities within designated temporary and permanent disturbance areas.	The area limits of project construction and survey activities will be predetermined based on the temporary and permanent disturbance areas noted on the final design engineering drawings, with activity restricted to and confined within those limits.	See BIO-APM-4
G-CM-6:Construction limits	Keep survey vehicles on existing roads.	In addition, survey personnel will keep survey vehicles on existing roads.	See BIO-APM-4
G-CM-6:Construction limits	No paint or discoloring agents will be applied to rocks or vegetation.	No paint or permanent discoloring agents will be applied to rocks or vegetation to indicate limits of survey or construction activity where any sensitive biological resources or wildlife habitats occur.	See BIO-APM-4
G-CM-6:Construction limits	Impacts associated unauthorized activity will be mitigated at higher ratios.	Any impacts associated it unauthorized activity (e.g., exceeding approved construction limits) will be mitigated at a 5:1 ratio (5.5:1 in FTHL MA). Restoration of the unauthorized impacts will be credited at a 1:1 ratio (i.e., offset by in-place habitat restoration); the remaining 4:1 (or 4.5: in FTHL MA) will be acquired offsite.	See BIO-APM-4
G-CM-44:**Limits for maintenance and survey activities.**	Determine project limits for temporary and permanent disturbance to occur during maintenance activities.	The area limits of Project maintenance and survey activities will be predetermined based on the temporary and permanent disturbance areas noted on the final design engineering drawings, with activity restricted to and confined within those limits, within SDG&E's ROW. In addition, survey personnel would keep survey vehicles on existing roads. No paint or permanent discoloring agents would be applied to rocks or vegetation to indicate limits of survey or maintenance activity where any sensitive biological resources or wildlife habitats occur.	Construction and maintenance activities will be limited to previously disturbed areas within the substation fence-line; therefore, this mitigation measure is not applicable.
BIO-APM-5: Access roads and waters of the U.S. and California	Construct roads at right angles to streambeds and washes	To the extent feasible, access roads shall be built at right angles to the streambeds and washes. Where not feasible for access roads to cross at right angles, SDG&E would limit roads constructed parallel to streambeds or washes to a maximum length of 500 feet at any one transmission line crossing location. Such parallel roads would be constructed in a manner that minimizes potential adverse impacts on "waters of the U.S." or waters of the state.	No new access roads will be constructed for the substation upgrades; therefore, this mitigation measure is not applicable.
BIO-APM-5: Access roads and waters of the U.S. and California	Obtain permits for streambed crossings and roads constructed parallel to streambeds	Streambed crossings and roads constructed parallel to streambeds would require review and approval of necessary permits from the ACOE, CDFG, and RWQCB. Culverts would be installed where needed for right angle crossings, but rock crossings would be utilized across most right angle drainage crossings.	There are no streambeds at the Pomerado Substation; therefore, this mitigation measure is not applicable.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
BIO-APM-5: Access roads and waters of the U.S. and California	Minimize disturbance from construction and maintenance activities	All construction and maintenance activities would be conducted in a manner that would minimize disturbance to vegetation, drainage channels and stream banks (e.g., structures would not be located within a stream channel, construction activities shall avoid sensitive features).	There will be no disturbance to vegetation, drainage channels, or stream banks; therefore, this mitigation measure is not applicable.
G-CM-12:**Minimize vegetation clearing.**	Leave vegetation in place where re-contouring is not required. Restore disturbed soils based on HRP per G-CM-16.	In construction areas where grading or re-contouring is not required, vegetation will be left in place wherever possible to avoid excessive root damage and allow for re-sprouting. Only the minimum amount of vegetation necessary for the construction of structures and facilities will be removed. Topsoil located in areas containing sensitive habitat will be conserved during excavation and reused as cover on disturbed areas to facilitate regrowth of vegetation. Topsoil located in developed or disturbed areas is excluded from this measure. Disturbed soils will be restored based on a Habitat Restoration Plan per G-CM-16.	No vegetation clearing will occur at the Pomerado Substation; therefore, this mitigation measure is not applicable.
BIO-APM-6: Environmental compliance	Comply with all applicable environmental laws and regulations	In the construction, operation, and maintenance of the project, SDG&E shall comply with all applicable environmental laws and regulations, including, without limitation, those regulating and protecting wildlife and its habitat.	SDG&E will continue to comply with all applicable environmental laws and regulations during construction.
BIO-APM-7: Littering	Littering is not allowed	Littering is not allowed. Project personnel shall not deposit or leave any food or waste in the project area, and no biodegradable or non-biodegradable debris shall remain in the right-of-way following completion of construction.	The SWEAP video was approved by the CPUC on March 15, 2010. This SWEAP will be shown to all project personnel and enforced throughout all phases of the Project and includes instructions prohibiting littering of any kind.
G-CM-9:**No littering.**	Disposal of wastes.	Project personnel will not deposit or leave any food or waste in the project area, and no biodegradable or non-biodegradable debris will remain in the ROW following completion of construction. All refuse will be placed in appropriate wildlife-proof containers and removed from job sites daily.	See BIO-APM-7
BIO-APM-8: Sensitive vegetation boundaries	Delineate and avoid sensitive plant populations	Prior to construction, the boundaries of plant populations designated as sensitive would be clearly delineated. Flagged areas would be avoided to the extent practicable during construction activities in that area.	There are no sensitive plant populations that exist within the Substation; therefore, this mitigation measure is not applicable.
G-CM-33:**Delineate plant population boundaries prior to initiating construction.**	Delineate plant population boundaries.	Prior to construction, plant population boundaries designated as listed or proposed by the Wildlife Agencies and other resources designated as listed or proposed by SDG&E and other resource agencies will be clearly delineated with visible flagging or fencing, which will remain in place for the duration of construction. Flagged areas will be avoided to the extent practicable during construction activities in that area. Where these areas cannot be avoided, focused surveys for covered plant species will be performed. Notification of presence of any covered plant species to be removed in the work area will occur within ten (10) working days prior to construction activity, during which time the Wildlife Agencies may remove such plant(s) or recommend measures to minimize or reduce the impact. If neither the Service nor CDFG has removed such plant(s) within ten (10) working days following written notice, SDG&E may proceed with work. In such cases, SDG&E will move plants to a nursery and hold them for up to one year while the Wildlife Agencies determine a specific relocation program.	See BIO-APM-8

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
BIO-APM-9: Brush clearing	Brush previously cleared and maintained within 2 years or less require no pre-activity survey	Brush clearing around any project facilities (e.g., structures, substations) for fire protection, visual inspection or project surveying, in areas which have been previously cleared or maintained within a two-year or shorter period shall not require a pre-activity survey.	There will be no brush clearing at the Pomerado Substation; therefore, this mitigation measure is not applicable.
BIO-APM-9: Brush clearing	Brush clearing will not be conducted during breeding season without a pre-activity survey	In areas not cleared or maintained within a two-year period, brush clearing shall not be conducted during the breeding season without a pre-activity survey for vegetation containing active nests, burrows, or dens.	There will be no brush clearing at the Pomerado Substation; therefore, this mitigation measure is not applicable.
G-CM-7::**Brush clearing during survey activities.**	Brush clearing will require prior approval from the biological monitor in conformance with the CMs.	During project surveying activities, brush clearing for footpaths, line-of-sight cutting, and land surveying panel point placement in sensitive habitat will require prior approval from the project biological monitor in conformance with the Conservation Measures. Hiking off roads or paths for survey data collection is allowed year-round as long as applicable Conservation Measures to minimize impacts are met.	See BIO-APM-9
BIO-APM-10: Wildlife and firearms	Do not harm wildlife	No wildlife, including rattlesnakes, may be harmed except to protect life and limb.	The SWEAP video was approved by the CPUC on March 15, 2010. This SWEAP will be shown to all project personnel and enforced throughout all phases of the Project, and includes instructions that no wildlife, including rattlesnakes, may be harmed except to protect life and limb. If rattlesnakes are encountered, they will be safely removed by a biologist or staff trained in safe snake handling procedures.
BIO-APM-10: Wildlife and firearms	Firearms are prohibited	Firearms shall be prohibited in all project areas except for those used by security personnel.	The SWEAP video was approved by the CPUC on March 15, 2010. This SWEAP will be shown to all project personnel and enforced throughout all phases of the Project, and addresses that firearms are prohibited in all project areas, except for security personnel.
G-CM-36:**No harm to wildlife.**	Do not harm wildlife, including rattlesnakes	No wildlife, including rattlesnakes, may be harmed except to protect life and limb. Firearms will be prohibited in all Project areas except for those used by security personnel.	See BIO-APM-10
BIO-APM-11: Feeding wildlife	Do not feed wildlife	Feeding of wildlife is not allowed.	The SWEAP video was approved by the CPUC on March 15, 2010. This SWEAP will be shown to all project personnel and enforced throughout all phases of the Project, and includes instructions that feeding wildlife is prohibited.
G-CM-37:**No feeding wildlife.**	Do not feed wildlife.	Feeding of wildlife by SDG&E personnel or contractors is prohibited.	See BIO-APM-11
BIO-APM-12: Pets	No pets permitted	Project personnel are not allowed to bring pets to any project area in order to minimize harassment or killing of wildlife and to prevent the introduction of destructive animal diseases to native wildlife populations.	The SWEAP video was approved by the CPUC on March 15, 2010. This SWEAP will be shown to all project personnel, and includes instructions that prohibit project personnel from bringing pets to any project area to minimize harassment or killing of wildlife and to prevent the introduction of animal diseases to wildlife population.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
G-CM-38:**No pets in project areas.**	Do not bring pets to project areas.	To minimize harassment or killing of wildlife and to prevent the introduction of destructive animal diseases to native wildlife populations, Project personnel are not allowed to bring pets into any project area.	See BIO-APM-12
BIO-APM-13: Plant or wildlife collection	Do not collect plants or wildlife	Plant or wildlife species may not be collected for pets or any other reason.	The SWEAP video was approved by the CPUC on March 15, 2010. This SWEAP will be shown to all project personnel and enforced throughout all phases of the Project, and includes instructions that prohibit collecting plant or wildlife species for any reason.
BIO-APM-14: Wildlife entrapment	Removal of wildlife by qualified biological monitor or wildlife agency	If the biological resource monitor is not qualified to remove the entrapped wildlife, a recognized wildlife rescue agency (such as Project Wildlife) may be employed to remove the wildlife and transport them safely to other suitable habitats.	This mitigation measure will be fulfilled during construction, as needed; therefore, it is not a pre-construction requirement.
BIO-APM-15: Emergency Repairs	Submit report of unavoidable environmental damage	Emergency repairs may be required during the construction and maintenance of the project to address situations (e.g., downed lines, slides, slumps, major subsidence, etc.) that potentially or immediately threaten the integrity of the project facilities. During emergency repairs the APMs shall be followed to the fullest extent practicable. Once the emergency has been abated, any unavoidable environmental damage shall be reported to the project biological construction monitor, who would promptly submit a written report of such impacts to the USFWS and CDFG and any other government agencies having jurisdiction over the emergency actions. If required by the government agencies, the biological construction monitor shall develop a reasonable and feasible mitigation plan consistent with the APMs and any permits previously issued for the project by the governmental agencies.	This mitigation measure will be fulfilled during construction, as needed; therefore, it is not a pre-construction requirement.
G-CM-10:Repairs to address emergencies.	Emergency repairs will follows the CM's to the extent feasible.	Repairs may be required during the construction of the project to address emergency situations (e.g., downed lines, slides, slumps, major subsidence, etc.) that potentially or immediately threaten the integrity of the project facilities. During emergency repairs, all Conservation Measures will be followed to the fullest extent practicable.	See BIO-APM-15
G-CM-10:Repairs to address emergencies.	Submit written report to agencies having jurisdiction.	Once the emergency has been abated, any unavoidable environmental damage will be reported to the project biological monitor, who will promptly submit a written report of such impacts to the Wildlife Agencies and any other government agencies having jurisdiction over the emergency actions.	See BIO-APM-15
G-CM-10:Repairs to address emergencies.	If required, develop mitigation plan consistent with CMs.	If required by the government agencies, the biological monitor will develop a reasonable and feasible mitigation plan consistent with the Conservation Measures and any permits previously issued for the project by the governmental agencies.	See BIO-APM-15
BIO-APM-16: Tree trimming	Schedule tree trimming during non-sensitive times	Environmentally sensitive tree trimming locations for the project would be identified in SDG&E's existing vegetation management database utilized by trim contractors. Trimming would be scheduled during non-sensitive (i.e., outside breeding or nesting) times.	This mitigation measure is not applicable to construction activities occurring at the Substation. There are no trees within the substation area.
BIO-APM-16: Tree trimming	Vary tree removal widths to maintain edge diversity	Where riparian areas with overstory vegetation are crossed, tree removal (i.e., clear-cut) widths shall be varied where feasible to minimize visual landscape contrast and to maintain habitat diversity at established wildlife corridor edges. Where tree removal widths cannot be varied, SDG&E shall consult with the USFWS and CDFG to develop alternative tree removal options that could reasonably maintain edge diversity.	This mitigation measure is not applicable to construction activities occurring at the sbstation. There are no trees or riparian areas within the substation area.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
BIO-APM-17: Access roads	Close all new access or spur roads not used for future operations and maintenance	All new access roads or spur roads constructed as part of the project that are not required as permanent access for future project maintenance and operation would be permanently closed.	No new access roads will be constructed for the substation upgrades; therefore, this mitigation measure is not applicable.
BIO-APM-17: Access roads	Mow vegetation to use as access road	Mowing of vegetation can be an effective method for protecting the vegetative understory while at the same time creating access to the work area. Mowing should be used when permanent access is not required since, with time, total revegetation is expected. If mowing is in response to a permanent access need, but the alternative of grading is undesirable because of downstream siltation potential, it should be recognized that periodic mowing would be necessary to maintain permanent access. The project biological construction monitor shall conduct checks on mowing procedures to ensure that mowing for temporary or permanent access roads is limited to a 14-foot-wide area on straight portions of the road and a 16- to 20-foot-wide area at turns, and that the mowing height is no less than 4 inches from finished grade.	No new access roads will be constructed for the substation upgrades; therefore, this mitigation measure is not applicable.
G-CM-30:**Close temporary construction access roads.**	Permanently close access roads not required for project on-going maintenance.	To limit new or improved accessibility into the area, all new access roads or spur roads constructed as part of the project that are not required as permanent access for future project maintenance and operation will be permanently closed. Where required, roads will be permanently closed, with the concurrence of the underlying landowner and the governmental agency having jurisdiction, using the most effective feasible and least environmentally damaging methods (e.g., stockpiling and replacing topsoil or rock replacement) appropriate to that area. All permanently closed access roads and spur roads will be restored with native vegetation following closure.	See BIO-APM-17
G-CM-31:**Mowing.**	Mowing of access roads to maintain access for maintenance.	Mowing shall be used when permanent access is not required since, with time, total re-vegetation is expected. If mowing is in response to a permanent access need, but the alternative of grading is undesirable because of downstream siltation potential, it should be recognized that periodic mowing will be necessary to maintain permanent access. In such instances, SDG&E will mow at least once every two years. The project biological construction monitor will conduct checks on mowing procedures to ensure that mowing for temporary or permanent access roads is limited to a 4-m-wide (14-foot-wide) area on straight portions of the road and a 5-6-m-wide (16 to 20-ft-wide) area at turns, and that the mowing height is no less than 10 cm (4 in) from finished grade.	See BIO-APM-17
BIO-APM-18: Sensitive features	Design structures and access roads to minimize impacts to sensitive features	In areas designated as sensitive by SDG&E or the resource agencies, to the extent feasible structures and access roads would be designed to minimize impacts to sensitive features. These areas of sensitive features include but are not limited to high value wildlife habitats, sensitive vegetation communities, and high value plant habitats, and/or to allow conductors to clearly span the features, within limits of standard structure design. If the sensitive features cannot be completely avoided, structures and access roads would be placed to minimize the disturbance to the extent feasible.	There are no sensitive features or endangered species or their sensitive habitat within the substation areas; therefore, this mitigation measure does not apply.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
BIO-APM-18: Sensitive features	Submit site surveys when constructing poles or roads in high value habitats cannot be avoided	When it is not feasible to avoid constructing poles or access roads in high value wildlife habitats, SDG&E shall perform a site survey to determine presence or absence of endangered species in sensitive habitats. SDG&E shall submit results of this survey to the USFWS and consult on mitigation measures for potential impacts, prior to constructing structures or access roads. This survey shall not replace the need for SDG&E to perform detailed on-the-ground surveys as otherwise required by BIO-APM-1.	There are no sensitive features or endangered species or their sensitive habitat within the substation areas; therefore, this mitigation measure does not apply.
BIO-APM-18: Sensitive features	Construct crossings at right angles to streambeds if access roads cannot avoid sensitive water features	Where it is not feasible for access roads to avoid sensitive water resource features, such as streambed crossings, such crossings shall be built at right angles to the streambeds. Where such crossings cannot be made at right angles, roads constructed parallel to streambeds shall be limited to a maximum length of 500 feet at any one transmission line crossing location. Such parallel roads shall be constructed in a manner that minimizes potential adverse impacts on "waters of the U.S." Streambed crossings or roads constructed parallel to streambeds shall require review and approval of necessary permits from the ACOE, CDFG, and RWQCB.	There are no sensitive water features within the substation areas; therefore, this mitigation measure does not apply.
G-CM-27:**Access roads.**	Build access roads at right-angles to stream crossings.	To the extent feasible, access roads will be built at right angles to the streambeds and washes. Where it is not feasible for access roads to cross at right angles, SDG&E will limit roads constructed parallel to streambeds or washes to a maximum length of 500 ft at any one transmission line crossing location. Such parallel roads will be constructed in a manner that minimizes potential adverse impacts on “waters of the U.S.” or waters of the state. Culverts will be installed where needed for right angle crossings, but rock crossings will be utilized across most right angle drainage crossings. All construction activities will be conducted in a manner that will minimize disturbance to vegetation, drainage channels, and stream banks (e.g., structures will not be located within a stream channel, construction activities will avoid sensitive features). Up to 30 days prior to construction in streambeds and washes, SDG&E will perform a pre-activity survey(s) to determine the presence or absence of threatened or endangered riparian species. Details of protocol survey requirements are listed in the species-specific measures below.	See BIO-APM-18
G-CM-8::**Year-round wire stringing.**	Wire stringing.	Stringing of new wire and reconductoring for the project will be allowed year round in sensitive habitats if the conductor is not allowed to drag on the ground or in brush and all vehicles used during stringing remain on project access roads. Where stringing requires that conductor drop within brush or drag on or through the brush or ground or vehicles leave project access roads, SDG&E will perform a site survey(s), to determine presence or absence of nesting migratory birds (including the three federally listed bird species subject to this consultation) or other listed species in the work area. Details of protocol survey requirements are outlined in the species-specific measures below. SDG&E will submit results of this survey(s) to the Wildlife Agencies, prior to dropping wire in brush, dragging wire on the ground or through brush, or taking vehicles off project access roads.	See BIO-APM-18

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
G-CM-11:Sensitive areas and features.	Structures and access roads should be designed to minimize impacts to sensitive features.	In areas designated as sensitive by SDG&E or the Wildlife Agencies, to the extent feasible, structures and access roads will be designed to minimize impacts to sensitive features. These areas of sensitive features include, but are not limited to, high-value wildlife and plant habitats, sensitive vegetation communities, and habitat occupied by listed species. If the sensitive features cannot be completely avoided or spanned, structures and access roads will be placed to minimize the disturbance to the extent feasible.	See BIO-APM-18
G-CM-11:Sensitive areas and features.	conduct site surveys when not feasible to avoid constructing poles or access roads in designated sensitive areas.	When it is not feasible to avoid constructing poles or access roads in designated sensitive areas, SDG&E will perform a site survey to determine presence or absence of endangered species in sensitive habitats as required in G-CM-32 below. SDG&E will submit results of this survey to the Wildlife Agencies prior to constructing structures or access roads.	See BIO-APM-18
BIO-APM-19: Compliance with BLM mitigation measures	Implement and comply with BLM mitigation measures	Restoration and habitat enhancement and mitigation measures developed during the consultation period with the BLM under Section 7 of the Endangered Species Act (ESA) would be implemented and complied with as specified in the Biological Opinion (BO) of the USFWS.	There are no sensitive features or endangered species or their sensitive habitat within the substation areas; therefore, implementation of the Endangered Species Act, Section 7 is not applicable.
BIO-APM-19: Compliance with BLM mitigation measures	Use Section 7 process to obtain incidental take authorization	The Section 7 process would be used to obtain an incidental take authorization through a compensation-based mitigation program for permanent impacts to occupied sensitive plant and animal habitat at a ratio of 1:1 or 2:1 based on site-specific studies, as outlined in BIO-APM-1. The Section 7 process may include consideration of SDG&E's existing NCCP mitigation credits as compensation for project impacts.	There are no sensitive features or endangered species or their sensitive habitat within the Substation areas; therefore, implementation of the Endangered Species Act, Section 7 is not applicable.
BIO-APM-20: Re-contouring	Leave vegetation in place where re-contouring is not required	In construction areas where re-contouring is not required, vegetation shall be left in place wherever possible to avoid excessive root damage and allow for re-sprouting.	No vegetation clearing will occur at the Pomerado Substation; therefore, this mitigation measure is not applicable.
BIO-APM-21: Raptor protection	Conform to "Suggested Practices for Raptor Protection on Power Lines"	Structures shall be constructed to conform to "Suggested Practices for Raptor Protection on Power Lines" (Raptor Research Foundation, Inc. 1981), to minimize impacts to raptors.	Substation upgrade activities do not include installation of additional power line exits or new tall support structures; therefore, this mitigation measure is not applicable.
BIO-APM-22: Salvaging plants	Salvaging may include removal and stockpiling for replanting	Salvage may include removal and stockpiling for replanting.	No vegetation clearing will occur at the Pomerado Substation; therefore, this mitigation measure is not applicable.
BIO-APM-23: Vegetation and topsoil disturbance	Remove only minimum amount of vegetation necessary for construction	Only the minimum amount of vegetation necessary for the construction of structures and facilities will be removed.	No vegetation clearing will occur at the Pomerado Substation; therefore, this mitigation measure is not applicable.
BIO-APM-23: Vegetation and topsoil disturbance	Conserve topsoil in areas of sensitive habitat	Topsoil located in areas containing sensitive habitat shall be conserved during excavation and reused as cover on disturbed areas to facilitate re-growth of vegetation. Topsoil located in developed or disturbed areas is excluded from this APM.	No excavation will occur at the Pomerado Substation; therefore, this mitigation measure is not applicable.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
BIO-APM-24: Construction covers	Secure in place strong covers	Covers shall be secured in place and shall be strong enough to prevent livestock or wildlife from falling through.	No excavation will occur at the Pomerado Substation; therefore, this mitigation measure is not applicable.
BIO-APM-25: Revegetation	Revegetate disturbed soils	Disturbed soils shall be revegetated.	No ground disturbing activities will occur at the Pomerado Substation; therefore, this mitigation measure is not applicable.
BIO-APM-26: Excavations	Slope excavations on one end	Excavations shall be sloped on one end to provide an escape route for small mammals and reptiles.	No excavation will occur at the Pomerado Substation; therefore, this mitigation measure is not applicable.
BIO-APM-27: Raptor nests	Remove all raptor nests outside breeding season of January to July and prior to construction	1. Prior to construction, SDG&E shall remove all existing raptor nests from structures that would be affected by project construction. 2. Removal of nests shall occur outside the raptor breeding season (January to July).	Existing raptor nests have not been observed within the Substation. If nests are found prior to construction and outside of the raptor breeding season, SDG&E will remove nests that would be affected by construction activities per the requirements of this mitigation measure.
BIO-APM-27: Raptor nests	Monitor active nests during breeding season	3. If it is necessary to remove an existing raptor nest during the breeding season, a qualified biologist shall survey the nest prior to removal to determine if the nest is active. A nest would be considered active if it contains eggs or fledglings. If the nest does not contain eggs or nestlings and is inactive, it shall be removed promptly. If a nest is determined to be active, the nest shall not be removed and the biologist shall monitor the nest to ensure nesting activities/breeding activities are not disrupted. If the biological monitor determines that project activities are disturbing or disrupting nesting activities, the monitor shall make feasible recommendations to reduce the noise and/or disturbance in the vicinity of the nest.	Existing raptor nests have not been observed within the Substation. If nests are found prior to construction and outside of the raptor breeding season, SDG&E will follow the provisions of this mitigation measure.
BIO-APM-28: Roost trees	Survey potential roost trees to be removed and follow procedures for felling trees	Potential roost trees that must be removed will be surveyed and identified in the field for application of the following procedures: *Before felling the tree*: 1. Trees should be removed under the warmest possible conditions 2. Peel any sections of the exfoliating bark off the tree gently and search for any roosting bats underneath 3. Create noise and vibrations on the tree itself. Noise and vibrations include: a. Running chain saw and making shallow cuts in the trunk (where bark has been peeled off) b. Striking the tree base with fallen limbs or tools such as hammers *Felling the tree*: 4. Disturbance should be near-continuous for ten minutes, and then another ten minutes should pass, before the tree is felled 5. When cutting sections of the bole, if any hollows or cavities (such as woodpecker holes) are discovered, be especially careful to check for the presence of bats in those areas. Cut slowly and carefully at all times. If possible, section bole near cavities to focus noise and vibrations, and open hollows by sectioning off a side.	There are no potential bat roost trees located within the substation areas; therefore, this mitigation measure is not applicable.
BIO-APM-29: Construction lighting and traffic	Minimize impacts of exterior lighting adjacent to preserved habitat	Exterior lighting within the project area adjacent to preserved habitat shall be of the lowest illumination allowed for human safety, selectively placed, shielded, and directed away from preserved habitat to the maximum extent practicable.	There will be no additional lighting as a result of upgrade activities at the substation; therefore, this mitigation measure is not applicable.
BIO-APM-29: Construction lighting and traffic	Minimize vehicle speed and volume	Vehicle traffic associated with project activities would be kept to a minimum volume and speed to prevent mortality of nocturnal wildlife species that may be moving about.	Upgrade activities at the substation will not occur during nighttime hours; therefore, this mitigation measure is not applicable.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
G-CM-13:Night lighting.	Use lowest illumination allowed for human safety.	Night lighting within the project area adjacent to preserved habitat will be of the lowest illumination allowed for human safety, selectively placed, shielded, and directed away from preserved habitat to the maximum extent practicable.	See BIO-APM-29
G-CM-13:Night lighting.	Vehicle speed limits may not exceed 15 mph to prevent mortality of nocturnal wildlife species.	Vehicle traffic associated with project activities may not exceed 24 km (15 mi) per hour to prevent mortality of nocturnal wildlife species that may be moving about.	See BIO-APM-29
G-CM-46:Minimize disturbance during O&M operations.	Minimize impacts during O&M Operations.	All O&M activities will be conducted in a manner that would minimize disturbance to vegetation, drainage channels, and stream banks.	There will be no disturbance to vegetation, drainage channels, or stream banks during operation and maintenance activities; therefore, this mitigation measure is not applicable.
G-CM-46:Minimize disturbance during O&M operations.	Conduct presence/absence surveys 30 days prior to conducting O&M Operations.	Up to 30 days prior to O&M activities in streambeds and washes, SDG&E would perform a pre-activity survey(s) to determine the presence or absence of threatened or endangered riparian species. Details of protocol survey requirements are listed below in the species-specific measures.	There will be no disturbance to vegetation, drainage channels, or stream banks during operation and maintenance activities; therefore, this mitigation measure is not applicable.
G-CM-47:**Invasive plant control during O&M activities**	Training program to include invasive species identification and control measures.	As part of the environmental training program, field crews will be trained to recognize the importance of invasive plant species control, and will be informed of the measures designed to control the spread of invasive species. Deliberate introduction of invasive plants or animals into any project site is prohibited. Heavy equipment will be inspected for invasive plant seeds or other plant material prior to entering an access road or a project site. Any plant seeds or other plant material discovered on heavy equipment will be manually removed. All seeds and straw materials used during O&M activities will be certified weed free, and all gravel and fill material would be certified weed free by the San Diego County Agriculture Commissioner's Office.	There are no natural areas within the previously disturbed substation; therefore, invasive species control measures are not applicable.
G-CM-48:**Maintain access roads every two years.**	Maintain access roads once every two years.	Access roads shall be maintained once every two years. If this schedule is not adhered to, loss of habitat due to maintenance of access roads will be considered a new permanent impact and compensated according to the ratios provided in Table 2.	No new access roads will be installed at the substation as part of the scope of work; therefore, this mitigation measure is not applicable.
G-CM-49:**Brush clearing around project facilities for maintenance activities.**	Brush clearing around project facilities for maintenance activities within a two-year period or shorter.	Brush clearing around any project facilities (e.g., structures, substations) for fire protection, visual inspection, or project surveying in areas that have been previously cleared or maintained within a two-year or shorter period would not require a preactivity survey.	There will be no brush clearing at the Pomerado Substation; therefore, this mitigation measure is not applicable.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
G-CM-49:**Brush clearing around project facilities for maintenance activities.**	Preactivity surveys required in areas not maintained within a two-year period.	In areas not cleared or maintained within a two-year period, brush clearing will not be conducted during the breeding season (March through August) without a pre-activity survey for vegetation containing active nests, burrows, or dens. The pre-activity survey performed by the on-site biological resource monitor will make sure that the vegetation to be cleared contains no active migratory bird nests, burrows, or active dens prior to clearing. If occupied migratory bird nests are present, fire protection or visual inspection brush clearing work will be avoided until after the nesting season, or until the nest becomes inactive. If no nests are observed, clearing may proceed. Where burrows or dens are identified in the reconnaissance-level survey, soil in the brush clearing area will be sufficiently dry before clearing activities occur to prevent mechanical damage to burrows that may be present.	There will be no brush clearing at the Pomerado Substation; therefore, this mitigation measure is not applicable.
VISUAL RESOURCES			
V-1a: Reduce visibility of construction activities and equipment.	Submit final construction plans 60 days prior to construction	SDG&E shall submit final construction plans demonstrating compliance with this measure to the BLM and CPUC for review and approval at least 60 days prior to the start of construction. Where the project crosses lands administered by other public agencies (e.g., Forest Service, Anza-Borrego Desert State Park), construction plans shall also be submitted to those agencies for review and approval within the same 60-day timeframe.	The upgrades will be installed within the existing substation site. There is an existing eight-foot wall that provides appropriate screening. There will not be additional visual impacts to nearby residences as a result of the upgrades since the Substation is located within an industrial area. Therefore, submission of final construction plans will not be required.
V-1b: Reduce construction night lighting impacts.	Design and install lighting to avoid night lighting impacts	SDG&E shall design and install all lighting at construction and storage yards and staging areas and fly yards such that light bulbs and reflectors are not visible from public viewing areas; lighting does not cause reflected glare; and illumination of the project facilities, vicinity, and nighttime sky is minimized.	Additional lighting is not proposed for the substation and construction activities will be limited to daylight hours. Therefore, this mitigation measure is not applicable.
V-1b: Reduce construction night lighting impacts.	Submit a Construction Lighting Mitigation Plan 90 days prior to construction	SDG&E shall submit a Construction Lighting Mitigation Plan to the BLM (only if on BLM lands), Forest Service (only if on National Forest lands), Anza-Borrego Desert State Park (for Park lands) and CPUC (for all areas) for review and approval at least 90 days prior to the start of construction or the ordering of any exterior lighting fixtures or components, whichever comes first. SDG&E shall not order any exterior lighting fixtures or components until the Construction Lighting Mitigation Plan is approved by the reviewing agency. The Plan shall include but is not necessarily limited to the following: • Lighting shall be designed so exterior light fixtures are hooded, with lights directed downward or toward the area to be illuminated and so that backscatter to the nighttime sky is minimized. The design of the lighting shall be such that the luminescence or light sources is shielded to prevent light trespass outside the project boundary • All lighting shall be of minimum necessary brightness consistent with worker safety • High illumination areas not occupied on a continuous basis shall have switches or motion detectors to light the area only when occupied	Additional lighting is not proposed for the substation and construction activities will be limited to daylight hours; therefore, a Construction Lighting Mitigation Plan will not need to be required.
V-2a: Reduce in-line views of land scars.	Construct access and spur roads at appropriate angles	Construct access or spur roads at appropriate angles from the originating, primary travel facilities to minimize extended, in-line views of newly graded terrain. Contour grading should be used where possible to better blend graded surfaces with existing terrain.	No new access roads will be constructed for the substation upgrades; therefore, this mitigation measure is not applicable.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
V-2a: Reduce in-line views of land scars.	Consult with visual resources specialist to evaluate access road visibility prior to final design	All proposed new access roads shall be evaluated for their visibility from sensitive viewing locations prior to final design. Prior to final design, SDG&E shall consult with a visual resources specialist representing the CPUC and BLM and a qualified biologist to identify the following: • Definition of access roads with sensitive viewing areas from which visibility of access roads is a concern. • Approximate location and length of alternative access road routes if straight line roads are not used. Define habitat affected and steepness of terrain for consideration of habitat and erosion impacts. The biologist and visual resources specialist shall confirm that the overall impacts of the alternate access road are less than that of the original access road design. • "Drive and crush" access is a feasible measure for avoiding access road scars (i.e., no grading or vegetation removal is required). If this means of access is to be used, SDG&E shall define frequency of driving and vehicle types such that a biologist confirms that vegetation would be likely to recover.	No new access roads will be constructed for the substation upgrades; therefore, this mitigation measure is not applicable.
V-2a: Reduce in-line views of land scars.	Submit table 60 days prior to construction	A table shall be submitted to the CPUC and BLM for review and approval at least 60 days before the start of construction to document towers for which this measure is applied, and the proposed resolution for each access road (i.e., retain straight line roads due to greater impacts from alternative routes, use "drive and crush" access, or develop alternate access road route).	No new access roads will be constructed for the substation upgrades; therefore, this mitigation measure is not applicable.
V-2a: Reduce in-line views of land scars.	Submit final construction plans 60 days prior to construction	SDG&E shall submit final construction plans demonstrating compliance with this measure to the CPUC and BLM, as well as the Forest Service and Anza-Borrego Desert State Park (as appropriate), for review and approval at least 60 days prior to the start of construction.	No new access roads will be constructed for the substation upgrades; therefore, this mitigation measure is not applicable.
V-2b: Reduce visual contrast from unnatural vegetation lines.	Revegetate boundaries of disturbed areas	In those areas where views of land scars are unavoidable, the boundaries of disturbed areas shall be aggressively revegetated to create a less distinct and more natural-appearing line to reduce visual contrast.	There will no disturbance and therefore, revegetation will not be necessary at the Pomerado Substation.
V-2b: Reduce visual contrast from unnatural vegetation lines.	Return graded roads to pre-construction conditions	All graded roads and areas not required for on-going operation, maintenance, or access shall be returned to pre-construction conditions.	No new access road will be construction for the substation upgrades; therefore, this mitigation measure is not applicable.
V-2b: Reduce visual contrast from unnatural vegetation lines.	Create barriers for public access if opened as a construction route	In those cases where potential public access is opened by construction routes, SDG&E shall create barriers or fences to prevent public access and patrol construction routes to prevent vandalized access and litter clean-up until all vegetation removed returns to its pre-project state.	There is no public access to the Pomerado Substation; therefore, this mitigation measure is not applicable.
V-2b: Reduce visual contrast from unnatural vegetation lines.	Submit final construction and restoration plans 60 days prior to construction	SDG&E shall submit final construction and restoration plans demonstrating compliance with this measure to the BLM and CPUC, as well as Forest Service and Anza-Borrego Desert State Park (as appropriate), for review and approval at least 60 days prior to the start of construction.	There will be no disturbance and no new access roads will be constructed; therefore, this mitigation measure is not applicable.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
V-2c: Reduce color contrast of land scars on non-Forest lands.	Treat disturbed soils visible from sensitive public viewing locations	For non-USFS-administered land areas where views of land scars from sensitive public viewing locations are unavoidable, disturbed soils shall be treated with Eonite or similar treatments to reduce the visual contrast created by the lighter-colored disturbed soils with the darker vegetated surroundings (Eonite and Permeon are commercially available chemical treatments that "age" or oxidize rock and are used specifically for coloring concrete or rock surfaces to tone down glare and contrast and simulate naturally occurring desert varnish). SDG&E will consult with the Authorized Officer (as determined by the CPUC and BLM as appropriate) on a site-by-site basis for the use of Eonite.	The Pomerado Substation upgrade area is not visible from sensitive public viewing locations; therefore, this mitigation measure is not applicable.
V-2c: Reduce color contrast of land scars on non-Forest lands.	Submit final construction and restoration plans 60 days prior to construction	SDG&E shall submit final construction and restoration plans demonstrating compliance with this measure to the BLM and CPUC, as well as Anza-Borrego Desert State Park (as appropriate), for review and approval at least 60 days prior to the start of construction.	Reduction of color contrast will not be required at the Pomerado Substation, as there will be no land scars that are visible to the public.
V-2d: Construction by helicopter.	Consult regarding helicopter construction techniques	In those areas where long-term land-scarring and vegetation clearance impacts would be visible to sensitive public viewing locations, or where construction would occur on slopes over 15 percent, SDG&E will consult with the Authorized Officer and appropriate land management agency, on a site-by-site basis regarding the use of helicopter construction techniques and the prohibition of access and spur roads.	The Pomerado Substation is not visible to the public and there are no slopes over 15 percent; therefore, this mitigation measure is not applicable.
V-2d: Construction by helicopter.	Conduct Agency Consultations 120 days prior to construction	Agency consultations must be conducted and approvals received at least 120 days prior to the start of construction.	The Pomerado Substation is not visible to the public and there are no slopes over 15 percent; therefore, this mitigation measure is not applicable.
V-2f: Reduce land scarring and vegetation clearance impacts on USFS-administered lands.	Limit vegetation clearing	Vegetation within the right of way and ground clearing at the foot of each tower and between towers will be limited to the clearing necessary to comply with electrical safety and fire clearance requirements.	Pomerado Substation is not located on USFS-administered lands; therefore, this mitigation measure is not applicable.
V-2f: Reduce land scarring and vegetation clearance impacts on USFS-administered lands.	Incorporate mitigation to reduce total visual impact	Mitigation will be incorporated to reduce the total visual impact of all vegetation clearing performed for the power line (USFS Scenery Conservation Plan).	Pomerado Substation is not located on USFS-administered lands therefore, this mitigation measure is not applicable.
V-2f: Reduce land scarring and vegetation clearance impacts on USFS-administered lands.	Submit Scenery Conservation Plan at least 120 days prior to construction	CPUC and USFS to review Scenery Conservation Plan at least 120 days prior to start of construction and verify implementation following construction.	Pomerado Substation is not located on USFS-administered lands therefore, this mitigation measure is not applicable.
V-3a: Reduce visual contrast of towers and conductors.	Conductors shall be non-specular	All new conductors and re-conductored spans are to be non-specular in design in order to reduce conductor visibility and visual contrast.	This mitigation measure applies to all tower locations and route segments; therefore, is it not applicable to the upgrades at Pomerado Substation.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
V-3a: Reduce visual contrast of towers and conductors.	Consult with a visual resources specialist to evaluate new access roads	All proposed new access roads shall be evaluated for their visibility from sensitive viewing locations prior to final design. Sensitive viewing locations have been defined by Cleveland National Forest as campgrounds, trailheads, trails, wilderness areas, back-country roads, heavily traveled roads, and overlooks. Access roads of concern are those that would be visible as they directly approach existing or proposed towers in a straight line from locations immediately downhill of the structures. Prior to final design, SDG&E shall consult with a visual resources specialist representing the CPUC and BLM and a qualified biologist to identify the following: • Definition of towers with sensitive viewing areas from which visibility of access roads is a concern. • Approximate location and length of alternative access road routes if straight line roads are not used. Define habitat affected and steepness of terrain for consideration of habitat and erosion impacts. The biologist and visual resources specialist shall confirm that the overall impacts of the alternate access road are less than that of the original access road design. • "Drive and crush" access is a feasible measure for avoiding access road scars (i.e., no	No new access roads will be constructed as part of the upgrade activities at Pomerado Substation; therefore, this mitigation measure is not applicable.
V-3a: Reduce visual contrast of towers and conductors.	Submit a table 60 days prior to construction	A table shall be submitted to the CPUC and BLM for review and approval at least 60 days before the start of construction to document towers for which this measure is applied, and the proposed resolution for each tower (i.e., retain straight line roads due to greater impacts from alternative routes, use "drive and crush" access, or develop alternate access road route.	This mitigation measure applies to all tower locations and route segments; therefore, is it not applicable to the upgrades at Pomerado Substation.
V-7a: Reduce visual contrast associated with ancillary facilities.	Submit Surface Treatment Plan 90 days prior to construction	SDG&E shall submit to BLM and CPUC a Surface Treatment Plan describing the application of colors and textures to all new facility structures, buildings, walls, fences, and components comprising all ancillary facilities including substations. The Surface Treatment Plan must reduce glare and minimize visual intrusion and contrast by blending the facilities with the landscape. The Treatment Plan shall be submitted to BLM and CPUC for approval at least 90 days prior to (a) ordering the first structures that are to be color treated during manufacture, or (b) construction of any of the ancillary facility component, whichever comes first. If the BLM or CPUC notifies SDG&E that revisions to the Plan are needed before the Plan can be approved, within 30 days of receiving that notification, SDG&E shall prepare and submit for review and approval a revised Plan. The Surface Treatment Plan shall include: • Specification, and 11" x 17" color simulations at life size scale, of the treatment proposed for use on project structures, including structures treated during manufacture • A list of each major project structure, building, tower and/or pole, and fencing specifying the color(s) and finish proposed for each (colors must be identified by name and by vendor brand or a universal designation) • Two sets of brochures and/or color chips for each proposed color • A detailed schedule for completion of the treatment • A procedure to ensure proper treatment maintenance for the life of the project.	Colors and textures of all upgraded equipment will match existing equipment at the Pomerado Substation, therefore a Surface Treatment Plan will not be required.
V-7a: Reduce visual contrast associated with ancillary facilities.	Receive approval before vendor specification	SDG&E shall not specify to the vendors the treatment of any buildings or structures treated during manufacture, or perform the final treatment on any buildings or structures treated onsite, until SDG&E receives notification of approval of the Treatment Plan by the BLM and CPUC.	Colors and textures of all upgraded equipment will match existing equipment, therefore this mitigation measure is not applicable to construction activities occurring at the Substation.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
V-7a: Reduce visual contrast associated with ancillary facilities.	Notify for inspection 30 days following commercial operation	Within 30 days following the start of commercial operation, SDG&E shall notify the BLM and CPUC that all buildings and structures are ready for inspection.	Colors and textures of all upgraded equipment will match existing equipment, therefore this mitigation measure is not applicable to construction activities occurring at the Substation.
V-7b: Screen ancillary facilities.	Submit a Screening Plan 90 days prior to screening installation	SDG&E shall provide a Screening Plan for screening vegetation, walls, and fences that reduces visibility of ancillary facilities (except Imperial Valley Substation) and helps the facility blend in with the landscape. The use of berms to facilitate project screening may also be incorporated into the Plan. SDG&E shall submit the Plan to the BLM and CPUC for review and approval at least 90 days prior to installing the landscape screening. If the BLM or CPUC notifies SDG&E that revisions to the Plan are needed before the Plan can be approved, within 30 days of receiving that notification, SDG&E shall prepare and submit for review and approval a revised Plan. The plan shall include but not necessarily be limited to: • An 11" x 17" color simulation of the proposed landscaping at 5 years • A plan view to scale depicting the project and the location of screening elements • A detailed list of any plants to be used; their size and age at planting; the expected time to maturity, and the expected height at five years and at maturity	The upgrades will be installed within the substation site which has an existing eight-foot perimeter wall that serves as screening for the Substation. There will not be additional visual impacts to nearby residences as a result of the upgrades. Therefore, a Screening Plan will not be required.
V-7b: Screen ancillary facilities.	Notify within 7 days after completing screening installation	SDG&E shall complete installation of the screening prior to the start of project operation. SDG&E shall notify the BLM and CPUC within seven days after completing installation of the screening, that the screening components are ready for inspection.	The upgrades will be installed within the substation site which has an existing eight-foot perimeter wall that serves as screening for the Substation. There will not be additional visual impacts to nearby residences as a result of the upgrades.
V-21a: Reduce night lighting impacts.	Design and install lighting to avoid night lighting impacts	SDG&E shall design and install all permanent lighting such that light bulbs and reflectors are not visible from public viewing areas; lighting does not cause reflected glare; and illumination of the project facilities, vicinity, and nighttime sky is minimized.	This mitigation measure will be fulfilled during construction; therefore, it is not applicable as a pre-construction requirement.
V-21a: Reduce night lighting impacts.	Submit a Lighting Mitigation Plan 90 days prior to construction	SDG&E shall submit a Lighting Mitigation Plan to the CPUC for review and approval at least 90 days prior to ordering any permanent exterior lighting fixtures or components. SDG&E shall not order any exterior lighting fixtures or components until the Lighting Mitigation Plan is approved by the CPUC. The Plan shall include but is not necessarily limited to the following: • Lighting shall be designed so exterior light fixtures are hooded, with lights directed downward or toward the area to be illuminated and so that backscatter to the nighttime sky is minimized. The design of the lighting shall be such that the luminescence or light sources is shielded to prevent light trespass outside the project boundary • All lighting shall be of minimum necessary brightness consistent with worker safety • High illumination areas not occupied on a continuous basis shall have switches or motion detectors to light the area only when occupied.	Additional lighting is not proposed for the substation and construction activities will be limited to daylight hours; therefore, a Lighting Mitigation Plan will not need to be required.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
V-45a: Prepare and implement Scenery Conservation Plan.	File Scenery Conservation Plan within 1 year after license is issued	Within one year after license issuance, or prior to any ground disturbing activities, the Licensee shall file with the Commission a Scenery Conservation Plan that is approved by the Forest Service. The purpose of this Scenery Conservation Plan is to identify specific actions that will minimize the project's visible disturbance to the naturally established scenery and to establish final direction to best achieve the spirit and intent of the Scenic Integrity Objectives of the Cleveland National Forest Land and Resource Management Plan. To achieve the greatest consistency with the Scenic Integrity Objectives, the project shall detail and integrate the following design recommendations into the Scenery Conservation Plan: Power Line and Support Towers. Transmission lines shall be nonspecular (nonreflective) and neutral in coloration. Support towers shall be custom-colored with a flat, non-reflective finish, to visually blend with native vegetation colors to appear as visually transparent as possible within the natural landscape pattern. Towers shall be designed to minimize their visual prominence and contrast to the natural landscape. Distance Zones. The Applicant shall consult with the Forest Service on tower design for any approved route on Forest lands and implement tower styles in accordance with agency direction. In general, the USFS requires that support towers within approximately one mile of sensitive primary viewpoints and without a backdrop be a monopole design with a simple, clean and less industrial appearance and support towers viewed beyond one mile from sensitive viewpoints or only at distance be lattice towers.	The Pomerado Substation is not located within Cleveland National Forest Lands; therefore, this mitigation measure is not applicable.
V-66a: Reduce structural prominence and visual contrast associated with the Interstate 8/ Chocolate Canyon transition structures.	Reconsider the location of transition structures	In order to reduce the structural prominence and visual contrast associated with the Interstate 8/Chocolate Canyon transition structures, SDG&E shall reconsider the location of the transition structures and attempt to lower their height by either relocating the next tower to shorten the span, or by moving the transition structures further downslope.	This mitigation measure applies to the Chocolate Canyon Option; therefore, it is not applicable to upgrade activities at the Pomerado Substation.
V-66a: Reduce structural prominence and visual contrast associated with the Interstate 8/ Chocolate Canyon transition structures.	Submit memo and final construction plans 120 days prior to construction	This measure shall be implemented by SDG&E's submittal of a memo to the CPUC for review and approval that documents its attempts to fine-tune the location of the transition structures, as well as the submittal of final construction plans for review and approval at least 120 days prior to the start of construction.	This mitigation measure applies to the Chocolate Canyon Option; therefore, it is not applicable to upgrade activities at the Pomerado Substation.
V-68a: Eliminate skylining of ridgeline towers and conductors.	Eliminate skylining of ridgeline towers and conductors	In order to eliminate the skylining of ridgeline towers and conductors, the ridgeline towers shall be relocated to elevations sufficiently low on the ridge to eliminate structure skylining when viewed from Moreno Boulevard, SR67, and residences on the slopes west of SR67.	No ridgeline towers will be installed at Pomerado Substation; therefore, this mitigation measure is not applicable.
V-68a: Eliminate skylining of ridgeline towers and conductors.	Submit final construction plans 120 days prior to construction	SDG&E shall submit final construction plans demonstrating compliance with this measure to the CPUC for review and approval at least 120 days prior to the start of construction.	No ridgeline towers will be installed at Pomerado Substation; therefore, this mitigation measure is not applicable.
VR-APM-1: Highway, canyon, and trail crossings	Place structures at maximum distance from crossings	At highway, canyon, and trail crossings, structures shall be placed at the maximum feasible distance from the crossing to reduce visual impacts as long as other significant resources are not negatively affected.	All upgrade activities will take place in previously disturbed areas within the substation fence-line; therefore, this mitigation measure is not applicable.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
VR-APM-2: Structure and conductor finishes	Use dulled metal finish and non-specular conductors	SDG&E will use dulled metal finish transmission structures and non-specular conductors in visually sensitive areas including the ABDSP, new ROW in the Central Link and Peñasquitos Junction to Peñasquitos Substation in the Coastal Link.	Pomerado Substation is not located within a visually sensitive area; therefore, this mitigation measure is not applicable.
VR-APM-3: Structure spacing	Match structure spacing when parallel to an existing line	Where the line parallels existing transmission lines, the spacing of structures shall match the existing transmission structures, where feasible, to minimize visual effects.	This mitigation measure is not applicable to upgrade activities at the Pomerado Substation.
VR-APM-4: Paint and discoloring agents	Do not paint or discolor rocks or vegetation	No paint or permanent discoloring agents will be applied to rocks or vegetation to indicate survey or construction activity limits.	The SWEAP video was approved by the CPUC on March 15, 2010. This SWEAP will be shown to all project personnel and enforced throughout all phases of the Project and includes instructions prohibiting application of paint or permanent discoloring agents on rocks or vegetation to indicate survey or construction limits.
VR-APM-5: Structures and residences	Do not install structures in front or in line-of-sight of residences	Transmission line structures will not be installed directly in front of residences or in direct line-of-sight from a residence where possible. SDG&E will consult with affected property owners on structure siting to reduce land use and visual impacts.	Upgrade activities will take place within the Pomerado Substation fence-line and will not impact residences; therefore, this mitigation measure is not applicable.
VR-APM-6: Scenic view areas	Place structures to avoid sensitive features	In scenic view areas as designated by land management agencies, structures would be placed to avoid sensitive features and/or allow conductor to clearly span the features, within limits of standard design where possible.	There are no sensitive features at Pomerado Substation; therefore, this mitigation measure is not applicable.
LAND USE			
L-1a: Prepare Construction Notification Plan.	Submit Construction Notification Plan 45 days prior to construction	45 days prior to construction, SDG&E shall prepare and submit a Construction Notification Plan to the CPUC and the BLM for approval. The Plan shall identify the procedures SDG&E will use to inform property and business owners of the location and duration of construction, identify approvals that are needed prior to posting or publication of construction notices, and include text of proposed public notices and advertisements. The plan shall address at a minimum the following components:	The Construction Notification Plan was approved by the CPUC on March 1, 2010.
L-1a: Prepare Construction Notification Plan.	Mail a public notice 15 days prior to construction	Public notice mailer. A public notice mailer shall be prepared and mailed no less than 15 days prior to construction. The notice shall identify construction activities that would restrict, block, or require a detour to access existing residential properties, retail and commercial businesses, wilderness and recreation facilities, and public facilities (e.g., schools and memorial parks). The notice shall state the type of construction activities that will be conducted, and the location and duration of construction, including all helicopter activities. SDG&E shall mail the notice to all residents or property owners within 1,000 feet of the right-of-way, any property owners or tenants that could be impacted by construction activities and specific public agencies with facilities that could be impacted by construction. If construction delays of more than seven days occur, an additional notice shall be prepared and distributed.	The Construction Notification Plan that was approved by the CPUC on March 1, 2010 addresses mailing public notifications. Proof of Notification will be submitted to CPUC prior to start of construction.
L-1a: Prepare Construction Notification Plan.	Advertise in newspapers and bulletins 15 days prior to construction	Newspaper advertisements. Fifteen days prior to construction, within a route segment, notices shall be placed in local newspapers and bulletins, including Spanish language newspapers and bulletins. The notice shall state when and where construction will occur and provide information on the public liaison person and hotline identified below. If construction is delayed for more than seven days, an additional round of newspaper notices shall be placed to discuss the status and schedule of construction.	The Construction Notification Plan that was approved by the CPUC on March 1, 2010 addresses newspaper advertisement notifications. Proof of Notification will be submitted to CPUC prior to start of construction.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
L-1a: Prepare Construction Notification Plan.	Post notices of construction at public venues 30 days prior to construction	Public venue notices. Thirty days prior to construction, notice of construction shall be posted at public venues such as trail crossings, rest stops, desert centers, resource management offices (e.g., Bureau of Land Management field offices, Anza-Borrego Desert State Park offices and campgrounds, Cleveland National Forest Ranger Stations), and other public venues to inform residents and visitors to the purpose and schedule of construction activities. For public trail closures, SDG&E shall post information on the trail detour at applicable resource management offices and post the notice on the trail within two miles of the detour. For recreation facilities, the notice shall be posted along the access routes to known recreational destinations that would be restricted, blocked, or detoured and shall provide information on alternative recreation areas that may be used during the closure of these facilities.	The Construction Notification Plan that was approved by the CPUC on March 1, 2010 addresses posting of notices of construction at public venues. Proof of Notification will be submitted to CPUC prior to start of construction.
L-1a: Prepare Construction Notification Plan.	Provide a public liaison person and toll-free hotline number before and during construction	Public liaison person and toll-free information hotline. SDG&E shall identify and provide a public liaison person before and during construction to respond to concerns of neighboring property owners about noise, dust, and other construction disturbance. Procedures for reaching the public liaison officer via telephone or in person shall be included in notices distributed to the public. SDG&E shall also establish a toll-free telephone number for receiving questions or complaints during construction and shall develop procedures for responding to callers. Procedures for handling and responding to calls shall be addressed in the Construction Notification Plan.	The Construction Notification Plan identifies the public liaison person assigned to the project and the toll-free hotline. The Plan was approved by the CPUC on March 1, 2010.
L-1c: Coordinate with MCAS Miramar.	Provide project engineering details to MCAS Miramar 90 days prior to construction	At least 90 days before construction, SDG&E shall provide all required project engineering details to MCAS Miramar for review and approval. Information provided shall include access roads to be used, expanded, or added. Information shall also include completed and authorized FAR Part 77 evaluations (Form 7460-1) for all objects exceeding the Outer Horizontal Surface (978 Ft AMSL) at MCAS Miramar. When any towers are to be removed on MCAS Miramar, all portions of the towers/poles shall be removed. Cutting poles and leaving buried portions is not acceptable on MCAS Miramar lands.	Upgrade activities will not occur within MCAS Miramar, therefore, this mitigation measure is not applicable.
L-1c: Coordinate with MCAS Miramar.	Provide evidence of coordination 60 days prior to construction	SDG&E shall provide the CPUC and BLM with evidence of its coordination with MCAS Miramar at least 60 days prior to the start of construction.	Upgrade activities will not occur within MCAS Miramar, therefore, this mitigation measure is not applicable.
L-2b: Revise project elements to minimize land use conflicts.	Notify landowners 90 days prior to completing final design of route	At least 90 days prior to completing final transmission line design for the approved route, SDG&E shall notify landowners of parcels through which the alignment would pass regarding the specific location of the ROW, individual towers, staging areas, pull sites, access roads, or other facilities associated with the project that would occur on the subject property or within 1,000 feet of the property.	Construction activities will be limited to the previously disturbed areas within the existing substation fence-line and no new landowners will be affected as part of the scope of work; therefore this mitigation measure is not applicable.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
L-2b: Revise project elements to minimize land use conflicts.	Provide notified parties 30 days to identify conflicts and potential reroutes	The notified parties shall be provided at least 30 days in which to identify conflicts with any existing structures or planned development on the subject property and to work with SDG&E to identify potential reroutes of the alignment that would be mutually acceptable to SDG&E and the landowner. Property owners whose land may be divided into potentially uneconomic parcels shall be afforded this same opportunity, even if development plans have not been established. SDG&E shall endeavor to accommodate these reroutes only to the extent that they are reasonable and feasible, do not create a substantial increase in cost, and do not create adverse impacts to resources or to other properties that would be greater in magnitude than impacts that would occur from construction and operation of the alignment as originally planned.	Construction activities will be limited to the previously disturbed areas within the existing substation fence-line and no new landowners will be affected as part of the scope of work; therefore this mitigation measure is not applicable.
L-2b: Revise project elements to minimize land use conflicts.	Provide written report at or before the time property owners are identified	At or before the time property owners are notified and based on SDG&E's own review of the alignment and facilities, SDG&E shall provide CPUC and BLM a written report identifying properties that are suspected of having a land use conflict as described above. This report shall identify and characterize existing buildings within the ROW and residences or occupied structures within or adjacent to the ROW, with which the alignment or other permanent facilities may conflict.	Construction activities will be limited to the previously disturbed areas within the existing substation fence-line and no new landowners will be affected as part of the scope of work; therefore this mitigation measure is not applicable.
L-2b: Revise project elements to minimize land use conflicts.	Provide written report within 30 days of the public notice closing date for responses	SDG&E shall provide a written report to the CPUC and BLM providing evidence of the notice provided to landowners and copies of any responses to the notice within 30 days of the notice closing date for responses. SDG&E shall also identify in the documentation submitted to CPUC and BLM whether reroutes recommended by the landowner or SDG&E can be accommodated. Where they cannot be accommodated, the reasons shall be provided. SDG&E shall provide information sufficient for the CPUC and BLM to determine that the reroute creates no more adverse impact than the originally planned alignment location. SDG&E shall include environmental information consistent with that required for a Variance (as defined in Section I, Mitigation Monitoring). Where a reroute is proposed, the CPUC and BLM will review and agree to accept or reject individual reroutes. CPUC and BLM also may recommend compromise reroutes for any of the parcels for which responses were provided to SDG&E in a timely fashion.	Construction activities will be limited to the previously disturbed areas within the existing substation fence-line and no new landowners will be affected as part of the scope of work; therefore this mitigation measure is not applicable.
L-2b: Revise project elements to minimize land use conflicts.	Develop specific reroute modifications	The following specific modifications shall be developed by SDG&E, following the procedures defined above: Interstate 8 Alternative: MP I8-87 through I8-89.5, High Meadow Ranch. The initial alignment shall be shifted approximately 200 feet to the west, downslope, in order to minimize visual effects of the towers on the development. See Figure Ap.11C-56 for map of this area. Interstate 8 Alternative: MP I8-92 to I8-92.7, Private home. The alignment shall be shifted to the east side of Highway 67, to a point just south of the Preserve parking lot, where the alignment would cross Highway 67 to join the Proposed Project route. See Figure Ap.11C-57 for map of this area. Star Valley Option Revision: SDG&E shall work with affected landowners to refine the route in order to minimize effects on private properties along Star Valley Road.	Construction activities will be limited to the previously disturbed areas within the existing substation fence-line and no new landowners will be affected as part of the scope of work; therefore this mitigation measure is not applicable.
LU-APM-1: Advance notice of construction	Provide advance notice within 300 feet of construction activities and appoint a public affairs officer	SDG&E will provide advance notice to residents, property owners, and tenants within 300 feet of construction activities and will appoint a public affairs officer to address public concerns or questions.	Property owners and tenants within 300 feet of the Substation will be noticed prior to commencement of construction activities (see Appendix E). Verification of such notification will be submitted to the CPUC as per the Construction Notification Plan approved on March 1, 2010.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
LU-APM-2: Proximity to residences	Place new structures more than 330 feet from residences	Place new transmission structures more than 330 feet from an existing residence to the extent feasible.	This mitigation measure is not applicable to upgrade activities at the Pomerado Substation.
LU-APM-4: Property access	Provide notification prior to construction	To facilitate access to properties obstructed by construction activities, SDG&E will notify property owners and tenants in advance of construction activities. Provide alternative access if feasible.	Construction at this site will take place inside the existing substation and as a result, access to adjacent properties will not be affected.
LU-APM-5: Irrigation canals and flood management structures	Coordinate construction activities with water management representatives	To remedy encroachment and safety conflicts with irrigation canals and flood management structures during construction, SDG&E will coordinate construction activities with appropriate water management representatives.	Irrigation canals and flood management structures are not located at the Substation.
LU-APM-6: Limits of construction	Restrict and confine activity within limits of construction	The limits of construction activities within and outside the ROW will typically be predetermined, with activity restricted to and confined within those limits.	Construction will be confined within the Substation fence-line, as illustrated in Appendix B.
LU-APM-6: Limits of construction	Provide flagging for environmentally sensitive areas	The ROW boundary and limits of construction activity inside and outside the ROW will be flagged in environmentally sensitive areas to alert construction personnel that those areas should be minimize or avoided.	There are no environmentally sensitive areas located inside the Substation. If buffer areas are needed to protect nests, then flagging or fencing as appropriate will be installed.
LU-APM-7: Location of project facilities	Install project facilities outside of private properties, parks, and other recreational areas	To the extent feasible, project facilities would be installed along the edges or borders of private property, open space parks, and recreation areas. When it is not feasible to locate project facilities along property borders, SDG&E would consult with affected property owners to identify facility locations that create the least potential impact to property and are mutually acceptable to property owners to the extent feasible. SDG&E would pay just compensation to affected property owners based upon the impact to the property caused by the facility locations identified by SDG&E.	The April 30, 2010 Mapbook illustrates changes to the final design of the alignment incorporating re-design of the alignment placing project facilities outside of private properties, parks, and other recreational areas to the extent feasible. A revised Mapbook and PMR was submitted to the CPUC on May 14, 2010. SDG&E will compensate property owners affected by the project.
LU-APM-8: General Plan updates	Coordinate to include Project in General Plans	SDG&E will continue its current coordination efforts with the Counties of Imperial and San Diego General Plan Updates and the City of San Diego General Plan Updates to include the Proposed Project in their respective General Plans.	The proposed upgrades to the Pomerado Substation do not require an update to the San Diego County General Plan.
LU-APM-9: Ministerial land use permits	Obtain ministerial land use permits	SDG&E would obtain all necessary and/or appropriate ministerial land use permits.	Upgrade activities will take place within the existing Pomerado Substation; therefore, ministerial land use permit(s) will not be necessary.
LU-APM-10: Structure locations	Match structure locations with existing transmission facilities	SDG&E will match structure locations with existing transmission facilities where feasible and appropriate.	No new structures will be built as part of the scope of work for Pomerado Substation upgrades; therefore, this mitigation measure is not applicable.
WILDERNESS & RECREATION			

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
WR-1a: Coordinate construction schedule and activities with the authorized officer for the recreation area.	Coordinate construction activities and schedule 60 days prior to construction	No less than 60 days prior to construction, SDG&E shall coordinate construction activities and the project construction schedule with the authorized officer for the recreation areas listed below: Trans-County Trail (County of San Diego Regional Trail), Pacific Crest National Scenic Trail (County of San Diego Regional Trail), California Riding and Hiking Trail (County of San Diego Regional Trail), Sycamore Canyon Open Space Preserve, Mission Trails Regional Park. SDG&E shall schedule construction activities to avoid heavy recreational use periods in coordination with and at the discretion of the authorized officer. SDG&E shall locate construction equipment to avoid temporary preclusion of recreation areas in accordance with the recommendation of the authorized officer.	There are no wilderness or recreation areas located within or adjacent to the Pomerado Substation. Therefore, Wilderness & Recreation mitigation measures are not applicable to this NTP request.
WR-1a: Coordinate construction schedule and activities with the authorized officer for the recreation area.	Submit documentation of coordination 30 days prior to construction	SDG&E shall document its coordination efforts with the authorized officer and provide this documentation to the CPUC, BLM, and affected park jurisdictions at least 30 days prior to construction.	There are no wilderness or recreation areas located within or adjacent to the Pomerado Substation. Therefore, Wilderness & Recreation mitigation measures are not applicable to this NTP request.
WR-1b: Provide temporary detours for trail users.	Coordinate temporary detours of trails 60 days prior to construction	No less than 60 days prior to construction, SDG&E shall coordinate with the authorized officer of the trails listed below to establish temporary detours of the trails to avoid construction area hazards, if the trail is deemed unsafe to use during construction. Trans-County Trail, Pacific Crest National Scenic Trail, California Riding and Hiking Trail, Mission Trails Regional Park (Fortuna, Rim, and Quarry Loop Trails)	There are no wilderness or recreation areas located within or adjacent to the Pomerado Substation. Therefore, Wilderness & Recreation mitigation measures are not applicable to this NTP request.
WR-1b: Provide temporary detours for trail users.	Site new trail segments to avoid sensitive resources and restore to pre-construction conditions	Should new trail segments be constructed as detours during construction, the temporary new trail segments would be sited to avoid sensitive resources, in coordination with the authorized officer of the trail or recreation area, and would be restored to pre-construction condition by SDG&E when SRPL construction is complete, if required by the authorized officer of the trail or recreation area	There are no wilderness or recreation areas located within or adjacent to the Pomerado Substation. Therefore, Wilderness & Recreation mitigation measures are not applicable to this NTP request.
WR-1b: Provide temporary detours for trail users.	Post public notices at trail detours	SDG&E shall post a public notice of the temporary trail closure and information on the trail detour.	There are no wilderness or recreation areas located within or adjacent to the Pomerado Substation. Therefore, Wilderness & Recreation mitigation measures are not applicable to this NTP request.
WR-1b: Provide temporary detours for trail users.	Submit documentation of coordination 30 days prior to construction	SDG&E shall document its coordination efforts with the authorized officer and submit this documentation to the CPUC, BLM, and affected park jurisdictions at least 30 days prior to construction.	There are no wilderness or recreation areas located within or adjacent to the Pomerado Substation. Therefore, Wilderness & Recreation mitigation measures are not applicable to this NTP request.
WR-1c: Coordinate with local agencies to identify alternative recreation areas.	Coordinate alternative recreation facilities 60 days prior to construction	SDG&E shall coordinate with the authorized officer for the applicable federal, State, or local parks and recreational facilities listed below at least 60 days before construction in order to identify alternative recreation facilities that may be used by the public during construction. Trans-County Trail (County of San Diego Regional Trail), Pacific Crest National Scenic Trail (County of San Diego Regional Trail), California Riding and Hiking Trail (County of San Diego Regional Trail), Sycamore Canyon Open Space Preserve, Mission Trails Regional Park	There are no wilderness or recreation areas located within or adjacent to the Pomerado Substation. Therefore, Wilderness & Recreation mitigation measures are not applicable to this NTP request.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
WR-1c: Coordinate with local agencies to identify alternative recreation areas.	Post public notices at recreation facilities	SDG&E shall post a public notice at recreation facilities that are to be closed or where access would be limited during project construction.	There are no wilderness or recreation areas located within or adjacent to the Pomerado Substation. Therefore, Wilderness & Recreation mitigation measures are not applicable to this NTP request.
WR-1c: Coordinate with local agencies to identify alternative recreation areas.	Submit documentation of coordination 30 days prior to construction	SDG&E shall document its coordination efforts with the parks and recreation departments and provide this documentation to the CPUC, BLM, and all affected park jurisdictions 30 days prior to construction.	There are no wilderness or recreation areas located within or adjacent to the Pomerado Substation. Therefore, Wilderness & Recreation mitigation measures are not applicable to this NTP request.
WR-2a: Develop a reroute for the BCD Alternative Revision to reduce effects on recreation.	Relocate 500kV line along southern boundary of JAM properties	SDG&E shall relocate the overhead 500 kV transmission line along the southern boundary of JAM properties as shown in Figure E.2.1-b to shorten the route and minimize effects on BLM land, Forest land, and private property. This reroute and its ground-disturbing components shall avoid Back Country Non-Motorized land use zones of the Cleveland National Forest, while also minimizing towers and disturbance on private property.	Upgrade activities will be limited to the fenced Pomerado Substation; therefore, this mitigation measure is not applicable.
WR-2a: Develop a reroute for the BCD Alternative Revision to reduce effects on recreation.	Submit memo and construction plans 120 days prior to construction	SDG&E shall submit a memo to the CPUC for review and approval that documents its attempts to fine-tune the location of the BCD Alternative Revision, as well as the submittal of final construction plans for review and approval at least 120 days prior to the start of construction.	Upgrade activities will be limited to the fenced Pomerado Substation; therefore, this mitigation measure is not applicable.
WR-2b: Evaluate and Implement PCT Route Revision.	Coordinate and submit route options for revising the Pacific Crest Trail	SDG&E shall consult and coordinate with the U.S. Forest Service, BLM, and the Pacific Crest Trail Association to develop route options for revising the PCT so it would cross the Modified Route D Alternative only once, rather than three times.	Upgrade activities will be limited to the fenced Pomerado Substation; therefore, this mitigation measure is not applicable.
WR-2b: Evaluate and Implement PCT Route Revision.	Submit a report identifying PCT relocation options prior to energizing the line	SDG&E shall prepare and submit a report to the BLM and U.S. Forest Service prior to energizing the new transmission line. The report shall identify feasible PCT relocation options, and, under the direction of the federal agencies, shall evaluate whether its construction and restoration of the old trail segment would create overall greater impacts than those created by three crossings of the PCT that would occur with the Modified Route D Alternative.	Upgrade activities will be limited to the fenced Pomerado Substation; therefore, this mitigation measure is not applicable.
WR-2b: Evaluate and Implement PCT Route Revision.	Construct new trail and restore old trail if directed by the BLM within 1 year of energizing the line	If directed by the BLM, SDG&E shall be responsible for constructing the new trail segment and restoring the old trail segment in manner acceptable to the BLM and U.S. Forest Service. Trail construction and restoration shall be completed within one year of energizing the transmission line.	Upgrade activities will be limited to the fenced Pomerado Substation; therefore, this mitigation measure is not applicable.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
WR-3a: Coordinate tower and road locations with the authorized officer for the recreation area.	Coordinate to determine locations of tower sites and spur roads	Where the Proposed Project crosses the recreation areas listed below, SDG&E shall coordinate with the authorized officer for the recreation area to determine specific tower site and spur road locations in order to minimize impacts to recreational resources. If it is not feasible to site structures outside of a park/preserve, compensation shall be required for permanent impacts (i.e., structure footings, access roads not dually used as trails) to park/preserve land at a 1:1 ratio. However, this mitigation measure is superseded by biological resource Mitigation Measure B-1a, which specifies restoration and compensation ratios for affected vegetation. In cases where the impacts to recreational resources occur on lands already in use as mitigation for other projects, the mitigation ratios shall be doubled, as is standard practice in San Diego County. In consultation with the authorized officer of the trail or recreation area, access roads shall not be located on trails (e.g. , PCT, Trans-County Trail) unless the authorized officer determines that the construction of new access roads would result in greater impacts than modifying the trail for use as an access road. If it is not feasible to site transmission structures off of a trail,	There are no wilderness or recreation areas located within or adjacent to the Pomerado Substation. Therefore, Wilderness & Recreation mitigation measures are not applicable to this NTP request.
WR-3a: Coordinate tower and road locations with the authorized officer for the recreation area.	Coordinate 60 days prior to construction and submit documentation 30 days prior to construction	This coordination shall occur no less than 60 days prior to the start of construction. SDG&E shall document its coordination with the authorized officer and shall submit this documentation to the CPUC, BLM, and ABDSP, at least 30 days prior to project construction. • Trans-County Trail • Pacific Crest National Scenic Trail • California Riding and Hiking Trail • San Vicente Highlands Open Space Preserve	There are no wilderness or recreation areas located within or adjacent to the Pomerado Substation. Therefore, Wilderness & Recreation mitigation measures are not applicable to this NTP request.
R-APM-2a: Recreational Use Areas	Provide advance notice if restrictions in access routes to recreational use areas	Advance notice of restriction of conflicts with access routes to recreational use areas will be provided.	There are no wilderness or recreation areas located within or adjacent to the Pomerado Substation. Therefore, Wilderness & Recreation mitigation measures are not applicable to this NTP request.
R-APM-2b: Trail use on federal holidays	No construction on federal holidays that affects trail use	No construction that affects trail use will be conducted in that area on federal holidays.	There are no wilderness or recreation areas located within or adjacent to the Pomerado Substation. Therefore, Wilderness & Recreation mitigation measures are not applicable to this NTP request.
R-APM-2c: Construction affecting parkland and trails	Coordinate construction activities affecting parkland and trails prior to construction	SDG&E will coordinate all construction activities, including temporary trail closures, affecting the parklands and trail systems of San Diego and Imperial Counties with the counties' Parks and Recreation Department and the California State Parks Department (for ABDSP), respectively, before construction begins in these areas.	There are no wilderness or recreation areas located within or adjacent to the Pomerado Substation. Therefore, Wilderness & Recreation mitigation measures are not applicable to this NTP request.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
R-APM-2d: Alternative park access signage	Post signs at alternative park access and parking	Signs directing vehicles to alternative park access and parking will be posted in the event construction temporarily obstructs parking areas near trailheads.	There are no wilderness or recreation areas located within or adjacent to the Pomerado Substation. Therefore, Wilderness & Recreation mitigation measures are not applicable to this NTP request.
R-APM-2e: Alternative trail and bikeway signage	Post signs at alternative trails and bikeways	Signs advising recreation users of construction activities and directing them to alternative trails or bikeways will be posted on both sides of all trail intersections or as determined through SDG&E's coordination with the respective jurisdictional agencies.	There are no wilderness or recreation areas located within or adjacent to the Pomerado Substation. Therefore, Wilderness & Recreation mitigation measures are not applicable to this NTP request.
R-APM-2f: Equestrian trail signage	Post signs at equestrian trails during helicopter construction	Where helicopters are used for construction, signage advising equestrians of construction timeframes with helicopter use will be posted at all equestrian trail-access points within the vicinity of the flight paths.	There are no wilderness or recreation areas located within or adjacent to the Pomerado Substation. Therefore, Wilderness & Recreation mitigation measures are not applicable to this NTP request.
R-APM-2f: Equestrian trail signage	Regularly check and maintain signs	These signs will be checked and maintained regularly.	There are no wilderness or recreation areas located within or adjacent to the Pomerado Substation. Therefore, Wilderness & Recreation mitigation measures are not applicable to this NTP request.
AGRICULTURE			
AG-1b: Restore compacted soil.	Restore disturbed soils 30 days after completion of construction clean-up	The Applicant shall restore soils compacted or disturbed such as by excavation during construction by conferring with the property owner or tenant to identify and then implement a mutually agreed means to restore such soils. Restoration actions may include, but are not be limited to, disking, plowing, removal of excavated soil, or other suitable restoration methods. This shall occur thirty (30) days after completion of construction clean-up and site restoration at each property.	There are no agricultural fields located within or adjacent to the Pomerado Substation. Therefore, Agricultural Resource mitigation measures are not applicable to this NTP request.
AG-1c: Coordinate with grazing operators.	Coordinate with grazing operators 60 days prior to construction and 30 days after construction	SDG&E shall coordinate with grazing operators to ensure that agricultural productivity and animal welfare are maintained both during and after construction to the maximum extent feasible. Coordination efforts will address issues including, but not necessarily limited to: • Interference with access to water (e.g., provide alternate methods for livestock access to water) • Impairment of cattle movements (e.g., provide alternate routes; reconfigure fencing/gates) • Removal and replacement of fencing (e.g., during construction install temporary fencing/barriers, as appropriate, and following construction restore equal or better fencing to that which was removed or damaged) • Impacts to facilities such as corrals and watering structures, as well as related effects such as ingress/egress, and management activities (e.g., replacement of damaged/removed facilities in kind; provide alternate access) This shall occur Sixty (60) days prior to the start of project construction and Thirty (30) days after construction on each property.	There are no agricultural fields or grazing operators located within or adjacent to the Pomerado Substation. Therefore, Agricultural Resource mitigation measures are not applicable to this NTP request.
AG-3b: Consult with and inform aerial applicators.	Consult and notify 60 days prior to erection of any structure affecting aerial applicator operations	The Applicant shall consult with land owners and the County Farm Bureaus to determine which aerial applicators operate in the county. The Applicant shall provide written notification to all aerial applicators working in the county and to the CPUC stating when and where the new transmission lines and towers will be erected. This shall occur Sixty (60) days prior to erection of any structure that could affect aerial applicator operations.	There are no agricultural fields or aerial applicator operators located within or adjacent to the Pomerado Substation. Therefore, Agricultural Resource mitigation measures are not applicable to this NTP request.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
AG-3b: Consult with and inform aerial applicators.	Provide maps of the alignment on or near agricultural lands	The Applicant shall also provide all aerial applicators, the County Farm Bureaus, and the CPUC with aerial photos or topographic maps clearly showing the new lines and towers in relation to agricultural lands.	There are no agricultural fields or aerial applicator operators located within or adjacent to the Pomerado Substation. Therefore, Agricultural Resource mitigation measures are not applicable to this NTP request.
LU-APM-3: Construction in croplands	Compensate farmers for loss of crops	1. Farmers will be compensated for losses of crops along ROW based upon a professional appraisal.	There are no agricultural fields or grazing operators located within or adjacent to the Pomerado Substation. Therefore, Agricultural Resource mitigation measures are not applicable to this NTP request.
LU-APM-3: Construction in croplands	Avoid planting, growing, and harvesting seasons	2. Construction activities in croplands will be scheduled to minimize or avoid planting, growing, and harvesting seasons to the extent feasible.	There are no agricultural fields or grazing operators located within or adjacent to the Pomerado Substation. Therefore, Agricultural Resource mitigation measures are not applicable to this NTP request.
CULTURAL & PALEONTOLOGICAL RESOURCES			
C-1a: Inventory and evaluate cultural resources in Final Area of Potential Effect (APE).	Submit cultural resources inventory prior to construction	Prior to construction and all other surface disturbing activities, the Applicant shall have conducted and submitted for approval by the BLM and CPUC an inventory of cultural resources within the project's final Areas of Potential Effect.This survey shall supplement inventories conducted for the EIS/EIR and shall satisfy Section 106 requirements for inventory of historic properties within all Areas of Potential Effect. The nature and extent of this inventory shall be determined by the BLM and CPUC in consultation with the appropriate State Historic Preservation Officer (SHPO) and other land-managing agencies (e.g., Anza-Borrego Desert State Park, U.S. Forest Service, Bureau of Indian Affairs, etc.) and shall be based upon project engineering specifications and in accordance with the Secretary of the Interior's Standards and Guidelines (Secretary's Standards) (36 CFR 61).Area of Potential Effect is the horizontal and vertical extent of anticipated impacts that could affect historic properties. This includes direct impacts (physical disturbance from any project activity during or after construction) and indirect impacts, such as noise, vibration, visual intrusion, or erosion.) A report documenting results of this inventory shall be filed with appropriate State repositories and local governments. As part of the inventory report, the Applicant shall evaluate the significance of all potentially affected cultural resources on the basis of surface observations. Evaluations shall be conducted by professionals meeting the Secretary's Standards and in accordance with those Standards to provide recommendations with regard to their eligibility for the NRHP, CRHR, or local registers. Preliminary determinations of NRHP eligibility will be made by the BLM, in consultation with the CPUC and other appropriate agencies and local governments, and the SHPO. As part of the inventory, the Applicant shall conduct field surveys of sufficient nature and extent to identify cultural resources that would be affected by tower pad construction, reconductoring activities, trenching for underground transmission lines, access road installation, and transmission line construction and operation. At a minimum, field surveys shall be conducted along newly proposed access roads, new construction yards, new tower sites, and any other projected areas of potential ground disturbance outside of the previously surveyed potential impact areas. Site-specific field surveys also shall be undertaken at all projected areas of impact within the previously surveyed corridor that coincide with previously recorded resource locations.	The Final Inventory Report of the Cultural Resources was accepted on May 28, 2010. The inventory concluded that there are no cultural resources identified within the Area of Potential Effect (APE) for the Pomerado Substation. Furthermore, the proposed upgrades are consistent with the activities currently underway in the existing Substation and there will be no ground disturbance.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
C-1a: Inventory and evaluate cultural resources in Final Area of Potential Effect (APE).	Stake tower locations prior to cultural resource field surveys	The selected right-of-way and tower locations shall be staked prior to the cultural resource field surveys.	This mitigation measure is not applicable to construction activities occurring at the Substation. Work activities will take place within the previously disturbed Substation site and there will be no ground disturbing activities.
C-1b: Avoid and protect potentially significant resources.	Protect potential and register-eligible resources from direct project impacts	Where feasible, potentially register-eligible resources and register-eligible resources shall be protected from direct project impacts by project redesign; complete avoidance of impacts to such resources shall be the preferred protection strategy. On the basis of preliminary National Register of Historic Places (NRHP) eligibility assessments (Mitigation Measure C-1a) or previous determinations of resource eligibility, the BLM and CPUC, in consultation with the SHPO, may request the relocation of the line, ancillary facilities, or temporary facilities or work areas, if any, where relocation would avoid or reduce damage to cultural resource values.	This mitigation measure is not applicable to construction activities occurring at the Substation. Work activities will take place within the previously disturbed Substation site and there will be no ground disturbing activities.
C-1b: Avoid and protect potentially significant resources.	Undertake additional studies if resources cannot be protected from direct impacts	Where the BLM and CPUC, in consultation with the Applicant, decide that potentially NRHP- and/or CRHR-eligible cultural resources cannot be protected from direct impacts by project redesign, or that avoidance is not feasible, the Applicant shall undertake additional studies to evaluate the resources' NRHP- and/or CRHR-eligibility and to recommend further mitigative treatment. The nature and extent of this evaluation shall be determined by the BLM in consultation with the CPUC and the SHPO and shall be based upon final project engineering specifications. Evaluations shall be based on surface remains, subsurface testing, archival and ethnographic resources, and in the framework of the historic context and important research questions of the project area.	This mitigation measure is not applicable to construction activities occurring at the Substation. Work activities will take place within the previously disturbed Substation site and there will be no ground disturbing activities.
C-1b: Avoid and protect potentially significant resources.	Incorporate results of studies in HPTP	Results of those evaluation studies and recommendations for mitigation of project effects shall be incorporated into a Historic Properties Treatment Plan consistent with Mitigation Measure C-1c (Develop and implement Historic Properties Treatment Plan).	This mitigation measure is not applicable to construction activities occurring at the Substation. Work activities will take place within the previously disturbed Substation site and there will be no ground disturbing activities.
C-1b: Avoid and protect potentially significant resources.	Designate NRHP and/or CRHR resources as ESA if within 50 feet of direct impact	All potentially NRHP- and/or CRHR-eligible resources (as determined by the BLM and CPUC, in consultation with the SHPO) that will not be affected by direct impacts, but are within 50 feet of direct impact areas shall be designated as Environmentally Sensitive Areas (ESAs) to ensure that construction activities do not encroach on site peripheries.	This mitigation measure is not applicable to construction activities occurring at the Substation. Work activities will take place within the previously disturbed Substation site and there will be no ground disturbing activities.
C-1b: Avoid and protect potentially significant resources.	Erect protective flagging or other markers for ESA	Protective fencing, or other markers (after approval by CPUC/BLM), shall be erected and maintained to protect ESAs from inadvertent trespass for the duration of construction in the vicinity. ESAs shall not be identified specifically as cultural resources.	This mitigation measure is not applicable to construction activities occurring at the Substation. Work activities will take place within the previously disturbed Substation site and there will be no ground disturbing activities.
C-1b: Avoid and protect potentially significant resources.	Develop and implement monitoring program as part of HPTP	A monitoring program shall be developed as part of a Historic Properties Treatment Plan and implemented by the Applicant to ensure the effectiveness of ESA protection (as detailed in Mitigation Mea-sure C-1e).	This mitigation measure is not applicable to construction activities occurring at the Substation. Work activities will take place within the previously disturbed Substation site and there will be no ground disturbing activities.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
C-1c: Develop and implement Historic Properties Treatment Plan.	Submit Historic Properties Treatment Plan	Upon approval of the inventory report and the National Register of Historic Places (NRHP)-eligibility and CRHR-eligibility evaluations consistent with Mitigation Measures C-1a (Inventory and evaluate cultural resources in Final APE) and C-1b (Avoid and protect potentially significant resources), the Applicant shall prepare and submit for approval a Historic Properties Treatment Plan (HPTP) for register-eligible cultural resources to avoid or mitigate identified potential impacts. Treatment of cultural resources shall follow the procedures established by the Advisory Council on Historic Preservation for compliance with Section 106 of the National Historic Preservation Act and other appropriate State and local regulations, as explicated in Section D.7.8. Avoidance, recordation, and data recovery will be used as mitigation alternatives; avoidance and protection shall be the preferred strategy. The HPTP shall be submitted to the BLM and CPUC for review and approval. As part of the HPTP, the Applicant shall prepare a research design and a scope of work for evaluation of cultural resources and for data recovery or additional treatment of NRHP- and/or CRHR-eligible sites that cannot be avoided.Data recovery on	This mitigation measure is not applicable to construction activities occurring at the Substation. Work activities will take place within the previously disturbed Substation site and there will be no ground disturbing activities. No cultural resources have been identified at the substation site.
C-1d: Conduct data recovery to reduce adverse effects.	Conduct data recovery investigations to reduce adverse effects	If NRHP- and/or CRHR-eligible resources, as determined by the BLM and SHPO, cannot be protected from direct impacts of the Proposed Project, data-recovery investigations shall be conducted by the Applicant to reduce adverse effects to the characteristics of each property that contribute to its NRHP- and/or CRHR-eligibility. For sites eligible under Criterion (d), significant data would be recovered through excavation and analysis. For properties eligible under Criteria (a), (b), or (c), data recovery may include historical documentation, photography, collection of oral histories, architectural or engi-neering documentation, preparation of a scholarly work, or some form of public awareness or interpretation. Data gathered during the evaluation phase studies and the research design element of the Historic Properties Treatment Plan (HPTP) shall guide plans and data thresholds for data recovery; treatment shall be based on the resource's research potential beyond that realized during resource recordation and evaluation studies. If data recovery is necessary, sampling for data-recovery excavations shall follow standard statistical sampling methods, but sampling shall be confined, as much as possible, to the direct impact area. Data-recovery methods, sample sizes, and procedures shall be	This mitigation measure is not applicable to construction activities occurring at the Substation. Work activities will take place within the previously disturbed Substation site and there will be no ground disturbing activities. No cultural resources have been identified at the substation site.
C-1d: Conduct data recovery to reduce adverse effects.	Submit field closure report prior to construction within 100 feet of affected resource	Following any field investigations required for data recovery, the Applicant shall document the field studies and findings, including an assessment of whether adequate data were recovered to reduce adverse project effects, in a brief field closure report. The field closure report shall be submitted to the BLM and CPUC for their review and approval, as well as to appropriate State repositories, local governments, and other appropriate agencies. Construction work within 100 feet of cultural resources that require data-recovery fieldwork shall not begin until authorized by the BLM or CPUC, as appropriate, to ensure that impacts to known significant archaeological deposits are adequately mitigated. Field closure report due prior to construction within 100 ft of affected resource.	This mitigation measure is not applicable to construction activities occurring at the Substation. Work activities will take place within the previously disturbed Substation site and there will be no ground disturbing activities. No cultural resources have been identified at the substation site.
C-1d: Conduct data recovery to reduce adverse effects.	Submit final report of data-recovery investigations within 1 year of completing fieldwork	Final report of data-recovery investigations are due within one year of completion of fieldwork.	This mitigation measure is not applicable to construction activities occurring at the Substation. Work activities will take place within the previously disturbed Substation site and there will be no ground disturbing activities. No cultural resources have been identified at the substation site.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
C-1e: Monitor construction at known ESAs.	Implement archaeological monitoring at cultural ESAs	The Applicant shall implement full-time archaeological monitoring by a professional archaeologist during ground-disturbing activities at all cultural resource Environmentally Sensitive Areas (ESAs). These locations and their protection boundaries shall be defined and mapped in the HPTP. Archaeological monitoring shall be conducted by a qualified archaeologist familiar with the types of historical and prehistoric resources that could be encountered within the project, and under direct supervision of a principal archaeologist.	This mitigation measure is not applicable to construction activities occurring at the Substation. Work activities will take place within the previously disturbed Substation site and there will be no ground disturbing activities. No cultural resources have been identified at the substation site.
C-1e: Monitor construction at known ESAs.	Qualification of archaeologists must be approved	The qualifications of the principal archaeologist and archaeological monitors shall be approved by the BLM and CPUC.	This mitigation measure is not applicable to construction activities occurring at the Substation. Work activities will take place within the previously disturbed Substation site and there will be no ground disturbing activities. No cultural resources have been identified at the substation site.
C-1e: Monitor construction at known ESAs.	Retain and schedule any required Native American monitoring	A Native American monitor may be required at culturally sensitive locations specified by the BLM following government-to-government consultation with Native American tribes. The monitoring plan in the HPTP shall indicate the locations where Native American monitors will be required and shall specify the tribal affiliation of the required Native American monitor for each location. The Applicant shall retain and schedule any required Native American monitors.	This mitigation measure is not applicable to construction activities occurring at the Substation. Work activities will take place within the previously disturbed Substation site and there will be no ground disturbing activities. Furthermore, Pomerado Substation is not a culturally sensitive location.
C-1e: Monitor construction at known ESAs.	Submit cultural resources monitoring monthly reports during construction	Compliance with and effectiveness of any cultural resources monitoring required by an HPTP shall be documented by the Applicant in a monthly report to be submitted to the BLM and CPUC for the duration of project construction.	This mitigation measure is not applicable to construction activities occurring at the Substation. Work activities will take place within the previously disturbed Substation site and there will be no ground disturbing activities. No cultural resources have been identified at the substation site.
C-1e: Monitor construction at known ESAs.	Notify if any damage to cultural resource ESAs and divert work to a buffer distance	In the event that cultural resources are not properly protected by ESAs, all project work in the immediate vicinity shall be diverted to a buffer distance determined by the archaeological monitor until authorization to resume work has been granted by the BLM and CPUC. The Applicant shall notify the BLM of any damage to cultural resource ESAs. If such damage occurs, the Applicant shall consult with the BLM and CPUC to mitigate damages and to increase effectiveness of ESAs. At the discretion of the BLM and CPUC, such mitigation may include, but not be limited to modification of protective measures, refinement of monitoring protocols, data-recovery investigations, or payment of compensatory damages in the form of non-destructive cultural resources studies or protection within or outside the license area, at the discretion of the BLM.	This mitigation measure is not applicable to construction activities occurring at the Substation. Work activities will take place within the previously disturbed Substation site and there will be no ground disturbing activities. No cultural resources have been identified at the substation site.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
C-1f: Train construction personnel.	Train construction personnel to recognize and protect cultural resources	All construction personnel shall be trained regarding the recognition of possible buried cultural remains and protection of all cultural resources, including prehistoric and historic resources during construction, prior to the initiation of construction or ground-disturbing activities. The Applicant shall complete training for all construction personnel and retain documentation showing when training of personnel was completed. Training shall inform all construction personnel of the procedures to be followed upon the discovery of archaeo-logical materials, including Native American burials.Training shall inform all construction personnel that Environmentally Sensitive Areas (ESAs) must be avoided and that travel and construction activity must be confined to designated roads and areas. All personnel shall be instructed that unauthorized collection or disturbance of artifacts or other cultural materials on or off the right-of-way by the Applicant, his representatives, or employees will not be allowed. Violators will be subject to prosecution under the appropriate State and federal laws and violations will be grounds for removal from the project. Unauthorized resource collection or disturbance may constitute grounds for the issuance of a stop work order. The following issues shall be addressed in training or in preparation for construction: • All construction contracts shall require construction personnel to attend training so they are aware of the potential for inadvertently exposing buried archaeological deposits, their responsibility to avoid and protect all cultural resources, and the penalties for collection, vandalism, or inadvertent destruction of cultural resources. • The Applicant shall provide training for supervisory construction personnel describing the potential for exposing cultural resources, the location of any potential ESA, and procedures and notifications required in the event of discoveries by project personnel or archaeological monitors. Supervisors shall also be briefed on the consequences of intentional or inadvertent damage to cultural resources. Supervisory personnel shall enforce restrictions on collection or disturbance of artifacts or other cultural resources.	The SWEAP video was approved by the CPUC on March 15, 2010. This SWEAP will be shown to all project personnel and enforced throughout all phases of the Project and includes instructions regarding the recognition of possible buried cultural remains and protection of all cultural resources.
C-1g: Avoid and protect Old Highway 80 (P-37-024023).	Avoid impacts to Old Highway 80	A portion of the Interstate 8 Alternative would be constructed underground within Alpine Boulevard; from approximately MP 74.3 to MP 80 of this underground segment, Alpine Boulevard is also Old Highway 80. Construction impacts to contributing elements of this resource shall be minimized by avoidance of highway segments that retain integrity, as well as associated historic road signs and monuments located on the shoulder.	This mitigation measure is not applicable to upgrade activities at the Pomerado Substation. No upgrade activities will take place from MP I8-74.3 to MP I8-80 of the Interstate 8 Alternative.
C-1g: Avoid and protect Old Highway 80 (P-37-024023).	Formally evaluate segments that are affected by construction impacts	If avoidance is not possible, affected segments shall be formally evaluated to assess their contribution to the NRHP eligibility of the resource as a whole. Additional protective measures are required to reduce adverse effects include formal documentation (i.e., HABS/HAER), and interpretive signage.	This mitigation measure is not applicable to upgrade activities at the Pomerado Substation. No upgrade activities will take place from MP I8-74.3 to MP I8-80 of the Interstate 8 Alternative.
C-2a: Properly treat human remains.	Avoid known Native American remains and protect with ESA designation	All locations of known Native American human remains shall be avoided through project design and shall be protected by designation as ESAs.	This mitigation measure is not applicable to construction activities occurring at the Substation. Work activities will take place within the previously disturbed Substation site and there will be no ground disturbing activities. No cultural resources have been identified at the substation site.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
C-2a: Properly treat human remains.	Contact agencies if sites will be affected	If the approved project route will affect sites known to contain human remains that cannot be avoided in their entirety during construction, the Applicant shall contact the California Native American Heritage Commission (NAHC). The NAHC will identify the Most Likely Descendant (MLD), within 48 hours, who will specify the preferred course of treatment in the event that additional human remains are discovered. The Applicant shall also contact the BLM (lead federal agency for the Proposed Project) and any additional land management agencies if the site is located on public lands administered by a State or federal agency other than the BLM. Although subject to the recommendations of the MLD, it is likely that the human remains would be respectfully removed by the MLD and/or qualified archaeologists and reinterred in an area not subject to impacts from the Proposed Project. The reinterment location may be identified as a nearby locale within SDG&E ROW, or an off-site location may be selected.	This mitigation measure is not applicable to construction activities occurring at the Substation. Work activities will take place within the previously disturbed Substation site and there will be no ground disturbing activities. No cultural resources have been identified at the substation site.
C-2a: Properly treat human remains.	Assist and support MLD with reinterment location	The Applicant shall assist and support the MLD in identifying, acquiring, and protecting the reinterment location.	This mitigation measure is not applicable to construction activities occurring at the Substation. Work activities will take place within the previously disturbed Substation site and there will be no ground disturbing activities. No cultural resources have been identified at the substation site.
C-2a: Properly treat human remains.	Follow laws that govern treatment of human remains	The Applicant shall follow all State and federal laws, statutes, and regulations that govern the treatment of human remains (see Section D.7.7).	This mitigation measure is not applicable to construction activities occurring at the Substation. Work activities will take place within the previously disturbed Substation site and there will be no ground disturbing activities. No cultural resources have been identified at the substation site.
C-2a: Properly treat human remains.	Support in consultations with Native Americans and implement required actions and studies	The Applicant shall assist and support the BLM in all required government-to-government consultations with Native Americans and appropriate agencies and commissions, as requested by the BLM. The Applicant shall comply with and implement all required actions and studies that result from such consultations.	This mitigation measure is not applicable to construction activities occurring at the Substation. Work activities will take place within the previously disturbed Substation site and there will be no ground disturbing activities. No cultural resources have been identified at the substation site.
C-2a: Properly treat human remains.	Divert work if human remains are discovered and inform officer	If human remains are discovered during construction, all work shall be diverted from the area of the discovery and the BLM authorized officer shall be informed immediately.	This mitigation measure is not applicable to construction activities occurring at the Substation. Work activities will take place within the previously disturbed Substation site and there will be no ground disturbing activities. No cultural resources have been identified at the substation site.
C-3a: Monitor construction in areas of high sensitivity for buried resources.	Implement archaeological monitoring	The Applicant shall implement archaeological monitoring by a professional archaeologist during subsurface construction disturbance at all locations identified in the Historic Properties Treatment Plan (HPTP) as highly sensitive for buried prehistoric or historical archaeological sites or Native American human remains. These locations and their protection boundaries shall be defined and mapped in the HPTP. Intermittent monitoring may occur in areas of moderate archaeological sensitivity at the discretion of the BLM and CPUC. Monitoring shall be conducted in accordance with procedures detailed in Mitigation Measure C-1e	This mitigation measure is not applicable to construction activities occurring at the Substation. Work activities will take place within the previously disturbed Substation site and there will be no ground disturbing activities. No cultural resources have been identified at the substation site.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
C-3a: Monitor construction in areas of high sensitivity for buried resources.	Divert work if buried cultural material discovered and notify archaeologist	Upon discovery of potential buried cultural materials by archaeologists or construction personnel, or damage to an ESA, work in the immediate area of the find shall be diverted and the Applicant's archaeologist notified. Once the find has been inspected and a preliminary assessment made, the Applicant's archaeologist shall consult with the BLM or CPUC, as appropriate, to make the necessary plans for evaluation and treatment of the find(s) or mitigation of adverse effects to ESAs, in accordance with the Secretary's Standards, and as specified in the HPTP.	This mitigation measure is not applicable to construction activities occurring at the Substation. Work activities will take place within the previously disturbed Substation site and there will be no ground disturbing activities. No cultural resources have been identified at the substation site.
C-4a: Complete consultation with Native American and other Traditional Groups.	Assist and support BLM in consultations with Native Americans to asses impacts	The Applicant shall provide assistance to the BLM, as requested by the BLM, to complete required government-to-government consultation with interested Native American tribes and individuals (Executive Memorandum of April 29, 1994 and Section 106 of the National Historic Preservation Act) and other Traditional Groups to assess the impact of the approved project on Traditional Cultural Properties or other resources of Native American concern, such as sacred sites and landscapes, or areas of traditional plant gathering for food, medicine, basket weaving, or ceremonial uses. As directed by the BLM, the Applicant shall undertake required treatments, studies, or other actions that result from such consultation.	This mitigation measure is not applicable to construction activities occurring at the Substation. Work activities will take place within the previously disturbed Substation site and there will be no ground disturbing activities. No cultural resources have been identified at the substation site.
C-4a: Complete consultation with Native American and other Traditional Groups.	Submit documentation of all pre-construction actions 30 days prior to construction	Written documentation of the completion of all pre-construction actions shall be submitted by the Applicant and approved by the BLM at least 30 days before commencement of construction activities. Actions that are required during or after construction shall be defined, detailed, and scheduled in the Historic Properties Treatment Plan and implemented by the Applicant, consistent with Mitigation Measure C-1c (Develop and implement Historic Properties Treatment Plan).	Consultation with Native American Tribes is ongoing.
C-5a: Protect and monitor NRHP- and/or CRHR-eligible properties.	Submit Design a long-term plan to protect NRHP and/or CRHR eligible sites 30 days prior to construction	The Applicant shall design and implement a long-term plan to protect National Register of Historic Places (NRHP- and/or CRHR)-eligible sites from direct impacts of project operation and maintenance and from indirect impacts (such as erosion and access) that could result from the presence of the project. The plan shall be developed in consultation with the BLM to design measures that will be effective against project maintenance impacts, such as vegetation clearing and road and tower maintenance, and project-related vehicular impacts.The plan shall also include protective measures for NRHP- and/or CRHR-eligible properties within the transmission line corridor that will experience operational and access impacts as a result of the Proposed Project. Measures considered shall include restrictive fencing or gates, permanent access road closures, signage, stabilization of potential erosive areas, site capping, site patrols, and interpretive/educational programs, or other measures that will be effective for protecting NRHP- and/or CRHR-eligible properties. The plan shall be property specific and shall include provisions for monitoring and reporting its effectiveness and for addressing inadequacies or failures that result in damage to NRHP- and/or CRHR-eligible properties.	This mitigation measure is not applicable to construction activities occurring at the Substation. Work activities will take place within the previously disturbed Substation site and there will be no ground disturbing activities. No cultural resources or historic places have been identified at the substation site.
C-5a: Protect and monitor NRHP- and/or CRHR-eligible properties.	Monitor sites annually for five years and submit a report within 1 month after monitoring	Monitoring of sites selected during consultation with BLM shall be conducted annually by a professional archaeologist for a period of five years. Monitoring shall include inspection of all site loci and defined surface features, documented by photographs from fixed photo monitoring stations and written observations. A monitoring report shall be submitted to the BLM, CPUC, and other appropriate land-managing agencies within one month following the annual resource monitoring. The report shall indicate any properties that have been affected by erosion or vehicle or maintenance impacts. For properties that have been impacted, the Applicant shall provide recommendations for mitigating impacts and for improving protective measures.	This mitigation measure is not applicable to construction activities occurring at the Substation. Work activities will take place within the previously disturbed Substation site and there will be no ground disturbing activities. No cultural resources or historic places have been identified at the substation site.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
C-5a: Protect and monitor NRHP- and/or CRHR-eligible properties.	Evaluate effectiveness of program after 5th year of monitoring	After the fifth year of resource monitoring, the BLM, CPUC, or other land-managing agency, as appropriate, will evaluate the effectiveness of the protective measures and the monitoring program. Based on that evaluation, the BLM or CPUC may require that the Applicant revise or refine the protective measures, or alter the monitoring protocol or schedule. If the BLM does not authorize alteration of the monitoring protocol or schedule, those shall remain in effect for the duration of project operation.	This mitigation measure is not applicable to construction activities occurring at the Substation. Work activities will take place within the previously disturbed Substation site and there will be no ground disturbing activities. No cultural resources or historic places have been identified at the substation site.
C-5a: Protect and monitor NRHP- and/or CRHR-eligible properties.	Notify immediately and implement additional measures if adverse effects	If the annual monitoring program identifies adverse effects to National Register of Historic Places (NRHP- and/or CRHR)-eligible properties from operation or long-term presence of the project, or if, at any time, the Applicant, BLM, CPUC, or other appropriate land-managing agency become aware of such adverse effects, the Applicant shall notify the BLM and CPUC immediately and implement additional protective measures, as directed by the BLM and CPUC. At the discretion of the BLM and CPUC, such measures may include, but not be limited to refinement of monitoring protocols, data-recovery investigations, or payment of compensatory damages in the form of non-destructive cultural resources studies or protection.	This mitigation measure is not applicable to construction activities occurring at the Substation. Work activities will take place within the previously disturbed Substation site and there will be no ground disturbing activities. No cultural resources or historic places have been identified at the substation site.
C-6a: Reduce adverse visual intrusions to historic built environment properties.	Provide inventory to conduct visual analysis of all known and potential historic built environment resources in HPTP	All known historic built environment resources located within 0.5 miles of the Proposed Project shall be inventoried and subjected to a visual analysis to assess which resources would be subject to potential indirect visual intrusions resulting from the project. This inventory will supplement the analysis of built environment resources conducted for the EIS/EIR, and shall meet the requirements of Section 106 to inventory historic properties that could be adversely affected by the Proposed Project. The Applicant shall inventory potentially register-eligible built environment resources within an Area of Potential Indirect Effect established by the BLM and CPUC. A qualified (Secretary of the Interior Standards) professional shall assess the potential for visual intrusions on the qualities that qualify any historic properties within the APE for register eligibility. The results of this inventory shall be included in the HPTP. If any historic properties are identified that would be adversely affected by visual intrusions from the Proposed Project, the HPTP shall also specify mitigation measures that would be implemented to reduce adverse effects, such as screening the visual intrusion with vegetation, moving project towers to less	This mitigation measure is not applicable to construction activities occurring at the Substation. Work activities will take place within the previously disturbed Substation site and there will be no ground disturbing activities. No cultural resources or historic places have been identified at the substation site.
C-6e: Reduce adverse visual intrusions to portions of Old Highway 80.	Minimize visual intrusion of aboveground portion on Highway 80	Visual intrusion by the aboveground portion of this alternative, on portions of Old Highway 80 that retain integrity of setting shall be minimized by a combination of minimizing tower height and screening. In addition, since segments of Old Highway 80 would be crossed by the overhead portion of the alternative, compensatory mitigation including new signage shall be employed.	This mitigation measure is not applicable to construction activities occurring at the Substation. Upgrade activities will not take place on Old Highway 80. Work activities will only take place within the previously disturbed Substation site and there will be no ground disturbing activities.
C-6e: Reduce adverse visual intrusions to portions of Old Highway 80.	Include protection plan for Old Highway 80 in HPTP	If this alternative is constructed, as part of the Historic Properties Treatment Plan (Mitigation Measure C-1c) SDG&E shall include a protection plan for Old Highway 80 that defines resources to be protected, includes input from visual resources specialists, and evaluates a menu of protection options.	This mitigation measure is not applicable to construction activities occurring at the Substation. Upgrade activities will not take place on Old Highway 80. Work activities will only take place within the previously disturbed Substation site and there will be no ground disturbing activities.
C-6f: Reduce adverse visual intrusions to the Desert View Tower viewshed.	Minimize visual intrusion to the Desert View Tower viewshed	Visual intrusion to the Desert View Tower viewshed, caused by the aboveground portion of this alternative shall be minimized by a combination of minimizing tower height, screening, and painting towers to match the surroundings. Specific measures to minimize visual effects to the Desert View Tower shall be developed in consultation with the owner of this resource.	The Pomerado Substation is not located in the Desert View Tower viewshed; therefore, this mitigation measure is not applicable.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
C-6f: Reduce adverse visual intrusions to the Desert View Tower viewshed.	Submit a protection plan for Desert View Tower viewshed 60 days prior to construction	If this alternative is constructed, SDG&E shall develop a protection plan for the Desert View Tower viewshed that defines resources to be protected, includes input from visual resources specialists, and evaluates a menu of protection options. The report shall be provided to the CPUC and BLM for review and approval at least 60 days before the start of construction.	The Pomerado Substation is not located in the Desert View Tower viewshed; therefore, this mitigation measure is not applicable.
CR-APM-1: Construction contract and cultural resources	Instruct and provide a contract addressing protection and avoidance of cultural resources	Prior to construction, construction personnel shall be instructed on the protection and avoidance of cultural resources. To assist in this effort, the construction contract will address state and federal laws regarding antiquities, fossils, and plants and wildlife, including the collection and removal, as well as the importance of these resources and the purpose and necessity of protecting them.	The SWEAP video was approved by the CPUC on March 15, 2010. This SWEAP will be shown to all project personnel and enforced throughout all phases of the Project and includes instructions regarding the recognition of possible buried cultural remains and protection of all cultural resources. A construction contract addressing state and federal laws regarding antiquities, fossils, and plants and wildlife, including the collection and removal, as well as the importance of these resources and the purpose and necessity of protecting them will be signed by each individual. Records of these contracts will be kept with the monitor.
CR-APM-2: Avoid cultural resources	Flag archaeological sites eligible for National Register	Archeological sites that are eligible or potentially eligible for the National Register will be flagged in the field and spanned or otherwise avoided through routing during construction activities to the extent feasible.	This mitigation measure is not applicable to construction activities occurring at the Substation. Work activities will take place within the previously disturbed Substation site and there will be no ground disturbing activities. No cultural resources have been identified at the substation site.
CR-APM-2: Avoid cultural resources	Implement impact avoidance and APMs during construction	Impact avoidance and APMs for cultural resources developed in consultation with appropriate land managing and regulatory (e.g., park personnel and State Historic Preservation Office) and other interested parties will be implemented prior to and during construction.	This mitigation measure is not applicable to construction activities occurring at the Substation. Work activities will take place within the previously disturbed Substation site and there will be no ground disturbing activities. No cultural resources have been identified at the substation site.
CR-APM-3: Previously unidentified cultural resources	Report within 24 hours any previously unidentified cultural resource discovered	Any previously unidentified cultural resource (historic or prehistoric site or object) discovered by SDG&E or any person working on its behalf during construction on public or park land shall be immediately reported to the appropriate land manager or authorized park officer within 24 hours of discovery.	This mitigation measure is not applicable to construction activities occurring at the Substation. Work activities will take place within the previously disturbed Substation site and there will be no ground disturbing activities. No cultural resources have been identified at the substation site.
CR-APM-3: Previously unidentified cultural resources	Suspend operations in the immediate area of the discovered cultural resource	Operations in the immediate area of the discovery shall be suspended until authorization to proceed is issued by the appropriate land manager or authorized park officer.	This mitigation measure is not applicable to construction activities occurring at the Substation. Work activities will take place within the previously disturbed Substation site and there will be no ground disturbing activities. No cultural resources have been identified at the substation site.
CR-APM-3: Previously unidentified cultural resources	Evaluate the discovered resource and determine appropriate actions.	An evaluation of the discovery will be made by the appropriate land manager, authorized park officer or SDG&E in consultation with the former to determine appropriate actions to prevent the loss of significant cultural or scientific values. SDG&E shall be responsible for the cost of evaluation.	This mitigation measure is not applicable to construction activities occurring at the Substation. Work activities will take place within the previously disturbed Substation site and there will be no ground disturbing activities. No cultural resources have been identified at the substation site.
CR-APM-3: Previously unidentified cultural resources	Develop a treatment plan to mitigate impacts	SDG&E will develop a treatment plan to mitigate the impacts.	This mitigation measure is not applicable to construction activities occurring at the Substation. Work activities will take place within the previously disturbed Substation site and there will be no ground disturbing activities. No cultural resources have been identified at the substation site.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
CR-APM-4: Standards for the Treatment of Historic Properties	Conduct maintenance and other activities in conformance with national standards	SDG&E will conduct maintenance, repair, stabilization, rehabilitation, restoration, preservation, conservation, and reconstruction of a historical resource in a manner consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings (1995 – Weeks and Grimmer).	This mitigation measure is not applicable to construction activities occurring at the Substation. Work activities will take place within the previously disturbed Substation site and there will be no ground disturbing activities. No cultural resources have been identified at the substation site.
CR-APM-5: Cultural resource guidelines	Follow guidelines for cultural resources	SDG&E will use the following as guidance in the implementation of the project: 1. Preservation in-place is the preferred manner of mitigating impacts to archaeological sites. Preservation in-place maintains the relationship between the artifacts and the archaeological context to the extent feasible. Preservation may also avoid conflict with religious or cultural values of groups associated with the site. 2. Preservation in-place may be accomplished by, but is not limited to, the following: a. planning construction to avoid archaeological sites; or b. incorporation of sites within parks, green space, or other open space; or c. deeding the site into a permanent conservation easement. 3. When data recovery through excavation is the only feasible mitigation, a data recovery plan which makes provisions for adequately recovering the scientifically consequential information from and about the historical resources shall be prepared and adopted prior to any excavation being undertaken. Such study shall be deposited with the California Historical Resources Regional Information Center. Archaeological sites known to contain human remains shall be treated in accordance with the provisions of Section 7050.5, Health and Safety Code. If an artifact must be removed during project excavation or testing, curation may be appropriate.	SDG&E will continue to comply with Cultural Resources mitigation measures as outlined in the MMCRP, therefore following guidelines for cultural resources.
CR-APM-6: Avoid historic properties	Avoid historic properties by fencing or barricading	Historic property will be avoided and fenced or barricaded for protection. Contributing portions and sensitive features of the historic property will be avoided and fenced or barricaded for protection.	There are no documented historical resources at the Pomerado Substation that will require adherence to cultural resource guidelines.
CR-APM-6: Avoid historic properties	Implement a plan if historic properties cannot be avoided	If historic property cannot be avoided, an approved plan for recordation, relocation, or data recovery will be implemented. Recordation of buildings or structures may include Historic American Building Survey (HABS) or Historic American Engineering Record	There are no documented historical resources at the Pomerado Substation that will require adherence to cultural resource guidelines.
CR-APM-7: Protective measures at historic properties	Control impacts that can deteriorate historic properties	1. Erosion, sedimentation, or indirect displacement that could indirectly deteriorate historic property will be controlled by limitation of activities near property, stabilization of sediments or structures, and erosion control.	This mitigation measure is not applicable to construction activities occurring at the Substation. Work activities will take place within the previously disturbed Substation site and there will be no ground disturbing activities. No cultural resources or historic properties have been identified at or adjacent to the substation site.
CR-APM-7: Protective measures at historic properties	Implement protective measures to minimize erosion and weeds	2. Protective measures will be implemented to minimize erosion and prevent invasion by aggressive weeds near historic property.	This mitigation measure is not applicable to construction activities occurring at the Substation. Work activities will take place within the previously disturbed Substation site and there will be no ground disturbing activities. No cultural resources or historic properties have been identified at or adjacent to the substation site.
CR-APM-7: Protective measures at historic properties	Implement control measures to minimize vibration, dust, and fumes	3. Control measures will be implemented to minimize vibration, dust, or fumes affecting property. 4. Protective barriers or materials will be used to minimize the effects of vibration, dust, fumes, or changes in vegetation.	This mitigation measure is not applicable to construction activities occurring at the Substation. Work activities will take place within the previously disturbed Substation site and there will be no ground disturbing activities. No cultural resources or historic properties have been identified at or adjacent to the substation site.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
CR-APM-7: Protective measures at historic properties	Minimize deterioration to buildings and structures	5. Buildings or structures will be stabilized or rehabilitated to minimize deterioration that might be accelerated by construction or operations.	This mitigation measure is not applicable to construction activities occurring at the Substation. Work activities will take place within the previously disturbed Substation site and there will be no ground disturbing activities. No cultural resources or historic properties have been identified at or adjacent to the substation site.
CR-APM-7: Protective measures at historic properties	Implement a plan if deterioration cannot be avoided	6. If deterioration cannot be avoided, SDG&E will implement an approved plan for recordation, relocation, or data recovery.	This mitigation measure is not applicable to construction activities occurring at the Substation. Work activities will take place within the previously disturbed Substation site and there will be no ground disturbing activities. No cultural resources or historic properties have been identified at or adjacent to the substation site.
CR-APM-8: Historic setting	Avoid and protect landscaping essential to historic property	1. In addition to the historic property itself, those elements of the landscape that are essential to the historic setting of the property will be avoided and protected to the extent feasible.	This mitigation measure is not applicable to construction activities occurring at the Substation. Work activities will take place within the previously disturbed Substation site and there will be no ground disturbing activities. No cultural resources or historic properties have been identified at or adjacent to the substation site.
CR-APM-8: Historic setting	Minimize intrusion to the historic setting	2. The location, appearance, or operational procedures of the undertaking will be modified to minimize intrusion on the historic setting (e.g., qualifications on height, color, emissions, or operational noise levels).	This mitigation measure is not applicable to construction activities occurring at the Substation. Work activities will take place within the previously disturbed Substation site and there will be no ground disturbing activities. No cultural resources or historic properties have been identified at or adjacent to the substation site.
CR-APM-9: Access to historic properties	Install permanent fencing, barriers, or controlled access	1. Permanent fencing or barriers will be installed, or access to the historic property will be controlled as deemed appropriate by the relevant agencies.	This mitigation measure is not applicable to construction activities occurring at the Substation. Work activities will take place within the previously disturbed Substation site and there will be no ground disturbing activities. No cultural resources or historic properties have been identified at or adjacent to the substation site.
CR-APM-9: Access to historic properties	Restrict construction and operation access	2. Use of access for construction or operation will be restricted.	This mitigation measure is not applicable to construction activities occurring at the Substation. Work activities will take place within the previously disturbed Substation site and there will be no ground disturbing activities. No cultural resources or historic properties have been identified at or adjacent to the substation site.
CR-APM-9: Access to historic properties	Instruct construction and maintenance personnel to protect sensitive properties	3. Construction and maintenance personnel will be instructed in protection of sensitive properties.	This mitigation measure is not applicable to construction activities occurring at the Substation. Work activities will take place within the previously disturbed Substation site and there will be no ground disturbing activities. No cultural resources or historic properties have been identified at or adjacent to the substation site.
CR-APM-10: Spanning and boring on historic properties	Span conductors over historic property	1. Project structures will be located so that conductors span linear historic property to the extent feasible.	This mitigation measure is not applicable to construction activities occurring at the Substation. Work activities will take place within the previously disturbed Substation site and there will be no ground disturbing activities. No cultural resources or historic properties have been identified at or adjacent to the substation site.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
CR-APM-10: Spanning and boring on historic properties	Boring shall avoid disturbance to historic property	2. Pipelines or conductors, placed underground, will bore under linear property to avoid disturbance or intrusion.	This mitigation measure is applicable to underground construction only (Link 4); therefore, it is not applicable to upgrade activities at Pomerado Substation.
CR-APM-11: SDG&E standard practices on private lands	Implement standard practices on private land	SDG&E would implement its standard practices for cultural and paleontological resources on private lands (see Appendix D).	This mitigation measure is not applicable to construction activities occurring at the Substation. Work activities will take place within the previously disturbed Substation site and there will be no ground disturbing activities. No cultural resources or historic properties have been identified at or adjacent to the substation site.
CR-APM-12: Cultural surveys at staging areas	Conduct cultural surveys for staging areas not yet identified	SDG&E will conduct cultural surveys for staging areas that have not yet been identified.	This mitigation measure is not applicable to construction activities occurring at the Substation. Work activities will take place within the previously disturbed Substation site and there will be no ground disturbing activities. No cultural resources or historic properties have been identified at or adjacent to the substation site.
PAL-1a: Inventory and evaluate paleontological resources in Final APE.	Submit an inventory of significant paleontological resources	Prior to construction, the Applicant shall conduct and submit to CPUC, BLM, and other involved land-managing agencies for approval an inventory of significant paleontological resources within the affected area based on field surveys of areas identified as marginal through high or undetermined paleontological sensitivity potential.	The Paleontological Records Search for the SDG&E Sunrise Powerlink Project was submitted February 25, 2010. There are no paleontological concerns for the Pomerado Substation as there will be no ground disturbance.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
PAL-1b: Develop Paleontological Monitoring and Treatment Plan.	Submit a Paleontological Monitoring Treatment Plan	Following completion and approval of the paleontological resources inventory and prior to construction, the Applicant shall prepare and submit to CPUC, BLM, and other involved land-managing agencies for approval a Paleontological Monitoring Treatment Plan (Plan). The plan shall be designed by a Qualified Paleontologist and shall be based on Society of Vertebrate Paleontology (SVP) guidelines and meet all regulatory requirements. The qualified paleontologist shall have a Master's Degree or Ph.D. in paleontology, and shall have knowledge of the local paleontology and is familiar with paleontological procedures and techniques. The Plan shall identify construction impact areas of moderate to high sensitivity for encountering significant resources and the depths at which those resources are likely to be encountered. The Plan shall outline a coordination strategy to ensure that a qualified paleontological monitor will conduct full-time monitoring of all ground disturbance in sediments determined to have a moderate to high sensitivity. Sediments of low, marginal, and undetermined sensitivity shall be monitored on a part-time basis (as determined by the Qualified Paleontologist) Sediments with zero sensitivity will not requirepaleontological monitoring. The Qualified Monitor shall have a BA in Geology or Paleontology and a minimum of one year of monitoring experience in local sediments. The Plan shall detail the significance criteria to be used to determine which resources will be avoided or recovered for their data potential. The Plan shall also detail methods of recovery, preparation and analysis of specimens, final curation of specimens at a federally accredited repository, data analysis, and reporting. The Plan shall specify that all paleontological work undertaken by the Applicant on public land shall be carried out by qualified paleontologists with the appropriate current permits, including, but not limited to a Paleontological Resources Use Permit (for work on public lands administered by BLM) and a Paleontological Collecting Permit (for work on lands administered by California Department of Parks and Recreation). Notices to proceed will be issued by the BLM, CPUC, and other agencies with jurisdiction, following approval of the Paleontological Monitoring and Treatment Plan.	This mitigation measure is not applicable to construction activities occurring at the Substation. Work activities will take place within the previously disturbed Substation site and there will be no ground disturbing activities. No cultural resources or historic properties have been identified at or adjacent to the substation site.
PAL-1c: Monitor construction for paleontology.	Conduct full-time paleontological construction monitoring	Based on the paleontological sensitivity assessment and Paleontological Monitoring and Treatment Plan consistent with Mitigation Measure PAL 1b (Develop Paleontological Monitoring and Treatment Plan), the Applicant shall conduct full-time construction monitoring by the qualified paleontological monitor in areas determined to have moderate to high paleontological sensitivity.	This mitigation measure is not applicable to construction activities occurring at the Substation. Work activities will take place within the previously disturbed Substation site and there will be no ground disturbing activities. No cultural resources or historic properties have been identified at or adjacent to the substation site.
PAL-1c: Monitor construction for paleontology.	Conduct part-time monitoring of sediments with low marginal undetermined sensitivity	Sediments of low, marginal undetermined sensitivity shall be monitored by a qualified paleontological monitor on a part-time basis (as determined by the Qualified Paleontologist).	This mitigation measure is not applicable to construction activities occurring at the Substation. Work activities will take place within the previously disturbed Substation site and there will be no ground disturbing activities. No cultural resources or historic properties have been identified at or adjacent to the substation site.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
PAL-1c: Monitor construction for paleontology.	Divert construction activities when significant fossils are recovered	Construction activities shall be diverted when data recovery of significant fossils is warranted, as determined by the Qualified Paleontologist	This mitigation measure is not applicable to construction activities occurring at the Substation. Work activities will take place within the previously disturbed Substation site and there will be no ground disturbing activities. No cultural resources or historic properties have been identified at or adjacent to the substation site.
PAL-1d: Conduct paleontological data recovery.	Implement Treatment Plan if significant paleotological resources are unavoidable	If avoidance of significant paleontological resources is not feasible or appropriate based on project design, treatment (including recovery, specimen preparation, data analysis, curation, and reporting) shall be carried out by the Applicant, in accordance to the approved Treatment Plan per Mitigation Measure PAL-1b (Develop Paleontological Monitoring and Treatment Plan).	This mitigation measure is not applicable to construction activities occurring at the Substation. Work activities will take place within the previously disturbed Substation site and there will be no ground disturbing activities. No cultural resources or historic properties have been identified at or adjacent to the substation site.
PAL-1e: Train construction personnel.	Train construction personnel on paleontological resources	Prior to the initiation of construction or ground-disturbing activities, all construction personnel shall be trained regarding the recognition of possible subsurface paleontological resources and protection of all paleontological resources during construction. The Applicant shall complete training for all construction personnel. Training shall inform all construction personnel of the procedures to be followed upon the discovery of paleontological materials. Training shall inform all construction personnel that Environmentally Sensitive Areas (ESAs) ESAs include areas determined to be paleontologically sensitive as defined on the paleontological sensitivity maps for the project, and must be avoided and that travel and construction activity must be confined to designated roads and areas. All personnel shall be instructed that unauthorized collection or disturbance of protected fossils on or off the right-of-way by the Applicant, his representatives, or employees will not be allowed. Violators will be subject to prosecution under the appropriate State and federal laws and violations will be grounds for removal from the project. Unauthorized resource collection or disturbance may constitute grounds for the issuance of a stop work order. The following issues shall be addressed in training or in preparation for construction: • All construction contracts shall include clauses that require construction personnel to attend training so they are aware of the potential for inadvertently exposing subsurface paleontological resources, their responsibility to avoid and protect all such resources, and the penalties for collection, vandalism, or inadvertent destruction of paleontological resources. • The Applicant shall provide a background briefing for supervisory personnel describing the potential for exposing paleontological resources, the location of any potential ESAs, and procedures and notifications required in the event of discoveries by project personnel or paleontological monitors. Supervisory personnel shall enforce restrictions on collection or disturbance of fossils. • Upon discovery of paleontological resources by paleontologists or construction personnel, work in the immediate area of the find shall be diverted and the Applicant's paleontologist notified. Once the find has been inspected and a preliminary assessment made, the Applicant's paleontologist will notify the BLM, CPUC, and other appropriate land managers and proceed with data recovery in accordance with the approved	The SWEAP video was approved by the CPUC on March 15, 2010. This SWEAP will be shown to all project personnel and enforced throughout all phases of the Project and includes instructions on the recognition of possible subsurface paleontological resources and protection of all paleontological resources during construction.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
GEO-APM-9: Avoid paleontological resources	Implement field mitigation efforts if paleontological resources are encountered	If paleontological resources are encountered, appropriate field mitigation efforts would be implemented to protect the resources. For example, if significant resources are discovered, such as vertebrate fossils, construction would be stopped in the immediate area of the find while SDG&E and its designated paleontologist determine the appropriate method and schedule to recover or protect the resource. However, work may continue in areas outside the immediate area of the find with the approval of the paleontologist.	This mitigation measure will be fulfilled during construction; therefore, it is not applicable as a pre-construction requirement.
GEO-APM-9: Avoid paleontological resources	Consult with agencies if paleontological resources cannot be avoided	When it is not feasible to avoid paleontological sites, SDG&E would consult with the appropriate federal, state, and resource agencies and specialists to either develop alternative construction techniques to avoid paleontological resources or develop appropriate APMs. Appropriate mitigation field measures may include actions such as protection-in-place by covering with earthen fill, removal and cataloguing, and/or removal and relocation.	This mitigation measure is not applicable to construction activities occurring at the Substation. Work activities will take place within the previously disturbed Substation site and there will be no ground disturbing activities. No cultural resources or historic properties have been identified at or adjacent to the substation site.
NOISE			
N-1a: Implement Best Management Practices for construction noise.	Obtain a variance for night construction or 200 feet from sensitive receptors 45 days prior to construction	SDG&E shall apply for and obtain a variance for construction activities that must occur outside of the daytime hours allowed by local ordinances or within 200 feet of noise-sensitive receptors forty-five days prior to construction.	Not applicable to pre-construction activities. During construction, work will be conducted between the hours of 7:00 a.m. and 7:00 p.m.; therefore, a variance for night construction activities will not be required. In the event that work needs to take place outside of these hours a variance will be obtained and submitted to the CPUC. There are industrial buildings adjacent to Pomerado Substation (see Appendix E). Installation of sound barrier walls or acoustic blankets to shield residences will not be required as there are no noise-sensitive receptors within 200 feet of the Substation.
N-1a: Implement Best Management Practices for construction noise.	Employ noise suppression techniques	SDG&E shall comply with local noise rules, standards, and/or ordinances by implementing the following noise-suppression techniques and variance standards set by local authorities. At a minimum, SDG&E shall employ the following noise-suppression techniques to avoid possible violations of local rules, standards, and ordinances: • Confine construction noise to daytime, weekday hours (e.g., 7:00 a.m. to 7:00 p.m.) or an alternative schedule established by the local jurisdiction or land use manager • On construction equipment, use noise reduction features (e.g., mufflers and engine shrouds) that are no less effective than those originally installed by the manufacturer • Install temporary sound walls or acoustic blankets to shield adjacent residences. These sound walls or acoustic blankets shall have a height of no less than 8 feet, a Sound Transmission Class (STC) of 27 or greater, and a surface with a solid face from top to bottom without any openings or cutout • Route construction traffic away from residences and schools, where feasible • Minimize unnecessary construction vehicle use and idling time. The ability to limit construction vehicle idling time is dependent upon the sequence of construction activities and when and where vehicles are needed or staged. A common sense" approach to	This mitigation measure will be fulfilled during construction; therefore, it is not applicable as a pre-construction requirement. During construction, SDG&E will employ noise suppression techniques as necessary.
N-2a: Avoid blasting where damage to structures could occur	Manage blasting with a plan for each site and submit plan 45 days prior to construction	Blasting shall be managed with a plan for each site. The plan shall include the blasting methods, surveys of existing structures and other built facilities, and distance calculations to estimate the area of effect of the blasting. Blasting shall not be allowed where damage to vulnerable structures could occur, and a rock anchoring or mini-pile system shall be used if adjacent structures could be damaged as a result of blasting or any construction method used as an alternative to blasting. Forty-five days prior to construction for blasting plan.	No blasting will occur at the Pomerado Substation; therefore, this mitigation measure is not applicable.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
N-2a: Avoid blasting where damage to structures could occur.	Restore damaged structure and compensate owner	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.	No blasting will occur at the Pomerado Substation; therefore, this mitigation measure is not applicable.
N-3a: Respond to complaints of corona noise.	Investigate and respond to corona noise complaints by implementing measures	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 repair damaged conductors, insulators, or other hardware).	This mitigation measure applies to overhead transmission line segments; therefore, it is not applicable to upgrade activities at the Pomerado Substation.
N-3a: Respond to complaints of corona noise.	Patrol transmission line and repair or replace damages	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.	This mitigation measure applies to overhead transmission line segments; therefore, it is not applicable to upgrade activities at the Pomerado Substation.
NOI-APM-1: Public noticing for construction noise	Provide notice to sensitive receptors and residences within 300 feet of construction	Provide notice prior to construction by mail to all sensitive receptors and residences within 300 feet of construction sites, staging areas, and access roads. The announcement shall state specifically where and when construction will occur in the area. Notices shall provide tips on reducing noise intrusion, for example, by closing windows facing the planned construction.	The Construction Notification Plan that was approved by the CPUC on March 1, 2010 addresses public noticing for construction noise. Proof of Notification will be submitted to CPUC prior to start of construction.
NOI-APM-1: Public noticing for construction noise	Provide a public liaison person before and during construction.	SDG&E would identify and provide a public liaison person before and during construction to respond to concerns of neighboring receptors, including residents, about noise construction disturbance. Procedures for reaching the public liaison officer via telephone or in person would be included in the above notices.	The Construction Notification Plan identifies a public liaison person that can respond to concerns of neighboring receptors about noise disturbances. The Plan was approved by the CPUC on March 1, 2010.
NOI-APM-1: Public noticing for construction noise	Establish a toll free number for questions and complaints	SDG&E would also establish a toll free telephone number for receiving questions or complaints during construction and develop procedures for responding to callers.	The Construction Notification Plan identifies the toll free telephone number established by SDG&E for receiving questions or complaints during construction and procedures to respond to callers. The Plan was approved by the CPUC on March 1, 2010.
TRANSPORTATION & TRAFFIC			
T-4a: Ensure pedestrian and bicycle circulation and safety.	Provide temporary pedestrian access	Where construction will result 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.	Construction activities will not result in temporary closures of sidewalks and other pedestrian facilities; therefore, this mitigation measure is not applicable.
T-4a: Ensure pedestrian and bicycle circulation and safety.	Provide detours and signs for bike route closures	Where construction activity will result in bike route or bike path closures, appropriate detours and signs shall be provided.	Construction activities will not result in bike route or bike path closures; therefore, this mitigation measure is not applicable.
T-5a: Repair roadways damaged by construction activities.	Coordinate road repairs with public agencies	If damage to roads, occurs, SDG&E shall coordinate repairs with the affected public agencies to ensure that any impacts to area roads are adequately repaired at SDG&E's cost. Roads disturbed by construction activities or construction vehicles shall be properly restored to ensure long-term protection of road surfaces.	It is not anticipated that upgrade activities at Pomerado Substation will cause roadway damage. Should damage to roads occur, provisions of this mitigation measure will be implemented.
T-5a: Repair roadways damaged by construction activities.	Protect drainage structures and incorporate measures into access agreement/easement	Care shall be taken to prevent damage to roadside drainage structures. Roadside drainage structures and road drainage features (e.g., rolling dips) shall be protected by regarding and reconstructing roads to drain properly. Said measures shall be incorporated into an access agreement/easement with the applicable governing agency prior to construction.	It is not anticipated that upgrade activities at Pomerado Substation will cause roadway damage. Should damage to roads occur, provisions of this mitigation measure will be implemented.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
T-7a: Notify public of potential short-term elimination of parking spaces.	Conform to agency requirements if parking spaces are eliminated or relocated	As required in Mitigation Measure L-1a, prior to any construction activity on major roadways, SDG&E shall notify the public of the potential for parking spaces to be temporarily eliminated and where temporary parking spaces will be relocated through multiple media such as local newspapers and on-site postings. The elimination and relocation of parking spaces must be in conformance with the requirements of agencies responsible for parking management.	Upgrade activities will be limited to the fenced Pomerado Substation and no parking will be eliminated; therefore, this mitigation measure is not applicable.
T-9a: Prepare Construction Transportation Management Plan.	Prepare a Construction Transportation Management Plan	SDG&E shall prepare a Construction Transportation Management Plan (CTMP) to address traffic and transportation issues related to project construction. The CTMP shall describe alternate traffic routes, timing of worker commutes and material deliveries, the need for lane and road closures, the use of helicopters, plans for construction worker parking and transportation to work sites, methods for keeping roadways clean, and other methods for reducing adverse construction-related traffic impacts on regional and local roadways. The plan must comply with the requirements of the respective county and must be submitted to the respective counties and Caltrans for approval prior to commencing construction activities.	A project-wide Traffic Study was completed on March 3, 2010. The Study revealed that there will not be a significant traffic impact and therefore mitigation is not required for the proposed construction at the Pomerado Substation. The existing circulation system and intersection controls will function adequately. As a result, a CTMP will not be required.
T-11b: Consult with and inform U.S. Customs and Border Patrol.	Provide notification when and where the line will be erected prior to construction	The Applicant shall consult with U.S. Customs and Border Patrol to determine where border patrol aircraft operate in the county. Prior to construction, the Applicant shall provide written notification to all border patrol aircraft working in the county and to the CPUC stating when and where the new transmission lines and towers will be erected.	The Pomerado Substation is not within the area of border patrol aircraft operations along the Interstate 8 Alternative and Modified Route D Alternative; therefore, this mitigation measure is not applicable.
T-11b: Consult with and inform U.S. Customs and Border Patrol.	Provide maps of the alignment near the U.S./Mexico border	The Applicant shall also provide all border patrol aircraft, the U.S. Customs and Border Patrol, and the CPUC with aerial photos or topographic maps clearly showing the new lines and towers in relation to the U.S./Mexico border within the San Diego and Imperial Counties.	The Pomerado Substation is not within the area of border patrol aircraft operations along the Interstate 8 Alternative and Modified Route D Alternative; therefore, this mitigation measure is not applicable.
T-APM-2a: Permits for Lane Closures	Obtain permits for temporary lane closures	Required permits for temporary lane closures will be obtained from the County of Imperial, County of San Diego, CALTRANS, and California State Parks (if applicable).	Upgrades will take place inside the existing Substation and lane closure permits on public roads will not be necessary or required; therefore, this mitigation measure is not applicable.
T-APM-2b: Detour Plans and Right-of-Entry permits	Submit Detour Plans	Detour plans will be submitted to the counties, CALTRANS, and/or California State Parks as part of the permit requirements.	Construction activities at the Pomerado Substation will not require detours, cause lane closures, alternate traffic routing, or other adverse construction-related traffic impacts.
T-APM-2b: Detour Plans and Right-of-Entry permits	Right-of-Entry permit required for construction and maintenance activities outside of easements	Within the ABDSP, a Right-of-Entry permit is required for any construction and maintenance activities that would occur outside of existing easements, including access roads (would not need ROE for access road maintenance if practical rights of ingress and egress are granted in easements).	No project activities will occur within ABDSP; therefore, this mitigation measure is not applicable.
T-APM-2b: Detour Plans and Right-of-Entry permits	Provide a request for maintenance or other earth-disturbing activities	SDG&E will provide California State Parks a request in writing for maintenance or other earth-disturbing activities.	No project activities will occur on California State Park land; therefore, this mitigation measure is not applicable.
T-APM-4a: Coordination with emergency services	Coordinate in advance with emergency service providers	SDG&E shall coordinate in advance with emergency service providers to avoid restricting movements of emergency vehicles.	Not applicable to pre-construction activities. During construction, SDG&E will coordinate with emergency service providers regarding Pomerado Substation construction activities.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
T-APM-4a: Coordination with emergency services	Notify cities and counties regarding construction activities	The counties and cities will then notify respective police, fire, ambulance and paramedic services. SDG&E shall notify counties and cities of the proposed locations, nature, timing, and duration of any construction activities and advised of any access restrictions that could impact their effectiveness.	Not applicable to pre-construction activities. During construction, SDG&E will coordinate with cities and counties regarding Pomerado Substation construction activities.
T-APM-5a: Coordination with school districts and transit authorities	Coordinate construction activities adjacent to school bus stops with school districts 1 month prior to construction	SDG&E will consult with the Imperial County Office of Education, Borrego Springs Unified School District, Warner Unified School District, Julian Union School District, and the Julian Union High School District at least one month prior to construction to coordinate construction activities adjacent to school bus stops. If necessary, school bus stops will be temporarily relocated or buses will be rerouted until construction in the vicinity is complete.	Construction activities are not planned at or in proximity to school bus stops; therefore, this mitigation measure is not applicable.
T-APM-5a: Coordination with school districts and transit authorities	Consult with transit authorities 1 month prior to construction	SDG&E will also consult with Imperial Valley Transit and the Metropolitan Transit System at least one month prior to construction to reduce potential interruption of transit services.	Construction activities are not planned at or in proximity to transit stops; therefore, this mitigation measure is not applicable.
T-APM-6a: Parking - Imperial County	Parking in Imperial County shall comply with County regulations and per an approved traffic control plan	Parking is permissible on Imperial County-maintained roadways when vehicles are within 18 inches of the curb; or if no curb is present, vehicles must not be more than 18 inches away from the right-hand edge of the roadway's boundary. Vehicles must also be parallel to the roadway when parked, unless otherwise indicated. Parking is prohibited where signage indicates no parking. Parking shall comply within the County of Imperial ordinances whenever possible or as indicated in an approved traffic control plan.	The Pomerado Substation is not located within Imperial County; therefore, this mitigation measure is not applicable.
T-APM-6b: Parking - San Diego County	Parking in San Diego County shall comply with County regulations and per an approved traffic control plan	Parking on San Diego County-maintained roads and highways is not permissible by law unless otherwise noted at specific locations. Parking is prohibited where signage and painted curbs indicates no parking. Where the project crosses major roadways, parking shall be prohibited in the project work area. Parking shall comply within the County of San Diego Department of Public Works Traffic Guidelines, 2001 whenever possible or as indicated in an approved traffic control plan.	There will be no parking on San Diego County-maintained roads and highways; therefore, this mitigation measure is not applicable.
T-APM-8a: Railroad ROW Entry Permits	Obtain permit(s) if entering railroad right-of-way	Required permits for entering railroad right-of-way will be obtained from Union Pacific Railroad, San Diego & Arizona Eastern Railroad and the U.S. Gypsum Mine.	This mitigation measure is not applicable to upgrade activities at the Pomerado Substation. There will be no entering railroad right-of-ways.
T-APM-9a: Scenic Highways	Underground utility facilities within 1,000 feet of an Officially Designated Scenic Highway	Eligible and Officially Designated Scenic Highways are located within Imperial and San Diego Counties. The California Public Utilities Code Section 320 requires that all new or relocated utility facilities within 1,000 feet of an Officially Designated Scenic Highway be undergrounded where feasible. SDG&E will bury all new or relocated utilities where feasible to avoid possible revocation of SR78 as an Officially Designated Scenic Highway within the ABDSP.	There are no new or relocated utility facilities within 1,000 feet of an Officially Designated Scenic Highway.
T-APM-10a: Access to properties	Ensure continuous access to properties	SDG&E or its construction contractor shall provide at all times the ability to quickly lay a temporary steel plate trench bridge upon request in order to ensure driveway access to businesses and residences, and shall provide continuous access to properties when not actively constructing the underground cable alignment.	Existing access roads will be utilized at Pomerado Substation; therefore, this mitigation measure is not applicable.
PUBLIC HEALTH & SAFETY			

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
P-1a: Implement Environmental Monitoring Program.	Implement an environmental monitoring plan	An environmental monitoring program will be implemented by SDG&E or its contractors to ensure that the plans defined in HS-APM-1 (personnel trained in proper use and safety procedures for the chemicals used), HS-APM-2 (personnel trained in refueling of vehicles), HS-APM-3 (preparation of environmental safety plans including spill prevention and response plan), HS-APM-8 (SDG&E's and/or General Contractor environmental/health and safety personnel), and HS-APM-10 (storage and disposal of hazardous and solid waste) are followed throughout the period of construction.	The Environmental Monitoring Plan was submitted to CPUC on May 10, 2010. The SWEAP video was approved by the CPUC on March 15, 2010 and discusses implementation of the Environmental Monitoring Program, maintenance of emergency spill supplies and equipment, the proper use of hazardous materials, development of a Hazardous Communication Plan, development of applicable environmental safety plans associated with hazardous materials, assignment of an Environmental Field Representative and/or General Contractor to the Health & Safety Office for the project; proper disposal/storage of hazardous and solid wastes in accordance with federal, state, and local regulations, and environmental training regarding potential exposure. The SWEAP video will be shown to all project personnel and enforced throughout all phases of the Project.
P-1a: Implement Environmental Monitoring Program.	Designate an Environmental Field Representative	SDG&E will designate an Environmental Field Representative who will be on site to observe and document adherence to the plan for all construction spreads.	The Environmental Monitoring Plan was submitted to CPUC on May 10, 2010. The Plan states that the Environmental Field Representative/ Lead Monitoring Manager for this Project is Steve Riggs.
P-1b: Maintain emergency spill supplies and equipment.	Maintain hazardous material spill kits onsite	Hazardous material spill kits will be maintained onsite by SDG&E or its contractors for response to small spills. Kits shall include oil-absorbent material, tarps, and storage drums to be used to contain and control any minor releases. Emergency spill supplies and equipment will be kept adjacent to all areas of work and in staging areas, and will be clearly marked. Detailed information for responding to accidental spills and for handling any resulting hazardous materials will be provided in the project's Spill Response Plan defined in HS-APM-3.	During construction, hazardous material spill kits will be maintained onsite.
P-2a: Test for residual pesticides/ herbicides on currently or historically farmed land.	Test farmed soil samples and submit sampling and testing plan 60 days prior to construction	In areas where the land has been or is currently being farmed, soil samples shall be collected and tested for herbicides, pesticides, and fumigants to determine the presence and extent of any contamination. The sampling and testing plan shall be prepared in consultation with the County Agricultural Commission, and conducted by an appropriate California licensed professional and sent to a California Certified laboratory. Samples shall be tested at a California Certified Laboratory. A report documenting the areas proposed for sampling, and the process used for sampling, testing shall be submitted to the CPUC and BLM for review and approval at least 60 days before construction.	Agricultural lands are not located within or adjacent to the Pomerado Substation; therefore, this mitigation measure is not applicable.
P-2a: Test for residual pesticides/ herbicides on currently or historically farmed land.	Submit laboratory results 30 days prior to construction	Results of the laboratory testing and recommended resolutions for handling and excavation of material found to exceed regulatory requirements shall be submitted to the CPUC and BLM (if on BLM land) 30 days prior to construction.	Agricultural lands are not located within or adjacent to the Pomerado Substation; therefore, this mitigation measure is not applicable.
P-2a: Test for residual pesticides/ herbicides on currently or historically farmed land.	Follow regulatory procedures for handling and disposal of contaminated soil	Excavated materials containing elevated levels of pesticide or herbicide will require special handling and disposal according to procedures established by the regulatory agencies.	Agricultural lands are not located within or adjacent to the Pomerado Substation; therefore, this mitigation measure is not applicable.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
P-2a: Test for residual pesticides/ herbicides on currently or historically farmed land.	Use effective dust suppression 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.	Agricultural lands are not located within or adjacent to the Pomerado Substation; therefore, this mitigation measure is not applicable.
P-2a: Test for residual pesticides/ herbicides on currently or historically farmed land.	Consult regulatory agencies for handling, treatment, and/or disposal	Regulatory agencies for the State of California (DTSC or RWQCB) and the appropriate County (San Diego or Imperial) shall be contacted by SDG&E or its contractor to plan handling, treatment, and/or disposal options.	Agricultural lands are not located within or adjacent to the Pomerado Substation; therefore, this mitigation measure is not applicable.
P-3a: Appoint individuals with correct training for sampling, data review, and regulatory coordination.	Collect soil or groundwater samples if contaminated	In the event that potential contaminated soil or groundwater is encountered, samples shall be collected by an OSHA-trained individual with a minimum of 40-hour hazardous material site worker training.	There is no known environmental contamination at the site and there will be no ground disturbing activities at the Pomerado Substation; therefore this mitigation measure is not applicable.
P-3a: Appoint individuals with correct training for sampling, data review, and regulatory coordination.	Coordinate with regulatory agencies if contaminated soil or groundwater confirmed by laboratory data	Laboratory data from suspected contaminated material shall be reviewed by the contractor's Health and Safety Officer and/or SDG&E's Field Environmental Representative and they shall coordinate with the appropriate regulatory agency (RWQCB or local CUPA agency) if contamination is confirmed to determine the suitable level of worker protection and the necessary handling and/or disposal requirements.	There is no known environmental contamination at the site and there will be no ground disturbing activities at the Pomerado Substation; therefore this mitigation measure is not applicable.
P-3b: Documentation of compliance with measures for encountering unknown contamination.	Submit report to agencies of contaminated soil within 30 days of laboratory data receipt	If during grading or excavation work, the contractor observes visual or olfactory evidence of contamination in the exposed soil a report of the location and the potential contamination, results of laboratory testing, recommended mitigation (if contamination is verified), and actions taken shall be submitted to the CPUC and BLM for each event. This report shall be submitted within 30 days of receipt of laboratory data.	There is no known environmental contamination at the site and there will be no ground disturbing activities at the Pomerado Substation; therefore this mitigation measure is not applicable.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
P-7a: Evaluate contaminated sites.	Implement steps 60 days prior to construction if excavation will occur	SDG&E shall implement the following steps, at locations where excavation or significant ground disturbance will occur; all steps be completed at least 60 days prior to project construction, to prevent mobilization of contaminants and exposure of workers and the public: • Step 1. Investigate the site to determine whether it has a record of hazardous material contamination which would affect construction activities. This investigation should be performed as a Phase I-Environmental Site Assessment (Phase I ESA). If contamination is found that could potentially affect the health and safety of workers or the public during construction of the Proposed Project, proceed to Step 2. • Step 2. Perform a characterization study of the site to determine the nature and extent of the contamination present at the location before construction activities proceed within the project ROW near the suspect site. • Step 3. Determine the need for further investigation and/or remediation of the soil or groundwater conditions at or near the contaminated site, i.e., within areas of ground disturbance for the Proposed Project. (For example, if there would be little or no contact with contaminated materials, industrial cleanup levels would likely be applicable. If site activities would involve human contact with the contaminated materials, such as would be the case with excavation of contaminated materials during project construction, then Step 4 shall be completed. If no human contact is anticipated, then no further mitigation would be required for the location.) • Step 4. If it is determined that disturbance or excavation of soils or groundwater with	There is no known environmental contamination at the site and there will be no ground disturbing activities at the Pomerado Substation; therefore this mitigation measure is not applicable.
HS-APM-1: Hazardous Communication Plan	Train personnel using hazardous materials	All personnel involved in using hazardous materials shall be trained in the proper use and safety procedures for the chemical and provided with the necessary Personal Protection Equipment (PPE).	The SWEAP video that was approved by the CPUC on March 15, 2010 includes training on hazardous materials management procedures. This SWEAP will be shown to all project personnel and enforced throughout all phases of the Project.
HS-APM-1: Hazardous Communication Plan	Develop a Hazardous Communication Plan	A Hazardous Communication (HAZCOM) Plan with Material Safety Data Sheets on all hazardous materials used for the project shall be developed.	The Sunrise Powerlink Hazard Communication Plan (HazCom) was approved by the CPUC on April 2, 2010. The HazCom Plan includes site specific information and the location of MSDS'. **Document Link:** http://www.cpuc.ca.gov/environment/info/aspen/sunrise/otherdocs/Hazard%20Communication%20Plan%203-21-10.pdf
HS-APM-2: Refueling vehicles	Trained personnel to perform refueling	Only personnel trained in refueling vehicles would be allowed to perform this operation.	Vehicle refueling will not take place at this site.
HS-APM-2: Refueling vehicles	Conduct refueling in designated areas or by assigned vehicles	All refueling operation shall be in designated areas or preformed by assigned vehicles.	Vehicle refueling will not take place at this site.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
HS-APM-3: Safety plans	Develop applicable safety plans	All applicable environmental safety plans associated with hazardous materials shall be developed for the project. These plans include but are not necessary limited to Hazardous Material Business (HMB) Plan; HAZCOM Plan; Spill Response Plan; 90 days temporary storage and disposal (TSD) facility permit; and Spill Prevention Control and Countermeasure (SPCC) Plan (only if storage is over 1,350 gallons at one location).	All applicable plans have been developed for this portion of the project work, including an SPCC Plan, HMBP, and HazCom Plan. The Substation has an existing Spill Prevention Control and Countermeasure Plan (SPCC) which contains emergency response and spill response information (see Appendix F). The Sunrise Powerlink Hazard Communication Plan (HazCom) was approved by the CPUC April 2, 2010. The Substation site Hazardous Materials Business Plan is included as Appendix D. No new oil-filled equipment will be installed as part of the work activities at the site, so no additional containment will be required and the SPCC Plan will not require changes.
HS-APM-4: Blasting plan	Develop site specific blasting plan	SDG&E will develop a site specific blasting plan when blasting of tower footing is required.	Blasting will not be required for the Substation upgrades scope of work.
HS-APM-4: Blasting plan	Use Californa licensed Blasting Contractor	A California licensed Blasting Contractor shall be used for all blasting operation.	Blasting will not be required for the Substation upgrades scope of work.
HS-APM-5: Investigate contaminated sites	Investigate impacts of all contaminated sites	All Government Code §65962.5 sites or other known contamination sites along the transmission line ROW or such sites that would affect construction work shall be investigated to determine potential impacts to the project.	The Substation is not a Section 65962.5 site or known contamination site.
HS-APM-6: UXO investigation	Investigate UXO by trained contractor	An Unexploded Ordinance (UXO) investigation of known and potential areas used by the military along the ROW shall be undertaken by a trained contractor.	The Pomerado Substation has been previously excavated. There is no known or potential for UXO, as this area was not utilized for military purposes. This mitigation measure does not apply.
HS-APM-6: UXO investigation	Remove UXO by trained personnel	If UXO are found, they shall be removed by trained personnel.	An investigation of the project ROW has been conducted by a UXO trained contractor. No UXO has been located; however, if a UXO is found during pre-construction investigations of known or potential UXO areas, a trained contractor shall remove the UXO.
HS-APM-7: UXO recognition	Train personnel to recognize UXO	All personnel involved in excavation and grading or for ROW clearing shall be trained to recognize UXO and/or potential soil, surface water, and groundwater potential contamination sites.	All site documentation reveals that this area was not previously used by the military and the property is not adjacent or near areas used by the military. Therefore, this mitigation measure does not apply.
HS-APM-8: Environmental field representative	Assign Environmental or Health & Safety Representative	SDG&E will assign Environmental Field Representative and/or General Contractor assigned Health & Safety Officer to the project.	SDG&E has assigned Steve Riggs, Field Monitoring Manager with Burns & McDonnell, 858.547.9869, as the Environmental Field Representative for the Pomerado Substation Upgrade.
HS-APM-9: FAA	Contact airport representatives within 2 miles	SDG&E will contact airport representative and/or Federal Aviation Administration Authorities regarding work within all existing and proposed transmission line corridors within 2 miles of an airport.	The scope of work is for upgrades to an existing Substation and not construction along the proposed transmission line corridor.
HS-APM-10: Hazardous and solid waste disposal	Store and dispose of hazardous waste per regulations	All hazardous waste and solid waste shall be stored and disposed of in accordance with federal, State, and local regulations. Whenever feasible, hazardous material minimization methods shall be employed and all hazardous materials recycled.	This mitigation measure will be fulfilled during construction; therefore, it is not applicable as a pre-construction requirement. It is not anticipated that hazardous wastes will be generated during construction at Pomerado; however, if hazardous wastes are generated, they will be properly disposed of and stored in accordance with all applicable federal and state regulations. Hazardous material minimization shall be employed whenever possible.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
HS-APM-11: Fire Prevention and Response Plan	Develop Fire Prevention and Response Plan	SDG&E will develop project-specific Fire Prevention and Response Plan (FPRP), which will be developed and reviewed by pertinent regulatory authorities.	The Fire Plan, signed by the CAL Fire Chief, was approved by the CPUC on February 2, 2010 and a project Fire Marshall has been hired onto the project and is assigned to enforce the FPRP.
HS-APM-11: Fire Prevention and Response Plan	Assign Fire Marshal to enforce fire prevention provisions	A project Fire Marshal shall be assigned to enforce all provisions of the FPRP as well as performing all other duties related to fire prevention activities for the Proposed Project.	The Fire Plan, signed by the CAL Fire Chief, was approved by the CPUC on February 2, 2010 and a project Fire Marshall has been hired onto the project and is assigned to enforce the FPRP.
HS-APM-12: Traffic Control Plan	Develop a Traffic Control Plan	A Traffic Control Plan (TCP) shall be developed that addresses all roadway crossings that would be used by the project and could interfere with emergency vehicles.	Construction activities will not cause lane closures, alternate traffic routing, or other adverse construction-related traffic impacts. Therefore, a Traffic Control Plan will not be required.
HS-APM-14: Environmental training	Conduct environmental training to construction workers	All construction workers shall undergo environmental training regarding potential exposure in accordance with federal, State, or local regulations.	The SWEAP video approved by the CPUC on March 15, 2010 provides environmental training to construction workers regarding potential exposure. This SWEAP will be shown to all project personnel and enforced throughout all phases of the Project.
HS-APM-15: Soil and groundwater contamination	Stop work if soil or groundwater contamination	If during excavation soil or groundwater contamination is suspected (e.g., unusual soil discoloration or strong odor), the contractor or subcontractor shall immediately stop work and notify the General Contractor's assigned Health & Safety Officer and/or SDG&E's Field Environmental Representative.	There is no known environmental contamination at the site and there will be no ground disturbing activities at the Pomerado Substation; therefore this mitigation measure is not applicable.
HS-APM-16: Contaminated soil and groundwater testing	Terminate work and implement health and safety procedures if contamination	If soil or groundwater contamination is suspected, work near the immediate excavation site shall be terminated, the work area cordoned off, and appropriate health and safety procedures implemented for the location by the General Contractor's assigned Health & Safety Officer and/or SDG&E's Field Environmental Representative. Work outside the immediate excavation site may continue as determined by the General Contractor's assigned Health and Safety Officer and/or SDG&E's Field Environmental Representative.	There is no known environmental contamination at the site and there will be no ground disturbing activities at the Pomerado Substation; therefore this mitigation measure is not applicable.
HS-APM-16: Contaminated soil and groundwater testing	Take preliminary samples and send to lab for testing	Preliminary samples of the soil, groundwater, or material shall be taken by an OSHA trained individual. These samples shall be sent to a California Certified Laboratory for characterization.	There is no known environmental contamination at the site and there will be no ground disturbing activities at the Pomerado Substation; therefore this mitigation measure is not applicable.
HS-APM-17: Contamination notification	Work may proceed if no contamination	If the sample testing determines that contamination is not present, work would be allowed to proceed at the immediate excavation site.	There is no known environmental contamination at the site and there will be no ground disturbing activities at the Pomerado Substation; therefore this mitigation measure is not applicable.
HS-APM-17: Contamination notification	Notify agencies if contamination is above regulatory limits	However, if contamination is found above regulatory limits, the regulatory agency (e.g., RWQCB or CUPA) responsible for responding to and for providing environmental oversight of the region shall be notified in accordance with State or local regulations.	There is no known environmental contamination at the site and there will be no ground disturbing activities at the Pomerado Substation; therefore this mitigation measure is not applicable.
PS-1a: Limit the conductor surface electric gradient.	Limit conductor surface gradient	As part of the design and construction process for the Proposed Project, the Applicant shall limit the conductor surface electric gradient in accordance with the IEEE Radio Noise Design Guide.	Substation upgrades will not require changes in existing conductor surface gradients that could affect radio reception.
PS-1b: Document and resolve electronic interference complaints.	Respond to and record interference complaints after energizing	After energizing the transmission line, SDG&E shall respond to and document all radio/television/equipment interference complaints received and the responsive action taken. These records shall be made available to the CPUC for review upon request.	This mitigation measure applies to overhead transmission line segments; therefore, it is not applicable to upgrade activities at the Pomerado Substation.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
PS-1b: Document and resolve electronic interference complaints.	Refer unresolved disputes to CPUC for resolution	All unresolved disputes shall be referred by SDG&E to the CPUC for resolution.	This mitigation measure applies to overhead transmission line segments; therefore, it is not applicable to upgrade activities at the Pomerado Substation.
PS-2a: Implement grounding measures.	Identify objects within and near ROW for induced voltages and implement electrical grounding	As part of the siting and construction process for the Proposed Project, SDG&E shall identify objects (such as fences, metal buildings, and pipelines) within and near the right-of-way that have the potential for induced voltages and shall implement electrical grounding of metallic objects in accordance with SDG&E's standards. The identification of objects shall document the threshold electric field strength and metallic object size at which grounding becomes necessary.	All facilities at the substation are properly grounded. During construction, new upgrades will be properly grounded as necessary.
AIR QUALITY			
AQ-1a: Suppress dust at all work or staging areas and on public roads.	Pave, apply water 3 times daily, or apply soil stabilizers	SDG&E shall: (a) pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas, and staging areas if construction activity causes persistent visible emissions of fugitive dust beyond the work area;	This mitigation measure will be fulfilled during construction; therefore, it is not applicable as a pre-construction requirement. A Dust Control Plan was approved by the CPUC on January 20, 2010. Dust Control Plan measures will be implemented during upgrade activities at Pomerado.
AQ-1a: Suppress dust at all work or staging areas and on public roads.	Pre-water sites 48 hours prior to clearing	(b) pre-water sites for 48 hours in advance of clearing;	This mitigation measure will be fulfilled during construction; therefore, it is not applicable as a pre-construction requirement.
AQ-1a: Suppress dust at all work or staging areas and on public roads.	Reduce amount of disturbed area	(c) reduce the amount of disturbed area where possible;	There will be no ground disturbance at the substation; therefore this mitigation measure is not applicable.
AQ-1a: Suppress dust at all work or staging areas and on public roads.	Spray stock-piles daily or as needed	(d) all dirt stock-pole areas should be sprayed daily as needed;	This mitigation measure will be fulfilled during construction; therefore, it is not applicable as a pre-construction requirement.
AQ-1a: Suppress dust at all work or staging areas and on public roads.	Cover loads in trucks or maintain 6 inches of free-board	(e) cover loads in haul trucks or maintain at least six inches of free-board when traveling on public roads;	This mitigation measure will be fulfilled during construction; therefore, it is not applicable as a pre-construction requirement.
AQ-1a: Suppress dust at all work or staging areas and on public roads.	Pre-moisten import and export dirt prior to transport	(f) pre-moisten, prior to transport, import and export dirt, sand, or loose materials;	This mitigation measure will be fulfilled during construction; therefore, it is not applicable as a pre-construction requirement.
AQ-1a: Suppress dust at all work or staging areas and on public roads.	Sweep public streets daily if soil tracking visible	(g) sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets or wash trucks and equipment before entering public streets;	This mitigation measure will be fulfilled during construction; therefore, it is not applicable as a pre-construction requirement.
AQ-1a: Suppress dust at all work or staging areas and on public roads.	Plant vegetative ground cover following construction	(h) plant vegetative ground cover in disturbed areas as soon as possible following construction;	Vegetative ground cover will not be required to be planted following construction at this site.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
AQ-1a: Suppress dust at all work or staging areas and on public roads.	Apply soil stabilizers or water on inactive work areas	(i) apply chemical soil stabilizers or apply water to form and maintain a crust on inactive construction areas (disturbed lands that are unused for four consecutive days);	This mitigation measure will be fulfilled during construction; therefore, it is not applicable as a pre-construction requirement.
AQ-1a: Suppress dust at all work or staging areas and on public roads.	File a Dust Control Plan 30 days prior to construction	and (j) prepare and file 30 days in advance of construction with the ICAPCD, SDAPCD, BLM, and CPUC a Dust Control Plan that describes how these measures would be implemented and monitored at all locations of the project. The Dust Control Plan shall identify nearby sensitive receptors, such as land uses that include children, the elderly, the acutely ill and the chronically ill, and specify the means of minimizing impacts to these populations (for example, by locating equipment and staging areas away from sensitive receptors).	The Dust Control Plan was approved on January 20, 2010. **Document Link:** http://www.cpuc.ca.gov/environment/info/aspen/sunrise/otherdocs/DCP/Dust%20Control%20Plan%20REV%20091112.pdf
G-CM-24:**Dust Control Plan.**	Develop a Dust Control Plan.	To suppress dust during Project construction, SDG&E will prepare and file with the Imperial County Air Pollution Control District, San Diego Air Pollution Control District, BLM, and CPUC, a Dust Control Plan. The Dust Control Plan will include a description of how the plan will be implemented and monitored at all locations of the project and contain the following measures: • Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas, and staging areas if construction activity causes persistent visible emissions of fugitive dust beyond the work area; • Pre-water sites for 48 hours in advance of clearing activities; • Reduce the amount of disturbed area where possible; • Spray all dirt stock-pole areas daily as needed; • Cover loads in haul trucks or maintain at least 15.24 cm (six in) of free-board when	See AQ-1a
G-CM-24:**Dust Control Plan.**	Implement Dust Control Plan.	In addition to the Dust Control Plan, the following dust reduction measures will be implemented: • Prohibit construction grading on days when the wind gusts exceed 40.2 km per hour (25 mph), to the extent feasible, to control fugitive dust; • All trucks hauling soil and other loose material will be covered or maintain at least 0.61 km (two feet) of freeboard; • Snow fence-type windbreaks will be erected in areas identified as needed by SDG&E; • Vehicle speeds will be limited to 24.1 km per hour (15 mph) on unpaved (no gravel or similar surfacing material) roads; • Unpaved roads will be treated by watering as necessary; • Soil stabilizers will be applied to inactive construction areas on an as-needed basis; and	See AQ-1a

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
AQ-1b: Use low-emission construction equipment.	Maintain construction equipment and use low-emission equipment	SDG&E shall maintain construction equipment per manufacturing specifications and use low-emission equipment described here. All off-road and portable construction diesel engines not registered under the CARB Statewide Portable Equipment Registration Program, which have a rating of 50 horsepower (hp) or more, shall meet, at a minimum, the Tier 2 California Emission Standards for Off-Road Compression-Ignition Engines as specified in California Code of Regulations, Title 13, Sec. 2423(b)(1) unless that such engine is not available for a particular item of equipment. In the event a Tier 2 engine is not available for any off-road engine larger than 100 hp, that engine shall be equipped with a Tier 1 engine. If any engine larger than 100 hp does not meet Tier 1 standards, that engine shall be equipped with a catalyzed diesel particulate filter (soot filter), unless the engine manufacturer indicates that the use of such devices is not practical for that particular engine type. SDG&E shall substitute small electric-powered equipment for diesel- and gasoline-powered construction equipment where feasible.	A Construction Emissions Monitoring Plan was approved on January 26, 2010.
AQ-1h: Obtain NOx and particulate matter emission offsets.	Obtain NOx emission reduction credits or fund incentive programs prior to construction	SDG&E shall obtain and hold for the duration of construction NOx emission reduction credits or fund incentive programs approved by ICAPCD and SDAPCD at sufficient levels to offset the construction emissions of NOx that exceed the ozone nonattainment area federal General Conformity Rule applicability threshold. SDG&E shall secure 99 tons per year of NOx reductions and 276 tons per year of particulate matter reductions in Imperial County. SDG&E shall secure 212 tons per year of NOx reductions in San Diego County to satisfy this requirement. The emission reduction credits or incentive program shall comply with ICAPCD and SDAPCD rules and regulations, and the credits or reductions shall be obtained by SDG&E prior to commencing construction.	The Construction Emission Monitoring Plan and Air Quality Mitigation Program was approved on January 26, 2010. This document provided updated NOx and PM calculations that show project-wide emissions below the applicability threshold for this measure, documented NOx emissions reduction credits obtained and addressed the funding of incentive programs. Accordingly, SDG&E submitted a variance request to the CPUC requesting that this mitigation measure would not apply to the project. Regardless, SDG&E has executed a MOU with Imperial County APCD regarding providing incentive funding for reducing emissions of PM10 and NOx throughout Imperial County and is pursuing the MOU with San Diego APCD in case emissions exceed the applicability thresholds during construction. The MOU has been agreed upon by the SDAPCD and is awaiting approval/execution by the APCD Board (the San Diego County Board of Supervisors).
AQ-4a: Offset construction-phase greenhouse gas emissions with carbon credits.	Report quarterly the status of carbon credits	SDG&E shall create greenhouse gas emission reductions or obtain and hold for the duration of project construction sufficient carbon credits to fully offset construction-phase greenhouse gas emissions. During construction SDG&E shall report to the CPUC quarterly the status of efforts to create reductions or obtain banked credits and the quantity of construction-phase greenhouse gas emissions offset by credits. At a minimum, SDG&E shall create or obtain and hold carbon credits to offset 55,000 tons of carbon dioxide emissions for each of the two years of construction. Carbon Reduction Tons (CRTs) verified according to the rules of the California Climate Action Registry may be retired by SDG&E to satisfy this requirement.	Emissions off-sets were submitted for review on August 27, 2009. Verification e-mail dated March 10, 2010 indicated that SDG&E purchased Carbon Reduction Tons (CRTs) to satisfy this measure. Quarterly reports will be provided as required.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
AQ-4b: Offset operation-phase greenhouse gas emissions with carbon credits.	Develop complete GHG inventory and report status of credits annually	SDG&E shall create greenhouse gas emission reductions or obtain and hold for the life of the project sufficient carbon credits to fully offset greenhouse gas emissions caused by activity to support transmission line operation, maintenance, and inspection activities. To determine the quantity of carbon credits that must be created or obtained and held each year, SDG&E must develop a complete GHG inventory annually for project-related operational emissions. SDG&E shall follow established methodologies to report and inventory indirect GHG emissions from energy imported and consumed to support operation of the Proposed Project and indirect GHG emissions from transmission and distribution losses associated with the Proposed Project. SDG&E shall report to the CPUC annually the status of efforts to obtain banked credits and the quantity of greenhouse gas emissions offset by credits. Established methodologies for determining project-related emissions include the current California Climate Action Registry (CCAR) General Reporting Protocol, and the Power/Utility Reporting Protocol appendix to the General Reporting Protocol. Carbon Reduction Tons (CRTs) verified according to the	This mitigation measure will be fulfilled post-construction; therefore, it is not applicable as a pre-construction requirement.
AQ-4c: Avoid sulfur hexafluoride emissions.	Submit SF6 leak detection and repair program 90 days prior to construction	SDG&E shall identify sulfur hexafluoride (SF6) leaks and establish a strategy for replacing leaking equipment to reduce SF6 leaks. To accomplish this, SDG&E shall develop and maintain a record of SF6 purchases, an SF6 leak detection and repair program using laser imaging leak detection and monitoring no less frequently than quarterly, an SF6 recycling program, and an employee education and training program for avoiding or eliminating SF6 emissions caused by the Proposed Project. The SF6 leak detection and repair program shall be provided to the CPUC and BLM 90 days prior to project construction.	The Avoid SF6 Emissions SF6 Mitigation Plan was approved on March 12, 2010.
AQ-4c: Avoid sulfur hexafluoride emissions.	Become a Partner in EPA's SF6 Partnership prior to construction.	Prior to construction, SDG&E shall also become a Partner in the U.S. EPA's SF6 Emissions Reduction Partnership for Electric Power Systems.	The Partnership MOU between SDG&E and US EPA was approved on February 24, 2010.
AQ-4c: Avoid sulfur hexafluoride emissions.	Report SF6 emissions to CCAR	SDG&E shall also report SF6 emissions from the Proposed Project to the California Climate Action Registry according to CCAR methodologies or alternate methodology approved by the California Air Resources Board.	The Avoid SF6 Emissions SF6 Mitigation Plan was approved on March 12, 2010.
AQ-4c: Avoid sulfur hexafluoride emissions.	Follow established methodologies to develop a complete GHG inventory	To develop a complete GHG inventory, SDG&E shall follow established methodologies to report indirect GHG emissions from energy imported and consumed to support operation of the Proposed Project and indirect GHG emissions from transmission and distribution losses associated with the Proposed Project.	The Avoid SF6 Emissions SF6 Mitigation Plan was approved on March 12, 2010. Records of SF6 purchases will be maintained by SDG&E's Substation Construction and Maintenance group and estimates of any greenhouse gas emissions will be added to inventories developed by SDG&E.
AQ-APM-1: Dust control in Imperial County	Comply with ICAPCD Rule 800	For activities in Imperial County, the project will comply with ICAPCD Rule 800 (Fugitive Dust Requirement for Control of Fine Particulate Matter [PM10]).	Pomerado Substation is not located in Imperial County; therefore, this mitigation measure is not applicable.
AQ-APM-1: Dust control in Imperial County	File a Dust Control Plan with ICAPCD	A Dust Control Plan for construction activities would be filed with the ICAPCD.	Pomerado Substation is not located in Imperial County; therefore, this mitigation measure is not applicable.
AQ-APM-2: Construction BMPs to minimize dust	Prohibit grading when wind exceeds 25 mph	1. Prohibit construction grading on days when the wind gusts exceed 25 mph to the extent feasible to control fugitive dust.	No grading will occur at the Pomerado Substation; therefore, this mitigation measure is not applicable.
AQ-APM-2: Construction BMPs to minimize dust	Cover loads in trucks or maintain 2 feet of freeboard	2. All trucks hauling soil and other loose material will be covered or maintain at least two feet of freeboard.	This mitigation measure will be fulfilled during construction, as needed; therefore, it is not applicable as a pre-construction requirement.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
AQ-APM-2: Construction BMPs to minimize dust	Install snow fence-type windbreaks	3. Snow fence-type windbreaks will be erected in areas identified as needed by SDG&E.	Upgrade activities will be limited to previously disturbed areas within the substation fence-line; therefore, this mitigation measure is not applicable.
AQ-APM-2: Construction BMPs to minimize dust	Limit vehicle speeds to 15 mph on unpaved roads	4. Vehicle speeds will be limited to 15 mph on unpaved (no gravel or similar surfacing material) roads.	This mitigation measure will be fulfilled during construction, as needed; therefore, it is not applicable as a pre-construction requirement.
AQ-APM-2: Construction BMPs to minimize dust	Water unpaved roads	5. Unpaved roads will be treated by watering as necessary.	This mitigation measure will be fulfilled during construction, as needed; therefore, it is not applicable as a pre-construction requirement.
AQ-APM-2: Construction BMPs to minimize dust	Apply soil stabilizers	6. Soil stabilizers will be applied to inactive construction areas on an as-needed basis.	This mitigation measure will be fulfilled during construction, as needed; therefore, it is not applicable as a pre-construction requirement.
AQ-APM-2: Construction BMPs to minimize dust	Contain exposed stockpiles of soil and other material	7. Exposed stockpiles of soil and other excavated materials will be contained within perimeter silt fencing, watered or treated with soil binders, as necessary.	This mitigation measure will be fulfilled during construction, as needed; therefore, it is not applicable as a pre-construction requirement.
AQ-APM-3: Minimize dust and mud tracking	Use methods to minimize mud and dust tracking on paved roads	To minimize mud and dust from being transported onto paved roadway surfaces, pave, gravel, use rattle plates or apply chemical stabilization at sufficient concentration and frequency to maintain a stabilized surface starting from the point of intersection with the public paved surface. SDG&E will implement this measure where applicable and not conflicting with other requirements.	SDG&E will use methods to minimize mud and dust tracking on paved roads. This measure will be fulfilled during construction; therefore, it is not applicable as a pre-construction requirement.
AQ-APM-4: Carpooling to job sites	Encourage carpooling to job sites	If suitable park-and-ride facilities are available in the project vicinity, construction workers will be encouraged to carpool to the job site to the extent feasible. The ability to develop an effective carpool program for the Proposed Project would depend upon the proximity of carpool facilities to the job site, the geographical commute departure points of construction workers, and the extent to which carpooling would not adversely affect worker show-up time and the project's construction schedule.	The SWEAP video approved by the CPUC on March 15, 2010 encourages carpooling. This SWEAP will be shown to all project personnel and enforced throughout all phases of the Project.
AQ-APM-5: Vehicle idling time	Minimize vehicle idling time with common sense approach	To the extent feasible, unnecessary construction vehicle and idling time will 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. Certain vehicles, such as large diesel-powered vehicles, have extended warm-up times following start-up that limit their availability for use following start-up. Where such diesel-powered vehicles are required for repetitive construction tasks, these vehicles may require more idling time. The project will apply a "common sense" approach to vehicle use; if a vehicle is not required for use immediately or continuously for construction activities, its engine will be shut off.	The SWEAP video approved by the CPUC March 15, 2010 addresses vehicle idling. This SWEAP will be shown to all project personnel and enforced throughout all phases of the Project.
AQ-APM-5: Vehicle idling time	Conduct briefings on common sense vehicle use	Construction foremen will include briefings to crews on vehicle use as a part of pre-construction conferences. Those briefings will include discussion of a "common sense" to vehicle use.	The SWEAP video approved by the CPUC March 15, 2010 addresses vehicle idling. This SWEAP will be shown to all project personnel and enforced throughout all phases of the Project.
HYDROLOGY & WATER RESOURCES			
H-1a: Prepare Substation Grading and Drainage Plan; construct during the dry season.	Submit a grading and drainage plan prior to construction	Prior to construction of new substations, a grading and drainage plan, with SWPPP for construction and post-construction BMPs (as defined by the RWQCB), shall be prepared and submitted to the CPUC and RWQCB for review and approval.	This mitigation measure only applies to new substations; therefore, it is not applicable to Pomerado Substation.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
H-1a: Prepare Substation Grading and Drainage Plan; construct during the dry season.	Grade at substations during dry season months	All grading for the substation shall occur either during the dry season months, or a settling pond shall be installed on the construction site with sufficient capacity to contain expected runoff during a rainfall event.	This mitigation measure only applies to new substations; therefore, it is not applicable to Pomerado Substation.
H-1a: Prepare Substation Grading and Drainage Plan; construct during the dry season.	Cease construction during rainfall when rutting occurs	In addition, for construction during a rainfall event, construction shall cease when rutting occurs in greater than 10% of the road or when rills more than 10 feet in length develop and lead off the road surface in the work area.	This mitigation measure only applies to new substations; therefore, it is not applicable to Pomerado Substation.
H-1a: Prepare Substation Grading and Drainage Plan; construct during the dry season.	Install drainage and erosion control BMPs prior to winter rains	Approved drainage control and erosion control BMPs shall be in place prior to the normal onset of winter rains.	This mitigation measure only applies to new substations; therefore, it is not applicable to Pomerado Substation.
H-1a (CC): Construct during the dry season.	Construct Chocolate Canyon Option in dry season	All Construction of the Chocolate Canyon Option shall occur during the dry months.	This mitigation measure only applies to new substations; therefore, it is not applicable to Pomerado Substation.
H-1a (CC): Construct during the dry season.	Drainage control and BMPs in place prior to winter rains	Approved drainage control and erosion control BMPs shall be in place prior to the normal onset of winter rains.	This mitigation measure only applies to new substations; therefore, it is not applicable to Pomerado Substation.
H-1a (CC): Construct during the dry season.	Implement Source Water Protection Guidelines	Implement the City of San Diego Source Water Protection Guidelines for New Development (2004) that describes procedures for minimizing the adverse water quality effect of new development near water supply reservoirs such as El Capitan. These guidelines specify best management practice procedures to be used by the development, which would include the Chocolate Canyon Option.	This mitigation measure only applies to new substations; therefore, it is not applicable to Pomerado Substation.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
H-1k: Comply with Forest Service conditions.	File hazardous substance plan within 1 year of license issuance	Where the power line crosses Forest Service property, the following conditions, or others defined by the Forest Service, based on consultation, shall be complied with: • The Forest Service reserves the right, after notice and opportunity for comment, to modify project conditions, if necessary, to respond to any Final Biological Opinion issued for this project by the United States Fish and Wildlife Service, NOAA Fisheries, or any Certification or permit issued for this project by the State Water Resources Control Board or Army Corps of Engineers. • Within one year of license issuance, or prior to any ground disturbing activities, the Licensee shall file with the California Public Utilities Commission a plan approved by the Forest Service for hazardous substances storage, spill prevention, and spill cleanup for project facilities on or directly affecting National Forest System Lands. In addition, during planning and prior to any new construction or maintenance not addressed in an existing plan, the Licensee shall notify the Forest Service, and the Forest Service shall make a determination whether a plan approved by the Forest Service for oil and hazardous substances storage and spill prevention and cleanup is needed. • At a minimum, the plan must require the Licensee to (1) maintain in the project area, or at an alternative location approved by the Forest Service, a cache of spill cleanup equipment suitable to contain any spill from the project; (2) to periodically inform the	Pomerado Substation is not located on USFS-administered lands therefore, this mitigation measure is not applicable.
H-1k: Comply with Forest Service conditions.	Confine vehicles to roads identified in a Road and Traffic Management Plan	• The Licensee shall confine all vehicles being used for project purposes, including but not limited to administrative and transportation vehicles and construction and inspection equipment, to roads or specifically designed access routes, and approved construction and staging areas, as identified in a Road and Traffic Management Plan developed by the Licensee. The Forest Service reserves the right to close any and all such routes where damage (impacts beyond the expected and approved disturbance) is occurring to the soil or vegetation, or, if requested by Licensee, to require reconstruction/construction by the Licensee to the extent needed to accommodate the Licensee's use. The Forest Service agrees to provide notice to the Licensee and the Public Utilities Commission prior to road closures, except in an emergency, in which case notice will be provided as soon as practicable.	Pomerado Substation is not located on USFS-administered lands therefore, this mitigation measure is not applicable.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
H-1k: Comply with Forest Service conditions.	File an Erosion Control Measure Plan prior to construction	• During planning and before any new construction or non-routine maintenance projects with the potential for causing erosion and/or stream sedimentation on or affecting National Forest System Lands, the Licensee shall file with the Public Utilities Commission an Erosion Control Measures Plan that is approved by the Forest Service. The Plan shall include measures to control erosion, stream sedimentation, dust, and soil mass movement attributable to the project. The plan shall be based on actual-site geological, soil, and groundwater conditions and shall include: 1. A description of the actual site conditions 2. Detailed descriptions, design drawings, and specific topographic locations of all control measures 3. Measures to divert runoff away from disturbed land surfaces 4. Measures to collect and filter runoff over disturbed land surfaces 5. Revegetating disturbed areas in accordance with current direction on use of native plants and locality of plant and seed sources 6. Measures to dissipate energy and prevent erosion 7. A monitoring and maintenance schedule. Upon Commission approval, the Licensee shall implement the plan.	Pomerado Substation is not located on USFS-administered lands therefore, this mitigation measure is not applicable.
H-1k: Comply with Forest Service conditions.	Submit NEPA analysis prior to ground distrubing work	•Ground disturbing activities may proceed only after appropriate NEPA analysis and documentation completion. If the licensee proposes new activities to the Public Utilities Commission not previously addressed in the Commission's NEPA analysis processes, the licensee, in consultation with the Forest Service, shall determine the scope of work, and the potential project related effects and whether additional information is required to proceed with the planned ground disturbing activity.	Pomerado Substation is not located on USFS-administered lands therefore, this mitigation measure is not applicable.
H-1k: Comply with Forest Service conditions.	Enter into a cost recovery agreement with the Forest Service	The licensee shall enter into a cost recovery agreement with the Forest Service under which the licensee shall fund the Forest Service staff time required for staff activities related to the analysis, documentation and administration of the proposed activities.	Pomerado Substation is not located on USFS-administered lands therefore, this mitigation measure is not applicable.
H-1k: Comply with Forest Service conditions.	File a Water Resources Management Plan within 6 months of license issuance	The Licensee shall within 6 months after license issuance file with the Public Utilities Commission a Water Resources Management Plan that is approved by the Forest Service, for the purpose of controlling and monitoring the project-related effects to water resources on National Forest System lands, which are related to the Licensee's activities. The purpose of the plan is to protect groundwater related surface water and other groundwater-dependent resources.	Pomerado Substation is not located on USFS-administered lands therefore, this mitigation measure is not applicable.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
H-4b: Avoid blasting where damage to groundwater wells or springs could occur.	Manage blasting near wells or springs with a Blasting Plan for each site	Blasting shall be managed with a Blasting Plan for each site. The Plan shall include the blasting methods, distance calculations to estimate the area of effect of the blasting, and surveys for wells and springs within the blast influence area (no less than ½ mile from the blasting location). Blasting shall not be allowed where damage to wells or springs could occur according to the Applicant's Blasting Plan, and a rock anchoring or mini-pile system shall be used if these resources could be damaged as a result of blasting or any earthworking method used as an alternative to blasting. Where inadvertent damage to wells within an EPA-designated Sole Source Aquifer occur as a result of earthwork, the Applicant shall compensate the landowner in the form of well repair or replacement, and shall provide the landowner with a water storage tank and sufficient potable water within 48 hours and throughout the interim between damage and repair or replacement. Where inadvertent damage to other wells or springs occurs as a result of earthwork, the Applicant shall compensate the landowner in the form of remedial cash payment, repair, or replacement, as appropriate. The burden of proof of no impact shall rest with the	Blasting will not be required for the Substation upgrades scope of work.
H-5a: Install substation runoff control.	Construct substation pads with pervious surfaces	The pad for new substations shall be constructed with a pervious and/or high-roughness (for example gravel) surface where possible to ensure maximum percolation of rainfall after construction.	This mitigation measure only applies to new substations; therefore, it is not applicable to Pomerado Substation.
H-5a: Install substation runoff control.	Install detention/retention basins	Detention/retention basins shall be installed to reduce local increases in runoff, particularly on frequent runoff events (up to 10 year frequency).	No detention/retention basins will be installed; therefore, this mitigation measure does not apply.
H-5a: Install substation runoff control.	Provide erosion protection to downstream drainage discharge points	Downstream drainage discharge points shall be provided with erosion protection and designed such that flow hydraulics exiting the site mimics the natural condition as much as possible.	This mitigation measure only applies to new substations; therefore, it is not applicable to Pomerado Substation.
H-5a: Install substation runoff control.	Submit drainage design hydrologic and hydraulic analysis prior to construction	A drainage design hydrologic and hydraulic analysis shall be provided to the CPUC for review and approval prior to the initiation of construction.	This mitigation measure only applies to new substations; therefore, it is not applicable to Pomerado Substation.
H-6a: Scour protection to include avoidance of bank erosion and effects to adjacent property.	Determine which towers require scour protection during design phase	A determination of towers requiring scour protection under WQ-APM-10 shall be made during the design phase by a registered professional engineer with expertise in river mechanics. All towers within the project shall be reviewed by the river mechanics engineer and the foundations of those towers determined to be subject to scour or lateral movement of a stream channel shall be protected by burial beneath the 100 year scour depth, setbacks from the channel bank, or bank protection as determined by the river mechanics engineer.	There are no streambeds or stream crossings at the Pomerado Substation; therefore, this mitigation measure is not applicable
H-6a: Scour protection to include avoidance of bank erosion and effects to adjacent property.	Submit evaluation and design plans 60 days prior to constructing towers	An evaluation shall also be made regarding the potential for the tower and associated structures to induce erosion onto adjacent property. Should the potential for such erosion occur, the tower location shall be moved to avoid this erosion, or erosion protection (such as rip rap) provided for the adjacent property. This evaluation, and associated scour/erosion protection design plans, shall be submitted to the CPUC for review and approval 60 days prior to the initiation of construction of the towers.	There are no streambeds or stream crossings at the Pomerado Substation; therefore, this mitigation measure is not applicable

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
H-7a: Develop Hazardous Substance Control and Emergency Response Plan for project operation.	Submit a Hazardous Substance Control and Emergency Response Plan 60 days prior to construction	SDG&E shall prepare and implement a Hazardous Substance Control and Emergency Response Plan for project operation, and a copy shall be kept onsite at substations. This plan shall include definition of an emergency response program to ensure quick and safe cleanup of accidental spills, including prescriptions for hazardous-material handling to reduce the potential for a spill during construction. The plan will identify areas where refueling and vehicle-maintenance activities and storage of hazardous materials, if any, will be permitted. These directions and requirements will also be reiterated in the project SWPPP. SDG&E shall submit this Response Plan to the CPUC and BLM for review and approval at least 60 days before construction.	The existing Substation SPCC Plan contains emergency response information to assure quick and safe clean-up of spills as required to address hazardous substance control and emergency response. The SPCC Plan is provided in Appendix F. The SPCC Plan will not require an update because none of the substation upgrade equipment contain over 55 gallons of oil.
H-8a: Bury power line below 100-year scour depth.	Submit design plans for burying line 60 days prior to construction	At locations where the buried power line is to be at or adjacent to a stream bed capable of scour, the power line shall be located below the expected depth of scour from a 100 year flood, or otherwise protected from exposure by scour which, for purposes of this mitigations measure, also includes lateral (streambank) erosion and potential scour associated with flows overtopping or bypassing a culvert or bridge crossing. During final design, a registered civil engineer with expertise in hydrology, hydraulics, and river mechanics shall make a determination of where the underground line could be at risk of exposure through scour or erosion from a 100 year event. Plans for burying the line below the 100 year scour depth, or otherwise protecting the line from erosion, shall be submitted to CPUC for review and approval prior to construction. Engineering evaluation, and associated scour protection design plans, shall be submitted to the CPUC for review and approval 60 days prior to the initiation of construction. Compliance to be ensured during construction.	This mitigation measure only applies to underground stream crossings; therefore, it is not applicable to upgrade activities at Pomerado Substation.
WQ-APM-1: Minimize disturbance to water resources	Minimize disturbance to water resources	All construction and maintenance activities shall be conducted in a manner that minimizes disturbance to riparian/wetland vegetation, drainage channels, and intermittent and perennial stream banks to the extent feasible.	There will not be any disturbance to water resources during construction at the Pomerado Substation; therefore, this mitigation measure does not apply.
WQ-APM-2: Placement of structures	Avoid sensitive water features	To the extent feasible, structures shall be placed so as to avoid sensitive features such as watercourses, or to allow conductors to clearly span the features, within limits of safety and standard structure design.	There are no sensitive water features inside the Substation; therefore, this mitigation measure does not apply.
WQ-APM-3: Protect water resources	Clearly mark restricted sites prior to construction	Specific sites as identified by authorized agencies (e.g., fragile watersheds) where construction equipment and vehicles are not allowed shall be clearly marked on-site before any construction or surface disturbing activities begin.	There are no sensitive water features inside the Substation; therefore, this mitigation measure does not apply.
WQ-APM-3: Protect water resources	Train construction personnel to recognize markers	Construction personnel shall be trained to recognize these markers and understand the equipment movement restrictions involved.	The SWEAP video approved by the CPUC on March 15, 2010 and includes recognition of markers and equipment movement restrictions. This SWEAP will be shown to all project personnel and enforced throughout all phases of the Project.
WQ-APM-4: Erosion control	Maintain adequate distance from stream banks	1. Adequate distance from stream banks and beds will be maintained during construction activities	There are no streambeds or riparian areas located at the Substation and as a result, stream crossings will not be required for this project.
WQ-APM-4: Erosion control	Use existing bridges to cross major streams	2. Construction activities will use existing bridges to cross major streams and culverts in most dry intermittent streams.	There are no streambeds or riparian areas located at the Substation and as a result, stream crossings will not be required for this project.
WQ-APM-4: Erosion control	Span riparian areas where feasible	3. Surface water, riparian areas and floodplains will be spanned where feasible	There are no streambeds or riparian areas located at the Substation and as a result, stream crossings will not be required for this project.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
WQ-APM-4: Erosion control	Prepare and implement erosion control BMPs per the SWPPP	4. A Storm Water Pollution Prevention Plan (SWPPP) will be prepared and implemented. 5. Storm Water Best Management Practices (BMPs) for construction will be implemented per the requirements of the project's SWPPP 6. Silt fencing, straw mulch, straw bale check dams would be installed as appropriate to contain sediment within construction work areas and staging areas. Where soils and slopes exhibit high erosion potential, erosion control blankets, matting, and other fabrics and/or other erosion control measures. 7. The potential for increased sediment loading will be minimized by limiting road improvements to those necessary for project construction, operation and maintenance.	SDG&E will implement best management practices (BMPs) under a Storm Water Management Plan (SWMP) being prepared for Pomerado Substation. SDG&E's Water Quality Construction BMP Manual will be referenced for BMP implementation and maintenance. A copy of this document is included in Appendix C. All BMPs are designed to prevent and avoid sediment within surface water runoff and protect the landscape from erosion in accordance with WQ-APM-4. A National Pollutant Discharge Elimination System (NPDES) general permit for storm water discharges associated with construction activities is being obtained and a supporting Storm Water Pollution Prevention Plan (SWPPP) is being developed. A copy of the NOI confirmation and WDID number and the SWPPP will be submitted to the CPUC prior to construction.
WQ-APM-4: Erosion control	Select upland pull sites to minimize disturbance to water resources	8. Upland pull sites will be selected to minimize impacts to surface waters, riparian areas, wetlands and floodplains.	There will not be any upland pull sites selected for the Pomerado Substation upgrades; therefore, this mitigation measure does not apply.
WQ-APM-4: Erosion control	Do not place structures in streambeds or drainage channels	9. Structures will not be placed in streambeds or drainage channels to the extent feasible	There are no streambeds or drainage channels within the Pomerado Substation; therefore, this mitigation measure is not applicable.
G-CM-2:**Water Quality Construction BMPs**	Use SDG&Es Water Quality Construction BMP Manual.	G-CM-2 Throughout the construction process all crews will use the SDG&E Water Quality Construction Best Management Practices Manual (BMPs) (SDG&E 2002). Following are some of the general guidelines: • Construction activities will use existing bridges to cross major streams and culverts in most dry intermittent streams; • Surface water, riparian areas, and floodplains will be spanned where feasible; A Storm Water Pollution Prevention Plan (SWPPP) will be prepared and implemented;Storm Water BMPs for construction will be implemented per the requirements of the project's SWPPP; • Silt fencing, straw mulch, and straw bale check dams will be installed as appropriate to contain sediment within construction work areas and staging areas. Where soils and slopes exhibit high erosion potential, erosion control blankets, matting, and other fabrics and/or other erosion control measures will be implemented. • The potential for increased sediment loading will be minimized by limiting road improvements to those necessary for project construction. • Upland pull sites will be selected to minimize impacts to surface waters, riparian areas, wetlands, and floodplains; and • Structures will not be placed in streambeds or drainage channels to the extent feasible.	See WQ-APM-4
WQ-APM-5: Stream crossings	Construct stream crossings and develop a mitigation and restoration plan	Any stream crossings will be constructed at low flow periods and, if necessary, a site-specific mitigation and restoration plan would be developed.	There are no stream beds or riparian areas located at the Pomerado Substation, therefore this mitigation measure is not applicable.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
WQ-APM-6: Water supplies	Avoid designated surface water protection areas	1. Designated surface water protection areas (source water) will be avoided.	There are no water protection areas located at the Pomerado Substation; therefore this mitigation measure is not applicable.
WQ-APM-6: Water supplies	No diversions, detention, retention, or consumption of surface waters	2. There will be no diversions, detention, retention or consumption of surface waters for the project	There will be no diversions, detention, retention, or consumption of surface waters.
WQ-APM-6: Water supplies	Conduct interviews with affected landowners prior to construction	3. Prior to construction, interviews would take place with affected landowners regarding location of water supply wells located on their property.	Groundwater supplies will not be used during project construction; therefore this mitigation measure is not applicable.
WQ-APM-6: Water supplies	Negotiate with landowners to provide alternative water supplies	4. SDG&E will negotiate with affected landowner to provide alternative water supplies in the event a supply well or springs dry up directly caused by project activities. Negotiation shall be by either a remedial cash payment to the landowner or by SDG&E contracting for the drilling of a replacement well.	Groundwater supplies will not be used during project construction; therefore this mitigation measure is not applicable.
WQ-APM-8: Water discharge	Obtain permits prior to discharging groundwater into storm drains	1. In no case will groundwater removed during construction be discharged to surface waters or storm drains without first obtaining any required permits.	SDG&E will not be impacting groundwater as part of this project. This mitigation measure does not apply.
WQ-APM-8: Water discharge	Contain and sample if dewatering and then release water according to test results	2. If dewatering is necessary, the water will be contained and sampled to determine if contaminants requiring special disposal procedures are present. 3. If the water tests sufficiently clean and land application is determined feasible per applicable SWRCB and RWQCB requirements, the water would be directed to relatively flat upland areas for evaporation and infiltration back to the water table, used for dust control, or used as makeup for a construction process (e.g., concrete production). 4. Water determined to be unsuitable for land application or construction use would be disposed of in another appropriate manner, such as treatment and discharge to a sanitary sewer system in accordance with applicable permit requirements or hauled offsite to an approved disposal facility.	Discharge of groundwater and dewatering will not be required during construction.
WQ-APM-9: Fuel and hazardous material storage	Storing fuels and hazardous materials prohibited near wells	Storage of fuels and hazardous materials will be prohibited within 200 feet of groundwater supply wells and within 400 feet of community or municipal wells.	There are not wells within the Substation fence-line or within 400 feet, therefore this mitigation measure does not apply.
WQ-APM-10: Minimize stream bank erosion	Minimize stream bank erosion	At locations where the project would cross below or pass adjacent to streams with erodible bed or banks, the burial depth shall be extended below the estimated 100 year depth of scour for that stream, or located at a sufficient distance from the bank as to avoid erosion that can reasonably be expected to occur during the life of the project.	There are no stream banks in or surrounding the Pomerado Substation, therefore this mitigation measure does not apply.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
WQ-APM-11: Groundwater	Test groundwater levels with pilot borings along underground portion of project	Groundwater levels along the underground portion of the project will be tested by drilling pilot borings. The location, distribution, or frequency of such tests shall be determined to give adequate representation of the conditions. Locations where groundwater depth is less than eight feet below ground surface shall be identified prior to excavation activities and avoided, where possible. Avoidance is especially recommended where shallow groundwater flow direction is not parallel to the orientation of the alignment. Where avoidance is not possible, SDG&E shall consider constructing underground facilities in a shallower excavation, depending upon requirements of the underground method or existing underground facilities and other practical concerns.	This mitigation measure only applies to underground portions of the project; therefore, it is not applicable to Pomerado Substation upgrades.
WQ-APM-11: Groundwater	Submit letter report with test drilling results	SDG&E shall document results of test drilling in a letter report to the CPUC construction starts and shall propose specific measures to minimize the impact on groundwater.	This mitigation measure only applies to underground portions of the project; therefore, it is not applicable to Pomerado Substation upgrades.
WQ-APM-13: Hazardous waste disposal	Dispose trash into enclosed containment	Totally enclosed containment will be provided for trash.	This mitigation measure will be fulfilled during construction; therefore, it is not applicable as a pre-construction requirement. During construction, trash will be inside an enclosed containment. SWEAP will be shown to all project personnel and includes instructions on proper disposal of hazardous materials.
WQ-APM-13: Hazardous waste disposal	Remove hazardous materials to a hazardous waste facility and promptly clean up if released onto ground	Hazardous materials will not be disposed of onto the ground, the underlying groundwater, or any surface water. Petroleum products and other potentially hazardous materials would be removed to a hazardous waste facility permitted or otherwise authorized to treat, store, or dispose of such materials. In the event of a release of hazardous materials to the ground, it will be promptly cleaned up in accordance with applicable regulations.	This mitigation measure will be fulfilled during construction; therefore, it is not applicable as a pre-construction requirement. During construction, any hazardous materials will be transported to a hazardous waste facility and will be promptly cleaned-up if released onto the ground. SWEAP will be shown to all project personnel and includes instructions on proper disposal of hazardous materials.
WQ-APM-14: NPDES permit	Obtain NPDES permit and implement a SWPPP	Secure any required General Permit for Storm Water Discharges Associated with Construction Activity (NPDES permit) authorization from the State Water Resources Control Board and/or the RWQCB to conduct construction-related activities to build the project and establish and implement a SWPPP during construction to minimize hydrologic impacts.	SDG&E will implement best management practices (BMPs) under a Storm Water Management Plan (SWMP) being prepared for Pomerado Substation. SDG&E's Water Quality Construction BMP Manual will be referenced for BMP implementation and maintenance. A copy of this document is included in Appendix C. All BMPs are designed to prevent and avoid sediment within surface water runoff and protect the landscape from erosion in accordance with WQ-APM-14. A National Pollutant Discharge Elimination System (NPDES) general permit for storm water discharges associated with construction activities is being obtained and a supporting Storm Water Pollution Prevention Plan (SWPPP) is being developed. A copy of the NOI confirmation and WDID number and the SWPPP will be submitted to the CPUC prior to construction.
G-CM-3:**NPDES Permit**	Obtain NPDES permit and implement a SWPPP.	SDG&E will secure any required General Permit for Storm Water Discharges Associated with Construction Activity (National Pollutant Discharge Elimination System (NPDES permit) authorization from the State Water Resources Control Board and/or the Regional WQCB to conduct construction-related activities to build the project and establish and implement a SWPPP during construction to minimize hydrologic impacts.	See WQ-APM-14

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
WQ-APM-15: Construction access routes	Adjust route of access roads to avoid sensitive features	To the extent feasible, where the construction of access roads would disturb sensitive features such as streambeds, the route of the access road would be adjusted to avoid such impacts. Where it is not feasible for access roads to avoid streambed crossings, such crossings would be built at right angles to the streambeds whenever feasible. Where such crossings cannot be made at right angles, SDG&E would limit roads constructed parallel to streambeds to a maximum length of 500 feet at any one transmission line crossing location. Such parallel roads would be constructed in such a manner that minimizes potential adverse impacts on waters of the U.S. or waters of the state. Streambed crossings or roads constructed parallel to streambeds would require review and approval of necessary permits from the ACOE, CDFG, and SWRCB/RWQCB.	Construction access will be provided by existing roads to the Substation.
WQ-APM-15: Construction access routes	Use existing roads or cross-country access routes	Whenever practicable, construction and maintenance traffic would use existing roads or cross-country access routes (including the ROW) which avoid impacts to the sensitive feature.	Construction access will be provided by existing roads to the Substation.
WQ-APM-15: Construction access routes	Clearly mark approved construction traffic routes	To minimize ground disturbance, construction traffic routes will be clearly marked with temporary markers such as easily visible flagging. Construction routes, or other means of avoidance, must be approved by the appropriate agency or landowner before use.	Construction access will be provided by existing roads to the Substation.
WQ-APM-16: Sensitive water resources	Conduct site-specific assessment where sensitive water resources cannot be avoided	If sensitive water resource features contain riparian areas, habitats of endangered species, streambeds, cultural resources, and wetlands which cannot be avoided, a qualified biological contractor shall conduct site-specific assessments for each affected site. These assessments shall be conducted in accordance with ACOE wetland delineation guidelines, as well as CDFG streambed and lake assessment guidelines, and shall include impact minimization measures to reduce wetland impacts to a less than significant effect (e.g., through creation or restoration of wetlands).	There are no sensitive water resource features such as wetlands or waters of the State located inside the Pomerado Substation, therefore this mitigation measure does not apply.
WQ-APM-16: Sensitive water resources	Locate staging/storage areas outside of riparian areas	Though construction or maintenance vehicle access through shallow creeks or streams is allowed, staging/storage areas for equipment and materials shall be located outside of riparian areas.	There are no sensitive water resource features such as wetlands or waters of the State located inside the Pomerado Substation, therefore this mitigation measure does not apply.
WQ-APM-16: Sensitive water resources	Obtain a Streambed Alteration Agreement when constructin new access through streambeds	Construction of new access through streambeds that require filling for access purposes would require a Streambed Alteration Agreement from the CDFG and/or consultation/approval with the ACOE and SWRCB/RWQCB. Where filling is required for new access, the installation of properly sized culverts and the use of geo-textile matting should be considered in the CDFG/ACOE consultation process. Where filling is required for new access, the installation of properly sized culverts and the use of geo-textile matting should be considered in the CDFG/ACOE consultation process.	There are no sensitive water resource features such as wetlands or waters of the State located inside the Pomerado Substation, therefore this mitigation measure does not apply.
G-CM-42:**Riparian buffer.**	Maintain riparian buffer construction/staging areas and riparian areas.	A minimum of a 30.5-m (100-ft) riparian buffer will be maintained between all construction/staging areas, except where the access roads cross riparian areas.	There are no riparian areas located at the Pomerado Substation; therefore, this mitigation measure is not applicable.
GEOLOGY, MINERALS, & SOILS			

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
G-2a: Protect desert pavement.	Avoid or minimize desert pavement grading	Grading for new access roads or work areas in areas covered by desert pavement shall be avoided or minimized. If avoidance of these areas is not possible, the desert pavement surface shall be protected from damage or disturbance from construction vehicles by use of temporary mats on the surface.	There is no desert pavement within or adjacent to the Pomerado Substation; therefore, this mitigation measure is not applicable.
G-2a: Protect desert pavement.	Submit a plan to identify and protect desert pavement 60 days prior to construction	A plan for identification and avoidance or protection of sensitive desert pavement shall be prepared and submitted to the CPUC and BLM for review and approval at least 60 days prior to start of construction.	There is no desert pavement within or adjacent to the Pomerado Substation; therefore, this mitigation measure is not applicable.
G-3a: Conduct geotechnical studies for soils to assess characteristics and aid in appropriate foundation design.	Submit design-level geotechnical studies 60 day prior to final project design	The design-level geotechnical studies to be performed by the Applicant shall identify the presence, if any, of potentially detrimental soil chemicals, such as chlorides and sulfates. Appropriate design measures for protection of reinforcement, concrete, and metal-structural components against corrosion shall be utilized, such as use of corrosion-resistant materials and coatings, increased thickness of project components exposed to potentially corrosive conditions, and use of passive and/or active cathodic protection systems. The geotechnical studies shall also 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 ASTM standards for field and laboratory testing. Study results and proposed solutions shall be provided to the CPUC and BLM for review and approval at least 60 days before final project design.	The design of the proposed Substation upgrades is based on historical geotechnical testing and a geotechnical engineer has determined that new geotechnical studies are not required since there are no ground disturbing activities and no new structures or foundations will be installed. Therefore, this mitigation measure is not applicable.
G-4a: Reduce effects of groundshaking.	Submit site-specific seismic analyses 60 days prior to final project design	The design-level geotechnical investigations performed by the Applicant shall include site-specific seismic analyses to evaluate the peak ground accelerations for design of project components. Based on these findings, project structure designs shall be modified/strengthened, as deemed appropriate by the project engineer, if the anticipated seismic forces (high calculated peak vertical and horizontal ground accelerations due to severe groundshaking) are found to be greater than anticipated wind load stresses on project structures. Study results and proposed design modifications shall be provided to the CPUC and BLM for review and approval at least 60 days before final project design.	The design of the proposed Substation upgrades is based on historical geotechnical testing and a geotechnical engineer has determined that new geotechnical studies are not required since there are no ground disturbing activities and no new structures or foundations will be installed. Therefore, this mitigation measure is not applicable.
G-4b: Conduct geotechnical investigations for liquefaction.	Submit liquefaction studies 60 days prior to final project design	Because seismically induced liquefaction-related ground failure has the potential to damage or destroy project components, the design-level geotechnical investigations to be performed by the Applicant shall include investigations designed to assess the potential for liquefaction to affect the approved project and all associated facilities, specifically at tower locations in areas with potential liquefaction-related impacts. Where these hazards are found to exist, appropriate engineering design and construction measures shall be incorporated into the project designs as deemed appropriate by the project engineer. Design measures that would mitigate liquefaction-related impacts could include construction of pile foundations, ground improvement of liquefiable zones, installation of flexible bus connections, 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 and BLM for review and approval at least 60 days before final project design.	The design of the proposed Substation upgrades is based on historical geotechnical testing and a geotechnical engineer has determined that new geotechnical studies are not required since there are no ground disturbing activities and no new structures or foundations will be installed. Therefore, this mitigation measure is not applicable.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
G-5a: Minimize project structures within active fault zones.	Submit a report with studies of active and potentiall active faults 60 days prior to construction	Prior to final project design SDG&E shall perform a geologic/geotechnical study to confirm the location of mapped traces of active and potentially active faults crossed by the project route. For crossings of active faults, the project design shall be planned so as not to locate towers or other project structures on the traces of active faults and in addition project components shall be placed as far as feasible outside the areas of mapped fault traces. Compliance with this measure shall be documented to the CPUC and BLM in a report submitted for review and approval at least 60 days prior to the start of construction.	The Pomerado Substation is not located on an active fault; therefore; this mitigation measure is not applicable.
G-6a: Conduct geotechnical surveys for landslides and protect against slope instability.	Submit slope stability analyses 60 days prior to construction	The design-level geotechnical surveys conducted by the Applicant shall perform slope stability analyses in areas of planned grading and excavation that cross and are immediately adjacent to hills and mountains. These surveys will acquire data that will 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 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 Proposed 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	The design of the proposed Substation upgrades is based on historical geotechnical testing and a geotechnical engineer has determined that new geotechnical studies are not required since there are no ground disturbing activities and no new structures or foundations will be installed. Slope instability is not a concern at the substation; therefore, this mitigation measure is not applicable.
G-9a: Coordinate with quarry operations.	Coordinate to determine status and plans of active quarries	SDG&E shall coordinate with operations and management personnel, and with BLM, to determine status of and plans for active quarries adjacent to or crossed by project alignments.	Pomerado Substation is not located on an active quarry; therefore, this mitigation measure is not applicable.
G-9a: Coordinate with quarry operations.	Submit plan to avoid impacts to mining operations 60 days prior to construction	SDG&E shall develop a plan to avoid or minimize interference with mining operations in conjunction with mine/quarry operators prior to construction, and submit it for review and approval to the BLM and CPUC. If mine operators are out of compliance with BLM lease requirements, SDG&E shall coordinate with all parties to resolve the situation and shall demonstrate compliance with this measure prior to the start of construction by submitting the plan to the CPUC and BLM for review at least 60 days prior to the start of construction.	Pomerado Substation is not located on an active quarry; therefore, this mitigation measure is not applicable.
G-9a: Coordinate with quarry operations.	Provide map of reroute and summary of impacts to mining areas	If active mining areas require a reroute of the existing SWPL or the Interstate 8 Alternative route, SDG&E shall provide a detailed map documenting proposed new tower and access road location(s), as well as a summary of environmental impacts that would occur (biological and cultural resources surveys must be completed).	Pomerado Substation is not located on an active quarry; therefore, this mitigation measure is not applicable.
GEO-APM-1: Existing access roads	No widening or grading of existing access roads if soil is sensitive to disturbance	No widening or upgrading of existing access roads will be undertaken where soils are very sensitive to disturbance, except repairs, widening or upgrades necessary to make roads passable.	The FEIR/EIR identified sensitive soils as "natural sand sources that supply the material for sand dune systems throughout the [ABDSP]. The project no longer impacts ABDSP and there are no sand dune systems along the project route; therefore, this mitigation measure does not apply.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
GEO-APM-2: Minimize soil disturbance	Minimize soil disturbance or return to pre-construction contours and condition	1. Vehicle and construction equipment use will be restricted to access roads and areas in the immediate vicinity of construction work sites to help reduce soil disturbance. 2. In agricultural areas, topsoil would be left in roughened condition. 3. When practical, construction activities will be avoided on wet soil to reduce the potential for soil compaction, rutting, and loss of soil productivity. 4. Disturbed areas will be returned to their pre-construction contours and allowed to re-vegetate naturally, or will be reseeded with an appropriate seed mixture if necessary. 5. Affected landowners having property directly impacted by the project will be compensated to disc or till soil upon construction completion. 6. Construction of access roads in inaccessible terrain will be reduced by using helicopters to place structures in select locations.	There are no geologic resources, agricultural soils, or mineral resources at the existing substation. The substation ground surface is paved, covered with equipment footings or crushed stone. Therefore, a new geotechnical studies are not required for construction of the proposed upgrades at the Pomerado Substation.
GEO-APM-3: Structure location and shrink/swell	Avoid placing structures in areas of high shrink/swell potential	Structure placement in areas of high shrink/swell potential will be avoided where possible.	No new structures will be installed as part of the Pomerado Substation upgrades; therefore, this mitigation measure is not applicable.
GEO-APM-4: Structure location and soil stability	Place structures in geologically stable areas	Structures will be placed in geologically stable areas, avoiding fault lines, brittle surface rock and bedrock, etc.	No new structures will be installed as part of the Pomerado Substation upgrades; therefore, this mitigation measure is not applicable.
GEO-APM-5: Erosion control	Implement construction to avoid or minimize new soil disturbance	Project construction activities shall be designed and implemented to avoid or minimize new disturbance, erosion on manufactured slopes, and off-site degradation from accelerated sedimentation.	Not applicable to pre-construction activities. During construction, there will be no ground disturbance; therefore this mitigation measure is not applicable.
GEO-APM-5: Erosion control	Maintain cut and fill slopes with erosion control and repair	Maintenance of cut and fill slopes created by project construction activities would consist primarily of erosion repair. Where re-vegetation is necessary to improve the success of erosion control, planting or seeding with native seed mix would be done on slopes.	Not applicable to pre-construction activities. During construction, there will be no ground disturbance, therefore this mitigation measure is not applicable.
G-CM-21:**Avoid/minimize new disturbance.**	Implementation of erosion control measures.	Project construction activities will be designed and implemented to avoid or minimize new disturbance, erosion on manufactured slopes, and off-site degradation from accelerated sedimentation. Where revegetation is necessary to improve the success of erosion control, planting or seeding with native seed mix, approved by the Wildlife Agencies, will be done on slopes. In addition to the measures above, the following erosion control procedures will be implemented: • Vehicle and construction equipment use will be restricted to access roads and areas in the immediate vicinity of construction work sites to help reduce soil disturbance. • In agricultural areas, topsoil will be left in roughened condition. • When practical, construction activities will be avoided on wet soil to reduce the potential for soil compaction, rutting, and loss of soil productivity. • Disturbed areas will be returned to their pre-construction contours and allowed to revegetate naturally, or will be reseeded with an appropriate seed mixture if necessary. Construction of access roads in inaccessible terrain will be reduced by using helicopters to place structures in select locations.	See GEO-APM-5

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
GEO-APM-6: Surface restoration	Perform surface restoration for erosion control and re-vegetation	In areas where ground disturbance is substantial or where re-contouring is required (e.g., marshaling yards, tower sites, spur roads from existing access roads), surface restoration will occur as necessary for erosion control and re-vegetation. The method of restoration will normally consist of returning disturbed areas back to their original contour, reseeding (if required), installing cross drains for erosion control, placing water bars in the road, and filling ditches for erosion control. Potential for erosion will be minimized on access roads and other locations primarily with water bars. The water bars will be constructed using mounds of soil shaped to direct the flow of runoff and prevent erosion. Soil spoils created during ground disturbance or re-contouring shall be disposed of only on previously disturbed areas, or used immediately to fill eroded areas. Cleared vegetation can be hauled off-site to a permitted disposal location, or may be chipped or shredded to an appropriate size and spread in disturbed areas of the ROW with the approval of the biological monitor. To limit impact to existing vegetation, appropriately sized equipment (e.g., bulldozers, scrapers, backhoes, bucket-loaders, etc.) will be used during all ground disturbance and re-contouring activities.	This mitigation measure is not applicable to construction activities occurring at the Substation. During construction, no surface restoration is necessary because there are not vegetated or previously undisturbed areas at the substation that could be impacted.
G-CM-22:**Surface restoration after disturbance.**	Restoration where ground disturbance is substantial or where recontouring is required.	In areas where ground disturbance is substantial or where re-contouring is required (e.g., marshalling yards, tower sites, spur roads from existing access roads) surface restoration will occur as necessary for erosion control and revegetation. The method of restoration will normally consist of returning disturbed areas back to their original contour, reseeding (if required), installing cross drains for erosion control, placing water bars in the road, and filling ditches for erosion control. Potential for erosion will be minimized on access roads and other locations primarily with water bars. The water bars will be constructed using mounds of soil shaped to direct the flow of runoff and prevent erosion. Soil spoils created during ground disturbance or recontouring will be disposed of only on previously disturbed areas, or used immediately to fill eroded areas. Cleared vegetation can be hauled offsite to a permitted disposal location, or may be chipped or shredded to an appropriate size and spread in disturbed areas of the ROW with the approval of the biological monitor.	See GEO-APM-6
G-CM-23:**Equipment size.**	Use appropriately sized equipment.	To limit impact to existing vegetation, appropriately sized equipment (e.g., bulldozers, scrapers, backhoes, bucket loaders, etc.) will be used during all ground disturbance and re-contouring activities.	No vegetation clearing will occur at the Pomerado Substation; therefore, this mitigation measure is not applicable.
GEO-APM-8: Avoid risk of landslide damage	Remove or stabilize boulders uphill of structures	During construction, SDG&E would remove or stabilize boulders uphill of structures that pose potentially high risk of landslide damage to those structures and would position structures to span over potential landslide areas to the greatest extent feasible.	There are no boulders or hills within the Pomerado Substation, therefore this mitigation measure does not apply.
GEO-APM-8: Avoid risk of landslide damage	Position structures to span over potential landslide areas	During construction, SDG&E would remove or stabilize boulders uphill of structures that pose potentially high risk of landslide damage to those structures and would position structures to span over potential landslide areas to the greatest extent feasible.	There are no boulders or hills within the Pomerado Substation, therefore this mitigation measure does not apply.
SOCIOECONOMICS			

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
S-2a: Notify public of utility service interruption.	Provide copies of posted public notices of planned outages	Prior to construction in which a utility service interruption is known to be unavoidable, SDG&E shall notify members of the public affected by the planned outage by mail of the impending interruption, and shall post flyers informing the public of the service interruption in neighborhoods affected by the planned outage. Copies of notices and dates of public notification shall be provided to the CPUC and BLM.	Pomerado Substation will not have planned interruption of services; therefore, this mitigation measure is not applicable.
S-2b: Protect underground utilities.	Submit documentation prior to construction of the underground transmission line	Prior to construction of the underground transmission line, SDG&E shall submit to the CPUC and BLM written documentation, including evidence of review by the appropriate jurisdictions, including the following: • Construction plans designed to protect existing utilities and showing the dimensions and location of the finalized alignment • Records that the Applicant provided the plans to affected jurisdiction for review, revision and final approval • Evidence that the project meets all necessary local requirements • Evidence of compliance with design standards • Copies of any necessary permits, agreements, or conditions of approval • Records of any discretionary decisions made by the appropriate agencies.	This mitigation measure applies to underground construction; therefore, it is not applicable to Pomerado Substation.
S-3a: Recycle construction waste.	Provide documentation to show amount of waste recycled	To comply with the Integrated Waste Management Act of 1989, during construction SDG&E and/or its construction contractor shall recycle a minimum of 50 percent of waste generated during construction activities. In unincorporated San Diego County, to comply with the construction and demolition debris ordinance, SDG&E and/or its construction contractor shall recycle a minimum of 90 percent of inerts and 70 percent of all other materials, and submit all applicable plans and documentation. Following the completion of construction activities, SDG&E shall provide the CPUC and BLM with documentation from the recycling and landfill facilities used to show that the amount of waste recycled was 50 percent or more in Imperial Valley and incorporated San Diego County, and 90 percent of inerts and 70 percent of all other materials in unincorporated San Diego County.	This mitigation measure will be fulfilled during and post construction; therefore, it is not a pre-construction requirement.
S-3b: Use reclaimed water.	Coordinate with water districts	To the extent feasible, SDG&E shall coordinate with local water districts in advance in order to efficiently obtain reclaimed or potable water for delivery to the construction sites and to meet any restrictions imposed by them.	Water usage at the Pomerado Substation will be minimal totaling approximately 500 gallons. Water will be used mainly for dust control. Due to the small amount of water needed for work at the site, it is not practical to use reclaimed water for this portion of the project. Accordingly, water will be provided by municipal sources either by an existing water spigot or irrigation system on site or brought on site via a small water truck. The water truck would be filled from either a permitted, metered hydrant, or from a source within the contractor's yard.
S-3b: Use reclaimed water.	Provide letter 60 days prior to construction	The Applicant shall provide a letter describing the availability of reclaimed water and efforts made to obtain it for use during construction to the CPUC and BLM a minimum of 60 days prior to the start of construction.	Water usage at the Pomerado Substation will be minimal totaling approximately 500 gallons. Water will be used mainly for dust control. Due to the small amount of water needed for work at the site, it is not practical to use reclaimed water for this portion of the project. Accordingly, water will be provided by municipal sources either by an existing water spigot or irrigation system on site or brought on site via a small water truck. The water truck would be filled from either a permitted, metered hydrant, or from a source within the contractor's yard.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
PSU-APM-1: Coordination with utility providers	Coordinate with utility providers	SDG&E has and will continue to coordinate with all utility providers with facilities located within or adjacent to the Proposed Project. In the event of a conflict, the project will be aligned vertically and/or horizontally as appropriate to avoid other utilities and provide adequate operational and safety buffering. Alternately, the other existing facilities may be relocated. Long-term operations and maintenance of the project will be negotiated through easement, purchased right-of-way, franchise agreement, or joint use agreement.	There are no affected third party utilities that will be affected by the project; therefore, this mitigation measure is not applicable.
PSU-APM-2: Underground Service Alert	Notify USA 48 hours prior to earth-disturbing activities	Underground Service Alert would be notified a minimum of 48 hours in advance of earth-disturbing activities in order to identify any buried utility lines.	There are no buried utilities at the substation that would require an Underground Service Alert; therefore, this mitigation measure is not applicable.
PSU-APM-3: Coordination with emergency services	Minimize disruption to response times and access for emergency and police services	SDG&E will coordinate construction schedules, lane closures, and other activities with installation of the project with emergency and police services to ensure that disruption to response times and access is minimized.	There will not be lane closures or other activities associated with construction at the Substation that will interfere with emergency and police service response times or access (if lane closures do need to occur, documentation of prior coordination with emergency service providers shall be submitted to the CPUC).
FIRE & FUELS MANAGEMENT			
F-1a: Develop and Implement a Construction Fire Prevention Plan.	Submit draft Construction Fire Prevention Plan 90 days prior to construction	SDG&E shall develop a multi-agency Construction Fire Prevention Plan for the SRPL and monitor construction activities to ensure implementation and effectiveness of the plan. Plan reviewers shall include: CPUC, CAL FIRE, San Diego and Imperial Counties, BLM, CNF, and City fire agencies. SDG&E shall provide a draft copy of this Plan to each listed agency at least 90 days before the start of any construction activities. Comments on the Plan shall be provided by SDG&E to all other participants. SDG&E shall resolve each comment in consultation with CAL FIRE.	A Construction Fire Plan, signed by the CALFire Chief, was approved by the CPUC on January 20, 2010.
F-1a: Develop and Implement a Construction Fire Prevention Plan.	Receive approval of final Plan 30 days prior to construction	The final Plan shall be approved by CAL FIRE at least 30 days prior to the initiation of construction activities.	A Construction Fire Plan, signed by the CALFire Chief, was approved by the CPUC on January 20, 2010.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
F-1a: Develop and Implement a Construction Fire Prevention Plan.	Implement Fire Plan during construction and maintenance	SDG&E shall fully implement the Plan during all construction and maintenance activities. All construction work on the SRPL shall follow the Construction Fire Prevention Plan guidelines and commitments, and Plan contents are to be incorporated into the standard construction contracting agreements for the construction of the SRPL. Primary Plan implementation responsibility shall remain with SDG&E. At a minimum, Plan contents shall include the requirements of Title 14 of the California Code of Regulations, Article 8 #918 "Fire Protection" (Refer to Section D.15.3), all components of the Sempra Utilities Wildland Fire Prevention and Fire Safety Guide (2007) in Appendix 3D, and the elements listed below: • During the construction phase of the project, 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. • Fire Suppression Resource Inventory - In addition to CCR Title 14, 918.1(a), (b), and (c), SDG&E shall update in writing the 24 hour contact information and onsite fire suppression equipment, tools, and personnel list on quarterly basis and provide it to the CPUC, BLM, and to State and federal fire agencies. • During Red Flag Warning events, as issued daily by the National Weather Service in SRAs and Local Responsibility Areas (LRA), and when the USFS. Project Activity Level (PAL) is Very High on CNF (as appropriate), all construction and maintenance activities shall cease. Exception for transmission line testing: A transmission line may be tested, one time only, if the loss of another transmission facility could lead to system instability or cascading outages. Utility and contractor personnel shall be informed of changes to the	This mitigation measure will be fulfilled during construction; therefore, it is not applicable as a pre-construction requirement.
F-1b: Amend and implement Sempra Utilities Wildland Fire Prevention and Safety Guide (2007).	Update the Amended Plan every five years	The draft SDG&E Plan and final Sempra Utilities Wildland Fire Prevention and Fire Safety Guide (2007) are presented in Appendix 3D. The Amended Plan shall, at a minimum, include all of the provisions of the Final Plan and the Construction Fire Plan (per Mitigation Measure F-1a). The plan shall be revisited and updated once every five years to incorporate new regulations, practices, technologies, and fire science research.	This mitigation measure will be fulfilled post construction; therefore, it is not applicable as a pre-construction requirement.
F-1b: Amend and implement Sempra Utilities Wildland Fire Prevention and Safety Guide (2007).	Submit the Plan 90 days prior to energization	SDG&E shall submit the Plan for review and comment by the following agencies at least 90 days prior to energizing the Proposed Project: CPUC, BLM, U.S. Forest Service, and ABDSP, and shall submit the Plan (with agency comments incorporated) for review and approval by Cal Fire at least 90 days prior to energizing the Proposed Project	This mitigation measure will be fulfilled pre-energization; therefore, it is not applicable as a pre-construction requirement.
F-1c: Ensure coordination for emergency fire suppression.	Do not obstruct firefighting equipment or crews	SDG&E shall ensure that personnel, construction equipment, and aerial operations do not create obstructions to firefighting equipment or crews.	Upgrade activities will be limited within the Pomerado Substation fence-line and will not obstruct firefighting equipment or crews or emergency fire suppression efforts.
F-1c: Ensure coordination for emergency fire suppression.	Coordinate fire suppression activities and unobstruct access roads at all times	The following provisions shall be defined based on consultation with fire agencies. Onsite SDG&E and contracted personnel shall coordinate fire suppression activities through the active Fire Incident Commander, and emergency ingress and egress to construction-related access roads shall remain unobstructed at all times.	Upgrade activities will be limited within the Pomerado Substation fence-line and will not obstruct firefighting equipment or crews or emergency fire suppression efforts.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
F-1c: Ensure coordination for emergency fire suppression.	Cease construction in work areas if fire within 1,000 feet	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 right-of-way (ROW), construction laydown areas, pull sites, access roads, parking pads, and any other sites adjacent to the ROW where personnel are active or where equipment is in use or stored.	Upgrade activities will be limited within the Pomerado Substation fence-line and will not obstruct firefighting equipment or crews or emergency fire suppression efforts.
F-1c: Ensure coordination for emergency fire suppression.	Contact dispatch centers 2 days prior to helicopter use	SDG&E shall contact CAL FIRE and CNF dispatch two days prior to helicopter use and shall provide dispatch centers with radio frequencies being used by the aircraft, aircraft identifiers, the number of helicopters that will be used while working on or near SRA and CNF lands at any given time, and the flight pattern of helicopters to be used. Should a wildfire occur within one (1) mile of the work area, upon contact from the CAL FIRE Incident Commander and/or Forest Aviation Officer, helicopters in use by SDG&E shall immediately cease construction activities and not restart aerial operations until authorized by the appropriate fire agency.	Helicopter construction will not be utilized at Pomerado Substation; therefore, this mitigation measure is not applicable.
F-1d: Remove hazards from the work area.	Clear and spread onsite dead and decaying vegetation prior to construction and maintenance	The Applicant shall clear dead and decaying vegetation from the work area prior to starting construction and/or maintenance work. The work area includes only those areas where personnel are active or where equipment is in use or stored, and may include portions of the transmission right-of-way (ROW), construction laydown areas, pull sites, access roads, parking pads, and any other sites adjacent to the ROW where personnel are active or where equipment is in use or stored. Cleared dead and decaying vegetation shall either be removed or chipped and spread onsite in piles no higher than six (6) inches.	There is no vegetation onsite; therefore, this mitigation measure is not applicable.
F-1e: Contribute to defensible space grants fund.	Contribute an annual sum to be distributed as homeowner grants	SDG&E shall contribute an annual sum to a fund that shall be distributed as homeowner grants for the creation of defensible space around homes, to promote compliance with PRC 4291, and to facilitate firefighting efforts and reduce structure damage from wildfires potentially ignited by the transmission line. The dollar value of the contribution is $2000 (2008USD) per home determined to be affected through Fire Behavior Model analysis (Table D.15-25). Grants from the fund shall be distributed to those homeowners at highest risk of sustaining structure damage from an ignition-related to the transmission line, as demonstrated by the Fire Behavior Trend Model results. Grants may alternatively be used toward retrofitting rooftops with fire-proof materials, fire shutters, double pane windows, cave boxing, removal of attic vents and/or installation of alternatives, automatic or remotely-operated water sprinklers and automatic or remotely-operated generator-supported water systems, and removal or replacement of wood fencing and decks with fire-resistant materials, at the discretion of the homeowner and under advisement by the agencies. The mechanism for grants distribution shall be determined through agency negotiations and detailed in the Memorandum of Understanding (Mitigation Measure F-	This mitigation measure will be fulfilled post construction; therefore, it is not applicable as a pre-construction requirement.
F-2a: Establish and maintain adequate line clearances.	Establish adequate conductor clearances prior to energization	The Applicant shall establish adequate conductor clearances prior to energizing the project by removing all vegetation from within 15 radial feet of new and relocated overhead 69 kV, 230 kV, and 500 kV 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, except where the transmission line spans a canyon. 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 six (6) inches.	There is no vegetation onsite; therefore, this mitigation measure is not applicable.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
F-2a: Establish and maintain adequate line clearances.	Maintain adequate conductor clearances for life of project; perform inspections each spring and submit survey results prior to June 1st each year	During the life of the project, the Applicant shall maintain adequate conductor clearances by inspecting the growth of vegetation along the entire length of the overhead transmission line at least once each spring and documenting the survey and results in a report submitted to the CPUC before June 1 of each year. 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.	This mitigation measure applies to transmission line routes therefore, it is not applicable as a pre-construction requirement.
F-2b: Install existing conductors on steel poles.	Relocate 69 kV lines onto non-specular steel poles using vertical conductor construction	Where construction of the Proposed Project or an alternative would result in the relocation of existing 69 kV transmission lines, these lines shall be relocated onto non-specular steel poles using vertical conductor construction. Also, all existing 69 kV or distribution lines with poles located within 100 feet of the Proposed Project or alternative shall be reconstructed so the existing conductors are on non-specular steel poles using vertical conductor construction to eliminate pole combustion hazard potential, increase wind loading capacity, and reduce mid-line slap ignition potential. Steel poles shall be finished to give the appearance of wood poles. This measure shall not apply to conductors that would be underbuilt on steel poles or lattice towers or installed underground. The vertical conductor construction requirement shall not apply to isolated towers that would be adjacent to existing structures with horizontal conductor construction, and shall apply to sets of four or more sequential towers.	There will be no relocation of existing 69 kV transmission lines at Pomerado Substation; therefore, this mitigation measure is not applicable.
F-2c: Perform climbing inspections.	Perform climbing inspections and submit inspection logs annually	The Applicant shall perform climbing inspections on 10 percent of project structures annually, such that every project structure has been climbed and inspected at the end of a 10-year period, for the life of the project. In addition, the Applicant shall keep a detailed inspection log of climbing inspections, and any potential structural weaknesses or imminent component failures shall be acted upon immediately. The inspection log shall be submitted to CPUC for review on an annual basis.	No new structures will be installed as part of the Pomerado Substation upgrades; therefore, this mitigation measure is not applicable.
F-3a: Contribute to Powerline Firefighting Mitigation Fund.	Contribute annually to Powerline Firefighting Mitigation Fund	The Applicant shall contribute an annual sum to local, State, and federal fire protection districts in the project vicinity through the mechanism of a new Powerline Firefighting Mitigation Fund, which shall be organized and carried out by SDG&E, and shall be subject to the oversight of the CPUC for the life of the Fund. Funding shall be used toward fire prevention measures and protection equipment and services, as appropriate to each jurisdiction. An increase in funding for fire prevention and suppression services and equipment will increase the probability of a fire being successfully contained, especially during normal weather conditions, and will therefore partially mitigate the significant barrier the transmission line poses to firefighting operations. The annual sum shall be based on an equivalent fuelbreak mitigation (presented as Mitigation Measure F-3a in the Draft EIR/EIS), which is an alternative means of partially mitigating the significant effect that the presence of the transmission line on firefighting operations, but which would be jurisdictionally infeasible. This shall be $1,000 per acre for the first year plus $250 per acre for each subsequent year for the life of the project (in 2008 United	On-going efforts with CAL FIRE and local fire agencies are in progress to establish and provide oversight to the Powerline Firefighting Mitigation Fund. This is required to be completed post-construction.

Mitigation Measures	*Task Title*	*Task Text*	*Comments*
F-3b: Prepare and implement a Multi-agency Fire Prevention MOU.	Create and implement a Multi-agency Fire Prevention MOU	A Memorandum of Understanding (MOU) for the SRPL shall be created and implemented between SDG&E and the CAL FIRE San Diego Unit, Cleveland National Forest, and other agencies as appropriate using the existing Southwest Powerlink MOU as a template. The MOU shall be adopted prior to energizing the new transmission line. The purpose of this Multi-agency Fire Prevention MOU is to efficiently coordinate all aspects of agency and utility fire prevention plans and practices. The MOU shall integrate the following components of the utility fire plan with existing agency fire plans: fire prevention, firefighter safety, emergency communication, firefighter training of both ground and aerial utility personnel, and others as appropriate. Financial commitments of each participating organization to pre-fire planning, preparedness, and prevention programs shall be stipulated in the MOU. The MOU shall stipulate the mechanism for defensible space grants distribution (Mitigation Measure F-1e). This MOU shall be periodically reviewed and updated at a minimum of once every five years to accommodate changes in regulations and environmental conditions. A key element of the MOU shall be ensuring immediate transmission line de-energizing during fire	SDG&E has prepared a draft Fire Prevention MOU. Draft comments from CAL FIRE and local fire agencies have been incorporated and on-going efforts are in progress to refine the draft MOU. It will be implemented prior to energization.
F-3b: Prepare and implement a Multi-agency Fire Prevention MOU.	Adopt a community education and outreach program	A community education and outreach program on the fire prevention plans and practices implemented by the MOU shall be adopted.	SDG&E has prepared a draft Fire Prevention MOU. Draft comments from CAL FIRE and local fire agencies have been incorporated and on-going efforts are in progress to refine the draft MOU. It will be implemented prior to energization.
G-CM-41:Disposal of excess fill, brush or other debris.	Do not dispose of excess fill, brush, or debris within waters of the U.S.	The applicant will ensure that the following conditions are implemented during project construction: • Disposal or temporary placement of excess fill, brush or other debris will not be allowed in waters of the United States or their banks;	There are no waters of the U.S. within Pomerado Substation; therefore, this mitigation measure is not applicable. During construction, waste will be properly disposed of.
G-CM-41:Disposal of excess fill, brush or other debris.	Do not dispose of fuel, oil, coolant, and other wastes within or near waiters of the U.S. Do not fuel vehicles near waters of the U.S.	All equipment maintenance, staging, and dispensing of fuel, oil, coolant, or any other such activities will occur in designated areas outside of waters of the United States within the fenced project impact limits. These designated areas will be located in previously compacted and disturbed areas to the maximum extent practicable in such a manner as to prevent any runoff from entering waters of the United States, and will be shown on the construction plans. Fueling of equipment will take place within existing paved areas or designated fueling areas designed to contain fuel drips greater than 30.5 m (100 ft) from waters of the United States. Contractor equipment will be checked for leaks prior to operation and repaired as necessary. “No-fueling zones” will be designated on construction plans and/or within the stormwater pollution prevention plan.	There are no waters of the U.S. within Pomerado Substation; therefore, this mitigation measure is not applicable. During construction, waste will be properly disposed of.

SUNRISE POWERLINK℠

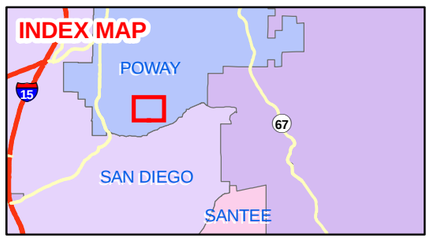
Legend

Pomerado Substation Areas

- Existing Substation Components
- Substation Fenceline / Work Area Within Substation

0 200 400

SCALE IN FEET



Appendix B
SITE LOCATION MAP
POMERADO SUBSTATION

05-13-10

SDGE
A Sempra Energy utility

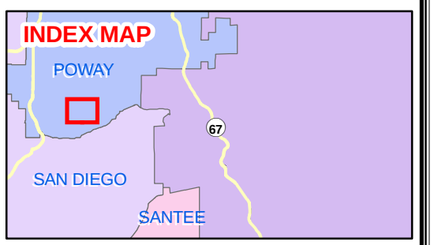
SUNRISE POWERLINK℠

Legend

- Substation Fenceline
- Buffer

0 400 800

SCALE IN FEET



Appendix E
SITE PLAN WITH NOISE RECEPTOR BUFFERS (200', 300')
POMERADO SUBSTATION
DRAFT

SDGE
A Sempra Energy utility

05-10-10