



**FINAL RECORD OF DECISION
SAN DIEGO GAS & ELECTRIC
MASTER SPECIAL USE PERMIT
U.S. FOREST SERVICE
CLEVELAND NATIONAL FOREST
ORANGE AND SAN DIEGO COUNTIES, CALIFORNIA**

A. BACKGROUND

San Diego Gas & Electric (SDG&E) submitted an initial application to the U. S Forest Service (Forest Service), Cleveland National Forest, to obtain a Master Special Use Permit (MSUP) in 2005. The purpose of the MSUP was to consolidate SDG&E's rights and responsibilities in connection with the continued operation of its electric lines and other existing facilities located within the Cleveland National Forest. As part of the National Environmental Policy Act (NEPA) review process, the Forest Service circulated an Environmental Assessment (EA) for public comment in 2009. In response to public comments received on that EA, I determined that additional fire risk reduction measures within the Cleveland National Forest (including fire hardening) and additional undergrounding should be evaluated as part of the MSUP review process and that, as a result, an environmental impact statement (EIS) was required.

After publication of the EA in 2009, SDG&E expanded the scope of the proposed MSUP to include fire hardening, undergrounding, and relocation of improvements both within and outside the Cleveland National Forest. The proposed power line replacement projects will require a Permit to Construct (PTC) from the California Public Utilities Commission (CPUC). The project also crosses other federal jurisdictions, including land managed by the Bureau of Indian Affairs (BIA) and the Bureau of Land Management (BLM). SDG&E also proposed new construction within Cuyamaca Rancho State Park (CSP).

The CPUC and Forest Service agreed to develop a joint Environmental Impact Report / Environmental Impact Statement (EIR/EIS) for the MSUP/PTC Power Line Replacement Projects. The CPUC is the lead agency under California law and the Forest Service is the lead federal agency. The joint EIR/EIS was prepared to comply with the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). The joint document is called the "SDG&E Master Special Use Permit and Permit to Construct Power Line Replacement Projects EIR/EIS." The BLM and BIA joined the Forest Service as federal cooperating agencies under NEPA, and the CSP is participating as a responsible agency under CEQA. The Final EIR/EIS was issued July 10, 2015. The BLM, BIA, and CSP have independent jurisdiction and approval authority for the project segments within their areas of jurisdiction and will be making independent decisions about the project.

B. DECISION

Based on my evaluation of the information provided by the applicant and my review of the analysis disclosed in the Final EIR/EIS, I have decided to implement the components of the Federal Preferred Alternative that are located on the National Forest System lands under my jurisdiction. This decision approves the use proposed by SDG&E with modifications. Authorization of this project will be implemented by issuing a 50 year special use permit for the construction, operation, and maintenance of project facilities. As required by Forest Service policy, the permit will include the standard periodic revision clause so that the permit will be subject to revision at year 25 to reflect changing times and conditions. The permit will also authorize the short-term use of locations needed to support project construction (temporary work areas) that are outside of the long-term special use permit area. The specific improvements authorized in the MSUP include:

Transmission lines – This decision authorizes the operation and maintenance of the sections of TL625, TL629, TL637, TL682, and TL6923 that cross National Forest System lands under my jurisdiction. The authorized operating voltage is 69 kilovolts (kV).

Distribution lines – This decision authorizes the operation and maintenance of the sections of C67, C73, C78, C79¹, C157, C212, C214, C220, C236, C237, C240, C358, C440, C441, C442, C449, C524, C970, C973, C1166, C1243, and C1458 that cross National Forest System lands under my jurisdiction. The authorized operating voltage of the distribution system is 12 kV.

Access roads – This decision authorizes the operation and maintenance of the access roads included in the Federal Preferred Alternative. These include two categories of roads, as follows:

Regularly maintained roads – these include the segments of roads that SDG&E identified in their application for a MSUP as roads that they maintain so that they can access their facilities. The total length of roads is approximately 26.5 miles as shown in Table 1. The MSUP will also authorize an access trail along a section of C442.

Table 1. Access roads authorized in the MSUP.

Power Line	Miles of access Roads	Miles of access Trails
C157	0.3	
C440	0.5	
C441	1.2	
C442	1.9	0.3
C449	0.5	
C73	0.9	

¹ It should be noted that C79 has several existing segments on the Cleveland National Forest. My decision authorizes the segment of C79 that is currently co-located with TL626 as part of the conversion of TL626 to a 12 kV only power line. As discussed later in the decision, the segment of C79 that serves Cuyamaca Peak is not authorized by this decision.

Power Line	Miles of access Roads	Miles of access Trails
C79	3.4	
TL625	8.6	
TL629	6.5	
TL637	0.5	
TL682	1.2	
TL6923	1.1	
Total	26.5	0.3

Roads identified for removal pending a decommissioning plan – The Federal Preferred Alternative adopted portions of the Partial Removal of Overland Access Roads alternative. My decision requires SDG&E to evaluate those roads and develop a plan for alternative access and road decommissioning. This analysis may be done in conjunction with the construction schedule but must be complete prior to fire hardening the individual segments where roads are identified for decommissioning. These roads will temporarily be authorized in the MSUP pending the required evaluation and decommissioning. The total length of roads to be decommissioned is approximately 5.3 miles as shown in Table 2.

Table 2. Partial Removal of Overland Access Roads.

Power Line	Miles of access roads
C79	1.0
C442	1.4
TL625	2.5
TL629	0.4
Total	5.3

System fire hardening – This decision authorizes the fire hardening activities described in the Federal Preferred Alternative (wood-to-steel pole replacement and reconductoring) for the sections of TL625, TL629, TL682, TL6923, C78, C79 (the section co-located with TL626 that will be converted to 12 kV only to serve local residents along the Boulder Creek Road), C157 (using the Option 2 relocation out of wilderness), C442, and C449 that cross National Forest System lands.

Undergrounding – This decision authorizes the relocation of all sections of C440 (those proposed by SDG&E and those included in the Federal Preferred Alternative) to locations within existing roads, where possible. The decision also authorizes the relocation of the proposed underground sections of C449 to underground locations that cross National Forest System lands.

Double Circuit Additions – This decision authorizes SDG&E to add an additional 69 kV circuit along the Loveland Substation to Barrett Tap segment of TL625 and the Cameron Tap to Crestwood Substation segment of TL629 that cross National Forest System lands.

These improvements are shown on the attached figures.

Temporary Work Areas - This decision authorizes those temporary work areas needed to support work activities associated with fire hardening and undergrounding authorized by the MSUP as described and evaluated in the Final EIR/EIS. The MSUP will be amended to remove those temporary work areas from the permit area after they have been restored to my satisfaction.

Other facilities and Improvements

Glen Cliff substation – This decision authorizes the continued operation and maintenance of the small section of the Glen Cliff substation located on National Forest System lands.

Weather stations and other ancillary improvements – This decision authorizes the installation, operation, and maintenance of weather stations, fire detection equipment, and other ancillary improvements needed to support “smart grid” operation. Surveillance cameras are not authorized.

Scope of the Decision

This decision applies only to National Forest System lands. This decision is conditioned on the terms of the special use permit, implementation of the mitigation measures and monitoring program as identified in the Final EIR/EIS, including the applicant proposed measures, and as further described in this ROD. A summary of the applicant proposed measures and mitigation measures is attached in an appendix to this ROD.

This decision does not authorize the use of pesticides on National Forest System land. Although the Final EIR/EIS evaluated the use of pesticides as part of the project, SDG&E did not propose any use of pesticides on National Forest System lands.

This decision does not apply to SDG&E activities fully authorized by prior easement rights held by SDG&E across acquired National Forest System lands. These easement rights were acquired by SDG&E when the lands were in private ownership, and the easement rights are managed as outstanding third party rights when the lands are added to the National Forest System. Any work proposed by SDG&E that is not fully authorized by prior easement rights will be included in the MSUP. Any powerline replacement or fire hardening activities fully authorized by the prior easement rights are subject to CPUC jurisdiction and SDG&E would be required to implement any project mitigation measures adopted by the CPUC.

Associated Land Management Plan Amendments

The Forest Service cannot issue a special use authorization to SDG&E without ensuring its consistency with the Cleveland National Forest Land Management Plan (LMP). Sections D.2.4 and D.10.3 describe three conflicts with the LMP that would be resolved through a project specific plan amendment, as follows:

1. Amending the plan to permit an exception to the Pacific Crest Trail standard for scenery management (CNF S12) where TL629, TL6923, and C449 intersect with the trail.
2. Amending the plan to permit an exception to standards for scenic integrity (S9 and S10) where C157 crosses an area with a High Scenic Integrity Objective.
3. Amending the plan to allow continued authorization of a distribution line and access road (a developed facility) along C442 in a Back Country Non-motorized (BCNM) land use zone.

This decision amends the LMP to provide these exceptions. These exceptions apply only to the MSUP. These project-specific exceptions to the LMP standards and zoning are limited in scope and are not significant amendments to the plan. Consistent with Forest Service Policy (FSM 1926.51), these amendments do not significantly alter the multiple-use goals and objectives for long-term land and resource management or change the plan standards as they apply to other actions. There are no adjustments to management areas or land use zones, and approval of the MSUP will not preclude other actions.

Relationship to the Federal Preferred Alternative described in the Final EIR/EIS

There are several components of the Federal Preferred Alternative that are outside of my jurisdiction and subject to review and approval by the other state and federal agencies. These include sections of TL 629, TL6931 and TL682 that are within the BIA's jurisdiction, and sections of TL625, TL629, and TL6923 that are within the jurisdiction of the BLM. The CPUC has overall jurisdiction on all aspects of the project, and the CSP has jurisdiction over the proposed relocation of C79 in Cuyamaca Rancho State Park.

The Federal Preferred Alternative also included an option for the removal of TL 626 that would have authorized the conversion of approximately six miles of the transmission line to 12kV from Santa Ysabel substation to the Boulder Creek substation, of which approximately 1.1 miles cross National Forest System lands. This decision does not authorize that conversion, and instead relies on the Boulder Creek substation off-grid solution described in Final EIR/EIS. This conversion is not included in the attached maps. If the off-grid solution is found to be infeasible, an on-grid solution will be considered at that time.

C. SITE RESTORATION FOR IMPROVEMENTS NOT INCLUDED IN THE MSUP

With my decision to authorize a MSUP for the improvements included in the Federal Preferred Alternative, the permits for the improvements that are not included in the new MSUP will terminate according to their terms and conditions. Those improvements not authorized in the new MSUP include:

- TL626 and associated roads that will be replaced by a fire hardened TL6931 or converted to a 12 kV only powerline as part of C79 (Permit DRD 4186-06). The section of TL 626 that serves the Boulder Creek Substation will be replaced by the off-grid solution proposed by SDG&E.
- Sections of C79 and associated access roads that provide service to Cuyamaca Peak that will be replaced by an underground alignment through Cuyamaca Rancho State Park (Permit DRD 4186-12)
- Overhead sections of C440 and associated access roads that will be relocated to underground locations within existing roads (Various Permits, including DRD 4186-24, 4186-52, and 4186-72)
- Overhead sections of C449 that will be relocated to underground locations within existing roads (Permit DRD 4186-35)

Although the specific permit condition may vary depending on the permit, the special use permits generally require, in part, that:

“Upon abandonment, termination, revocation, or cancellation of this permit, the permittee shall remove within a reasonable time all structures or improvements except those owned by the United States, and shall restore the site, unless otherwise agreed upon in writing or this permit.”

As we transition to the MSUP, the existing improvements not authorized by the MSUP will remain in place, subject to their existing permits, during the construction of the replacement facilities. This will ensure that a continued supply of electricity is available to customers served by the existing facilities. I will work with SDG&E to establish a restoration work schedule for the removal of the improvements not authorized in the MSUP that is consistent with the transition of the electrical service to the new improvements. This phased approach will ensure that the permit areas are restored within a reasonable time as required by the existing permits. I expect the transition to the new improvements and restoration of the old improvements to be completed within five years.

D. DECISION RATIONALE

My decision to authorize the MSUP and associated fire hardening and relocation projects is based on my goal of selecting the alternative that continues to provide benefits to the public while having the least overall impact to the environment. The Federal Preferred Alternative, which is also the NEPA environmentally preferable alternative (Final EIR/EIS Section E.6), best meets the Forest Service purpose and need by continuing electric service to a variety of users within and adjacent to the Cleveland National Forest in a manner that is the least in conflict with the LMP. This alternative also reduces the fire risk associated with the existing facilities in a high fire hazard area through fire hardening or undergrounding facilities in the Cleveland National Forest. The other alternatives have a greater overall impact to the environment as described in the Final EIR/EIS Section E.

My conclusions are based on a review of the record for the Final EIR/EIS, which documents a thorough analysis of relevant scientific information, a consideration of responsible opposing views, and acknowledgement of uncertainty and risk. I have also considered the issues raised by the public during the environmental review. Several of those issues are directly related to the Cleveland National Forest and are addressed in the following discussion.

Wildfire – One of the primary project purposes was to reduce the risk of power line related wildfires. This issue was addressed by a combination of project design and mitigation. Project design elements include the use of stronger steel towers and stronger wind resistant conductors, and relocating certain sections of the distribution system to underground ducts. As described in the Final EIR/EIS section D.8, fire hardening reduces the risk of power line related wildfires when compared to the existing system. My decision requires SDG&E to implement a fire prevention and protection plan for both construction and operation and maintenance (MM FF-1 and FF-2) which will further reduce the risk of wildfire related to those activities.

Visual – The scenic integrity of the Cleveland National Forest is an important LMP goal. As described in the Final EIR/EIS Section D.2, the steel poles used for fire hardening authorized in

the MSUP are often taller and larger in diameter than the existing wood poles, and have the potential for a greater visual impact on the landscape when compared to the existing poles. My selection of the Federal Preferred Alternative reduces the visual impact of the project by removing some transmission and distribution lines from service to avoid visually sensitive areas, and includes additional undergrounding in the Laguna Recreation Area. My decision also requires SDG&E to develop a Scenery Conservation Plan (MM VIS-1) so that the impacts of specific poles can be further reduced during the final design of the project.

Even with those actions and mitigation, relocating and fire hardening of C157 to avoid designated wilderness and fire hardening TL629, TL6923, and C449 in the vicinity of the Pacific Crest Trail would not meet the LMP scenic integrity standards, and my decision includes a project specific amendment to address that conflict. Mitigation Measure VIS-2 requires compensation for impacts that are not consistent with the LMP Scenic Integrity Objectives.

Wildlife Habitat – Impacts to wildlife and wildlife habitat are addressed in the Final EIR/EIS in Section D.4. While there will be some new permanent and temporary impacts to habitat, SDG&E has designed the project to minimize those impacts by reducing the size of work areas, and locating them in non-habitat areas when possible. The combined habitat impacts are within the take thresholds established by SDG&E's Subregional Natural Community Conservation Plan (NCCP). Implementing the Federal Preferred Alternative will also reduce the overall habitat impact of the project by removing TL626 from service, relocating C440 and C449 out of sensitive habitat and into underground ducts located within existing roads, and reducing the overall length of roads needed to access the electrical system. My decision also includes mitigation that will require SDG&E to restore temporary work areas (MM BIO-4), compensate for permanent habitat loss (MM BIO-5), and protect nesting birds (MM BIO-28).

Roads – The impact of SDG&E's access roads on water quality is addressed in the Final EIR/EIS Section D.9, and roads in general are addressed in D.14. My decision would remove approximately 19 miles of access road from National Forest System land through a combination of relocating lines to existing roads and removing some lines and their associated access roads from service. I am also requiring SDG&E to develop a plan to develop alternate access and remove approximately 5.3 miles of road as part of the MSUP (MM-HYD-3). The sections of the remaining 26.5 miles of road that are included in the MSUP that are over 15% road gradient will be evaluated and a plan developed to stabilize those roads (MM HYD-4). Implementation of the MSUP will reduce the overall water quality impacts associated with the existing access road system.

Land use – The relationship of the project with land use plans is addressed in the Final EIR/EIS Section D.10. Although my decision to adopt the Federal Preferred Alternative does not avoid all conflicts with the LMP, it does avoid conflicts with designated wilderness by relocating C157 into the corridor between the Pine Creek and Hauser Wilderness and avoids an area of Recommended Wilderness in Cedar Creek by removing TL626 from service. Selecting Option 2 for the C157 relocation also accommodates the City of San Diego's plan for city owned property around Barrett Reservoir. The Federal Preferred Alternative does not conflict with other state or local plans.

Growth inducing effects – Growth inducing effects are addressed in the Final EIR/EIS in Section G.1. While implementation of any of the alternatives is not expected to increase growth related to employment, the analysis acknowledges that certain aspects of fire hardening, particularly the use of the stronger conductors, will increase the capacity of the transmission lines to carry power (measured by amperage). Although the fire hardening would increase capacity to move electricity, thereby removing a possible obstacle to growth of new local renewable generation projects, none of the modifications proposed as part of the Federal Preferred Alternative would allow interconnections of a new local renewable generation project.

Required Mitigation – SDG&E, as the applicant, proposed numerous measures to protect resources as described in the Final EIR/EIS Section B.7.1. The Forest Service and CPUC, as lead agencies, identified additional measures throughout the Final EIR/EIS Section D. Both the applicant proposed measures and the agency required mitigation measures will be included in the MSUP as permit requirements, and implemented as part of the Mitigation, Monitoring, Compliance, and Reporting Program described in the Final EIR/EIS Section H.

Transfer of impacts - I am sensitive to the concern that some of the options selected in the Federal Preferred Alternative transfer impacts to other areas. Removing TL626 from service and replacing it with a fire hardened TL6931 was of particular concern in the Boulevard area. Based on the comparison of alternatives in the Final EIR/EIS Section E, I have concluded that removing 18 miles of transmission line from service, and replacing it by fire hardening an existing 6 mile transmission line has less overall impact on the environment, and that the impacts associated with fire hardening TL6931 can be effectively mitigated.

Summary - Taken as a whole, the transmission lines and distribution circuits included in the Federal Preferred Alternative will continue to provide benefits to the public by providing electrical service to remote residences and critical infrastructure, and will continue to provide the backbone transmission system for the eastern half of San Diego County. The system will continue to provide those services in a manner that reduces the risk of power line related wildfire, and reduce the impact of the improvements on the environment by reducing the project footprint, particularly as it relates to access roads. I have concluded occupancy of National Forest System lands is appropriate and the project is in the public interest.

E. PURPOSE AND NEED

The Forest Service purpose is to authorize the power lines and associated facilities needed to continue electric service to a variety of users within and adjacent to the Cleveland National Forest through an MSUP in a manner that is consistent with the LMP. This action is needed because the 70 individual permits or easements for the existing facilities have expired, and a permit is required for the continued occupancy and use of National Forest System lands. Further, the purpose of this action is to reduce fire risk associated with the existing facilities in a high fire hazard area through fire hardening of facilities in the Cleveland National Forest. This action is needed for resource protection as well as public safety.

F. OTHER REQUIRED PERMITS AND APPROVALS

My decision is only one part of the regulatory approvals needed by SDG&E for this project to go forward. In addition to obtaining a permit to occupy and use National Forest System lands, SDG&E must obtain other agency approvals as described in section A.6.5 of the Final EIR/EIS.

Activities that require certification from the State Water Resources Control Board under Section 401 of the Clean Water Act (Title 33 United States Code (USC) § 1341) cannot be authorized under a Forest Service permit until such a certificate is granted or waived. Other applicable approvals and permits described in the Final EIR/EIS must also be secured by SDG&E prior to the Forest Service approving any ground disturbing activities.

G. PUBLIC INVOLVEMENT

A notice of intent to prepare an EIS was published in the Federal Register on September 23, 2013 (78 FR 58270), and the scoping comment period was open for 45 days. In addition, the proposed action was listed in the Cleveland National Forest Schedule of Proposed Actions and updated periodically during the environmental analysis. People were invited to review and comment through direct distribution of a joint Forest Service and CPUC Notice of Preparation and by legal notices published in local papers. A supplemental scoping period was offered starting on January 17, 2014 and ending on March 7, 2014. Public meetings were held in Alpine and Julian during the first scoping period, and in Alpine during the supplemental scoping period. All project information was maintained on the project webpage (<http://www.cpuc.ca.gov/environment/info/dudek/CNF/CNF.htm>) hosted by the CPUC.

Issues were identified from scoping comments and were summarized in the Scoping Report dated January 16, 2014, and were updated in March 2014 after the supplemental scoping period. The issues significant to the proposed action are summarized Table A-1 of the Final EIR/EIS.

The Draft EIR/EIS was published for review and comment on September 5, 2014 when the Environmental Protection Agency published the Notice of Availability in the Federal Register (79 FR 53061). Notices were distributed to the project mail list, and copies of the Draft EIR/EIS were available on the web, at local libraries, and provided to those who requested copies. Notice of the opportunity to comment was published in the San Diego Union-Tribune on September 5, 2014. A public meeting was held in Alpine on October 1, 2014. The 60 day comment period closed on November 4, 2014.

The Forest Service and CPUC received comment on the Draft EIR/EIS from two federal agencies, seven state and local agencies, two Native American tribes, eight community groups, the applicant, and fifteen individuals. The comments and responses are presented in the Final EIR/EIS Volume 2. Summaries of the public participation process are discussed in the Final EIR/EIS Section I.

H. ALTERNATIVES CONSIDERED IN DETAIL

In addition to the selected alternative, I considered six other alternatives in detail as described below. A comparison of the alternatives considered in detail can be found in the Final EIR/EIS Section E.

SDG&E's Proposed Project – SDG&E's proposed project would include issuance of a MSUP for the SDG&E system, including 102 miles of electric lines within the SDG&E system totaling approximately 146 miles both on and off the Cleveland National Forest. I did not select this alternative because the proposal to fire harden C157 within the Hauser Wilderness area would not be consistent with the Wilderness Act, and the proposal to fire harden TL626 would conflict with the LMP water quality standards and Recommended Wilderness land use zone.

Federal Proposed Action – The Federal Proposed Action modifies certain actions proposed by SDG&E on National Forest System lands and the La Jolla Indian Reservation. Under this alternative TL626 would be relocated to the east of the Cedar Creek canyon, and relocated to the east of the Inaja Fire Memorial Overlook. This alternative also requires additional undergrounding for C440 within the Laguna Recreation Area, and also requires a short section of undergrounding for TL682 within the La Jolla Indian Reservation. I did not select this alternative because the relocation of TL626 east of Cedar Creek canyon would create greater impacts, particularly on private land, when compared to other options evaluated for TL626.

No Action Alternative – No MSUP Issued – Under this required alternative the Forest Service would not issue a MSUP and the existing permits would terminate according to their terms. SDG&E would be required to remove all the improvements according to the permit terms. I did not select this alternative because it would not meet the purpose and need of continuing to supply power to a variety of users within and adjacent to the Cleveland National Forest.

No Project Alternative – Under this alternative, which is required under CEQA, the existing alignments within the Cleveland National Forest would be maintained as they are currently, under their approximately 70 separate permits and easements. In addition, none of SDG&E's proposed power line replacement projects including proposed fire hardening activities would be authorized. This alternative also does not meet the purpose and need because it does not authorize the uses in a manner consistent with the LMP, and does not reduce the fire risk.

Partial Removal of Overland Access Roads – This alternative, which is based on the Proposed Project, would remove up to 10.5 miles of regularly maintained access roads that are in general greater than 25% grade and in close proximity to creeks, particularly along TL626 (Boulder Creek) and TL625 (Barber Mountain/Carveacre). I did not select this alternative because it included the same project components of the Proposed Project that caused the conflict with the LMP.

Removal of TL 626 from Service – Under this alternative, TL 626 would be removed from service and replaced by one of two options described in the Final EIR/EIS Section C.4.2. The remaining system components would be treated the same as the Proposed Project. Even though this alternative had a better option for TL626, I did not select this alternative because of LMP conflicts with other project components such as C157.

The Federal Preferred Alternative – As described in the Final EIR/EIS Section E.6, the federal preferred alternative is a composite of three alternatives. The Federal Proposed Action is the basis of the preferred alternative; however the TL626 relocation option has been replaced by the TL626 Removal From Service Alternative Option 1 (the upgrade to TL6931), combined with the off-grid solution for the Boulder Creek substation. The Federal Preferred Alternative also analyzed the conversion of TL626 to 12 kV to continue service to the Boulder Creek substation

if the off-grid solution was not feasible. As discussed earlier in the ROD, my decision does not authorize this conversion. The Federal Preferred Alternative would also convert a 6.8 mile section of TL626 that is co-located with C79 to a 12kV fire hardened line to serve local residences along Boulder Creek Road. The Federal Preferred Alternative adopts Option 2 for the C157 relocation out of the Hauser Wilderness. The Federal Preferred Alternative also incorporates the portions of the Partial Removal of Overland Access Roads applicable to TL626/C79, TL625, C442, and TL629. This alternative as modified and adopted in this ROD best meets the purpose and need for the reasons described in my decision rationale.

I. ALTERNATIVES ELIMINATED FROM DETAILED STUDY

In addition to the alternatives considered in detail, I also considered fifteen additional alternatives but eliminated them from detailed study as described in the Final EIR/EIS Section C.5. As described in Section C.5, alternatives that were not carried forward for full analysis did not meet project objectives, feasibility or environmental effectiveness criteria.

J. ENVIRONMENTALLY PREFERRED ALTERNATIVE

As described in the Final EIR/EIS Section E.7, the environmentally preferred alternative is the Federal Preferred Alternative as described above. This alternative would improve scenic quality where powerlines are removed or placed underground, reduce impacts to vegetation and associated habitat, reduce fire risk associated with overhead powerlines, reduce watershed and water quality impacts, and better meet the resource goals identified in local, federal, and tribal plans by reducing the total miles of overhead powerline, placing powerlines underground, relocating a powerline from wilderness, and removing excessively steep roads from sensitive watersheds.

K. TRIBAL CONSULTATION

During the early planning stages of this analysis (March 2013), the Forest Service conducted informal consultation with the Inaja-Cosmit Band of Indians and the Bureau of Indian Affairs (BIA) to discuss TL626 relocation options that have the potential to have direct effects on reservation lands. The Forest Service also invited the four tribal governments with reservation lands that would potentially be directly affected by SDG&E's proposed project (Viejas, Barona, Campo, and Inaja) and the BIA to become cooperating agencies in April 2013.

The BIA, on behalf of the Forest Service, consulted with tribal leaders for the La Jolla Band of Luiseño Indians in the design of the Federal Proposed Action for TL682. The Forest Service, in conjunction with the BIA, also conducted informal consultation with tribal leaders for the Campo Kumeyaay Nation in May and October 2014 to discuss SDG&E's proposal to upgrade TL6931 in order to replace TL626.

When the Draft EIR/EIS was published, all Tribes, including federally recognized and unrecognized Tribes, were invited by the Forest Service, on behalf of the cooperating federal agencies, to initiate formal consultation on the proposed project. The intent was to engage in meaningful consultation with tribes regarding concerns or comments they may have about the proposed project, and taking those into consideration in the decision-making process. Tribes

were also provided with a copy of the draft Programmatic Agreement and an outline of the proposed Historic Properties Management Plan (HPMP), and invited to comment and/or engage in consultation on those documents.

In conjunction with the government-to-government consultation process, federally recognized tribes in the project area have been, and will continue to be, included in all project notifications, as appropriate.

L. FINDINGS REQUIRED BY OTHER LAWS AND REGULATIONS

L.1 National Forest Management Act

The National Forest Management Act (NFMA) requires projects and permits to be consistent with the LMP (16 USC § 1604(i)). If a proposed site specific decision is not consistent with the applicable plan, I may modify the proposed decision to make it consistent with the plan, reject the proposal; or amend the plan to authorize the action.

Consistency with the LMP is discussed in the Final EIR/EIS Section D.10. That section discusses the LMP and describes the three interrelated documents that provide direction and policies for the Cleveland National Forest, while evaluating the proposed project and the alternatives consistency with the plan components. Final EIR/EIS Chapter D.10.9 describes the LMP amendment process that would be implemented as part of MM LU-2.

As described in Final EIR/EIS Section D.10.2.1, the LMP consists of three interrelated documents. Part 1 is the vision for the forest expressed through goals and desired conditions. Not every goal and desired condition is implemented by or applicable to every site-specific project. As described in the LMP, desired conditions are not commitments and may only be achievable over the long term. (LMP Part 1, page 2). Goal 4.1 is applicable to the proposed project and provides that energy development should be managed to facilitate energy production while protecting ecosystem health. This goal is implemented through the strategic direction provided in Part 2 of the LMP, which consists of program strategies (Appendix B) and suitable uses consistent with the achievement of the desired conditions in Part 1 (LMP Part 2, page 2). Part 2 establishes suitable uses through land use zones. Part 3 contains LMP standards, which are mandatory requirements that apply to site-specific projects. The following discussion will summarize the key plan components that I considered in my decision.

LMP Part 1, Goals and Desired Conditions

As described in Final EIR/EIS Section D.10, the desired condition associated with Goal 7.1 is to minimize the area encumbered by special use authorizations, and authorize those uses that provide public benefit and conform to resource management and protection objectives. My decision meets the intent of that goal by selecting the alternative that continues to provide benefits to the public with the least overall impact to the environment.

Under Goal 6.2, the LMP identifies twelve MIS for habitat types and issues shown in the table in LMP Part 1, page 46. Although habitat and species diversity is managed at the forest level, the analysis presented in Final EIR/EIS Section D.4.1.7 describes the MIS species considered in the analysis, and the analysis for Impact BIO-6 in Sections D.4.3 through D.4.6 presents the effects.

Based on the analysis, implementation of the Federal Preferred Alternative will not alter or contribute to existing forest-wide habitat trends for management indicator species.

LMP Part 2, Land Use Zones

Land use zones (CFR 219.11(c)) were used to map the Cleveland NF for the purpose of identifying appropriate management types of ‘uses’ that are consistent with the achievement of the desired conditions described in Part 1 of the LMP. These land use zones are used to demonstrate management’s intent and to indicate the anticipated level of public land use in any area of the national forest. The activities that are allowed in each zone are expected to result in progress along the pathway toward the realization of the desired conditions.

The types of suitable uses for commodities and commercial uses are outlined in LMP Part 2, Table 2.2.3. Portions of SDG&E’s proposed project with associated access roads are considered Developed Facilities, while portions lacking roads are considered Non-recreational Special Uses: Low Intensity Land Use. Low intensity uses are suitable in designated areas for Developed Area Interface (DAI), Back Country (BC), and Back Country Motorized Use Restricted (BCMUR) zones, and allowed by exception for Back Country Non-Motorized (BCNM), Critical Biological (CB), and Wilderness (W). Developed facilities are suitable in designated areas for Developed Area Interface (DAI), Back Country (BC), and Back Country Motorized Use Restricted (BCMUR) zones, and not suitable for Back Country Non-Motorized (BCNM), Critical Biological (CB), and Wilderness (W) (LMP, Part 2, page 4).

Sections of C442 with access roads cross through areas of BCNM land use zone, and approving this continued occupancy of the line with motorized access requires a plan amendment. My decision includes that project specific amendment.

LMP Part 2 and 3, LMP Standards

The LMP adopts standards that apply to projects proposed on the forest. Part 2 identifies standards that are specific to the Cleveland National Forest and Part 3 identifies standards that apply to all four southern California national forests. Based on the Final EIR/EIS discussion in Chapters D.2 and D.10, authorizing construction, operation, and maintenance of the power line replacement projects in a MSUP, including mitigation, would require a LMP amendment. My decision incorporates an amendment to the LMP to address the following plan requirements:

Pacific Crest Trail Standards (LMP Part 2, page 68)

The plan standards require:

CNF S12 - Pacific Crest National Scenic Trail - Protect scenic values in accordance with adopted scenic integrity objectives. Protect foreground views from the footpath as well as designated viewpoints. Where practicable avoid establishing unconforming land uses within the viewshed of the trail (Morena, Laguna, Aguanga Places).

Aesthetic Management Standards (LMP Part 3, page 6)

The plan standards require:

S9: Design management activities to meet the Scenic Integrity Objectives (SIOs) shown on the Scenic Integrity Objectives Map.

S10: Scenic Integrity Objectives will be met with the following exceptions:

- Minor adjustments not to exceed a drop of one SIO level is allowable with the Forest Supervisor's approval.*
- Temporary drops of more than one SIO level may be made during and immediately following project implementation providing they do not exceed three years in duration.*

The SIO's along the route selected for C157 and along the Pacific Crest Trail are mapped as High. Even with implementation of mitigation measure MM VIS-1, the Final EIR/EIS concludes that the project will not meet these requirements (Final EIR/EIS sections D.2.4.2). My decision includes exceptions to these requirements.

As described in Sections D.2 and D.10, the other improvements included in the Federal Preferred Alternative are consistent with LMP direction.

L.2 Endangered Species Act

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 federal agencies are relying on implementation of SDG&E's Subregional Natural Community Conservation Plan (NCCP), and SDG&E low effect Habitat Conservation Plan (HCP) for Quino checkerspot butterfly to meet consultation requirements. The Forest Service also consulted with the FWS with regards to Laguna Mountain skippers, and asked for concurrence with a “may affect, not likely to adversely affect” finding.

Consultation was concluded with the FWS concurrence letter and Biological Opinion issued November 17, 2015. The concurrence letter included general conservation measures and conservation measures for southwestern willow flycatcher, least Bell's vireo, and arroyo toad. The opinion included incidental take of Stephens' kangaroo rat subject to implementation of the listed reasonable and prudent measures and terms and conditions. Consistent with this consultation, I am incorporating the applicable requirements from the NCCP, HCP, concurrence letter and Biological Opinion in this decision and will include those requirements in the MSUP.

L.3 Clean Water Act

The Federal Preferred Alternative 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 section D.9.3 to 9.6, potential impacts to water quality will be mitigated by adoption of mitigation measures that require an Erosion Control Plan (MM HYD-1), an Access Road Decommissioning Plan (MM HYD-3), and an Access Road Evaluation and Repair Design Report (MM HYD-4). Implementation of these and other measures, along with reducing the total length of access roads, will reduce the overall impact of the construction, operation, and maintenance of the improvements authorized by the MSUP, particularly when compared to the existing condition.

Depending on the final designs, SDG&E may need to obtain approvals from the ACOE and the State or Regional Water Resources Control Board under the CWA, including certification (or a waiver) under Section 401 from the State that the proposed discharge complies with water quality standards. As discussed earlier in the ROD, activities subject to the CWA certification requirement will not be authorized until SDG&E obtains certification under the CWA or such certification is waived. I will amend project conditions, if necessary, to respond to any certification issued by the State or Regional Water Resources Control Board.

L.4 Clean Air Act

Implementation of the MSUP 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. As described in Final EIR/EIS section D.3.1.1, the San Diego Air Basin is designated as non-attainment for ozone. 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 per year for VOCs (O₃ precursor), NO_x (O₃ precursor), and CO. 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. The Forest Service does not have any practical control over emissions resulting from activities on non-National Forest System lands. As a result, this conformity evaluation is limited to direct and indirect emissions associated with construction activity on National Forest System lands.

As discussed in the Final EIR/EIS section D.3.3, the construction, operation, and maintenance of the improvements authorized by the MSUP would result in a temporary addition of pollutants to the local airshed caused by soil disturbance, fugitive dust emissions, and combustion pollutants from on-site construction equipment, as well as from off-site trucks hauling construction materials. Emissions would not exceed the federal de minimis thresholds for VOC, NO_x, and CO emissions. Therefore, the project would be considered to be in compliance with the general conformity requirements and would not conflict with local air quality attainment or maintenance plans to achieve or maintain federal ambient air quality standards.

SDG&E has proposed APMs AIR-01 through AIR-05, which would include construction dust and emission controls, which would be implemented as part of the MSUP to reduce impacts related to air quality (see Section B.7 of the Final EIR/EIS). I am adopting the air quality applicant proposed measures as a condition of this decision.

L.5 National Historic Preservation Act

The process for identifying, evaluating, and avoiding the potential for effects to historic properties (cultural resources listed or eligible for listing on the National Register of Historic Places) is defined in Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended. Section 106 requires federal agencies to identify and avoid or mitigate potential effects to historic properties within the Area of Potential Effects (APE) of undertakings on federal land.

As described in the Final EIR/EIS Section D.5.2.1, compliance with Section 106 of the NHPA will be accomplished through the development and implementation of a project specific Programmatic Agreement (pursuant to 36 CFR 800.14(b)) between the California State Historic Preservation Officer (CASHPO), the Cleveland National Forest, the CPUC and SDG&E. The Programmatic Agreement was executed by the Forest Service on February 10th, 2016, and the CASHPO on February 11th, 2016. The BLM, the BIA, and Native American Tribes were invited to sign the Programmatic Agreement as concurring parties.

Mitigation Measure CUL-1 in the Final EIR/EIS outlines the comprehensive approach to the protection and preservation of historic properties that is contained in the Programmatic Agreement, which also requires the preparation and implementation of a Historic Properties Management Plan (HPMP) and Historic Properties Treatment Plan (HPTP) for the undertaking. The requirements of the project specific Programmatic Agreement will be incorporated into the MSUP and will apply to the proposed fire hardening, undergrounding, and relocation of improvements within the Cleveland National Forest during the construction phase.

An Operation and Maintenance plan incorporating the requirements of the Forest Service Regional Programmatic Agreement of 2013 will be prepared and implemented to avoid potential effects to historic properties associated with operation and maintenance activities conducted by SDG&E within the boundary of the MSUP for the duration of the permit.

L.6 Federal Land Policy and Management Act

Special use permits for transmission lines on National Forest System lands are authorized under the authority of the Federal Land Policy and Management Act of 1976 (FLPMA). FLPMA requires, in part, that right-of-way authorizations contain conditions to minimize damage to scenic and aesthetic values, fish and wildlife habitat and otherwise protect the environment. Adopting the applicant proposed measures and the agency required mitigation measures described in the Final EIR/EIS ensures that the project is in compliance with this requirement. FLPMA also requires location of the right-of-way along a route that will cause least damage to the environment, taking into consideration feasibility and other relevant factors. The Federal Preferred Alternative, which relocates power lines away from sensitive areas and reduces the

impact of access roads, best meets the Forest Service purpose and need while minimizing the impact to the environment. My decision to authorize the MSUP and power line replacement projects on National Forest System lands is consistent with the requirements of FLPMA.

L.7 Forest Service Regulations and Policy

Inventoried Roadless Areas (IRAs)

The 2001 Roadless Rule (36 CFR Part 294) establishes prohibitions on road construction, road reconstruction, and timber harvesting within inventoried roadless areas on National Forest System lands unless those activities fall within one of the circumstances identified in the rule. As described in the Final EIR/EIS Sections D.2, D.10, and D.13, sections of C79 that currently share the same poles as TL626 cross through the Sill Hill and No Name IRAs. The Federal Preferred Alternative would authorize C79 as a 12 kV line only through these areas, using the existing roads. The existing access road that crosses Boulder Creek in the Sill Hill IRA was included in the Partial Removal of Overland Access Roads alternative, and would not be authorized as part of the Federal Preferred Alternative. This would reduce the impacts on riparian areas, water quality, and avoid a conflict with the BCNM land use zone. My decision to authorize the fire hardening of C79 in its current location, including the use of some of the existing access roads is consistent with the 2001 Roadless Rule.

Special Uses

Forest Service special use regulations are found at 36 CFR Part 251 Subpart B, § 251.54.g.4 states:

“Based on evaluation of the information provided by the applicant and other relevant information such as environmental findings, the authorized officer shall decide whether to approve the proposed use, approve the proposed use with modifications, or deny the proposed use.”

My decision to approve SDG&E’s proposed use with modifications is consistent with that direction.

The Forest Service Manual (FSM) and Handbooks provide policy direction for implementing the laws and regulations guiding special uses management on the National Forests. Special Use Management policy is found in the 2700, 2710, and 2720 sections of the manual. As described in the Final EIR/EIS Section D.10.2.1, Region 5 Supplement to FSM 2700 (R5 No. 2700-2011-1) contains direction for power lines on National Forests in the Pacific Southwest Region in order to eliminate or mitigate long-term conflicts between power lines and the management of National Forest lands and resources and to eliminate identified fire and safety hazards. The following direction is provided in Chapter 2720 for power lines up to and including 35 kV and power lines over 35 kV:

“Power Lines Up To and Including 35 kV. Place all new power line installations underground, except where the environmental analysis indicates that aerial construction provides better protection for National Forest resource and environmental values. The authorizing officer shall require undergrounding of existing aerial power line

installations, especially when the holder proposes those lines for upgrading, replacement, or reconstruction, except where the environmental analysis clearly indicates that aerial construction provides better protection for National Forest resource and environmental values.

Powerlines Over 35 KV. Forest Service officers may authorize aerial construction, except for those areas where the environmental analysis clearly indicates unacceptable affects on National Forest resource and environmental values. While it is technically feasible to underground electric powerlines over 35 KV, construction costs and operational problems increase substantially. Consider undergrounding only after a thorough assessment of the situation by the authorizing officer."

My decision requires additional undergrounding of C440 along with the undergrounding of C440 and C449 already included in SDG&E's Proposed Project. While there may be some short term impacts associated with placing additional sections of C440 underground, the long term benefits of reduced habitat disturbance, reduced vegetation management needs, improved scenic integrity, and eliminating the risk of power line related wildfires provide better protection for National Forest resources.

Several of the alternatives considered but eliminated from detailed consideration proposed more extensive undergrounding, including undergrounding 146 miles of existing 69 kV transmission lines and 12 kV distribution lines, or undergrounding 45 miles of 69 kV transmission lines along roadways. While these alternatives would meet the project purpose and need, they were not feasible due to construction limitations associated with steep terrain and roadway encroachment limitations for roads managed by other jurisdictions. Undergrounding in steep terrain also has greater environmental impact, offering less protection for National Forest resources.

The Federal Preferred Alternative adopts additional undergrounding in an area with moderate terrain and suitable access roads under Forest Service jurisdiction. Additionally, no new power lines are included, and so my decision to adopt the additional undergrounding only for C440 is consistent with this policy.

Sensitive Species

Forest Service policy (FSM 2670.32) requires a review of all Forest Service permitted activities for possible effects on endangered, threatened, proposed, or sensitive species. The analysis presented in Final EIR/EIS Section D.4.1.7 describes the Sensitive Species considered in the analysis, and the analysis for Impact BIO-6 in Sections D.4.3 through D.4.6 presents the effects. Appendices BIO-1 through 6 provide a detailed review of special status species, including sensitive species, with habitat in the project area. For this project SDG&E will be following the requirements of their NCCP. The NCCP provides for the conservation and preservation of most sensitive species. The NCCP and other measures will be incorporated into the Operating Plan as enforceable conditions of the permit, and actions identified in the NCCP will be extended to species on the Regional Forester's Sensitive Species list. Based on the analysis in the Final EIR/EIS, implementing the Federal Preferred Alternative on National Forest System lands will not result in loss of species viability or create significant trends toward federal listing for any Regional Foresters' list plant or animal species.

L.8 Environmental Justice

Executive Order 12898 requires an assessment of whether implementation of the proposed action would disproportionately affect minority or low-income populations. As described in the Final EIR/EIS Section G.5, the project (or alternatives) would not create disproportionately high or adverse effects on minority or low-income populations as the construction footprint is minimal and the work will replace existing improvements. Operations and maintenance activities would remain essentially the same as they currently are conducted.

M. OBJECTION PROCESS

The proposed decision by the Forest Service to authorize SDG&E facilities on National Forest System lands was subject to the Forest Service predecisional administrative review (referred to as “objection”) process pursuant to 36 CFR 218, Subparts A and B. Legal notice of the 45 day objection period was published in the San Diego Union Tribune on Friday July 10, 2015. The objection period closed on August 24, 2015.

M.1 Objections Filed

Objections were filed by the following entities and individuals: SDG&E, Gerald Fisher, the Cleveland National Forest Foundation, Backcountry Against Dumps, Nathan Weflen, Cindy Buxton, and the Sierra Club. The objectors asked that the decision be changed in the following ways:

SDG&E – asked that the MSUP not be delayed pending the 401 Certificate, and that the wording for two required mitigation measures be clarified.

Fisher – asked that additional undergrounding of facilities be required, particularly as it relates to TL 682.

Cleveland National Forest Foundation – asked that additional alternatives that utilize microgrid technology or other alternatives that do not increase transmission capacity be considered and adopted.

Backcountry Against Dumps – asked that the full undergrounding alternative be considered along with alternatives that do not increase the system capacity.

Weflen – asked that C79 be constructed underground along the Boulder Creek road.

Buxton – asked that all distribution lines be constructed underground, that C79 specifically be reconstructed underground along the Boulder Creek Road, that TL 682 be replaced with an underground alternative, that the permit term be reduced to 30 years, and that the conversion of TL 626 between Santa Ysabel and the Boulder Creek substation be removed from the document.

Sierra Club – referenced the Buxton objection and requested the same changes as described above.

M.2 Response to the Objections

Deputy Regional Forester Jennifer Eberlien, acting as the Reviewing Officer, convened a resolution meeting with the objectors on October 9, 2015. Each objector was given an opportunity to discuss their issues directly with the Reviewing Officer. The Reviewing Officer issued a response to the objections on November 9, 2015. The Reviewing Officer evaluated 21 objection points and concluded the “Forest Supervisor’s rationale for this project is clear and the reasons for the project are logical and responsive to direction contained in the CNF LRMP. As described above, I made a reasonable and appropriate effort to resolve the concerns that were brought forward while maintaining a balanced approach to managing the lands and meeting the purpose of the project.”

M.3 Instructions to the Responsible Official

The Reviewing Officer identified five instructions that I must address before issuing a Final ROD. The instructions and my response are discussed below.

Instruction 1 - Objection Point 1. The Responsible Official should clarify that state CWA certification is not necessary prior to permit issuance authorizing activities where a 401 certification is not required, but is necessary prior to permitting new activities which require a 401 certification.

Response – The text of the Final ROD sections F and L.3 has been edited to clarify that activities requiring a 401 certificate can’t be authorized until a certificate is granted. The decision would allow a permit to be issued for those activities that do not require 401 certification.

Instruction 2 – Objection Point 2. The Responsible Official should clarify SDG&E’s responsibility in Mitigation Measure PSU-1 to reflect SDG&E’s jurisdictional concerns (if the FS requires AT&T to co-locate with SDG&E, then SDG&E needs to work with AT&T.)

Response – I have reviewed the text of Mitigation Measure PSU-1 and have consulted with CPUC staff regarding the implementation of this measure. This measure was designed to mitigate a potentially significant impact and applies to SDG&E activities both on and off the Cleveland National Forest. As noted in the objection review, this measure can only be applied through the special use permit if the Forest Service requires AT&T to co-locate their facilities. SDG&E does not have the authority to require AT&T to take this action. I’ve directed my staff to clarify the jurisdictional concerns as part of the Mitigation, Monitoring, Compliance, and Reporting Program developed jointly between the Forest Service and the CPUC during project implementation.

Instruction 3 – Objection Point 3. The Final ROD should more clearly define the gate protocol requirements that will apply during construction, operation and maintenance to SDG&E for the life of the MSUP, and should specify which roads are subject to those requirements. Specific consequences of SDG&E not following these protocols should be addressed via clause IV.F of the special use permit; therefore, I instruct the Responsible Official to remove them from Mitigation measure REC-2.

Response – This mitigation measure applies to National Forest System lands and is intended to protect those lands from unauthorized access. I have modified the text of the measure in the appendix to this ROD to address this instruction. The measure will apply only to those roads included in the MSUP. The consequences for non-compliance have been removed from the measure and will be covered by the standard permit conditions.

Instruction 4 – Objection Point 20. Clarify in the Final ROD:

- a. Why changes to the Preferred Federal Alternative were incorporated into the FEIR/EIS.
- b. That the selected alternative differs from the Federal Preferred Alternative as described in the ROD language and map. To clarify, this decision only selects the off-grid solution and not the back-up option to convert the northern end of TL 626 to 12 kV should the off-grid solution not be implemented.

Response – The FEIR/EIS included a map (Figure ES-3) that displayed the conversion of TL 626 to 12 kV between the Santa Ysabel and Boulder Creek substations. The map was designed to display the Environmentally Superior Alternative under CEQA and the Federal Preferred Alternative under NEPA. The section of line raised in the objection was an option considered in the Federal Preferred Alternative, but not an option that was selected in the Final ROD. I have expanded the discussion in sections B and H of this Final ROD to clarify that my decision does not include the conversion of TL 626 north of the Boulder Creek substation that was included in the Final EIR/EIS. Section B contains a new paragraph that explains the relationship between my decision and the Federal Preferred Alternative and that an on-grid solution will be considered at a later time if the off-grid solution is found to be infeasible. Section H expands the discussion of the Federal Preferred Alternative to explain how the conversion of this northern section of TL 626 was an option that was considered but not selected in this decision.

Instruction 5 – Objection Point 21. The Responsible Official should specify in the MSUP the intervals/years this permit will be subject to revision as per 2709.11 Chapter 50, E8.

Response – Section B of this Final ROD has been modified to include this requirement. The MSUP will be subject to revision at year 25.

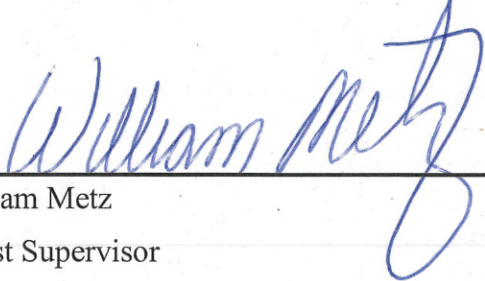
In addition to my response to the instructions, I am directing my staff to evaluate the possibility of additional undergrounding of C79 in the Sill Hill area when SDG&E begins the design stage for the TL626 conversion. The concept of undergrounding shorter sections of C79 (described as a hybrid alternative) was identified during the objection resolution meeting. While this concept was suggested too late in the process to be fully evaluated, I have the discretion to consider this concept as we move forward, and have chosen to evaluate that concept as we implement the conversion of TL626.

N. IMPLEMENTATION

This decision may be implemented on the date of my signature.

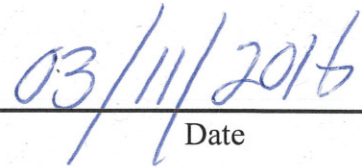
O. CONTACT

For additional information concerning this decision, contact Jeff Heys, Forest Planner, Cleveland National Forest, at 858-674-2959, or jaheys@fs.fed.us.



William Metz

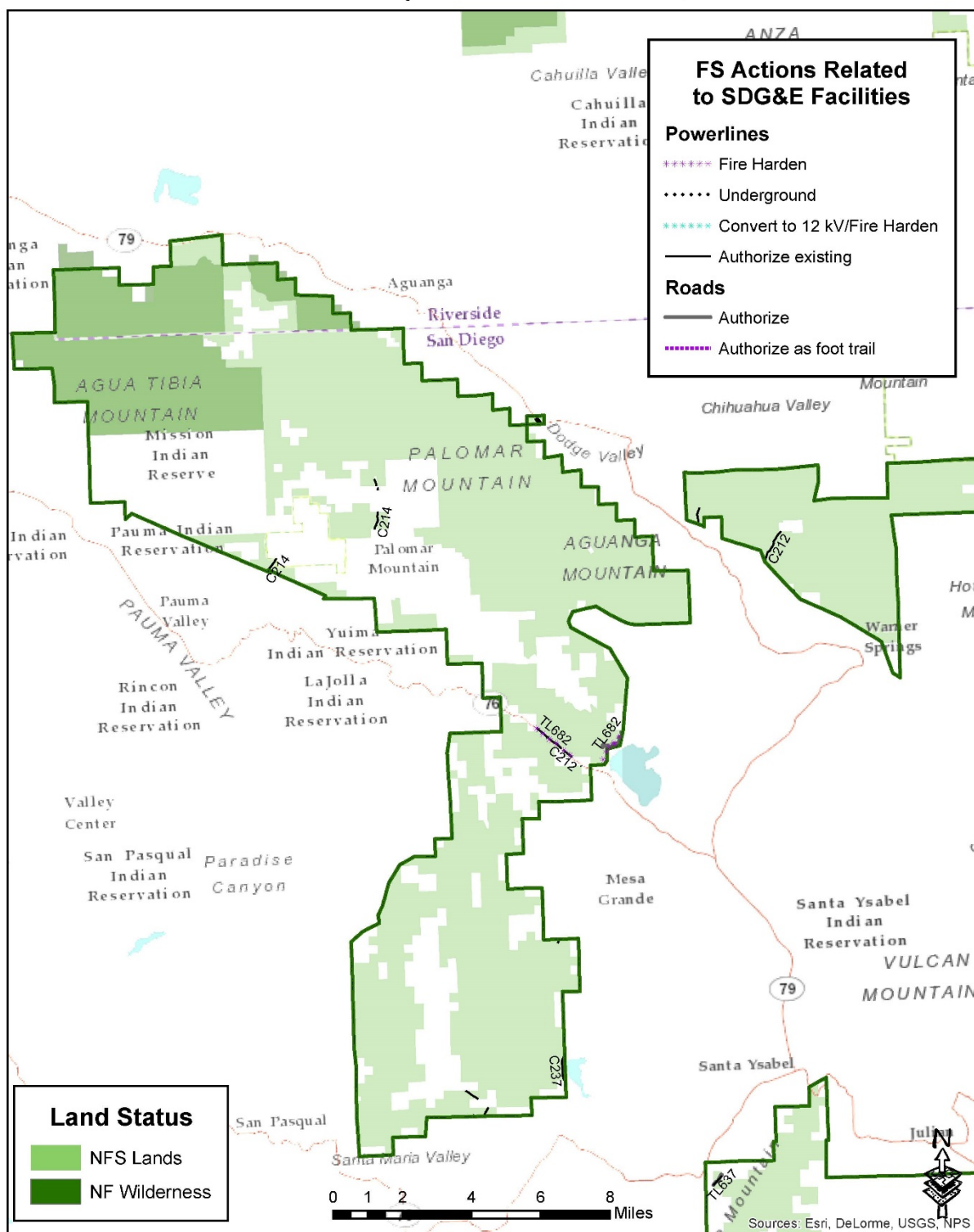
Forest Supervisor



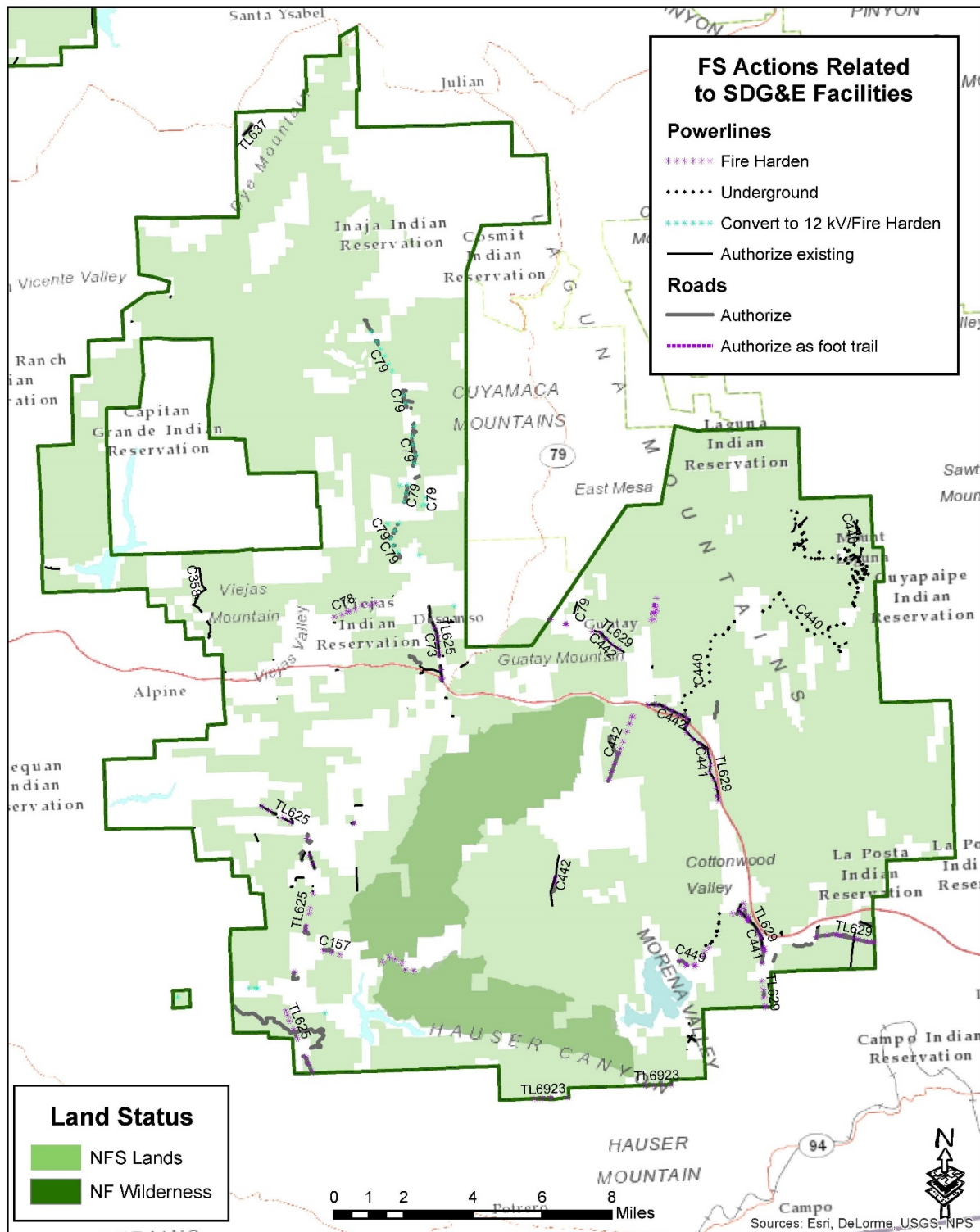
Date

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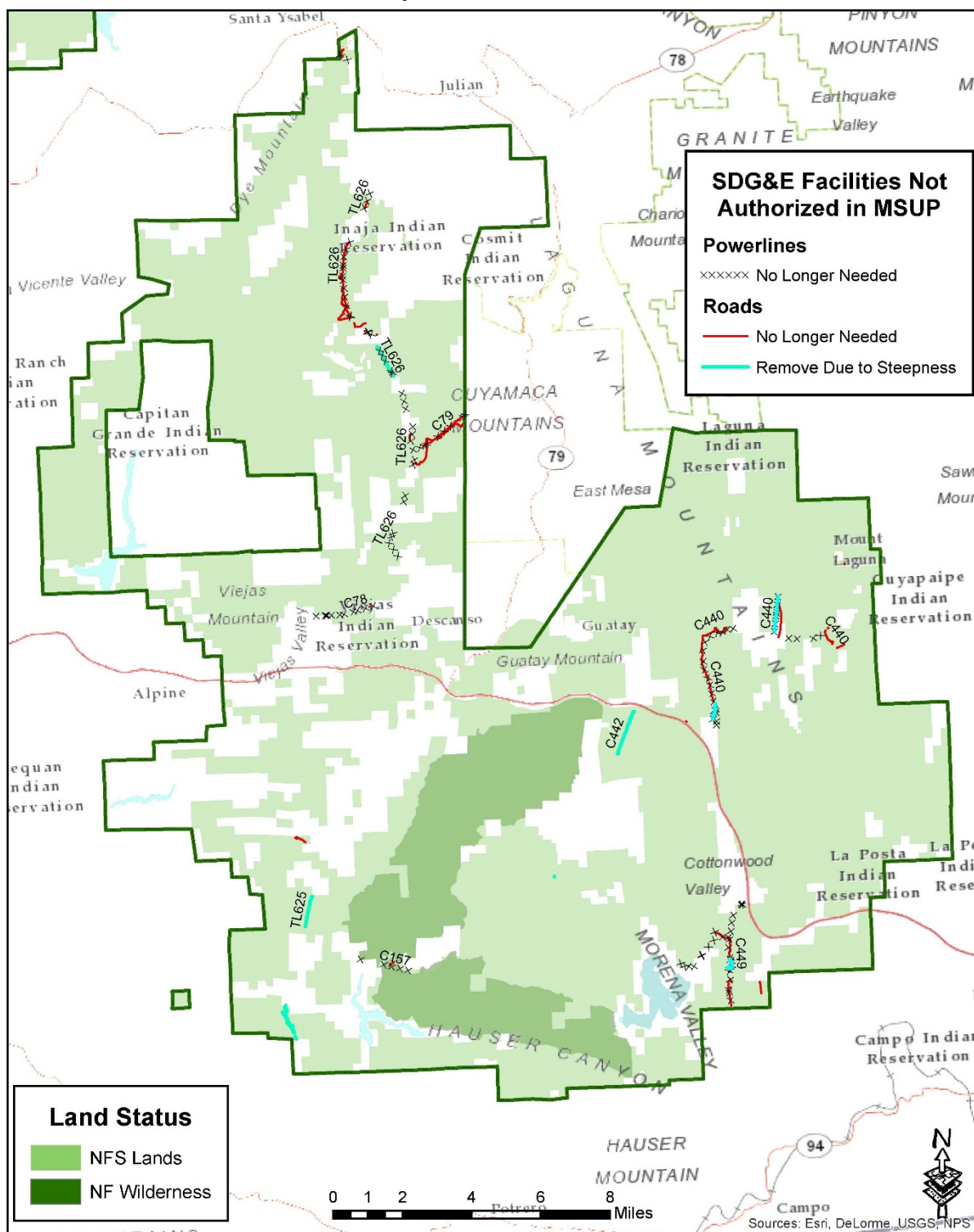
SDG&E Master Special Use Permit, CNF North



SDG&E Master Special Use Permit, CNF South



SDG&E Master Special Use Permit, CNF South



Final Record of Decision

Mitigation Appendix

This appendix compiles the applicant proposed measures and the text of the mitigation measures from the Final EIR/EIS into one document for reference. The mitigation measure text reflects the final version of the requirement in “clean” text. The Final EIR/EIS text is in “track-change mode” to disclose any edits between draft and final. Please refer to the Final EIR/EIS for the full description of the mitigation and monitoring requirements for each measure, which can be found at the end of the applicable resource chapters.

Mitigation Measures

The following mitigations were developed by the Forest Service and the CPUC to provide a consistent mitigation approach across all jurisdictions. Mitigation measures supersede the Applicant Proposed Measures (APMs) described later in this appendix.

Visual Resources

MM VIS-1 Prepare and Implement a Scenery Conservation Plan.

SDG&E shall file with the CPUC a Scenery Conservation Plan that is approved by the Forest Service and provided to other applicable jurisdictional agencies for review and comment. Each 69 kV power line or 12 kV distribution line segment will be covered under an individual section of the plan, and each section will be reviewed and approved by the appropriate agencies prior to any ground-disturbing activities for the specific segment. The purpose of this plan is to identify and implement specific actions that will minimize the project’s visual disturbance to the naturally established scenery. Specific actions shall also be identified and implemented for individual poles to protect existing views from established scenic vistas and roadways located outside of the CNF. Power and distribution line support towers shall be designed to minimize their visual prominence and contrast to the natural landscape. Individual poles anticipated to create adverse effects to scenic vistas and/or particularly noticeable visual contrast in existing views shall be designed, located, shaped, textured, and/or screened as necessary to minimize their visual contrast, blend and complement the adjacent forest and community character. Methods such as limiting the number of climbing pegs and identifying less visually intrusive pole markings for high voltage lines, consistent with CPUC requirements, shall be considered. SDG&E shall also be required to provide photorealistic visual simulations of typical proposed designs that include design features that may be incorporated into poles identified for visual treatment to demonstrate the effectiveness of such features in reducing visual contrast and prominence as viewed from sensitive viewsheds.

MM VIS-2

If the Forest Service selects to fire harden TL626, TL629, TL6923 or C157 or relocate TL626 (Options 1,2,3a,3b,4 and 5, it would have to approve a project-specific CNF Land Management Plan Amendment contemporaneously with the decision to authorize the MSUP and pole replacement project. The project-specific plan amendment would amend the Land Management

Plan to allow project-specific exemptions for inconsistencies with the CNF Land Management Plan scenic integrity objectives.

Biological Resources

MM BIO-1 Confine all construction and construction-related activities to the minimum necessary area.

All construction areas, access to construction areas, and construction-related activities shall be strictly limited to the areas identified in Section B, Project Description, Table B-7. The limits of approved work spaces (not including existing access roads) shall be delineated with stakes and/or flagging prior to beginning work in any area. In areas where SDG&E will not work within exclusive-use easements, SDG&E will post temporary signage along approved work limits, indicating that the area is an active construction/work zone and access is temporarily restricted. An environmental monitor shall complete weekly observations to ensure that all work is completed within the approved work limits, and in the event any work occurs beyond the approved limits, it shall be reported by SDG&E's compliance team in accordance with the Mitigation Monitoring, Compliance, and Reporting program (see Section H).

MM BIO-2 Conduct contractor training for all construction staff.

Prior to construction, all developer, contractor, and subcontractor personnel shall receive training regarding the appropriate work practices necessary to implement the mitigation measures and comply with environmental regulations, including plant and wildlife species avoidance, impact minimization, and best management practices. Sign-in sheets and hard hat decals shall be provided that document contractor training has been completed for construction personnel.

MM BIO-3 Conduct biological construction monitoring.

An authorized biological monitor must be present at the construction sites during all initial ground-disturbing and vegetation-removal activities in undeveloped areas (i.e., not roads or existing developed areas). The monitor shall survey the construction project footprint and surrounding areas for compliance with all environmental specifications. Weekly biological construction monitoring reports shall be prepared and submitted to the appropriate permitting and responsible agencies through the duration of the ground-disturbing and vegetation-removal construction phase. Monthly biological construction monitoring reports shall be prepared and submitted through the duration of project construction to document compliance with environmental requirements.

MM BIO-4 Restore all temporary construction areas pursuant to a Habitat Restoration Plan (HRP).

All previously undisturbed temporary work areas not subject to long-term use or ongoing vegetation maintenance shall be revegetated with native species characteristic of the adjacent native vegetation communities in accordance with a Habitat Restoration Plan as described in SDG&E NCCP 7.2 Habitat Enhancement Measures. Restoration techniques may include the following: hydroseeding, hand-seeding, imprinting, and soil and plant salvage. Any salvage and

relocation of species considered desert native plants shall be conducted in compliance with the California Desert Native Plant Act. The HRP shall include success criteria and monitoring specifications and shall be approved by the permitting agencies prior to construction of the project. At the completion of project construction, all construction materials shall be completely removed from the site. Topsoil located in areas to be restored will be conserved and stockpiled during the excavation process for use in the restoration of sites requiring restoration. Wherever possible, vegetation will be left in place or mowed, and not grubbed, per the NCCP, to avoid excessive root damage and allow for natural regrowth following construction. Temporary impacts shall be restored sufficient to compensate for the impact to the satisfaction of the permitting agencies (depending on the location of the impact). If restoration of temporary impact areas does not meet success criteria per the HRP, the temporary impact shall be considered a permanent impact and compensated accordingly (see MM BIO-5).

Specifically, the HRP will include the following sections:

- Introduction
- Mitigation Measure Summary
- Plan Objectives
- Plan Implementation
 - Pre-Construction Documentation
 - Clearing and Grading
 - Cleanup
 - Seeding
 - Other Planting Methods
- Schedule
 - Restoration
 - Seeding and Planting
- Restoration Monitoring
 - Monitoring Success Criteria, and Remedial Measures
 - Reporting
 - Completion of Restoration Program
- References

The HRP will be prepared by a habitat restoration specialist (approved by the CPUC and Forest Service) who will oversee implementation of the HRP. The HRP shall be submitted to the CPUC and the Forest Service for review and approval prior to implementation.

MM BIO-5 Provide habitat compensation or restoration for permanent impacts to native vegetation communities.

Permanent impacts to all native vegetation communities shall be mitigated by either on- or off-site restoration of suitable but degraded habitat, or by the procurement and protection of off-site habitat as compensation for permanent impacts. Permanent impacts shall be compensated at a minimum of a 1:1 ratio and in accordance with SDG&E NCCP 7.4 Mitigation Credits or as required by the permitting agencies. Where discrepancies occur, the higher of the two ratios will be applied, but these ratios are not additive (i.e., ratios of 1:1 and 2:1 do not equal 3:1. Mitigation would be applied at the 2:1 ratio only). Impacts to vegetation communities on Forest Service land will be mitigated as follows: 2:1 for habitats that are sensitive or support listed species; 2:1 for coastal sage scrub, chaparral, grassland, or oak/conifer forest; and 3:1 for riparian oak woodland. “Disturbed” habitat is to be mitigated per ratio for the surrounding vegetation. Forest Service requirements related to MM BIO-5 will only apply to National Forest System lands.

Habitat compensation shall be accomplished through agency-approved land preservation or mitigation fee payment for the purpose of habitat compensation of lands supporting comparable habitats to those lands impacted by the proposed power line replacement projects. Land preservation or mitigation fee payment for habitat compensation must be completed within 36 months of permit issuance. Habitat restoration may be appropriate as compensation for permanent impacts provided that restoration is demonstrated to be feasible and the restoration effort is implemented pursuant to a Habitat Restoration Plan, which includes success criteria and monitoring specifications as described for MM BIO-4. All habitat compensation and restoration used as mitigation for the proposed power line replacement projects on public lands shall be located in areas designated for resource protection and management. All habitat compensation and restoration used as mitigation for the proposed power line replacement projects on private lands shall include long-term management and legal protection assurances.

MM BIO-6 Implement fire prevention best management practices during construction and operation activities.

Fire prevention best management practices shall be implemented during construction and operation of the project as specified by the Construction Fire Prevention/Protection Plan (to be developed as required under MM FF-1 and MM FF-2). The PALS system will be followed for any work on National Forest System lands.

MM BIO-7 Prepare and implement a Stormwater Pollution Prevention Plan.

Prepare a Stormwater Pollution Prevention Plan pursuant to the specifications described in APM HYD-05 and MM HYD-1.

MM BIO-8 Procedural requirements for herbicide applications.

Herbicide applications shall follow measures as described in MM HYD-5 and MM BIO-23. In addition, herbicides shall only be applied to the minimum area necessary to achieve fire safety objectives and not used in excess or inadvertently be applied to special-status plant species in the vicinity. Special-status plant species of concern are listed below under Impact BIO-6 (a total of

48 species, of which 46 are further described in Table D.4-11). If the professional is unfamiliar with the identification of special-status plant species, an SDG&E biologist shall provide additional supplemental training prior to the application of herbicides along the project as described in MM BIO-23. This training will be administered by an SDG&E biologist and shall include an overview of special-status species along the ROW, identification features, and avoidance measures.

MM BIO-9

SDG&E shall identify all proposed replacement pole locations within the vicinity of RCAs to identify those poles and associated access roads that can be reasonably relocated outside these areas and consult with the Forest Service for authorization of their relocation and proposed placement. These Forest Service requirements will only apply to National Forest System lands.

MM BIO-10 Limit temporary and permanent impacts to jurisdictional features to the minimum necessary.

Formal jurisdictional delineation and permits are required prior to construction for all work areas located within or adjacent to jurisdictional wetlands and waters. The applicant shall obtain and implement the terms and conditions of agency permit(s) for unavoidable impacts to jurisdictional wetlands and waters. All construction areas, access to construction areas, and construction-related activities shall be strictly limited to the areas within the approved work limits and delineated with stakes and/or flagging that shall be maintained throughout the construction period. The project applicant shall obtain applicable permits and provide evidence of permit approval, which may include but not be limited to a Clean Water Act Section 404 Permit from the ACOE, a Clean Water Act Section 401 water quality certification from the RWQCB, and a Section 1602 Streambed Alteration Agreement with the California Department of Fish and Wildlife for impacts to jurisdictional features prior to project construction. These permits are anticipated to be approved under the MSUP. The terms and conditions of these authorizations shall be implemented.

In addition, prior to conducting work or establishing the final design of a selected transmission line alignment, a planning-level assessment of aquatic resources will be conducted to identify the environmentally preferred alternative. The assessment will include review of the National Hydrography Dataset, National Wetland Inventory, U.S. Geological Survey topographic maps, high-resolution digital photography, and necessary field checking. Once the environmentally preferred alternative is identified, a jurisdictional delineation will be conducted of the selected transmission line to ensure the final design is the Least Environmentally Damaging Practicable Alternative (LEDPA) and is in compliance with the Clean Water Act (CWA) Section 404(b)(1) Guidelines. The CWA Section 404 permit authorization will be obtained for any discharges into waters of the United States and the widths of access roads and construction of bridges over waters of the United States will be minimized to the extent feasible.

MM BIO-11 Implement habitat creation, enhancement, preservation, and/or restoration pursuant to a wetland mitigation plan to ensure no net loss of jurisdictional waters and wetlands.

Temporary and permanent impacts to all jurisdictional resources shall be compensated through a combination of habitat creation (i.e., establishment), enhancement, preservation, and/or and restoration at a minimum of a 1:1 ratio or as required by the permitting agencies. Any creation, enhancement, preservation, and/or restoration effort shall be implemented pursuant to a Habitat Restoration Plan, which shall include success criteria and monitoring specifications, and shall be approved by the permitting agencies prior to construction of the project. A habitat restoration specialist will be designated and approved by the permitting agencies and will determine the most appropriate method of restoration. Restoration techniques may include hydroseeding, hand-seeding, imprinting, and soil and plant salvage (as discussed in SDG&E NCCP 7.2 Habitat Enhancement Measures). Temporary impacts shall be restored sufficient to compensate for the impact to the satisfaction of the permitting agencies (depending on the location of the impact). If restoration of temporary impact areas is not possible to the satisfaction of the appropriate agency, the temporary impact shall be considered a permanent impact and compensated accordingly. All habitat creation and restoration used as mitigation for the proposed project on public lands shall be located in areas designated for resource protection and management. All habitat creation and restoration used as mitigation for the proposed project on private lands shall include long-term management and legal protection assurances.

MM BIO-12 Where drainage crossings are unavoidable, construct access roads at right angles to drainages.

Unless not possible due to existing landforms or site constraints, access roads shall be built perpendicular to drainages to minimize the impacts to these resources and prevent impacts along the length of jurisdictional features

MM BIO-13 Conduct preconstruction surveys for special status plants in areas not accessible during previous rare plant surveys.

Prior to construction, San Diego Gas & Electric (SDG&E) shall retain a qualified biologist approved by the California Public Utilities Commission (CPUC) and Forest Service to conduct a focused rare plant survey on site during the time period when the previously described special-status plant species are detectable.

Table D.4-12 in EIR/EIS describes the 40 blooming plant species that shall be surveyed, months they shall be surveyed (i.e., blooming periods), and the TL/circuits on which they occur. Cuyamaca cypress and tecate cypress can be surveyed anytime of the year. Surveys shall be conducted in areas not included during rare plant surveys (see Chambers Group Inc. 2012b, Table 2).

Of the 40 species described, there is some potential for 8 of these species to occur in vernal pools, including California Orcutt grass*, Cuyamaca larkspur, long-spined spineflower, Orcutt's brodiaea*, San Diego goldenstar*, San Diego thornmint*, Santa Lucia dwarf rush, and

variegated dudleya*. These 8 species are also included in Table D.4-12. These species will also be protected through implementation of, the SDG&E Natural Community Conservation Plan (NCCP), and through avoidance of impacts to wetlands (MM BIO-10 through MM BIO-12).

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

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

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

MM BIO-14 Install fencing or flagging around identified special-status plant species populations in the construction areas.

Prior to the start of construction, a qualified biologist shall conduct focused surveys during the appropriate blooming period for special-status plant species for all construction areas. All of the special-status plant locations shall be recorded using a Global Positioning System (GPS), which will be used to site the avoidance fencing/flagging. Special-status plant species shall be avoided to the maximum extent possible by all construction activities. The boundaries of all special-status plant species to be avoided shall be delineated in the field with clearly visible fencing or flagging. The fencing/flagging shall be maintained for the duration of project construction activities.

Cutting down or damaging coniferous trees that occur along C79 within California Department of Parks and Recreation lands is prohibited. Equipment within staging areas will be situated to avoid damage to coniferous trees. If avoidance to coniferous trees along C79 within California Department of Parks and Recreation lands is not feasible, the applicant will work closely with the California Department of Parks and Recreation to determine alternative staging location(s). In addition, all areas along C79 associated with the Cuyamaca Rancho State Park Reforestation Project will be avoided, including disturbance to these areas and the temporary establishment of staging and stringing sites. This reforestation project is registered with the Climate Action Reserve (www.climateactionreserve.org), where more details can be found.

MM BIO-15 Implement special-status plant species compensation.

Impacts to special-status plant species shall be maximally avoided. Where impacts to special-status plant species are unavoidable, the impact shall be quantified and compensated through off-site land preservation and/or plant salvage and relocation. Where off-site land preservation is biologically preferred, the land shall contain comparable special-status plant resources as the impacted lands and shall include long-term management and legal protection assurances to the satisfaction of the Forest Service. Land preservation must be completed within 36 months of initiation of construction. Where salvage and relocation is demonstrated to be feasible and biologically preferred, it shall be conducted pursuant to an agency-approved plan that details the methods for salvage, stockpiling, and replanting, as well as the characteristics of the receiver sites. Any salvage and relocation plans shall be approved by the permitting agencies prior to project construction. Any salvage and relocation of species considered desert native plants shall be conducted in compliance with the California Desert Native Plant Act. Success criteria and monitoring shall also be included in the plan. If salvage and relocation is not possible to the satisfaction of the Forest Service, off-site land preservation shall be required. Forest Service requirements will only apply to National Forest System lands.

MM BIO-16 Install fencing or flagging around identified special-status butterfly host species populations in the construction areas and road maintenance.

Prior to the start of construction, a qualified biologist shall conduct focused surveys during the appropriate blooming period for larvae or adult (nectar sources or egg laying sources) plant for the following species: Hermes copper butterfly, Laguna Mountains skipper, or Quino checkerspot butterfly. These host plants include Cleveland's horkelia, western plantain, bird's beak, owl's clover, California buckwheat, and spiny redberry. Similar protective measures for special-status plants (identified in MM BIO-13 and MM BIO-14) shall be implemented. Occupied or suitable habitat for these species shall be avoided to the greatest extent feasible. In addition to the implementation of SDG&E NCCP Operational Protocols, site visits will be conducted prior to construction and road maintenance. Prior to site visits, a digital database of known host plant populations will be reviewed. Site visits will verify the known locations of host plant populations in the area and, if present, avoid those locations.

MM BIO-17 Conduct protocol surveys for Quino checkerspot, Hermes copper, and Laguna Mountains skipper butterflies within 1 year prior to project construction activities in occupied habitat.

The project proponent shall conduct preconstruction protocol surveys for Quino checkerspot butterfly, Laguna Mountains skipper, and Hermes copper butterfly within 1 year prior to construction activities (or unless coordination with the U.S. Fish and Wildlife Service determines that SDG&E's low-effect habitat conservation plan (HCP) for Quino (SDG&E 2007) adequately protects the species, historical surveys are adequate, or as superseded by consultation with the USFWS and Forest Service) in any project construction area known to support the species.

Surveys shall be conducted by a qualified biologist¹ in accordance with the most currently accepted protocol survey methods for Quino checkerspot and Laguna Mountains skipper. This includes current habitat assessment and reporting requirements. Results shall be reported to USFWS and the CDFW South Coast Regional Office within 45 days of the completion of the survey. Surveys for Hermes copper butterfly shall follow County of San Diego Guidelines.² A qualified biologist shall survey all potential habitat for Hermes copper which includes any woody (mature) spiny redberry shrub with California buckwheat within 15 feet. California buckwheat without spiny redberry nearby is not considered suitable habitat. If California buckwheat is within 15 feet of a mature spiny redberry shrub, additional vegetation within 15 feet should also be considered potential habitat for Hermes copper. All butterfly protocol survey data shall be provided to the CDFW South Coast Regional Office.

MM BIO-18 Provide compensation for temporary and permanent impacts to Occupied or Critical Habitat for Quino checkerspot, Hermes copper, and Laguna Mountains skipper butterfly habitat through conservation and/or restoration.

Temporary and permanent impacts to Quino checkerspot butterfly and Laguna Mountains skipper shall be compensated through a combination of habitat compensation and habitat restoration at a minimum of a 2:1 mitigation ratio for occupied non-critical habitat and a minimum of a 3:1 mitigation ratio for critical habitat, or as required by the permitting agencies. Forest-related impacts will be mitigated at the ratios provided above on Forest Service lands and in coordination with the Forest Service. Habitat compensation shall be accomplished through U.S. Fish and Wildlife Service-approved land preservation or mitigation fee payment for the purpose of habitat compensation of lands supporting Quino checkerspot butterfly or Laguna Mountains skipper as appropriate. Mitigation for Hermes copper butterfly shall consist of 1:1 replacement of temporary impacts to occupied habitat, where host plants are impacted, and at a 2:1 ratio where permanent impacts occur. Land preservation or mitigation fee payment for habitat compensation must be completed within 18 months of permit issuance. Habitat restoration may be appropriate as habitat compensation provided that the restoration effort is demonstrated to be feasible and implemented pursuant to a Habitat Restoration Plan, which shall include success criteria and monitoring specifications and shall be approved by the permitting agencies prior to project construction. All habitat compensation and restoration used as mitigation for the proposed project on public lands shall be located in areas designated for resource protection and management. All habitat compensation and restoration used as mitigation for the proposed project on private lands shall include long-term management and legal protection assurances.

¹ A qualified biologist is defined as a biologist (permitted or not) who has a demonstrated background in butterfly survey techniques and identification.

² County of San Diego (2010) Attachment C of the Report Format and Content Requirements – Biological Resources.

MM BIO-19 Final design of power and distribution line and access roads through Quino checkerspot and Laguna Mountains skipper critical habitat and Hermes copper occupied habitat shall maximally avoid host plants for these species.

The final design of the proposed project through Quino checkerspot, Hermes copper, and Laguna Mountains skipper butterfly habitat shall maximally avoid and minimize habitat resources used by these species based on safety and other superseding regulatory requirements. The applicant shall explore alternate tower locations, reduced road widths, reduced vegetation maintenance, and other design modifications to minimize impacts to host plants in critical habitat for these species, and it shall obtain agency approval of the final design through this area. If impacts are not avoided, compensatory mitigation, as described per MM BIO-18, will be required. This measure shall apply to all locations that have been designated as critical or occupied habitat for these species.

MM BIO-20 Obtain and implement the terms of agency permit(s) with jurisdiction federal or state-listed species.

In addition to the obligation of the Forest Service consulting with the USFWS on the project, if federally listed wildlife species not already covered by SDG&E's NCCP (including any species that may be listed prior to issuance of the PTC and MSUP) may be impacted by the project, the Forest Service will initiate a Section 7 consultation with the U.S. Fish and Wildlife Service (USFWS). If state-listed wildlife species not already covered by SDG&E's NCCP may be impacted by the project, SDG&E will seek a Section 2081 permit (or consistency determination) from the California Department of Fish and Wildlife (CDFW). In addition, take authorization for golden eagles will require coordination with the USFWS and CDFW. SDG&E shall implement and/or adhere to all USFWS recommendations stipulated by the Forest Service in the Special Use Permit; SDG&E shall implement and/or adhere to all requirements in CDFW permit. SDG&E will not need a Section 2081 permit if the potentially impacted species or action is covered by SDG&E's NCCP. The Forest Service is required to consult with the USFWS for their federal action (approving the MSUP) as identified in Section A, Table A-3.

When conducting work within designated critical habitat for the Quino checkerspot butterfly, SDG&E shall implement all applicable protocols to avoid and minimize impacts to this species defined in the SDG&E Low-Effect Habitat Conservation Plan for Quino. Additionally, when working within designated critical habitat for Laguna Mountains skipper, SDG&E shall implement all impact minimization measures for Laguna Mountains skipper (USFS 2006c), consistent with USFWS direction (USFWS 2006, 2007), which includes:

1. Prior to project work, a qualified biologist shall identify all LMS habitat (to include host plant and nectar sources) within 10 meters of the proposed project(s) ROW. SDG&E facilities that are within designated critical habitat for Laguna Mountains skipper are shown on USFWS Critical Habitat maps (71 FR 74592–74615). During any maintenance activities, a qualified biologist will be present to monitor work and ensure that Laguna Mountains skipper habitat is not affected.

2. Chipping of vegetation shall not be allowed in known or potential Laguna Mountains skipper habitat. This includes the ROW within or adjacent to (within 10 meters) known or potential Laguna Mountains skipper habitat. Potential habitat shall be identified by the qualified biologist either during the host plant/nectar source survey or some time previous to the onset of ROW work.
3. Vehicles or tracked equipment shall only be allowed on existing roads or trails when operating within or adjacent to Laguna Mountains skipper habitat. Prior to operation of vehicles on existing roads or trails, a qualified biologist will ensure that the road or trail itself does not contain host plants or nectar sources.
4. Any project that may adversely affect the Laguna Mountains skipper shall require consultation with the U.S. Fish and Wildlife Service.

If the NCCP is not used, then formal consultation with the USFWS and CDFW will need to occur to determine the need for take permits.

MM BIO-21 If construction occurs in occupied and/or suitable habitat for sensitive butterfly species, SDG&E will implement the following:

Quino checkerspot: SDG&E will comply with the avoidance and minimization measures outlined in the existing Low-Effect Habitat Conservation Plan for Quino checkerspot butterfly.

Hermes copper: Because this species is not state- or federally listed, the following will only be required for activities: While performing construction activities within the flight season, a qualified biological monitor will be on-site for all project activities to assure that both impacts to host plants and direct take of Hermes copper butterflies are avoided to the greatest extent feasible. The biological monitor may temporarily stop work in the event a Hermes copper butterfly is observed within the immediate construction area (i.e., the flagged work areas currently being used for construction activities.)

Laguna Mountains skipper butterfly: Construction will occur outside of the flight season OR at least 10 meters (33 feet) away from all host plant locations. If there is a known or newly discovered occurrence during the flight season, construction shall be prohibited within 1 kilometer (0.6 mile) of the occurrence or unless coordination with the U.S. Fish and Wildlife Service determines construction activities may commence. The Laguna Mountains skipper flight season occurs from April to July.

MM BIO-22 Biologists will monitor construction activities.

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

Monitors shall also delineate pre-determined access routes using markers or signs and ensure the maintenance of markers or signs on a regular basis.

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

MM BIO-23 Biologists will inspect open holes at the end of each workday.

At the end of each workday, any open holes (including large/steep excavations) shall be inspected by the on-site biologist and subsequently fully covered with steel plates, plywood, or other effective coverings to prevent entrapment of wildlife species. If fully covering the excavations is impractical, ramps will be used to provide a means of escape for wildlife that enter the excavations, or open holes will be securely fenced with exclusion fencing. If common wildlife species are found in a hole, the designated biological monitor shall immediately be informed and the animal(s) shall be removed. If the animal(s) is/are a sensitive species that require(s) special handling authorization, a qualified biologist (agency-permitted or approved to handle a specific species) shall remove the animal before resumption of work in that immediate area. San Diego Gas & Electric shall specify the requirement to cover all open holes, create ramps, or install exclusion fencing around open holes in its agreements with all construction contractors.

MM BIO-24 Enforce speed limits in and around all construction areas.

Vehicles shall not exceed 15 miles per hour on unpaved roads (as stated in SDG&E NCCP 7.1 Operational Protocols) and the right-of-way accessing the construction site or 10 miles per hour during the night.

MM BIO-25 Minimize night construction lighting adjacent to native habitats.

Lighting of construction areas at night shall be the minimum necessary for personnel safety and shall be low illumination, selectively placed, shielded and directed away from adjacent native habitats.

MM BIO-26 Prohibit littering and remove trash from construction areas daily.

Littering shall not be allowed by the project personnel. All food-related trash and garbage shall be removed from the construction sites on a daily basis.

MM BIO-27 Prohibit the harm, harassment, collection of, or feeding of wildlife.

Project personnel shall not harm, harass, collect, or feed wildlife. No pets shall be allowed in the construction areas.

MM BIO-28 Implement Bird Protection Measures.

- A. Construction activities, including but not limited to tree trimming, road maintenance (i.e., re-establishing of existing access roads), grading, or site disturbance, may occur during

the avian bird breeding season that runs between March 1 and September 1, for non-listed birds, and other seasons as defined below for special-status species, in compliance with the procedures and provisions of this mitigation measure. To avoid avian disturbance by construction activities, an Avian Protection Plan, including a Nesting Bird Management Plan, shall be developed in coordination with the Wildlife Agencies prior to project onset to develop measures based on site specific conditions to protect birds. This Avian Protection Plan shall be implemented by SDG&E and their biological monitors with oversight by the CPUC and the Forest Service. The Plan shall include procedures to allow the Wildlife Agencies open communication with the biological monitor(s) and access to scientific data collected that will be electronically stored in a database approved by the CPUC, the Forest Service, and the Wildlife Agencies. Between February and September during project construction, SDG&E shall provide a monthly summary of nesting bird monitoring activities and at the completion of each nesting season shall provide an evaluation of the data collected to date as specified in the Nesting Bird Management Plan.

- B. The Project's transmission pole and line design may have an impact on certain raptor species. Consequently, in addition to the construction activities, the Plan shall address avian mortality related to line strikes through the use of adaptive management (i.e., measures to make the lines more visible to the suite of species affected), in response to reported mortalities.
- C. The Avian Protection Plan shall include the following measures:
 - a. Compliance with the Migratory Bird Treaty Act
 - b. Compliance with Fish and Game Code Sections 3503, 3503.5, and 3511
 - c. Activities shall be prohibited within:
 - i. Approximately 0.25 mile of California spotted owl active nest sites (or activity centers) during the breeding season (February 1 through August 15) unless surveys confirm that California spotted owls are not nesting within the 0.25-mile radius;
 - ii. 500 feet of raptor and owl active nests;
 - iii. 500 feet of federally and/or state-listed birds active nests;
 - iv. 250 feet of occupied burrowing owl burrows from February 1 to August 31 or within 160 feet from September 1 through January 31; and
 - v. 150 feet of non-listed birds and as specified in the avian protection plan for other bird species of concern.

If year-round burrowing owls are identified and there would only be temporary indirect impacts, then work may continue through coordination with the CDFW and monitoring. If it appears that the burrowing owls may be directly impacted,

then a relocation plan will be developed for the specific burrowing owl(s). This plan would include the methods to relocate, location of the relocation, and post-relocation monitoring. Active relocation and banding of birds is not required. Similar buffers will be utilized for non-Forest Service lands as specified in the Avian Protection Plan and Nesting Bird Management Plan. “Nest” is defined as a structure or site under construction or preparation, constructed or prepared, or being used by a bird for the purpose of incubating eggs or rearing young. Perching sites and screening vegetation are not part of the nest. “Active nest” is defined as once birds begin constructing, preparing, or using a nest for egg-laying. A nest is no longer an “active nest” if abandoned by the adult birds or once nestlings or fledglings are no longer dependent on the nest.

- d. Apply APLIC Measures. Specific APLIC measures to be applied must, at a minimum, must allow the circuits to meet National Electric Safety Code (NESC) requirements and should provide general information on specialized construction designs to meet APLIC standards. In particular, conductor separation between the energized and grounded hardware should meet the current state of the art requirements to protect species up to California condor. If appropriate separation is not feasible, then the energized parts and hardware should be covered. As appropriate, bird diverters should be deployed as well.
- D. The database shall include special features to accommodate additional variables (covariate) information requested by the Wildlife Agencies designed for this Project that will provide data which will contribute to the scientific standards of effective avian avoidance measures. In order to help evaluate buffer effectiveness, nests shall be monitored on a daily basis by a qualified biologist during disturbance and-related activities (i.e., brushing, tree trimming, ground-disturbing activities, mechanized or manual construction/removal/installation, and restoration activities) and every 4 days following disturbance until nest fates have been determined for entry into the database. Daily nest monitoring will be conducted by a qualified biologist, from as far away as possible while still being able to observe activity. The biologist need not observe the actual contents of the nest, but may extrapolate status based on adult behaviors. Actual surveys of the nest contents must not occur more than weekly (i.e., allow at least 7 days between nest visits) and visits should be very brief, paths should go by the nest without stopping if possible, the biologist should not touch leaves or branches, and should take a new route each time they pass by the nest. If brown-headed cowbirds or potential nest predators (e.g., scrub jays, crows, ravens) are in the area, then the visit should be postponed until they are gone.

At a minimum, the plan(s) shall include the following sections:

- Plan Objectives
- Applicable Mitigation Measures
- Environmental Awareness Program

- Existing Avian Resources
- Construction Process and Timing (related to avian resource protection)
- Specific APLIC measures to be Applied
- Nest Survey and Monitoring Methods
 - Surveyor Experience and Training
 - Nesting Bird Survey Protocol
 - Standard Buffer Distances as determined in consultation with Wildlife Agencies
 - Protections of Listed Species, Raptors, and Eagles
 - Nest Monitoring
 - Data Collection
- Avian Reporting System
 - Nest Monitoring Log to include fates of all nests monitored
 - Reporting including update of database accessible to Wildlife Agencies
- Nest Management
 - Nesting Habitat Reduction
 - Nesting Deterrents
 - Nest Removal
- Risk Assessment and Mortality Reduction
- Quality Control and Effectiveness
- Avian Enhancement
- Key Resources
- Prior to the start of construction and implementation, SDG&E shall submit the plan to the U.S. Fish and Wildlife Service, CDFW, CPUC, and Forest Service for review and approval.

In order to identify locations of current bald eagle (*Haliaeetus leucocephalus*), golden eagle (*Aquila chrysaetos*), California spotted owl (*Strix occidentalis*), American peregrine falcon (*Falco peregrinus anatum*), or federally and/or state-listed or fully protected bird nests, the monitoring biologists will coordinate with the U.S. Forest Service (Forest Service), U.S. Fish and Wildlife Service, and California Department of Fish and Wildlife (CDFW) to ensure that the most up to date information is made available to monitoring biologists. If work will be

conducted within a 1 mile buffer of historic and currently known nests during the bald or golden eagle breeding season (December 15 through July 31), SDG&E will survey the historic and currently known nests sites to determine if they are active. If nests are determined to be active, then work within 1 mile of active nests shall be rescheduled until after the completion of nesting activity at those nests. Alternatively, SDG&E may plan work activities to occur outside of the 1 mile buffers during the breeding season.

MM BIO-29 Rock blasting.

In the unlikely event that rock blasting is used during construction, a noise and vibration calculation will be prepared and submitted to the California Public Utilities Commission (CPUC) and the County of San Diego for review before blasting at each site. The construction contractor will ensure compliance with all relevant local, state, and federal regulations relating to blasting activities. This Blasting Plan would include a site-specific nesting bird survey to be conducted by a CPUC-approved biologist. The results of this survey would be communicated to the CPUC.

If the CPUC-approved biologist observes an active nest (as defined in MM BIO-28) for any special-status species (including federal, state, and county candidate, sensitive, fully protected, or special-status species) or species covered by the Migratory Bird Treaty Act that may be impacted by blasting activities, San Diego Gas & Electric shall postpone any activity that may impact the success of the nest until the nest no longer meets the given definitions.

MM BIO-30 Prior to work being conducted, measures will be employed to protect (a) Townsend's bat and (b) bats in general.

(A) Townsend's bat protection measures

Prior to work being conducted, qualified biologists will conduct a literature search for potential roost sites and follow-up surveys for Townsend's big-eared bat maternity roosts within 500 feet of project lines during the breeding/pupping season (April–mid-September). Typical Townsend's big-eared bat roosts occur in mines, caves, buildings, long and dark culverts, and older bridges (pre-1960) (Pierson and Rainey 1994). If any potential structures or features for Townsend's big-eared bat are present within the project area they shall be surveyed.

Inspections of potential roosts shall be conducted using an appropriate combination of visual and acoustic survey techniques (including structure inspection, sampling, and/or exit counts) for areas that may be directly or indirectly impacted by the project. Where active roosts are located, reporting shall include: 1) the exact location of all roosting sites (location shall be adequately described and drawn on a map); 2) the number present at the time of visit (count or estimate); 3) the location, amount, distribution, and age of all droppings shall be described and pinpointed on a map; and 4) the type of roost (i.e., night roost – rest at night while out feeding vs. day roost – maternity colony) must also be clearly stated. All survey results, including field data sheets, shall be provided to the CDFW South Coast Regional Office. Locations of all roosts shall be kept confidential to protect them from disturbance.

If non-maternity roosts are identified, the CDFW will be notified and consulted. If maternity roosts are present, the CDFW and CPUC will be notified and no work will occur within 500 feet of the roost location until the end of the pupping season or until the roost is determined to be unoccupied by Townsend's big-eared bat. For the protection of young (i.e., unable to fly) and hibernating adults all project-related activities shall be avoided where roosts are present during the winter and spring. No restrictions apply to project vehicle traffic on existing access roads, or to construction activity that occurs outside of the pupping season.

(B) General bat protection measures for other bat species

Prior to work being conducted, qualified biologists will conduct a literature search for known general bat roost sites and follow-up surveys within 100 feet of project lines during the breeding/pupping season (April–mid-September). In general, bat species may roost in rock outcrop, dense tree canopies, flaking tree bark, snags, bridges, mine, caves, flumes, and buildings. If any known sites for bats in general are present within the project area they shall be surveyed.

Inspections of known roosts shall be conducted using an appropriate combination of visual and acoustic survey techniques (including structure inspection, sampling, and/or exit counts) for areas that may be directly or indirectly impacted by the project. Bats shall be identified to the most specific taxonomic level possible. Where active bat roosts are located, reporting shall include: 1) the exact location of all roosting sites (location shall be adequately described and drawn on a map); 2) the number of bats present at the time of visit (count or estimate); 3) each species of bat present shall be named (include how the specific was identified); 4) the location, amount, distribution, and age of all bat droppings shall be described and pinpointed on a map; and 5) the type of roost (i.e., night roost – rest at night while out feeding vs. day roost – maternity colony) must also be clearly stated. All survey results, including field data sheets, shall be provided to the CDFW South Coast Regional Office. Locations of all roosts shall be kept confidential to protect them from disturbance.

If potential roosts are determined to be present then the roosts must be analyzed further to determine if Townsend's big-eared bats are present and if maternity roosts are present. If maternity roosts are present, the CDFW and CPUC will be notified and no work will occur within 100 feet of the roost location until the end of the pupping. For the protection of young (i.e., unable to fly) and hibernating adults, all project-related activities shall be avoided where roosts are present during the winter and spring. No restrictions apply to project vehicle traffic on existing access roads, or to construction activity that occurs outside of the pupping season.

MM BIO-31 Biologists will conduct surveys for Stephens' kangaroo rat.

In locations where Stephens' kangaroo rat habitat assessments were not accessible during the 2010 surveys (including the extensive parcels of land westward of Santa Ysabel owned by a single landowner – Map Pages MS-016-025 [Chambers Group Inc. and SJM Biological Consultants 2012; Appendix A] and the large parcel immediately south of Old Highway 80 and southward of southern end of Kitchen Creek Road [Map Page MS-069 [Chambers Group Inc. and SJM Biological Consultants 2012]; Appendix A]), a pedestrian preconstruction survey for

potentially occupied suitable habitat (open habitat with suitable soils, slope, and kangaroo rat burrows) and follow-up trapping to confirm species, will be conducted by a California Public Utilities Commission (CPUC)-approved biologist to assess the potential areas for Stephens' kangaroo rat to occur within SDG&E's proposed project area.

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

MM BIO-32 Procedural requirements for pesticide applications.

Herbicide application shall occur under the direction of a professional applicator with an Agricultural Pest Control Adviser License. If the professional has only obtained a Qualified Applicator License, an SDG&E biologist shall provide additional supplemental training prior to the application of pesticides along the project right-of-way. This training will be administered by an SDG&E biologist and shall include topics, such as pertinent laws and regulations (California Department of Fish and Game Code, Migratory Bird Treaty Act, and Endangered Species Act), that may impact special-status wildlife species.

MM BIO-33 Focused surveys for arroyo toad shall be conducted.

Prior to initiating construction, all riverbed areas within 1,000 feet of construction sites and access roads shall be surveyed during the appropriate season (December 1 through July 31)³ for arroyo toad. The applicant shall contract with a qualified biologist to conduct focused surveys for arroyo toad. If arroyo toads are detected in or adjacent to the project site, no work will be authorized within 500 feet of occupied habitat until the project applicant receives concurrence from the U.S. Fish and Wildlife Service (USFWS) that work may proceed. If arroyo toads are detected in or adjacent to the project site, the project applicant shall develop and implement a monitoring plan that includes the following measures, in consultation with the USFWS:

1. The applicant shall retain a qualified biologist with demonstrated expertise with arroyo toads to monitor all construction activities in potential arroyo toad habitat and assist the project applicant in the implementation of the monitoring program. This person will be approved by the CPUC and Forest Service prior to the onset of ground-disturbing activities. This biologist will be referred to as the "authorized biologist" hereafter. The

³ Since at higher elevations breeding season may occur between February 1 and July 31, on Forest Service land breeding season limited operating period will be set with a project-specific consultation with the Forest Service.

authorized biologist will be present during all activities immediately adjacent to or within habitat that supports populations of arroyo toad.

2. Prior to the onset of construction activities, the authorized biologist shall provide all personnel who will be present on work areas within or adjacent to the project site with the following information:
 - a. A detailed description of the arroyo toad, including color photographs;
 - b. A description of the protection the arroyo toad receives under the Endangered Species Act (ESA) and possible legal action that may be incurred for violation of the act;
 - c. The protective measures being implemented to conserve the arroyo toad and other species during construction activities associated with the proposed project; and
 - d. A point of contact if arroyo toads are observed.
3. All trash that may attract predators of the arroyo toad will be removed from work sites or completely secured at the end of each workday.
4. Prior to the onset of any construction activities, the project applicant shall meet on site with staff from the USFWS and the authorized biologist. The applicant shall provide information on the general location of construction activities within habitat of the arroyo toad and the actions taken to reduce impacts to this species. Because arroyo toads may occur in various locations during different seasons of the year, the project applicant, USFWS, and authorized biologists will, at this preliminary meeting, determine the seasons when specific construction activities would have the least adverse effect on arroyo toads. The goal of this effort is to avoid mortality of arroyo toads during construction.
5. Where construction can occur in habitat where arroyo toads are widely distributed, work areas will be fenced in a manner that prevents equipment and vehicles from straying from the designated work area into adjacent habitat. The authorized biologist⁴ will assist in determining the boundaries of the area to be fenced in consultation with the USFWS. All workers will be advised that equipment and vehicles must remain within the fenced work areas.
6. The authorized biologist will direct the installation of the fence and conduct a minimum of three nocturnal surveys to move any arroyo toads from within the fenced area to suitable habitat outside of the fence. If arroyo toads are observed on the final survey or during subsequent checks, the authorized biologist will conduct additional nocturnal surveys if he or she determines that they are necessary in concurrence with the USFWS.
7. Fencing to exclude arroyo toads will be at least 24 inches in height.

⁴ Authorized biologist is a biologist whose resume has been reviewed and approved by the Forest Service and CPUC.

8. The type of fencing must be approved by the authorized biologist and the USFWS.
9. Construction activities that may occur immediately adjacent to breeding pools or other areas where large numbers of arroyo toads may congregate will be conducted during times of the year (fall/winter) when individuals have dispersed from these areas. The authorized biologist will assist the project applicant in scheduling its work activities accordingly.
10. If arroyo toads are found within an area that has been fenced to exclude arroyo toads, activities will cease until the authorized biologist moves the arroyo toads.
11. If arroyo toads are found in a construction area where fencing was deemed unnecessary, work will cease until the authorized biologist moves the arroyo toads. The authorized biologist, in consultation with USFWS, will then determine whether additional surveys or fencing are needed. Work may resume while this determination is being made, if deemed appropriate by the authorized biologist and USFWS.
12. Any arroyo toads found during clearance surveys or otherwise removed from work areas will be placed in nearby suitable, undisturbed habitat. The authorized biologist will determine the best location for their release, based on the condition of the vegetation, soil, and other habitat features and the proximity to human activities. Clearance surveys shall occur on a daily basis in the work area.
13. The authorized biologist will have the authority to stop all activities until appropriate corrective measures have been completed.
14. Staging areas for all construction activities will be located on previously disturbed upland areas designated for this purpose. All staging areas will be fenced within potential toad habitat.
15. To ensure that diseases are not conveyed between work sites by the authorized biologist or his or her assistants, the fieldwork code of practice developed by the Declining Amphibian Populations Task Force (DAPTF 2009) will be followed at all times.
16. Drift fence/pitfall trap surveys will be implemented in toad sensitive areas prior to construction in an effort to reduce potential mortality to this species. Prior to any construction activities in the project site, silt fence shall be installed completely around the proposed work area and a qualified biologist should conduct a preconstruction/clearance survey of the work area for arroyo toads. Any toads found in the work area should be relocated to suitable habitat. The silt fence shall be maintained for the duration of the work activity.

On Forest Service lands, occupied arroyo toad breeding habitat will be mitigated at a 3:1 ratio; occupied arroyo toad upland burrowing habitat will be mitigated at 2:1; and unoccupied arroyo

toad habitat (or designated critical habitat) will be mitigated at 2:1⁵. In addition, a Forest Service consultation will be conducted to verify limited operating periods for arroyo toad are defined.

The applicant shall restrict work to daylight hours, except during an emergency⁶, in order to avoid nighttime activities when arroyo toads may be present on the access road. Traffic speed should be maintained at 15 mph or less in the work area.

Cultural Resources

MM CUL-1

In order to avoid adverse effects to historic properties, SDG&E will implement a comprehensive approach to cultural resource management consistent with any project specific Programmatic Agreement developed between the federal agencies and the SHPO. The comprehensive approach will include, at a minimum, the following elements:

1a. – Inventory and evaluate cultural resources in the Final Area of Potential Effect (APE). Prior to any ground disturbing activities, SDG&E will complete inventories within the APE and submit the results of those inventories for approval by the CPUC and federal agencies. These surveys shall supplement surveys done for the EIR/EIS and will satisfy Section 106 requirements.

1b. – Avoid and protect potentially significant resources. Where feasible, complete avoidance of impacts shall be the preferred strategy. Where the federal agencies and CPUC decide that cultural resources cannot be avoided, they will be incorporated into a Historic Properties Management Plan as described below.

1c. – Develop and Implement Historic Properties Management Plan. After completing the inventory and avoidance phase of site design, SDG&E will prepare and submit for approval a Historic Properties Management Plan (HPMP) to avoid or mitigate identified potential impacts.

1d. – Conduct data recovery to reduce adverse effects. If eligible resources, as determined by the federal agencies and the SHPO, cannot be protected from direct impacts of the project or alternatives, data-recovery investigations shall be conducted by SDG&E to reduce adverse effects to the characteristics of each property that contribute to its eligibility, using procedures described in the HPMP.

1e. – Monitor construction activities. Incorporate monitoring as described in APM CUL-04. If any cultural resources are unexpectedly encountered, the monitor will stop work and notify the Principal Investigator, who will notify the appropriate federal Heritage Program Manager or CPUC representative, depending on the location of the discovery.

⁵ Per Robert Hawkins (pers. comm. 2014)

⁶ Emergencies are described in SDG&E 1995 (Section 2.2) and SDG&E 2013a (Attachment C).

MM CUL-2

In order to reduce adverse effects and significant impacts to historic resources along C79, C440, and C442 as identified in Table D.5-12 of the EIR/EIS, the original exterior materials on the cabins shall not be removed, modified, or covered. If equipment attached to the cabins must be replaced, the equipment shall retain its original appearance in terms of materials and size. If this cannot be met, then a cultural monitor is required to be present during the replacement of the lines to minimize modifications to the cabin exteriors.

MM CUL-3

During construction of the proposed power line replacement projects, all measures as identified in Tables 3 and 6 for TL625, Tables 9 and 11 for TL626, Tables 14 and 17 for TL629, Table 20 for TL682, Table 23 for TL6923, Table 26 for C78, Table 29 for C79, Table 31 for C157, Table 34 for C440, Table 37 for C442, and Table 40 for C449 of the Cultural Resources Technical Report prepared by ASM (ASM 2011) shall be implemented. All measures shall be implemented by a qualified archaeologist who is approved by the California Public Utilities Commission and Forest Service. Further, when on City-owned land (portions of C157, T625, and C449), the City's Land Development Manual – Historical Resource Guidelines per the San Diego Municipal Code, Chapter 14, Article 3, Division 2, Section 14.0201, shall be followed (<http://docs.sandiego.gov/municode/MuniCodeChapter14/Ch14Art03Division02.pdf>).

Public Health and Safety

MM PHS-1 San Diego Gas & Electric (SDG&E) shall provide written documentation that all staff, including contractor, and subcontractor project personnel, have received training regarding the appropriate work practices necessary to effectively implement hazardous materials procedures and protocols and to comply with the applicable environmental laws and regulations, including, without limitation, hazardous materials spill prevention and response measures.

MM PHS-2 San Diego Gas & Electric (SDG&E) shall implement best management practices (BMPs) to prevent impacts from release of hazardous materials during construction, operation, and maintenance activities. Typical BMPs could include, but would not be limited to, practices such as the use of absorbent pads for spill containment, specified locations for vehicle refueling, and a daily vehicle inspection schedule designed to identify leaking fuels and/or oils as early as possible. No hazardous material, as defined by 40 CFR 355, shall be stored on site above threshold planning quantities, as defined in Appendices A and B of 40 CFR 355. All vehicle maintenance activities shall be conducted at designated locations within approved staging areas or other locations specified for this activity. In the event emergency maintenance is required on site, or removal of the equipment to an off-site repair facility is determined by SDG&E to be infeasible, SDG&E will use BMPs to prevent the release of hazardous materials during these emergency maintenance activities. SDG&E will be required to complete a Spill Response and Notification Plan for agency approval before commencing construction.

MM PHS-3 In the event that rock blasting is used during construction, a noise and vibration calculation will be prepared and submitted to the California Public Utilities Commission and the

County of San Diego for review before blasting at each site. The construction contractor will ensure compliance with all relevant local, state, and federal regulations relating to blasting activities. In addition to any other requirements established by the appropriate regulatory agencies, the pre-blast survey and blasting plan shall meet the following conditions:

- The pre-blast survey shall be conducted for structures within a minimum radius of 1,000 feet from the identified blast site to be specified by San Diego Gas & Electric (SDG&E) or SDG&E's contractor. Sensitive receptors that could reasonably be affected by blasting shall be surveyed as part of the pre-blast survey. Notification that blasting would occur shall be provided to all owners of the identified structures to be surveyed prior to commencement of blasting. The pre-blast survey shall be included in the final blasting plan.
- The final blasting plan shall address air-blast limits, ground vibrations, and maximum peak particle velocity for ground movement, including provisions to monitor and assess compliance with the air-blast, ground vibration, and peak particle velocity requirements. The blasting plan shall meet criteria established in Chapter 3 (Control of Adverse Effects) in the *Blasting Guidance Manual* of the U.S. Department of Interior Office of Surface Mining Reclamation and Enforcement.
- The blasting plan shall outline the anticipated blasting procedures for the removal of rock material at the proposed pole locations. The blasting procedures shall incorporate line control to full depth and controlled blasting techniques to create minimum breakage outside the line control and maximum rock fragmentation within the target area. Prior to blasting, all applicable regulatory measures shall be met. The applicant, general contractor, or its subcontractor (as appropriate) shall keep a record of each blast for at least 1 year from the date of the last blast.

MM PHS-4

Prior to construction, all San Diego Gas & Electric (SDG&E), contractor, and subcontractor project personnel anticipated to work between poles Z173105 and Z173109 shall receive training regarding the location of suspected soil and groundwater contamination along TL629 between poles Z173105 and Z173109, and will be instructed to avoid any ground disturbance in the area.

MM PHS-5

Prior to flight operations for helicopter use during construction as well as operations, San Diego Gas & Electric (SDG&E) shall coordinate with local air traffic control and comply with all Federal Aviation Administration (FAA) regulations regarding helicopter use to prevent conflicts with air traffic generated by local airstrips. Documentation verifying SDG&E has coordinated with local air traffic control shall be provided to California Public Utilities Commission prior to use of helicopters for construction and operations and maintenance activities. SDG&E shall prepare an Aviation Safety Plan for Forest Service approval prior to any use of helicopters in support of activities on the Cleveland National Forest. The Aviation Safety Plan will outline the

procedures used to ensure safe transportation of external loads, and will identify coordination requirements with Forest Service aviation resources operating in the area.

MM PHS-6

If, during construction activities, it is anticipated or planned that helicopters will be used for external load operations, including carrying structures, San Diego Gas & Electric (SDG&E) will prepare a Helicopter Lift Plan. This plan will be prepared in accordance with and comply with all relevant FAA regulations, as well as SDG&E's Aviation Operations Manual. Prior to initiation of construction activities for each alignment, if determined that helicopters would be used, the Helicopter Lift Plan will be provided to the California Public Utilities Commission.

MM PHS-7 Conduct geotechnical investigations.

The applicant shall perform design-level geotechnical investigations to evaluate the potential for liquefaction, lateral spreading, seismic slope instability, and ground-cracking hazards to affect the approved project and all associated facilities. Where these hazards are found to exist, appropriate engineering design and construction measures that meet California Building Code (CBC), CPUC General Order 95, and Electric Power Research Institute (EPRI) Moment Foundation Analysis and Design parameters shall be incorporated into the project designs.

MM PHS-8 Facilities inspections conducted following major seismic event.

If large levels of ground shaking (such as Modified Mercalli Intensity VI or greater) are experienced or a major earthquake (magnitude 6.0 and above) occurs along the Elsinore Fault, a professional licensed geologist, geotechnical engineer, and structural engineer employed or contracted by SDG&E shall perform facilities inspections as quickly as possible. Careful examination shall be conducted of all project facilities within the identified area of effect. Any required repair or needed improvements shall be implemented as soon as feasible to ensure that the integrity of project facilities has not been compromised.

Fire and Fuels Management

MM FF-1 Develop and Implement a Construction Fire Prevention/Protection Plan.

SDG&E shall develop a multiagency Construction Fire Prevention/Protection Plan in consultation with the U.S. Forest Service, Bureau of Land Management (BLM), Bureau of Indian Affairs (BIA), California Department of Forestry and Fire Protection (CAL FIRE), San Diego Rural Fire Protection District (SDRFPD), and San Diego County Fire Authority (SDCFA) to the satisfaction of lead agencies. SDG&E shall monitor construction activities to ensure implementation and effectiveness of the plan. The final plan will be approved by the commenting agencies prior to the initiation of construction activities and shall be implemented during all construction activities by SDG&E. At minimum, the plan will include the following:

- Procedures for minimizing potential ignition
 - Vegetation clearing
 - Fuel treatment area establishment

- Parking requirements
 - Smoking restrictions
 - Hot work restrictions
- Red Flag Warning restrictions
- Fire coordinator role and responsibility
- Fire suppression equipment on site at all times work is occurring
- Requirements of Title 14 of the California Code of Regulations, 918 “Fire Protection” for the private land portions
- Applicable components of the SDG&E Wildland Fire Prevention and Fire Safety Electric Standard Practice 113-1 (July 2012)
- Emergency response and reporting procedures
- Emergency contact information
- Worker education materials; kick-off and tailgate meeting schedules
- Other information as provided by responsible and commenting agencies (as appropriate for each project).

Additional restrictions will include the following:

- During the construction phase of the project, the applicant shall implement ongoing fire patrols. The applicant shall maintain fire patrols during construction hours and for 1 hour after end of daily construction and hotwork.
- Fire Suppression Resource Inventory – In addition to 14 CCR 918.1(a), (b), and (c), the applicant shall update in writing the 24-hour contact information and on-site fire suppression equipment, tools, and personnel list on a quarterly basis and provide it to the Forest Service, BLM, BIA, SDRFPD, SDCFA, and CAL FIRE.
- During Red Flag Warning events, as issued daily by the National Weather Service in State Responsibility Areas (SRAs) and Local Responsibility Areas (LRAs), and when the Forest Service Project Activity Level (PAL) is “E” on Cleveland National Forest (CNF) (as appropriate), all non-essential, non-emergency construction and maintenance activities shall cease or be required to operate under a Hot Work Procedure. The Hot Work Procedure will be in compliance with the applicable sections in NFPA 51-B “Fire prevention during welding, cutting, or other hot work” and CFC Chapter 26 “Welding and other Hot Work.”
- The applicant 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/or cellular telephone access that is operational throughout the project area 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 as soon as the fire is identified/discovered.
- 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 crew members as needed, and outdated cards destroyed, prior to the initiation of construction activities on the day the information change goes into effect.
- 50 feet of fire suppression equipment, as outlined in ESP 113.1.

SDG&E will provide a draft copy of the Construction Fire Prevention/Protection Plan to the responsible fire agencies for comment a minimum of 90 days prior to the start of any construction activities. The final plan will be approved by the responsible lead agencies with input from the fire and permitting agencies, as desired, prior to the initiation of construction activities and provided to SDG&E for implementation during all construction prior to the initiation of construction activities. All construction work on the proposed power line replacement projects shall follow the Construction Fire Prevention/Protection Plan guidelines and commitments.

MM FF-2 Develop and Implement an Operations and Maintenance Fire Prevention/Protection Plan.

The plan will address all SDG&E electric facilities proposed to be covered under the Master Special Use Permit (MSUP) within the Cleveland National Forest (CNF), and other project facilities off the CNF, and will be implemented during all operational maintenance work associated with the project for the life of the project. This plan will satisfy the requirements of the SDG&E Project Specific Fire Plan, as identified in SDG&E's Electric Standard Practice 113-1. Important fire safety concepts that shall be included in the plan and make it an essential overall mitigation measure are the following:

- Guidance on where maintenance activities may occur (non-vegetated areas, cleared access roads, and work pads that are approved as part of the project design plans)
- Fuel treatment area maintenance
- When vegetation work will occur (prior to any other work activity)
- Timing of vegetation clearance work to reduce likelihood of ignition and or fire spread
- Coordination procedures with fire authority
- Integration of the project's Construction Fire Prevention/Protection Plan content

- Personnel training and fire suppression equipment
- Red Flag Warning restrictions for operation and maintenance work
- Fire safety coordinator role as manager of fire prevention and protection procedures, coordinate with fire authority and educator
- Communication protocols
- Incorporation of responsible agency review and approved Response Plan mapping and assessment.
- Other information as provided by responsible and commenting agencies, as applicable.

SDG&E will provide a draft copy of the Operations and Maintenance Fire Prevention/Protection Plan to the responsible fire agencies for comment a minimum of 90 days prior to the completion of the first project segment. The final plan will be approved by the CPUC and Forest Service prior the first construction segment being deemed complete and the final plan will be provided to SDG&E for implementation during all operations and maintenance activities.

Hydrology and Water Quality

MM HYD-1 Erosion Control Plan / Stormwater Pollution Prevention Plan.

SDG&E shall develop and implement an Erosion Control Plan (ECP) for construction, operations, and maintenance activities in order to prevent and control soil erosion and gullyng . The ECP shall include Forest Service best management practices specific to re-vegetation requirements (scarifying the soil, and fertilizing, seeding and/or mulching, as required to achieve proper post-construction site stabilization) and incorporate Construction General Permit SWPPP requirements for each construction segment as the SWPPP(s) for that segment are completed. Additionally, the ECP shall complement restoration goals and objectives identified in the Habitat Restoration Plan, as required under MM BIO-4. The ECP shall be updated for each construction segment and provided to the CPUC and the federal agencies for review and approval prior to each agency's Notice to Proceed issuance for that construction segment.

As required by the Construction General Permit, SDG&E shall develop a Storm Water Pollution Prevention Plan (SWPPP) for the project or for individual construction segments, as required, to reduce soil erosion during construction. The SWPPP(s) and verification of submittal to the RWQCB shall be submitted to the CPUC and Forest Service prior to Notice to Proceed issuance for the respective construction segment. SDG&E shall provide the CPUC and Forest Service with subsequent amendments to the SWPPP as part of SDG&E's weekly compliance reports. In weekly construction compliance reports, SDG&E shall note when Storm Water Construction Site Inspection Report Forms have been posted to the Storm Water Multiple Application and Report Tracking System (SMARTS) following storm events.

MM HYD-2a Documentation of purchased water source(s).

For water that is to be purchased from one or more public or private water/utility district(s), private landowners, or from tribes, SDG&E shall provide to the CPUC written documentation from such district(s) and/or landowners indicating the total amount of water to be provided and the time frame that the water will be made available to the project. The documentation shall also indicate the type of water (potable or reclaimed) and the specific source of the water (groundwater well or surface diversions). The sources and amounts of water to be obtained by SDG&E shall be documented in a Water Supply Plan to be submitted to the CPUC prior to notice to proceed for each project component.

MM HYD-2b Groundwater Evaluations of Off-Site Water Import Sources.

For identified water sources that derive their water supply from groundwater, SDG&E shall commission a groundwater study by a registered/certified hydrogeologist, as reviewed and approved by CPUC, to assess the existing condition of the underlying groundwater/aquifer and all existing wells (with owner's permission) in the vicinity of proposed well location/water sources and to verify that the proposed source is capable of supplying the amount of water needed. The groundwater study shall evaluate whether the volume and duration of the proposed groundwater use would exceed County of San Diego thresholds for impacts with respect to groundwater supply and well interference. If the evaluation indicates the potential for significant impacts, the registered/certified hydrogeologist shall recommend feasible mitigation measures (e.g., a groundwater monitoring program) to avoid exceeding applicable thresholds. The groundwater evaluation shall be provided along with the documentation of purchased water sources, and the CPUC shall not authorize construction of the project unless such documentation have been provided by SDG&E and approved by CPUC. If the evaluation finds that impacts cannot be avoided given the volume and duration of the proposed groundwater use, the CPUC will not authorize use of the water source and shall require SDG&E to seek other viable sources of water.

Total confirmed water supplies from the combination of above documented sources shall equal the total gallons of water needed through construction of the project. SDG&E shall submit monthly water logs documenting compliance with the water supply plan and groundwater thresholds.

MM HYD-3 Access Road Decommissioning Plan.

SDG&E shall prepare an Access Road Decommissioning Plan for review and approval by the CPUC and Forest Service within 1 year of project approval or permit issuance. The plan will be prepared by qualified professionals (e.g., PG, PE, or CEG contracted by SDG&E) whose qualifications are reviewed and approved by the CPUC and the Forest Service. The plan will include a schedule for decommissioning activities.

Under the plan, SDG&E shall be responsible for the prevention and control of soil erosion and gullying in areas proposed for access road removal and shall implement the following activities:

- Remove any flagging, signs, or other markings within or around sensitive resource areas after road removal, except where such signs are necessary for long-term access control and interpretation purposes.
- Remove temporary fill and structures to the extent practical.
- Provide appropriate access control for temporary work areas, such as fencing posts, and/or signage, and ensure gates are locked in accordance with MM-REC-1 to minimize unauthorized traffic and/or access road circumvention during construction
- Ensure that the road surface is in stable condition when the road is closed. Seed and fertilize disturbed surfaces as necessary.
- To facilitate regeneration, back blade or otherwise scarify road beds where appropriate. Use native grass or forb mixes if available.
- All earthwork shall be confined to the road corridor and no soil shall be sidecast onto adjacent areas; if necessary, excess soil material shall be incorporated into restoration activities or hauled off site to an approved disposal facility.
- Activities will complement restoration goals and objectives identified in the Habitat Restoration Plan, as required under MM BIO-4.

MM HYD-4 Access Road Condition Evaluation and Repair Design Report.

Planned grading and repair activities along SDG&E exclusive-use access roads that a) exceed grades of 15% (over a minimum distance of 100 feet), b) are within RCAs, or c) are anywhere within a sediment-sensitive watershed (as defined by the SWRCB) shall be evaluated by a qualified professional (e.g., PG, PE, or CEG contracted by SDG&E and reviewed and approved by the CPUC and the Forest Service) prior to initiating construction on the associated segment, who will identify areas experiencing chronic erosion and drainage issues. At a minimum, segments shall include, but are not limited to, the following:

TL626 south of Eagle Creek Road and north of Boulder Creek Road

TL625 in the Vicinity of Barber Mountain Road

TL625 north of Lyons Valley Road and south of Carveacre Road

C442 east of Oak Valley and south of I-8, on the western flanks of Long Peak

Short segments of TL629 on either side of Cameron Valley and east of Pine Valley

The qualified professional shall design an engineered solution(s) to be implemented within the existing access roadway disturbance area in accordance with Forest Service standards, as described in Forest Service Handbook 2509.22 (Section 12.2), for each area determined to experience chronic erosion and/or drainage issues prior to beginning work on those facilities associated with the problematic access road. The designed solution(s) shall be included into the

approved project to ensure the avoidance or minimization of substantial damage or soil loss along the identified road segments.

Examples of such solutions could include, but are not limited to the following:

- Crowning road sections with gentle slopes to prevent standing water on the road
- Outsloping roads at 3%-5% wherever possible
- Where required for proper maneuvering and safety, insloping roads at 3-5% into properly designed ditches
- Installing rolling dips, ditch relief culverts, and/or water bars at intervals appropriate for the road-grade and the soil erosivity
- Minimizing the number of water crossings, and maintaining crossings as close to a 90-degree angle as possible to the streambed.
- Constructing perennial and seasonal/ephemeral stream crossings so as not to change the cross-sectional area of the stream channel or impede fish migration.
- Constructing perennial and seasonal/ephemeral stream crossings with materials that will not degrade water quality (e.g., concrete, coarse rock, riprap and/or gabions)
- Surfacing roads with erosion-resistant materials such as rock or asphalt concrete.

The Access Road Condition Evaluation and Repair Design Report shall identify locations, if any, where no feasible and/or effective solutions can be implemented to adequately handle runoff or comply with Forest Service soil and water quality management standards as contained in Forest Service Handbook 2509.22 (Section 12.2). The report will be updated for each construction segment according to SDG&E's final construction schedule.

In these locations, the qualified professional shall recommend options for access road removal (i.e., requiring access by helicopter) or realignment (e.g., to achieve a lower slope) that would still achieve project objectives.

Construction of each segment shall not proceed until the report section pertaining to that segment has been reviewed and approved by CPUC and Forest Service. In the event there are disputes regarding specific problem locations, CPUC and Forest Service will allow construction to proceed on those portions of the construction segment not impacted by access roads requiring evaluation under this measure; however, SDG&E shall not work in areas under dispute until resolution is achieved.

MM HYD-5 Procedural Requirements for Pesticide and Herbicide Applications.

Pesticide and herbicide application shall occur under the direction of a professional pesticide applicator with either a Qualified Applicator License (QAL) or an Agricultural Pest Control Adviser License in the State of California (see MM-BIO-32 for additional biological training requirements for applicators with a QAL). Label instructions and all applicable laws and

regulations shall be strictly followed in the application of pesticides and herbicides and disposal of excess materials and containers. Only those materials registered by the EPA for the specific purpose planned shall be authorized for use. Before applying any pesticides or herbicides on National Forest System land, SDG&E shall receive approval from the Forest Service for all pesticides and herbicides proposed for use on National Forest System land prior to their application on these lands. For portions of the project crossing BLM lands, SDG&E shall obtain a BLM Pesticide Use Permit as well. Additionally, prior to any pesticide or herbicide use, SDG&E shall submit an anticipated schedule to the Forest Service for planned use within the CNF on an annual basis, or more frequently as needed, and will work with the Forest Service to determine the appropriate pesticide and herbicide per location.

MM HYD-6 Implementation of Creek-Crossing Procedures.

Where creek crossings can be completed during dry season, with no flows present in the creek, seasonally timed restorative open trenching will be completed. This procedure will use minimum trench widths. Trench cut material will be placed outside of the creek bed and outside of 100-year inundated areas. Trench fill will be compacted and replaced to match existing creek bed gradations, and vegetation will be restored. Open trenching restoration will be completed prior to any wet season flows, and will include anti-erosion action plans for any unplanned rainfall during construction. SDG&E shall obtain all required permits prior to completing open trenching through drainages. In any case, flows will be isolated from open trenching by best management practices mandated by the General Construction Permit. Areas of trenching would be restored and/or vegetated at completion of work.

Where creek crossing cannot be completed during the dry season creek crossing shall use jack-and-bore procedures to avoid direct impacts and shall be conducted in a manner that does not result in sediment-laden discharge or hazardous materials release to the water body. SDG&E shall develop a Jack-and-Bore/Horizontal Directional Drill (HDD) Contingency Plan for this work in accordance with MM-HYD-8. Additionally, SDG&E shall implement the following measures during horizontal boring (jack-and-bore) operations and shall be included in the HDD Contingency Plan:

- (1) Site preparation shall begin no more than 10 days prior to initiating horizontal bores to reduce the time soils are exposed adjacent to creeks and drainages.
- (2) Trench and/or bore pit spoil shall be stored a minimum of 25 feet from the top of the bank or wetland/riparian boundary. Spoils shall be stored behind a sediment barrier and covered with plastic or otherwise stabilized (i.e., tackifiers, mulch, or detention).
- (3) Portable pumps and stationary equipment located within 100 feet of a water resource (i.e., wetland/riparian boundary, creeks, and drainages) shall be placed within secondary containment with adequate capacity to contain a spill (i.e., a pump with 10-gallon fuel or oil capacity should be placed in secondary containment capable of holding 15 gallons). A spill kit shall be maintained on site at all times.

(4) Within 24 hours following backfill of the bore pits, disturbed soils shall be seeded and stabilized to prevent erosion, and temporary sediment barriers shall be left in place until restoration is deemed successful.

SDG&E shall obtain the required permits prior to conducting creek crossing work. Required permits may include ACOE CWA Section 404, Regional Water Quality Control Board Clean Water Act 401, and CDFG Streambed Alteration Agreement 1602. SDG&E shall implement all pre- and post-construction conditions identified in the permits issued.

MM HYD-7 Horizontal Directional Drill Contingency Plan.

If horizontal directional drilling is to be used during construction, SDG&E shall prepare a Horizontal Directional Drill (HDD) Contingency Plan to address procedures for containing an inadvertent release of drilling fluid (frac-out). The plan shall contain specific measures for monitoring frac-outs, for containing drilling mud, and for notifying agency personnel. The plan shall also discuss spoil stockpile management, hazardous materials storage and spill cleanup, site-specific erosion and sediment control, and housekeeping procedures, as described in the Stormwater Pollution Prevention Plan. The Jack-and-Bore HDD Contingency Plan shall be submitted to the CPUC, Forest Service, Bureau of Indian Affairs, and ACOE 60 days prior to construction.

SDG&E shall obtain the required permits prior to conducting work associated with jack-and-bore/horizontal directional drilling activities. Required permits may include U.S. Army Corps of Engineers Clean Water Act Section 404, Regional Water Quality Control Board Clean Water Act 401, and CDFG Streambed Alteration Agreement Section 1602. The applicant shall implement all pre- and post-construction conditions identified in the permits issued for the jack-and-bore/horizontal directional drilling.

Land Use and Planning

MM LU-1 Prepare Construction Notification Plan.

Forty-five (45) days prior to construction of the first segment, the project applicant shall prepare and submit a Construction Notification Plan to the appropriate land use jurisdiction agency for approval. The plan will be updated with additional information 45 days before construction of each additional segment. The plan shall identify the procedures that will be used to inform private landowners, schools, and agencies with authority over recreational areas/facilities 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 and other sensitive land uses. The notice shall state the type of construction activities that will be conducted and the location and duration of construction, including all helicopter activities. The project applicant shall mail the notice to all residents or

property owners within 1,000 feet of project components and to all land use agencies having jurisdiction over a recreation area/facility located within 1,000 feet of a project component. If construction delays of more than 30 days occur, an additional notice shall be prepared and distributed. To facilitate access to properties obstructed by construction activities, the project applicant shall notify property owners and tenants at least 24 hours in advance of construction activities and shall provide alternative access if required.

Newspaper/website advertisements. Fifteen (15) days prior to construction of any project component, notices shall be placed in local newspapers and bulletins, including Spanish language newspapers and bulletins, and on the relevant websites of jurisdictional agencies. The Forest Supervisor, District Rangers, and Public Affairs Officer of the Cleveland National Forest shall also be notified. The notice shall state when and where construction will occur and provide information about the public liaison person and hotline. If construction is delayed for more than 7 days, an additional round of newspaper notices shall be placed to discuss the status and schedule of construction.

Public venue notices. Thirty (30) days prior to construction, notice of construction shall be posted at public venues such as libraries, community notification boards, rest stops, community centers, trailheads, informational kiosks, and other public venues applicable to the electrical facility under construction to inform affected residents and recreationists of the purpose and schedule of construction activities.

Public liaison person and toll-free information hotline. The project applicant 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. The project applicant 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.

MM LU-2

If the Forest Service selects to leave TL626 or C442 in place, it would have to approve a project-specific CNF Land Management Plan Amendment contemporaneously with the decision to authorize the MSUP and pole replacement project. The project-specific plan amendment would amend the Land Management Plan to allow project-specific exemptions for inconsistencies with the CNF Land Management Plan land use zones and standards.

MM LU-3 Revise project elements to minimize land use conflicts.

At least Ninety (90) days prior to completing final transmission line design for the approved route, the project applicant shall notify landowners of parcels through which the alignment would pass regarding the specific location of the ROW, individual towers, staging areas, access roads, or other facilities associated with the project that would occur on the subject property. The notified parties shall be provided 30 days in which to identify conflicts with any planned

development on the subject property and to work with the project applicant to identify potential reroutes of the alignment that would be mutually acceptable to the project applicant 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. The project applicant shall endeavor to accommodate these reroutes to the extent that they are feasible 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.

MM LU-4

Prior to construction, for any structure or object that is placed in, under, or over any portion of a county roadway, SDG&E shall obtain, from the San Diego County Director, Department of Public Works (DPW), a written encroachment permit in accordance with Section 71 (Highway and Traffic) of the San Diego County code of Regulatory Ordinances.

Noise

MM NOI-1

In the event noise levels during construction activities are expected to exceed an 8-hour L_{eq} of 75 dBA at the nearest property line or within 190 feet of the existing and proposed project alignment where noise-sensitive areas are located, San Diego Gas & Electric (SDG&E) shall implement noise reduction measures to reduce noise levels to below 75 dBA. Measures to be implemented could include: (1) portable noise barriers erected temporarily to reduce noise impacts at specific locations; or (2) if noise barriers would not reduce levels to below 75 dBA, depending on the location of residences and the level of construction noise, SDG&E shall offer to relocate affected residents until the impact has been determined to not be adverse.

MM NOI-2

At least 30 days before helicopter use and stringing operations are employed, San Diego Gas & Electric (SDG&E) shall prepare and submit a public notice mailer to the California Public Utilities Commission for approval. The public notice mailer shall be prepared and mailed no less than 7 days prior to helicopter use and stringing operations along the approved project alignment. SDG&E shall notify landowners, residents, schools, livestock facility owners, and CNF offices responsible for managing recreation areas within 590 feet in areas of fly yards and pole locations where helicopters will be used during construction to provide adequate notice of potential helicopter and/or stringing activity within the project vicinity. If construction is delayed for more than 7 days, an additional notice shall be mailed to discuss the status and schedule of helicopter use and stringing operations.

MM NOI-3

In the unlikely event that rock blasting is used during construction, SDG&E will prepare a blasting plan, that will include a noise and vibration calculation, and will be submitted to the California Public Utilities Commission and the County of San Diego for review before blasting

at each site. Each blasting plan will be consistent with SDG&E's blasting guidelines to reduce noise and vibration impacts from blasting activities. The blasting contractor will be required to obtain a blasting permit and explosive permit per the San Diego County Regulatory Ordinances, and will ensure compliance with all relevant local, state, and federal regulations relating to blasting activities.

MM NOI-4

For any work that cannot occur during the allowable construction hours (between 7 a.m. and 7 p.m. Monday through Saturday), SDG&E will follow its established protocols and will provide advance notice by mail to all property owners within 300 feet of planned construction activities. The announcement will state the construction start date, anticipated completion date, and hours of construction. SDG&E will also communicate the exception to the CPUC and San Diego County in advance of conducting the work. If necessary, SDG&E will temporarily relocate residents occupying properties located less than 220 feet from construction activities on an as-needed basis for the duration of construction activities that would affect them.

Public Services and Utilities

MM PSU-1 AT&T Commitments.

Prior to receiving a Notice to Proceed with construction along each of the proposed power line replacement projects, SDG&E shall provide to the CPUC and Forest Service written commitment from AT&T confirming that AT&T facilities that are co-located on the proposed power line replacement projects will be relocated to SDG&E's new facilities. Facilities will be transferred in a manner that avoids interruptions of telecommunications services to the greatest degree possible. The timing of the relocation activities will be reviewed and approved by both the CPUC and Forest Service.

Recreation

MM REC-1 Installation of Gates and Appropriate Signage.

To deter unauthorized access to specially designated or restricted areas via SDG&E access roads authorized by the MSUP, the project applicant shall submit a plan and schedule for gate (or other barriers, such as pipe rails, where appropriate) installation to the Forest Service for approval. Gates will meet Forest Service engineering standards, and designs will be approved by the Forest Service prior to installation. In addition, appropriate deterrence signage approved by the Forest Service shall be installed on gates to SDG&E access roads. Maintenance of gates and signage shall be the responsibility of the project applicant.

MM REC-2 Enforcement of Proper Gate Protocol.

During construction and ongoing operations and maintenance activities, gates on access roads authorized by the MSUP shall be locked immediately after ingress and egress has occurred. Should SDG&E or Forest Service staff observe unlocked gates, SDG&E will be required to review gate protocols with personnel.

Applicant Proposed Measures

SDG&E filed Applicant Proposed Measures (APMs) as part of the Plan of Development that was included in their application to the CPUC and Forest Service. Many of these APMs have been superseded by the required mitigation measures. If there are any conflicts or inconsistency between the APMs and mitigation measures, the mitigation measures will take precedent.

APM No.	Description
<i>General</i>	
APM GEN-01	Native soil not used for backfill will be spread on site, if clean, or hauled off site and disposed of at an approved facility. Construction activities that involve placement of native, clean soil will be managed by employing BMPs that minimize soil erosion and impacts on surrounding vegetation per the SDG&E Water Quality BMP Manual. BMPs such as silt fencing or fiber rolls will be installed where necessary (e.g., in high-velocity flow areas and in areas of steep slope), and soil will be placed and compacted in a manner that sufficiently controls erosion and sediment discharge from the site.
APM GEN-02	Where distribution and power lines are removed, the old conductor will be wound onto wooden spools, placed on flatbed trucks, and recycled at an approved facility.
APM GEN-03	Old poles, associated hardware, and any other debris generated from construction activities will be removed from the site and placed on flatbed trucks for recycling or disposal at an approved facility.
APM GEN-04	The entire existing wooden pole will be removed unless protection of an environmental resource requires the pole to be cut off at the surface and the base left in place.
APM GEN-05	Imported material may be used to backfill the holes as needed; however, as much native material as possible will be used on site. Construction activities that involve placement of native, clean soil will be managed by employing BMPs that minimize soil erosion and impacts on surrounding vegetation per the SDG&E Water Quality BMP Manual. BMPs such as silt fencing or fiber rolls will be installed where necessary (e.g., in high-velocity flow areas and in areas of steep slope), and soil will be placed and compacted in a manner that sufficiently controls erosion and sediment discharge from the site.
APM GEN-06	Prior to initiating construction, SDG&E will make all the appropriate and necessary notifications, including landowner notifications.
APM GEN-07	SDG&E will notify the Underground Service Alert a minimum of 48 hours in advance of excavating or conducting other ground-disturbing activities in order to identify buried utilities. Exploratory excavations (potholing) will also be conducted to verify the locations of existing facilities in the field, if necessary.
APM GEN-08	SDG&E will coordinate with CAISO to obtain all the necessary line clearances prior to beginning new conductor installation.
<i>Visual Resources</i>	
APM VIS-01	When construction has been completed, all temporary work areas will be restored to near pre-construction conditions in accordance with landowner agreements, in order to reduce potential visual contrast with the surrounding landscape setting.
APM VIS-02	Construction activities will be kept as clean and inconspicuous as practical. Where practical, construction storage and staging will be screened from close-range residential views with opaque fencing.
APM VIS-03	Non-specular conductors will be installed for new and replacement conductors along the electric line alignments in order to minimize the reflectivity and general visibility of new electric line facilities.

APM No.	Description
APM VIS-04	New and replacement poles to be installed along the electric line alignments will be reddish-brown, weathered-steel that will appear similar in color to existing wood poles seen in the Proposed Action area and will blend in with the surrounding landscape backdrop.
APM VIS-05	Any required lighting will be limited to individual pole work areas and will not exceed more than two hours per evening.
<i>Air Quality</i>	
APM AIR-01	To the extent feasible, unnecessary construction vehicle and idling time would 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 would apply a “common sense” approach to vehicle use; if a vehicle is not required for use immediately or continuously for construction activities, its engine would be shut off.
APM AIR-02	To control fugitive dust, SDG&E would apply water or non-toxic soil stabilizers on all unpaved access roads, staging areas, and other work areas if construction activity causes persistent visible emissions of fugitive dust beyond the work area; cover loads in haul trucks or maintain at least six inches of free-board when traveling on public roads; and apply non-toxic soil stabilizers or water to form and maintain a crust on inactive construction areas (disturbed work areas that are unused for four consecutive days).
APM AIR-03	Traffic speeds on unpaved roads would be limited to 15 miles per hour.
APM AIR-04	SDG&E would maintain construction equipment per manufacturing specifications and use low-emission equipment as follows: 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, Section 2423(b)(1), unless such an engine is not available for a particular item of equipment. In the event that a Tier 2 engine is not available for any off-road engine larger than 100 hp, 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.
APM AIR-05	SDG&E would continue to utilize best management practices (BMPs) to minimize dust and erosion.
<i>Biological Resources</i>	
APM BIO-01	SDG&E will consult with the appropriate resource agencies regarding potential impacts to federally and state-listed species, as appropriate.
APM BIO-02	All work areas will be surveyed for special-status plant and wildlife species by a qualified biologist prior to the commencement of construction in accordance with SDG&E's pre-activity survey report requirements.
APM BIO-03	SDG&E will implement the protocols identified in the POD Appendix A: SDG&E NCCP Protocols (SDG&E 2013a).
APM BIO-04	SDG&E will implement the protocols identified in SDG&E Quino Checkerspot Butterfly (<i>Euphydryas editha quino</i>) Low-Effect Habitat Conservation Plan Sections 3.2 Actions to Minimize Impacts and 3.3 Actions to Mitigate Impacts.
APM BIO-05	Stringing site locations are designed with a preference toward placement within roadways, where possible, to minimize additional potential impacts from grading and vegetation removal that may otherwise be required if these stringing sites were required to be located in vegetated, off-road areas.

APM No.	Description
APM BIO-06	Although Laguna Mountains Skipper is not covered under SDG&E's Natural Community Conservation Plan (NCCP), SDG&E will utilize NCCP protocols 1, 2, 3, 5, 7, 8, 10, 11, 13, 14, 17, 24, 25, 29, 34, 35, 41, 44, 48, 54, 55, and 57 in United States (U.S.) Forest Service- (Forest Service-) modeled critical habitat and occupied habitat to minimize any potential impacts to this species. In addition, SDG&E will have a qualified biologist survey any Laguna Mountains Skipper habitat prior to work.
APM BIO-07	If California spotted owls are identified in the vicinity of proposed work areas during the pre-activity survey process, SDG&E will consult with the appropriate resource agencies to avoid impacts to nesting California spotted owl.
APM BIO-08	SDG&E will design and install all new poles to conform to the guidelines in the Suggested Practices for Avian Protection on Power Lines Manual developed by the Avian Power Line Interaction Committee.
APM BIO-09	If active bat roosts are identified during pre-activity surveys, SDG&E will coordinate with the U.S. Fish and Wildlife Service/California Department of Fish and Wildlife as appropriate.
APM BIO-10	SDG&E will eliminate existing access roads that will no longer be used due to removal or relocation of facilities, and will return the land to near pre-construction conditions.
<i>Cultural and Paleontological Resources</i>	
APM CUL-01	Prior to construction, all SDG&E, contractor, and subcontractor personnel will receive training regarding the appropriate work practices necessary to effectively implement the APMs and to comply with the applicable environmental laws and regulations, including the potential for exposing subsurface cultural, archaeological, and paleontological resources and how to recognize possible buried resources. This training will include a presentation of the procedures to be followed upon discovery or suspected discovery of cultural and archaeological materials, including Native American remains and their treatment, as well as of paleontological resources.
APM CUL-02	Intensive pedestrian surveys will be conducted prior to construction in those areas within the ROWs for which initial survey access was not granted to determine the potential for impacts to cultural resources in these areas. Where possible, engineering design will be re-evaluated to determine whether facilities can be relocated to avoid any cultural resources identified from these additional surveys. If relocation is not feasible, APM CUL-03 will be implemented to minimize impacts to sensitive cultural resources.
APM CUL-03	All potentially National Register-eligible or archaeologically sensitive sites, as defined in the Cultural Resources Technical Report, that will not be directly affected by construction but are within 50 feet of replacement pole locations will be designated as Environmentally Sensitive Areas (ESAs). Potentially eligible resources include those that are recommended eligible, as well as unevaluated sites. Protective fencing or other markers will be erected and maintained to protect these ESAs from inadvertent trespass for the duration of construction in the vicinity. ESAs will not be signed or marked as cultural, historical, or archaeological resources.
APM CUL-04	An archaeological or cultural monitor will be present during construction activities that occur within or adjacent to identified archaeological or cultural resource site boundaries, respectively, as identified in the Cultural Resources Technical Report to ensure conformance with prescribed avoidance measures. The monitor will identify potential archaeological or cultural resources that may be unexpectedly encountered during construction and will have the authority to divert or temporarily halt construction activities in the area of discovery. In the event that archaeological or cultural resources are discovered, the monitor will stop work and notify the Principal Investigator (PI), who will inform SDG&E and the Forest Service Heritage Program Manager (HPM) of the stoppage. The archaeologist, in consultation with the Forest Service HPM and SDG&E's Cultural Resource Specialist, will determine the significance of the discovered resources. The Forest Service HPM and SDG&E's Cultural Resource Specialist and Environmental Project Manager

APM No.	Description
	must concur with the evaluation procedures to be performed before construction activities are allowed to resume. For significant cultural resources, preservation in-place will be the preferred manner of mitigating for impacts. For resources that cannot be preserved in place, a Research Design and Data Recovery Program will be prepared and carried out to mitigate impacts in consultation with the Forest Service HPM, the Tribes, and the State Historic Preservation Office (SHPO). No collection of archaeological or cultural resources will occur on Forest Service property without prior Forest Service HPM consent. Daily logs will be kept by all monitors, and a monitoring report (with appropriate graphics), which describes the results, analyses, and conclusions of the monitoring program, will be prepared at the conclusion of each phase of monitoring. Any new cultural sites or features encountered will be recorded with the South Coastal Information Center. Monitors will also identify and delineate an approved footpath through the archaeological and cultural resource sites for construction crews, as needed.
APM CUL-05	SDG&E will implement all applicable site-specific impact avoidance measures identified and described in the Cultural Resources Technical Report, such as avoiding access road improvements within culturally sensitive areas unless improvements are required for safety reasons; replacing poles within the previously disturbed area (two to four feet) represented by the existing pole locations, where necessary, to avoid sensitive resources; and cutting existing poles off at grade level, where specified and landowner approval is provided. Same-hole pole placement will also be utilized on a case-by-case basis. No new pole locations will be placed within cultural resource boundaries unless the appropriate consultation (including Section 106) has taken place. No temporary poles will be located within sites unless the appropriate consultation (including Section 106) has taken place.
APM CUL-06	In consultation with the Forest Service HPM, BIA Archaeologist, the Tribes, and the SHPO, SDG&E will develop a Cultural Resources Treatment Plan that includes procedures for protection and avoidance, evaluation and treatment, and the curation of any potentially register-eligible cultural materials. Specific protective measures, including a monitoring program, will be defined in the Cultural Resources Treatment Plan to reduce potential adverse impacts on unknown cultural resources to less-than-significant levels.
APM CUL-07	Should any previously unidentified prehistoric or historic artifacts; indicators or examples of cultural, archaeological, or paleontological resources; or potential human remains or funerary items be discovered during the course of site preparation, grading, excavation, construction, or other activities, all operations within 50 feet of an inadvertent discovery during such activities shall cease and the PI will contact the Forest Service HPM and SDG&E's Cultural Resource Specialist. Once a find has been identified, the Forest Service HPM and SDG&E's Cultural Resources Specialist will determine if additional cultural resources work, including but not limited to a formal evaluation or Proposed Action redesign, are required treatment. Ground-disturbing work in the vicinity of the discovery will not resume without authorization by the Forest Service HPM and after the appropriate consultation has taken place.

APM No.	Description
APM CUL-08	A paleontological monitor will be present for excavation activities conducted at locations with underlying PFYC Class 3 geologic deposits where new steel poles are unable to be installed in the same location as of that of the existing wood pole. In the event that fossils are unexpectedly encountered during construction, a qualified paleontologist will have the authority to divert or temporarily halt construction activities in the area of discovery to allow the recovery of fossil remains in a timely fashion. When significant fossils are discovered, the paleontologist will recover them in accordance with professional standards. Fossil remains collected during monitoring and salvage will be cleaned, repaired, sorted, cataloged, and curated in a scientific institution with permanent paleontological collections. The paleontological monitor will follow the procedures outlined in the Paleontological Monitoring and Treatment Plan, which will be prepared and will include information regarding pre-construction field surveys, construction personnel training, necessary permits, research design, monitoring methodology, fossil discovery and recovery protocols, fossil preparation and curation procedures, and the preparation of a final monitoring report.
APM CUL-09	SDG&E will flag potentially sensitive archaeological resources identified in the vicinity of access roads for avoidance and prohibit any grading activities in the vicinity as part of construction or operation and maintenance.
<i>Public Health (Fire Hazards)</i>	
APM HAZ-01	SDG&E will implement its existing Electric Standard Practice (ESP) 113-1, which includes requirements for carrying emergency fire suppression equipment, conducting worker-awareness trainings that cover fire prevention and safety, restrictions on smoking and idling vehicles, and construction restrictions during Red Flag Warnings (RFWs).
APM HAZ-02	SDG&E will implement Electric Distribution Operation 3017 to ensure that the proper steps are taken to maintain fire safety while meeting all operational and service requirements.
APM HAZ-03	Prior to starting construction activities, SDG&E will clear dead and decaying vegetation from Proposed Action work areas where personnel are active or where equipment is in use or being stored within ROWs, staging areas, stringing sites, and access roads.
APM HAZ-04	Prescribed fire tools and backpack pumps with water will be kept within 50 feet of work activities to ensure the capability for rapid extinguishment in the event of a fire.
APM HAZ-05	Weather and fire danger will be monitored daily by SDG&E meteorologists and wildland fire specialists in order to provide timely and immediate communication of significant changes which could impact the Proposed Action.
APM HAZ-06	No construction work will occur for areas affected by a RFW or Project Activity Level E designation.
<i>Hydrology and Water Quality</i>	
APM HYD-01	All concrete washouts will be conducted either into excavations where the concrete was poured within designated concrete washout stations, or will be captured using a washout recycling system. Crews will not be allowed to dispose of concrete directly onto the ground.
APM HYD-02	When construction activities are required adjacent to flowing aquatic resources, sediment barriers will be placed between the work area and flowing water.

APM No.	Description
APM HYD-03	In areas where topsoil has not been salvaged, construction activities will be limited when the environmental monitor determines that the soil is too wet to adequately support vehicles and equipment. Where soil conditions are deemed too wet to work, one of the following measures will apply: <ul style="list-style-type: none"> — Access will be limited to the minimum area feasible for construction. Where possible, vehicles and equipment will be routed around wet areas so long as the re-route does not cross into sensitive resource areas. — If wet areas cannot be avoided and soil moisture is too high to strip topsoil, BMPs—including the use of wide-track or low ground pressure equipment or installation of prefabricated equipment pads or timber mats—will be implemented for use in these areas to minimize rutting and off-site sedimentation.
APM HYD-04	Any areas not surveyed for potentially jurisdictional wetlands or waters due to limited access will be surveyed prior to the start of construction activities and potential impacts will be assessed and the appropriate jurisdictional permits will be obtained as needed.
APM HYD-05	SDG&E will prepare and implement a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP will identify BMPs based on its Water Quality BMPs Manual for each activity that has the potential to degrade surrounding water quality through erosion, sediment run-off, and other pollutants. These BMPs will then be implemented and monitored by a Qualified SWPPP Practitioner.
APM HYD-06	During any construction activities, SDG&E will flag all hydrological resources occurring within work areas for avoidance, and all construction activities will occur outside of these resources.
APM HYD-07	SDG&E will comply with Forest Service requirements pertaining to hydrology and water quality, as detailed in the Forest Service's Water Quality Management for National Forest System Lands in California, BMPs.
APM HYD-08	If dewatering is required, dewatering systems—as outlined in SDG&E's Water Quality BMPs Manual—will be used to dispose of groundwater. Typically, groundwater will be pumped into truck-mounted storage tanks and either discharged to land in accordance with Regional Water Quality Control Board regulations or transported to an authorized discharge location.
APM HYD-09	SDG&E will implement site-specific erosion and sediment control devices and the proper handling of potentially hazardous materials.
APM HYD-10	Following construction, the ROW, work areas, stringing sites, staging areas, and fly yards will be returned to near pre-construction conditions, which include re-establishing drainage patterns and vegetation, where feasible.
APM HYD-11	Existing access roads will be utilized to access the replacement structures where helicopter-only access is not required.
<i>Noise</i>	
APM NOI-01	SDG&E will provide notice of the construction schedule to all property owners within 300 feet of the Proposed Action by mail at least one week prior to the start of construction activities. The announcement will state the construction start date, anticipated completion date, and hours of operation, as well as a telephone number to call with questions or complaints during construction.
APM NOI-02	Operating equipment will be positioned to maximize the distance to residences and to maintain safe and effective operation.
APM NOI-03	All internal combustion engine-driven equipment will be equipped with exhaust mufflers that are in good condition and meet or exceed the manufacturer's specifications. All equipment will be maintained and tuned according to manufacturer recommendations.
APM NOI-04	When backup alarms have more than one loudness setting, they will be set to the lowest setting that meets Occupational Safety and Health Administration safety requirements.

APM No.	Description
APM NOI-05	When located within 80 feet of residences, a temporary noise barrier with an effective height of approximately three feet will be placed between residences and stationary noise-generating equipment during use. The effective height is that of the barrier above the line-of-sight between the noise source and the noise-sensitive receiver.
APM NOI-06	Helicopters will be required to maintain a height of at least 500 feet when passing over residential areas, except when at temporary construction areas or actively assisting with conductor stringing. All helicopters will be required to maintain a lateral distance of at least 500 feet from all schools. No more than 64 flights per day will be conducted.
APM NOI-07	Residents who experience construction noise levels that exceed the applicable noise thresholds will be temporarily relocated, on an as-needed basis, for the duration of the activities that will impact them.
APM NOI-08	In the event that blasting is required within 325 feet of a residential property line, SDG&E will prepare and provide a blasting plan for the Proposed Projects that is consistent with SDG&E's blasting guidelines to reduce noise and vibration impacts from blasting activities. The blasting contractor will be required to obtain a blasting permit and explosive permit per the San Diego County Regulatory Ordinances.
APM NOI-09	Where appropriate, SDG&E will coordinate with the San Diego County noise control officer regarding helicopter flights between 6:30 a.m. and 7:00 a.m. to avoid any conflicts with the County noise ordinance.
APM NOI-10	If construction occurs outside the hours allowed by San Diego County, SDG&E will follow its established protocols and will provide advance notice by mail to all property owners within 300 feet of planned construction activities. The announcement will state the construction start date, anticipated completion date, and hours of construction.
<i>Transportation and Traffic</i>	
APM TRANS-01	To minimize traffic impacts, temporary lane closures will occur during off-peak traffic hours, to the extent practical, in order to minimize disruptions and traffic backups.
APM TRANS-02	Caution signs and/or flagmen will be used to regulate traffic where necessary and to maintain a safe transportation corridor during construction.
APM TRANS-03	Emergency vehicles will be provided access even in the event of temporary road or lane closures.
APM TRANS-04	SDG&E will coordinate isolated, temporary road closures with local jurisdictional agencies, as required, to cross these roadways, and perform work according to agency requirements.
APM TRANS-05	SDG&E will develop and implement a Traffic Control Plan during construction.
APM TRANS-06	SDG&E will coordinate flight patterns with local air traffic control and the Federal Aviation Administration prior to construction to prevent any adverse impacts due to increased air traffic.
APM TRANS-07	Where replacement poles will be close to existing pole locations, existing access roads, spur roads, and turnarounds will be used to the extent possible to support construction activities and will continue to be used for future line maintenance.
Source: Final EIR/EIS Table B-13	