United States Department of the Interior

BUREAU OF LAND MANAGEMENT

RECORD OF DECISION
for the
Sunrise Powerlink Transmission Project
and
Associated Amendment to the
Eastern San Diego County Resource Management Plan

CACA 47658

Imperial and San Diego Counties, California

Lead Agency:

Department of the Interior
Bureau of Land Management
El Centro Field Office

Cooperating Agencies:

United States Forest Service
Cleveland National Forest

United States Department of Defense
Marine Corps Air Station Miramar

United States Bureau of Indian Affairs

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EXECUTIVE SUMMARY

This document constitutes the Record of Decision (ROD) of the Department of Interior (DOI) and Bureau of Land Management (BLM) for the Sunrise Powerlink Transmission Project and Associated Amendment to the Eastern San Diego County Resource Management Plan (RMP). This ROD includes both plan amendment and right-of-way grant decisions. Amendment of the Eastern San Diego County RMP is required to allow for a one-time exemption of a single utility crossing of the Selected Alternative across public lands. This ROD applies only to BLM-administered lands. Each of the cooperating federal agencies is responsible for issuing their own decisions and applicable authorizations.

After extensive environmental analysis, consideration of public comments, and application of pertinent federal laws and policies, it is the decision of the BLM to amend the Eastern San Diego RMP to allow for a single utility crossing in the McCain Valley. It is the decision of the DOI to authorize a right-of-way grant and temporary use permit (TUP) for the construction, operation, and maintenance, and termination of a transmission line on an alignment identified as the BLM Agency Preferred Alternative in the Final Environmental Impact Report/Environmental Impact Statement (EIR/EIS) published in the Federal Register on October 17, 2008. The Final EIR/EIS is available online at: http://www.cpuc.ca.gov/Environment/info/aspen/sunrise/sunrise.htm.

The Final EIR/EIS analyzed the environmental impacts of the Sunrise Powerlink Transmission Project along a route proposed by SDG&E, the Proposed Action/Project, as well as a number of alternative routes. This decision approves the Sunrise Powerlink Transmission Project's Final Environmentally Superior Southern (SWPL) Route Alternative as analyzed in the Final EIR/EIS as BLM's Agency Preferred Alternative, which is also referred to as the Selected Alternative in this ROD. For the first 36 miles of the Selected Alternative route, the 500 kV transmission line will be built on BLM lands adjacent to the existing Southwest Powerlink 500 kV line. The Selected Alternative crosses approximately 49 miles of BLM land, approximately 19 miles of Forest Service land, approximately two miles of Department of Defense land, and approximately 0.4 miles of state land. The remainder of the line would cross lands in various ownership including private and local agencies.

Project Objectives, Purpose and Need. SDG&E has stated that it developed the Sunrise Powerlink Transmission Project for three major objectives: (1) to bring renewable energy resources to San Diego County from Imperial County by providing access to remote areas with the potential for significant development of renewable energy sources; (2) to improve electric reliability within the San Diego area by providing additional transmission during peak loading and for the region's growing economy; (3) and to reduce congestion and power supply costs of delivering electricity to ratepayers.

Plan Amendment and Environmental Review Process: BLM must comply with the planning provisions of section 202 of the Federal Land Policy and Management Act (FLPMA) as well as the implementing regulations for planning found in 43 Code of Federal Regulations (CFR) subparts 1601 and 1610 in considering amendments to land use plans. Planning requirements are integrated with the requirements for environmental review under the National Environmental Policy Act (NEPA). BLM served as the federal lead agency under NEPA for consideration of the

Sunrise Powerlink Transmission Project and the Eastern San Diego County RMP amendment. The Proposed Action/Project and several alternatives also included a proposed amendment to the California Desert Conservation Area (CDCA) Plan, because those route alignments would deviate from BLM-designated utility corridors in several areas. However, the Final Environmentally Superior Southern Route Alternative, which is the Selected Alternative, would remain within BLM CDCA-designated utility corridors, and thus, a CDCA Plan amendment is not required for this ROD.

The transmission line project and the plan amendment were analyzed in a jointly prepared EIR/EIS in compliance with California Environmental Quality Act (CEQA) and NEPA requirements, respectively. The California Public Utilities Commission (CPUC) served as the lead agency pursuant to CEQA. While BLM acted as the lead federal agency responsible for compliance with the requirements of NEPA, the Cleveland National Forest (CNF), Department of Defense Marine Corps Air Station (MCAS) Miramar, and Bureau of Indian Affairs (BIA) were cooperating federal agencies and provided information, analysis, and comment. The NEPA process included public scoping, a Draft EIR/EIS, a Recirculated Draft EIR/Supplemental Draft EIS (RDEIR/SDEIS) and a Final EIR/EIS, which are hereby incorporated by reference into this ROD. The proposed plan amendment was reviewed by the Governor's Office of Planning and Research following the issuance of the Final EIR/EIS and proposed plan amendment, and found to be consistent with state and local plans.

Public Involvement. Public review and comment on the Sunrise Powerlink Transmission Project were extensive. Public scoping, including 15 public meetings and numerous agency meetings, initiated the public review process. The combined comment periods on the Draft EIR/EIS, RDEIR/SDEIS, and BLM's proposed plan amendments occurred over five and a half months. BLM and CPUC held 14 public meetings and received approximately 3,900 pages of comments on two draft documents. All public comments received were carefully analyzed and agency responses are included in the Final EIR/EIS. As described further in this document, 20 protests to BLM's proposed plan amendments were considered and resolved by the Director of the BLM.

Consultation with Other Agencies: In addition to Forest Service, BIA, and MCAS Miramar, which all served as formal EIR/EIS cooperators, BLM and CPUC also coordinated and consulted with the US Fish and Wildlife Service, California Department of Fish and Game, California Department of Parks and Recreation, California Department of Transportation, Imperial and San Diego counties, Department of Defense El Centro Naval Air Station, City of San Diego, San Diego Regional Energy Office, California Department of Forestry and Fire Protection, Vista Irrigation District, Imperial Irrigation District and potentially affected Native American Tribes.

Decision Rationale: As described further in this ROD, the decisions are to: (1) amend the Eastern San Diego County RMP to allow for a one-time exemption, and (2) issue two right-of-way grants (one for temporary use) to SDG&E for the construction, operation, maintenance, and termination of the transmission line, ancillary facilities, and access roads across public lands. These decisions reflect careful consideration and resolution of the issues by BLM and the Department of the Interior (DOI), and were thoroughly analyzed in the Sunrise Powerlink Transmission Project environmental review process.

These decisions fulfill legal requirements for managing public lands. Granting the rights-of-way to SDG&E contributes to the public interest in reducing energy costs and providing a reliable electricity supply that allows for the importation of renewable power from the Imperial Valley to meet State and Federal renewable energy goals. The attached right-of-way grants and mitigation measures ensure that authorization of the Sunrise Powerlink Transmission Project will protect environmental resources and comply with environmental standards. These decisions reflect the careful balancing of the many competing public interests in managing the public lands for public benefit. These decisions are based on a comprehensive environmental analysis and full public involvement. BLM and CPUC have engaged highly qualified technical experts to analyze the environmental effects of the Sunrise Powerlink Transmission Project. Members of the public have contributed to the analysis and consideration of the many environmental issues arising out of the environmental review process. BLM, CPUC, DOI and other consulted agencies have used their expertise and existing technology to address the important issues of environmental resource protection. BLM and DOI have determined that the measures contained in the Final EIR/EIS, the programmatic agreement regarding the management of cultural resources, and the biological opinion significantly minimize and/or mitigate environmental damage and protect resources.

I. DECISION

This ROD for the Sunrise Powerlink Transmission Project and Associated Amendment to the Eastern San Diego County RMP approves the construction, operation and maintenance of the proposed Sunrise Powerlink Transmission Project on public lands in Imperial and San Diego Counties, as analyzed in the Sunrise Powerlink Transmission Project Final EIR/EIS and Proposed Land Use Amendment, issued October 17, 2008 in the EPA Federal Register. This approval will take the form of a BLM right-of-way grant, under 43 CFR, Part 2800 regulations.

The rights-of-way will grant SDG&E the right to use the described public lands to construct, operate, maintain and terminate a 500 kV electrical transmission line from Imperial Valley Substation to a newly-constructed 500/230 kV substation that was identified in the Final EIR/EIS (herein called Modified Route D Alternative Substation), a distance of approximately 92.53 miles. The right-of-way will also grant SDG&E the right to use the described public lands to construct, operate, maintain and terminate a 230 kV electrical transmission line from the Modified Route D Alternative Substation to Sycamore Canyon Substation, located in San Diego. This decision is conditioned, however, upon implementation of mitigation measures and monitoring programs as identified in the Final EIR/EIS.

This decision approves the Sunrise Powerlink Transmission Project's Final Environmentally Superior Southern Route Alternative as analyzed in the Final EIR/EIS, which is also referred to as the Selected Alternative in this ROD. For the first 36 miles of the Selected Alternative route, the 500 kV transmission line will be built on BLM lands adjacent to the existing Southwest Powerlink 500 kV line. The Selected Alternative crosses approximately 49 miles of BLM land, 19 miles of Forest Service land, two miles of Department of Defense land, and 0.4 miles of state land. The remainder of the line would cross lands in various ownerships, including private and local agencies.

The Selected Alternative is a combination of the following alternatives and route segment options, as shown in Figure 1. The decisions contained herein apply only to the BLM-administered public lands within the Selected Alternative.

- Interstate 8 Alternative between the Imperial Valley Substation and MP I8-40 (where the BCD Alternative diverges), including the following reroutes[1]:
  - Southwest Powerlink (SWPL) Archaeological Site Reroute; and
  - Jacumba SWPL Breakaway Point Revision.
- BCD Alternative and BCD South Option Revisions. Because it does not appear likely that easements can be secured by SDG&E for the Interstate 8 Alternative between McCain Valley Road and the eastern end of the Modified Route D Alternative across Tribal lands, the BCD Alternative and BCD South Option Revisions is approved. With implementation of Mitigation Measure WR-2a (Develop a reroute for the BCD Alternative Revision to reduce effects on recreation) the route would be relocated south of JAM property on Forest Service land.
- Modified Route D Alternative, including the Modified Route D Alternative Substation, as modified to incorporate the following SDG&E reroutes:
  - Cameron Reroute;
  - Pacific Crest Trail (PCT) Option A, which follows the existing SDG&E 69 kV line, is approved. BLM worked with the Forest Service to develop additional mitigation (WR-2c, PCT Route Impact Mitigation) for the PCT crossing that requires compensation to the Forest Service for the final impacts to the PCT identified by the route revision plan included in Mitigation Measure WR-2b (Evaluate and Implement PCT Route Revision). The full text of Mitigation Measures WR-2b (Evaluate and Implement PCT Route Revision) and WR-2c (PCT Route Impact Mitigation) is included in Appendix A of this ROD.
  - Western Modified Route D Alternative (MRDA) Reroute.
- Star Valley Option Revision was not found to be environmentally superior in the Final EIR/EIS if the eastern end of underground segment in Alpine Boulevard is deemed feasible. Since publication of the Final EIR/EIS, the Forest Service has selected the Star Valley Option Revision as its preferred route in this area, because use of the original Modified Route D Alternative to the Interstate 8 Alternative is located in a highly visible area and would require a more extensive road system. In addition, implementation of Mitigation Measure L-2b (Revise project elements to minimize land use conflicts) would minimize impacts of the route to landowners. As a result, the Forest Service has stated that the portion of the Modified Route D Alternative on Forest Service lands is not feasible as designed. In addition, in accordance with Mitigation Measure L-2b of the Final EIR/EIS, SDG&E has stated that they have a preliminary agreement with a landowner that would allow for the northwestern end of the

[1] Segments of several transmission line route alternatives and the Proposed Action/Project were modified following publication of the Draft EIR/EIS in order to reduce or avoid certain impacts. These reroutes and revisions were included in the Recirculated Draft EIR/Supplemental Draft EIS and Final EIR/EIS and many were incorporated into the Final Environmentally Preferred/Superior Southern Route Alternative, which is the Selected Alternative.

Star Valley Option route to be constructed on private land. This would result in the reduction of land use conflicts to other abutting private lands on Star Valley Road.

- Interstate 8 Alternative installed underground in Alpine Boulevard from the end of the Star Valley Option Revision to where it joins the Chocolate Canyon Option Revision.
- Chocolate Canyon Option Revision.
- Interstate 8 Alternative from the end of the Chocolate Canyon Option Revision to where it joins the Proposed Action/Project route at MP 130, incorporating the following SDG&E reroutes:
  - High Meadows Reroute; and
  - Highway 67 Hansen Quarry Reroute.
- Proposed Action/Project from MP 130 to the Sycamore Canyon Substation.
- Coastal Link System Upgrades Alternative Revision, which includes:
  - Reconductoring of the existing Sycamore Canyon–Pomerado double-circuit 69 kV on existing structures;
  - Installation of a third 230/69 kV transformer at the existing Sycamore Canyon Substation;
  - Installation of a new 230/138 kV transformer at the existing Encina Substation; and
  - Reconductoring of the Sycamore Canyon–Scripps 69 kV transmission line (added as part of the Coastal Link System Upgrades Alternative Revision).
  - Reconductoring of the existing Sycamore-Elliott 69 kV transmission line (also part of the Proposed Action/Project).

One right-of-way grant will be issued for a term of 50 years with a right of renewal so long as the lands are being used for the purposes specified in the grant. Additionally, a second right-of-way will be issued for a term of two years with a right of renewal for temporary use. SDG&E may, upon concurrence of the BLM, assign the right-of-way grants to another party. Construction of the project may be phased; however, the BLM typically requires the initiation of project construction within 18 months of the issuance of a right-of-way grant. In addition, initiation of construction will be conditioned upon final BLM approval of the construction plans. This approval will take the form of an official Notice to Proceed for each phase of construction.

DECISION TO AMEND THE EASTERN SAN DIEGO COUNTY RESOURCE MANAGEMENT PLAN

After considering the full agency and public record for the Sunrise Powerlink Transmission Project and the associated amendment to the Eastern San Diego County RMP, I have determined that the plan amendment is warranted and in the public interest. The plan amendment is necessary for the issuance of two right-of-way grants (one for temporary use) to SDG&E.

In accordance with section 202 of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1712), the implementing regulations (43 CFR subparts 1601 and 1610), section 102(c) of the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.), and the implementing regulations of the Council on Environmental Quality and the Department of the Interior (40 CFR parts 1500-1508; 43 CFR. part 46), **I approve the following:**

> **An amendment to the Eastern San Diego County Resource Management Plan for an exception to the energy production and utility corridors element of the Plan, thereby allowing the issuance of two right-of-way grants (one for temporary use) to SDG&E for construction, operation, maintenance, and termination of the transmission line, ancillary facilities, and access roads on federal lands administered by the Bureau of Land Management. The approved alignment is the Final Environmentally Superior Southern Route Alternative which is shown on Figure 1 as the BCD Alternative and BCD South Option Revisions with implementation of Mitigation Measure WR-2a (Develop a reroute for the BCD Alternative Revision to reduce effects on recreation).**

Approved by:

January 20, 2009

Mike Pool, State Director
Bureau of Land Management
California State Office

Date

DECISION TO ISSUE TWO RIGHT-OF-WAY GRANTS FOR THE SUNRISE POWERLINK PROJECT

After considering the full agency and public record for the application for a right-of-way to construct, operate and maintain the Sunrise Project, I have determined that BLM shall proceed with implementation of the Sunrise Powerlink Project subject to the terms and conditions contained in this Record of Decision and attached hereto. Although BLM will not physically build and operate the Sunrise Powerlink Project, it will continue to have responsibility for overseeing its implementation on public lands and protecting public resources. BLM will continue working closely with SDG&E and other federal and state agencies involved in the Sunrise Powerlink Project, and the Counties of San Diego and Imperial, California, to ensure protection of the public interest.

In accordance with section 202 of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1712), the regulations implementing the Act's land use planning provisions (43 CFR subparts 1601 and 1610), section 102(c) of the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.) and the regulations of the Council on Environmental Quality and the Department of the Interior implementing NEPA (40 CFR parts 1500-1508, 43 CFR part 43), **I approve the following:**

> **a right-of-way grant and temporary use permit will be offered to SDG&E for construction, operation, maintenance, and termination of the transmission line, ancillary facilities, and access roads of the Sunrise Powerlink Project across public lands administered by the BLM.**

The 50-year right-of-way grant is for a 200-foot wide right-of-way for a 500 kV single-circuit transmission line, a 300-foot wide right-of-way for a 230 kV double-circuit transmission line, and ancillary facilities, including helicopter pads and access roads. A portion of the centerline of the 500 kV transmission line will be 400 feet north of the centerline of the existing San Diego Gas & Electric (SDG&E) "Southwest Powerlink" 500 kV transmission line (CA-5865, 1982). This right-of-way, subject to terms and conditions contained in the right-of-way grant and Plan of Development, will terminate in 50 years unless, prior to that time, it is relinquished, abandoned, terminated, or modified pursuant to the terms and conditions of the grant or of any applicable federal law or regulation. The grant is subject to renewal. If renewed, the right-of-way grants shall be subject to the regulations existing at the time of renewal and any other terms and conditions that the federal authorized officer deems necessary to protect the public interest.

The two-year right-of-way grant authorizes use of approximately 214.77 acres in addition to the transmission line right-of-way, and also authorizes use of other temporary use areas, such as temporary construction access roads, pull sites, fly yards and extra work areas. All temporary work areas shall be reclaimed to the satisfaction of the Authorized Office within 120 days after the completion of construction of the transmission line. This temporary use permit will terminate on December 31, 2012, unless prior thereto, it is relinquished, abandoned, terminated, or modified pursuant to the terms and conditions of this instrument or of any applicable federal law or regulation. This grant is also subject to renewal, under the same terms set out above.

The approved route, ancillary facilities, and temporary work areas are described in detail in the Final EIR/EIS, and depicted on the Facility Alignment Sheets (Appendix K) in the Plan of Development. All adopted mitigation measures listed in Appendix A of this Record of Decision shall be incorporated into the right-of-way grant as terms and conditions. SDG&E shall comply with:

- all terms and conditions set forth in the right-of-way grants;
- the Biological Opinion issued by the FWS, and
- the Programmatic Agreement regarding the management of cultural resources.

Within 30 days after the date of publication in the Federal Register of this decision, an adversely affected party has the right of appeal to the Interior Board of Land Appeals, Office of the Secretary, in accordance with the regulations at Title 43 Code of Federal Regulations, Part 4.411.

Approved by:

January 20, 2009

Mike Pool, State Director
Bureau of Land Management
California State Office

Date

II. AUTHORITY

FLPMA establishes policies and procedures for management of public lands. In section 102(a)(8), Congress declared that it is the policy of the United States that:

> *the public lands be managed in a manner that will protect the quality of scientific, scenic, historical, ecological, environmental, air and atmospheric, water resource, and archeological values; that, where appropriate, will preserve and protect certain public lands in their natural condition; that will provide food and habitat for fish and wildlife and domestic animals; and that will provide for outdoor recreation and human occupancy and use* (43 U.S.C.1701(a)(8)).

Section 202 of the FLPMA and the regulations implementing the Act's land use planning provisions (43 CFR subparts 1601 and 1610) provide a process and direction to guide the development, amendment, and revision of land use plans for the use of the public lands.

Section 102(c) of the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.) and the Council on Environmental Quality's and Department of the Interior's implementing regulations (40 CFR parts 1500-1508, 43 CFR part 46) provide for the integration of NEPA into agency planning to insure appropriate consideration of NEPA's policies and to eliminate delay.

III. REQUIRED ACTIONS

The following federal statutes require that specific actions be completed prior to issuance of a ROD and project approval:

Endangered Species Act of 1973. Under Section 7 of the Endangered Species Act, a federal agency that authorizes, funds, or carries out a project that "may affect" a listed species or its critical habitat must consult with U.S. Fish and Wildlife Service (FWS). The BLM prepared a Biological Assessment for the FWS in accordance with Section 7 of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.). FWS has issued a Biological Opinion determining that the project is not likely to jeopardize the species or result in adverse modification of critical habitat and has established mitigation measures to reduce any anticipated impacts.

National Historic Preservation Act. The basis for determining significance of cultural resources is driven by the National Historic Preservation Act (NHPA), 16 U.S.C. § 470 et seq. In particular, 16 U.S.C. § 470f (Section 106) requires federal agencies to take into account impacts upon resources listed or eligible for listing on the National Register of Historic Places (NRHP).

The Section 106 process has been completed for the selected route. Section 106 compliance is in accordance with the Programmatic Agreement (pursuant to 36 CFR 800.14(b)) executed by the BLM and the California State Historical Preservation Officer (SHPO) in December 2008. The Forest Service, MCAS Miramar, US Army Corps of Engineers, California Public Utilities Commission, San Diego Gas & Electric Company, and potentially affected Native American tribes are invited signatories and/or concurring parties.

Clean Air Act, as Amended in 1990 (42 USC Section 7606(c), Title 40 CFR Section 51, Subpart W - Determining Conformity of General Federal Actions to State or Federal Implementation Plans and Title 40 CFR Section 93, Subpart B - Determining Conformity of General Federal Actions to State or Federal Implementation Plans). The Sunrise Powerlink Transmission Project is expected to meet the requirements of the Clean Air Act. Section 176(c) of the Clean Air Act prohibits federal agencies from, among other things, issuing licenses or permits or approving any activity which does not conform to an approved State Implementation Plan. Both the San Diego and Salton Sea Air Basins are designated as non-attainment for ozone and the Salton Sea Air Basin is also designated as serious non-attainment for PM_{10}. Federal conformity regulations presume conformity with state plans where Project emissions are below applicable thresholds (the "*de minimis* thresholds"), and where no "regionally significant" emissions would occur. The applicable *de minimis* thresholds are 100 tons/year (NO_x), 100 tons/year (VOC) and 70 tons/year (PM_{10}). A regionally significant action would occur only where the direct and indirect emission of any pollutant represents 10 percent or more of a non-attainment area's emissions inventory for that pollutant.

Additionally, where, as here, the Federal action is a permit, license, or other approval for some aspect of a nonfederal undertaking, the relevant activity for conformity purposes is the part, portion, or phase of the nonfederal undertaking that requires the Federal permit, license, or approval. BLM does not have any practical control over emissions resulting from activities on non-BLM administered lands. As a result, this conformity evaluation is limited to direct and indirect emissions associated with construction activity on BLM-administered lands. Construction of the Sunrise Project is estimated to take approximately two years and is scheduled to begin in June 2010.

Construction emissions that may be associated with the future 500 kV expansion, Stirling Solar Project and the Esmeralda-San Felipe Geothermal Project on public lands, are either not currently identified or quantifiable due to the status and phasing of these potential projects and/or are not expected to overlap with construction for the preferred Environmentally Superior Southern Route. Additionally, these projects would be subject to additional environmental review under NEPA and the Clean Air Act, prior to any potential approvals.

As discussed in the Final EIR/EIS, construction of the Sunrise Powerlink Transmission Project would be a source of dust and other particulate matter. Over the course of construction, it is estimated that traffic and other activities related to construction along the Final Environmentally Superior Southern Route Alternative (the Selected Alternative) would result in the direct and indirect emission of 152.38 tons per year of PM_{10} on federal lands in the Salton Sea Air Basin non-attainment area in Imperial County that would be localized mainly at the construction site. *See* FEIS at Appendix 10. All of these emissions would be caused by construction activity on BLM-administered public lands, and exceed the PM_{10} *de minimis* threshold by 83 tons per year.

Construction of the Sunrise Powerlink Transmission Project would similarly be a source of NO_x and VOC emissions, which are precursors to ozone formation. More specifically, in the San Diego and Salton Sea Air Basins, it is estimated that construction activity along the Selected Alternative Route would result in the direct and indirect emission of 167.25 tons per year of NO_x

on BLM administered lands. *See* FEIS at Appendix 10. These emissions exceed the NO_x *de minimis* threshold by 67.25 tons per year.

BLM is requiring as a condition of this decision compliance with the attached mitigation measures to reduce air emissions. Additionally, EPA guidance permits Federal agencies to take measures to reduce emissions from the proposed action to fall below *de minimis* levels. Here, SDG&E, the Imperial County Air Pollution Control District, and the San Diego Air Pollution Control District have committed to identify appropriate emission reduction measures to be incorporated into the Project to bring the total direct and indirect emissions caused by the Project below the applicable General Conformity rule *de minimis* emission thresholds. The level of emissions reductions necessary to satisfy federal *de minimis* requirements are set forth above, and are required to be completed prior to the initiation of Project construction on BLM lands. Additionally, the levels of emissions associated with construction of the Sunrise Powerlink Transmission Project are not considered a regionally significant action. As a result, emissions from the Sunrise Powerlink Transmission Project will be below General Conformity thresholds, and no formal conformity determination is required.

Clean Water Act. The Sunrise Powerlink Transmission Project is expected to meet the requirements of the Clean Water Act (CWA). The CWA requires states to set standards to protect, maintain, and restore water quality through the regulation of point source and certain non-point source discharges to surface water. Point source discharges are regulated by the National Pollutant Discharge Elimination System (NPDES) permit process, outlined in CWA Section 402. NPDES permitting authority is delegated to, and administered by, California's nine Regional Water Quality Control Boards. California's State Water Resources Control Board regulates the NPDES storm water program. In addition, Section 404 of the CWA authorizes the U.S. Army Corps of Engineers (ACOE) to regulate the discharge of dredged or fill materials into navigable waters of the U.S., including certain wetlands and other waters of the United States. The ACOE issues individual site-specific or general (nationwide) permits for such discharges.

As discussed in the Final EIR/EIS, construction of the Sunrise Powerlink Transmission Project may result in discharges to surface water and may require the construction of new access roads through streambeds that would require filling for access purposes. These and other potential impacts will require SDG&E to obtain approvals from the ACOE and the applicable Regional Water Quality Control Boards and the State Water Resources Control Board under the CWA, including certification (or a waiver) from the State that the proposed discharge complies with water quality standards. To ensure that no discharge to navigable waters will occur, this ROD and the BLM's right-of-way grants provide that no Notice(s) to Proceed may be issued to SDG&E for the Sunrise Powerlink Transmission Project until necessary authorization(s) under the CWA are obtained.

IV. MANAGEMENT CONSIDERATIONS AND DECISION RATIONALE

This decision approves two right-of-way grants for the Sunrise Powerlink Transmission Project as the Final Environmentally Superior Southern Route Alternative (Selected Alternative) as analyzed in the Final EIR/EIS. BLM's decision to authorize these activities is based on the following rationale:

1. Under the Energy Policy Act of 2005, federal agencies are directed to encourage the development of renewable energy. By entering into a Memorandum of Understanding (MOU) in November 2008 with California Department of Fish and Game, California Energy Commission, and FWS, BLM has committed to work with state agencies to achieve California's Renewable Portfolio Standards (RPS) energy goals and greenhouse gas emission reduction standards in a manner that is both timely and in compliance with federal and state environmental laws. The purpose of the MOU is to assist with the implementation of applicable state and federal laws, regulations, and policies. The purpose is also to facilitate coordination between the agencies to develop guidelines and a comprehensive conservation strategy that would help reduce timelines for siting, development, permitting and construction of qualifying RPS projects in the Mojave and Colorado Desert regions while enhancing and maximizing environmental protections.

   The Selected Alternative is the environmentally preferred transmission alternative that would both increase take-away capacity and provide direct access to new renewable generation in the Imperial Valley region. The Selected Alternative would assist in the development of solar and other qualified RPS energy development.

2. The construction, operation, and maintenance activities associated with the Selected Alternative, either singularly or with mitigation, are in conformance with the following land use factors:

   i. BLM policy and guidance for issuing rights-of-way including BLM Manual 2801.11;

   ii. California Desert Conservation Area Plan of 1980, as amended (CDCA Plan);

   iii. BLM Eastern San Diego County Resource Management Plan, as amended;

   Construction of the Selected Alternative is consistent with BLM Visual Resource Management (VRM) guidelines described in the BLM Eastern San Diego County Resource Management Plan.[2] Other alternatives analyzed in the FEIS (including the Proposed Action/Project) conflict with the BLM VRM guidelines.

3. The Selected Alternative meets all project objectives, is technically, legally and regulatorily feasible, and avoids incompatible Land Use Zones within Cleveland National Forest. Additionally, the BLM and CPUC consulted extensively with Forest Service and SDG&E to identify route modifications within the Cleveland National

[2] Section E.2.3.2 of the Final EIR/EIS and Section 3.3.2 of the RDEIR/SDEIS conclude that the Selected Alternative along the BCD Alternative Revision would be inconsistent with the BLM VRM guidelines. However, this conclusion was based on the Draft BLM Eastern San Diego County Resource Management Plan. The final Eastern San Diego County RMP ROD, which changed the VRM classifications from Class II to Class IV, was signed on October 10, 2008 and appeared in the November 12, 2008 Federal Register (73 Fed. Reg. 66918-66919) after the Final EIR/EIS for the Sunrise Powerlink Transmission Project was completed. This Sunrise Powerlink Transmission Project ROD reflects the new VRM classifications, and therefore, the Selected Alternative is consistent with VRM guidelines.

Forest that would minimize impacts to Forest Service resources and avoid land use zones that do not allow transmission lines or new access roads. The Selected Alternative has been found to be the environmentally preferable transmission route between Imperial Substation and the San Diego load center.

4. The location of the Selected Alternative in close proximity to other proposed and existing electrical transmission lines within existing utility corridors for the majority of the route allows the BLM to most effectively manage existing and future utility usage within the corridor and to minimize conflicts with other existing and proposed utility facilities. The Modified Route D Alternative, which is included as a segment of the Selected Alternative, has also been identified as a 368 corridor by the Department of Energy's Final West-wide Corridor Programmatic EIS.[3] In addition, placement of the Sunrise Powerlink Transmission Project within or parallel to existing utility and transportation corridors minimizes surface disturbances by allowing for sharing of access and spur roads between facilities. Although several of the other alternatives analyzed in the Final EIR/EIS and the Proposed Action/Project would generally follow existing utility corridors, many would create new transmission corridors where they diverge from the existing lines.

5. The Selected Alternative does not cross ABDSP and does not impact state-designated Wilderness.

6. The shorter length and reduced ground disturbance of the Final Environmentally Superior Southern Alternative as described in Section I above, which is also the Selected Alternative (approximately 118 miles, as compared to approximately 141 miles for the Northern Environmentally Superior Alternative route), results in reduced impacts in the areas of biological resources, geology, mineral resources, and soils, air quality, public health and safety, transportation and traffic, and socioeconomics, public services and utilities.

7. The Final EIR/EIS analyzed two non-wires alternatives, the New In-Area All-Source Generation Alternative and the New In-Area Renewable Generation Alternative. These alternatives were found to be environmentally superior to all of the transmission alternatives evaluated in the Final EIR/EIS because the impacts of both non-wires alternatives would be confined to specific areas and, in the case of the New In-Area All-Source Generation Alternative, would create impacts in more developed areas. Neither alternative was selected, however, by the CPUC or the BLM because neither meets all of the project objectives. Specifically, neither alternative was found to meet the second project objective specified above, to reduce congestion and power supply costs of delivering electricity to ratepayers. Additionally, both alternatives would create significant impacts as a result of extensive ground disturbance and habitat loss and cause significant impacts to visual, recreation, and water resources, and for the reasons discussed in this decision. Due to its location in the Borrego Valley, the solar thermal

[3] Energy Policy Act of 2005, Section 368, required designation of federal energy corridors. This alternative includes a corridor identified in West-wide Energy Corridor Final Programmatic EIS, published by the Department of Energy in the Federal Register on November 28, 2008, page 72521.

component of the New In-Area Renewable Generation Alternative would be highly visible from surrounding Anza-Borrego Wilderness areas, and the solar thermal component would require transmission line upgrades though the ABDSP.

8. The Final EIR/EIS found that the LEAPS Transmission-Only Alternative is the third most environmentally superior alternative and the overall environmentally superior transmission line route alternative because of its shorter length and reduced environmental impacts when compared to the other transmission route alternatives. The LEAPS Transmission-Only Alternative would still have significant and unavoidable adverse temporary impacts associated with construction as well as major permanent impacts to biological and visual resources. This alternative was not selected, however, because it was found not to meet all of the project objectives and for the reasons discussed in this decision. Specifically, the LEAPS Transmission-Only Alternative will not facilitate the development of renewable energy. Similarly, although the No Action Alternative would likely have fewer environmental impacts (depending upon the energy options that would be required to replace the Sunrise Powerlink, it too would not meet all Project Objectives.

9. The major resource issues identified through BLM interdisciplinary review have been addressed in the analysis and considered in the decision. Based on the analysis in the Final EIR/EIS, many of the impacts of the activities to be authorized will be mitigated to less than significant. In addition, many impacts have been avoided or minimized to the degree feasible. Although significant and unmitigable impacts were identified in Section E of the Final EIR/EIS for biological resources, visual resources, wilderness and recreation, agricultural resources, cultural resources, noise, air quality, and fire and fuels management, all of the other major alternatives considered would also have significant and unmitigable impacts. Based on the rationale listed above along with an extensive alternatives comparison in Section H of the Final EIR/EIS, a determination has been made that the Selected Alternative is the BLM preferred alternative between Imperial Valley Substation and San Diego.

10. A one-time amendment to the Eastern San Diego County RMP is warranted. The record indicates that it is unlikely that SDG&E will be able to secure easements for the Interstate 8 Alternative between McCain Valley Road and the eastern end of the Modified Route D Alternative across Tribal land. Therefore, the BCD Alternative and BCD South Option Revisions and an amendment to the Eastern San Diego County Plan are approved in this ROD. The Interstate 8 Alternative west of McCain Valley Road is shorter in length, located in a less remote area, and would result in fewer significant, unmitigable impacts to biological resources, recreation, and visual resources than would the BCD/BCD South Option Revisions. However, because SDG&E likely will not be able to secure easements for the Interstate 8 Alternative between McCain Valley Road and the eastern end of the Modified Route D Alternative across Tribal land, BLM approves an amendment to the Eastern San Diego County RMP to provide a one-time exception to the plan requirement that new gas, electric, and water transmission facilities and cables for interstate communication be allowed only within designated corridors. The plan amendment applies to the public lands along the BCD/BCD South Option Reroute portion of the Environmentally Superior Southern (SWPL) Route Alternative.

V. ALTERNATIVES CONSIDERED

The following alternatives were considered in the Sunrise Powerlink Transmission Project Final EIR/EIS, published in the Federal Register on October 17, 2008. The alternatives are described in detail in the Final EIR/EIS and are briefly summarized below.

The *Proposed Action/Project* includes an approximately 150-mile transmission line (676 new towers) from Imperial County to coastal San Diego County. The proposed 500 kV line would pass through ABDSP, and a 230 kV line would continue through rural San Diego County (communities of San Felipe, Santa Ysabel, Ramona) with both overhead and underground segments. It would also include a new substation in central San Diego County and upgrades at four existing substations.

In total, the alternatives screening process culminated in the identification and preliminary screening of over 100 potential alternatives or combinations of alternatives. These alternatives ranged from minor routing adjustments to SDG&E's Proposed Action/Project route, to entirely different transmission line routes, to alternate system voltages, and system designs. Renewable resource technologies, distributed generation, and demand-side management were also considered. The alternatives that were eliminated did not meet project objectives, did not meet legal, regulatory, and technical feasibility criteria, and/or did not avoid or reduce environmental effects of the Proposed Action/Project.

The Proposed Action/Project and variations on the proposed route have become known throughout the course of this proceeding as the "Northern Route Alternatives," and they are sometimes referred to interchangeably as the "Northern Routes." These Northern Route Alternatives all pass through ABDSP. The Southwest Powerlink Alternative routes and variations on the Southwest Powerlink Alternative routes have become known as the "Southern Route Alternatives," and they are sometimes referred to interchangeably as the "Southern Routes." These Southern Route Alternatives all parallel the existing 500 kV Southwest Powerlink transmission line for a portion of their eastern segments. The terms Northern Route and Southern Route are used to identify the two primary transmission "spines" that could bring power from the Imperial Valley to San Diego – either north through ABDSP, or south, avoiding ABDSP.

Northern Transmission Line Route Alternatives

The *FTHL Eastern Alternative* was developed by the EIR/EIS team as a way to avoid almost two miles within the Flat-Tailed Horned Lizard (FTHL) Management Area in Imperial County between MP 3 and MP 8.8.

The SDG&E West of Dunaway Alternative would diverge from the Proposed Action/Project at MP 4 and would follow the existing SWPL #1 approximately 1.7 miles farther west-northwest than the Proposed Action/Project. The alternative would rejoin the proposed route at MP 7.9. Although the route would be 2.2 miles longer, it would avoid a major planned land development project that the proposed route would bisect.

The *SDG&E West Main Canal–Huff Road Modification Alternative* would diverge from the Proposed Action/Project at MP 11 and follow the IID Westside Main Canal to the east-northeast, and then turn north on Huff Road. The lengths of this alternative and the proposed route would be essentially the same; however, this route would avoid direct effects to the Bullfrog Farms and also to the Raceway development.

The *Partial Underground 230 kV ABDSP SR78 to S2 Alternative* would include installation of a double-circuit bundled 230 kV line (as opposed to 500 kV with the Proposed Action/Project) that would be installed underground and overhead in and along SR78 through ABDSP (including the segment of SR78 in which SDG&E proposed to underground the existing 92 and 69 kV lines as part of the Proposed Action/Project) and in and along Highway S2. The proposed Central East Substation would not be constructed with this alternative. Instead, a new 500 kV/230 kV substation would be constructed adjacent to the existing IID San Felipe Substation to accommodate the new transmission line. An all-underground option is also considered in the Final EIR/EIS, in which the two overhead segments of this alternative would remain underground within Highways SR78 and S2. These segments would cross and parallel the Earthquake Valley Fault.

The *Overhead 500 kV ABDSP within Existing Right-of-Way Alternative* would minimize impacts on Pinyon Ridge Wilderness Area by staying within a 100 foot-wide corridor along the existing right-of-way through the ABDSP, and not requiring the additional 50 foot-wide expansion needed by the Proposed Action/Project. The alternative would follow the same route as the Proposed Action/Project, except in the Grapevine Canyon area where the alternative would remain within the existing SDG&E 69 kV right-of-way/easement and towers would not be located on State-designated Wilderness through the ABDSP.

The *East of Tamarisk Grove Campground Option* would follow the 150 foot-wide right-of-way outlined in the Proposed Action/Project, and not the existing right-of-way through the ABDSP, between the eastern Park boundary (MP 60.9) and the west side of Tamarisk Grove Campground (MP 74.8) near the SR78/Highway S3 intersection. In comparison to the Overhead 500 kV ABDSP within Existing Right-of-Way Alternative, this option would move the new 500 kV transmission line farther from SR78 and Tamarisk Grove Campground, reducing highway encroachment and tree trimming around the campground. Use of the option would require discretionary action/approval from California State Park that may not be otherwise required under the Overhead 500 kV ABDSP within Existing Right-of-Way Alternative.

In comments on the Draft EIR/EIS, SDG&E requested that the following reroutes be considered:

- Under the *Overhead 500 kV ABDSP Within Existing Right-of-Way Alternative Revision* all project activities would remain within the existing transmission corridor through ABDSP. This design revision would relocate access roads, pull sites, etc. and would thereby locate the 500 kV transmission line entirely within a 100-foot corridor and out of state-designated Wilderness through ABDSP.
- *Around Narrows Substation Revision*. Instead of crossing over the existing Narrow Substation (MP 69.7) to its south side, the reroute would remain within SDG&E's easement and the 500 kV line would be rerouted to the north side of the substation.

The *Santa Ysabel Existing Right-of-Way Alternative* would follow an existing 69 kV transmission line right-of-way east of SR79 and along the toe slope for the southern portion of the alternative. This alternative would begin at MP 100 and would travel south for approximately 4.7 miles on the west side of SR79, following the west side (farther from SR79) of an existing SDG&E 69 kV transmission line. Where the southern border of the Santa Ysabel Reservation no longer parallels the east side of SR78 and the valley begins to open up, the alternative route and the existing 69 kV transmission line would cross to the east side of SR79 (approximately 1,800 feet south of School House Canyon Road). The route would continue south rejoining the Proposed Action/Project at approximately MP 109.5.

The *Santa Ysabel All Underground Alternative* would include undergrounding the 230 kV transmission line within SR79 through Santa Ysabel. A portion of the Santa Ysabel All Underground Alternative under SR79 would be located partially on Santa Ysabel Tribal lands. The 8.9 mile alternative route would diverge from the Proposed Action/Project at MP 100 and would follow the existing 69 kV right-of-way overhead for approximately 1,100 feet south until the line would be west of the Alquist-Priolo Fault Zone. The line would transition underground and would travel south in dirt roads and hay fields on private ranch lands generally parallel to SR79 until it would intersect SR79. South of Mesa Grande Road, this alternative would be the same as the Santa Ysabel Partial Underground Alternative (see below). The route would travel underground in SR79 and then in access roads for the existing Santa Ysabel–Creelman 69 kV transmission line. Where the existing 69 kV line turns southwest, this alternative would turn west-southwest and would follow an existing dirt road to rejoin the Proposed Action/Project at approximately MP 109.4 where it would transition overhead.

The *Santa Ysabel Partial Underground Alternative* would begin at MP 105.5, would transition underground at the southern side of Mesa Grande Road, and would travel underground to the Mesa Grande Road/SR79 intersection. Once this alternative turns south in SR79, it would be the same as the Santa Ysabel All Underground Alternative described above.

In comments on the Draft EIR/EIS, SDG&E requested that the following reroute be considered:

- The *SDG&E Santa Ysabel Partial Underground Alternative Revision* would reduce potential impacts to cultural resources, including human remains buried at the cemetery at the Santa Ysabel Mission, and would also minimize impacts to properties and traffic in SR79. The underground reroute would diverge from the original Santa Ysabel Partial Underground Alternative approximately 2,200 feet east of where it would originally reach SR79. The reroute would turn south in ranching roads cutting across grazing lands for approximately one mile. At this point, the reroute would turn east along a parcel boundary and would rejoin the original alternative in SR79, near MP SYPU-2. Approximately one mile south of this point the next segment of the reroute would diverge from the original alternative just north of the town of Santa Ysabel passing the west side of the town and rejoining the original alternative along a private ranching road at a parcel boundary.

The *SDG&E Mesa Grande Alternative* would reduce visibility of the overhead line west of Mesa Grande Road. The route would diverge from the proposed route at MP 101.5 and would travel southeast for approximately 0.7 miles. At MP 102.2 it would turn southwest along the lower

portion of the northwesterly facing slope of a small valley running from the northeast to the southwest to cut the angle and rejoin the Proposed Action/Project at MP 103.5, on the southerly side of Mesa Grande Road.

The *CNF Existing 69 kV Route Alternative* would avoid scattered single-family residences on SR78 and Deer Canyon Drive in unincorporated San Diego County. At MP 111.5 where the proposed 230 kV and existing 69 kV transmission lines would be routed west for 0.5 miles and then south for approximately 0.5 miles to avoid Cleveland National Forest (CNF), the CNF Existing 69 kV Route Alternative would remain in the existing 69 kV right-of-way heading southwest through Cleveland National Forest for approximately 0.5 miles to rejoin the Proposed Action/Project at MP 112.5.

The *Oak Hollow Road Underground Alternative* would be constructed as an underground facility following a portion of Oak Hollow Road. The purpose of this alternative would be to extend the proposed underground segment of the 230 kV line further east so it would be underground through the residential valley area. This alternative would transition underground at approximately MP 116.7 within Mt. Gower Open Space Preserve and would rejoin the underground segment of the proposed route at MP 117.3 along Gunn Stage Road.

The *San Vicente Transition Alternative* would move the transition structure from its proposed location along San Vicente Road (MP 121.9) approximately 0.3 miles west to MP 122.2.

The *Chuck Wagon Road Alternative* would follow existing roads and transmission rights-of-way. The underground transmission line would diverge from the underground proposed route at MP 121.7 (approximately 0.2 miles east of the proposed transition point) and would turn south in Chuck Wagon Road. The alternative route would continue underground south in Chuck Wagon Road for approximately 1.6 miles. The route would transition to overhead and would turn west for 1.2 miles to rejoin the Proposed Action/Project at MP 125.6.

The majority of the *Pomerado Road to Miramar Area North Alternative* is underground with the exception of the east and west ends where the line is overhead within existing right-of-way. This alternative would exit the Sycamore Substation at MCAS Miramar overhead westerly within an existing right-of-way toward Pomerado Road. The line would cross Pomerado Road just north of Legacy Road and would transition underground just east of the roadway. The underground portion of the route would be located within existing roadways through generally commercial and industrial land use areas. The line would transition to overhead and would be located within the existing 230 kV right-of-way heading northward into the Peñasquitos Substation.

The *Los Peñasquitos Canyon Preserve and Mercy Road Alternative* would vary from the Proposed Action/Project east of the Chicarita Substation. The entire alternative would be underground except the eastern and western ends where the line transitions to overhead structures. Under this alternative, the transmission line would bypass the Chicarita Substation and would come from the Sycamore Substation and connect to an existing right-of-way along Scripps-Poway Parkway in the vicinity of Ivy Hill Drive. From here the line would transition to underground to its terminus at Black Mountain Road. At Black Mountain Road the line would

remain underground heading north then west at Park Village Drive where the line would rejoin the Proposed Action/Project.

The *Black Mountain to Park Village Road Underground Alternative* would deviate from the Proposed Action/Project alignment where the line approaches Black Mountain Road. Under this alternative, the line would remain underground but would be located underneath Black Mountain Road and would turn west onto Park Village Drive, following the Proposed Action/Project alignment into the Peñasquitos Substa¬tion via the Los Peñasquitos Canyon Preserve.

The *Coastal Link System Upgrade Alternative* is a transmission system modification that would require the following:

- Reconductoring of the existing Sycamore Canyon–Pomerado 69 kV circuit on existing structures;
- Reconductoring of the existing Pomerado-Poway 69 kV circuit on existing structures;
- Reconductoring of the existing Sycamore Canyon-Elliott 69 kV transmission line (also part of the Proposed Action/Project);
- Installation of a third 230/69 kV transformer at the existing Sycamore Canyon Substation (expansion of the Sycamore Canyon Substation would occur within the existing easement of the substation); and
- Installation of a new 230/138 kV transformer at the existing Encina Substation or upgrading (reconductoring the existing Sycamore Canyon–Chicarita 138 kV circuit using 34 existing wood frame structures).

It would eliminate all associated impacts of the Coastal Link of the Proposed Action/Project between Sycamore Canyon and Peñasquitos Substation.

In comments on the Draft EIR/EIS, SDG&E requested that the following reroute be considered:

- The *Coastal Link System Upgrade Alternative Revision* would include one additional transmission upgrade to the Coastal Link System Upgrades Alternative analyzed in the Draft EIR/EIS, the upgrade of the Sycamore-Scripps 69 kV line.

Substation Alternatives to Central East Substation

The *Top of the World Substation Alternative* would be located approximately one mile west of the proposed Central East Substation. The transmission line routes into the substation would follow the Proposed Action/Project route to the point where the line to the proposed Central East Substation site is proposed to jog southeast (at approximately MP 92.7). At this point the alternative 500 kV route would turn west for 1.1 miles to enter the alternative site. Exiting the substation, the line would travel southwest for 400 feet and then west and north-northwest to rejoin the Proposed Action/Project around MP 95.

In comments on the Draft EIR/EIS, SDG&E requested that the following reroute be considered:

- *Top of the World Substation Alternative Revision*. The principal revisions are that the reroute would shorten a bend in the 500 kV ingress transmission line east of the Top of the World Substation Alternative, and the 230 kV egress line would parallel the ingress line, rather than heading northwest from the substation.

Southern Transmission Line Route Alternatives

All of the southern transmission alternatives would avoid ABDSP, which is the major reason that they were considered. All transmission line routes that would follow a portion of the existing Southwest Powerlink would pass through the Cleveland National Forest (CNF), which require an amendment of the recently approved Forest Plan. The Interstate 8 (I-8) Alternative and associated options would also parallel a portion of the I-8 freeway, which runs on an east-west path across the southern Imperial and San Diego Counties.

In addition, there are three alternative route segments for the I-8 Alternative that are listed here and addressed in greater detail below:

- BCD Alternative: Replacement of MP I8-39.5 to MP I8-58 of the I-8 Alternative.
- Route D Alternative: Replacement of the Interstate 8 Substation and 230 kV segment with a continuation of the 500 kV segment that would turn north at MP I8-70 and pass through the Boulder Creek area of the Cleveland National Forest, joining the Proposed Action/Project route at MP 114 at the Central South Substation Alternative.
- Modified Route D Alternative: Replacement of the Interstate 8 route from about MP I8-47 to MP 70 and of the Interstate 8 Alternative Substation. It would require a new 500/230 kV substation south of the I-8 freeway.

In addition, five short options are included in this description of the Interstate 8 Alternative: the Campo North Option, the Buckman Springs Underground Option, the West Buckman Springs Option, the South Buckman Springs Option, and the Chocolate Canyon Option. These options are described after the description of the main route below.

The route of the I-8 Alternative would be located adjacent to the existing 500 kV Southwest Powerlink, separated by an average of 400 feet, for the first 35.7 miles. This segment generally parallels I-8. The route would begin at the Imperial Valley Substation, paralleling the Southwest Powerlink to a point about six miles west of the San Diego/Imperial County line. At that point, the Sunrise Powerlink's 500 kV line would turn northwest, passing less than one mile southeast of the southwest corner of ABDSP and crossing I-8 freeway just west of the BLM Carrizo Gorge Wilderness Area and one mile east of the community of Boulevard. After approaching I-8 from the southeast, the I-8 Alternative route would cross to the north side of I-8 about a mile east of Boulevard, then turn west following the freeway. The route would cross the freeway several times in order to avoid residential areas and a major wind farm, and would enter the Interstate 8 Alternative Substation at MP I8-65. The line would exit the substation to the west at 230 kV. At the eastern end of Alpine Boulevard, the route would transition to underground and travel in Alpine Boulevard, before transitioning back to overhead and eventually rejoining the Proposed Action/Project at its MP 131. A portion of the I-8 Alternative would cross both the Campo and the La Posta Indian Reservations.

In comments on the Draft EIR/EIS, SDG&E requested the following mitigation reroutes be considered:

- The *SWPL Archaeological Site (Plaster City) Reroute* is a 3.3-mile segment of the I-8 Alternative (about 11 miles west of the Imperial Valley Substation) that would diverge from the existing Southwest Powerlink to the north in order to avoid passing through an archaeological site.
- The *Jacumba SWPL Breakaway Point Reroute* would eliminate the need for one large angle structure by spanning directly between two smaller angle structures without impacting additional parcels. Specifically, at MP 35.2 the reroute would diverge from the I-8 Alternative and head northwest for 1,700 feet.
- The *High Meadows Reroute* would minimize land use and visual impacts to the High Meadows Ranch Subdivision. The reroute would diverge south from the Interstate 8 Alternative at MP I8-87.1 and would parallel the Interstate 8 Alternative to its south and then west and would rejoin the Interstate 8 Alternative at MP I8-89.3.
- The *Highway 67 Hansen Quarry Reroute* would minimize impacts to aggregate mineral resources at an operational quarry along the Interstate 8 Alternative. The Highway 67 Hansen Quarry Reroute would continue from the northern end of the High Meadows Reroute at MP I8-89.3 and would rejoin the Interstate 8 Alternative at MP I8-91.9.

The *Interstate 8 Alternative Substation* would be used if the adopted transmission line route requires a conversion to 230 kV to allow the underground segment through Alpine. It would be located southwest of Descanso on private land adjacent to Cleveland National Forest land. The 500 kV line would enter the substation from the east, and a double-circuit 230 kV transmission line would exit the substation to the west after conversion from 500 to 230 kV.

The *Campo North Route Option* would remain north of the freeway across Tribal lands in the vicinity of the Kumeyaay Wind Energy Project, passing immediately adjacent to the southernmost wind turbine in the wind farm (at about MP I8-45) and just north of the Caltrans right-of-way. This option would avoid two freeway crossings and shorten the route by about 0.5 miles.

In the area of Buckman Springs, three route options are considered, two to preserve hang gliding and paragliding opportunities in Horse Canyon and one to utilize an existing transmission line corridor. The I-8 Alternative as defined would be located between the Horse Canyon take off and landing points, presenting a safety risk to glider pilots.

- Option 1 – *Buckman Springs Underground Option*. This option would require construction of two overhead/underground transition stations for the 500 kV line and installation of an underground route segment for approximately 1.9 miles.
- Option 2 – *West Buckman Springs Option*. This option would minimize hang gliding and paragliding impacts by moving the transmission line to a location west of Buckman Springs Valley, rather than east where the route is currently proposed.

- Option 3 – *South Buckman Springs Option*. This option would avoid passing through Backcountry Non-Motorized Land Use Zones within the CNF that occur north and east of Interstate 8, by crossing south of the freeway.

The *Chocolate Canyon Option* is a 230 kV segment option that would replace the Interstate 8 Alternative from MP I8-79.0 to MP I8-82.3. The route would run at a much lower elevation in the canyon so it would be less visible from residences west of the canyon.

In comments on the Draft EIR/EIS, SDG&E requested the *SDG&E Chocolate Canyon/Peutz Valley Revision* be a reroute for the Interstate 8 Alternative at the west end of the underground segment in Alpine Boulevard. The revised route would minimize visual impacts by keeping the transmission line underground, below the I-8 Freeway, until the north side of the freeway.

The *BCD Alternative* would avoid ABDSP and also avoid the residential areas through which the existing 69 kV lines pass. This 500 kV alternative would diverge from the Interstate 8 Alternative about one mile northeast of Boulevard, where it would cross I-8 to the north, then it would head north-northwest, generally paralleling McCain Valley Road. It would pass directly adjacent to and west of the Carrizo Gorge Wilderness ACEC. The route would pass within one mile and east of Lark Canyon Campground and OHV Area and pass about three miles southwest of the Carrizo Overlook. After passing through the CNF, the route would join the Interstate 8 Alternative north of Buckman Springs. The 19.5-mile BCD segment of this route would include 6.5 miles within the CNF, 11 miles on BLM land, 0.2 miles on State of California conservation land, and 1.8 miles on private lands.

The *BCD South Option* would eliminate the westernmost 6 miles of the BCD Alternative by turning southwest just one mile after entering CNF. It would remain within the Backcountry Land Use Zone of CNF, which allows transmission lines, and it would eliminate effects on the Cibbets Flat Campground and the nearby crossing of the Pacific Crest Trail. The BCD South Option would also avoid all tribal land.

In comments on the Draft EIR/EIS, SDG&E requested the following mitigation reroutes be considered:

- *BCD Alternative and BCD South Option Revisions*. Revision of these two alternative segments was suggested by SDG&E with input from the Forest Service, as well as the CPUC and BLM, to avoid Backcountry Non-Motorized Land Use Zones in the Cleveland National Forest and to minimize disturbance and visibility on CNF. The BCD Alternative and BCD South Option Revisions would replace part of the BCD Alternative and all of the BCD South Option. The BCD Alternative Revision would diverge from the BCD Alternative at MP BCD-9. It would head to the northwest for just over four miles and then turn and head south-southwest for two miles to where it would cross the original BCD Alternative. This is the point where the BCD South Option Revision begins. The BCD South Option Revision would roughly parallel the BCD South Option's original route for 3.8 miles, crossing Interstate 8 approximately 0.25 miles west of the original BCD South Option crossing. The revised route would remain approximately 0.5 miles west of the original BCD South Option and join the Modified Route D Alternative at MP MRD-3.6.

The *Route D Alternative* (north of I-8) would be a 500 kV alternative that would diverge from the I-8 Alternative at MP I8-70.3. The Route D Alternative would pass through the Boulder Creek Valley north of the town of Descanso. The Route D Alternative would require use of the Central South Substation Alternative in order to convert from 500 kV to 230 kV. Approval of this route would require that only existing roads be used through a 1.5 mile segment that would pass through an Inventoried Roadless Area (IRA) northwest of Descanso in the CNF. This route would also require a Forest Land Management Plan (LMP) amendment as it would pass through several sensitive areas of National Forest System lands.

The *Modified Route D Alternative* (south of I-8) was identified as a route to be evaluated because the alternative transmission line route would be consistent with the Forest Land Management Plan's Land Use Zones and it would diverge from the existing Southwest Powerlink at a point east of the area of greatest fire risk. The majority of this alternative has also been identified as a 368 corridor by the Department of Energy's Final West-wide Corridor Programmatic EIS.[4] The Modified Route D Alternative route would start by diverging from the Interstate 8 Alternative at MP I8-48.7, and would travel southwest and west eventually passing between BLM's Hauser Mountain Wilderness area and the CNF's Hauser Wilderness. At MP MD-22.5, the route would turn north, pass immediately east of the existing Barrett Substation, and would re-enter the CNF. This route would include the Modified Route D Substation, located on private land about 1.5 miles south of Interstate 8. The Modified Route D Alternative would have two options for connecting with the Proposed Action/Project route:

- Remain at 500 kV, cross Interstate 8 and connect with the Route D Alternative, continuing north through the Boulder Creek area to the Central South Substation Alternative (MP 113.5).
- Convert to 230 kV at a new substation, the Modified Route D Alternative Substation (see description below). In this option, an overhead double-circuit 230 kV transmission line would exit the substation, continue north, and would transition underground at the same point as the Interstate 8 Alternative (at the east end of Alpine Boulevard). In addition, the 230 kV segment has a route option, the Star Valley Option (see below), which would reduce the length of underground construction in Alpine Boulevard and would avoid cultural resources of concern.

In comments on the Draft EIR/EIS, SDG&E requested the following mitigation reroutes be considered:

- The *Cameron Reroute* would diverge from the Modified Route D Alternative just west of Buckman Springs Road. The rerouted line would be located a maximum of approximately 150 feet southeast of its original location for 0.3 miles in order that the line does not cross a corner of a CNF land use zone that does not allow transmission lines, and it would remain entirely on private land.

[4] Energy Policy Act of 2005, Section 368, required designation of federal energy corridors. This alternative includes a corridor identified in West-wide Energy Corridor Final Programmatic EIS, published by the Department of Energy in the Federal Register on November 28, 2008, page 72521.

- *Pacific Crest Trail (PCT) Route Options*. The original Modified Route D Alternative, also called PCT Option A below, has been retained in the Final EIR/EIS as part of the Final Environmentally Superior Southern Route Alternative. PCT Option B was described and analyzed in the RDEIR/SDEIS, but it has since been eliminated from consideration. Finally, PCT Reroute Option C/D was analyzed in the Final EIR/EIS in order to allow agencies the opportunity to include either option as part of the approved route. The three options are described as follows:
    - PCT Option A (original Modified Route D Alternative route). PCT Option A is the same as the original Modified Route D Alternative route. The route would be located on BLM land just south of the CNF boundary between MP MRD-11.7 and MP MRD-14. The route would follow the existing 69 kV transmission corridor, and would maximize use of existing access roads. Both the 69 kV and 500 kV lines would cross the PCT three times within a space of about 0.25 mile.
    - PCT Option B would minimize impacts to its crossing of the Pacific Crest Trail; however, due to the development of PCT Option C/D, it has been eliminated from consideration.
    - PCT Option C/D would create a new transmission line right-of-way and the towers would be constructed by helicopter (thus eliminating the need for access roads to the extent feasible). With this reroute, PCT users would cross under the 69 kV line, then cross below the 500 kV line only once farther to the southwest.
- The *Western Modified Route D Alternative Reroute* would minimize impacts to properties. The portion of the reroute around the Modified Route D Alternative Substation has been modified to fit updated substation civil and electrical engineering and to provide for increased separation between the incoming 500kV line and the outgoing 230kV line to accommodate future transmission expansion. The Western MRDA Reroute would first diverge from the north side of Modified Route D Alternative at MP MRD-18.5 and then would parallel the Modified Route D Alternative, being alternately east or west of the alternative at various locations. At MP MRD-31, the reroute would be located east of the original alternative until it would cross to its west and continue 0.2 miles into the alternative substation.

The *Modified Route D Alternative Substation* would be located on private land west of Japatul Valley Road. It would be the same size (about 40 acres) as the proposed Central East Substation, and it would have to accommodate future 230 kV circuits exiting the substation when demand growth justifies the need for additional lines.

The *Star Valley Option* would reduce the length of underground construction in Alpine Boulevard and would avoid cultural resources of concern. The Star Valley Option, as discussed above, would exit the Modified Route D Alternative Substation to the west-northwest and would be an overhead double-circuit 230 kV transmission line. This option would join the Interstate 8 Alternative as underground at Alpine Boulevard at MP I8-73.6.

In comments on the Draft EIR/EIS, SDG&E requested the *Star Valley Option Revision* be considered. This reroute was suggested by SDG&E in an effort to reduce visual impacts to

residences. The outgoing 230 kV line was modified leaving the Modified Route D Substation Alternative to accommodate future transmission expansion. The reroute would extend in nearly a straight line between the Modified Route D Substation Alternative to a point where the Star Valley Option turns due north. It would replace with a straight alignment a portion of the Star Valley Option that has two dog legs in its alignment and would rejoin the Star Valley Option at MP SVO-2.3.

Project Route and System Transmission Lines Alternatives

System Alternatives rely on different transmission line upgrades and interconnections. Within the project area, these alternatives include upgrades to the existing transmission infrastructure, different voltage configurations of the proposed lines, interconnections to points other than the Imperial Valley Substation, or alternative transmission technologies. Two options from the Lake Elsinore Advanced Pumped Storage (LEAPS) Project Alternative were fully evaluated in the EIR/EIS.

- *LEAPS Generation and Transmission Alternative*. The LEAPS Project is also described in the LEAPS Project Final EIS (published by the Federal Energy Regulatory Commission as Lead Agency, with Forest Service as a cooperating agency, FERC Project No. 11858, FERC/FEIS 0191F, January 2007). The LEAPS Project is co-sponsored by the Elsinore Valley Municipal Water District, a public non-profit agency, and the Nevada Hydro Company, Inc. (co-applicants). This alternative would fully implement the "preferred alternative" or "staff alternative" identified in the January 2007 LEAPS Project Final EIS, with both pumped storage and transmission components.
- *LEAPS Transmission-Only Alternative*. The LEAPS Transmission-Only Alternative would include a new 500 kV line known as the Talega-Escondido/Valley-Serrano (TE/VS) Interconnect. This alternative would involve only the transmission components of the LEAPS Generation and Transmission Alternative (see above) and modifications to the existing SDG&E Talega-Escondido 230 kV transmission lines to accommodate the interconnection of the new 500 kV line and northern substation. The new 500 kV transmission line would be constructed along the same corridor as the LEAPS Project, but no reservoir or pumped storage generation would be built.

Non-Wires Alternatives

The non-wires alternatives would avoid major new transmission projects by focusing on generation as a way for SDG&E to perform its function as a load-serving entity. The projects considered in the Final EIR/EIS are representative of reasonable generation scenarios, and are not intended to depend on the progress of contracts for individual utility projects.

Including the components of the non-wires alternatives in the Sunrise Powerlink Transmission Project EIR/EIS does not automatically lead these alternatives to be built because additional approvals or agency actions would be necessary to implement them. Each generator included in the non-wires scenarios would require permitting and CEQA and/or NEPA compliance for each project.

The *New In-Area Renewable Generation Alternative* would involve development of various in-area renewable projects that together could provide sufficient generation capacity to defer the need for the Proposed Action/Project. No single in-area renewable generation project would be likely by itself to provide the necessary capacity to serve as a viable alternative to the Sunrise Powerlink Transmission Project. By considering the availability of in-area renewable resources as a whole, this alternative offers a scenario of in-area renewable generation development. The types of resources involved would be solar thermal, solar photovoltaic, wind, and biomass/biogas.

A second non-wire alternative, the *New In-Area All-Source Generation Alternative*, would include a combination of fossil-fired central station generation, renewable generation, and non-renewable distributed generation (DG). Except for solar thermal, this alternative would also involve renewable projects discussed for the New In-Area Renewable Generation Alternative above. One optional scenario, or "resource bundle," that could occur in conjunction with the New In-Area All-Source Generation Alternative would be to include 231 and 249 MW of demand response by 2010 and 2016, respectively. A second optional scenario, or second "resource bundle," that could occur in conjunction with the New In-Area All-Source Generation Alternative would be to combine the All-Source Generation Alternative with demand response and the use of Renewable Energy Credits (RECs) for RPS compliance.

Under the *No Action Alternative*, the BLM would not issue a Right-of-Way Grant for the construction of the Sunrise Powerlink Transmission Project.

VI. MITIGATION AND MONITORING

The Mitigation Monitoring, Compliance, and Reporting Program (MMCRP) for this project is located in Section I of the Final EIR/EIS. This plan is available in its entirety on the following CPUC agency website under the San Diego Gas & Electric's Sunrise Powerlink Transmission Project Final EIR/EIS Section I, Mitigation Monitoring and Reporting:

http://www.cpuc.ca.gov/Environment/info/aspen/sunrise/feir/I%20Mitigation%20Monitoring.pdf

The BLM is a lead agency, along with the CPUC, in ensuring compliance with all adopted mitigation measures, which are attached to this ROD as part of the right-of-way grant (Appendix A). The BLM would incorporate this mitigation into the right-of-way grant as terms and conditions. Failure on the part of the grant holder to adhere to these terms and conditions could result in various administrative actions up to and including a termination of the grant and requirements to remove the facility and rehabilitate disturbances. All practicable means to avoid or minimize environmental harm have been adopted under this decision. Major elements of this mitigation/monitoring plan, including adopted mitigation measures and related monitoring and enforcement activities for the Selected Alternative, are attached to the right-of-way grant (Appendix A).

VII. PUBLIC INVOLVEMENT

<u>Scoping</u>

The BLM published the Notice of Intent (NOI) to prepare a joint EIS/EIR and Proposed Land Use Plan Amendment for the Proposed Sunrise Powerlink Transmission Project on August 31, 2006 in the Federal Register. A Notice of Public Scoping Meetings was mailed to federal, state, regional, and local agencies, elected officials of affected areas, and the general public. Copies of the NOI were available at 26 local repositories. The comment period began on August 31, 2006, the day of the NOI publication, and ended October 20, 2006.

Newspaper advertisements appeared in 11 local and regional newspapers between September 15 and 22, 2006 for the October scoping meetings and in eight newspapers between January 20 and February 2, 2007 for the February meetings. The February meetings had an additional focus on alternatives under consideration. As part of outreach to Spanish-speaking populations, newspaper advertisements were published in two Spanish-language newspapers. Public scoping meetings were held on:

- October 2, 2006 at 4:30 p.m. in El Centro, California
- October 3, 2006 at 4:00 p.m. and 7:00 p.m. in Ramona, California
- October 4, 2006 at 2:00 p.m. and 6:00 p.m. in Borrego Springs, California
- October 5, 2006 at 2:00 p.m. in San Diego–Mission Valley, California
- October 5, 2006 at 6:30pm in San Diego–Rancho Peñasquitos, California
- February 5, 2007 at 12:30 p.m. in El Centro, California
- February 5, 2007 at 7:30 p.m. in San Diego–Rancho Peñasquitos, California
- February 6, 2007 at 2:00 p.m. in Julian, California
- February 6, 2007 at 7:00 p.m. in Ramona, California
- February 7, 2007 at 1:00 p.m. in Boulevard, California
- February 7, 2007 at 6:30 p.m. in Alpine, California
- February 8, 2007 at 2:30 p.m. in Borrego Springs, California
- February 9, 2007 at 1:00 p.m. in Temecula, California

Cleveland National Forest requested and received an extension on the January-February 2007 scoping comment period, and in April 2007, CNF requested that an alternative be fully analyzed that would not require an amendment to the Cleveland National Forest's 2005 Land Management Plan. To notify the public and to allow the public to respond to this additional alternative, on May 16, 2007 the BLM mailed a notice describing the new alternative and the rationale for its consideration, as well as a map of the route. A 30-day comment period followed, closing on June 16, 2007.

The scoping process for the Sunrise Powerlink Transmission Project was designed to solicit input from the public, federal, state, and local agencies, and other interested parties on the scope of issues that should be addressed in the Draft EIR/EIS. The scoping process was also intended to identify significant issues related to the Sunrise Powerlink Transmission Project. The Sunrise Powerlink Transmission Project and alternatives were revised to address comments and concerns raised during the scoping process.

Review of Draft EIR/EIS

A Notice of Availability (NOA) for the Draft EIR/EIS was published in the Federal Register on January 11, 2008. This initiated a 90-day public comment period. The NOA was mailed to 13,616 interested parties, agencies, county and city departments, special districts, property owners, and occupants on or adjacent to the Sunrise Powerlink Transmission Project and alternative routes. Copies of the Draft EIR/EIS were shipped to 181 interested parties, and 561 copies of the Executive Summary and 570 copies of the DVD were also mailed. Informational workshops on the Draft EIR/EIS were held on:

- January 28, 2008 at 12:30 p.m. in El Centro, California
- January 28, 2008 at 7:00 p.m. in Alpine, California
- January 29, 2008 at 1:00 p.m. in Temecula, California
- January 29, 2008 at 7:00 p.m. in San Diego–Rancho Peñasquitos, California
- January 30, 2008 at 2:00 p.m. in Ramona, California
- January 30, 2008 at 7:00 p.m. in Warner Springs, California
- January 31, 2008 at 3:30 p.m. and 7:00 p.m. in Pine Valley, California
- February 1, 2008 at 1:00 p.m. in Borrego Springs, California

Public participation hearings on the Draft EIR/EIS were conducted on:

- February 25, 2008 at 6:30 p.m. in Pine Valley, California
- February 26, 2008 at 1:00 p.m. in Borrego Springs, California
- February 26, 2008 at 7:00 p.m. in Ramona, California
- May 12, 2008 at 1:00 p.m. and 6:30 p.m. in Borrego Springs

Review of Recirculated Draft EIR/Supplemental Draft EIS

Due to additional information submitted following publication of the Draft EIR/EIS, BLM prepared and published a Recirculated Draft EIR/Supplemental Draft EIS (RDEIR/SDEIS) in July 2008. The RDEIR/SDEIS was released for public review on July 11, 2008 with a 45-day comment period (ending on August 25, 2008). Following the release of the Recirculated Draft EIR/Supplemental Draft EIS the CPUC and BLM held two informational workshops in Jacumba, California on August 4, 2008.

Review of the Final EIR/EIS

The Final EIR/EIS was distributed to a variety of federal, state, and local government agencies, elected officials, environmental organizations, Native American tribes, and other interested parties for review. A NOA for the Final EIR/EIS was published in the Federal Register, October 17, 2006. This started a 30-day public review period for the Final EIR/EIS. The BLM has considered all comments received on the Final EIR/EIS in the development of this ROD. In addition, the BLM will:

1. Distribute a news release about the ROD in the local and regional media;
2. Send the ROD to all those on the distribution list; and
3. Make the ROD available on the BLM website and to all who request a copy.

Summary of Protests and Comments

The U.S. Environmental Protection Agency's Notice of Availability of the Final EIS/EIR was issued on October 17, 2008. Release of the Final EIR/EIS initiated the 30-day protest period, which closed on November 15, 2008. During that period, any person who participated in the planning process and believed they would be adversely affected by the plan amendments had the opportunity to protest the proposed amendment to the Director of the BLM. Twenty (20) formal protest letters were filed with BLM, and of the 22 protest letters, three letters were determined to contain valid protest points.

In general the protesters and commenters were in support of the No Action/Project Alternative and/or the two in-basin, non-wires alternatives (an all-renewable generation alternative and a conventional-plus-renewable generation alternative) that were analyzed in the EIR/EIS. Some of the issues raised in the protest letters include: adequacy of the cumulative impact assessment; rationale for BLM's agency preferred decision; adequacy of analysis/mitigation for environmental impacts; timing of publication of the RMP and plan amendment; level of effort made with Caltrans to route an alternative within its right-of-way; failure to conduct sufficient surveys; claimed violation of Section 7 of the Federal Endangered Species Act; deferral of scientific surveys, reviews, consultations, public involvement; insufficient opportunity for public comment; and adequacy of analysis of the impacts of the plan amendment.

The Protesters received detailed responses from the BLM Director/Assistant Director specifying how the issues were addressed in the Final EIR/EIS. The responses concluded that BLM followed applicable planning procedures, laws, regulations, and policies and considered all relevant resource functions and public input in developing the Final EIR/EIS and Proposed Plan Amendment. Therefore, no changes to the proposed decision were determined warranted and the Director/Assistant Director dismissed all protests.

In addition to the 22 formal protest letters that were submitted to BLM, BLM also received 12 comments on the Final EIR/EIS. The issues raised in the comments generally include: concerns about economic costs/benefits of project and alternatives; concerns about water resources, air quality and conformance with State Implementation Plan; legal adequacy of cumulative and environmental justice analyses; legality of any routes on Viejas Tribal Fee lands; concerns that visual and noise impacts would be greater to Tamarisk Grove Campground than the EIR/EIS states; changes to the CEQA notification provisions and findings required for public acquisition of agricultural lands per Williamson Act statue and Gov Code 51291; adequacy of analysis/mitigation for environmental impacts; rationale that a southern route would be environmentally preferred; adequacy of analysis of impacts to CNF, McCain Valley and Boulevard from Sunrise Powerlink Transmission Project and other wind proposals; and changes to the solar thermal component of the all-renewable alternative. BLM reviewed the comments to the Final EIR/EIS and determined that they did not raise any significant new circumstances or information relevant to environmental concerns associated with the Sunrise Powerlink Transmission Project. Therefore no changes to the proposed decision were determined warranted.

APPENDIX A: Mitigation Measures

Introduction

All mitigation measures presented in the Final EIR/EIS that apply to the Final Environmentally Preferred/Superior Southern Route Alternative are listed below. Measures are presented by environmental discipline. Following the mitigation measures are the Applicant Proposed Measures that SDG&E presented in its Proponent's Environmental Assessment for the Proposed Project. While these APMs were not specifically developed to apply to a Southern Route, most are not geographically specific so would apply to transmission line and substation construction in any location.

Mitigation Measures

The text of some of the mitigation measures originally included reference to specific geographic locations that would not be affected by the Final Environmentally Superior Southern Route Alternative. These portions of the Mitigation Measures have been deleted. Additionally, some biological resources mitigation measures require specific amounts of habitat to be restored or mitigated. The acreage defined herein for specific habitats is specific to the Final Environmentally Superior Southern Route Alternative as presented in the Final EIR/EIS.

Biological Resources

The Applicant Proposed Mitigation measures for biology (BIO-APMs) referred to in some of the mitigation measures below include environmental measures that are already required by existing regulations and/or requirements, or are SDG&E's standard practices designed to address temporary and/or permanent impacts, as well as impacts anticipated during operations and maintenance of the completed project. The applicable parts of these measures would be implemented regardless of any regulatory oversight by the CPUC and BLM and are not measures added to the project based on the EIR/EIS analysis. Rather, they are integrated as part of the project description. However, it should be noted that some APMs were based on SDG&E's NCCP, which is not applicable (see discussion in Section D.2.3.3). As a result, in some cases, portions of the APMs are not appropriate or are not adequate to provide mitigation for the project's impacts. In these cases, the portions of the APMs which are not appropriate or adequate are shown in struck text in Appendix 8N, and the mitigation measures that are proposed in addition to the applicable portions of the APMs to avoid, minimize, or mitigate the relevant impacts of the project are shown in the second column of Appendix 8N. Appendix 8N clarifies applicable requirements for the Mitigation Monitoring Reporting Program (Section D.2.27).

Final EIR/EIS Appendix 8P presents a Consolidated Biology Impact Matrix that includes the acreage of impacted habitat for vegetation communities and special status animal species for the Final Environmentally Superior Southern Route Alternative.

B-1a **Provide restoration/compensation for affected sensitive vegetation communities.** 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. 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. 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 off-site 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). Restoration in ABDSP shall be maintained and monitored for a minimum of five years. The success of the restoration is usually based on how the habitat compares with similar, nearby, undisturbed habitat. Any restoration efforts would be subject to a Habitat Restoration Plan approved by the CPUC, BLM, Wildlife Agencies, State Parks (for restoration in ABDSP), and USDA Forest Service (for alternatives with restoration on National Forest lands). Mitigation ratios and mitigation acreages for construction within authorized limits 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). The mitigation ratios also apply to impacts from emergency repairs. 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.

All limits of construction shall be delineated with orange construction fencing. 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. 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 the installed gates. 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.

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.

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 on-site 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 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.

The Habitat Restoration Plan shall also incorporate the measures identified in the May 25, 2006 Memorandum of Understanding among Edison Electric Institute, USDA Forest Service, BLM, USFWS, National Park Service, and the Environmental Protection Agency (Edison Electric Institute, et al., 2006) where applicable. The MOU discusses vegetation management along ROWs for electrical transmission and distribution facilities on federal lands. The major provisions of the MOU include reducing soil erosion and water quality impacts; promoting local ecotypes in revegetation projects; planting native species and protecting rare species; and reducing the introduction of non-native, invasive or noxious plant species to the ROWs. The MOU can be viewed online at http://www.eei.org/industry_issues/environment/land/vegetation_management/ EEI_MOU_FINAL_5-25-06.pdf.

The following habitat restoration requirements are not included in the MOU described above. 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. 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, off-site 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).

Tree Mitigation. 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.

For habitat acquisition and preservation, the mitigation ratios 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). For example, removal of coast live oak trees (that occur in coast live oak woodland) shall require mitigation at a 3:1 ratio based on the permanent impact to the summed acreage of all individual coast live oak trees impacted. Therefore, if the total acreage of all individual coast live oak trees in coast live oak woodland impacted is 10 acres, then 30 acres of coast live oak woodland shall be acquired and preserved. 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.

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 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

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

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.

Mitigation Parcels/Habitat Management Plans. All off-site 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 . To demonstrate that such parcels shall be acquired, 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.

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 off-site 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, off-site 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
- 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 Management Plan by the designated land management entity)
- 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 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).

B-1c **Conduct biological monitoring.** 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. Additionally, 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 B1b). 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. 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. 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. 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 have the authority to issue stop work orders if any part of the mitigation measures or APMs are being violated. 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. 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.

B-1k **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 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. A re-seeding plan shall be developed with input from Cal Fire, the US 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. 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. Specific re-seeding requirements stipulated in this mitigation measure shall be subject to approval and modification by any public landowning agency.

B-1l **SDG&E shall continue to work with the USDA Forest Service to minimize impacts to the RCA between Structures 184 and 187.** 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.

B-2a **Provide restoration/compensation for affected 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. 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. A jurisdictional delineation and impact assessment shall be prepared based on the final alignment and final engineering plans when they are complete. 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. For example, permanent impacts to emergent wetland would require a 2:1 mitigation ratio. Half (or 1:1) of the mitigation acreage would have to consist of created emergent wetland in an appropriate location to be preserved, and the other half (1:1) would require acquisition and preservation of already-existing emergent wetland (or other wetland community acceptable to the permitting agencies — ACOE, Regional Water Boards, State Water Board, and CDFG). 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. Wetland permits shall be obtained from the ACOE, Regional Water Boards, State Water Board, and CDFG prior to initiating construction in jurisdictional areas.

All limits of construction shall be delineated with orange construction fencing and/or silt fencing. 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. 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.

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.

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. 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).

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 off-site 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 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, off-site 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 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 Management Plan by the designated land management entity)
- 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 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).

B-3a **Prepare 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 Plan for ROW within or adjacent to the boundaries of ABDSP. Developed land shall be excluded from weed control.

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 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 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 plant 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 also be conducted by surveying areas that will be directly impacted by the project for weed populations that are rated High or Moderate for negative ecological impact in the California Invasive Plant Inventory Database (Cal-IPC, 2006) or are weed species of concern to State Parks (for ROW within or adjacent to ABDSP). These plant species shall be treated prior to construction or at a time when treatments would be most effective based on phenology according to control methods and practices for invasive weed populations designed in consultation with Cal-IPC and State Parks (for treatment in ROW within ABDSP).
- 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.

For the lifespan of the project (i.e., as long as the project is physically present), long-term measures to control the introduction and spread of noxious weeds in the project area shall be taken as follows.

— 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.

— 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.

— During project construction and operation/maintenance, vehicles and all equipment shall be washed (including wheels, undercarriages, and bumpers) at an off-site 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. In addition, tools such as chainsaws, hand clippers, pruners, etc. shall be washed at an off-site washing facility immediately before project construction begins and prior to returning to project construction should tools be used in a different construction area. In addition, vehicles, tools, and equipment shall be washed at an off-site 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). Finally, vehicles, tools, and equipment used for maintenance shall be washed at an off-site 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 made to use wash facilities that use recycled water. 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.

B-5a **Conduct rare plant surveys, and implement appropriate avoidance/minimization/compensation strategies.** 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.

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. All stakes, flagging, or fencing shall be removed no later than 30 days after construction is complete.

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 off-site acquisition and preservation of habitat containing the plant at a 2:1 ratio. Avoidance may not be feasible due to physical or safety constraints. 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). A qualified biologist shall prepare a Restoration Plan that shall indicate where restoration would take place. The restoration plan shall also 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.

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). Avoidance may not be feasible due to physical or safety constraints. Mitigation Measure B-1a would also provide habitat-based mitigation for these impacts.

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. 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.

A Habitat Management Plan for any required, off-site 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 off-site 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) off-site 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 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 Management Plan by the designated land management entity)
- 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 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).

B-7a **Cover all steep-walled trenches or excavations used during construction to prevent the entrapment of wildlife (e.g., reptiles and small mammals)**. 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. 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. Furthermore, 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. 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.

B-7b **Implement avoidance/mitigation/compensation according to 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. Furthermore, 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 Project, the required mitigation for FTHL impacts (if off-site 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 Lizard Interagency Coordinating Committee, CPUC, BLM, Wildlife Agencies, and State Parks (for land in ABDSP).

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
- 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 Management Plan by the designated land management entity)
- 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 Flat-Tailed Horned Lizard Interagency Coordinating Committee, CPUC, BLM, Wildlife Agencies, and State Parks (for mitigation parcels to be part of ABDSP).

B-7c **Minimize impacts to Peninsular bighorn sheep and provide compensation for loss of critical habitat.** 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.

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.

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 on-site restoration and off-site 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 Project, the required mitigation for PBS impacts includes off-site purchase of 525.71 acres and on-site 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.

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
- 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 Management Plan by the designated land management entity)
- 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 CPUC, BLM, Wildlife Agencies, and State Parks (for mitigation parcels to be part of ABDSP).

B-7d **Conduct burrowing owl surveys, and implement appropriate avoidance/minimization/ compensation strategies.** 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.

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).

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.

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 owls, then the applicant shall work with the CDFG to provide alternate mitigation for burrowing owls. If the alternate burrows are used, no other mitigation shall be required.

If it is not possible to preserve contiguous habitat on which to provide alternate burrows (e.g., on private land), and occupied owl burrows would be directly impacted, then the owls shall be passively relocated without the creation of alternate burrows prior to construction (relocation should only be implemented during the non-breeding season [September 1 through January 31]). 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 revised.

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 Management Plan by the designated land management entity)
- 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 CPUC, BLM, Wildlife Agencies, and State Parks (for mitigation parcels to be part of ABDSP).

B-7e **Conduct least Bell's vireo and southwestern willow flycatcher surveys, and implement appropriate avoidance/minimization/compensation strategies.** 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.

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.

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.

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. 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.

Mitigation for the loss of least Bell's vireo- or southwestern willow flycatcher-occupied habitat (or designated critical habitat for the flycatcher) shall be implemented as follows. Permanent impacts to occupied habitat and/or designated critical habitat shall include off-site 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 on-site restoration and 2:1 off-site 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.

For the Project, the required mitigation for least Bell's vireo occupied habitat is on-site restoration of 13.5 acres and off-site acquisition and preservation of 52.8 acres of least Bell's vireo occupied habitat. For the Project, the required mitigation for southwestern willow flycatcher occupied

habitat is on-site restoration of 33.14 acres and off-site acquisition and preservation of 68.41 acres of southwestern willow flycatcher occupied habitat 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).

A Habitat Management Plan for any required, off-site 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 applicant to fund the Habitat Management Plan and implementation of the Habitat Management Plan by the designated land management entity)
- Management specifications including, but not limited to, regular biological surveys to compare with baseline; exotic, non-native species control; fence/sign replacement or repair, public education; trash removal; and annual reports to 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).

B-7h **Implement appropriate avoidance/minimization strategies for eagle nests.** No construction or maintenance activities shall occur within 4,000 feet of an eagle nest during the eagle breeding season (December through June).

B-7i **Conduct Quino checkerspot butterfly surveys, and implement appropriate avoidance/ minimization/compensation strategies.** 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.

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.

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 on-site restoration of temporarily disturbed areas and off-site 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 off-site 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 mitigation land to be part of ABDSP), and USDA Forest Service (for mitigation parcels to be National Forest lands). A USFWS permitted biologist shall be present during all construction activities in potentially occupied habitat to monitor and assist the construction crews to ensure impacts occur only as allowed. This same mitigation shall apply where the protocol pre-construction survey was conclusive for determining that the QCB is present and where construction would occur in designated critical habitat. Impacts to QCB critical habitat must be mitigated within the same Critical Habitat Unit where the impacts occurred.

For the Project, the required mitigation for impacts to designated critical habitat includes 55.7 acres of onsite restoration and 94.12 acres of offsite acquisition and preservation of acres of QCB critical habitat or other habitat acceptable to Wildlife Agencies, BLM, or other applicable agencies. Impacts to QCB critical habitat must be mitigated within the same Critical Habitat Unit where the impacts occurred.

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) shall be considered occupied by the QCB and mitigated under the assumption that the QCB is present.

A Habitat Management Plan for any required, off-site 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 applicant to fund the Habitat Management Plan and implementation of the Habitat Management Plan by the designated land management entity)
- Management specifications including, but not limited to, regular biological surveys to compare with baseline; exotic, non-native species control; fence/sign replacement or repair, public education; trash removal; and annual reports to 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).

B-7j **Conduct arroyo toad surveys, and implement appropriate avoidance/minimization/compensation strategies.** 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 shall stand. Where the pre-construction survey determines the species is absent, the mitigation shall be reduced accordingly.

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.

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.

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. 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.

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. For the Proposed Project, the required mitigation for arroyo toad occupied habitat includes 150.69 acres of on-site restoration and 216.18 acres of off-site acquisition and preservation of occupied toad habitat consisting of 0.6 acres of breeding habitat and 215.58 acres of 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).

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
- 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 Management Plan by the designated land management entity)
- 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 CPUC, BLM, Wildlife Agencies, and USDA Forest Service (for mitigation parcels to be National Forest lands).

B-7l **Conduct coastal California gnatcatcher surveys, and implement appropriate avoidance/minimization/compensation strategies.** 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.

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, the following avoidance measures shall apply.

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.

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. However, 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 activities, and working in other areas until the young have fledged.

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.

For the Proposed Project, the required mitigation for the loss of assumed occupied gnatcatcher habitat includes 52.69 acres of on-site restoration and 103.73 acres of off-site acquisition and preservation of occupied gnatcatcher habitat. Furthermore, the required mitigation for the loss of unoccupied designated critical habitat includes 32.97 acres of on-site restoration and off-site acquisition and preservation of 4.44 acres of designated critical habitat for the gnatcatcher. 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).

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
- 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 Management Plan by the designated land management entity)
- 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 CPUC, BLM, Wildlife Agencies, and USDA Forest Service (for mitigation parcels to be National Forest lands).

B-8a **Conduct pre-construction surveys and monitoring for breeding birds.** 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).

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.

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.

If no active nests are observed, construction may proceed. 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, and 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). Otherwise, 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. All active nests shall be monitored on a weekly basis until the nestlings fledge. 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).

B-9a **Survey for bat nursery colonies.** A CDFG-approved biologist shall conduct a habitat assessment for bat nursery colonies prior to any construction activity. Then, the approved biologist shall conduct a survey for bat nursery colonies or signs of such colonies prior to construction. 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. 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.

B-10a **Utilize collision-reducing techniques in installation of transmission lines**. The 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. 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 geographic 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 (from MP 50 through MP 88 for the SRPL Proposed Project) 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 transmission lines (CEC, 2007). 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 continue to work with these agencies until approval of a final study protocol is obtained. If the study shows the markers to be ineffective, the applicant shall coordinate with the Wildlife Agencies and State Parks (for markers in ABDSP) to develop alternate collision protection measures.
- 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. 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. 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. 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.

B-11a Prepare and implement a raven control plan. A Raven Control Plan shall be prepared and implemented for the I-8 Alternative where it occurs in FTHL MAs and FTHL habitat outside of 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. SDG&E shall obtain approval of this plan from the USFWS prior to the start of construction. SDG&E shall work with the USFWS until approval of a plan is obtained.

B-12a Conduct maintenance activities outside the general avian breeding season. 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.

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). 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).

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, 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 would reduce noise to below the threshold, maintenance shall be deferred until the nestlings have fledged as determined the qualified biologist. Where noise-reducing methods are employed, active nests shall be monitored by the qualified biologist on a weekly basis until maintenance is complete or until the nestlings fledge, whichever comes first. The qualified biologist shall 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, Wildlife Agencies, State Parks (for maintenance in ABDSP), and USDA Forest Service (for alternatives with maintenance on National Forest lands).

Animal Burrows/Dens. If any animal burrows or dens are identified during the pre-maintenance surveys for active bird nests, soil in a brush-clearing area shall be sufficiently dry before brush clearing to prevent damage to burrows or dens. 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.

B-12b **Conduct maintenance when arroyo toads are least active.** 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.

B-12c **Maintain access roads and clear vegetation in Quino checkerspot butterfly habitat.** 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).

Visual Resources

V-1a **Reduce visibility of construction activities and equipment.** Substation construction sites and all staging and material and equipment storage areas including storage sites for excavated materials, and helicopter fly yards shall be appropriately located away from areas of high public visibility. If visible from nearby roads, residences, public gathering areas, or recreational areas, facilities, or trails, construction sites and staging areas and fly yards shall be visually screened using temporary screening fencing. Fencing will be of an appropriate design and color for each specific location. Additionally, construction in areas visible from recreation facilities and areas during holidays and periods of heavy recreational use shall be avoided. 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.

V-1b **Reduce construction 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. 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.

V-2a **Reduce in-line views of land scars.** 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. 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.
- 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).

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.

V-2b **Reduce visual contrast from unnatural vegetation lines.** 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. Furthermore, all graded roads and areas not required for on-going operation, maintenance, or access shall be returned to pre-construction conditions. 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. 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.

V-2c **Reduce color contrast of land scars on non-Forest lands.** 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. 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.

V-2d **Construction by helicopter.** 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. Agency consultations must be conducted and approvals received at least 120 days prior to the start of construction.

V-2f **Reduce land scarring and vegetation clearance impacts on USFS-administered lands.** 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. Mitigation will be incorporated to reduce the total visual impact of all vegetation clearing performed for the power line **(**USFS Scenery Conservation Plan)

V-3a **Reduce visual contrast of towers and conductors.** The following design measures shall be applied to all new structure locations, conductors, and re-conductored spans, in order to reduce the degree of visual contrast caused by the new facilities:

- All new conductors and re-conductored spans are to be non-specular in design in order to reduce conductor visibility and visual contrast.
- 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, backcountry 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 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.
- 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).

V-7a **Reduce visual contrast associated with ancillary facilities.** 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.

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.

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.

V-7b **Screen ancillary facilities.** 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.

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.

V-21a **Reduce 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. 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.

V-45a **Prepare and implement Scenery Conservation Plan.** 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 non-specular (non-reflective) 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, should 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.
- **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. Mitigation will be incorporated to reduce the total visual impact of all vegetation clearing performed for the power line.
- **Roads.** No new access or spur roads, or improvements (reconstruction/expansion) to existing roads are to be constructed in the following areas: (1) where ground slopes exceed 15%, or (2) on Forest lands subject to a HIGH Scenic Integrity Objective (SIO) where the new access or spur road would be visible from primary travel (paved) roads or the Pacific Crest National Scenic Trail, regardless of ground slope. Existing roads needing reconstruction/expansion on other areas of the forest shall be configured to minimize the creation of cut/fill slopes. Where such slopes are created, they shall be immediately treated to minimize their level of scenery disturbance. These treatments may include construction of structural elements designed to blend with the adjacent natural scenery, or revegetation with native species.
- **Structures.** All structures and structural elements, that may be constructed as part of the project shall be designed, located, shaped, textured, colored and/or screened as necessary to minimize their visual contrast, blend, and complement the adjacent forest and community architectural character.
- **Evaluation of Effects.** The Licensee may be required to provide photorealistic visual simulations of proposed designs and mitigation measures to demonstrate their effectiveness in achieving Land and Resource Management Plan Scenic Integrity Objectives as viewed from sensitive viewsheds.
- **Offsite Mitigation.** Where project features create unavoidable and permanent negative scenery effects that are inconsistent with CNF Plan Scenic Integrity Objectives, additional scenery enhancement activities approved by the Forest Service shall be performed in the nearest suitable areas in new viewsheds agreeable to the Forest shall be purchased and assigned to the Forest for its stewardship.

V-66a Reduce structural prominence and visual contrast associated with the Interstate 8/Chocolate Canyon 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 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.

V-68a 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. 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.

Land Use

L-1a Prepare Construction Notification Plan. Forty-five 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:

- **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, remove parking, 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.
- **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.
- **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.
- **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.

L-1c **Coordinate with MCAS Miramar**. 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. 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.

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.

L-2b **Revise project elements to minimize land use conflicts.** 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. 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.

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.

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.

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.

Wilderness and Recreation

WR-1a **Coordinate construction schedule and activities with the authorized officer for the recreation area.** 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. 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. 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.

BLM Dunaway Camp
Juan Bautista de Anza National Historic Trail (County of San Diego Regional Trail)
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

WR-1b **Provide temporary detours for trail users.** 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. 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. SDG&E shall post a public notice of the temporary trail closure and information on the trail detour. 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.

- Juan Bautista de Anza National Historic Trail
- Trans-County Trail
- Pacific Crest National Scenic Trail
- California Riding and Hiking Trail
- Mission Trails Regional Park (Fortuna, Rim, and Quarry Loop Trails)

WR-1c Coordinate with local agencies to identify alternative recreation areas. 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. SDG&E shall post a public notice at recreation facilities that are to be closed or where access would be limited during project 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.

- BLM Dunaway Camp
- Juan Bautista de Anza National Historic Trail
- Trans-County Trail
- Pacific Crest National Scenic Trail
- California Riding and Hiking Trail
- Sycamore Canyon Open Space Preserve
- Mission Trails Regional Park

WR-2a Develop a reroute for the BCD Alternative Revision to reduce effects on recreation. 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. 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.

WR-2b Evaluate and Implement PCT Route Revision. 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. 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. 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.

WR-2c PCT Route Impact Mitigation. SDG&E shall consult and coordinate with the U.S. Forest Service, BLM, and the Pacific Crest Trail Association to develop mitigation options to compensate for the final impacts to the PCT identified by the route revision plan required by Mitigation Measure WR-2b. Compensation measures will include enhancements to other PCT trail segments to off-set the impacts at the Modified Route D Alternative transmission line crossing. SDG&E shall prepare and submit a report to the BLM and U.S. Forest Service for approval prior to energizing the new transmission line. The report shall identify feasible PCT compensation options, including improved or additional trailhead parking, trail improvements, and site improvement at the trail terminus. If directed by the BLM, SDG&E shall be responsible for implementing compensation projects in manner acceptable to the BLM and U.S. Forest Service. Projects shall be completed within one year of energizing the transmission line.

WR-3a Coordinate tower and road locations with the authorized officer for the recreation area. 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, SDG&E shall provide full funding for relocation of trail segments, including planning and trail construction, at location(s) identified by the authorized officer of the trail or recreation area. Trail segment relocation shall maintain the connectivity of regional and community trails.

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.

- Juan Bautista de Anza National Historic Trail
- Cleveland National Forest
- Trans-County Trail
- Pacific Crest National Scenic Trail
- California Riding and Hiking Trail
- San Vicente Highlands Open Space Preserve

Agriculture

AG-1a Avoid interference with agricultural operations. The Applicant shall coordinate with property owners and tenants to ensure that project construction will be conducted so as to avoid or minimize interference with agricultural operations. Agricultural operations include, but are not limited to, the use of farm vehicles and equipment, access to property; water delivery, drainage, and irrigation.

AG-1b Restore compacted soil. 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.

AG-1c Coordinate with grazing operators. 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)

AG-3b Consult with and inform aerial applicators. The Applicant shall consult with landowners 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. 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.

Cultural Resources

C-1a Inventory and evaluate cultural resources in Final APE. 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.[1] This survey will 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).

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

[1] 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.

selected right-of-way and tower locations shall be staked prior to the cultural resource field surveys.

C-1b **Avoid and protect potentially significant resources.** 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.

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 will 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. 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).

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, will be designated as Environmentally Sensitive Areas (ESAs) to ensure that construction activities do not encroach onsite peripheries. 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. 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 Measure C-1e).

C-1c **Develop and implement 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 most resources would consist of sample excavation and/or surface artifact collection, and site documentation. A possible

exception would be a site where burials, cremations, or sacred features are discovered that cannot be avoided (see Mitigation Measure C-2).

The HPTP shall define and map all known NRHP- and/or CRHR-eligible properties in or within 50 feet of all project APEs and shall identify the cultural values that contribute to their NRHP- and/or CRHR-eligibility. The HPTP shall also detail how NRHP- and/or CRHR-eligible properties will be marked and protected as ESAs (in accordance with Mitigation Measure C-1b) during construction.

The HPTP shall also define any additional areas that are considered to be of high-sensitivity for discovery of buried register-eligible cultural resources, including burials, cremations, or sacred features. This sensitivity evaluation shall be conducted by an archaeologist who meets the Secretary's Standards and who takes into account geomorphic setting and surrounding distributions of archaeological deposits. The HPTP shall detail provisions for monitoring construction in these high-sensitivity areas for proper implementation of Mitigation Measures C-1e and C-3a. It shall also detail procedures for halting construction, making appropriate notifications to agencies, officials, and Native Americans, and assessing register-eligibility in the event that unknown cultural resources are discovered during construction. For all unanticipated cultural resource discoveries, the HPTP shall detail the methods, consultation procedures, and timelines for assessing register-eligibility, formulating a mitigation plan, and implementing treatment. Mitigation and treatment plans for unanticipated discoveries shall be approved by the BLM and CPUC, other appropriate agencies and local governments, appropriate Native Americans, and the SHPO prior to implementation.

The HPTP shall also identify all historic built environment resources (structures, roads, dams, etc.) that would be affected indirectly by visual intrusion of the Proposed Project on qualities that contribute to their register eligibility. Although the current analysis has assessed the potential for indirect visual impacts to previously recorded historic built environment resources within 0.5 miles of the Proposed Project and Alternatives, the HPTP shall include an identification effort focused on identifying any such resources that may not have been previously recorded. The scope of this identification effort shall be in accordance with 36 CFR 800, which requires a reasonable effort to identify potentially NRHP-eligible resources that would be adversely affected by indirect project impacts. The HPTP shall also detail the treatment for each affected resource that will minimize those long-term visual impacts (as detailed in Mitigation Measure C-6a).

The HPTP shall include provisions for analysis of data in a regional context, reporting of results within one year of completion of field studies, curation of artifacts (except from private land) and data (maps, field notes, archival materials, recordings, reports, photographs, and analysts' data) at a facility that is approved by BLM, and dissemination of reports to local and State repositories, libraries, and interested professionals. The BLM will retain ownership of artifacts collected from BLM managed lands. The Applicant shall attempt to gain permission for artifacts from privately held land to be curated with the other project collections. The HPTP shall specify that archaeologists and other discipline specialists conducting the studies meet the Secretary's Standards (per 36 CFR 61).

C-1d **Conduct data recovery 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

engineering 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 will 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 will follow standard statistical sampling methods, but sampling will be confined, as much as possible, to the direct impact area. Data-recovery methods, sample sizes, and procedures shall be detailed in the HPTP consistent with Mitigation Measure C-1c (Develop and implement Historic Properties Treatment Plan) and implemented by the Applicant only after approval by the BLM and CPUC. 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.

C-1e **Monitor construction at known 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. The qualifications of the principal archaeologist and archaeological monitors shall be approved by the BLM and CPUC.

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.

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. 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.

C-1f **Train construction personnel.** 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 archaeological 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.

C-1g **Avoid and protect Old Highway 80 (P-37-024023).** 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. 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.

C-2a **Properly treat human remains.** All locations of known Native American human remains shall be avoided through project design and shall be protected by designation as ESAs. 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. The Applicant shall follow all State and federal laws, statutes, and regulations that govern the treatment of human remains (see Section D.7.7). 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.

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. The Applicant shall follow all State and federal laws, statutes, and regulations that govern the treatment of human remains. 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, as directed by 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 re-interment location may be identified as a nearby locale within SDG&E ROW, or an offsite location may be selected. The Applicant shall assist and support the MLD in identifying, acquiring, and protecting the re-interment location.

C-3a **Monitor construction in areas of high sensitivity for buried resources.** 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

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 will 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.

C-4a **Complete consultation with Native American and other Traditional Groups.** 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. 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).

C-5a **Protect and monitor NRHP- and/or CRHR-eligible properties.** 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. The plan shall be submitted to the BLM, CPUC, and other appropriate land-managing agencies for review and approval at least 30 days prior to project operation.

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. 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.

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.

C-6a **Reduce adverse visual intrusions to historic built environment properties.** 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 conspicuous locations, if technically feasible, or altering towers to reduce any identified adverse effects. Selection of appropriate and effective treatments shall consider technical feasibility of the measures and potential impacts on other sensitive resources or land uses.

C-6e **Reduce adverse visual intrusions to portions of Old 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. If this alternative is constructed, as part of the Historic Properties Treatment Plan (Mitigation Measure C-1c) SDG&E shall develop 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.

C-6f **Reduce adverse visual intrusions 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. 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.

Paleontological Resources

PAL-1a **Inventory and evaluate paleontological resources in the Final APE.** 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.

PAL-1b **Develop Paleontological Monitoring and 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, shall have knowledge of the local paleontology, and shall be 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 require paleontological monitoring. The Qualified Monitor shall have a B.A. 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.

PAL-1c Monitor construction for paleontology. 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. 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). Construction activities shall be diverted when data recovery of significant fossils is warranted, as determined by the Qualified Paleontologist

PAL-1d Conduct paleontological data recovery. 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).

PAL-1e Train construction personnel. 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 Treatment Plan consistent with Mitigation Measure PAL-1b (Develop Paleontological Monitoring and Treatment Plan).

Noise

N-1a **Implement Best Management Practices for construction noise.** 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. 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. 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 cutouts
- 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 vehicle use shall be applied; if a vehicle is not required for use immediately or continuously for construction activities, its engine shall be shut off. (Note: certain equipment, such as large diesel-powered vehicles, require extended idling for warm-up and repetitive construction tasks.)

N-2a **Avoid blasting where damage to structures could occur.** 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. 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.

N-3a **Respond to complaints of corona noise.** 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). 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.

Transportation and Traffic

T-1a **Restrict lane closures.** SDG&E shall restrict all necessary lane closures or obstructions on major roadways associated with overhead or underground construction activities to off-peak periods in congested areas to reduce traffic delays. Lane closures must not occur between 6:00 and 9:30 a.m. and between 3:30 and 6:30 p.m., unless otherwise directed in writing by the responsible public agency issuing an encroachment permit.

T-4a **Ensure pedestrian and bicycle circulation and safety**. 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. Where construction activity will result in bike route or bike path closures, appropriate detours and signs shall be provided.

T-5a **Repair damaged roads.** If damage to roads occurs as a result of project construction or construction vehicle traffic, SDG&E shall restore damaged roadways at their own expense under the direction of the affected public agencies to ensure that any impacts are adequately repaired. Roads disturbed by construction activities or construction vehicles shall be properly restored to ensure long-term protection of road surfaces. Said measures shall be incorporated into an access agreement/easement with the applicable governing agency prior to construction. Prior to construction, SDG&E will determine with the governing agency the appropriate method for documenting pre- and post-construction conditions.

T-7a **Notify public of potential short-term elimination of parking spaces.** As required in Mitigation Measures 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 onsite postings. The elimination and relocation of parking spaces must be in conformance with the requirements of agencies responsible for parking management.

T-9a **Prepare 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.

T-11b **Consult with and inform U.S. Customs and Border Protection.** 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 and shall install markers as requested by the Border Patrol. 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.

Public Health and Safety – Environmental Contamination

P-1a **Implement Environmental Monitoring Program.** 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. SDG&E will designate an Environmental Field Representative, who will be onsite to observe, enforce, and document adherence to the plans for all construction activities.

P-1b **Maintain emergency spill supplies and equipment.** Hazardous material spill kits will be maintained onsite by SDG&E or its contractors for response to small spills. This 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.

P-2a **Test for residual pesticides/herbicides on currently or historically farmed land.** 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. 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.

Excavated materials containing elevated levels of pesticide or herbicide will require special handling and disposal according to procedures established by the regulatory agencies. Effective dust suppression procedures will be used in construction areas to reduce airborne emissions of these contaminants and reduce the risk of exposure to workers and the public. Regulatory agencies for the State of California (DTSC or RWQCB) and the appropriate County (San Diego or Imperial) shall be contacted by SDG&E or its contractor to plan handling, treatment, and/or disposal options.

P-3a **Appoint individuals with correct training for sampling, data review, and regulatory coordination.** 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-hours hazardous material site worker training. 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.

P-3b **Documentation of compliance with measures for encountering unknown contamination.** 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 (if on BLM lands) for each event. This report shall be submitted within 30 days of receipt of laboratory data.

P-7a **Evaluate contaminated sites**. 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 (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 contamination would accompany construction at the site, undertake a Phase II Environmental Site Investigation (Phase II ESI) involving sampling and further characterization of potentially contaminated areas with the project ROW or reroute the line away from the contamination area. Should further investigation reveal high levels of hazardous materials, mitigate health and safety risk according San Diego County CUPA or RWQCB regulations or requirements. This would include site-specific Health and Safety Plans, Work Plans, and/or Remediation Plans.

Public Health and Safety – Electric and Magnetic Fields and Other Field-Related Concerns

PS-1a **Limit the conductor surface electric 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.

PS-1b **Document and resolve electronic interference complaints.** 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. All unresolved disputes shall be referred by SDG&E to the CPUC for resolution.

PS-2a **Implement grounding measures.** 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.

Air Quality

AQ-1a Suppress dust at all work or staging areas and on public roads. 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; (b) pre-water sites for 48 hours in advance of clearing; (c) reduce the amount of disturbed area where possible; (d) all dirt stock-pole areas should be sprayed daily as needed; (e) cover loads in haul trucks or maintain at least six inches of free-board when traveling on public roads; (f) pre-moisten, prior to transport, import and export dirt, sand, or loose materials; (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; (h) plant vegetative ground cover in disturbed areas as soon as possible following construction; (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); 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).

AQ-1b Use low-emission construction 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 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.

AQ-1h Obtain NOx and particulate matter emission offsets. 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, and 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.

AQ-4a Offset construction-phase greenhouse gas emissions with 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.

AQ-4b **Offset operation-phase greenhouse gas emissions with carbon credits.** 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 rules of the California Climate Action Registry may be retired by SDG&E to satisfy this requirement.

AQ-4c **Avoid sulfur hexafluoride emissions.** SDG&E shall identify sulfur hexafluoride (SF_6) leaks and establish a strategy for replacing leaking equipment to reduce SF_6 leaks. To accomplish this, SDG&E shall develop and maintain a record of SF_6 purchases, an SF_6 leak detection and repair program using laser imaging leak detection and monitoring no less frequently than quarterly, an SF_6 recycling program, and an employee education and training program for avoiding or eliminating SF_6 emissions caused by the Proposed Project. The SF_6 leak detection and repair program shall be provided to the CPUC and BLM 90 days prior to project construction. Prior to construction, SDG&E shall also become a Partner in the U.S. EPA's SF_6 Emissions Reduction Partnership for Electric Power Systems. SDG&E shall also report SF_6 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. 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.

Water Resources

H-1a **Prepare Substation Grading and Drainage Plan; construct during the dry season.** 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. 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. 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. Approved drainage control and erosion control BMPs shall be in place prior to the normal onset of winter rains.

H-1a(CC)

Construct during the dry season. All construction of the Chocolate Canyon Option shall occur during the dry season months. Approved drainage control and erosion control BMPs shall be in place prior to the normal onset of winter rains. 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.

H-1b **Construction in Los Peñasquitos Canyon Preserve to be in the dry season; SWPPP to be reviewed and approved by San Diego County and City of San Diego.** Construction within the Los Peñasquitos Canyon Preserve (the Preserve) shall occur during the summer (dry season) months. Project construction plans and the SWPPP for project construction shall be submitted to the CPUC, the City of San Diego and the County of San Diego for review and approval prior to construction. The SWPPP shall address erosion and sedimentation control, groundwater dewatering procedures, hazardous materials identification, handling, disposal and emergency spill procedures, and any other best management procedures necessary to prevent contaminants from entering the waters of the preserve, including consideration of using directional drilling. Construction activities within the Preserve shall be open to City and County monitors who shall have the authority to ensure compliance with the approved SWPPP.

H-1k **Comply with Forest Service conditions.** 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 Forest Service of the location of the spill cleanup equipment on National Forest System lands and of the location, type, and quantity of oil and hazardous substances stored in the project area; (3) to inform the Forest Service immediately of the nature, time, date, location, and action taken for any spill affecting National Forest System lands, and Licensee adjoining property when such spill could reasonably be expected to affect National Forest System lands, and (4) provide annually to the Forest Service a list of Licensee project contacts.

- 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.
- 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.

- 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. 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.
- 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.

- Within one year of license issuance the Licensee shall file with the Public Utilities Commission a plan approved by the Forest Service for the management of groundwater and the associated surface waters on or affecting National Forest System lands. The purpose of the plan shall be to reduce the potential for groundwater extraction or contamination and related effects to surface water resources.

H-1l **Construction on Forest Service land to be subject to an approved, site-specific SWPPP and Sediment Control Plan.** A site-specific sediment control plan and SWPPP shall be prepared for construction within the National Forest. These plans shall identify and characterize potentially affected water resources and provide site-specific remedies to minimize project-related sedimentation, as well as provide post-construction remediation and monitoring details. The sediment control plan shall include construction in the dry period, as well as construction by helicopter in areas where terrain is steep and the potential consequences of sedimentation severe. These plans shall be submitted to the Forest Service and CPUC for review and approval prior to construction.

H-2d **Maintain vehicles and equipment.** All vehicles and equipment, including all hydraulic hoses, shall be maintained in good working order so that they are free of any and all leaks that could escape the vehicle or contact the ground. A vehicle and equipment maintenance log shall be updated and provided to CPUC and BLM once monthly during project construction.

H-4b **Avoid blasting where damage to groundwater wells or springs could occur.** 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 Applicant.

H-5a **Install substation runoff control.** 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. Detention/retention basins shall be installed to reduce local increases in runoff, particularly on frequent runoff events (up to 10-year frequency). 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. A drainage design hydrologic and hydraulic analysis shall be provided to the CPUC for review and approval prior to the initiation of construction.

H-6a **Scour protection to include avoidance of bank erosion and effects to adjacent property.** 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. 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.

H-7a **Develop Hazardous Substance Control and Emergency Response Plan for project operation.** 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.

H-8a **Bury power line below 100-year scour depth.** 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.

Geology, Mineral Resources, and Soils

G-2a **Protect desert pavement.** 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 placed on the ground surface. 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. The plan shall define how protective measures will prevent destruction of desert pavement.

G-3a **Conduct geotechnical studies for soils to assess characteristics and aid in appropriate foundation 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.

G-4a **Reduce effects of groundshaking.** 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.

G-4b **Conduct geotechnical investigations for liquefaction.** 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.

G-5a **Minimize project structures within active fault zones.** 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.

G-6a **Conduct geotechnical surveys for landslides and protect against slope instability.** The design-level geotechnical surveys conducted by the Applicant shall perform slope stability analyses in areas 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 of unstable materials, and avoidance of highly unstable areas. SDG&E shall document compliance with this measure prior to the final project design by submitting a report to the CPUC for review and

approval at least 60 days before construction. The report shall document the investigations and detail the specific support and protection measures that will be implemented.

G-9a **Coordinate with quarry operations.** 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. 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. 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).

Socioeconomics, Services, and Utilities

S-2a **Notify public of utility service interruption.** 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.

S-2b **Protect underground utilities.** 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.

S-3a **Recycle construction waste**. To comply with the Integrated Waste Management Act of 1989, during project construction SDG&E and/or its construction contractor shall recycle a minimum of 50 percent of the 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.

S-3b **Use reclaimed water.** 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. 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.

Fire and Fuels Management

F-1a **Develop and implement a Construction Fire Prevention Plan**. 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, and SDG&E shall resolve each comment in consultation with CAL FIRE. The final Plan shall be approved by CAL FIRE at least 30 days prior to the initiation of construction activities. 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 Red Flag event status and PAL as stipulated by CAL FIRE and CNF.
- All construction crews and inspectors shall be provided with radio and cellular telephone access that is operational along the entire length of the approved route to allow for immediate reporting of fires. Communication pathways and equipment shall be tested and confirmed operational each day prior to initiating construction activities at each construction site. All fires shall be reported to the fire agencies with jurisdiction in the project area immediately upon ignition.
- Each crew member shall be trained in fire prevention, initial attack firefighting, and fire reporting. Each member shall carry at all times a laminated card listing pertinent

telephone numbers for reporting fires and defining immediate steps to take if a fire starts. Information on contact cards shall be updated and redistributed to all crewmembers as needed, and outdated cards destroyed, prior to the initiation of construction activities on the day the information change goes into effect.

- Each member of the construction crew shall be trained and equipped to extinguish small fires in order to prevent them from growing into more serious threats. Each crew member shall at all times be within 100 yards of a vehicle containing equipment necessary for fire suppression as outlined in the final Construction Fire Plan.

F-1b **Amend and implement Sempra Utilities Wildland Fire Prevention and Fire Safety Guide (2007).** 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. 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.

F-1c **Ensure coordination for emergency fire suppression.** SDG&E shall ensure that personnel, construction equipment, and aerial operations do not create obstructions to firefighting equipment or crews. 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.

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. 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.

F-1d **Remove hazards from the work area**. 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.

F-1e **Contribute to defensible space grants fund.** 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 set forth in 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-3b).

Table D.15-25. Mitigation Measure F-1e Compliance Contributions

Segment Identification	Homes at Risk	Annual Contribution Per Home	Total Annual Contribution for 2008 (USD)
Final Environmentally Superior Southern Route Alternative	1,300	$2,000	$2,600,000

a To be determined through Fire Behavior Trend Modeling Analyses that shall be performed by SDG&E should any of these future routes be constructed.

b No additional homes would be placed at risk should this alternative be selected in addition to the primary route to which this alternative would connect.

F-2a **Establish and maintain adequate line clearances.** 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.

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.

F-2b **Install existing conductors on steel poles.** 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.

F-2c **Perform climbing inspections.** 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.

F-3a **Contribute 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, based on the number of miles of Wildfire Containment Conflict listed in Table D.15-26. Should CAL FIRE wish to take over administrative authority for the Powerline Firefighting Mitigation Fund, an administrative transfer shall not be in violation of Mitigation Measure F-3a.

Table D.15-26. Mitigation Measure F-3a Compliance Locations

Segment Identification	Location of Significant Conflict	Length of Significant Conflict (miles)	Area of Significant Conflict (acres)
Final Environmentally Superior Southern Route Alternative	MRD 11-13, MRD 23-26.5, and MP just before 131-133	6.5	236

F-3b **Prepare 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

community education and outreach program on the fire prevention plans and practices implemented by the MOU shall be adopted.

A key element of the MOU shall be ensuring immediate transmission line de-energizing during fire emergencies and ensuring adequate and immediate communication to fire agencies of line de-energizing. SDG&E shall provide all appropriate local, State, and federal fire dispatching agencies with an on-call contact person (Fire Coordinator) who has the authority to shut down the line in areas affected by a fire. The transmission line shall be de-energized prior to and during fire suppression activities within 1,000 feet of the transmission corridor to maintain firefighter safety, and re-energizing shall require notification of all fire agencies.

Applicant Proposed Measures

The following Applicant Proposed Measures (APMs) were identified by SDG&E in its Proponent's Environmental Assessment submitted to the CPUC. The impact analysis assumes that all APMs would be implemented as defined in the table.

Applicant Proposed Measures

APM No.	Description
	AIR QUALITY
AQ-APM-1	For activities in Imperial County, the project will comply with ICAPCD Rule 800 (Fugitive Dust Requirement for Control of Fine Particulate Matter [PM10]). A Dust Control Plan for construction activities would be filed with the ICAPCD.
AQ-APM-2	1. Prohibit construction grading on days when the wind gusts exceed 25 mph to the extent feasible to control fugitive dust. 2. All trucks hauling soil and other loose material will be covered or maintain at least two feet of freeboard. 3. Snow fence-type windbreaks will be erected in areas identified as needed by SDG&E. 4. Vehicle speeds will be limited to 15 mph on unpaved (no gravel or similar surfacing material) roads. 5. Unpaved roads will be treated by watering as necessary. 6. Soil stabilizers will be applied to inactive construction areas on an as-needed basis. 7. Exposed stockpiles of soil and other excavated materials will be contained within perimeter silt fencing, watered or treated with soil binders, as necessary.
AQ-APM-3	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.
AQ-APM-4	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.
AQ-APM-5	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. 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.
	BIOLOGICAL RESOURCES
BIO-APM-1	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 and consult on reasonable and feasible mitigation measures for potential impacts, prior to any ground disturbing activities in a particular area. Mitigation would prioritize avoidance as the primary means to address impacts. If avoidance is not feasible, then relocation/restoration would be implemented. Where relocation/restoration is not feasible or deemed not to fully address impacts, then mitigation through SDG&E's NCCP mitigation credits or if necessary compensation via another on- or off-site purchase or dedication of habitat at a ratio of 2:1 for impacts inside preserves and 1:1 for impacts outside of preserves would be identified and implemented.
BIO-APM-2	Prior to construction, all SDG&E's contractors, subcontractors and project personnel would 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.

Applicant Proposed Measures

APM No.	Description
BIO-APM-3	Except when not feasible due to physical or safety constraints, all project vehicle movement would 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. New access road construction for the project would be allowed year-round. However, when feasible, every effort would 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 would perform a site survey, or more as appropriate, in the area where the work is to occur. This survey would be performed to determine presence or absence of endangered nesting birds, or other endangered species in the work area. SDG&E would 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 would not replace the need for SDG&E to perform detailed on-the-ground surveys otherwise required by BIO-APM-1. Parking or driving underneath oak trees is not allowed in order to protect root structures. 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 miles per hour speed limit shall be observed on dirt access roads to reduce dust and allow reptiles and small mammals to disperse.
BIO-APM-4	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. Survey personnel shall keep survey vehicles on existing roads. During project surveying activities, brush clearing for footpaths, line-of-sight cutting, and land surveying panel point placement in sensitive habitat would require prior approval from the project biological resource monitor in conformance with the APMs. Hiking off roads or paths for survey data collection is allowed year-round as long as other APMs are met. Stringing of new wire and reconductoring for the project would 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 of drag on or through the brush or ground or vehicles leave project access roads, SDG&E would perform a site survey, or more as appropriate, to determine presence or absence of endangered nesting birds or other endangered species in the work area. SDG&E would submit results of this survey to the USFWS and CDFG and consult on reasonable and feasible mitigation measures for potential impacts, prior to dropping wire in brush, dragging wire on the ground or through brush, or taking vehicles off project access roads. However, this survey would not replace the need for SDG&E to perform detailed on-the-ground surveys as otherwise required by BIO-APM-1. No paint or permanent discoloring agents would 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.
BIO-APM-5	To the extent feasible, access roads would 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 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. 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. 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 would avoid sensitive features). Prior to construction in streambeds and washes, SDG&E would perform a pre-activity survey, or more as appropriate, to determine the presence or absence of endangered riparian species. However, this survey would not replace the need for SDG&E to perform detailed on-the-ground surveys as otherwise required by the BIO-APM-1.
BIO-APM-6	In the construction, operation, and maintenance of the project, SDG&E would comply with all applicable environmental laws and regulations, including, without limitation, those regulating and protecting wildlife and its habitat.
BIO-APM-7	Littering is not allowed. project personnel would not deposit or leave any food or waste in the project area, and no biodegradable or non-biodegradable debris would remain in the right-of-way following completion of construction.

Applicant Proposed Measures

APM No.	Description
BIO-APM-8	Prior to construction, the boundaries of plant populations designated as sensitive by USFWS or CDFG and other resources designated sensitive by SDG&E and the resource agencies would be clearly delineated with clearly visible flagging or fencing. The flagging and fencing shall remain in place for the duration of construction. Flagged areas would be avoided to the extent practicable during construction activities in that area. Where these areas cannot be avoided, focused surveys for covered plant species shall be performed in conformance with BIO-APM-1, and the responsible resource agency(s) would be consulted for appropriate mitigation and/or re-vegetation measures prior to disturbance. Notification of the presence of any covered plant species to be removed in the work area would occur within ten (10) working days prior to the project activity, during which time the USFWS or CDFG may remove such plant(s) or recommend measures to minimize or reduce the take. If neither USFWS nor CDFG has removed such plant(s) within the ten (10) working days following the written notice, SDG&E may proceed with the work and cause a take of such plant(s), if minimization measures are not implemented.
BIO-APM-9	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. In areas not cleared or maintained within a two-year period, brush clearing shall 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 would 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 would 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 would be sufficiently dry before clearing activities occur to prevent mechanical damage to burrows that may be present.
BIO-APM-10	No wildlife, including rattlesnakes, may be harmed except to protect life and limb. Firearms shall be prohibited in all project areas except for those used by security personnel.
BIO-APM-11	Feeding of wildlife is not allowed.
BIO-APM-12	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.
BIO-APM-13	Plant or wildlife species may not be collected for pets or any other reason.
BIO-APM-14	All steep-walled trenches or excavations used during construction shall be inspected twice daily (early morning and evening) to protect against wildlife entrapment. If wildlife is located in the trench or excavation, the on-site biological resource monitor shall be called immediately to remove them if they cannot escape unimpeded. The on-site biological resource monitor would make the required contacts with the USFWS and CDFG resource personnel and obtain verbal approval prior to removing any entrapped wildlife. 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.
BIO-APM-15	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 would 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 would develop a reasonable and feasible mitigation plan consistent with the APMs and any permits previously issued for the project by the governmental agencies.

Applicant Proposed Measures

APM No.	Description
BIO-APM-16	Environmentally sensitive tree trimming locations for the project would be identified in SDG&E's existing vegetation management tree trim database utilized by tree trim contractors. The biological field construction monitor shall be contacted prior to trimming in environmentally sensitive areas. Whenever feasible, trees in environmentally sensitive areas, such as areas of riparian or native scrub vegetation, would be scheduled for trimming during non-sensitive (i.e., outside breeding or nesting) times. Where trees cannot be trimmed during non-sensitive times, SDG&E would perform a site survey, or more as appropriate, to determine presence or absence of endangered nesting bird species in riparian or native scrub vegetation. SDG&E would submit results of this survey to the USFWS and CDFG and consult on mitigation measures for potential impacts, prior to tree trimming in environmentally sensitive areas. However, this survey would not replace the need for SDG&E to perform detailed on-the-ground surveys as otherwise required by BIO-APM-1. Where riparian areas with over-story vegetation are crossed, tree removal (i.e., clear-cut) widths would 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 would consult with the USFWS and CDFG to develop alternative tree removal options that could reasonably maintain edge diversity.
BIO-APM-17	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. Where required, roads would be permanently closed using the most effective feasible and least environmentally damaging methods appropriate to that area with the concurrence of the underlying landowner and the governmental agency having jurisdiction (e.g., stockpiling and replacing topsoil or rock replacement). This would limit new or improved accessibility into the area. 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 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 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.
BIO-APM-18	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. When it is not feasible to avoid constructing poles or access roads in high value wildlife habitats, SDG&E would perform a site survey to determine presence or absence of endangered species in sensitive habitats. SDG&E would submit results of this survey to the USFWS and consult on mitigation measures for potential impacts, prior to constructing structures or access roads. However, this survey would not replace the need for SDG&E to perform detailed on-the-ground surveys as otherwise required by BIO-APM-1. Where it is not feasible for access roads to avoid sensitive water resource features, such as streambed crossings, such crossings would be built at right angles to the streambeds. Where such crossings cannot be made at right angles, roads constructed parallel to streambeds would be limited 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." Streambed crossings or roads constructed parallel to streambeds would require review and approval of necessary permits from the ACOE, CDFG, and RWQCB.
BIO-APM-19	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. 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.
BIO-APM-20	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.
BIO-APM-21	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.

Applicant Proposed Measures

APM No.	Description
BIO-APM-22	Species identified as sensitive by the land managing agency shall be salvaged where avoidance is not feasible in accordance with state law. 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, • removal and salvage by commercial dealers, or • any combination of the above.
BIO-APM-23	Only the minimum amount of vegetation necessary for the construction of structures and facilities will be removed. 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.
BIO-APM-24	Construction holes left open over night shall be covered. Covers shall be secured in place nightly, prior to workers leaving the site, and shall be strong enough to prevent livestock or wildlife from falling through and into a hole. Holes and/or trenches shall be inspected prior to filling to ensure absence of mammals and reptiles.
BIO-APM-25	Disturbed soils shall be re-vegetated with an appropriate seed mix that does not contain invasive, non-native plant species.
BIO-APM-26	Excavations shall be sloped on one end to provide an escape route for small mammals and reptiles.
BIO-APM-27	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). 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.
BIO-APM-28	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.
BIO-APM-29	Reduce construction night lighting on sensitive habitats. 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. 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.
	CULTURAL RESOURCES
CR-APM-1	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.

Applicant Proposed Measures

APM No.	Description
CR-APM-2	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. 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.
CR-APM-3	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. 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. 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. SDG&E will develop a treatment plan to mitigate the impacts.
CR-APM-4	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).
CR-APM-5	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. 4. Data recovery shall not be required for an historical resource if the lead agency through discussion and consultation with Indian Tribes, professional archaeologists and SHPO determines that testing or studies already completed have adequately recovered the scientifically consequential information from and about the archaeological or historical resource, provided that the determination is documented in the EIR and that the studies are deposited with the California Historical Resources Regional Information Center.
CR-APM-6	1. Historic property will be avoided and fenced or barricaded for protection. 2. Contributing portions and sensitive features of the historic property will be avoided and fenced or barricaded for protection. 3. 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 (HAER) documentation.

Applicant Proposed Measures

APM No.	Description
CR-APM-7	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. 2. Protective measures will be implemented to minimize erosion and prevent invasion by aggressive weeds near historic property. 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. 5. Buildings or structures will be stabilized or rehabilitated to minimize deterioration that might be accelerated by construction or operations. 6. If deterioration cannot be avoided, SDG&E will implement an approved plan for recordation, relocation, or data recovery.
CR-APM-8	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. 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).
CR-APM-9	1. Permanent fencing or barriers will be installed, or access to the historic property will be controlled as deemed appropriate by the relevant agencies. 2. Use of access for construction or operation will be restricted. 3. Construction and maintenance personnel will be instructed in protection of sensitive properties.
CR-APM-10	1. Project structures will be located so that conductors span linear historic property to the extent feasible. 2. Pipelines or conductors, placed underground, will bore under linear property to avoid disturbance or intrusion.
CR-APM-11	SDG&E would implement its standard practices for cultural and paleontological resources on private lands (see Appendix D).
CR-APM-12	SDG&E will conduct cultural surveys for staging areas that have not yet been identified.
	GEOLOGY, SOILS, AND PALEONTOLOGY
GEO-APM-1	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.
GEO-APM-2	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. Revegetation and monitoring for vegetative success will follow the guidelines outlined in Mitigation Measure B-1a (Provide restoration/ compensation for affected sensitive vegetation communities). 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.
GEO-APM-3	Structure placement in areas of high shrink/swell potential will be avoided where possible.
GEO-APM-4	Structures will be placed in geologically stable areas, avoiding fault lines, brittle surface rock and bedrock, etc.
GEO-APM-5	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. 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.

Applicant Proposed Measures

APM No.	Description
GEO-APM-6	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.
GEO-APM-8	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.
GEO-APM-9	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. 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.
LAND USE AND AGRICULTURAL RESOURCES	
LU-APM-1	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.
LU-APM-2	Place new transmission structures more than 330 feet from an existing residence to the extent feasible.
LU-APM-3	1. Farmers will be compensated for losses of crops along ROW based upon a professional appraisal. 2. Construction activities in croplands will be scheduled to minimize or avoid planting, growing, and harvesting seasons to the extent feasible.
LU-APM-4	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.
LU-APM-5	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.
LU-APM-6	The limits of construction activities within and outside the ROW will typically be predetermined, with activity restricted to and confined within those limits. 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.
LU-APM-7	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.
LU-APM-8	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.
LU-APM-9	SDG&E would obtain all necessary and/or appropriate ministerial land use permits.
LU-APM-10	SDG&E will match structure locations with existing transmission facilities where feasible and appropriate.
NOISE AND VIBRATION	

Applicant Proposed Measures

APM No.	Description
NOI-APM-1	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. 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. SDG&E would also establish a toll free telephone number for receiving questions or complaints during construction and develop procedures for responding to callers.
NOI-APM-2	SDG&E will coordinate with ABDSP to minimize potential construction noise impacts at Tamarisk Grove campground during peak times of use.
	PUBLIC HEALTH AND SAFETY / HAZARDOUS MATERIALS
HS-APM-1	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). A Hazardous Communication (HAZCOM) Plan with Material Safety Data Sheets on all hazardous materials used for the project shall be developed.
HS-APM-2	Only personnel trained in refueling vehicles would be allowed to perform this operation. All refueling operation shall be in designated areas or preformed by assigned vehicles.
HS-APM-3	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).
HS-APM-4	SDG&E will develop a site specific blasting plan blasting of tower footing is required. A California licensed Blasting Contractor shall be used for all blasting operation.
HS-APM-5	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.
HS-APM-6	An Unexploded Ordinance (UXO) investigation of known and potential areas used by the military along the ROW shall be undertaken by a trained contractor. If UXO are found, they shall be removed by trained personnel.
HS-APM-7	All personnel involved in excavation and grading or for ROW clearing shall be trained to recognized UXO and/or potential soil, surface water, and groundwater potential contamination sites.
HS-APM-8	SDG&E will assign Environmental Field Representative and/or General Contractor assigned Health & Safety Office to the project.
HS-APM-9	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.
HS-APM-10	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.
HS-APM-11	SDG&E will develop project-specific Fire Prevention and Response Plan (FPRP), which will be developed and reviewed by pertinent regulatory authorities. 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.
HS-APM-12	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.
HS-APM-14	All construction workers shall undergo environmental training regarding potential exposure in accordance with federal, State, or local regulations.
HS-APM-15	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.

Applicant Proposed Measures

APM No.	Description
HS-APM-16	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. 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. 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.
HS-APM-17	If the sample testing determines that contamination is not present, work would be allowed to proceed at the immediate excavation site. 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.
	PUBLIC SERVICES AND UTILITIES
PSU-APM-1	SDG&E has and will continue to coordinate with all utility providers with facilities located within or adjacent to the Proposed Project to ensure that design does not conflict with other facilities. 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.
PSU-APM-2	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.
PSU-APM-3	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.
	RECREATION RESOURCES
R-APM-2a	Advance notice of restriction of conflicts with access routes to recreational use areas will be provided.
R-APM-2b	No construction that affects trail use will be conducted in that area on federal holidays.
R-APM-2c	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.
R-APM-2d	Signs directing vehicles to alternative park access and parking will be posted in the event construction temporarily obstructs parking areas near trailheads.
R-APM-2e	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.
R-APM-2f	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. These signs will be checked and maintained regularly.
R-APM-3a	Construction-related traffic shall be restricted to routes approved by the authorized agencies. New access roads or cross-county vehicle travel will not be permitted on ABDSP or state lands unless prior written approval is given by the authorized ABDSP officer. Authorized roads used by the project shall be rehabilitated when construction activities are complete as coordinated with California State Parks.
	TRANSPORTATION AND TRAFFIC
T-APM-2a	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).
T-APM-2b	Detour plans will be submitted to the counties, CALTRANS, and/or California State Parks as part of the permit requirements. 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). SDG&E will provide California State Parks a request in writing for maintenance or other earth-disturbing activities.

Applicant Proposed Measures

APM No.	Description
T-APM-4a	SDG&E shall coordinate in advance with emergency service providers to avoid restricting movements of emergency vehicles. 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.
T-APM-5a	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. 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.
T-APM-6a	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.
T-APM-6b	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.
T-APM-8a	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.
T-APM-9a	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.
T-APM-10a	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.
	HYDROLOGY AND WATER QUALITY
WQ-APM-1	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.
WQ-APM-2	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.
WQ-APM-3	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. Construction personnel shall be trained to recognize these markers and understand the equipment movement restrictions involved.

Applicant Proposed Measures

APM No.	Description
WQ-APM-4	1. Adequate distance from stream banks and beds will be maintained during construction activities. 2. Construction activities will use existing bridges to cross major streams and culverts in most dry intermittent streams. 3. Surface water, riparian areas and floodplains will be spanned where feasible. 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. 8. Upland pull sites will be selected to minimize impacts to surface waters, riparian areas, wetlands and floodplains. 9. Structures will not be placed in streambeds or drainage channels to the extent feasible.
WQ-APM-5	Any stream crossings will be constructed at low flow periods and, if necessary, a site-specific mitigation and restoration plan would be developed.
WQ-APM-6	1. Designated surface water protection areas (source water) will be avoided. 2. There will be no diversions, detention, retention or consumption of surface waters for the project. 3. Prior to construction, interviews would take place with affected landowners regarding location of water supply wells located on their property. 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.
WQ-APM-8	1. In no case will groundwater removed during construction be discharged to surface waters or storm drains without first obtaining any required permits. 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.
WQ-APM-9	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.
WQ-APM-10	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.
WQ-APM-11	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. 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.

Applicant Proposed Measures

APM No.	Description
WQ-APM-13	Hazardous materials will not be disposed of onto the ground, the underlying groundwater, or any surface water. Totally enclosed containment will be provided for trash. 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.
WQ-APM-14	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.
WQ-APM-15	To the extent feasible, where the construction of access roads would disturb sensitive features such as stream-beds, the route of the access road would be adjusted to avoid such impacts. 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. 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 avoid-ance, must be approved by the appropriate agency or landowner before use. 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.
WQ-APM-16	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). 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. 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.
	VISUAL RESOURCES
VR-APM-1	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.
VR-APM-2	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.
VR-APM-3	Where the line parallels existing transmission lines, the spacing of structures shall match the existing transmission structures, where feasible, to minimize visual effects.
VR-APM-4	No paint or permanent discoloring agents will be applied to rocks or vegetation to indicate survey or construction activity limits.
VR-APM-5	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.
VR-APM-6	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.

Source: SDG&E PEA, 8/2006.

Form 1842-1
(September 2006)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

INFORMATION ON TAKING APPEALS TO THE INTERIOR BOARD OF LAND APPEALS

DO NOT APPEAL UNLESS
1. This decision is adverse to you,
AND
2. You believe it is incorrect

IF YOU APPEAL, THE FOLLOWING PROCEDURES MUST BE FOLLOWED

1. NOTICE OF APPEAL

A person who wishes to appeal to the Interior Board of Land Appeals must file in the office of the officer who made the decision (not the Interior Board of Land Appeals) a notice that he wishes to appeal. A person served with the decision being appealed must transmit the *Notice of Appeal* in time for it to be filed in the office where it is required to be filed within 30 days after the date of service. If a decision is published in the FEDERAL REGISTER, a person not served with the decision must transmit *a Notice of Appeal* in time for it to be filed within 30 days after the date of publication (43 CFR 4.411 and 4.413).

2. WHERE TO FILE

NOTICE OF APPEAL

U.S. Dept. of the Interior
Bureau of Land Management
El Centro Field Office
1661 South 4th Street
EI Centro, CA 92243

And

U.S. Dept. of the Interior
Office of Hearings & Appeals
Interior Board of Land Appeals
801 North Quincy St., MS 300-QC
Arlington, VA 22203

WITH COPY TO SOLICITOR

U.S. Dept. of the Interior
Office of the Solicitor-Pacific Southwest Region
2800 Cottage Way, Room E-2753
Sacramento, CA 95825-1890

3. STATEMENT OF REASONS

Within 30 days after filing the *Notice of Appeal,* file a complete statement of the reasons why you are appealing. This must be filed with the United States Department of the Interior, Office of Hearings and Appeals, Interior Board of Land Appeals, 801 N. Quincy Street, MS 300-QC, Arlington, Virginia 22203. If you fully stated your reasons for appealing when filing the *Notice of Appeal,* no additional statement is necessary (43 CFR 4.412 and 4.413).

WITH COPY TO SOLICITOR

U.S. Dept. of the Interior
Office of the Solicitor-Pacific Southwest Region
2800 Cottage Way, Room E-2753
Sacramento, CA 95825-1890

U.S. Dept. of the Interior
Bureau of Land Management
El Centro Field Office
1661 South 4th Street
El Centro, CA 93342

4. ADVERSE PARTIES

Within 15 days after each document is filed, each adverse party named in the decision and the Regional Solicitor or Field Solicitor having jurisdiction over the State in which the appeal arose must be served with a copy of: (a) the *Notice of Appeal,* (b) the Statement of Reasons, and (c) any other documents filed (43 CFR 4.413).

5. PROOF OF SERVICE

Within 15 days after any document is served on an adverse party, file proof of that service with the United States Department of the Interior, Office of Hearings and Appeals, Interior Board of Land Appeals, 801 N. Quincy Street, MS 300-QC, Arlington, Virginia 22203. This may consist of a certified or registered mail "Return Receipt Card" signed by the adverse party (43 CFR 4.401(c)).

6. REQUEST FOR STAY

Except where program-specific regulations place this decision in full force and effect or provide for an automatic stay, the decision becomes effective upon the expiration of the time allowed for filing an appeal unless a petition for a stay is timely filed together with *a Notice of Appeal* (43 CFR 4.21). If you wish to file a petition for a stay of the effectiveness of this decision during the time that your appeal is being reviewed by the Interior Board of Land Appeals, the petition for a stay must accompany your *Notice of Appeal (43* CFR 4.21 or 43 CFR 2801.10 or 43 CFR 2881.10). A petition for a stay is required to show sufficient justification based on the standards listed below. Copies of the *Notice of Appeal* and Petition for a Stay **must** also be submitted to each party named in this decision and to the Interior Board of Land Appeals and to the appropriate Office of the Solicitor (43 CFR 4.413) at the same time the original documents are filed with this office. If you request a stay, you have the burden of proof to demonstrate that a stay should be granted.

Standards for Obtaining a Stay. Except as otherwise provided by law or other pertinent regulations, a petition for a stay of a decision pending appeal shall show sufficient justification based on the following standards: (I) the relative harm to the parties if the stay is granted or denied, (2) the likelihood of the appellant's success on the merits, (3) the likelihood of immediate and irreparable harm if the stay is not granted, and (4) whether the public interest favors granting the stay.

Unless these procedures are followed, your appeal will be subject to dismissal (43 CFR 4.402). He certain that all communications are identified by serial number of the case being appealed.

NOTE: A document is not filed until it is actually received in the proper office (43 CFR 4.401(a)). See 43 CFR Part 4, Subpart B for general rules relating to procedures and practice involving appeals.

(Continued on page 2)

Appendix B

43 CFR **SUBPART** 1821--GENERAL **INFORMATION**

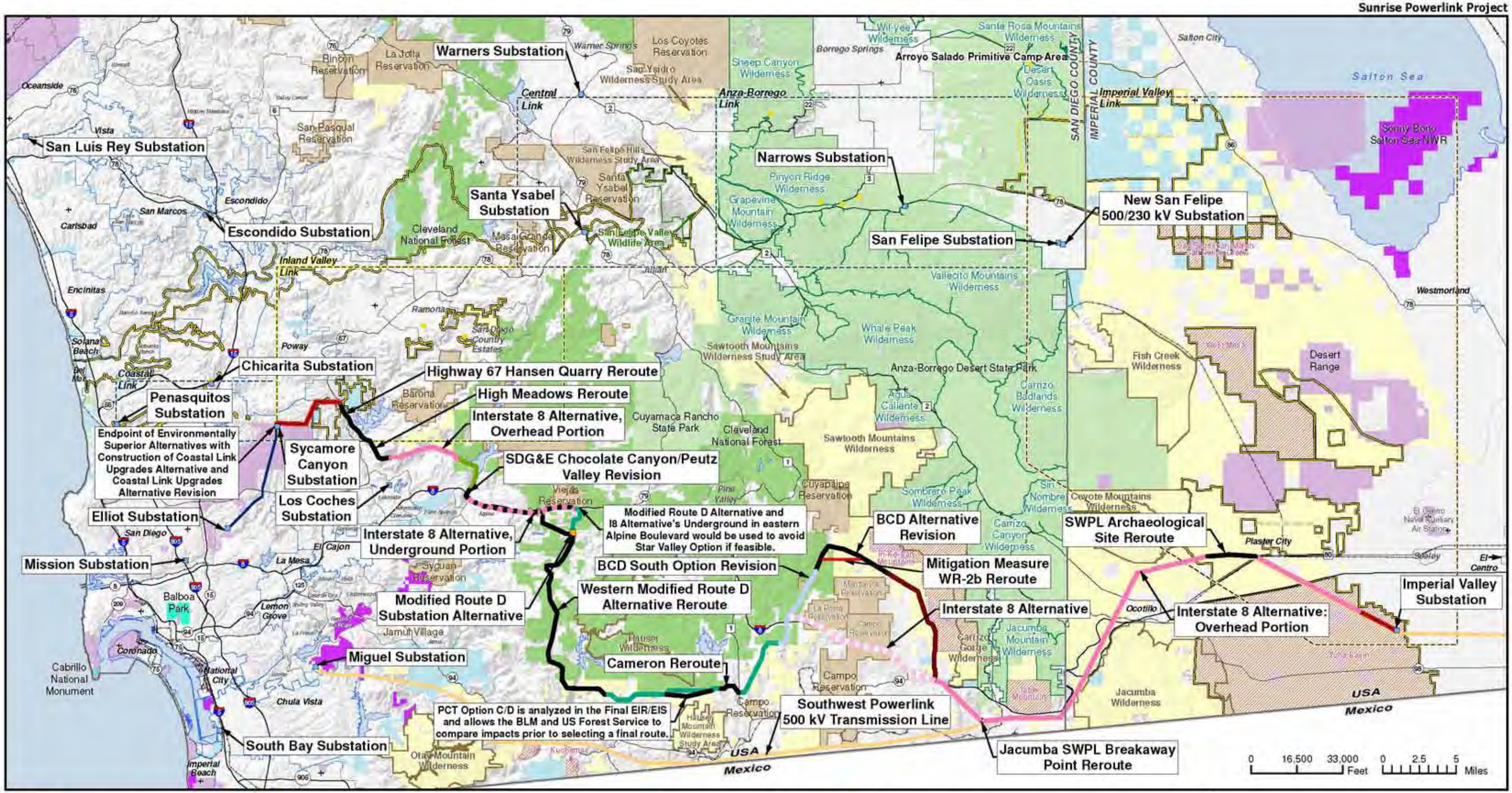
Sec. 182I.10 Where are BLM offices located? (a) In addition to the Headquarters Office in Washington, D.C. and seven national level support and service centers, BLM operates 12 State Offices each having several subsidiary offices called Field Offices. The addresses of the State Offices can be found in the most recent edition of 43 CFR 1821.10. The State Office geographical areas of jurisdiction are as follows:

STATE OFFICES AND AREAS OF JURISDICTION:

Alaska State Office - - - - - - Alaska
Arizona State Office - - - - - - Arizona
California State Office - - - - - California
Colorado State Office - - - - - Colorado
Eastern States Office - - - - - - Arkansas, Iowa, Louisiana, Minnesota, Missouri
and, all States east of the Mississippi River
Idaho State *Office* — Idaho
Montana State Office - - - - - - Montana. North Dakota and South Dakota
Nevada State Office - - - - - - - Nevada
New Mexico State Office - - - New Mexico, Kansas, Oklahoma and Texas
Oregon State Office - - - - - - - Oregon and Washington
Utah State Office - - - - - - - - - Utah
Wyoming State Office - - - - - Wyoming and Nebraska

(b) A list of the names, addresses, and geographical areas of jurisdiction of all Field Offices of the Bureau of Land Management can be obtained at the above addresses or any office of the Bureau of Land Management, including the Washington Office, Bureau of Land Management, 1849 C Street, NW, Washington, DC 20240.

(Form 1842-1, September 2006)



Proposed Project 230 kV
Proposed Project Relocated 69 kV Line
Sycamore-Elliot Reconductor
Substation Transmission Line
BCD Alternative Revision
BCD South Option Revision
Interstate 8 Alternative, Overhead Portion
Interstate 8 Alternative, Underground Portion
Interstate 8 Alternative: Chocolate Canyon Option
Modified Route D Alternative
Modified Route D Alternative: Star Valley Option
Existing 500 kV Transmission Line
Reroute
Municipality
Unincorporated Town
Major Road/Interstate
Railroad
Substation
Milepost
Overhead-Underground Alternative Transition Structure
Airport/Airfield
Recreation Area
Recreation Area
BLM Area of Critical Environmental Concern
Major Water Body

Jurisdictional Land Ownership

Bureau of Land Management Land
State Land
State Park
Department of Defense Land
Tribal Land
U.S. Fish and Wildlife Land
National Park Service Land
U.S. Forest Service Land
Other Federal Land
Federal Wilderness Area
San Dieguito River Park
State Wilderness (some roads within wilderness areas are excluded from wilderness designation)

N

Aspen Environmental Group
HELIX Environmental Planning, Inc.

Sunrise Powerlink Project

Final Environmentally Preferred/Superior Southern Route Alternative