Decision 16-05-005 May 12, 2016

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

In The Matter of the Application of SAN DIEGO GAS & ELECTRIC COMPANY (U902E) for a Permit to Construct The Salt Creek Substation Project.	Application 13-09-014 (Filed September 25, 2013)

DECISION GRANTING PERMIT TO CONSTRUCT THE SALT CREEK SUBSTATION PROJECT

Table of Contents

Title **Page**

DECISION GRANTING PERMIT TO CONSTRUCT THE SALT CREEK SUBSTATION PROJECT

Summary

This decision grants San Diego Gas & Electric Company's request for a permit to construct the Salt Creek Substation Project, configured as Project Alternative 2 (69/12-kilovolt Substation with Generation at Border and Larkspur Electric Generating Facilities) with the mitigation measures identified in the Mitigation Monitoring, Compliance, and Reporting Program attached to this decision. This proceeding is closed.

1. Background

In Application (A.) 13-09-014, San Diego Gas & Electric Company (SDG&E) seeks a Permit to Construct (PTC) the proposed Salt Creek Substation Project (Proposed Project). The Proposed Project includes a 120-megavolt-ampere (MVA) 69/12-kilovolt (kV) substation, distribution circuits, transmission line (TL) 6910 loop-in, TL 6965, and some modifications to the Miguel Substation in the City of Chula Vista and San Diego County, California.

To issue a PTC pursuant to General Order (GO) 131-D, the Commission must find that the project complies with the California Environmental Quality Act[1] (CEQA). In evaluating whether to approve the project or a project alternative, CEQA requires the lead agency[2] (the Commission in this case) to

[1] Cal. Pub. Res. Code, starting at § 21000.

[2] The lead agency is the public agency which has the principal responsibility for carrying out or approving a project. The lead agency also must decide whether an Environmental Impact Report or Negative Declaration will be required for the project and prepare the appropriate environmental document. CEQA Guidelines (Cal. Code Regs. Tit. 14, Div. 6, Ch.3) § 15367.

conduct a review to identify environmental impacts of the project and ways to avoid or reduce environmental damage. CEQA precludes the lead agency from approving a proposed project or a project alternative unless the lead agency requires the project proponent to eliminate or substantially lessen all significant effects on the environment where feasible and determines that any unavoidable remaining significant effects are acceptable due to overriding considerations.[3] In addition, pursuant to GO 131-D and Decision (D.) 06-01-042, the Commission will not certify a project unless its design is in compliance with the Commission's policies governing the mitigation of electromagnetic field (EMF) effects using low-cost and no-cost measures.

The Scoping Memo and Ruling identified the following issues to be resolved in this proceeding:

1. What are the significant environmental impacts of the Proposed Project?
2. Are there potentially feasible mitigation measures that will eliminate or lessen the significant environmental impacts?
3. As between the Proposed Project and the project alternatives, which is environmentally superior?
4. Are the mitigation measures or project alternatives infeasible?
5. Was the Environmental Impact Report (EIR) completed in compliance with CEQA, did the Commission review and consider the EIR prior to approving the Proposed Project or a project alternative, and does the EIR reflect the Commission's independent judgment?
6. To the extent that the Proposed Project and/or project alternatives result in significant and unavoidable impacts, are

[3] CEQA Guidelines §§ 15090, 15091, 15093, 15126.2, 15126.4, and 15126.6.

there overriding considerations that nevertheless merit Commission approval of the Proposed Project or project alternative?

7. Is the Proposed Project and/or project alternative designed in compliance with the Commission's policies governing the mitigation of EMF effects using low-cost and no-cost measures?

On May 15, 2015, the Commission's Energy Division published and circulated a Notice of Availability of a Draft EIR and Public Meeting for the Proposed Project to the State Clearinghouse, responsible and trustee agencies, property owners, and interested parties. That triggered the start of the 45-day period for public review and comment on the Draft EIR. An informational public meeting was held on June 4, 2015, to respond to questions and provide clarifications regarding the impact analysis and conclusions presented in the Draft EIR. Copies of the Draft EIR were also made available for public review at the Otay Ranch Branch Public Library, at the Commission, and on the Proposed Project website.

Three public agencies, three local residents, and SDG&E submitted written comments on the Draft EIR. The public agencies' comments identified permitting, planning and notice requirements relating to clean water regulations, highway closures, and the Draft EIR. Two local residents supported the Proposed Project. The third resident objected to the location of the Proposed Project and its potential negative impact on the value of the resident's property as well as some potential health and safety concerns. SDG&E's comments (1) recommended some editorial corrections, (2) provided some technical clarifications and supplemental data on the special-status Hermes copper butterfly, (3) addressed legal issues, including the selection of alternatives,

assessment of significant impacts, and imposition of the mitigation measures, and (4) requested that the Commission incorporate SDG&E's recommended changes to the mitigation measures in the Final EIR.

The Commission's Energy Division issued the Final EIR on September 30, 2015. The Final EIR identifies Alternative 2 (discussed in Section 2.3 of this decision) as the environmentally superior alternative. The Final EIR addresses the comments on the Draft EIR and incorporates several minor clarifications and modifications to the Proposed Project and the Draft EIR. It also incorporates the recommended editorial changes, minor changes to mitigation measures, and technical clarifications.

On November 20, 2015, a prehearing conference was held. SDG&E and the Commission's Office of Ratepayer Advocates attended. The assigned Commissioner and the Administrative Law Judge issued the Scoping Memo and Ruling on December 9, 2015, identifying the issues to be determined by the Commission in resolving the proceeding, setting a schedule for addressing those issues, and receiving into the record of this proceeding as Exhibits A (Draft EIR), B-1 (Final EIR, Volume I), B-2 (Final EIR, Volume II), and C (SDG&E's Amendment to Magnetic Field (EMF) Management Plan, filed on December 4, 2015).

2. Summary and Final EIR

CEQA requires the lead agency's consideration and comparative evaluation of the Proposed Project and a range of reasonable alternatives to the Proposed Project that would feasibly attain most of the basic objectives of the project and avoid or substantially lessen any of the significant effects of the project. The Final EIR analyzes and comparatively evaluates the impacts of the Proposed Project and the project alternatives as summarized below.

2.1. Proposed Project and Objectives

The Proposed Project includes the following components:

- **Salt Creek Substation**: Construction of a 120-MVA 69/12-kV distribution substation in southeastern Chula Vista referred to as the Salt Creek Substation. The proposed substation would include three distribution circuits to tie in to the existing distribution network at Hunte Parkway. It also would include an underground loop-in of the existing 69-kV TL 6910 and fiber optic line located in the SDG&E transmission corridor adjacent to the proposed substation location.

- **TL 6965**: Construction of approximately five miles of above-ground 69-kV power line (PL) and approximately 1,000 feet of underground PL between Miguel Substation and the proposed Salt Creek Substation. The aboveground PL would be installed on 41 new steel poles and eight existing steel poles.

- **Miguel Substation Modifications**: Addition of a new 69-kV circuit position at Miguel Substation to accommodate TL 6965.

In general, the purpose of the Proposed Project is to serve the growing communities of Otay Ranch and Eastlake, and the foreseeable future development of currently undeveloped land in the eastern portion of the City of Chula Vista. In its Proponent's Environmental Assessment (PEA), SDG&E lists the following as its objectives of the Proposed Project:

- Meet the area's projected long-term electric distribution capacity needs by constructing the proposed Salt Creek Substation near planned load growth to maximize system efficiency;

- Provide three 69-kV circuits into the Salt Creek Substation to serve load growth in the region and meet the regulatory requirements of the North American Electric Reliability Corporation (NERC), Western Electric Coordinating Council (WECC), and California Independent System Operator (CAISO);

- Provide substation and circuit tie capacity that would provide additional reliability for existing and future system needs;
- Reduce loading on area substations to optimum operating conditions, providing greater operational flexibility to transfer load between substations within the proposed Salt Creek Substation service territory;
- Comply with and respect the outcome of the extensive community-based public process to select a site for a new substation in the Otay Ranch area, as evidenced by City of Chula Vista City Council Resolution 2011-073;
- Meet the Proposed Project needs while minimizing environmental impacts by siting the substation on property designed for future development that is located outside of the City of Chula Vista's Multiple Species Conservation Program (MSCP) Preserve; and
- Locate proposed new power facilities, as appropriate and as needed, within existing utility right-of-ways (ROWs), access roads, and utility-owned property.

Based on the additional technical data presented by SDG&E and further assessment, the Commission's Energy Division adopted the following refined set of basic project objectives (Project Objectives) in the Draft EIR:

- Meet the electric distribution capacity needs of the southeastern Chula Vista service territory;
- Provide substation and circuit tie capacity that would provide additional reliability for existing and future system needs; and
- Reduce loading on area substations to optimum operating conditions, providing greater operational flexibility to transfer load between substations.

As depicted in Attachment A, the Proposed Project is located in southwestern San Diego County. The majority of it is in the eastern portion of the City of Chula Vista, and a small portion is in an unincorporated portion of

San Diego County on SDG&E fee-owned land. The location is approximately 15 miles southeast of downtown San Diego and five miles north of the international border with Mexico. The Proposed Project would be developed on land that is either already owned by SDG&E, within existing SDG&E easements, or within public ROW.

2.2. Alternative 1: 230/12-kV Substation and 230-kV Loop-in

Alternative 1 involves construction of a new 230/12-kV substation, instead of the proposed 69/12-kV substation, within the proposed location for the Salt Creek Substation. The new substation would include an underground loop-in of the existing 230-kV TL to the new 230/12-kV substation and new underground 12-kV distribution circuits to connect to the existing network.

Alternative 1 would avoid construction of a new five-mile-long PL between the proposed Salt Creek Substation and existing Miguel Substation, and would reduce impacts to biological resources, cultural resources, residences near the transmission corridor and staging yards due to noise, and recreational impacts. As compared to the Proposed Project, Alternative 1 would result in more visual impacts, and would have a larger construction timeframe that could result in more air quality and noise impacts on residences near the substation site.

Alternative 1 would meet the three Project Objectives, but could pose technical issues for transferring load between the 69/12-kV and 138/12-kV substations. It might achieve the objective of providing greater operational flexibility than now, but to a lesser degree than the Proposed Project.

2.3. Alternative 2: 69/12-kV Substation and Generation at Border and Larkspur Electric Generating Facilities

Alternative 2 involves construction of a 69/12-kV substation at the proposed Salt Creek Substation site, and includes a loop-in of TL 6910, both in a configuration identical to the Proposed Project. Alternative 2 does not include installation of a new 69-kV PL along the existing ROW. With Alternative 2 (without the proposed PL), approximately seven additional hours per year of energy generation from the existing electric generating facilities (during periods of peak electricity demand) would be necessary to maintain system reliability and meet the anticipated needs of this area.

Alternative 2 would avoid the effects of constructing, operating, and maintaining TL 6965, the proposed 69-kV PL. Alternative 2 would result in an estimate one to two percent increase in SDG&E's use of power from CalPeak Power - Border electric generating facility (Border) and the Larkspur Energy Facility (LEF) relative to the Proposed Project, totaling approximately seven additional hours per year of energy generation from either one of the facilities over the next 10 years. Both Border and LEF are currently under contract to sell power to SDG&E.

This alternative would not result in any new significant impacts relative to the Proposed Project. This alternative would involve less redundancy in power sources to the substation and would therefore potentially be less reliable if a fault were to occur on the existing 69-kV line. This alternative would meet the three Project Objectives.

2.4. Alternative 3: 69/12-kV Substation and Underground 69-kV PL within Public ROW

Alternative 3 would involve construction of a 69/12-kV substation at the proposed Salt Creek Substation site, and include a loop-in of TL 6910, both in a configuration identical to the Proposed Project. Alternative 3 would build a new underground 69-kV PL within the public ROW. The 69-kV line would be overhead within the Miguel Substation in the same configuration as the Proposed Project, but would transition underground via a cable pole and be routed underground for approximately six miles to the Salt Creek Substation site.

Alternative 3 would avoid construction of a 69-kV PL along the existing ROW, thus avoiding use of helicopters and construction related noise impacts, and the visual impacts of an overhead PL. The underground line would avoid potential conflicts with utilities, including the gas pipelines in the transmission corridor, thereby reducing safety concerns. However, the underground construction activities would potentially result in more impacts than the Proposed Project along some roads in the following resource areas: noise, air quality and emissions, traffic and emergency access, and geology and soils.

This alternative would meet the three Project Objectives.

2.5. No Project Alternative

CEQA requires an evaluation of the No Project Alternative. Under the No Project Alternative, the Proposed Project would not be implemented, and SDG&E would need to find a different way (other than the Proposed Project) to serve the additional electrical needs of the growing area from its other existing substations because energy demand in that area will soon exceed existing capacity.

For SDG&E to meet the future energy needs of the southeast Chula Vista area with the No Project Alternative, SDG&E would have to build out the existing Proctor Valley Substation from its current configuration of two transformer banks to its maximum of four transformer banks, and construct six- to seven-mile-long distribution circuits to the Otay Ranch Area. The impacts associated with this alternative will likely be less than those of the Proposed Project. However, this option would only be a short-term solution for approximately two years, and SDG&E would still have to devise a long-term solution, which may involves additional project(s) with additional impacts, to meet this area's expected energy needs.

The No Project Alternative would not meet the three Project Objectives. Instead, it would result in a reduced level of reliability and would fail to satisfy the expected load growth for the area.

3. Summary of Significant Environmental Impacts

3.1. The Proposed Project

The Proposed Project would have significant and unavoidable impacts on aesthetics, noise, and recreational resources, less than significant impacts with mitigation on the other ten resource areas, and less than significant impacts without mitigation on agricultural and forestry resources. Significant and unavoidable impacts from noise during the construction would be temporary (18 to 24 months). Significant and unavoidable impacts on aesthetics and recreation from the presence of the substation would be mitigated to a less-than-significant level within five years of the construction completion.

3.2. Alternative 1

Alternative 1 (230/12-kV Substation and 230-kV Loop-In) would have significant and unavoidable impacts on aesthetics, noise, and recreation. Impacts

on aesthetics and recreation would last through the operational life of the project, while permanent and temporary increases in noise would be limited to the construction period (24 to 30 months). Alternative 1 would result in less than significant impacts, with mitigation, on ten resource areas and adverse, but less than significant impacts on agricultural and forestry resources, and public services.

Alternative 1 would lessen the environmental impacts of the Proposed Project as follows:

- Eliminate temporary significant and unavoidable substantial increase in noise at schools, parks, and over 1,000 residents within 200 feet of the transmission corridor, even though the alternative would result in a substantial temporary and permanent increase in noise for receptors near the substation during construction; and the noise levels near the substation would be similar to the Proposed Project.
- Eliminate helicopter noise along the PL and near staging yards.
- Eliminate the aesthetic impact of an additional PL in the transmission corridor.
- Reduce biological impacts by eliminating temporary and permanent habitat impacts and noise impacts on wildlife along the five-mile-long PL.
- Eliminate impacts on all eligible cultural resources in the Proposed Project area.
- Reduce potential for hazards and hazardous materials impacts by avoiding construction of power pole foundations near fuel pipelines.
- Eliminate impacts from trail detours and closures and noise and aesthetic impacts on recreational facilities within and near the transmission corridor north of Hunte Parkway.

- Eliminate the need for temporary road or lane closures associated with PL stringing.
- Reduce conflicts with utilities in the utility corridor.

The 230/12-kV substation would have the following environmental impacts, beyond those impacts of the Proposed Project:

- The larger 230/12-kV substation would have a higher profile than the proposed substation and would be visible from a greater distance, resulting in a permanent significant and unavoidable visual impact.
- The significant unavoidable visual impact from the 230/12-kV substation would result in permanent significant and unavoidable impacts on the recreational value of the adjacent trails.
- The larger 230/12-kV substation would have a longer construction timeframe of 24 to 30 months, as compared to 18 to 24 months for the Proposed Project. This longer construction duration would result in more air quality and greenhouse gas (GHG) emissions than the Proposed Project.
- The longer construction timeframe would result in a significant and unavoidable impact from a permanent increase in noise (impacts exceeding two years are considered permanent).
- The larger 230/12-kV substation would require more grading with larger retaining walls and steeper slopes than the Proposed Project substation, resulting in greater potential impacts on geology and soils from increased loss of topsoil.
- The increased grading and increase in impervious surfaces at the substation would result in greater risk of sedimentation and increase in runoff volume.

3.3. Alternative 2

Alternative 2 (a 69/12-kV Substation with generation at Border and LEF) would have significant and unavoidable impacts on aesthetics, noise, and recreation, similar to the Proposed Project. These significant and unavoidable

impacts would result from construction of the 69/12-kV substation in the same location as the Proposed Project and would be limited to the period during and up to five years following the construction of the project. This alternative would result in less than significant impacts, with mitigation, in nine resource areas and adverse, and less than significant impacts on agriculture, forestry and public services.

However, Alternative 2 would eliminate all environmental impacts associated with construction, operation, and maintenance of the proposed five-mile-long 69-kV PL. All impacts that would be reduced or eliminated by Alternative 1, as listed in Section 3.2. above, are also reduced or eliminated by Alternative 2. Alternative 2 would reduce the air quality emissions during the construction, resulting in decreased potential to exceed air quality thresholds.

Alternative 2 would create the following new or increased environmental impact, beyond those impacts of the Proposed Project:

- The additional generation of power at Border and LEF would result in increased air quality and GHG emissions over the operating life of the project; however, these emissions would be well below all air quality and GHG emissions thresholds for the basin, and the nominal additional power generation at the facilities would be within the permitted operating limits and less than significant without mitigation.

3.4. Alternative 3

Alternative 3 (a 69/12-kV Substation and Underground PL within the Public ROW) would have significant and unavoidable impacts on aesthetics, noise, and recreation from construction of the 69/12-kV substation in the same location as the Proposed Project. Significant and unavoidable noise impacts would also result from underground construction of the PL in proximity to sensitive receptors. All significant and unavoidable impacts from Alternative 3

would be limited to the period during and up to five years following construction of the project. Noise impacts would last approximately 18 to 24 months. Impacts on aesthetics and recreation would be reduced to a less than significant level within a period of five years as vegetation matures and provides visual screening of the facility. Alternative 3 would result in less than significant impacts, with mitigation, on twelve resource areas and adverse, but less than significant impacts on agriculture and forestry.

Alternative 3 would lessen the environmental impacts in the following manner, as compared to the Proposed Project:

- Eliminate the aesthetic impact of a new PL in the transmission corridor.
- Reduce noise impacts on sensitive receptors by eliminating the use of helicopters for PL stringing.
- Reduce impacts on cultural resources by avoiding the California Register of Historic Places eligible resources within the transmission corridor; Alternative 3 construction is less likely to encounter resources than the Proposed Project because the work area was previously disturbed by road construction.
- Reduce impacts on native habitats by avoiding the temporary and permanent habitat impacts in the transmission corridor.
- Reduce potential for hazards and hazardous materials impacts by avoiding construction of power pole foundations near fuel pipelines.

Alternative 3 would result in the following new or increased impacts, beyond those impacts of the Proposed Project:

- Noise impacts on sensitive receptors including residents and schools near the underground alignment during

underground construction. The noise impacts would not be more intense, but would impact different receptors than the Proposed Project. Construction of the underground PL would last longer than the Proposed Project PL due to the increased duration and increased activity level required to construct an underground PL relative to an overhead PL.

- Indirect noise impacts on wildlife in preserve areas near the underground alignment. The underground alignment along Hunte Parkway is adjacent to the City's Multiple Species Conservation Program or MSCP Preserve and critical habitat for Coastal California gnatcatcher.
- Impacts on transportation and traffic as a result of traffic lane closures, bicycle lane closures, and potential temporary bus stop closures or relocation to avoid conflicts with the active construction area and open trench within the roadway.

3.5. No Project Alternative

The No Project Alternative would reduce or avoid most of the impacts of the Proposed Project; however the No Project Alternative would result in other yet to be quantified long-term significant and unavoidable impacts of the environment, including impacts to SDG&E's systems and services due to reduced reliability and increased brown-outs and black-outs after 2017.

3.6. Environmentally Superior Alternative

CEQA requires identification of an environmentally superior alternative. The Final EIR compares and evaluates the resource impacts associated with the Proposed Project and above-summarized alternatives. This comparison,[4] which includes consideration of differences in intensity and duration of significant

[4] *See* Table 6.3-1 of the Final EIR.

impacts, identifies Alternative 2 (69/12-kV Substation and Generation at Border and Larkspur Electric Facilities) as the environmentally superior alternative because it would:

- Avoid all the impacts associated with the construction, operation and maintenance of a five-mile-long PL.
- Result only in temporary significant and unavoidable impacts related to noise, aesthetics, and recreation.
- Have no long-term significant and unavoidable impacts.

Alternative 2 results in similar significant impacts on aesthetics and recreation as the Proposed Project, because Alternative 2 would construct a substation in the same location and manner as the Proposed Project. Substation construction would degrade the scenic quality and thereby reduce the recreational value of nearby trails and open space recreational areas, resulting in temporary (up to five years) significant impacts. Also, open views of the substation would cause significant impacts to the recreational value of nearby trails and open spaces. However, these impacts would be mitigated over time through landscaping and the associated visual screening of the substation.

Alternative 2 would avoid significant and unavoidable impacts from the substantial temporary and periodic increase in noise levels along the PL corridor associated with construction of the five-mile-long PL, in the Proposed Project. Noise from Alternative 2 construction would affect residents near the substation; however, Alternative 2 would avoid the use of helicopters and associated noise impacts on residents and schools near the PL alignment. Alternative 2 would also reduce impacts on biological and cultural resources by limiting the area of disturbance relative to the Proposed Project. Alternative 2 also avoids

construction in proximity to a gas pipeline and avoids all hazards associated with construction and operation of a PL adjacent to a buried gas pipeline.

Moreover, unlike the No Project Alternative, Alternative 2 would have no long-term significant and unavoidable impacts. It only results in minimal increases in adverse air quality and GHG emissions from increasing electric generation at Border and LEF by 220 to 350 Megawatt-hour (MWh)/year (equivalent to five to seven hours of cumulative run time at the electric facilities annually because each peaker plant produces power at 49 MWh).

Accordingly, Alternative 2 is the environmentally superior alternative across the majority of resource areas because it reduces impacts of the Proposed Project without any new or more intense significant impacts.

4. Mitigation Monitoring and Reporting Plan

The Mitigation Monitoring and Reporting Plan section of the Final EIR (Attachment B of this decision) describes all feasible measures that could minimize significant adverse environmental impacts of the Proposed Project. For each resources area, feasible mitigation measures are identified where environmental effects could be substantially minimized.

5. Infeasibility of Environmentally Superior Alternative and Mitigation Measures

CEQA Guidelines § 15091 requires the lead agency to approve the environmentally superior alternative (Alternative 2 in this case) and to adopt all Final EIR identified mitigation measures, except if the environmentally superior alternative or the identified mitigation measures are infeasible due to specific economic, legal, social, technological or other considerations. There is no evidence that either Alternative 2 or any of the mitigation measures identified in

the Mitigation Monitoring, Compliance, and Reporting Program (Attachment B to this decision) is infeasible.

6. Statement of Overriding Considerations

When the lead agency approves a project which will result in one or more unavoidable adverse impacts, the lead agency must first make a finding or a statement of overriding considerations which sets forth specific reasons to support its action.[5] The statement of overriding consideration must specify economic, social or other benefits of the project that outweigh harm of the adverse impacts to warrant project approval.

The Salt Creek Substation Project is necessary to ensure that safe and reliable electric service is available to meet the long-term forecasted electrical demand of the growing communities of Otay Ranch and Eastlake, and the foreseeable future development of currently undeveloped land in the eastern portion of the City of Chula Vista service territory. Specifically, it is needed to provide substation and circuit tie capacity that would provide additional reliability for existing and future system needs of the area and reduce loading on area substations to optimum operating conditions, thereby providing greater operational flexibility to transfer load between substations.

Alternative 2, the environmentally superior alternative, results in some temporary significant and unavoidable impacts. However, we find that the following benefits of the Proposed Project, configured as Alternative 2, outweigh these unavoidable adverse environmental impacts, as identified in the Final EIR:

(a) Meet the forecasted load demand in the area;

[5] CEQA Guidelines § 15093.

(b) Provide substation and circuit tie capacity for additional reliability for existing and future system needs of that area;

(c) Reduce loading on area substations to optimum operating conditions; and

(d) Provide greater operational flexibility to transfer load between substations.

Accordingly, with the foregoing statement of overriding considerations, Commission approval of the Proposed Project, configured as Alternative 2, is warranted.

7. Certification of the Final EIR

CEQA requires the lead agency to certify that the EIR was completed in compliance with CEQA, that the agency has reviewed and considered it prior to approving the project, and that the EIR reflects the agency's independent judgment. As set forth above, the Final EIR was completed after notice and opportunity for public comment on the scope of the environmental review and the Draft EIR, as required by CEQA. The Final EIR documents all comments on the Draft EIR and responds to them, as required by CEQA. The Final EIR also identifies the Proposed Project's significant and unavoidable environmental impacts, mitigation measures that will avoid or substantially lessen them, and the environmentally superior alternative. We have reviewed and considered the information contained in the Final EIR, and it reflects our independent judgment. We certify that the Final EIR was completed in compliance with CEQA.

8. EMF

The Commission has examined EMF impacts in several previous proceedings.[6] We found the scientific evidence presented in those proceedings was uncertain as to the possible health effects of EMFs, and we did not find it appropriate to adopt any related numerical standards. Because there is no agreement among scientists that exposure to EMF creates any potential health risk, and because CEQA does not define or adopt any standards to address the potential health risk impacts of possible exposure to EMFs, the Commission does not consider magnetic fields in the context of CEQA and determination of environmental impacts.

However, recognizing that public concern remains, we do require, pursuant to GO 131-D, Section X.A, that all requests for a PTC include a description of the measures taken or proposed by the utility to reduce the potential for exposure to EMFs generated by the Proposed Project. We developed an interim policy that requires utilities, among other things, to identify the no-cost measures undertaken, and the low-cost measures implemented, to reduce the potential EMF impacts. The benchmark established for low-cost measures is four percent of the total budgeted project cost that results in an EMF reduction of at least 15 percent (as measured at the edge of the utility ROW).

SDG&E prepared a detailed Field Management Plan (Plan) with analysis of three primary components of the Proposed Project: the proposed Salt Creek Substation, the new 69-kV TL 6965, and the TL 6910 loop-in (re-named TL 6964).

---

[6] *See* D.06-01-042 and D.98-11-013.

SDG&E's also submitted an amendment to the Plan that addresses the environmentally superior project alternative identified in the Final EIR (collectively, Amended Plan). SDG&E's Amended Plan aligns with the design and construction features of the Final EIR's environmentally superior Alternative 2, with the scope limited to possible magnetic field reduction measures for:

- Construction of an underground loop-in of the existing 69-kV PL (TL 6910) to the Salt Creek Substation, which would be in the same configuration as for the Proposed Project.[7]
- Construction of the 120-MVA 69-kV/12-kV low-profile Salt Creek Substation southeasterly of Hunte Parkway at the proposed substation site.[8]

The underground loop-in component is limited in scope and does not provide significant opportunity to implement magnetic field reduction measures. The only work related to TL 6910 and TL 6964 is the intercept to accommodate two cable poles for the loop-in. Additionally, the loop-in is located on undeveloped land and in a utility corridor adjacent to open space (undeveloped land). Pursuant to D.06-01-042, the field management plan "should not include low-cost mitigation for undeveloped land." Accordingly, the Amended Plan for Alternative 2 does not include low-cost mitigation for undeveloped land. We also note, possible low-cost measures such as increasing structure height and trench depth, and placing overhead lines underground, are not applicable to the underground loop-in. Accordingly, SDG&E adopted the following measures in the Amended Plan:

---

[7] The loop-in covers a distance of approximately 300 feet, mostly within substation property.

[8] The substation configuration would be identical to that of the Proposed Project.

- Keep high current devices, transformers, capacitors, and reactors, away from the substation property lines by bringing them into the substation property where possible.
- For underground duct banks, the minimum distance should be 12 feet from the adjacent property lines, to the extent practical.
- Locate new substations close to the existing TL ROW to the extent practical.
- Increase the substation property boundary to the extent practical.

SDG&E's Amended Plan and adopted measures comply with SDG&E's EMF Design Guidelines prepared in accordance with the Commission's EMF decisions D.98-11-013 and D.06-01-042.

9. Categorization and Need for Hearing

In Resolution ALJ 176-3323, the Commission preliminarily categorized this application as ratesetting, and preliminarily determined that hearings were necessary. We confirm the categorization of ratesetting. No evidentiary hearing is needed.

10. Comments on Proposed Decision

The proposed decision of Administrative Law Judge Kimberly Kim in this matter was mailed to the parties in accordance with Pub. Util. Code § 311 and comments were allowed pursuant to Rule 14.3 of the Commission's Rules of Practice and Procedure. On May 2, 2016, SDG&E filed a comment supporting the proposed decision in all respects. No other comments or replies have been filed.

11. Assignment of Proceeding

Carla J. Peterman is the assigned Commissioner and Kimberly Kim is the assigned Administrative Law Judge in this proceeding.

Findings of Fact

1. The Salt Creek Substation Project is needed to ensure that safe and reliable electric service is available to meet the long-term forecasted electrical demand of the growing communities of Otay Ranch and Eastlake, and the foreseeable future development of currently undeveloped land in the eastern portion of the City of Chula Vista service territory.

2. The Final EIR identifies the Salt Creek Substation Project, configured as Project Alternative 2 (69/12-kV Substation with Generation at Border and Larkspur Electric Generating Facilities) with mitigation measures identified in the attached Mitigation Monitoring, Compliance, and Reporting Program, as the environmentally superior project alternative because it would:

(a) Avoid all impacts associated with construction, operation and maintenance of a five-mile-long PL;

(b) Result only in temporary significant and unavoidable impacts related to noise, aesthetics, and recreation; and

(c) Have no long-term significant and unavoidable impacts.

3. The Salt Creek Substation Project, configured as Project Alternative 2, (1) accommodates forecasted load demand in the area, (2) provides substation and circuit tie capacity that would provide additional reliability for existing and future system needs of that area, (3) reduces loading on area substations to optimum operating conditions, and (4) provides greater operational flexibility to transfer load between substations.

4. Project Alternative 2, the environmentally superior alternative, results in some temporary significant and unavoidable impacts.

5. The Mitigation Monitoring and Reporting Plan section of the Final EIR (Attachment B of this decision) describes all feasible measures that could minimize significant adverse environmental impacts of the Proposed Project; and

for each resources area, feasible mitigation measures are identified where environmental effects could be substantially minimized.

6. The following benefits of the Proposed Project, configured as Project Alternative 2, outweigh these unavoidable adverse environmental impacts, as identified in the Final EIR:

(a) Meet the forecasted load demand in the area;

(b) Provide substation and circuit tie capacity for additional reliability for existing and future system needs of that area;

(c) Reduce loading on area substations to optimum operating conditions; and

(d) Provide greater operational flexibility to transfer load between substations.

7. The Commission has reviewed and considered the information contained in the Final EIR.

8. The Final EIR reflects the Commission's independent judgment and analysis.

9. The Final EIR was completed in compliance with CEQA.

10. The Proposed Project is designed in compliance with Commission policies governing the mitigation of EMF effects using low-cost and no-cost measures.

11. SDG&E's Amended Plan aligns with the design and construction features of the Final EIR identified environmentally superior alternative, Project Alternative 2, and adopts the following magnetic field reduction measures:

(a) Keep high current devices, transformers, capacitors, and reactors, away from the substation property lines by bringing them into the substation property as much as possible.

(b) For underground duct banks, the minimum distance should be 12 feet from the adjacent property lines to the extent practical.

(c) Locate new substations close to existing transmission line rights-of- way to the extent practical.

(d) Increase the substation property boundary to the extent practical.

12. SDG&E's Amended Plan and adopted measures comply with SDG&E's EMF Design Guidelines prepared in accordance with the Commission's EMF decisions D.98-11-013 and D.06-01-042.

Conclusions of Law

1. The environmentally superior project alternative (Project Alternative 2 in this case) should be approved.

2. The Mitigation Monitoring and Reporting Plan section of the Final EIR (Attachment B of this decision) and the mitigation measures identified in it should be adopted.

3. SDG&E should be granted a PTC the Salt Creek Substation Project, configured as Project Alternative 2 or the environmentally superior project alternative (69/12-kilovolt Substation with Generation at Border and Larkspur Electric Generating Facilities) with the mitigation measures identified in the Mitigation Monitoring, Compliance, and Reporting Program attached to this decision as Attachment B.

4. The Final EIR should be certified as having been prepared in compliance with CEQA.

5. The proceeding should be categorized as ratesetting.

6. This proceeding should be closed.

7. This order should be effective immediately.

O R D E R

IT IS ORDERED that:

1. San Diego Gas & Company is granted a permit to construct the Salt Creek Substation Project, configured as Project Alternative 2 (69/12-kilovolt Substation with Generation at Border and Larkspur Electric Generating Facilities) with the mitigation measures identified in the Mitigation Monitoring, Compliance, and Reporting Program attached to this decision as Attachment B.

2. The Final Environmental Impact Report (EIR), Exhibits B-1 (Final EIR, Volume I) and B-2 (Final EIR, Volume II) are certified as having been prepared in compliance with the California Environmental Quality Act.

3. The Mitigation Monitoring and Reporting Plan section of the Final Environmental Impact Report (Attachment B of this decision) and the mitigation measures identified in it are adopted.

4. Application 13-09-014 is categorized as ratesetting.

5. No hearing is needed.

6. Energy Division may approve requests by San Diego Gas & Company for minor project refinements that may be necessary due to final engineering of the Salt Creek Substation Project, as approved in this decision, so long as such minor project refinements are located within the geographic boundary of the study area of the Environmental Impact Report and do not, without mitigation, result in a new significant impact or a substantial increase in the severity of a previously identified significant impact based on the criteria used in the environmental

document; conflict with any mitigation measure or applicable law or policy; or trigger an additional permit requirement.

7. San Diego Gas & Electric Company shall seek any other project refinements by a petition to modify this decision.

8. Application 13-09-014 is closed.

This order is effective today.

Dated May 12, 2016, at Sacramento, California.

MICHAEL PICKER
President
MICHEL PETER FLORIO
CATHERINE J.K. SANDOVAL
CARLA J. PETERMAN
LIANE M. RANDOLPH
Commissioners

Attachment A
(Alternative 2 Project Site Map)

(End of Attachment A)

Attachment B
(Mitigation Monitoring, Compliance, and Reporting Program)

PANORAMA ENVIRONMENTAL, INC.

9 MITIGATION MONITORING AND REPORTING PLAN

9.1 OVERVIEW

SDG&E proposes to construct and operate the Salt Creek Substation Project. The proposed project includes construction, operation and maintenance of the following components:

- **Proposed Substation**: Construction and operation of a new 120-MVA, 69/12-kV electric distribution substation in southeast Chula Vista. The proposed substation would include three distribution circuits to tie into the existing distribution network at Hunte Parkway. The substation would also include an underground loop-in of the existing 69-kV transmission line (TL 6910) and fiber optic line located in the SDG&E transmission corridor adjacent to the proposed substation site.
- **TL 6965:** Construction of approximately five miles of aboveground 69-kV power line and approximately 1,000 feet of underground power line between Miguel Substation and the proposed substation. The aboveground power line would be installed on 41 new steel poles and eight existing steel poles.
- **Miguel Substation Modifications:** Addition of a new circuit position at Miguel Substation for TL 6965.

An EIR was prepared to assess the proposed project's environmental effects based on information in SDG&E's PEA, project site visits, responses to CPUC data requests, and supplemental research. The majority of the project's impacts would occur during project construction. SDG&E proposed APMs to reduce potentially significant adverse impacts related to project construction and operation. These APMs are included in this MMRP, and the implementation of APMs would be monitored and documented in the same manner as mitigation measures.

The purpose of this MMRP is to ensure effective implementation of each APM as well as the mitigation measures identified in this Draft EIR and imposed by the CPUC as part of project approval.

The MMRP is presented in Table 9.1-1. Table 9.1.1 is organized first by environmental topic (i.e., Aesthetics, Recreation, etc.) and subsequently by APM or mitigation measure. Table 9.1.1 includes:

- APMs and mitigation measures that SDG&E must implement as part of the project
- Impact statement(s) that require the APM or mitigation measure in order to reduce impacts to less than significant
- Monitoring and reporting requirements
- Effectiveness criteria
- Timing and location of implementation for each measure

The CPUC will use this MMRP as the framework for a MMCRP. The CPUC will create the detailed Mitigation Monitoring and Compliance Reporting Program (MMCRP) to formalize protocols to be followed prior to and during construction by CPUC third-party Environmental Monitors (EMs) and SDG&E staff if the proposed project or project alternative is approved. The MMCRP will include, but will not be limited to, the following topics:

- Agency jurisdiction
- Roles and responsibilities
- Communication
- Compliance verification and reporting
- Project changes

A CPUC-designated EM would carry out all construction field monitoring to ensure full implementation of all measures. In all instances where non-compliance occurs, the CPUC's designated EM would issue a warning to the construction foreman and SDG&E's project manager. Continued non-compliance would be reported to the CPUC's designated project manager. Any decisions to halt work due to non-compliance would be made by the CPUC. The CPUC's designated environmental monitor would keep a record of any incidents of non-compliance with mitigation measures, APMs, or other conditions of project approval. Copies of these documents would be supplied to SDG&E and the CPUC.

The CPUC will finalize the MMCRP in consultation with SDG&E. Drafted language for the minor project ~~modification~~ refinement and dispute resolution protocols are provided below.

9.2 MINOR PROJECT ~~MODIFICATIONS~~ REFINEMENT

The CPUC Project Manager and the CPUC Monitoring Team would ensure that any process to consider minor project ~~modifications~~ refinements that may be necessary due to final engineering or deviations from the procedures identified under the monitoring program are consistent with CEQA requirements. Project ~~modifications~~ refinements cannot proceed if they would require ground-disturbing activities outside the geographic boundary of the project corridor or would create a new or substantially more severe significant impact. A minor project ~~modification~~ refinement should be strictly limited to minor project changes that will not trigger other permit requirements, unless the appropriate agency has approved the change; that does not increase the severity of an impact or create a new impact without appropriate agency approval; and that complies with the intent of the mitigation measure.

A project ~~modification~~ refinement that has the potential for creating significant environmental effects would be evaluated to determine whether supplemental CEQA review is required. Any proposed deviation from the approved project, adopted mitigation measures, APMs, and correction of such deviation, would be reported immediately to the CPUC Project Manager for their review. The CPUC Monitoring Team will review the minor project ~~modification~~ refinement to ensure that all of the information required to review the minor project ~~modification~~ refinement is included, and then forward the request to the CPUC Project Manager for review and concurrence that no additional CEQA evaluation is necessary. The

CPUC Project Manager may request a site visit or may need additional information to verify that additional CEQA evaluation is not needed. Approval by other agencies may also be needed. A minor project ~~modification~~ refinement request, in general, must include the information listed below:

- Detailed description of the location, including maps, photos, and/or other supporting documents;
- How the minor project ~~modification~~ refinement request deviates from a project requirement;
- Biological resources surveys or verification that no biological resources would be significantly impacted;
- Cultural resource surveys or verification that no cultural resources would be significantly impacted; and
- Agency approval (if necessary).

9.3 DISPUTE RESOLUTION

It is expected that the MMRP will reduce or eliminate many potential disputes; however, disputes can occur even after the best preparation.

Issues should be first addressed at the field level informally between the CPUC EMs and SDG&E's monitors at the regular progress meetings. Questions may be raised to the SDG&E Project Environmental Manager or SDG&E Project Construction Manager. Should the issue persist or not be resolved at these levels, the following procedures would be used:

1. Disputes unresolved in the field and complaints (including those from the public) should be directed to the CPUC Project Manager for resolution. The Project Manager will attempt to resolve the dispute informally. Should this informal process fail, the CPUC Project Manager will inform SDG&E prior to initiating Step 2.
2. Should the informal process in the field fail, the CPUC Project Manager may issue a formal letter requiring corrective actions to address the unresolved or persistent deviations from the proposed project or adopted MMRP.
3. If a dispute or complaint regarding implementation or evaluation of the MMCRP or mitigation measures cannot be resolved informally or through a letter request, any affected participant in the dispute or complaint may file a written "notice of dispute" with the CPUC's Executive Director. This notice should be filed in order to resolve the dispute in a timely manner, with copies concurrently served on other affected participants. Within 10 days of receipt, the Executive Director or designee(s) shall meet or confer with the filer and other affected participants to resolve the dispute. The Executive Director shall issue an Executive Resolution describing the decision and serve it to the filer and other affected participants.
4. If one or more of the affected parties is not satisfied with the decision described in the Executive Resolution, such party/ies may appeal the Executive Resolution to the CPUC via a procedure to be specified by the CPUC.

Parties may also seek CPUC review through procedures specified in the CPUC Rules of Practice and Procedure for formal and expedited dispute resolution, although a good faith effort should first be made to use the procedure described in this document.

9.4 COMPLIANCE WITH NCCP AND PERMIT CONDITIONS

Specific biological resource mitigation measure requirements may be satisfied through compliance with the NCCP, amended NCCP, permit conditions, or other authorizations obtained by SDG&E, if these requirements are equally or more effective than the mitigation identified in this EIR. SDG&E shall provide the CPUC with copies of permits or other authorizations including any future amendments to the NCCP, and supporting documentation, to show that compliance with permitting conditions will be equally or more effective as mitigation for impacts to biological resources. The CPUC shall have sole discretion to determine whether compliance with permit conditions will also satisfy the performance standards or requirements identified in mitigation measures in this EIR. If the CPUC determines that compliance with permit conditions will also satisfy the mitigation measures in this EIR, SDG&E shall submit reports to the CPUC documenting compliance consistent with the reporting requirements of the equivalent mitigation measure or measures.

Table 9.1-1 Mitigation Monitoring and Reporting Plan

Impact	APM/Mitigation Measure	Monitoring/Reporting Requirement	Effectiveness Criteria	Timing and Location
		Aesthetics		
Impact Aesthetics-1: Potential to substantially degrade the existing visual character or quality of the site and its surroundings during construction	**APM AES-1: Visual Screening:** The Hunte Parkway and Eastlake Parkway staging yards will have opaque mesh installed along the fence to screen the view of the staging yards from public vantage points, such as roads and residences.	**SDG&E:** Install opaque mesh along the fence at Hunte Parkway and Eastlake Parkway staging yards. **CPUC:** During monitoring, verify measure is implemented as defined.	Views of staging yards from public vantage points are screened.	**Timing:** Before use of Hunte Parkway and Eastlake Parkway staging yards **Location:** Fence of Hunte Parkway and Eastlake Parkway staging yards
Impact Aesthetics-6: Potentially create a new source of substantial light or glare that would adversely affect day or nighttime views in the area	**APM AES-2: Night Lighting:** All lights will be shielded and pointed down to minimize glare onto surrounding properties and natural habitats. Lights will not be left on at night, with the exception of the gate entry light and lights required for nighttime work and/or an emergency.	**SDG&E:** Point lights down and install shields on lights. With the exception of the gate entry light and nighttime work and/or for an emergency, do not leave lights on at night. **CPUC:** During monitoring, verify measure is implemented as defined.	Shielding and pointing lights down reduced glare into surrounding properties and natural habitats.	**Timing:** During construction and operation **Location:** All lights
Impact Aesthetics-6	**APM AES-3: Glare:** Engineered poles (poles requiring foundations) will be dull galvanized to reduce glare compared to typical galvanized coatings. Direct bury poles will either be dull galvanized or weathered steel.	**SDG&E:** Install dull galvanized engineered poles. Install either dull galvanized or weathered steel direct bury poles. **CPUC:** Verify engineered poles are dull galvanized. Verify direct bury poles are either dull galvanized or weathered steel.	Dull galvanized or weathered steel reduce glare from poles.	**Timing:** Prior to pole installation **Location:** All pole locations
Impact Aesthetics-1 **Impact Aesthetics-2:** Potential to substantially degrade the existing visual character or quality of the site and its surroundings during operation and maintenance **Impact Aesthetics-3:** Potential to substantially damage scenic resources, including, but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway or designated scenic roadway during construction **Impact Aesthetics-4:** Potential to substantially damage scenic resources, including, but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway or designated scenic roadway during operation and maintenance **Impact Bio-7**	**Mitigation Measure Aesthetics-1:** SDG&E shall submit a Landscaping and Irrigation Plan to the CPUC for review and approval no less than ~~30~~ 120 days prior to acquisition of landscape materials ~~construction~~. The purpose of the Landscaping and Irrigation Plan is to ensure successful revegetation of the substation slope to partially screen the facility from view within a period of 5 years after construction. The Landscaping and Irrigation Plan shall conform to the species and irrigation approach presented in the Conceptual Landscape Plan (Appendix B of this EIR). The Plan shall be reviewed by a geotechnical engineer for consistency with the slope stabilization approach proposed for the site prior to submittal to the CPUC. The Plan shall not conflict with the slope stabilization approach as described in the geotechnical report prepared for the substation site (Kleinfelder 2008; the report is included in Appendix H). The Landscaping and Irrigation Plan will include: 1. Specimen Name, Location, and Container Size for all Trees, Shrubs and Groundcover, including at a minimum: a. Adequate container size for each tree species to provide visual screening of the substation facility within a period of 5 years 2. Temporary and Permanent Irrigation Line Locations 3. Thickness of topsoil and soil compaction range for selected plant species	**SDG&E:** Submit the Landscaping and Irrigation Plan to CPUC at least 30 days prior to construction. Submit landscape monitoring reports to CPUC throughout the duration of monitoring. **CPUC:** Review and approve Landscaping and Irrigation Plan. Review landscape monitoring reports during monitoring. Verify measures in the Plan are implemented as defined during monitoring.	The Plan contains all necessary information. Measures in the Plan are implemented.	**Timing:** Submit Plan 30 days prior to the start of construction Monitor for at least 5 years and until the success criteria have been met **Location:** All areas where landscaping and irrigation will occur

Impact	APM/Mitigation Measure	Monitoring/Reporting Requirement	Effectiveness Criteria	Timing and Location
Impact Bio-8 **Impact GeologySoils-4** **Impact Hydro-3** **Impact Recreation-3:** Have a substantial adverse effect on the recreational value of existing recreational facilities during construction **Impact Recreation-4:** Have a substantial adverse effect on the recreational value of existing recreational facilities during operation	4. Success Criteria, including at a minimum: a. 80 percent success for all container plantings with a tree canopy height of 12 feet or more b. 85 percent of pre-project vegetative cover for shrub and herbaceous vegetation c. Less than 5 percent invasive weeds 5. Remedial Actions, including at a minimum: a. Replacement of container plantings if the success criteria are not met by year 2 b. Additional seeding if the success criteria for shrub and herbaceous vegetation is not met by year 2 c. Soil treatments, as appropriate d. Extended irrigation for areas not meeting success criteria or change in the frequency and duration of irrigation e. Invasive weed removal by hand, mechanical, or chemical application 6. Monitoring Methods, Location, Frequency, and Reporting including: a. Landscape monitoring reports that document plant mortality and replacement and include photo-documentation of the vegetated cover from a minimum of eight photo locations b. Quarterly monitoring for the first year following construction c. Bi-annual monitoring in the spring and fall for the remainder of the monitoring period d. Monitoring for at least 5 years and until the success criteria have been met The SDG&E Landscaping and Irrigation Plan shall be prepared by a California-licensed landscape architect or a restoration ecologist with experience in southern California ecosystems. The plantings defined in the Landscaping and Irrigation Plan shall be planted on the site within 3 months of the completion of substation construction. SDG&E shall submit the landscape monitoring reports to the CPUC throughout the duration of monitoring. Landscape monitoring reports shall be prepared by a California licensed landscape architect or a botanist.			
Impact Aesthetics-1 **Impact Aesthetics-2** **Impact Aesthetics-3** **Impact Aesthetics-4** **Impact Recreation-3** **Impact Recreation-4**	**Mitigation Measure Aesthetics-2:** SDG&E shall prepare a Facilities Color Treatment Plan describing the application of colors to all new facility buildings, walls and fences at the Salt Creek Substation. The proposed color treatments shall minimize visual intrusion and contrast by blending the facilities with the landscape. Color specifications for the verdura retaining wall and masonry walls will be based on standard color palettes from the providers. The Plan shall be submitted to CPUC for review and approval at least 90 days prior to (a) ordering the first exterior building components to be color treated, or (b) construction of any exterior building component, whichever comes first. The Facilities Color Treatment Plan shall include:	**SDG&E:** Submit the Facilities Color Treatment Plan to CPUC at least 90 days prior to (a) ordering the first exterior building components to be color treated, or (b) construction of any exterior building component, whichever comes first. Refrain from starting treatment until the Facilities Color Treatment Plan is approved. **CPUC:** Review and approve the Facilities Color Treatment Plan. Verify measures in the Plan are implemented as defined during monitoring.	The Plan contains all necessary information. Measures in the Plan are implemented.	**Timing:** Submit Plan at least 90 days prior to (a) ordering the first exterior building components to be color treated, or (b) construction of any exterior building component, whichever comes first Monitor during construction when color treatment is applied **Location:** All facilities that require color treatment

Impact	APM/Mitigation Measure	Monitoring/Reporting Requirement	Effectiveness Criteria	Timing and Location
	• Specification, and 11 x 17 inch color simulations ~~at life-size~~ to scale, of the treatment proposed for use on project structures • List of each major project structure, building, ~~tower and/or pole,~~ and fencing specifying the color(s) and finish proposed for each (colors must be identified by name and by vendor brand or a universal designation) • Two sets of brochures and/or color chips for each proposed color • A detailed schedule for completion of the treatment • A procedure to ensure proper treatment maintenance for the life of the project SDG&E shall not specify to the vendors the treatment of any buildings or structures treated during manufacture or perform the final treatment on any buildings or structures treated onsite during construction until SDG&E receives notification of approval of the Color Treatment Plan by the CPUC.			
Impact Aesthetics-6	**Mitigation Measure Aesthetics-3:** SDG&E shall submit to the CPUC a Surface Treatment Plan describing the structural steel specifications used at the Salt Creek Substation. Steel specifications in the Surface Treatment Plan must reduce the potential for daytime structural glare. The Surface Treatment Plan shall include samples showing at least three (3) samples of post-production dulling agents applied to the steel structural members. Finishes will be durable, factory or manufacturer-applied, of an appropriate color, and non-specular. The Surface Treatment Plan will also include maintenance and inspection protocols. The Surface Treatment Plan shall be submitted to the CPUC for approval at least 90 days prior to (a) ordering the first structures, or (b) construction of the Salt Creek Substation, whichever comes first. The CPUC shall approve the Surface Treatment Plan, or otherwise inform SDG&E what modifications to the Surface Treatment Plan are necessary, within 30 days after the Plan's submittal by SDG&E. SDG&E shall not begin construction of the Salt Creek Substation until the Plan has been approved by the CPUC.	**SDG&E:** Submit the Surface Treatment Plan to CPUC at least 90 days prior to (a) ordering the first structures, or (b) construction of the Salt Creek Substation, whichever comes first. Refrain from implementing the Plan until its approval. **CPUC:** Review and approve the Surface Treatment Plan or provide revisions to SDG&E within 30 days after the Plan's submittal. Verify steel structures used during construction conform to the specifications in the Plan.	The Plan contains all necessary information. Measures in the Plan are implemented.	**Timing:** Submit Plan at least 90 days prior to (a) ordering the first structures, or (b) construction of the Salt Creek Substation, whichever comes first Review or provide revisions to Plan within 30 days after Plan's submittal Materials are installed during construction of Salt Creek Substation **Location:** Salt Creek Substation
Impact Aesthetics-6	**Mitigation Measure Aesthetics-4:** SDG&E will use dulled metal finish transmission structures and non-specular (non-reflective) conductors along TL 6965 to minimize reflectivity and general visibility of the line.	**SDG&E:** Use dulled metal finish transmission structures and non-specular conductors along TL 6965. **CPUC:** Verify transmissions structures have a dulled metal finish and conductors are non-specular along TL 6965.	Reflectivity and visibility of the power line is reduced.	**Timing:** Prior to construction of TL 6965 **Location:** Along TL 6965
Impact Aesthetics-1 **Impact Aesthetics-2**	**Optional Measure Aesthetics-1:** SDG&E should install opaque mesh along the fence of all staging yards, with the exception of the Miguel Substation staging yard, used for the proposed project to screen the view of the staging yards from public vantage points, such as roads.	**SDG&E:** Install opaque mesh along the fence of all staging yards. **CPUC:** During monitoring, verify measure is implemented as defined.	Views of staging yards from public vantage points are screened.	**Timing:** Before use of staging yards **Location:** Fence of staging yards
		Air Quality		
Impact Air-2: Potentially violate any air quality standard or	**APM AIR-1: Dust Control:** All unpaved demolition and construction areas ~~will be wetted as needed~~ shall be wetted	**SDG&E:**	Fugitive dust has been controlled inside	**Timing:**

Impact	APM/Mitigation Measure	Monitoring/Reporting Requirement	Effectiveness Criteria	Timing and Location
contribute substantially to an existing or projected air quality violation **Impact Air-3:** Potentially result in a cumulative considerable net increase of any criteria pollutant for which the project region is in nonattainment under an applicable federal or state ambient air quality standard **Impact Bio-1** **Impact Bio-2** **Impact Bio-3** **Impact Bio-4** **Impact Bio-5**	at least three times daily during construction, and temporary dust covers shall be used to reduce fugitive dust emissions and meet San Diego Air Pollution Control District (SDAPCD) Rule 55 requirements. SDG&E or its contractor shall keep the construction area sufficiently dampened to control dust caused to construction and hauling and at all times provide reasonable dust control of areas subject to windblown erosion. All ~~earthen material transported off site will~~ loads shall be secured by covering or use of at least 2 feet of freeboard to avoid carry-over. All materials transported off-site shall be either sufficiently watered or securely covered. All earth-moving or excavation activities ~~that create visible dust will~~ shall be discontinued ~~to limit~~during period of high winds (i.e., greater than 25 mph) to prevent excessive amount of fugitive dust ~~from leaving the project site~~ generation.	Wet all unpaved demolition and construction areas as needed to meet SDAPCD Rule 55 requirements. Secure all earthen material transported off site. Discontinue activities that create visible dust. **CPUC:** Verify measure is implemented as defined during monitoring.	and outside of the project area.	During construction. **Location:** Applies to all unpaved demolition and construction areas, stockpiles of earthen materials, and all areas where earth-moving or excavation activities occur.
Energy Conservation (See Chapter 7: CEQA Statutory Sections)	**APM AIR-2: Vehicle and Equipment Exhaust:** SDG&E or its contractors will maintain and operate construction equipment to minimize exhaust emissions. All equipment will be properly tuned and maintained in accordance with manufacturer specifications. During construction, trucks and vehicles in loading and unloading queues will have their engines turned off after 5 minutes when not in use. All areas where construction vehicles are parked, staged, or operating will be visibly posted with signs stating, "No idling in excess of 5 minutes." Construction activities will be phased and scheduled to avoid emissions peaks, and equipment use will be curtailed during second-stage smog alerts.	**SDG&E:** Properly tune and maintain equipment in accordance with manufacturer specifications. Turn off trucks and vehicles that idle for longer than 5 minutes. Post signs stating, "No idling in excess of 5 minutes." Phase and schedule construction activities to avoid emissions peaks and curtail equipment use during second-stage smog alerts. **CPUC:** Verify measure is implemented as defined during monitoring.	Equipment is properly tuned and maintained. Trucks and vehicles do not idle for longer than 5 minutes and signs are posted. Construction activities avoid emissions peaks and are minimized during second-stage smog alerts.	**Timing:** Throughout construction **Location:** All areas where construction vehicles are parked, staged, or operating
Impact Air-1: Conflict with or obstruct implementation of the applicable air quality plans **Impact Hazards-3**	**APM AIR-3: VOC Emissions:** Coatings, sealants, adhesives, solvents, asphalt, and architectural coatings will be in conformance with CARB's Suggested Control Measure for Architectural Coatings, and with SDAPCD's VOC Rules 61, 66.1, 67.0, and 67.17.	**SDG&E:** Conform to CARB's Suggested Control Measure for Architectural Coatings, and to SDAPCD's VOC Rules 61, 66.1, 67.0, and 67.17. **CPUC:** Verify all coatings, sealants, adhesives, solvents, asphalt, and architectural coatings are in conformance.	All coatings, sealants, adhesives, solvents, asphalt, and architectural coatings are in conformance.	**Timing:** Prior to application of coatings, sealants, adhesives, solvents, asphalt, and architectural coatings **Location:** All locations where coatings, sealants, adhesives, solvents, asphalt, and architectural coatings will be used
Impact Air-2	**Mitigation Measure Air-1:** SDG&E shall submit a Dust Control Management Plan to the CPUC for review and approval no less than 30 days prior to construction. The Dust Control Management Plan shall contain measures that provide for conformance to SDAPCD Rule 55 requirements: 1. No person shall engage in construction or demolition activity in a manner that discharges visible dust emissions into the atmosphere beyond the property line for a period or periods aggregating more than 3 minutes in any 60-minute period; and 2. Visible roadway dust as a result of active operations, spillage from transport trucks, erosion, or track-out/carry-out shall: i. Be minimized by the use of any of the following or	**SDG&E:** Submit the Dust Control Management Plan to CPUC at least 30 days prior to construction. **CPUC:** Review and approve the Dust Control Management Plan. Verify measures in the Plan conform to SDAPCD Rule 55 requirements. Verify measures in the Plan are implemented as defined during monitoring.	The Plan contains all necessary information. Measures in the Plan are implemented.	**Timing:** Submit Plan at least 30 days prior to construction Monitor throughout construction **Location:** All staging and work areas

Impact	APM/Mitigation Measure	Monitoring/Reporting Requirement	Effectiveness Criteria	Timing and Location
	equally effective track-out/carry-out and erosion control measures that apply to the project or operation: track-out gates or gravel beds at each egress point, wheel-washing at each egress during muddy conditions, soil binders, chemical soil stabilizers, geotextiles, mulching, or seeding; and for outbound transport trucks: using secured tarps or cargo covering, watering, or treating of transported material; and ii. Be removed at the conclusion of each work day when active operations crease, or every 24 hours for continuous operations. If a street sweeper is used to remove any track-out/carry out, only PM_{10}-efficient street sweepers certified to meet the most current South Coast Air Quality Management District Rule 1186 requirements shall be used. The use of blowers for removal of track-out/carry-out is prohibited under any circumstances. Measures to comply with visible dust emissions restrictions could include: • Watering or applying soil stabilizers to areas with loose dust • Ceasing earth moving activities when wind speed exceeds 20 miles per hour • Covering soil stockpiles			
	Biological Resources			
Impact Bio-4: Potential for substantial adverse effect from project construction, either directly or through habitat modifications, on any avian species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS	**APM BIO-1: Burrowing Owl:** SDG&E will coordinate with CDFW to implement the avoidance and minimization measures, as needed and as appropriate, to avoid impacts to western burrowing owl. If western burrowing owl occupancy on site is confirmed during pre-construction take avoidance surveys, SDG&E will implement the CDFW-approved "Burrowing Owl Monitoring and Mitigation Plan" in coordination with CDFW.	**SDG&E:** Coordinate with CDFW to implement measures to avoid impacts to western burrowing owl. Implement the Burrowing Owl Monitoring and Mitigation Plan if burrowing owl is confirmed on site. **CPUC:** During monitoring, verify implementation of avoidance measures. If necessary, verify measures in the Burrowing Owl Monitoring and Mitigation Plan are implemented during monitoring.	Impacts to western burrowing owl are avoided. Measures in the Plan are implemented, if necessary.	**Timing:** Coordinate with CDFW and monitor throughout construction **Location:** Entire project area
Impact Bio-1: Potential for substantial adverse effect from project construction, either directly or through habitat modifications, on any plant species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS **Impact Bio-3:** Potential for substantial adverse effect from project construction, either directly or through habitat modifications, on any reptile species identified as a	**APM BIO-2: SDG&E Subregional Natural Communities Conservation Plan:** The Proposed Project will avoid and minimize impacts to biological resources through implementation of the SDG&E Subregional NCCP, which is a comprehensive conservation-based approach that provides more effective species protection than project-by-project conservation planning would achieve. The SDG&E Subregional NCCP establishes a mechanism for addressing biological resource impacts incidental to the development, maintenance, and repair of SDG&E facilities within the SDG&E Subregional NCCP coverage area. The Proposed Project is located within the SDG&E Subregional NCCP coverage area. The SDG&E Subregional NCCP includes a Federal ESA Section 10(A) permit and a California ESA Section 2081 Memorandum of Understanding (for incidental take) with an Implementation Agreement with USFWS and CDFW, respectively, for the management and conservation of multiple species and their	**SDG&E:** Implement the SDG&E Subregional NCCP, including all operating conditions. Perform a verification survey of the proposed project disturbance areas. Biological monitors will be present as needed to implement measures in the Subregional NCCP and to survey any additional impact areas as needed. Biological monitors will perform a survey of the entire project area after construction is complete and determine actual impacts. Prepare a Post-Construction Report. Submit the NCCP Annual Report, which will contain all findings in the Post-Construction Report, to CDFW and USFWS. Provide the CPUC with copies of permits or other authorizations including any future amendments to the NCCP,	Impacts to sensitive biological resources are avoided or mitigated appropriately and in accordance with SDG&E's Subregional NCCP. The Post-Construction Report and NCCP Annual Report accurately reflect impacts and corresponding compensatory mitigation.	**Timing:** Perform verification survey prior to start of construction Biological monitors present throughout construction Perform completion survey of entire project area after construction is complete Submit Post-Construction Report and NCCP Annual Report after construction is complete **Location:** Entire project area

Impact	APM/Mitigation Measure	Monitoring/Reporting Requirement	Effectiveness Criteria	Timing and Location
candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS **Impact Bio-4** **Impact Bio-5:** Potential to have a substantial adverse effect from project construction, either directly or through habitat modifications, on any mammalian species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS **Impact Bio 6:** Potential to have a substantial adverse effect from project operation and maintenance, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS **Impact Bio-7:** Potential to cause a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by CDFW or USFWS	associated habitats, as established according to the federal and state ESAs and California's NCCP Act. The NCCP's Implementing Agreement confirms that the mitigation, compensation, and enhancement obligations contained in the Agreement and SDG&E Subregional NCCP meet all relevant standards and requirements of the California ESA, the federal ESA, the NCCP Act, and the Native Plant Protection Act with regard to SDG&E's activities in the Subregional NCCP Plan Area. Pursuant to the SDG&E Subregional NCCP, SDG&E conducted pre-construction studies for all activities occurring off of existing access roads in natural areas. An independent biological consulting firm surveyed all Proposed Project impact areas and prepared a Pre-Activity Study Report (PSR) outlining all anticipated impacts related to the Proposed Project. The Proposed Project will include monitoring, as recommended by the PSR and outlined in the SDG&E Subregional NCCP, as well as other avoidance and minimization measures outlined in the NCCP's Operational Protocols. Prior to the commencement of construction, a verification survey of the Proposed Project disturbance areas will be conducted, as required by the SDG&E Subregional NCCP. Biological monitors will be present as needed during construction to ensure implementation of the avoidance and minimization measures set forth in the NCCP. If the previously delineated work areas must be expanded or modified during construction, the monitors will survey the additional impact area to determine if any sensitive resources will be impacted by the proposed activities, to identify avoidance and minimization measures, and to document any additional impacts. Any additional impacts would be included in a Post-Construction Report (PCR) to calculate the appropriate mitigation, which generally includes site enhancement or credit withdrawal from SDG&E mitigation bank credits. Alternatively, SDG&E may utilize the 11.0959 acres of purchased conveyance land credits in the Otay Ranch Preserve in lieu of drawing down additional credits from SDG&E's NCCP credits. When construction is complete, the biological monitor will conduct a survey of the entire Proposed Project area to determine actual impacts from construction. The PCR will determine how much site enhancement and credit withdrawal from the SDG&E mitigation bank would be required to address impacts from activities related to the Proposed Project. These impact and mitigation credit calculations will be submitted to USFWS and CDFW as part of the NCCP Annual Report, pursuant to requirements of the NCCP and the NCCP Implementing Agreement. Specific operating restrictions that are incorporated into the Proposed Project to comply with the SDG&E Subregional NCCP include the following: • Vehicles will be kept on access roads and limited to 15 miles per hour (Section 7.1.1, 1.). • No wildlife, including rattlesnakes, may be harmed, except	and supporting documentation, to show that compliance with permitting conditions will be equally or more effective as mitigation for impacts to biological resources, if applicable. **CPUC:** Verify measures in the SDG&E Subregional NCCP are implemented during monitoring. Verify biological monitoring is performed as defined in the measure during monitoring. Verify reports are prepared and the NCCP Annual Report is submitted to CDFW and USFWS. The CPUC will determine whether compliance with permit conditions will also satisfy the performance standards or requirements identified in mitigation measures in this EIR; SDG&E will submit adequate documentation to CPUC to verify compliance.		

Impact	APM/Mitigation Measure	Monitoring/Reporting Requirement	Effectiveness Criteria	Timing and Location
	to protect life and limb (7.1.1, 2.). • Feeding of wildlife is not allowed (Section 7.1.1, 4.). • No pets are allowed within the ROW (Section 7.1.1, 5.). • Plant or wildlife species may not be collected for pets or any other reason. (Section 7.1.1, 7). • Littering is not allowed, and no food or waste will be left on the ROW or adjacent properties (Section 7.1.1, 8.). • Measures to prevent or minimize wild fires will be implemented, including exercising care when driving and not parking vehicles where catalytic converters can ignite dry vegetation (Section 7.1.1, 9.). • Field crews shall refer all environmental issues, including wildlife relocation, dead, or sick wildlife, or questions regarding environmental impacts to the Environmental Surveyor. Biologists or experts in wildlife handling may be necessary to assist with wildlife relocations (Section 7.1.1, 10.). • All SDG&E personnel will participate in an environmental training program conducted by SDG&E, with annual updates (Section 7.1.2, 11.). • The Environmental Surveyor shall conduct preactivity studies for all activities occurring in natural areas, and will complete a preactivity study form including recommendations for review by a biologist and construction monitoring, if appropriate. The form will be provided to CDFW and USFWS but does not require their approval (Section 7.1.3, 13.). • The Environmental Surveyor shall flag boundaries of habitats to be avoided and, if necessary, the construction work boundaries (Section 7.1.3, 14.). • The Environmental Surveyor must approve of activity prior to working in sensitive areas where disturbance to habitat may be unavoidable (Section 7.1.4, 25.). • In the event SDG&E identifies a covered species (listed as threatened or endangered by the federal or state) of plant within the temporary work area (10 foot radius) surrounding a power pole, SDG&E would notify the USFWS (for Federal ESA listed plants) and CDFW (for California ESA listed plants) (Section 7.1.4, 28.). • The Environmental Surveyor shall conduct monitoring as recommended in the preactivity study form (Section 7.1.4, 35.). • Supplies, equipment, or construction excavations where wildlife could hide (e.g., pipes, culverts, pole holes, trenches) shall be inspected prior to moving or working on/in them (Section 7.1.4, 37, and 38.). • Fugitive dust will be controlled by regular watering and speed limits (Section 7.1.4, 39.). • During the nesting season, the presence or absence of nesting species (including raptors) shall be determined by a biologist who would recommend appropriate avoidance and minimization measures (Section 7.1.6, 50). • Maintenance or construction vehicle access through willow			

Impact	APM/Mitigation Measure	Monitoring/Reporting Requirement	Effectiveness Criteria	Timing and Location
	creeks or streams is allowed. However no filling for access purposes in waterways is allowed (Section 7.1.7, 52). • Staging/storage areas for equipment and materials shall be located outside of riparian areas (Section 7.1.7, 53.).			
Impact Bio-5	**APM BIO-3: Cover Excavations:** SDG&E will inspect and cover all excavated pole holes at the end of each day and when not in use, using suitable materials to prevent human and animal entrapment (e.g., plywood boards, plastic covering, gravel, and/or sand bags).	**SDG&E:** Inspect and cover all excavated pole holes as defined in the measure. **CPUC:** Verify measure is implemented as defined during monitoring.	Excavated pole holes are covered with appropriate materials and avoid human and animal entrapment.	**Timing:** Throughout construction of TL 6965 **Location:** All excavated pole holes
Impact Bio-1 **Impact Bio-2:** Potential for substantial adverse effect from project construction, either directly or through habitat modifications, on any invertebrate species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS **Impact Bio-3** **Impact Bio-4** **Impact Bio-5** **Impact Bio-7** **Impact Aesthetics-2**	**APM BIO-4: Restoring Temporarily Disturbed Areas:** SDG&E will restore all areas that are temporarily disturbed by project activities (e.g., stringing sites, structure removal sites, and staging areas) to approximate preconstruction conditions following completion of construction, as needed and appropriate. Disturbed areas will be revegetated where appropriate (to re-establish a natural-appearing landscape and reduce potential visual contrast with the surrounding landscape). Revegetation in certain areas will not be possible due to vegetation management requirements related to fire safety. Restoration could include reseeding, planting replacement vegetation, or replacement of structures (such as fences), as appropriate. In addition, all construction materials and debris will be removed from the project area and recycled or properly disposed of off site. SDG&E will conduct a final survey after restoration to ensure that clean-up activities are successfully completed as required.	**SDG&E:** Restore all areas temporarily disturbed by the project to approximately preconstruction conditions. Recycle or dispose of all construction materials and debris from the project area. Conduct a final survey after restoration. **CPUC:** Verify all restoration, revegetation, and clean-up activities are successfully completed.	All temporarily disturbed areas are restored to approximately preconstruction conditions. All construction materials and debris are removed from the project site and disposed of properly.	**Timing:** Restore areas and remove materials after construction is complete Survey after restoration is complete **Location:** All areas temporarily disturbed by the project
Impact Bio-1 **Impact Bio-2** **Impact Bio-5** **Impact Bio-6:** Potential to have a substantial adverse effect from project operation and maintenance, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS	**Mitigation Measure Biology-1a:** The following operational protocols shall be adhered to by SDG&E. *General Behavior for all Field Personnel* 1. Vehicles must be kept on access roads. A 15 mile-per-hour speed limit shall be observed on dirt access to allow for reptile species to disperse. Vehicles must be turned around in established or designated areas only. 2. No wildlife, including rattlesnakes, may be harmed, except to protect life and limb. 3. Firearms shall be prohibited on the right-of-way except for those used by security personnel. 4. Feeding of wildlife is not allowed. 5. SDG&E personnel are not allowed to bring pets on the rights-of-way in order to minimize harassment or killing of wildlife and to prevent the introduction of destructive domestic animal diseases to native wildlife populations. 6. Plant or wildlife species may not be collected for pets or any other reason. 7. Littering is not allowed. SDG&E shall not deposit or leave any food or waste on the rights-of-way or adjacent property. 8. Wild Fires shall be prevented or minimized by exercising care when driving and by not parking	**SDG&E:** Follow general behavior protocols for all field personnel. Conduct environmental training for staff ~~at least 30 days~~ prior to ~~the start of construction~~personnel conducting work on the project, and submit a copy of the training materials to the CPUC. Pre-activity survey will be conducted no earlier than 30 days prior to surface disturbance. Follow protocols for maintenance, construction of access roads, survey work, and emergency repairs. ~~SDG&E will provide compensatory mitigation for temporary and permanent impacts to vegetation communities and provide CPUC with evidence of available habitat mitigation lands for project temporary and permanent impacts to vegetation communities and a habitat enhancement plan at least 30 days prior to the start of construction.~~ ~~Monitoring compensatory mitigation lands for 5 years and until success criteria are met~~ Provide the CPUC with copies of permits or other authorizations including any future amendments to the NCCP, and supporting documentation, to show that compliance with permitting conditions will be equally or more effective as mitigation for impacts to biological resources, if applicable.	SDG&E follows protocols in this mitigation measure Environmental training prior to construction. Pre-activity surveys. ~~Compensatory mitigation~~	**Timing:** Staff environmental training ~~30 days~~ prior to construction Pre-activity surveys 30 days prior to surface disturbance ~~Submit evidence of available habitat mitigation lands and habitat enhancement plan at least 30 days prior to construction~~ ~~Monitoring for compensatory mitigation for 5 years and until success criteria are met~~ **Location:** All project work areas ~~and off-site for compensatory mitigation~~

Impact	APM/Mitigation Measure	Monitoring/Reporting Requirement	Effectiveness Criteria	Timing and Location
	vehicles where catalytic converters can ignite dry vegetation. In times of high fire hazard, it may be necessary for trucks to carry water and shovels, or fire extinguishers in the field. The use of shields, protective mats, or other fire prevention methods shall be used during grinding and welding to prevent or minimize the potential for fire. Care should be exhibited when smoking in natural habitats. 9. Field crews shall refer environmental issues including wildlife relocation, dead or sick wildlife, hazardous waste, or questions about avoiding environmental impact to the Qualified Biologist. Additional biologists or experts in wildlife handling may need to be brought in by the Qualified Biologist for assistance with wildlife relocations. *Qualified Biologist* 10. 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 for the project. Monitors shall be responsible for pre-activity surveys, work area delineations (i.e., staking, flagging, etc.) to comply with the mitigation measures in this EIR including on-site monitoring and documentation of violations and compliance. *Training* 11. An environmental training program shall be developed and presented to all crew members prior to the beginning of all project construction. The training shall describe special-status plant and wildlife species and sensitive habitats that could occur within project areas, protection afforded to these species and avoidance and minimization measures required to avoid and/or minimize impacts from the project. Penalties for violations of environmental laws shall also be incorporated into the training session. Each crewmember shall be provided with an informational training handout and a decal to indicate that he/she has attended the training. The roles and responsibilities of the CPUC-approved biologists and other environmental representatives shall be identified in the Mitigation Monitoring, Compliance, and Reporting Program (MMCRP) and discussed during the training. All new construction personnel shall receive this training before beginning work on this project. A copy of the training and training materials shall	**CPUC:** Verify that SDG&E follows general behavior protocol for all field personnel. Verify environmental training. Verify that pre-activity surveys are conducted. Verify that SDG&E follows protocols for maintenance, construction of access roads, survey work, and emergency repairs. ~~Verify evidence of available habitat mitigation lands at least 30 days prior to the start of construction.~~ ~~Review and approve habitat enhancement plan at least 30 days prior to the start of construction~~ ~~Verify monitoring of compensatory mitigation.~~ The CPUC will determine whether compliance with permit conditions will also satisfy the performance standards or requirements identified in mitigation measures in this EIR; SDG&E will submit adequate documentation to CPUC to verify compliance.		

Impact	APM/Mitigation Measure	Monitoring/Reporting Requirement	Effectiveness Criteria	Timing and Location
	be provided to CPUC for review and approval at least 30 days prior to the start of construction. Training logs and sign-in sheets shall be provided to CPUC on a monthly basis. As needed, in-field training shall be provided to new on-site construction personnel by the environmental compliance supervisor or a qualified individual who shall be identified by the Qualified Biologist, or initial training shall be recorded and replayed for new personnel. *Pre-activity Surveys* 12. The Qualified Biologist shall conduct a pre-activity survey for all activities occurring off of access roads in natural areas. The pre-activity survey will be conducted no earlier than 30 days prior to surface disturbance. The results of the pre-activity survey will be documented by the Qualified Biologist in a pre-activity survey report. The pre-activity survey report will be submitted to the CPUC for review and approval and the results shall be submitted to CDFW and USFWS as required by any other regulatory permits or approvals. The pre-activity study report will include the following: • Type, location, and size of project • Date, time, weather, surrounding land uses • Evaluation of type and quality of habitat • Work description and methods which will be used to avoid or minimize ground disturbance, including biological monitoring during construction • Anticipated impacts and proposed mitigation • Map of location of work area In those situations where the Qualified Biologist cannot make a definitive species identification, the Qualified Biologist shall make a determination based on the available evidence and professional expertise 13. In order to ensure that habitats are not inadvertently impacted, the Qualified Biologist shall determine the extent of habitat and flag boundaries of habitat which must be avoided. When necessary, the Qualified Biologist should also demark appropriate equipment laydown areas, vehicle turn around areas, and pads for placement of large construction equipment such as cranes, bucket trucks, augers, etc. When appropriate, the Qualified Biologist shall make office and/or field presentations to field staff to review and become familiar with natural resources to be protected on a project specific			

Impact	APM/Mitigation Measure	Monitoring/Reporting Requirement	Effectiveness Criteria	Timing and Location
	basis. 14. SDG&E will maintain a library of rare plant locations known to SDG&E occurring within the project area. "Known" means a verified population, either extant or documented using record data. Information on known sites may come from a variety of record data sources including local agency Habitat Conservation Plans, pre-activity surveys, or biological surveys conducted for environmental compliance on a project site (e.g. initial study), but there is no requirement for development of original biological data. Plant inventories shall be consulted as part of pre-activity survey procedures. *Maintenance, Repair, and Construction of Facilities* 15. Maintenance, repair and construction activities shall be designed and implemented to minimize new disturbance, erosion on manufactured and other slopes, and off-site degradation from accelerated sedimentation, and to reduce maintenance and repair costs. 16. Routine maintenance of all Facilities includes visual inspections on a regular basis, conducted from vehicles driven on the access roads where possible. If it is necessary to inspect areas which cannot be seen from the roads, the inspection shall be done on foot, or from the air. 17. Erosion will be minimized on access roads and other locations primarily with water bars. The water bars are mounds of soil shaped to direct flow and prevent erosion. 18. Hydrologic impact will be minimized through the use of state-of-the-art technical design and construction techniques to minimize ponding, eliminate flood hazards, and avoid erosion and siltation into any creeks, streams, rivers, or bodies of water by us of Best Management Practices. 19. When siting new facilities, every effort will be made to cross the wetland habitat perpendicular to the watercourse, spanning the watercourse to minimize the amount of disturbance to riparian area. 20. During repair or maintenance of facilities in a streambed, water may be temporarily diverted as long as the natural drainage patterns are restored after disturbance to minimize the impact of the disturbances and help to reestablish or enhance the native habitat. Erosion control during construction in a streambed in the form of intermittent check dams and culverts should also be considered to prevent alteration to natural drainage pattern and prevent siltation. 21. Impact to wetlands shall be minimized by avoiding pushing soil or brush into washes or			

Impact	APM/Mitigation Measure	Monitoring/Reporting Requirement	Effectiveness Criteria	Timing and Location
	ravines. 22. During work on facilities, all trucks, tools, and equipment should be kept on existing access roads or cleared areas, to the extent possible. 23. Qualified Biologist must approve of an activity prior to working in any sensitive area where disturbance to habitat may be unavoidable. 24. Insulator washing is allowed from access roads if other applicable protocols are followed 25. Brush clearing around facilities for fire protection shall not be conducted from March through August without prior approval by the Qualified Biologist. The Qualified Biologist will make sure that the habitat contains no active nests, burrows, or dens prior to clearing. In the event SDG&E identifies a special-status plant within a 10-foot radius around power poles, which is the area required to be cleared for fire protection purposes, SDG&E shall notify USFWS (for ESA listed plants), and CDFW (for CESA listed plants), in writing, of the plant's identity and location and of the proposed Activity, which will result in a Take of such plant. Notification will occur ten (10) working days prior to such Activity, during which time USFWS or CDFW may remove such plant(s). If neither USFWS nor CDFW have removed such plant(s) with the ten (10) working days following the notice, SDG&E may proceed to complete its fire clearing and cause a Take of such plant(s) consistent with SDG&E's take coverage for the ESA or CESA listed plants. When fire clearing is necessary in instances other than around power poles, and the potential for impacts to special-status species exist, SDG&E will follow the pre-activity study and notification procedures in number 12, above. 26. Wire stringing is allowed year round in sensitive habitats if conductor is not allowed to drag on ground or in brush and vehicles remain on access roads. 27. Maintenance of cut and fill slopes shall consist primarily of erosion repair. In situations where revegetation would improve the success of erosion control, planting or seeding with native hydroseed mix may be done on slopes. 28. Spoils created during maintenance operations shall be disposed of only on previously disturbed areas designated by the Qualified Biologist or used immediately to fill eroded areas. Cleared vegetation shall be hauled off the rights-of-way to a permitted disposal location. 29. The Qualified Biologist should be contacted to perform a pre-activity survey when trimming is planned in environmentally sensitive areas. Whenever possible, trees will be scheduled for trimming in the non-breeding season.			

Impact	APM/Mitigation Measure	Monitoring/Reporting Requirement	Effectiveness Criteria	Timing and Location
	30. If any previously unidentified dens, burrows, or plants are located on any project site after the pre-activity survey, the Qualified Biologist shall be contacted. Qualified Biologist will determine how to best avoid or minimize impacting the resource by considering such methods as project or work plan redevelopment, equipment placement or construction method modification, seasonal/time of day limitations, etc. The Qualified Biologist shall report the dens, burrows, or plants to the CPUC and describe the method for avoidance and minimization of the resource consistent with the APMs and mitigation measures in this EIR. 31. The Qualified Biologist shall conduct monitoring as recommended in the pre-activity survey report. At completion of work, the Qualified Biologist shall check to verify compliance; including observing that flagged area have been avoided and that reclamation has been properly implemented. Also at completion of work, the Qualified Biologist is responsible for removing all habitat flagging from the construction site. 32. The Qualified Biologist shall conduct checks on mowing procedures, to ensure that mowing is limited to a 12-foot wide area on straight portions of the road (slightly wider on radius turns), and that the mowing height is no less than 4 inches. 33. Supplies or equipment where wildlife could hide (e.g., pipes, culverts, pole holes) shall be inspected prior to moving or working on them to reduce the potential for injury to wildlife. Supplies or equipment that cannot be inspected or from which animals could not be removed shall be capped or otherwise covered at the end of each work day. Old piping or other supplies that have been left open, shall not be capped until inspected and any species found in it allowed to escape. Ramping shall be provided in open trenches when necessary. If an animal is found entrapped in supplies or equipment, such as a pipe section, the supplies or equipment shall be avoided and the animal(s) left to leave on its own accord, except as otherwise authorized by CDFW. 34. All steep-walled trenches or excavations used during construction shall be inspected twice daily (early morning and evening) to protect against wildlife entrapment. If wildlife are located in the trench or excavation, the Qualified Biologist shall be called immediately to remove them if they cannot escape unimpeded. 35. Large amounts of fugitive dust could interfere with photosynthesis. Fugitive dust created during clearing, grading, earth-moving, excavation or			

Impact	APM/Mitigation Measure	Monitoring/Reporting Requirement	Effectiveness Criteria	Timing and Location
	other construction activities will be controlled by regular watering. At all times, fugitive dust emissions will be controlled by limiting on-site vehicle speed to 15 miles per hour. 36. Before using pesticides in areas where burrowing owls may be found, a pre-activity survey will be conducted. *Maintenance of access roads shall consist of:* 37. Repair erosion by grading, addition of fill, and compacting. In each case of repair, the total area of disturbance shall be minimized by careful access and use of appropriately sized equipment. Repairs shall be done after pre-activity surveys conducted by the Qualified Biologist and in accordance with the recommendations regarding construction monitoring and relevant protocols. Consideration should be given to source of erosion problem, when source is within SDG&E control. 38. Vegetation control through grading should be used only where the vegetation obscured the inspection of facilities, access may be entirely lost or the threat of Facility failure or fire hazard exists. The graded access road area should not exceed 12-feet-wide on straight portions (radius turns may be slightly wider). 39. Mowing habitat can be an effective method for protecting the vegetative understory while at the same time creating access to a work area. Mowing should be used when permanent access is not required since, with time, total revegetation is expected. If mowing is in response to a permanent access need, but the alternative of grading is undesirable because of downstream siltation potential, it should be recognized that periodic mowing will be necessary to maintain permanent access. 40. Maintenance work on access roads should not expand the existing road bed. 41. Material for filling in road ruts should never be obtained from the sides of the road, which contain habitat, without approval from Qualified Biologist. *Construction of new access roads shall comply with the following:* 42. SDG&E access roads will be designed and constructed according to the SDG&E *Guide for Encroachment on Transmission Rights-of-Way (4/91)*. 43. Access roads will be made available to managers of the regional preserve system subject to coordination with SDG&E. 44. New access roads shall be designed to be placed in previously disturbed areas and areas which require the least amount of grading in sensitive areas during construction whenever			

Impact	APM/Mitigation Measure	Monitoring/Reporting Requirement	Effectiveness Criteria	Timing and Location
	possible. Preference shall be given to the use of stub roads rather than lining facilities tangentially. 45. SDG&E will consider providing access control on access roads leading into the regional preserve system where such control provides benefit to sensitive resources. 46. New access road construction is allowed year round. Every effort shall be made to avoid constructing roads during the nesting season. During the nesting season, the presence or absence of nesting species shall be determined by a biologist and appropriate avoidance and minimization recommendations followed. *Construction and Maintenance of Access Roads through Stream Beds* 47. Construction of new access roads though streambeds requires a Streambed Alteration Agreement from CDFW and/or consultation with the Army Corps of Engineers. 48. Maintenance or construction vehicle access through shallow creeks or streams is allowed. However, no filing for access purposes in waterways is allowed without the installation of appropriately sized culverts. The use of geotextile matting should be considered when it would protect wetland species. 49. Staging/storage area for equipment and materials shall be located outside of riparian area. *Survey Work* 50. Brush clearing for foot path or line-of-sight cutting is not allowed from March through August in sensitive habitats without prior approval from the Qualified Biologist, who will ensure the brush clearing activity, does not adversely affect a sensitive species. 51. SDG&E survey personnel must keep vehicles on existing access roads. No clearing of brush for panel point placement is allowed from March through August without prior approval from the Qualified Biologist. 52. Hiking off roads or paths for survey data collection is allowed year round so long as other protocols are met. *Emergency Repairs* 53. During a system emergency, unnecessary carelessness which results in environmental damage is prohibited. 54. Emergency repair of facilities is required in situations which potentially or immediately threaten the integrity of the SDG&E system, such as pipe leaks or downed lines, slumps, slides, major subsidence, etc. During emergency repairs this mitigation measure shall continue to be followed to fullest extent possible.			

Impact	APM/Mitigation Measure	Monitoring/Reporting Requirement	Effectiveness Criteria	Timing and Location
	55. Once the emergency has stabilized, any unavoidable environmental damage will be reported to the Qualified Biologist by the foreman. The Qualified Biologist will develop a mitigation plan and ensure its implementation is consistent with this mitigation measure.			
Impact Bio-1 **Impact Bio-7**	**Mitigation Measure Biology-1b:** *Compensatory Mitigation and Habitat Enhancement Measures* SDG&E will provide compensatory mitigation for temporary and permanent impacts to vegetation communities caused by the proposed project. SDG&E shall follow the guidelines set in Sections 7.2 and 7.4 of the NCCP dated 1995. SDG&E shall provide CPUC with evidence of available habitat mitigation lands for project temporary and permanent impacts to vegetation communities at least 30 days prior to the start of construction. If SDG&E proposes to conduct on-site habitat enhancement activities as defined by the NCCP Habitat Enhancement in lieu of preservation of habitats within a mitigation bank or withdrawal of mitigation credits from the existing SDG&E Mitigation Bank, SDG&E shall submit a habitat enhancement plan to CPUC at least 30 days prior to the start of construction for CPUC review and approval. At a minimum, the habitat enhancement plan must demonstrate the enhancement of vegetation communities impacted by the project, define the methods used to enhance the habitat, and include monitoring for at least 3~~5~~ years and until success criteria are met. Success criteria for habitat enhancement ~~will include improving degraded habitats at a minimum of a 2:1 ratio for vegetation communities impacted by the project~~ including mitigation ratios will be as defined by the NCCP Enhancement Program. Permanent impacts shall be mitigated at a 2:1 ratio for all the impacts inside of a preserve and a 1:1 ratio for all the impacts outside of a preserve.	**SDG&E:** SDG&E will provide compensatory mitigation for temporary and permanent impacts to vegetation communities and provide CPUC with evidence of available habitat mitigation lands for project temporary and permanent impacts to vegetation communities and a habitat enhancement plan at least 30 days prior to the start of construction. Monitoring compensatory mitigation lands for ~~5~~3 years and until success criteria are met Provide the CPUC with copies of permits or other authorizations including any future amendments to the NCCP, and supporting documentation, to show that compliance with permitting conditions will be equally or more effective as mitigation for impacts to biological resources, if applicable. **CPUC:** Verify evidence of available habitat mitigation lands at least 30 days prior to the start of construction. Review and approve habitat enhancement plan at least 30 days prior to the start of construction Verify monitoring of compensatory mitigation. The CPUC will determine whether compliance with permit conditions will also satisfy the performance standards or requirements identified in mitigation measures in this EIR; SDG&E will submit adequate documentation to CPUC to verify compliance.	Compensatory mitigation	**Timing:** Submit evidence of available habitat mitigation lands and habitat enhancement plan at least 30 days prior to construction Monitoring for compensatory mitigation for ~~5~~3 years and until success criteria are met **Location:** All project work areas and off-site for compensatory mitigation
Impact Bio-1 **Impact Bio-2**	**Mitigation Measure Biology-2:** Impacts to special-status plant species shall be avoided to the extent feasible. Where impacts to special-status plant species are unavoidable, the impact shall be quantified and compensated through off-site land preservation and/or plant salvage and relocation. Where off-site land preservation is biologically preferred, the land shall contain comparable special-status plant resources as the impacted lands and shall include long-term management and legal protection assurances to the satisfaction of the CPUC. Land preservation must be completed within 18 months of construction start. 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. The plan shall also define the monitoring strategy with a minimum of annual monitoring for 5 years and until success criteria are met. Success criteria shall include a minimum of 1:1 replacement of the impacted population with 2:1 mitigation for Otay tarplant. Any salvage and relocation plans must be approved by CDFW, USFWS, and CPUC at least 30 days prior	**SDG&E:** Avoid special-status plants during construction. Complete land preservation for compensatory mitigation within 18 months of construction. Submit salvage and relocation plans 30 days prior to project construction to CDFW, USFWS, and CPUC. Monitor special-status plants for 5 years. **CPUC:** Verify SDG&E methods to avoid special-status plants. Verify land preservation for compensatory mitigation within 18 months of construction. Approve salvage and relocation plans 30 days prior to project construction. Verify monitoring for special-status plants.	Avoidance of special-status plants Impacted special-status plants are mitigated off-site	**Timing:** Land preservation within 18 months of start of construction Salvage and relocation plans 30 days prior to construction Monitoring for 5 years **Location:** Off-site

Impact	APM/Mitigation Measure	Monitoring/Reporting Requirement	Effectiveness Criteria	Timing and Location
	to project construction.			
Impact Bio-1 **Impact Bio-2** **Impact Bio-4** **Impact Bio-5** **Impact Bio-7** **Impact Bio-8:** Potential to cause a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means	**Mitigation Measure Biology-3:** Precautions shall be taken to minimize the introduction and spread of invasive weeds. Weed control shall include the following: 1. Prior to construction, all work areas within SDG&E ROW shall be reviewed for the presence of weed populations that are rated High or Moderate for negative ecological impact in the California Invasive Plant Inventory Database (http://www.cal-ipc.org/paf/). These plant species shall be mapped and density of occurrence within the project area determined prior to commencement of ground disturbing activities. All Cal-IPC High or Moderate species with limited occurrence within 15 feet of project impact areas shall be treated or mechanically removed prior to construction according to control methods and practices for invasive weed populations designed ~~in consultation with the~~ per California Invasive Plant Council (Cal-IPC) recommendations. Cal-IPC High and Moderate species that are ubiquitous within and adjacent to the project area shall be treated when the percent cover of these weed species exceeds baseline conditions in the area. Ornamental plant species that have been planted within the project area shall be excluded from all weed control efforts. 2. Weed control treatments shall include all legally permitted chemical, manual, and mechanical methods ~~applied with the authorization of the San Diego County Agriculture Commissioner~~. The application of herbicides shall be in compliance with all state and federal laws and regulations under the prescription of a licensed Pest Control Advisor (PCA) and implemented by a licensed Qualified Applicator. Where manual and/or mechanical methods are used, plant debris shall be disposed of in a landfill as appropriate. Timing of weed control treatment shall be determined for each plant species ~~in consultation with the PCA, the San Diego County Agriculture Commissioner, and Cal-IPC,~~ by the PCA with the goal of controlling populations before they start producing seeds. 3. Construction vehicles and equipment used for ground disturbing activities shall be ~~washed~~ clean (including wheels, undercarriages, and bumpers) before entering ~~and again before leaving~~ the ~~substation site~~ project area. Further cleaning shall not be required as long as the vehicles stay within project work areas for the duration of construction activities. In addition, tools used for vegetation removal activities such as chainsaws, hand clippers, and pruners shall be ~~washed~~ cleaned to ensure no seed of vegetative propagules are on the equipment before entering and again before leaving all project work areas. All ~~washing~~ cleaning shall take place where rinse water and the waste product is collected and disposed of in either a sanitary sewer or landfill. A written ~~daily~~ log shall be kept for all vehicle/equipment/tool washing that states the date, time, location, type of equipment washed, methods used, and staff present. The log shall include the	**SDG&E:** Survey work areas for weed populations rated High or Moderate. ~~Consult with Cal-IPC on treatment of weed populations and treat weeds according to the consultation.~~ ~~Consult with PCA, San Diego County Agriculture Commissioner, and Cal-IPC regarding timing of weed control treatment.~~ ~~Wash~~ Clean construction equipment before ~~and after~~ entering all project areas and keep wash logs. Use only certified weed-free seeds, straw, gravel, and fill material on site. Monitor work areas for weeds from construction commencement until 2 years after construction completion and treat reestablished weed populations annually until the species is at or below pre-construction conditions. Provide CPUC with a list of all plants and seed mixes proposed for project landscaping, erosion control, and the revegetation of temporary impact areas 30 days prior to construction. Provide a final plantand seed list to CPUC for approval at least 30 days prior to application **CPUC:** Verify that weed control treatments, herbicide application, and disposal of plant debris receive appropriate authorization and/or comply with appropriate regulations. Verify all seeds, straw, gravel, and fill material on site are certified weed-free. Ensure weed spread is controlled during construction and for 2 years post-construction. Review wash logs. Review list of plants and seed mixes proposed for project landscaping, erosion control, and the revegetation of temporary impact areas. Verify on site that seed and plant materials are included on CPUC-approved plant species list.	All seeds, plants, straw, gravel, and fill material on site are certified weed-free. Equipment is washed to reduce weed spread. Plant and seed list contains only either native or ecologically appropriate, non-invasive species. Weed populations do not spread in project area.	**Timing:** Survey prior to construction Review plant and seed list 30 days prior to construction and application ~~Wash~~Clean equipment and use weed-free materials during construction Monitor during and for 2 years after construction **Location:** All project work areas

Impact	APM/Mitigation Measure	Monitoring/Reporting Requirement	Effectiveness Criteria	Timing and Location
	signature of a responsible staff member. Logs shall be available to CPUC and wildlife agencies for inspection at any time and shall be submitted to CPUC on a monthly basis during construction. 4. During project construction, all seeds and straw materials shall be certified weed-free, and all gravel and fill material shall be certified weed-free. 5. From the time construction begins until 2 years after construction is complete, ~~identified and treated populations~~ project impact areas shall be monitored annually for the presence of weed species that were not present prior to the commencement of construction activities as well as the reestablishment of weeds identified and treated prior to construction. Treated populations that meet the treatment criteria in Item 1 above that reestablish shall be retreated on an annual basis until the density of the species is at or below its preconstruction level. 6. Only native plants and seed or ecologically appropriate, non-invasive plants and seed shall be used in proposed project landscaping. A list of all plants and seed mixes ~~proposed~~ anticipated to be used for project landscaping, erosion control, and the revegetation of temporary impact areas shall be provided to CPUC for ~~approval~~ review at least 30 days prior to construction. A final plant and seed mix shall be provided to the CPUC for approval once the seed and/or plant material is in the final stages of being secured. This shall occur at least 30 days prior to application/installation. Plant and seed materials brought to the project site shall be field-verified against this list by the CPUC inspector prior to planting and seed mix application.			
Impact Bio-2	**Mitigation Measure Biology-4:** SDG&E shall conduct surveys for Hermes copper butterfly within 1 year prior to project construction activities in suitable habitat. Surveys shall be conducted by a qualified biologist in all suitable habitat areas for Hermes copper butterfly. Suitable habitat areas include any woody (mature) spiny redberry shrub with California buckwheat within 15 feet. California buckwheat without spiny redberry nearby is not considered suitable habitat. Surveys shall follow the "County of San Diego Guidelines for Hermes Copper (*Lycaena hermes*)" (County of San Diego 2010). Survey results shall be reported to the USFWS and CPUC within 30 days of survey completion, and prior to project construction activities.	**SDG&E:** Conduct surveys for Hermes copper butterfly within 1 year prior to project construction. **CPUC:** Review survey results.	Hermes copper butterfly surveys are performed prior to construction.	**Timing:** Survey within 1 year prior to construction Results sent to USFWS and CPUC within 30 days of survey completion **Location:** All project areas
Impact Bio-2	**Mitigation Measure Biology-5:** Temporary and permanent impacts to Hermes copper butterfly shall be compensated at a ratio of 1:1 for unoccupied habitat and 2:1 for occupied habitat. Habitat compensation shall be accomplished through land preservation or mitigation fee payment for the purpose of habitat compensation for lands supporting Hermes copper butterfly. Land preservation or mitigation fee payment for habitat compensation shall be completed within 18 months of project initiation. Habitat restoration may be	**SDG&E:** Mitigate for impacts to Hermes copper butterfly habitat at a ratio of 1:1 for unoccupied and 2:1 for occupied habitat. **CPUC:** Verify habitat compensation has been accomplished within 18 months of project initiation.	Impacts to Hermes copper butterfly are mitigated for at a 1:1 ratio for unoccupied and 2:1 ratio for occupied habitat.	**Timing:** Compensation occurs within 18 months of start of construction **Location:** Restored habitat on site and habitat preservation areas off site

Impact	APM/Mitigation Measure	Monitoring/Reporting Requirement	Effectiveness Criteria	Timing and Location
	appropriate as habitat compensation provided that the restoration effort is demonstrated to be feasible and is implemented pursuant to a Habitat Restoration Plan, which shall include success criteria and monitoring specifications and shall be approved by the CPUC and permitting agencies prior to project construction. All habitat compensation and restoration used as mitigation for the proposed project shall include long-term management and legal protection assurances.			
Impact Bio-4	**Mitigation Measure Biology-6:** This measure applies to all work areas in which any construction-related activities must be conducted during the nesting bird season (generally between February 15 and August 31, but may be earlier or later depending on species, location, and weather conditions). *Nesting Bird Survey Requirements.* If work is scheduled to occur during the avian nesting season, nesting bird surveys shall be conducted according to the following provisions: 1. Nest surveys shall occur within 48 hours prior to the start of ground-disturbing construction or vegetation trimming or removal activities. If there is no work in an area for 7 days, it shall be considered a new work area if construction, vegetation trimming, or vegetation removal begins again. 2. Surveys shall be conducted with sufficient survey duration and intensity of effort necessary for the identification of active nests, which is defined as once birds begin constructing, preparing, or using a nest for egg-laying. A nest is no longer an "active nest" if abandoned by the adult birds or once nestlings or fledglings are no longer dependent on the nest". Surveys shall include nests of protected species within vegetation identified for removal and/or pruning, and within a the following buffers of active work areas: 1-mile buffer for golden eagle, 0.5-mile buffer for Swainson's hawk, 0.25-mile buffer for white-tailed kite and 500-foot buffer for other avian and raptor species. 3. Surveys shall be conducted during locally appropriate dates for nesting seasons; note that generally the season is between February 15 and August 31 but may be earlier or later depending on species, location, and weather conditions. 4. The surveys shall be conducted by a CPUC-approved qualified biologist. 5. Survey results shall be provided to CPUC prior to initiating construction activities. 6. Work areas within which significant noise is not generated, such as work performed manually, by hand or on foot, and/or that would not cause significant disturbances to nesting birds (e.g., operating switches, driving on access roads, normally occurring activities at substations, and activities at staging and laydown areas) do not need to be surveyed prior to use. None of these activities shall result in physical contact with a nest. *Avoid Impacts on Nesting Birds.* During the nesting season	**SDG&E:** Conduct nesting bird surveys prior to ground-disturbing construction or vegetation trimming or removal activities. Evaluate trees with raptor nests located within 500 feet of work areas and do not remove any trees with active raptor nests. Use exclusion techniques for any construction equipment left unattended for 24 hours. Establish buffers around nesting birds: (a) 500 feet for raptors, (b) 250 feet for passerine birds in rural areas, or (c) 50 feet for common (non-special-status) passerine birds in residential, commercial, and industrial areas. Submit buffer reduction requests for any buffers that SDG&E would like to reduce. Monitor all nests with a reduced buffer, map nest locations and exclusion buffers, and submit monthly monitoring reports to CPUC. Submit final reports to CPUC. **CPUC:** Approve a qualified biologist to conduct bird surveys. Review nesting bird survey results. Verify buffers are established and maintained for nesting birds. Review buffer reduction requests and respond within 2 business days. Verify use of exclusion techniques. Review GIS data, monthly reports, and final reports after each nesting season to ensure that the measure was implemented as defined.	Nesting bird survey reports fulfill all requirements. No nests are built in construction equipment. Buffers are established and maintained. Monthly reports include all necessary information, including GIS data of nest locations and exclusion buffers. Final reports include all necessary information. Construction avoids project-related "take."	**Timing:** Surveys: during the nesting season, 48 hours prior to the start of any ground-disturbing activities or vegetation removal/trimming and again if there is no work in an area for 7 days Buffers and reduction requests, and exclusion techniques: when construction occurs during the nesting season and when buffers are reduced at any time of the year. Monitoring: daily basis during the nesting season and when buffers are reduced at any time of the year. Monthly reports: submitted for every month of the nesting season and when buffers are reduced at any time of the year. Final reports: submitted after the end of each nesting season. **Location:** Applies to all work areas in which any construction-related activities are conducted.

Impact	APM/Mitigation Measure	Monitoring/Reporting Requirement	Effectiveness Criteria	Timing and Location
	(generally between February 15 and August 31, but may be earlier or later depending on species, location, and weather conditions) raptor nests that are located within a 500-foot buffer from a work location and a 1-mile buffer for golden eagle and 0.5-mile buffer for Swainson's hawk, shall be evaluated by a CPUC-approved qualified biologist to determine whether the raptor nest is active. No trees with active raptor nests shall be removed during nesting season. No additional measures shall be implemented if active nests are more than the following distances from the nearest work areas: (a) 1 mile for golden eagle, (b) 0.5 mile for Swainson's hawk, (c) 0.25 mile for white-tailed kite, (d) 500 feet for raptors, Coastal California gnatcatcher, and least bell's vireo, (e) 250 feet for passerine birds in open space areas, or (f) 150 feet for common (non-special-status) passerine birds in residential, commercial, and industrial areas. Buffers shall not apply to construction-related traffic using existing roads where the use of such roads is not limited to project-specific use (i.e., county roads, highways, farm roads, or other private roads). As appropriate, exclusion techniques may be used for any construction equipment that is left unattended for more than 24 hours to reduce the possibility of birds nesting in the construction equipment. An example of an exclusion technique is covering equipment with tarps. *Buffer Reduction.* The specified buffers from nesting birds may be reduced on a case-by-case basis if, based on compelling biological or ecological reasoning (e.g., the biology of the bird species, concealment of the nest site by topography, land use type, vegetation, level of project activity, and level of pre-existing disturbance on site), it is determined by a CPUC-approved qualified biologist that implementation of a specified smaller buffer distance will still avoid nest abandonment and failure. Requests to reduce standard buffers must be submitted to CPUC's independent biologist for review. Requests to reduce buffers must include: • Species • Location • Pre-existing conditions present on site • Description of the work to be conducted within the reduced buffer • Size and expected duration of proposed buffer reduction • Reason for the buffer reduction • Name and contact information of the CPUC-approved qualified biologist(s) who requested the buffer reduction and will conduct subsequent monitoring • Proposed frequency and methods of monitoring necessary for the nest given the type of bird and surrounding conditions CPUC's independent biologist shall respond to SDG&E's request for a buffer reduction (and buffer reduction terms) within 2 business days; if a response is not received, SDG&E may proceed with the buffer reduction until CPUC's independent biologist can review and approve or deny the buffer reduction request. If SDG&E proceeds with a reduced			

Impact	APM/Mitigation Measure	Monitoring/Reporting Requirement	Effectiveness Criteria	Timing and Location
	buffer, nests shall be monitored on a daily basis during construction activities. If the buffer reduction request is denied, or if the qualified biologist determines that the nesting bird(s) are not tolerant of project activity, the buffer outlined above in this measure shall be implemented. Non-special-status species found building nests within the work areas after specific project activities begin may be tolerant of that specific project activity; however, the CPUC-approved qualified biologist shall implement an appropriate buffer or other appropriate measures to protect the nest after taking into consideration the position of the nest, the bird species nesting on site, the type of work to be conducted, and duration of the construction disturbance. In these cases, the proposed buffer or other measures must be approved by CPUC's independent biologist through the buffer reduction process outlined in this measure, if buffers are less than those specified in this measure. These nests shall be monitored on a daily basis and only during construction activities (no monitoring required over weekends or periods when no work is conducted) by a qualified biologist until the qualified biologist has determined that the young have fledged or construction ends within the work area (whichever occurs first). If the qualified biologist determines that the nesting bird(s) are not tolerant of project activity, the buffer outlined above in this measure shall be implemented. The recommended buffers may only be reduced again following the same process, as identified above, and after the qualified biologist has determined that the nesting birds are no longer exhibiting signs of intolerance to construction activities. *Monitoring and Reporting.* All nests with a reduced buffer shall be monitored on a daily basis during construction activities by a CPUC-approved qualified biologist until the qualified biologist has determined that the young have fledged or until one week after construction ends within the reduced buffer/work area (whichever occurs first). Nest locations and exclusion buffers shall be mapped (using geographic information systems [GIS]) for all nests identified. This information shall be maintained in a database and shall be provided to CPUC, CDFW, and USFWS. A monthly written report shall be submitted to CPUC, CDFW, and USFWS for construction within a reduced buffer and shall include the following: information included in buffer reduction requests, work conducted within the work site, duration of work activities and related buffer reduction, information on nest success (eggs, young, and adults). No avian reporting shall be required for construction occurring outside of the nesting season and if construction activities do not occur within a reduced buffer during any calendar month. A final report shall be submitted to CPUC, CDFW, and USFWS at the end of each nesting season summarizing all avian-related monitoring results and outcomes for the duration of project construction. Nests located in areas of existing human presence and disturbance, such as in yards of private residences, or within commercial and or industrial properties, are likely acclimated to			

Impact	APM/Mitigation Measure	Monitoring/Reporting Requirement	Effectiveness Criteria	Timing and Location
	disturbance and do not need to be monitored, as determined by the CPUC-approved qualified biologist and approved by CPUC's independent biologist.			
Impact Bio-5	**Mitigation Measure Biology-7:** The following requirements specify protocols for surveying ~~bay~~western yellow bat habitat and avoiding impacts on western yellow bat~~s~~. ***Work Areas.*** Suitable western yellow bat habitat shall be assessed by a CPUC-approved qualified biologist in trees within a 50-foot buffer of active work areas and in structures with suitable western yellow bat habitat within a 100-foot buffer of active work areas. If an active western yellow bat maternity roost is found in a tree or structure, the CPUC-approved qualified biologist shall define an appropriate limited or no-work exclusion area surrounding the roosting habitat based on the ~~bat species,~~ numbers~~,~~ and roost type (i.e., individuals, small group, or potential maternal colony), as well as in consideration of the habitat quality and duration of work-related disturbance in the vicinity of the maternity roost. The limited work or exclusion areas shall be approved by CPUC's independent biologist who shall respond to SDG&E's request for approval within one business day; if a response is not received, SDG&E may proceed with the implementation of the proposed limited work or exclusion area until CPUC's independent biologist can review and approve or deny the buffer reduction request. The limited work or exclusion area shall not apply to construction-related traffic using existing roads where the use of such roads is not limited to project-specific use (i.e., county roads, highways, farm roads, or other private roads) and shall not apply if the roost(s) is/are located in a residential, commercial, or industrial area. The boundaries of the limited or no work area shall be clearly marked by the CPUC-approved qualified biologist to ensure that no vehicles or equipment physically disturb the roost. The CPUC-approved qualified biologist shall inspect roost sites when construction is occurring at the specific work site to ensure integrity of the limited or no-work area and ensure that the size of the area is adequate based on site conditions and construction-generated noise. ***Tree Pruning and Removal.*** Preconstruction habitat assessments shall be conducted by a CPUC-approved qualified biologist on all trees to be removed that are 10 inches or more in diameter at breast height to identify suitable western yellow bat roosting habitat, within 7 days of the tree removal date. For trees to be removed that provide suitable western yellow bat roosting habitat features, follow-up emergence surveys and acoustic monitoring shall be conducted for 1/2 hour prior to sunset and 1 hour after sunset. If western yellow bats are not detected emerging from trees and acoustic activity indicates that no roosting bats are present, no additional measures are required. If active western yellow bat maternity roosts are detected in vegetation to be removed, removal shall occur outside of	**SDG&E:** Assess suitable bat habitat in trees within a 50-foot buffer of active work areas and in structures within a 100-foot buffer. Submit requests for and comply with limited and no-work exclusion areas. Inspect roost sites when construction is occurring at the specific work site. Perform preconstruction habitat assessments on qualifying trees to be removed within 7 days of removal. Suitable roost trees shall not be removed between April and September. Document and report all bat roosts through MMCRP. **CPUC:** Verify a qualified biologist conducts appropriate surveys for bat roosting habitat near work areas and trees for removal. Review and approve limited and no-work exclusion area requests and verify areas are established and maintained. Verify tree trimming occurs in accordance with the provisions of the measure. Review reports to ensure that measure was implemented.	Limited and no-work areas are established and maintained. Monitoring reports fulfill all requirements. Bats and roosting habitat are not disturbed.	**Timing:** Survey prior to construction Habitat assessments are performed within 7 days of tree removal Submit reports on an on-going basis during construction Remove suitable roost trees outside of breeding season (April to September) **Location:** Areas of suitable bat habitat

Impact	APM/Mitigation Measure	Monitoring/Reporting Requirement	Effectiveness Criteria	Timing and Location
	April to September, where practicable, to avoid impacts to reproductive bats. If western yellow bats are detected emerging from trees or acoustic activity indicates that roosting bats are present, the potential presence of a maternal colony shall be assessed. If a maternal colony is found in a tree, no work shall occur within 50 feet of the tree. ~~Suitable roost trees shall be removed, to the extent practicable, outside of April to September to avoid impacts to reproductive bats.~~ If vegetation removal activities are conducted during the western yellow bat reproductive season the following techniques shall be implemented to passively vacate bats from roosts: • Create noise and vibration disturbance on the tree (e.g., concussive hitting with equipment and/or chainsaw cutting) for at least 15 minutes before carefully opening up potential crevices and cavities for inspection and clearance. • If bats may be in a tree hole or heavy branch cavity, attempt to expose them and allow escape. For example, if the cavity cannot be investigated by the CPUC-approved qualified biologist, then carefully cut successive sections above the cavity to open it, waiting up to 10 minutes in between each cut, and determine if it is empty or allow any bats inside to crawl or fly out. ***Reporting.*** All western yellow bat maternity roosts in trees shall be documented and reported through the MMCRP.			
Impact Bio-5	**Mitigation Measure Biology-8:** A CPUC-approved qualified biologist shall conduct a preconstruction survey to identify potential San Diego desert woodrat houses within the proposed project work areas and within 5 feet of the edge of the work areas to avoid direct take of woodrats. All woodrat houses shall be documented and reported through the MMCRP. Woodrat houses found within the work site or within 5 feet from a work site shall be flagged or fenced for avoidance. If impacts to a woodrat house located within a work site are unavoidable, a CPUC-approved qualified biologist, prior to construction and outside of breeding season (April through June), shall dismantle the house by hand, removing the materials layer by layer to allow for adult woodrats to escape. If young are present and found during the disassembling process, a CPUC-approved qualified biologist shall leave the site for at least 24 hours to allow for the rats to relocate their young on their own. This step shall be repeated as needed until the young have been relocated by the parent woodrats. Once the nest is vacant, the disassembly process shall be completed and the nest sticks shall be collected and moved to another suitable nearby location to allow for nest reconstruction. Piles of cut vegetation/slash shall be retained near the work site prior to nest dismantling to provide refuge for woodrats that may become displaced.	**SDG&E:** Conduct preconstruction survey for San Diego desert woodrat. Document and report all houses through MMCRP. Flag or fence all houses within work site or 5 feet from work site. As needed, dismantle houses and retain piles of slash per provisions in the measure if impacts are unavoidable. **CPUC:** Review reports to ensure that measure was implemented. Verify that houses identified are flagged and avoided if possible, or else dismantled in accordance with the provisions of the measure.	Monitoring reports fulfill all requirements. To the extent possible, woodrat houses are not disturbed.	**Timing:** Survey prior to construction Dismantle nests prior to construction and outside of breeding season (April through June) **Location:** All work areas plus a 5-foot buffer
Impact Bio-6 **Impact Hazards-1**	**Mitigation Measure Biology-9:** Only a State of California certified contractor (i.e., Qualified Applicator), will be permitted to perform herbicide applications. Herbicides will	**SDG&E:** A State of California certified contractor can apply herbicides during certain weather conditions and in locations specified in	Herbicides are applied according to all applicable laws, regulations, and permit stipulations and only during specified	**Timing:** Throughout construction

Impact	APM/Mitigation Measure	Monitoring/Reporting Requirement	Effectiveness Criteria	Timing and Location
Impact Hazards-3	be applied in accordance with applicable laws, regulations, and permit stipulations. All herbicide applications must follow EPA label instructions. SDG&E shall only apply herbicides when wind speeds are between 3 and 10 mph. No herbicides shall be applied when rainfall is predicted within 48 hours or during periods of temperature inversions (i.e., when the air temperature at ground level is cooler than the air above it). Herbicides shall not be applied within 100 feet of a special-status plant.	the measure. **CPUC:** Verify herbicides are applied according to all applicable laws, regulations, and permit stipulations. Verify herbicides are applied only during specified conditions.	conditions.	**Location:** All work areas No herbicide application within 100 feet of a special-status plant
Impact Bio-6	**Mitigation Measure Biology-10:** The applicant shall design and construct its facilities in compliance with Avian Power Line Interaction Committee's *Suggested Practices for Avian Protection on Power Lines* to reduce potential electrocution impacts to avian species.	**SDG&E:** Design project to comply with Avian Power Line Interaction Committee's *Suggested Practices for Avian Protection on Power Lines.* **CPUC:** Verify that facilities are designed and constructed in compliance with *Suggested Practices for Avian Protection on Power Lines*.	Project design complies with Avian Power Line Interaction Committee's *Suggested Practices for Avian Protection on Power Lines.*	**Timing:** Prior to construction **Location:** All project features
Impact Bio-7 **Impact GeologySoils-4**	**Mitigation Measure Biology-11:** The Applicant shall prepare and implement a Restoration and Revegetation Plan for restoration and revegetation of temporarily disturbed areas along TL 6965 within SDG&E's ROW between Miguel Substation and the proposed Salt Creek Substation. The Restoration and Revegetation Plan shall apply to areas temporarily disturbed during construction of the proposed project not subject to ongoing disturbance by other SDG&E maintenance activities or by other entities (i.e., utility providers such as the City of Chula Vista) out of SDG&E's control. The Restoration and Revegetation Plan shall be prepared by a biologist with expertise in southern California ecosystems and native plant revegetation techniques. The Restoration and Revegetation Plan will include the following information: a. The location(s) of the area(s) of restoration and revegetation b. The plant species to be used (natives only), container sizes, and seeding rates in each area c. The planting schedule for each restoration area d. A description of the irrigation method(s) e. Measures to control exotic vegetation in the restoration and revegetation area f. Specific success criteria including at a minimum: i. 70 percent cover of the restoration area ii. Less than 5 percent invasive weeds g. Detailed monitoring program that includes monitoring for a minimum of three years and until success criteria are met h. Contingency measures should the success criteria not be met The Applicant shall submit the Restoration and Revegetation Plan to the CPUC for review and approval at least 60 days prior to construction.	**SDG&E:** Submit the Restoration and Revegetation Plan to CPUC at least 60 days prior to construction. **CPUC:** Review and approve the Restoration and Revegetation Plan. Ensure implementation of the Plan during monitoring.	The Plan contains all necessary information. Measures in the Plan are implemented.	**Timing:** Submit Plan at least 60 days prior to construction Monitor for at least 3 years and until the success criteria have been met **Location:** All disturbed sites
~~**Impact Bio-1**~~	~~**Optional Measure Biology-1:** To further minimize the construction-related direct impacts to San Diego County~~	~~**SDG&E:**~~ ~~Restore site using seed mix containing San Diego County~~	~~Seed mix contains San Diego County sunflower seeds.~~	~~**Timing:**~~ ~~During construction, prior to~~

Impact	APM/Mitigation Measure	Monitoring/Reporting Requirement	Effectiveness Criteria	Timing and Location
	~~sunflower (a species that has limited distribution in California, but is not a federally or state-listed endangered plant), San Diego County sunflower shall be included in the planting/seed mix for revegetation of temporary impacts in suitable habitat areas.~~	~~sunflower seed in areas where suitable habitat occurs.~~ ~~**CPUC:**~~ ~~Verify that San Diego County sunflower is included in the planting/seed mix.~~		~~revegetation activities~~ ~~**Location:**~~ ~~Disturbed sites with suitable habitat for San Diego County sunflower~~
		Cultural and Paleontological Resources		
Impact Cultural-1: Cause a substantial adverse change in the significance of an archaeological resource as defined in CEQA Guidelines Section 15064.5 **Impact Cultural-2:** Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5 **Impact Cultural-3:** Disturb any human remains, including those interred outside of formal cemeteries	**APM CUL-1: Cultural Resources Training:** A qualified archaeologist shall attend pre-construction meetings, as needed, to consult with the excavation contractor concerning excavation schedules, archaeological field techniques, and safety issues. A qualified archaeologist is defined as an archaeologist that meets the U.S. Secretary of Interior Professional Qualifications Standards, as published in 36 Code of Federal Regulations Part 61. Proposed Project personnel shall receive training regarding the appropriate work practices necessary to effectively implement the APMs, including the potential for exposing subsurface cultural resources and paleontological resources. This training program shall be submitted to CPUC for approval and include procedures to be followed upon the discovery or suspected discovery of archaeological materials, Native American remains, and paleontological resources. Such appropriate work practices and inadvertent discovery procedures are outlined in the Cultural Resources Mitigation and Monitoring Plan (CRMMP). The requirements for archaeological monitoring shall be noted on the construction plans.	**SDG&E:** Conduct cultural resources training program. **CPUC:** Review the cultural resources training program. Review the construction plans to ensure that they include the requirements for archaeological monitoring.	Cultural resources training program is conducted for all crew members.	**Timing:** Conduct training program prior to construction Review construction plans prior to construction **Location:** Not applicable.
Impact Cultural-1	**APM CUL-2: Cultural Resources Monitoring:** An archaeological monitor shall work under the direction of the qualified archaeologist. Monitoring will be conducted according to the procedures outlined in the CRMMP and will occur during proposed pole replacement/improvement activities and access road grading adjacent to eligible cultural resources. Monitoring shall also occur during vegetation removal or ground-disturbing activities. If the previously delineated work areas must be expanded or modified during construction, CPUC procedures will be followed and the cultural monitors will review the previous survey data for the proposed project to determine if any sensitive resources would be impacted by the proposed activities, to identify any necessary avoidance and minimization measures, and to document any additional impacts, and avoidance and minimization measures. The CRMMP will address any project refinements that go outside of previously evaluated work areas and will detail the appropriate measures to be implemented. The CRMMP will specify the criteria by which the resource will be evaluated for significance. The CRMMP will also outline the consultation requirements. In the event that cultural resources are encountered during ground-disturbing activities, the archaeologist shall have the authority to divert or temporarily suspend ground disturbance to allow evaluation of potentially significant cultural resources. The archaeologist shall follow the appropriate reporting and treatment procedures outlined in the CRMMP before activities are allowed to resume.	**SDG&E:** The archaeological monitor will conduct cultural resource monitoring in accordance with the CRMMP and during the activities specified in the measure. Review previous survey data if work areas must be expanded or modified. The archaeologist may divert or temporarily suspend ground disturbing activities to allow evaluation of potentially significant resources if resources are encountered. **CPUC:** Verify monitoring has been conducted during appropriate activities. Review reports to ensure that the measure was implemented.	Cultural resources construction monitoring occurs in accordance with CRMMP. Potentially significant resources are evaluated and impacts to resources are avoided.	**Timing:** Monitor during construction **Location:** Pole locations, access roads adjacent to eligible cultural resources, and areas of vegetation removal or ground-disturbing activities

Impact	APM/Mitigation Measure	Monitoring/Reporting Requirement	Effectiveness Criteria	Timing and Location
	APM CUL-3: Access Routes: Where ground-disturbing activities, such as grading, are conducted along access roads, monitoring shall occur where the access road crosses the site or is located with the boundaries of a site, and equipment blades shall be lifted when traversing sites. Monitoring shall occur for ground-disturbing activities associated with access road improvements within the Existing Substation property. Additionally, all vehicles shall remain on existing dirt roads and new access identified for the Proposed Project. In the event that a resource is observed while monitoring an access road, appropriate inadvertent discovery procedures outlined in the CRMMP shall be followed before activities are allowed to resume.	**SDG&E:** Conduct cultural resource monitoring during ground disturbance on access roads. Contain all vehicles to existing dirt roads and new access defined for the proposed project. **CPUC:** Verify that monitoring has been conducted. Verify that all vehicles remain on existing dirt roads and new access roads identified for the project. Verify that inadvertent discovery procedures are followed.	Monitoring occurs on access roads. All vehicles remain on existing dirt roads and new access roads.	**Timing:** Throughout construction **Location:** Project access roads
Impact Cultural-4: Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature	**APM CUL-4: Qualified Paleontologist:** A qualified paleontologist shall attend preconstruction meetings, as needed, to consult with the excavation contractor concerning excavation schedules, paleontological field techniques, and safety issues. A qualified paleontologist is defined as an individual with a Master's of Science or Doctor of Philosophy in paleontology or geology who is experienced with paleontological procedures and techniques, who is knowledgeable in the geology and paleontology of Southern California, and who has worked as a paleontological mitigation project supervisor in the region for at least 1 year. The requirements for paleontological monitoring shall be noted on the construction plans.	**SDG&E:** Identify qualified paleontologist and ensure his/her attendance at preconstruction meetings. **CPUC:** Verify that a qualified paleontologist attends the preconstruction meetings.	A qualified paleontologist attends the preconstruction meetings.	**Timing:** Prior to construction **Location:** Areas of excavation
Impact Cultural-4	**APM CUL-5: Paleontological Monitoring:** A paleontological monitor shall work under the direction of the qualified Proposed Project paleontologist, and shall be on site to observe excavation operations that involve the original cutting of previously undisturbed deposits with high paleontological resource sensitivity (i.e., Mission Valley and Otay Formations). A paleontological monitor is defined as an individual who has experience in the collection and salvage of fossil materials. If the previously delineated work areas must be expanded or modified during construction, the paleontological monitors would review the previous survey data for the proposed project to determine if the additional impact area to determine if any sensitive resources would be impacted by the proposed activities, to identify any necessary avoidance and minimization measures, and to document any additional impacts, and avoidance and minimization measures. In the event that fossils are encountered, the paleontological monitor shall have the authority to divert or temporarily halt construction activities in the area of the discovery to allow recovery of fossil remains in a timely manner.	**SDG&E:** Conduct paleontological monitoring during excavation operations in highly sensitive resource sensitivity. Review previous survey data if work areas must be expanded or modified. The paleontological monitor may divert or temporarily halt construction activities in an area of fossils are encountered. **CPUC:** Verify that a paleontological monitor is on site to observe excavations and reviews previous survey data if work areas must be expanded.	Monitoring occurs during excavation operations. Impacts to paleontological resources are avoided.	**Timing:** During construction **Location:** Areas of excavation
Impact Cultural-4	**APM CUL-6: Paleontological Screen Washing:** Because of the potential for recovery of small fossil remains, it may be necessary to set up a screen-washing operation on-site. If fossils are discovered, the paleontologist (or paleontological monitor) shall recover them, along with pertinent stratigraphic data. Because of the potential for recovery of small fossil remains, such as isolated mammal teeth, recovery of bulk	**SDG&E:** Recover previously undiscovered fossils. Clean, repair, sort, catalog, and deposit any collected fossil remains. Prepare a summary report. **CPUC:**	Fossils are recovered. Summary report contains all necessary information.	**Timing:** During and after construction **Location:** All work areas

Impact	APM/Mitigation Measure	Monitoring/Reporting Requirement	Effectiveness Criteria	Timing and Location
	sedimentary matrix samples for off-site wet screening from specific strata may be necessary, as determined in the field. Fossil remains collected during monitoring and salvage shall be cleaned, repaired, sorted, cataloged, and deposited in a scientific institution with permanent paleontological collections. A final summary report shall be completed. This report shall include discussions of the methods used, stratigraphy exposed, fossils collected, and significance of recovered fossils. The report shall also include an itemized inventory of all collected and catalogued fossil specimens.	Verify that the paleontologist or paleontological monitor recovers any previously undiscovered fossils. Review the final summary report.		
Impact Cultural-3	**APM CUL-7: Discovery of Human Remains:** If human remains are encountered during construction, SDG&E staff will comply with California law (Health and Safety Code section 7050.5; PRC sections 5097.94, 5097.98, and 5097.99). This law specifies that work stop immediately in any areas where human remains or suspected human remains are encountered. The appropriate agency and SDG&E will be notified of any such discovery. SDG&E will contact the Medical Examiner at the county coroner's office. The Medical Examiner has two (2) working days to examine the remains after being notified by SDG&E. ~~Under some circumstances, a determination may be made without direct input from the Medical Examiner.~~ When the remains are determined to be Native American, the Medical Examiner has 24 hours to notify the Native American Heritage Commission (NAHC). The NAHC will immediately notify the identified Most Likely Descendant (MLD), and the MLD has 24 hours to make recommendations to the landowner or representative for the respectful treatment or disposition of the remains and grave goods. If the MLD does not make recommendations within 24 hours, the area of the property must be secured from further disturbance. If there are disputes between the landowner and the MLD, the NAHC will mediate the dispute to attempt to find a resolution. If mediation fails to provide measures acceptable to the landowner, the landowner or his/her authorized representative shall reinter the human remains and items associated with Native American burials with appropriate dignity on the property in a location not subject to further subsurface disturbance.	**SDG&E:** Comply with California law in the event that human remains are found. **CPUC:** Verify that construction stops immediately in any areas where human remains or suspected human remains are found. Verify that respectful treatment or disposition of the remains or grave goods has occurred.	Stop work if human remains are found. Comply with California law.	**Timing:** Throughout construction **Location:** All work areas
Impact Cultural-1 **Impact Cultural-2**	**Mitigation Measure Cultural Resources-1:** If previously undiscovered resources are identified during construction, the CPUC-approved cultural resource specialist/archaeologist shall evaluate the resource and determine whether it is (1) eligible for the CRHR (and thus a historic resource for purposes of CEQA); or (2) a unique archaeological resource as defined by CEQA. If the resource is determined to be neither a unique archaeological nor a historical resource, work may commence in the area. If the resource meets the criteria for either a historical or unique archaeological resource, or both, work shall remain halted within ~~165~~ 50 feet (~~50~~ 15 meters) of the area of the find, and the cultural resources specialist/archaeologist shall consult with CPUC staff regarding methods to ensure that no substantial adverse change would occur to the significance of the resource pursuant to CEQA Guidelines Section 15064.5(b). Preservation	**SDG&E:** Evaluate undiscovered resources and mitigate as defined by the measure. Halt work within ~~165~~ 50 feet of the area of the find. **CPUC:** Verify all previously undiscovered cultural resources have been evaluated by the cultural resource specialist/archaeologist. Verify the measure is implemented as defined.	Evaluate and treat undiscovered resources.	**Timing:** Throughout construction **Location:** All work areas

Impact	APM/Mitigation Measure	Monitoring/Reporting Requirement	Effectiveness Criteria	Timing and Location
	in place (i.e., avoidance) is the preferred method of mitigation for impacts to cultural resources and shall be required to mitigate impacts to previously undiscovered resources. Other methods of mitigation, described below, shall only be used if the CPUC-approved cultural resource specialist/ archaeologist determines the method would provide superior mitigation of the impacts to the resource. The alternative methods of mitigation may include data recovery and documentation of the information contained in the site to answer questions about local prehistory (see Mitigation Measures Cultural Resources-3 and Cultural Resources-4). The methods and results of evaluation or data recovery work at an archaeological find shall be documented in a professional-level technical report to be filed with the California Historical Resources Information System (CHRIS). Work in the area may commence upon completion of treatment, as approved by CPUC.			
Impact Cultural-1	**Mitigation Measure Cultural Resources-2:** SDG&E shall prepare and submit for CPUC approval a HPTP for CRHR-eligible or potentially eligible cultural resources to avoid or mitigate potential impacts. Preservation in place (i.e., avoidance) shall be the preferred mitigation strategy. Recordation and data recovery will be used as mitigation alternatives if preservation in place is not feasible or the CPUC-approved cultural resource specialist/ archaeologist determines recordation or data recovery would provide superior mitigation. The HPTP shall be submitted to CPUC for review and approval at least 30 days prior to construction. As part of the HPTP, SDG&E shall prepare a research design and a scope of work for evaluation of cultural resources and for data recovery and testing or additional treatment of CRHR-eligible or potentially eligible sites that cannot be avoided. Data recovery and testing on most resources would consist of sample excavations and/or surface artifact collection, and site documentation. A possible exception would be a site where burials, cremations, or sacred features are discovered that cannot be avoided. The HPTP shall define and map all CRHR-eligible or potentially eligible properties in or within 50 feet or all project work areas and shall identify the cultural values that contribute to their CRHR-eligibility. The HPTP shall also detail how CRHR-eligible or potentially eligible properties will be marked and protected as environmental sensitive areas during construction. The HPTP shall include provisions for analysis of data in a regional context, reporting of results within one year of completion of field studies, curation of artifacts and data (maps, field notes, archival materials, recordings, reports, photographs, and analysts' data) at a facility that is approved by CPUC, and dissemination of reports to appropriate local and state repositories~~, libraries, and interested professionals~~.	**SDG&E:** Submit a Historic Properties Treatment Plan to CPUC at least 30 days prior to construction. **CPUC:** Review and approve the Historic Properties Treatment Plan.	The Plan contains all necessary information. Measures in the Plan are implemented.	**Timing:** Submit the Plan at least 30 days prior to construction **Location:** All CRHR-eligible properties in or within 50 feet of all work areas
Impact Cultural-1	**Mitigation Measure Cultural Resources-3:** Where CRHR-eligible resources cannot be protected from direct impacts of the project, data recovery investigations shall be conducted by	**SDG&E:** Conduct data recovery investigations as needed and only after approval by CPUC.	Data recovery investigations are conducted as needed to mitigate for impacts to known significant	**Timing:** Recover data prior to construction Submit field closure report after

Impact	APM/Mitigation Measure	Monitoring/Reporting Requirement	Effectiveness Criteria	Timing and Location
	SDG&E to reduce adverse effects to the characteristics of each property that contribute to its CRHR eligibility. For sites eligible under Criterion (d), significant data shall be recovered through excavation and analysis. For properties eligible under Criterion (a), (b), or (c), data recovery may include historical documentation, photography, collection of oral histories, architectural or engineering documentation, preparation of a scholarly work, or some form of public awareness or interpretation. Data gathered during the evaluation-phase studies and the research design element of the HPTP shall guide plans and data thresholds for data recovery; treatment shall be based on the resource's research potential beyond that realized during resource recordation and evaluation studies. If data recovery is necessary, sampling for data recovery excavations shall follow standard statistical sampling methods, but sampling shall be confined, as much as possible, to the direct impact area. Data recovery methods, sample sizes, and procedures shall be detailed in the HPTP consistent with Mitigation Measure Cultural Resources-3 and implemented by SDG&E only after approval by CPUC. Following any field investigations required for data recovery, SDG&E shall document the field studies and findings, including an assessment of whether adequate data were recovered to reduce adverse project effects, in a brief field closure report. The field closure report shall be submitted to CPUC for its review and approval, as well as to appropriate state repositories, local governments, and other appropriate agencies. Construction work within 100 feet of cultural resources that require data recovery fieldwork shall not begin until authorized by CPUC, as appropriate, to ensure that impacts to known significant archaeological deposits are adequately mitigated.	Submit field closure report to CPUC and appropriate state repositories, local governments, and other appropriate agencies. **CPUC:** Approve data recovery investigations as needed. Review the field closure report to ensure implementation of the measure.	archaeological deposits. The field closure report contains all necessary information.	construction **Location:** All work areas that contain significant archaeological deposits
Impact Cultural-1	**Mitigation Measure Cultural Resources-4:** SDG&E shall consult with Native Americans to identify culturally sensitive locations and determine where Native American monitoring is required prior to performing any ground-disturbing activities. Consultation shall consist of letters sent to the NAHC and Native American representatives requesting information about any sacred lands or sites within the proposed project area. Consultation materials also shall include documentation of responses from NAHC and Native American representatives. A Native American monitor shall be required during archaeological excavations and ground-disturbing activities performed in areas identified as culturally sensitive. SDG&E shall prepare a summary letter that indicates the locations where Native American monitors will be required and shall specify the tribal affiliation of the required Native American monitor for each location. SDG&E shall retain and schedule any required Native American monitors. SDG&E shall submit documentation of consultation efforts (i.e., information request letters and responses) and the summary letter to CPUC for review and recordkeeping within 30 days prior to construction.	**SDG&E:** Consult with Native Americans to identify culturally sensitive locations and determine where monitoring is necessary. A Native American monitor will be present during archaeological excavations and ground-disturbing activities in culturally sensitive areas. Submit consultation effort documentation to CPUC within 30 days prior to construction. **CPUC:** Verify that a Native American monitor is present during archaeological excavations and ground-disturbing activities in culturally sensitive locations. Review documentation of consultation effort.	Consult with Native Americans. Native Americans monitor archaeological excavations and ground-disturbing activities.	**Timing:** Consult with Native Americans at least 30 days prior to construction **Location:** Areas of archaeological excavations and ground-disturbing activities
Impact Cultural-4	**Mitigation Measure Paleontology-1:** In the event that a paleontological resource is uncovered during project	**SDG&E:** Stop work near previously unidentified paleontological	Resources are evaluated and treated as needed.	**Timing:**

Impact	APM/Mitigation Measure	Monitoring/Reporting Requirement	Effectiveness Criteria	Timing and Location
	implementation, all ground-disturbing work within ~~165~~ 50 feet (~~50~~ 15 meters) of the discovery shall be halted. A CPUC-approved, qualified paleontologist shall inspect the discovery and determine whether further investigation is required. If the discovery can be avoided and no further impacts will occur, no further effort shall be required. If the resource cannot be avoided and may be subject to further impact, a qualified, CPUC-approved qualified paleontologist shall evaluate the resource and determine whether it is "unique" under CEQA, Appendix G, part V. The determination and associated plan for protection of the resource shall be provided to CPUC for review and approval. If the resource is determined not to be unique, work may commence in the area. If the resource is determined to be a unique paleontological resource, work shall remain halted, and the paleontologist shall consult with SDG&E and CPUC staff regarding methods to ensure that no substantial adverse change would occur to the significance of the resource pursuant to CEQA. Preservation in place (i.e., avoidance) is the preferred method of mitigation for impacts to paleontological resources and shall be required unless there are other equally effective methods. Other methods may be used but must ensure that the fossils are recovered, prepared, identified, catalogued, and analyzed according to current professional standards under the direction of a qualified paleontologist. All recovered fossils shall be curated at an accredited and permanent scientific institution according to Society of Vertebrate Paleontology standard guidelines (SVP) standards; typically the Natural History Museum of Los Angeles County and UC Berkeley accept paleontological collections at no cost to the donor (SVP 2010). Work may commence upon completion of treatment, as approved by CPUC.	resource and evaluate the resource as needed. Treat resources as defined in the measure. **CPUC:** Verify that all ground-disturbing work is halted if any paleontological resources are uncovered and a qualified paleontologist inspects the discovery. Verify that appropriate mitigation methods are used to mitigate for impacts to paleontological resources.		Throughout construction **Location:** All work areas
		Geology and Soils		
Impact GeologySoils-1: Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault or strong seismic ground-shaking **Impact GeologySoils-2:** Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction **Impact GeologySoils-3:** Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides	**APM GEO-1: Geotechnical Requirements:** SDG&E will incorporate the design measures and findings of the geotechnical investigation reports in the final design of all project components.	**SDG&E:** Incorporate design measures and findings of geotechnical investigation into project design. **CPUC:** Review the final designs of all project components.	Geotechnical report findings are incorporated into final project design.	**Timing:** Prior to construction **Location:** All project features

Impact	APM/Mitigation Measure	Monitoring/Reporting Requirement	Effectiveness Criteria	Timing and Location
Impact GeologySoils-4: Potential for substantial soil erosion or the loss of topsoil **Impact GeologySoils-5:** Located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse **Impact GeologySoils-6:** Located on expansive soil, or collapsible soil, creating substantial risks to life or property				
Impact GeologySoils-1 **Impact GeologySoils-2** **Impact GeologySoils-3**	**APM GEO-2: Seismic Standards:** SDG&E will comply with all applicable codes and seismic standards to minimize the potential for damage from a seismic event. The project will be designed to withstand strong seismic accelerations in accordance with SDG&E standard design and engineering practices to reduce the potential for damage to occur to the proposed facilities in the event of a major seismic event.	**SDG&E:** Design all project components to be in compliance with applicable codes and seismic standards. **CPUC:** Review project designs and verify compliance.	Designs are in compliance with all applicable codes and seismic standards.	**Timing:** Prior to and during construction **Location:** All project features
Impact GeologySoils-4 **Impact Hydro-3**	**Mitigation Measure Geology-1:** ~~O~~ For areas that will not be subject to additional disturbance, once temporary surface disturbances are complete, permanent stabilization BMPs to control soil erosion will be used in areas ~~that will~~ not ~~be~~ subject to any additional disturbance immediately after temporary BMPs have been removed and within 7 days following final earthwork in the area. Permanent stabilization ~~shall be stabilized within 7 days using permanent stabilization BMPs to control soil erosion.~~ BMPs may include hydroseeding, planting, and minor regrading. An SDG&E Reclamation Specialist shall inspect and monitor BMPs following installation in areas where revegetation has been performed until the minimum vegetative cover specified in the Revegetation Plan is established (see Mitigation Measure Biology-11).	**SDG&E:** Stabilize any areas not subject to additional ground disturbance within 7 days using BMPs. Monitor BMPs following installation where revegetation has been performed until required vegetative cover is established. **CPUC:** Verify disturbed sites are stabilized within 7 days and inspect BMPs. Inspect revegetation and verify minimum vegetative requirements are met.	Disturbed sites are stabilized. Minimum vegetation reestablishment requirements are met or exceeded.	**Timing:** Stabilization: within 7 days of completion of ground disturbance. Revegetation: during and after construction phase, after completion of ground disturbance. **Location:** Applies to all temporarily disturbed areas and areas where revegetation has been performed.
Greenhouse Gas Emissions				
Impact GHG-2: Potential to conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emission of greenhouse gases	**APM GHG-1: SF_6 Management:** The proposed Salt Creek Substation would be an air-insulated substation. Equipment containing sulfur hexafluoride (SF_6) gas will only be used for transmission circuit breakers. SDG&E SF_6 mitigation strategies will be implemented during operation and maintenance of SF_6-containing equipment installed as part of the proposed project. These strategies are as follows: • Recording company-wide SF_6 purchases, use, and emissions rates to comply with the EPA rule on Electrical Transmission and Distribution Equipment Use (Mandatory Reporting of Greenhouse Gases, 40 Code of Federal Regulations [CFR] Part 98, Subpart DD) and CARB's Regulation for Reducing Sulfur Hexafluoride Emissions from	**SDG&E:** Implement SF_6 mitigation strategies defined in the measure. **CPUC:** Verify SF_6 mitigation strategies are implemented for SF_6-containing equipment.	SF_6 mitigation strategies are implemented.	**Timing:** After construction **Location:** Salt Creek Substation

Impact	APM/Mitigation Measure	Monitoring/Reporting Requirement	Effectiveness Criteria	Timing and Location
	Gas Insulated Switchgear (California Code of Regulations [CCR] Title 17, Sections 95350–95359). • Continuing to participate in the EPA Sulfur Hexafluoride Partnership. • Implementing a recycling program. • Training employees on safe and proper handling of SF_6. • Continuing to report greenhouse gas emissions to The Climate Registry. • Implementing SDG&E's SF_6 leak detection and repair program. This program includes monthly visual inspections of each gas circuit breaker (GCB), which includes checking pressure levels within the breaker and recording these readings in SDG&E's Substation Management System. During installation or major overhaul of any GCB, the unit is tested over a 24-hour period to ensure that no leaks are present. Minor overhauls of each GCB are conducted every 36 to 40 months to check overall equipment health. This process includes checking gas pressure, moisture ingress, and SF_6 decomposition. If the GCB fails any of these checks, the unit is checked for leaks and repaired. In addition, all GCBs are equipped with a gas monitoring device and alarm that automatically alerts SDG&E's Grid Operations Center. If gas pressure approaches minimum operating levels, an alarm is immediately reported to SDG&E's Substation Construction and Maintenance Department. The GCB is usually inspected for leaks within 24 hours of such an alarm. SDG&E's leak detection practice includes the following three methodologies: – Spraying a leak-detection agent onto common leak points, including O rings, gaskets, and fittings; – Using a field-monitoring device (sniffer) to detect the presence of SF_6 gas; and – Using a Flir's leak-detection camera to detect the presence of SF_6 gas when the above two methods are unsuccessful in finding a leak.			
Impact GHG-2 **Impact Utilities-7**	**Mitigation Measure GHG-1:** In accordance with requirements in Assembly Bill 1826, SDG&E shall dispose of organic ~~matter~~ waste (defined in PRC Section 42649.8(c) as food waste, green waste, landscape and pruning waste, nonhazardous wood waste, ad food-soiled paper waste that is mixed in with food waste) removed on and after April 1, 2016 by means other than transporting to a landfill if the amount of organic waste meets or exceeds 8 cubic yards per week. On and after January 1, 2017, SDG&E shall dispose of organic waste by means other than transporting to a landfill if the amount of organic waste meets or exceeds 4 cubic yards per week. Options for non-landfill disposal may include composting on previously disturbed SDG&E land, self-hauling organic waste for recycling, or participating in a greenwaste recycling program in accordance with subdivision (b) of AB 1826. SDG&E shall notify the CPUC of the disposal method at least 30 days prior to construction.	**SDG&E:** Dispose of organic matter removed after 2016 in accordance with AB 1826~~by means other than transporting to a landfill~~. Notify CPUC of disposal method at least 30 days prior to construction. **CPUC:** Verify non-landfill disposal method for organic waste after 2016.	Organic waste after 2016 is disposed of in a manner consistent with AB 1826~~other than transport to a landfill~~.	**Timing:** After construction **Location:** To be determined during determination of disposal method

Impact	APM/Mitigation Measure	Monitoring/Reporting Requirement	Effectiveness Criteria	Timing and Location
		Hazards and Hazardous Materials		
Impact Hazards-1: Potential to create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, or through accidental release of a hazardous material through upset or accident conditions **Impact Hazards-3:** Potential to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 miles of an existing or proposed school **Impact Hydro-1** **Impact Hydro-5** **Impact Hydro-6**	**APM HAZ-1: Spill Prevention, Control, and Countermeasure Plan and Hazardous Substance Management and Emergency Response Plan:** A Spill Prevention, Control, and Countermeasure (SPCC) Plan will be prepared prior to project construction ~~and that addresses response procedures in the event of any release or spill of hazardous materials during construction~~for the project; an SPCC Plan is required for the transformers at the proposed Salt Creek Substation because the transformers would contain more than 1,320 gallons of mineral oil. The SPCC Plan will establish procedures, methods, equipment requirements, and worker training to prevent oil spills or leaks from reaching ~~waterways and leaving the site~~navigable waterways. A Hazardous Substance Management and Emergency Response (HSMER) Plan will be prepared prior to project construction and that addresses response procedures in the event of any release or spill of hazardous materials during construction. The HSMER Plan will establish procedures, methods, equipment requirements, and worker training to prevent spills or leaks from reaching waterways and leaving the site.	**SDG&E:** Prepare the SPCC and HSMER Plans. **CPUC:** Review the SPCC and HSMER Plans.	The Plans contains all necessary information. Procedures and requirements in the Plans are implemented.	**Timing:** Prepare Plans prior to construction **Location:** All work areas
Impact Hazards-1 **Impact Hazards-3** **Impact Hydro-5**	**APM HAZ-2: Hazardous Materials Management:** SDG&E will prepare and implement a Hazardous Materials Business Plans required by Chapter 6.95 of the State of California Health and Safety Code if the project exceeds the threshold quantities of hazardous materials and/or waste.	**SDG&E:** Prepare the Hazardous Materials Business Plan if necessary. **CPUC:** Review the Hazardous Materials Business Plan if necessary.	The Plan contains all necessary information. Procedures and requirements in the Plan are implemented.	**Timing:** During construction **Location:** All works areas
Impact Hazards-7: Potential to expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands **Impact Bio-1** **Impact Bio-2** **Impact Bio-3** **Impact Bio-4** **Impact Bio-5** **Impact Bio-7**	**APM HAZ-3: Wildland Fire Prevention and Fire Safety Practices:** Construction within "High" and "Very High" Fire Threat Zones (identified by the Fire and Resource Assessment Program (FRAP) maintained by CalFire) will be consistent with SDG&E's current design standards to improve service reliability in fire-prone areas during extreme weather conditions. SDG&E's current design standards include increasing conductor spacing to improve line clearances; installing steel poles to withstand extreme winds; installing self-supporting angle structures, which eliminate guying; and installing longer polymer insulators to minimize the potential of electrical faults caused by contamination, which will improve system reliability. SDG&E will adhere to its current operating protocol, Electric Standard Practice (ESP) 113.1, Wildland Fire Prevention and Fire Safety Standard Practice, which includes requirements for carrying emergency fire suppression equipment; conducting "tailgate meetings" that cover fire safety discussions, restricting smoking, and idling vehicles; and restricting construction during red flag warnings. The project will also comply with SDG&E's project-specific Construction Fire Plan. The Construction Fire Plan addresses the following fire risk reduction measures: • Training and briefing all personnel working on the project in fire prevention and suppression methods;	**SDG&E:** Work will be consistent with SDG&E's design standards for fire-prone areas. Adhere to applicable protocols and plans (current operating protocol, Electric Standard Practice (ESP) 113.1, Wildland Fire Prevention and Fire Safety Standard Practice, and SDG&E's project-specific Construction Fire Plan). A ~~meteorologist and~~ wildland fire specialist monitor weather conditions daily. ~~Work will not occur during times of high fire threat.~~ Do not conduct "at risk" activities when the Fire Potential Index is Extreme or during Red Flag Warnings, with exception of those that present a greater fire risk if left undone. **CPUC:** Verify that construction is consistent with SDG&E's design standards for fire-prone areas and adheres to applicable protocols and plans. Verify ~~meteorologist and~~ wildland fire specialists are present periodically during construction. ~~Verify that no work occurs during times of high fire threat.~~ Verify "at risk" activities are not conducted during Extreme fire risk or Red Flag Warnings, with limited exceptions.	Construction is consistent with SDG&E's design standards for fire-prone areas as well as applicable protocols and plans. Meteorologists and wildland fire specialists are ~~present~~ available for consultation during construction. Work does not occur during times of high fire threat.	**Timing:** Train personnel prior to construction Implement fire measures throughout construction Monitor weather daily during construction **Location:** Entire project area Maintain fire tools and backpack pumps with water within 50 feet of work activities

Impact	APM/Mitigation Measure	Monitoring/Reporting Requirement	Effectiveness Criteria	Timing and Location
	• Conducting a fire prevention discussion at each morning's safety meeting; • Storage of prescribed fire tools and backpack pumps with water within 50 feet of work activities; and • Assigning personnel to conduct a "fire watch" or "fire patrol" to ensure that risk mitigation and fire preparedness measures are implemented, immediate detection of a fire, and to coordinate with emergency response personnel in the event of a fire. Weather and fire danger will be monitored daily by company ~~meteorologists and~~ wildland fire specialists to provide timely and immediate communication of significant changes that could impact the project. No ~~work will occur during times of high fire threat, and if conditions change after commencing construction, work will cease in periods of extreme fire danger, such as red flag warnings issued by the National Weather Service or other severe fire weather conditions as identified by SDG&E.~~ "at risk" activities (i.e., activities in a wildland area that present a potential of ignition, either directly or indirectly, that may cause a fire) will be conducted except for those activities which, if left undone, present a greater risk than that involved with their accomplishment when the Fire Potential Index is Extreme (includes Red Flag Warnings). Some activities may be allowed inside substation fences and inside staging yards after consultation with the On-duty Fire Coordinator/Fire specialist to make a determination and identify additional mitigation requirements to reduce risk.			
Impact Hazards-1 **Impact Utilities-8**	**Mitigation Measure Hazards-1:** SDG&E shall excavate ("pothole") to the top of any buried utilities, including pipelines, that are located within 10 feet of a proposed excavation (i.e., pole foundation) to verify the location of the utility prior to initiating excavation work. Potholing work shall be performed using a non-destructive method (e.g., air vacuum extraction) that will not damage the pipeline once it is encountered. Potholing work shall be conducted under the oversight of a representative of the utility company. Potholing shall reveal the top of the pipeline only and shall not go any deeper than the top of the pipe, and shall not damage the pipe in any way. Two potholes shall be excavated at each associated foundation location so that the orientation of the pipeline can be verified. Potholes shall be backfilled with stockpiled soil once the location and orientation of the pipeline has been verified and marked. The utility company representative shall verify and approve that backfill and compaction of the potholes has been performed adequately. If the pipeline is located within the footprint of the proposed pole foundation, no pole foundation excavation work shall commence until SDG&E and CPUC have been notified and the pole location has been relocated sufficiently far away from the buried pipeline to avoid any impacts to the buried pipeline.	**SDG&E:** Locate all buried utilities within 10 feet of a proposed excavation and ensure that no buried utilities are damaged in the process. Verify that backfilled holes are adequately filled and compacted. **CPUC:** Verify all buried utilities are located and not damaged in the process.	Utilities are located, left undamaged, and properly covered.	**Timing:** Prior to construction **Location:** Within 10 feet of proposed TSP foundations along TL 6965
Impact Hazards-7	**Mitigation Measure Hazards-2:** SDG&E and/or its contractors shall have water tanks and/or water trucks ~~sited/~~available at active project sites for fire protection during project	**SDG&E:** Have water tanks and/or water trucks ~~on site~~ available at active project sites and require construction vehicles to have	Water trucks are ~~on site~~ available at active project sites. Vehicles are parked away from dry	**Timing:** Prior to and during construction

Impact	APM/Mitigation Measure	Monitoring/Reporting Requirement	Effectiveness Criteria	Timing and Location
	construction. All construction vehicles shall have fire suppression equipment. Construction personnel shall be required to park vehicles away from dry vegetation. Prior to construction, ~~SDG&E and its contractors~~ SDG&E's Fire Marshal/Coordinator shall contact and coordinate with CalFire and applicable local fire departments (i.e., City of Chula Vista and San Diego County) to determine the appropriate amounts of fire equipment to be carried on the vehicles and appropriate locations for the water tanks if water trucks are not used. SDG&E shall submit verification of its consultation with CalFire and the local fire departments to CPUC.	fire suppression equipment. Park vehicles away from dry vegetation. Consult with CalFire and local fire departments to determine appropriate amount of fire equipment to carry and locations for water tanks, if necessary. **CPUC:** Verify water tanks and/or water trucks are ~~present on site~~ available at active project sites. Verify vehicles are parked away from dry vegetation. Review consultation with CalFire and local fire departments.	vegetation. Consultation with CalFire and local fire departments occurs.	**Location:** Entire project area
		Hydrology and Water Quality		
Impact Hydro-1: Potential to violate any water quality standards or waste discharge requirements **Impact Hydro-3:** Potential to substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on or off site **Impact Hydro-5:** Potential to create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff **Impact Bio-1** **Impact Bio-2** **Impact Bio-3** **Impact Bio-4** **Impact Bio-5** **Impact Bio-7** **Impact Bio-8** **Impact GeologySoils-4** **Impact Hazards-1** **Impact Hazards-3**	**APM HYDRO-1: Stormwater Pollution Prevention Plan:** SDG&E will obtain coverage for the project under the Construction General Permit (Order No. 2009-0009-DWQ, as amended by 2010-0014-DWQ and 2012-0006-DWQ), which requires submittal of Permit Registration Documents (PRDs) to the State Water Resources Control Board. The PRDs include a Stormwater Pollution Prevention Plan (SWPPP), which will include the following: • Identification of pollutant sources and non-stormwater discharges associated with construction activity. • Specifications for erosion control best management practices (BMPs) that would be implemented, inspected, and maintained during construction of the project to minimize erosion and the potential for accidental releases, and to minimize pollutants in the runoff from the construction areas, including pollutants from storage and maintenance areas and building materials laydown areas. • Procedures for spill response and implementation. • Personnel training procedures for protocols included in the SWPPP. • Requirements for reporting and recordkeeping. • Procedures for water sampling and analysis of pollutants to ensure that Numeric Action Levels and Numeric Effluent Limitations are not exceeded.	**SDG&E:** Submit PRDs , including the SWPPP to the State Water Resources Control Board prior to construction. Implement requirements for the General Permit and SWPPP. **CPUC:** Verify PRDs are submitted to the State Water Resources Control Board. Verify SWPPP and General Permit requirements are implemented.	SWPPP and General Permit requirements are implemented.	**Timing:** Submit PRDs prior to construction Implement SWPPP during construction **Location:** Entire project area
Impact Hydro-1 **Impact Hydro-3**	**APM HYDRO-2: Stormwater Management Plan:** SDG&E will prepare and implement a Stormwater Management Plan that addresses post-construction drainage and water quality impacts (in tandem with the site design) in accordance with the City of Chula Vista's Standard Urban Stormwater Mitigation Plan (SUSMP) to comply with the Regional Municipal Separate Stormwater Sewer System (MS4) Permit (i.e., Clean Water Act Section 403, NPDES Permit). Any long-term maintenance activities required in the Water Quality	**SDG&E:** Prepare and implement a Stormwater Management Plan in accordance with the City of Chula Vista's SUSMP and the MS4 permit. Follow the City of Chula Vista's SUSMP for any long-term maintenance activities. **CPUC:**	The Plan contains all necessary information and complies will all applicable plans and permits. Measures in the Plan are implemented.	**Timing:** Plan is prepared prior to the end of construction **Location:** Entire project area

Impact	APM/Mitigation Measure	Monitoring/Reporting Requirement	Effectiveness Criteria	Timing and Location
	Technical Report prepared for the proposed project would be in accordance with the City's SUSMP.	Review Stormwater Management Plan. Verify long-term maintenance activities are in accordance with the City of Chula Vista's SUSMP.		
Impact Hydro-1 **Impact Bio-8**	**Mitigation Measure Hydro-1:** Overland crossings of drainages with vehicles and heavy equipment shall be conducted when the drainage is dry, as determined by the aquatic resource monitor. After each rain event, drainage crossings shall be evaluated for surface flows and ponding by the aquatic resource monitor to determine if a dry-out period (i.e., avoidance of the crossing) is required to avoid impacts to the drainage. ~~during the dry season (June 1 to October 15) or a temporary bridge shall be installed across the drainage~~ If it becomes necessary to place a temporary bridge over a jurisdictional drainage during construction, the bridge should be placed over the drainage spanning the channel from bank to bank and avoiding the Ordinary High Water Mark (OHWM) to the extent feasible. An aquatic resource monitor shall be present to provide guidance to the work crew during placement and removal of the bridge to avoid substantial impacts to the drainage. SDG&E shall consult with USACE, SDRWQCB, and CDFW and obtain any required permits or approvals prior to constructing a temporary bridge over any state or federally jurisdictional drainage. ~~Waters of the U.S. and State shall be avoided during installation of the temporary bridge.~~ SDG&E shall implement restoration and/or compensatory mitigation for temporary and permanent impacts to federally jurisdictional drainages associated with temporary bridge construction and use, if impacts to waters cannot be avoided.	**SDG&E:** Conduct overland crossings of drainages during the dry season. Prepare permits and obtain approvals as necessary. Restore and/or implement compensatory mitigation for temporary and permanent impacts to federally jurisdictional drainages. **CPUC:** Verify that overland crossings of drainages occur during the dry season. Review any required permits and approvals. Verify restoration and/or implementation of compensatory mitigation.	Overland crossings occur during the dry season (June 1 to October 15). Necessary permits and approvals are obtained and followed. Impacted federally jurisdictional drainages are restored or mitigated.	**Timing:** Obtain required permits prior to constructing temporary bridges Overland crossings during construction will occur only between June 1 and October 15 Restore or mitigate after construction **Location:** Jurisdictional drainages within the project area
Impact Hydro-1	**Mitigation Measure Hydro-2:** Groundwater extracted during construction dewatering shall not be discharged to surface waters or storm drains. If dewatering is necessary, the water would either be directed to relatively flat upland areas for evaporation and infiltration back to the water table, used for dust control, used to irrigate upland areas, or used as makeup for a construction process (e.g., concrete production). If extracted groundwater is found not to be clean, clear, and odor-free, it shall be disposed of at an appropriate designated facility.	**SDG&E:** SDG&E will not discharge groundwater to surface water or storm drains. Direct water to relatively flat upland areas if dewatering is necessary. **CPUC:** Verify measure is implemented as defined during monitoring.	Groundwater is not discharged to surface water or storm drains. Water is directed to relatively flat upland areas if necessary.	**Timing:** Groundwater excavation during construction **Location:** All excavated areas
Impact Hydro-3 **Impact Hydro-5**	**Mitigation Measure Hydro-3:** The water detention basin to be installed at the substation site shall be designed in accordance with the City of Chula Vista Development Stormwater Manual, ~~which approves use of the following types of stormwater facilities:~~ ~~• Infiltration facilities or practices, including dry wells, infiltration trenches, infiltration basins, and other facilities that infiltrate runoff to native soils (sized to detain and infiltrate a volume equivalent to the 85th percentile 24-hour event)~~ ~~• Bioretention facilities and media filters that detain stormwater and filter it slowly (at the rate of about 5 inches per hour) through soil or sand (sized with a surface area of at least 0.04 times the effectively impervious tributary area,~~	**SDG&E:** Prepare water detention basin design in accordance with the City of Chula Vista Development Stormwater Manual. Submit design to the City of Chula Vista and CPUC at least 60 days prior to construction. **CPUC:** Review the stormwater detention basin design.	Water detention basin is built in accordance with the City of Chula Vista Development Stormwater Manual.	**Timing:** Submit design at least 60 days prior to construction **Location:** Water detention basin at Salt Creek Substation

Impact	APM/Mitigation Measure	Monitoring/Reporting Requirement	Effectiveness Criteria	Timing and Location
	~~or as approved by the City Engineer)~~ • ~~Extended detention basins, wet ponds, and wetlands or other facilities using settling (sized to detain a volume equivalent to runoff from the tributary area generated by the 85th percentile 24-hour event)~~ The stormwater detention basin design shall be submitted to the City and CPUC for review and approval no less than 60 days prior to construction.			
		Noise		
Impact Noise-4: Potential to result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity during construction **Impact Recreation-3**	**APM NOISE-1: Mufflers:** Functioning mufflers will be maintained on all construction equipment.	**SDG&E:** Maintain functioning mufflers on all equipment. **CPUC:** Verify that functioning mufflers are maintained.	Mufflers for all equipment are properly maintained.	**Timing:** During construction **Location:** Throughout life of the project
	APM NOISE-2: Helicopter Use: Helicopter usage will occur during daylight hours and conform to acceptable hours for construction activities, as outlined within the San Diego County Noise Code and the City of Chula Vista Noise Ordinance. All helicopter use will comply with local, state, and federal regulations. There will be no helicopter over-flights of residences.	**SDG&E:** Limit helicopter usage to acceptable daylight hours. Helicopters will not fly over residences. **CPUC:** Verify that helicopters are used during acceptable daylight hours and do not fly over residences.	Helicopters operate at acceptable daylight hours and do not fly over residences.	**Timing:** During construction **Location:** Recreational areas on Hunte Parkway and within the transmission corridor, and residences
Impact Noise-1: Potential to expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance or applicable standards of other agencies **Impact Noise-4**	**APM NOISE-3: Construction Outside of Allowed Hours:** If construction activities are required outside of the permissible local construction hours, SDG&E will ~~obtain approval from~~ meet and confer with the City of Chula Vista and the County of San Diego prior to conducting construction outside the permitted hours.	**SDG&E:** ~~Obtain approvals~~ Meet and confer with Agencies, as necessary. **CPUC:** Verify SDG&E has ~~obtained approvals~~ met and conferred with Agencies, as necessary.	Construction outside of allowed hours is approved.	**Timing:** Prior to construction outside of allowed hours **Location:** Entire project area
Impact Noise-4 **Impact Recreation-3** **Impact Recreation-4**	**Mitigation Measure Noise-1:** SDG&E shall provide notice by mail to all sensitive receptors and residences within 300 feet of construction sites, staging yards, helicopter fly yards, and access roads at least one week prior to construction activities. SDG&E shall also post notices at the access road to the proposed substation and in ~~public areas, including recreational use areas, within 300 feet of the project alignment and construction work areas~~ SDG&E's right-of-way where the right-of-way is located within 300 feet of designated trails, public parks, and roads. The announcement shall state specifically where and when construction will occur in the area. For areas that would be exposed to helicopter noise, the announcement shall provide specific details on the schedule of the dates, times, and duration of helicopter activities. Notices shall provide tips on reducing noise intrusion, for example, by closing windows facing the planned construction. SDG&E shall identify and provide a public liaison person before and during construction through project energization to respond to concerns of neighboring receptors, including	**SDG&E:** Prepare notice and send via mail to all sensitive receptors defined in the measure. Post notices in public areas. Appoint a public liaison person and establish a hot line. Submit monthly reports to the CPUC within 15 days of the end of the month. **CPUC:** Review the notice that will be sent to sensitive receptors and verify that it has been mailed to appropriate sensitive receptors. Verify the appointment of a public liaison person and establishment of a hot line. Review monthly reports.	The public is notified of construction activities. Notices are posted in public areas. A public liaison person is appointed. Reports detail complaints and responses.	**Timing:** Notify sensitive receptors and post notices at least 1 week prior to construction activities Appoint public liaison person prior to construction Monthly reports are sent within 15 days of the end of every month **Location:** Sensitive receptors and residences within 300 feet of construction sites, staging yards, helicopter fly yards, and access roads

Impact	APM/Mitigation Measure	Monitoring/Reporting Requirement	Effectiveness Criteria	Timing and Location
	residents, about noise construction disturbance. SDG&E shall also establish a toll-free telephone number for receiving questions or complaints during construction through project energization and develop procedures for responding to callers. Procedures for reaching the public liaison officer via telephone or in person shall be included in the above notices and also posted conspicuously at the construction site(s). SDG&E ~~will~~ shall address all complaints ~~in a~~ within one week of when the complaint is filed. SDG&E shall provide monthly reports with records of complaints and responses to the CPUC. These reports shall be provided to CPUC within 15 days of the end of the month.			
Impact Noise-4 **Impact Recreation-3** **Impact Recreation-4**	**Mitigation Measure Noise-2:** SDG&E shall comply with local noise rules, standards, and/or ordinances by implementing the following noise-suppression techniques and standards set by local authorities. SDG&E shall submit a request to CPUC for any construction activities that must occur outside of the permitted construction hours allowed by local ordinances. The request shall include details on the noise levels resulting from construction activities occurring outside the permitted construction hours. CPUC will not authorize any work outside of locally permitted construction hours that would exceed local standards. SDG&E shall also employ the following noise-suppression techniques to reduce construction noise: • Use noise reduction features on construction equipment (e.g., mufflers and engine shrouds) that are no less effective than those originally installed by the manufacturer. • Install temporary sound walls or acoustic blankets to shield adjacent residences from stationary equipment where residences are located within ~~200~~ 300 feet of the equipment. The sound walls or acoustic blankets shall have a height of no less than 3 feet higher than noise-generating piece(s) or parts of equipment, a Sound Transmission Class of 27 or greater, and a surface with a solid face from top to bottom without any openings or cutouts along the face or at the base of the barrier. • Minimize unnecessary construction vehicle use and idling time. The ability to limit construction vehicle idling time is dependent upon the sequence of construction activities and when and where vehicles are needed or staged. If a vehicle is not required for use immediately or continuously for construction activities, its engine shall be shut off.	**SDG&E:** Implement the noise-suppression techniques and standards defined in the measure. Request permission from CPUC for any construction activities that must occur outside of permitted hours. **CPUC:** During monitoring, verify noise-suppression techniques and standards are implemented. Review and approve requests for construction activities outside permitted hours.	Noise-suppression techniques and standards are implemented. Construction outside of permitted hours is approved and does not create noise in excess of local standards.	**Timing:** During construction **Location:** All work areas
Impact Noise-4	**Mitigation Measure Noise-3:** SDG&E shall coordinate with the Chula Vista Elementary School District and the Sweetwater Union High School District to schedule helicopter activities and TL 6965 construction activities, (i.e. power pole installation and helicopter flight within 300 feet of school properties to avoid days/times when school is in session to the extent practicable. To the extent feasible, construction activities that would result in a substantial increase in ambient noise levels at a nearby school would be scheduled during a school break.	**SDG&E:** Coordinate with Chula Vista Elementary School District and Sweetwater Union High School District to schedule helicopter and construction activities during school breaks. **CPUC:** Verify coordination with Chula Vista Elementary School District and Sweetwater Union High School District.	Construction activities that would result in a substantial increase in ambient noise levels are scheduled during school breaks, to the extent feasible.	**Timing:** Prior to helicopter activities and TL 6965 construction activities **Location:** Construction sites within 300 feet of school properties

Impact	APM/Mitigation Measure	Monitoring/Reporting Requirement	Effectiveness Criteria	Timing and Location
Impact Noise-4	**Mitigation Measure Noise-4:** SDG&E shall relocate pole number 28 approximately 100 feet to the north and in line with the power line to increase the distance between residences and the proposed power pole.	**SDG&E:** Relocate pole number 28 approximately 100 feet to the north. **CPUC:** Verify relocation of pole 28.	Pole 28 is relocated.	**Timing:** During construction **Location:** 100 feet north of Pole 28
		Recreation		
Impact Recreation-1: Potential to substantially disrupt recreational activities or increase the use of recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated **Impact Traffic-3:** Potential to substantially increase hazards due to a design feature or incompatible uses	**APM REC-1: Temporary Trail Detours:** Where feasible, temporary detours will be provided for trail users. Signs will be posted to direct trail users to temporary trail detours. If a trail detour is not feasible, the trail will be closed and signs will alert trail users 1 week in advance of the closure. Signs will be posted within 200 feet of the trail closure area.	**SDG&E:** Establish temporary trail detours where feasible and close trails when necessary. Post signs alerting trail users of closure one week in advance of the closure. **CPUC:** Verify temporary detours are established and trails are closed, as necessary. Verify signs are posted one week in advance of the trail closure.	Detours are established where feasible and/or trails are closed when necessary. Signs are posted near trail closure area.	**Timing:** Temporary detours during construction If trails are closed, post signs one week in advance of closure **Location:** Post signs within 200 feet of trail closure area
Impact Recreation-1	**Mitigation Measure Recreation-1:** SDG&E shall prepare a Pre-Project Trail Condition Report that documents the condition of designated and unofficial trails located within the project work area, prior to construction. The Pre-Project Trail Condition Report shall be submitted to CPUC 30 days prior to construction. SDG&E shall repair all damage to trails (e.g., rutting) caused by construction vehicles by the completion of construction. SDG&E shall prepare a Post-Project Trail Condition Report documenting the final state of all trails within the project work area and access roads. The Post-Project Trail Condition Report shall be submitted to the CPUC within 90 days of construction completion. SDG&E shall complete all trail repairs to the approval of CPUC.	**SDG&E:** Submit the Pre-Project Trail Report to the CPUC at least 30 days prior to construction. Repair damage to all trails caused by construction. Submit the Post-Project Trail Report to the CPUC within 90 days of construction completion. **CPUC:** Review the Pre-Project and Post-Project Trail Reports. Verify all trails are repaired by the end of construction.	The Plans contains all necessary information. All damaged trails are repaired.	**Timing:** Submit Pre-Project Trail Report at least 30 days prior to construction Repair damage during construction Submit Post-Project Trail Report within 90 days of construction completion **Location:** Designated and unofficial trails located within the project area
Impact Recreation-2: Potential to include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment	**Mitigation Measure Recreation-2:** SDG&E shall use existing trails, paths, and walkways for any temporary trail detours.	**SDG&E:** Use existing paths for temporary detours. **CPUC:** Verify that existing paths are used for temporary detours.	Existing trails are used for temporary detours	**Timing:** During construction **Location:** Existing trails, paths, and walkways
		Transportation and Traffic		
Impact Traffic-3	**APM TRANS-1: Steel Plating:** Steel plating will be placed over open trenches to maintain vehicular and pedestrian traffic across areas that are not under active construction.	**SDG&E:** Place steel plating over open trenches. **CPUC:** Verify that steel plating has been placed over open trenches.	Vehicular and pedestrian traffic is maintained with steel plating.	**Timing:** During construction **Location:** Open trenches throughout project area
Impact Traffic-1: Conflict with an applicable plan including a congestion management plan, ordinance, or policy establishing measures of	**Mitigation Measure Traffic-1:** SDG&E shall prepare and submit to Caltrans a Highway Closure Plan as part of the encroachment permit application at least 30 days prior to initiating installation of crossings of SR-125. The plan shall require that closure or partial closure of SR-125 be limited to	**SDG&E:** Submit a Highway Closure Plan to Caltrans. Provide evidence of Plan ~~submission~~ approval to CPUC at least 15 days prior to initiating crossing installation.	The Plan contains all necessary information. Measures in the Plan are implemented.	**Timing:** Highway Closure Plan is submitted to Caltrans 15 days prior to initiating installation of the crossings

Impact	APM/Mitigation Measure	Monitoring/Reporting Requirement	Effectiveness Criteria	Timing and Location
effectiveness for the performance of the circulation system or other standards, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including, but not limited to, intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit **Impact Traffic-4:** Result in inadequate emergency access **Impact Hazards-6:** Potential to impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan	off-peak, non-daytime hours, from 10 p.m. to 5 a.m., and that signage be posted prior to the closure to alert drivers of the closure in accordance with Caltrans requirements. Highway closure times will be reviewed and approved by Caltrans to minimize delay to SR-125 traffic. The plan shall also outline suggested detours for SR-125 traffic, including routes and signage. SDG&E shall provide evidence of Caltrans approval of the plan to CPUC at least 15 days prior to initiating installation of the crossings. No work shall begin in Caltrans right-of-way until the encroachment permit and Highway Closure Plan are approved by Caltrans.	Implement requirements within the Highway Closure Plan. **CPUC:** Verify the Highway Closure Plan has been submitted with the encroachment permit application. Verify measures in the Plan are implemented during monitoring.		Monitoring Plan implementation during construction Highway closure will occur between 10 p.m. and 5 a.m. **Location:** Two locations on SR-125 that would be closed during stringing Detours to SR-125
Impact Traffic-2: Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks	**Mitigation Measure Traffic-2:** Prior to construction, helicopter contractors shall coordinate helicopter activities for the project with the FAA and obtain any required approvals to conduct work in the airport airspace. Helicopter contractors shall provide the CPUC with all required approvals, documents, and conditions of work prior to conducting helicopter activities for the project. The helicopter operator would prepare and implement a Helicopter Lift Plan, coordinate with the regional FAA office, and obtain approval for the helicopter operations for all routes within 1,500 feet of residences or that would crossover "congested areas" as described in 14 CFR Part 133.33.	**SDG&E:** Obtain approval from FAA to conduct work in airport airspace. Provide the CPUC with all required approvals, documents, and conditions of work. Prepare and implement a Helicopter Lift Plan, if necessary. **CPUC:** Review all required approvals, documents, and conditions of work prior to use of helicopters. Review the Helicopter Lift Plan, if necessary.	Approval from FAA is obtained. The Plan contains all necessary information. Measures in the Plan are implemented, if necessary.	**Timing:** Prior to conducting helicopter activities **Location:** In the airport airspace located in portions of the northern half of the transmission corridor
Impact Traffic-3 **Impact Traffic-5:** Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities **Impact GHG-2** **Impact Recreation-1**	**Mitigation Measure Traffic-3:** SDG&E shall develop and implement a project-specific Transportation Management Plan (TMP) to be implemented during construction. SDG&E shall submit the plan to CPUC for review and approval at least 30 days prior to construction. The TMP shall conform to the *California Joint Utility Traffic Control Committee's Work Area Protection and Traffic Control Manual*. The TMP shall include provisions for the following: • Implementation of standard safety practices, including installation of appropriate barriers between work zones and transportation facilities, placement of appropriate signage, and use of traffic control devices. • Use of flaggers and/or signage to guide vehicle through or around construction zones using proper techniques for construction activities. • Storage of all equipment and materials in designated work areas in a manner that minimizes traffic obstructions and maximizes sign visibility. • Limiting of vehicles to safe speed levels according to	**SDG&E:** Submit the project-specific TMP to CPUC at least 30 days prior to construction. **CPUC:** Review the project-specific TMP. Verify measures in the TMP are implemented during monitoring.	The TMP contains all necessary information. Measures in the TMP are implemented.	**Timing:** Submit TMP at least 30 days prior to construction **Location:** Roads throughout the entire project area

Impact	APM/Mitigation Measure	Monitoring/Reporting Requirement	Effectiveness Criteria	Timing and Location
	posted speed limits, road conditions, and weather conditions. • Coordination with public transit provider. • Routing of trucks to avoid minor roads, where possible, to reduce congestion and potential asphalt damage. • Repair of asphalt and other road damage (e.g., curb and gutter damage, rutting in unpaved roads) caused by construction vehicles. • Detours for cyclists and pedestrians when bike lanes or sidewalks must be closed. • Abiding by encroachment permit conditions, which shall supersede conflicting provisions in the TMP.			
Impact Traffic-4 **Impact Hazards-6**	**Mitigation Measure Traffic-4:** SDG&E shall notify local emergency personnel (i.e., fire departments, police departments, and ambulance services) at least 1 week prior to a road closure. The notice shall include date(s), time(s), and duration of closure(s), and a contact number for SDG&E project personnel.	**SDG&E:** Notify local emergency personnel at least one week before closure of SR-125. **CPUC:** Verify local emergency personnel are notified before closure of SR-125, and review notice.	Notices are sent to local emergency personnel.	**Timing:** Send notices at least 1 week prior to closure of SR-125 **Location:** Not applicable
		Utilities and Service Systems		
Impact Utilities-8: Cause substantial deterioration or damage to gas, water, or sewer pipelines **Impact Hazards-1**	**APM UTIL-1: Utility Notification:** Prior to trenching, SDG&E will notify other utility companies to locate and mark existing underground utilities along the proposed underground alignment.	**SDG&E:** Notify other utility companies to locate and mark existing underground utilities along the proposed underground alignment. **CPUC:** Verify other utility companies locate and mark existing utilities.	Existing underground utilities are marked.	**Timing:** Prior to trenching activities **Location:** Underground project features
Impact Utilities-8 **Impact Hazards-1**	**Mitigation Measure Utilities-1:** SDG&E shall notify all appropriate utility companies to locate and mark existing underground utilities along the entire length of the alignment at least 30 days prior to construction. No subsurface work shall be conducted that would conflict with a buried utility. In the event of a conflict, the project will be realigned vertically and/or horizontally as appropriate to avoid utilities and provide adequate operational and safety buffering.	**SDG&E:** Notify utility companies at least 30 days prior to construction. Do not conduct any subsurface work that would conflict with a buried utility. Prepare realignments of the project, if necessary. **CPUC:** Verify notification of utility companies at least 30 days prior to construction. Verify subsurface work does not conflict with existing utilities. Verify realignments of the project, if necessary.	Underground utilities are marked and if necessary, project is re-aligned.	**Timing:** Utilities are marked least 30 days prior to construction **Location:** Entire project area
Impact Utilities-9: Disrupt existing utility systems or conflict with utility ROWs	**Mitigation Measure Utilities-2:** Prior to construction in which a utility service interruption is known to be unavoidable, SDG&E shall notify members of the public affected by the planned outage at least ~~30~~ 10 calendar days prior to the impending interruption for residential outages and commercial outages. Copies of the notices and dates shall be provided to the CPUC at the time the notices are distributed to the public. In the event of an unforeseen utility service disruption, SDG&E shall immediately notify the CPUC and affected utility company/companies to determine appropriate actions.	**SDG&E:** Send notices to public at least ~~30~~ 10 calendar days prior to an impending utility service interruption for residential outages and commercial outages. Notify the CPUC and affected utility company/companies in the event of an unforeseen utility service disruption. **CPUC:** Review notices and dates of scheduled service interruptions. Verify notices are sent to utility companies in the case of unforeseen service interruptions.	Notices are sent to alert the public of known utility service interruptions. Notices are immediately sent to the CPUC and affected utility companies in the event of an unforeseen utility service disruption.	**Timing:** Send notices to public at least ~~30~~ 10 calendar days prior to an impending utility service interruption Send notices to CPUC and utility companies immediately if the event in an unforeseen utility disruption **Location:** Not applicable
Impact Utilities-9	**Mitigation Measure Utilities-3:** SDG&E shall acquire easements	**SDG&E:**	Required easements are acquired.	**Timing:**

Impact	APM/Mitigation Measure	Monitoring/Reporting Requirement	Effectiveness Criteria	Timing and Location
	for access roads ~~owned by~~ from the SDCWA and the City of Chula Vista prior to use of these roads, as needed. SDG&E shall ~~construct a secondary access road to the City of Chula Vista sewer access road and~~ maintain City of Chula Vista access to buried sewer lines throughout the duration of construction.	Acquire easements from SDCWA and City of Chula Vista. Maintain access to buried sewer lines for the City of Chula Vista ~~by constructing a secondary access road~~. **CPUC:** Review easements. ~~Verify construction of a secondary access road for the City of Chula Vista.~~	Access to buried sewer lines for the City of Chula Vista is maintained.	Easements acquired prior to construction Access to buried sewer lines is maintained during construction **Location:** Access roads owned by SDCWA and City of Chula Vista

(End of Attachment B)