4.0 Mitigation Monitoring, Compliance, and Reporting Program

The purpose of this Mitigation Monitoring, Compliance, and Reporting Program (MMCRP) is to ensure effective implementation of the applicant proposed measures (APMs) that San Diego Gas and Electric Company (the applicant) has agreed to implement as part of the South Orange County Reliability Enhancement Project (proposed project) and mitigation measures required by the California Public Utilities Commission (CPUC) for the proposed project. This Chapter supersedes Chapter 8, "Mitigation Monitoring and Reporting Plan" in the Draft EIR. The MMCRP, which is outlined in Table 4-1, includes:

- Each impact evaluated in the Environmental Impact Report (EIR);
- APMs and mitigation measures that the applicant is required to implement as part of the proposed project;
- Compliance documentation and consultation requirements for each APM and mitigation measure;
- Monitoring requirements; and
- Timing for implementation of the APMs and mitigation measures.

A CPUC Monitor (see Section 4.2.1, "CPUC Project Manager and Compliance Managers and Monitors") will monitor construction of the approved project to ensure full implementation of each APM and mitigation measure. The CPUC Compliance Manager (see Section 4.2.1) will issue a warning for non-compliance activities that don't present an immediate risk to environmental resources. Continued non-compliance of low risk activities or non-compliance activities that present a more severe risk to environmental resources will be reported to the CPUC Project Manager (see Section 4.2.1). Any decisions to halt work due to non-compliance will be made by the CPUC Project Manager. The CPUC Compliance Manager will keep a record of any incidents of noncompliance with mitigation measures, APMs, or other conditions of project approval. The CPUC Compliance Manager will provide copies of these documents to the applicant and CPUC Project Manager.

If the CPUC approves the proposed project and mitigation measures, further project construction–related details will be added to the MMCRP.

4.1 Regulatory Background

Under California Environmental Quality Act (CEQA) Guidelines Section 15097, the Lead Agency (in this case, CPUC) is responsible for developing a mitigation monitoring or reporting program to ensure that all project revisions and mitigation measures described in the findings associated with approval of the project are implemented. Monitoring refers to the ongoing or periodic process by which project construction and operation are overseen by the lead agency and ensures that the applicant's compliance with project conditions is checked on a regular basis. Reporting, which comprises written reviews of the applicant's compliance with APMs and mitigation measures, ensures that the lead agency is informed of compliance with APMs and mitigation measures. The CPUC views the MMCRP as a working guide to facilitate not only the applicant's implementation of APMs and mitigation measures, but also the monitoring, compliance, and reporting activities of the CPUC and its monitors. The CEQA Guidelines encourage lead and responsible agencies to cooperate in mitigation monitoring and reporting, where possible.

4.2 Roles and Responsibilities

This section outlines roles and responsibilities specific to the MMCRP.

4.2.1 CPUC Project Manager and Compliance Managers and Monitors

The CPUC Project Manager will assign monitoring and reporting responsibilities to a third-party contractor as described below and will oversee the work of the third-party contractor through review of weekly and monthly status reports. The CPUC Project Manager will be notified of non-compliance situations and may suggest measures to help resolve the issue(s). All minor project refinement requests (further discussed in Section 4.4, "Minor Project Refinements") will be submitted to the CPUC Project Manager for review and approval.

The CPUC Project Manager will assign a Compliance Manager (CPUC Compliance Manager) as the designated point of contact. The CPUC Compliance Manager will be a third-party contractor and will report to the CPUC Project Manager. The CPUC Compliance Manager will consult with the CPUC Project Manager to determine the appropriate level of inspection frequency and intensity and will also oversee one or more Compliance Monitors. Compliance Monitors are on-the-ground personnel responsible for observing and reporting compliance with the terms and conditions of the CPUC Certificate of Public Convenience and Necessity. The number of Compliance Monitors and frequency of site inspections will depend on the number of concurrent construction activities and their locations. The CPUC Compliance Manager will be an integral part of the project team and will stay apprised of construction activities, schedule changes, and construction progress. The CPUC Compliance Manager and Compliance Monitors will document compliance through daily site inspection forms, the use of tables tracking APMs and mitigation measures, and monthly reports to the CPUC Project Manager.

4.2.2 Construction Personnel

Applicant Construction Management Team

The applicant's construction management team will oversee, manage, and coordinate with the Construction Crews or Contractor, if utilized, to ensure overall project construction is completed as required by the project conditions and contract, and within the schedule. The applicant's construction management team must ensure that APMs, mitigation requirements, and project conditions are implemented and that any work stoppages are appropriately communicated and coordinated.

Construction Crews/Contractors

The Construction Crews/Contractors will provide daily construction work schedules and describe the number, types, and activities of the construction scheduled to occur to ensure adequate monitoring resources are provided. The Construction Crews/Contractors will also report deviations from compliance and any spills (e.g., fuel or water) to the Compliance Monitors.

The Construction Crews/Contractors will be responsible for compliance with the environmental requirements of the project. They will be responsible for incorporating all APMs, mitigation requirements, and project conditions into daily construction activities.

Key environmental responsibilities for Construction Crews/Contractors include, but are not limited to:

- Verifying that all construction workers attend the project environmental training program prior to beginning work;
- Reviewing and understanding the APMs, mitigation requirements, and project conditions; and
- Implementing APMs, mitigation requirements, and project conditions during construction and maintaining compliance with the MMCRP.

4.2.3 Monitoring

As the Lead Agency under CEQA, the CPUC is required to monitor the project to ensure that the APMs, mitigation requirements, and project conditions are implemented. The CPUC will have primary responsibility for ensuring full compliance with the provisions of the monitoring program. The Compliance Monitors, under the supervision of the CPUC Compliance Manager, will monitor construction activities in the project areas on a regular basis, particularly when construction activities have the potential to impact a sensitive resource.

The applicant may elect to have one or more full-time environmental monitor on site on a daily basis to coordinate specialty monitors (such as biologists and archaeologists), assist construction crews with interpreting APMs and mitigation measures, and help correct any compliance issues in a timely manner. Environmental monitors will also provide environmental training.

4.2.4 Enforcement

The CPUC has the authority to halt any construction activity associated with the project if the activity is determined to be a deviation from the approved project, adopted APMs, mitigation measures, or conditions of approval. CPUC Compliance Monitors will inform the applicant's environmental monitor or construction contractor of a compliance issue and report compliance issues to the CPUC Project Manager via the CPUC Compliance Manager.

4.2.5 Mitigation Compliance

The applicant is responsible for successfully implementing all the adopted APMs and mitigation measures listed in the MMCRP. The applicant shall inform the CPUC Project Manager and CPUC Compliance Manager in writing of any mitigation measures that are not or cannot be successfully implemented. The CPUC Project Manager and CPUC Compliance Manager will identify the appropriate subsequent actions.

4.3 Communication

Communication is a critical component of a successful environmental compliance program. To avoid project delays and possible work stoppages, environmental and construction representatives will need to interact regularly and maintain professional, responsive communications at all times. Similarly, representatives of the applicant will need to coordinate closely with the Compliance Monitors to address and resolve issues in a timely manner. A communication protocol to accurately disseminate information regarding ongoing surveys and mitigation measures, construction activities, contractors, and planned or upcoming work to all levels of the project will be established prior to the commencement of construction.

4.3.1 Monthly Environmental Compliance Report

The applicant will prepare and distribute a monthly environmental compliance report to the CPUC Project Manager and CPUC Compliance Manager. The CPUC Compliance Manager will review the monthly report to ensure that the status of APMs and mitigation measures is consistent with observations in the field. The monthly environmental compliance report will also be used to keep all parties informed of construction progress and any schedule changes.

4.3.2 Coordination with Other Agencies

Several local, state, and federal agencies have jurisdiction over portions of the land in the project area. In addition, some APMs and mitigation measures were derived from specific agency input. The applicant will be responsible for contacting agencies and immediately notifying them of compliance issues within their jurisdiction. The CPUC Compliance Manager may request copies of email correspondences, phone logs, or other documentation between the applicant and agencies to avoid direct involvement of Compliance Monitors. However, if an issue regarding compliance with an APM, mitigation measure, or permit requirement under the jurisdiction of an agency remains unresolved, the Compliance Monitors may elect to contact the agency to discuss resolution.

4.4 Minor Project Refinements

This section describes the CPUC's process for staff approval of a minor project refinement (MPR) requested by the applicant. An MPR may be necessary as a result of the applicant's final engineering of project elements. The CPUC will only grant approval of an MPR if the refinement achieves or exceeds the level of environmental protection approved in the Final EIR, is consistent with CEQA requirements, and complies with the intent of the mitigation measures in the Final EIR. The CPUC will require a Petition for Modification for any request that does not meet all of the criteria of an MPR.

4.4.1 Minor Project Refinements Request Process

The applicant's request for CPUC staff approval of an MPR must be made in writing and should include the following information:

- A detailed description of the proposed MPR, including an explanation of why the MPR is necessary;
- Photos, maps, and other supporting documentation illustrating the difference between the existing conditions in the project area, the approved project, and the proposed MPR;
- A discussion of each environmental impact of the proposed MPR with supporting data verifying that the proposed MPR would not increase an existing impact of the project or create a new impact, after application of previously adopted mitigation;
- Whether the MPR conflicts with any APMs or mitigation measures;
- Whether the MPR conflicts with any applicable guideline, ordinance, code, rule, regulation, order, decision, statute, or policy; and
- Construction schedule of the MPR.

The CPUC staff may request additional information, agency consultations, or a site visit in order to process the request. The CPUC staff will process the MPR once it is determined that sufficient information about the MPR has been received. The CPUC Project Manager will provide the applicant with a denied MPR with provided justification or a signed, approved MPR.

4.4.2 Requirements for Staff Approval of Minor Refinements

An MPR must meet all of the following requirements for CPUC staff approval. An MPR must not:

- Be outside the geographic boundary of the study area as defined in the CEQA document;
- Create a new significant impact or a substantial increase in the severity of a previously identified impact, based on the thresholds used in the environmental document;
- Trigger less restrictive or new discretionary permit requirements;[1]
- Conflict with any APMs or mitigation measures or any applicable guideline, ordinance, code, rule, regulation, order, decision, statute, or policy; or
- Require new conditions for approval, without which the refinements would result in a new significant impact or a substantial increase in the severity of a previously identified impact.

Examples of refinements that may be approved by staff after final engineering include, but are not limited to:

- Adding a temporary extra work area or substituting a work area, including lay-down and staging, for another work area that is as suitable as or more suitable than the originally proposed work area. The temporary extra work area or substitute work area must be located in a disturbed area, must be restored to either its initial condition[2] or an improved condition,[3] and must not create any new significant impacts or a substantial increase in the severity of a previously identified impact.
- Adjusting the alignment of a project component within the study area that was defined in the original environmental analysis to avoid sensitive resources or effects on homeowners, or adapt to conditions on the ground that vary from the conditions that existed at the time of the original environmental analysis, so long as the adjustment does not create a new significant impact or a substantial increase in the severity of a previously identified impact.
- Finalizing the engineering design for a project component that was not specifically described in the Final EIR or that requires adjustments in order to facilitate construction. The finalized design must not create a new significant impact or a substantial increase in the severity of a previously identified impact.

[1] For example: In the event that dredging activities are added to a project, new conditions may be required under a Clean Water Act Section 404 permit or a California Fish and Game Code Section 1602 Lake or Streambed Alteration Agreement.

[2] The initial condition of the area is the condition prior to its use as a work area.

[3] For example, trash has been cleaned up that was originally on the site, or the site is replanted with native vegetation.

4.5 Dispute Resolution

The following procedure will be observed for dispute resolution:

- **Step 1.** Disputes and complaints (including those of the public) should be directed first to the CPUC Project Manager for resolution. The CPUC Project Manager will attempt to resolve the dispute.
- **Step 2.** Should this informal process fail, the CPUC Project Manager may initiate enforcement or compliance action to address deviations from the proposed project or adopted MMCRP.
- **Step 3.** If a dispute or complaint regarding the implementation or evaluation of the MMCRP cannot be resolved informally or through enforcement or compliance action by the CPUC, any affected participant in the dispute or complaint may file a written "notice of dispute" with the CPUC 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 for the purposes of resolving the dispute. The Executive Director shall issue an Executive Resolution describing his/her decision, and serve it on the filer and other affected participants.
- **Step 4.** If one or more of the affected parties is not satisfied with the decision as described in the resolution, such party(ies) may appeal to the CPUC via a procedure to be specified by the Commission.

Parties may also seek review by the CPUC through existing 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 foregoing procedure.

4.6 Mitigation, Monitoring, Compliance, and Reporting Program

Table 4-1 presents the MMCRP, which incorporates all changes to the proposed project and mitigation measures that were made as a result of public review of the Draft EIR and Recirculated Draft EIR and further consideration of the proposed project by the CPUC. If the CPUC Commissioners approve the proposed project, CPUC staff will compile the Final MMCRP based on this table and the final project conditions.

Table 4-1 is the core document for the proposed project's environmental requirements and will serve as the primary guideline for determining compliance with the MMCRP. A copy of the table should be kept with each crew working on the proposed project, and all supervisory staff working on the proposed project should be familiar with the content of the table. CPUC staff will use a modified version of the MMCRP table to accurately track the status of APMs and mitigation measures and will also be used by the applicant's Environmental Monitors, Compliance Monitors, project managers, supervisory staff, and other members of the project team.

4.6.1 Effectiveness Review

The CPUC may conduct a comprehensive review of conditions that are not effectively mitigating impacts at any time it deems appropriate, including as a result of the Dispute Resolution procedure outlined in section 4.2, "Roles and Responsibilities." If the CPUC determines that, based on the review, any

conditions are not adequately mitigating significant environmental impacts caused by the project, the CPUC may impose additional reasonable conditions to effectively mitigate these impacts. These reviews will be conducted in a manner consistent with the CPUC's rules and practices.

Table 4-1 Mitigation Monitoring, Compliance, and Reporting Program

Impact	Applicant Proposed Measure (APM) or Mitigation Measure (MM)	Monitoring Requirements	Timing
4.1 Aesthetics			
Impact AE-1: Result in a substantial adverse effect on a scenic vista.	**APM AES-1: Clean Work Areas.** During construction, SDG&E would keep construction activities as clean and inconspicuous as practical.	• Ensure that the applicant maintains construction activities in orderly fashion.	During construction and restoration.
	APM AES-2: Restoring Disturbed Areas. When proposed project construction has been completed all disturbed terrain would be restored through recountouring and revegetation in order to reestablish a natural appearing landscape and reduce potential visual contrasts between disturbed areas and the surrounding landscape.	• Ensure that the applicant restores disturbed areas.	During restoration.
	MM AES-2: Minimize Clearing and Ground Disturbance and Restore Disturbed Areas to Pre-Project Conditions. Clearing and ground disturbance required for construction, operation, and maintenance, including, but not limited to, access roads, pulling sites, construction and maintenance pads, and construction laydown areas, will be the minimum required, and the applicant will consult with the CPUC to identify and implement methods to restore disturbed areas to pre-construction conditions for all areas not required for operation and maintenance. The applicant will consult with the CPUC to identify and implement methods to restore disturbed areas to conditions that would blend with the overall landscape character, to the extent feasible. Areas around new or rebuilt transmission structures that must be cleared during the construction process or other areas of ground disturbance will be regraded and revegetated to restore these areas to an appearance that will help blend them into the overall landscape character.	• Ensure that the applicant minimizes ground disturbance	During construction, restoration, and operation.
	MM AES-3: Screen or Effectively Locate Laydown Areas. Laydown areas within view of residences, scenic roads, and recreational facilities will be effectively located to limit views (aesthetic effects) of materials, equipment, vehicles, and other items used during construction. Staging and laydown areas that cannot be located away from public views will be screened using opaque fencing or landscaping to limit aesthetic effects. Where laydown areas are visible from publicly accessible areas and roads, any associated signage will be kept to the minimum necessary to communicate information about the project, safety, and security. All laydown areas will be effectively reclaimed immediately following completion of their use.	• Ensure that the applicant screens laydown areas from residences, scenic roads, and recreational facilities.	During construction and restoration.

Table 4-1 Mitigation Monitoring, Compliance, and Reporting Program

Impact	Applicant Proposed Measure (APM) or Mitigation Measure (MM)	Monitoring Requirements	Timing
Impact AE-3: Substantially degrade the existing visual character or quality of the site and its surroundings.	**APM AES-1: Clean Construction Work Areas.** See above. **APM AES-2: Restoring Appearance of Disturbed Areas.** See above. **MM AES-2: Minimize Clearing and Ground Disturbance and Restore Disturbed Areas to Pre-Project Conditions.** See above. **MM AES-3: Screen or Effectively Locate Laydown Areas.** See above.		
	APM AES-3: Visual Screening - San Juan Capistrano Substation. The applicant would install landscaping and a screening wall would be installed in key areas along the perimeter of San Juan Capistrano Substation to partially screen views of substation structures and to visually integrate the new substation facilities with the existing setting. Figure 2-4 depicts the general location of new substation landscaping. Plant material would be appropriate to site-specific conditions and the local landscape setting. Landscaping would be consistent with technical requirements for proposed project operations and maintenance and would incorporate input from the City of San Juan Capistrano, local residents, and SDG&E's facility security	• Ensure that the applicant screens San Juan Capistrano Substation and visually integrates the substation with existing setting.	During restoration and operation.
	MM AES-1: Architectural Review of San Juan Capistrano Substation. To ensure that the aesthetic design of San Juan Capistrano Substation facilities, such as walls, buildings, and landscaping, are consistent with the City of San Juan Capistrano's aesthetic design criteria, the applicant shall submit a revised series of elevations and a landscape plan to the City's Architectural Review Board (ARB) prior to filing for grading and building permits. The ARB shall determine if the applicant's revised plans are consistent with the City's aesthetic design criteria and if any modifications are needed. The applicant shall not initiate ground-disturbing activities until the ARB approves the aesthetic design and landscaping plan for the San Juan Capistrano Substation.	• Ensure that the City approves the design of the San Juan Capistrano Substation.	Prior to construction.
	MM AES-4: Glare and Color Contrast Reduction for Transmission Structures and Conductors. To reduce potential glare and color contrast for components of the project, the finish on all new transmission structures will be non-reflective (e.g., steel that has been galvanized and treated to create a dulled finish) to reduce light reflection and color contrast and help blend the structures into the landscape setting. All new transmission conductors will be non-specular to minimize conductor reflectivity and help blend them into the landscape setting.	• Ensure that the applicant installs transmission structures and conductors with non-reflective finish.	During construction.

Table 4-1 Mitigation Monitoring, Compliance, and Reporting Program

Impact	Applicant Proposed Measure (APM) or Mitigation Measure (MM)	Monitoring Requirements	Timing
Impact AE-4: Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area.	**MM AES-5: Shield or Downcast Construction Lighting.** To reduce the potential for visual impacts associated with construction lighting, lighting for construction activities will be limited to an amount required for safety of construction personnel and security of construction equipment. In order to minimize the effect of light pollution in the surrounding area, all construction lighting will be operated and oriented to mostly or fully eliminate off-site light spill at all times.	• Ensure that the applicant shields construction lighting.	During construction and restoration.
4.2 Agriculture and Forestry Resources			
No applicable APMs or MMs.			
4.3 Air Quality			
Impact AQ-2: Violate any air quality standard or contribute substantially to an existing or projected air quality violation.	**APM AQ-1: Control Fugitive Dust Emissions.** The applicant would minimize fugitive dust by: • Using a gravel apron to reduce mud/dirt track-out from unpaved truck exit routes. • Applying water to disturbed areas within a construction site. • Limiting the onsite vehicles to a 15 mph speed limit on unpaved roads. If necessary, SDG&E or its contractor(s) can install speed monitoring equipment at strategic locations and along project roads. • Requiring all trucks hauling dirt, sand, soil, or other loose material to be covered with a fabric tarp and maintain a freeboard height of 12 inches. • Applying a cover to storage piles when wind events are declared. Requiring local streets to be swept by Rule 1186-compliant PM10 efficient vacuum units a minimum of once per month.	• Ensure that the applicant implements dust control measures.	During construction and restoration.
	APM AQ-2: Minimize NO_X and Particulate Matter (PM) Emissions from Off-Road Diesel-Powered Construction Equipment. Where available, SDG&E will ensure that all off-road diesel-powered construction equipment with engines greater than 50 horsepower are compliant with Tier 4 interim or Tier 4 off-road emissions standards, as specified by the phase-in schedule below: • 2015: 5% Tier 4 interim engines • 2016: 10% Tier 4 engines • 2017: 20% Tier 4 engines • 2018: 30% Tier 4 engines • 2019: 40% Tier 4 engines • 2020: 50% Tier 4 engines In the event equipment with a Tier 4/Tier 4 interim engine is not available for any	• Ensure that the applicant utilizes appropriate construction equipment.	During construction and restoration.

Table 4-1 Mitigation Monitoring, Compliance, and Reporting Program

Impact	Applicant Proposed Measure (APM) or Mitigation Measure (MM)	Monitoring Requirements	Timing
	off-road engine larger than 50 hp, that engine shall be operated with tailpipe retrofit controls that reduce exhaust emissions of NOx and PM to no more than Tier 3 emission levels. Equipment with an engine not compliant with the Tier 4/Tier 4 interim standard will be allowed only when the applicant has performed (and documented) a good faith effort (due diligence) to locate Tier 4 and/or Tier 4 interim equipment in the Project vicinity (defined as within 200 miles of the Project site). Use of older equipment (operated with tailpipe retrofit controls that reduce exhaust emissions of NOx and PM to no more than Tier 3 emission levels) would be allowable following due diligence and associated documentation that no Tier 4/Tier 4 interim equipment (or emissions equivalent retrofit equipment) is available for a particular equipment type. Each case shall be documented with written correspondence (or signed statement and electronic mail) by the appropriate construction contractor, along with documented correspondence from at least two construction equipment rental firms providing equipment within the defined project vicinity (200 miles). Documentation of due diligence will be submitted to CPUC staff for before equipment is used on the project. The applicant will make available to CPUC staff and/or construction monitors a copy of each piece of construction equipment's certified tier specification, BACT documentation, and/or CARB or SCAQMD operating permit, as applicable, at the time of mobilization of each applicable unit of equipment.		
	MM AQ-1: Oxides of Nitrogen (NO_X) Credits. The emissions of NO_X due to construction of the proposed project will be mitigated through the purchase of Regional Clean Air Incentive Market Trading Credits (RTCs) for every pound of NO_x emissions in excess of the SCAQMD regional significance threshold of 100 pounds per day. The total amount of NO_X RTCs to be purchased will be calculated when the construction schedule is finalized. The applicant will purchase and submit the required RTCs to the SCAQMD prior to the start of project construction. The applicant will also track actual daily emissions during construction according to a monitoring plan that includes records of equipment and vehicle usage.	• Ensure that the applicant purchases a sufficient number of RTCs.	Prior to and during construction.
Impact AQ-3: Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment.	**APM AQ-1: Control fugitive dust emissions.** See above. **APM AQ-2: Minimize NO_X and Particulate Matter (PM) Emissions from Off-Road Diesel-Powered Construction Equipment.** See above.		

Table 4-1 Mitigation Monitoring, Compliance, and Reporting Program

Impact	Applicant Proposed Measure (APM) or Mitigation Measure (MM)	Monitoring Requirements	Timing
Impact AQ-4: Exposure of sensitive receptors to substantial pollutant concentrations.	**MM AQ-1: Oxides of Nitrogen (NO_X) Credits.** See above. **APM AQ-1: Control fugitive dust emissions.** See above. **APM AQ-2: Minimize NO_X and Particulate Matter (PM) Emissions from Off-Road Diesel-Powered Construction Equipment.** See above.		
4.4 Biological Resources			
Impact BR-1: Have a substantial adverse effect, 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 California Department of Fish and Wildlife (CDFW) or U.S. Fish and Wildlife Service (USFWS).	**SDG&E Subregional Natural Community Conservation Plan (NCCP)/Habitat Conservation Plan (HCP) Operational Protocols:** See Appendix O.	• Ensure that the applicant adheres to the requirements of the HCCP/HCP.	Prior to and during construction and during operation.
	MM BR-1: Limit Construction to Designated Areas and Protect Riparian, Aquatic, and Wetland Areas. In all project locations, vehicular traffic (including movement of all equipment) will be restricted to established construction areas indicated by flagging and signage. CPUC notification and approval will be required for any additional disturbance areas already identified and evaluated for the project pursuant to CEQA. As feasible, the applicant shall use disturbed or low habitat value areas before using undisturbed or higher quality habitat areas, as determined by a qualified biologist. Prior to ground disturbing activities, sensitive resources, such as waterbodies, oak trees, special status plant populations, and natural communities, will be clearly marked and avoided. All aquatic features, including vegetated washes, creeks, drainages (ephemeral and perennial), and riparian areas, will be spanned by the 230-kV transmission and 12-kV distribution line where possible. If construction will occur within 200 feet of an aquatic feature, biological monitors will establish and maintain a minimum exclusionary buffer of 50 feet from the delineated extent of all jurisdictional wetland features. If the applicant cannot maintain the 50-foot exclusionary buffer, the applicant will submit best management practices (BMPs) to the CPUC for review and approval prior to construction. In addition, if the applicant is unable to maintain the 50-foot buffer, the applicant shall consult with USACE and CDFW regarding potential impacts to streams or wetlands.	• Ensure that the applicant protects sensitive resources.	Prior to and during construction and during operation.

Table 4-1 Mitigation Monitoring, Compliance, and Reporting Program

Impact	Applicant Proposed Measure (APM) or Mitigation Measure (MM)	Monitoring Requirements	Timing
	If nighttime lighting is necessary adjacent to aquatic areas, lighting shall be shielded away from these areas to prevent impacts on aquatic wildlife.		
	MM BR-2: Biological Monitoring. CPUC-approved, qualified biological monitors will be present during construction and restoration activities in areas where sensitive resources identified by a CPUC-approved biologist may be impacted by construction of the project. Biological monitors will be assigned to the project in areas of sensitive biological resources. The monitors will be responsible for ensuring that impacts on special status species, native vegetation, wildlife habitat, or unique resources will be avoided to the fullest extent possible. Where appropriate, monitors will flag the boundaries of areas where activities will need to be restricted in order to protect native plants and wildlife or special status species. Those restricted areas will be monitored to ensure their protection during construction. The applicant shall submit the biological monitors' daily monitoring reports and monthly biological monitoring reports to the CPUC, CDFW and USFWS.	• Ensure that the applicant has biological monitors present.	During construction and restoration.
	MM BR-3: Preconstruction Surveys. a. Preconstruction surveys will be conducted by CPUC-approved, qualified biologists according to standardized methods. Surveys will encompass all construction areas. Existing baseline vegetation data will be used during post-construction restoration efforts, as outlined in Section 7 of the SDG&E Subregional NCCP/HCP. Preconstruction surveys will take place for each discrete work area within 14 days of the start of ground disturbance, or if work has lapsed for longer than 14 days. b. Additionally, a CPUC-approved, qualified biologist will conduct preconstruction clearance sweeps for special status species at all access, staging, and work areas where suitable habitat is present within approximately 24 hours of construction and restoration activities each day. c. In addition to these preconstruction surveys, a CPUC-approved biologist will conduct protocol-level surveys for coastal California gnatcatcher and least Bell's Vireo along the proposed 12-kV distribution line where surveys have not yet taken place. A CPUC-approved biologist will also perform protocol-level southwestern willow flycatcher and rare plant surveys throughout the entire project area, where suitable habitat exists.	• Ensure that the applicant conducts preconstruction surveys.	No more than14 days prior to construction.

Table 4-1 Mitigation Monitoring, Compliance, and Reporting Program

Impact	Applicant Proposed Measure (APM) or Mitigation Measure (MM)	Monitoring Requirements	Timing
	If a special status species is found at any time, the CPUC will be notified within 48 hours, and the CPUC will determine the need for additional consultation with the appropriate resource agency or agencies.		
	MM BR-4: Limit Removal of Native Vegetation Communities and Trees. The removal of native vegetation and trees will be limited to the minimum practicable area required for construction of the project. To the extent feasible, grading, grubbing, graveling, or paving will only occur for permanent project components. Temporary staging areas will be used in such a way that it facilitates post-construction restoration, per Section 7 of the SDG&E Subregional NCCP/HCP. Drive-and-crush methods will be employed, with the exception of those areas where this method is not feasible for temporary staging areas for safety reasons and placement of temporary structures, such as construction trailers and drop tanks.	• Ensure that the applicant minimizes removal of native vegetation and trees.	During construction and restoration.
	MM BR-5: Avian Safe Building Standards. The applicant will design all transmission structures installed as part of the proposed project to be consistent with the Suggested Practices for Raptor Protection on Power Lines: The State of the Art in 2006 (APLIC 2006).	• Ensure that the applicant implements avian safe building standards.	Prior to construction.
	MM BR-6: Migratory Birds and Raptors Impact Reduction Measures. The applicant will develop a Nesting Bird Management Plan in consultation with the USFWS, CDFW, and CPUC that outlines protective measures and BMPs that will be employed to prevent disturbance to active nests of both special status and Migratory Bird Treaty Act (MBTA) -protected bird species with the potential to occur in the project area. The Nesting Bird Management Plan will include the following components: • Appropriate survey timing, extents, and methods, including dates of local breeding season when surveys must take place; monitoring and reporting protocol; protocol for determining whether a nest is active; and protocol for documenting, reporting, and protecting active nests within construction and restoration areas will be included in the Nesting Bird Management Plan. If preconstruction survey protocols exist for a special status avian species with a potential to be impacted by the project, the plan will outline the implementation of these protocols. The survey area will include the construction area, plus an additional distance large enough to accommodate the protective buffer of MBTA-protected bird species likely to occur in proximity to the construction area. The plan will also specify approved nest deterrent methods, inactive nest management, and state that project-related nest failures will be reported to the USFWS and CDFW.	• Ensure that the applicant implements migratory bird impact reduction measures.	Prior to and during construction and restoration.

Table 4-1 Mitigation Monitoring, Compliance, and Reporting Program

Impact	Applicant Proposed Measure (APM) or Mitigation Measure (MM)	Monitoring Requirements	Timing
	• Appropriate and effective buffer distances, including horizontal buffers from nests, horizontal buffers from territories, if appropriate, and vertical buffers for helicopters will be included. Buffers will not be based on generalized assumptions regarding all nesting birds, but will be specific to the site and species/guild and account for specific stage of nesting cycle and construction work type. During construction and restoration, a CPUC-approved avian biologist will implement the appropriate buffer distance in accordance with the plan, and a process for a reduction from the plan's nesting buffer distances will be specified. Buffer reductions for special status species and raptors shall be determined upon consultation with USFWS, CDFW, and the CPUC. Buffer reductions for common species must be approved by the CPUC-approved avian biologist and USFWS, CDFW, and CPUC will be notified. • Vertical buffers would be based on anticipated effects of rotor wash and noise for each class of helicopter (i.e. Light Duty, Medium Duty, and Heavy Duty). Surveys and monitoring of the active buffer areas will be completed by a CPUC-approved biologist before, during, and after helicopter use in the vicinity of active buffers and reported to the CPUC. • The Nesting Bird Management Plan will include the minimum requirements to become a CPUC-approved avian biologist and biological monitor for nesting birds, including education, experience in conducting biological surveys, and experience with specific birds in the project area. • The CPUC-approved biological monitor will halt work if it is determined that active nesting will be disturbed by construction or restoration activities until further direction or approval to work is obtained from the CPUC and/or appropriate wildlife agencies. The Nesting Bird Management Plan will be submitted to the USFWS, CDFW, and CPUC for review and comment no more than six months prior to the start of construction, with the intent that the plan will be finalized no more than two months prior to the start of construction. The final plan will be implemented during construction and restoration activities. A Nesting Tracker will be maintained and updated weekly during the nesting bird season, and will be submitted to USFWS, CDFW, and CPUC on a monthly basis. This Nesting Tracker will contain data such as species, location, buffer, monitor name, and status of the nest.		

Table 4-1 Mitigation Monitoring, Compliance, and Reporting Program

Impact	Applicant Proposed Measure (APM) or Mitigation Measure (MM)	Monitoring Requirements	Timing
	MM BR-7: Coastal Cactus Wren Avoidance. a. **Preconstruction Surveys.** CPUC-approved biologists will perform preconstruction surveys in potential coastal cactus wren habitat within 200 feet of each discrete work area and record the location and quality. Preconstruction surveys will take place within two weeks prior to the start of ground disturbance or when work has lapsed for longer than two weeks. b. **Conservation.** Should suitable coastal cactus wren habitat patches be identified in or within 200 feet of work areas, the areas will be avoided to the greatest extent possible during construction. Habitat includes, but is not limited to, mature cholla or prickly-pear cactus typically less than 1 meter in height, interspersed with California sagebrush, California buckwheat, and blue elderberry. Habitat patches may be as small as approximately 1acre. Habitat patches located in close proximity to construction activities should be protected by physical barriers, such as rope or signage. c. **Habitat Restoration Plan for Coastal Cactus Wren Habitat.** Prior to construction of the proposed project, and with the coordination and review of USFWS and CDFW, SDG&E will prepare a habitat restoration plan for coastal cactus wren habitat. Details of the restoration plan will be finalized pending consultation between the applicant, SDG&E, USFWS, and CDFW. The restoration plan will be prepared by a qualified botanist familiar with this vegetation association. The plan will include the following elements: planting/reseeding species mentioned above in correct ratios so as to be suitable for coastal cactus wren; monitoring plan and schedule, including duration and performance criteria; and any specific measures that will be required to ensure success of the restoration effort. Suitable habitat will be replaced at a 1:1 ratio, and if SDG&E chooses to implement the restoration effort outside the project area, it must be no more than 3 miles away from the project area. d. **Take Avoidance.** Should biologists identify nesting coastal cactus wrens at any time during construction, biologists will implement a buffer around the nest that sufficiently protects the nesting pair from disturbance caused by construction activities, as determined by the project-specific Nesting Bird Management Plan. The nest should be monitored regularly according to methods outlined in the Nesting Bird Management Plan and the buffer must remain in place until construction is complete or the nest is no longer active.	• Ensure that the applicant implement coastal cactus avoidance measures.	Prior to and during construction and restoration.

Table 4-1 Mitigation Monitoring, Compliance, and Reporting Program

Impact	Applicant Proposed Measure (APM) or Mitigation Measure (MM)	Monitoring Requirements	Timing
	MM BR-8: Western Burrowing Owl Impacts Reduction Measures. a. **Preconstruction Surveys for Burrowing Owls.** Prior to ground disturbance, a CPUC-approved biologist will conduct preconstruction take-avoidance surveys for burrowing owls within 150 meters of project areas in suitable habitat no more than 14 days prior to ground-disturbing activities according to methods outlined in the CDFW's 2012 (or most recent) Staff Report on Burrowing Owl Mitigation (CDFG 2012). Surveys will provide data on whether burrowing owls occupy the site and, if so, whether the owls are actively nesting. b. **Burrowing Owl Impact Avoidance.** If pre-construction take-avoidance surveys detect the presence of any active burrowing owl burrows during breeding season, the burrows will be avoided, and construction activities within 150 meters will be enclosed by construction fencing. Buffer sizes are outlined in the CDFW's Staff Report on Burrowing Owl Mitigation. Active burrowing owl burrows should be monitored regularly according to methods outlined in the Nesting Bird Management Plan, and buffers should remain in place until the nest fledges or fails. c. **Eviction.** If, in consultation with the CDFW, it is determined that project activities require removal of occupied burrows, or burrows potentially occupied by burrowing owls, eviction and burrow closure may be required to ensure against "take" of owl or nests. However, eviction is required, it will occur only after consulting with CDFW and CDFW approval of a Burrowing Owl Exclusion Plan. Monitoring will be conducted to ensure take is avoided during eviction procedures. Owls may not be evicted or captured without prior authorization from the CDFW.	• Ensure that the applicant implements burrowing owl impact reduction measures.	Prior to and during construction and restoration.

Table 4-1 Mitigation Monitoring, Compliance, and Reporting Program

Impact	Applicant Proposed Measure (APM) or Mitigation Measure (MM)	Monitoring Requirements	Timing
Impact BR-2: Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the CDFW or USFWS.	**SDG&E Subregional Natural Community Conservation Plan (NCCP)/Habitat Conservation Plan (HCP) Operational Protocols:** See above. **MM BR-2: Biological Monitoring.** See above. **MM BR-3: Preconstruction Surveys.** See above.		
	MM BR-9: Invasive Plant Control Measures. The applicant will use standard BMPs to avoid the introduction and spread of controllable invasive plant species such as tamarisk (*Tamarix* sp.) and giant reed (*Arundo donax*) during construction of the project. Proper handling during construction will include the following: • All vehicles and equipment will be cleaned prior to arrival at the work site. • Crews, with construction inspector oversight, will ensure that vehicles and equipment are free of soil and debris capable of transporting noxious weed seeds, roots, or rhizomes before the vehicles and equipment are allowed use of access roads. • Straw or hay bales used for sediment barrier installations or mulch distribution will be obtained from state-cleared sources that are free of invasive weeds. The applicant will develop an Invasive Plant Management Plan to outline the methods that will be employed to prevent the spread of invasive plants onsite. This plan will be submitted to the CDFW and CPUC for review and comment no more than six months prior to the start of construction, with the intent to produce a final draft of the plan no later than two months prior to the start of construction.	• Ensure that the applicant implements invasive plant control measures.	During construction and restoration.
Impact BR-5: Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.	**SDG&E Subregional Natural Community Conservation Plan (NCCP)/Habitat Conservation Plan (HCP) Operational Protocols:** See above. **MM BR-1. Limit Construction to Designated Areas and Protect Riparian, Aquatic, and Wetland Areas.** See above. **MM BR-2: Biological Monitoring.** See above. **MM BR-3: Preconstruction Surveys.** See above. **MM BR-4. Limit Removal of Native Vegetation Communities and Trees.** See above.		

Table 4-1 Mitigation Monitoring, Compliance, and Reporting Program

Impact	Applicant Proposed Measure (APM) or Mitigation Measure (MM)	Monitoring Requirements	Timing
Impact BR-6: Conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state HCP.	**SDG&E Subregional Natural Community Conservation Plan (NCCP)/Habitat Conservation Plan (HCP) Operational Protocols:** See above.		
	MM BR-10: Mitigation Plan Development. To ensure that the project is consistent with the SDG&E Subregional NCCP/HCP, the applicant will prepare and implement an Mitigation Plan Development for the project. The Mitigation Plan Development will: • Detail a consultation process in accordance with Section 6.2.1 of SDG&E's NCCP/HCP. Alternatively, an updated process and timeline can be developed as allowed by both USFWS and CDFW. • Require SDG&E to provide the CPUC with written confirmation from USFWS and CDFW that the consultation process has been carried out to the satisfaction of the agency and are consistent with the SDG&E Subregional NCCP/ HCP. • Include a summary of the policies and procedures in the SDG&E Subregional NCCP/HCP that are relevant to other HCPs/NCCPs, conservation plans, and public or private conservation or preserve areas, including but not limited to: – Operational protocols used in sensitive habitat areas; – Mitigation for temporary and permanent impacts, including habitat enhancement and mitigation credits; – Coordination and consultation procedures with the USFWS and CDFW; – Definition of preserve area according to the SDG&E Subregional NCCP/HCP; – Identification and mapping of areas that may qualify as a preserve area within 100 feet of any project component; and – A review of locations where there may be potential conflicts among conservation plans. • This plan will be submitted to the USFWS, CDFW, and CPUC for review and comment with the intent to produce a final draft of the plan, approved by the CPUC, no less than two months prior to the start of construction. Implementation of the Mitigation Plan Development, excluding any restoration or other physical habitat improvements that are required as a result of the	• Ensure that the applicant develops and implements a mitigation plan.	Prior to and during construction.

Table 4-1 Mitigation Monitoring, Compliance, and Reporting Program

Impact	Applicant Proposed Measure (APM) or Mitigation Measure (MM)	Monitoring Requirements	Timing
	agency consultation, will be completed prior to the start of construction.		
4.5 Cultural Resources			
Impact CUL-1: Substantial adverse change in the significance of an historical resource.	**APM CUL-1: Worker Training for Cultural Resources.** Prior to the initiation of construction or ground-disturbing activities, all SDG&E, contractor, and subcontractor personnel would receive training regarding the appropriate work practices necessary to effectively implement the APMs and to comply with the applicable environmental laws and regulations, including the potential for exposing subsurface cultural resources and paleontological resources and to recognize possible buried resources. Training would inform all construction personnel of the anticipated procedures that would be followed upon the discovery or suspected discovery of archaeological materials, including Native American remains, and their treatment, as well as of paleontological resources.	• Ensure that the applicant implements a worker training for cultural resources.	Prior to and during construction and restoration.
	APM CUL-2: Cultural Resource Monitoring. A qualified archaeologist would attend preconstruction meetings, as needed, and a qualified archaeological monitor would monitor ground disturbing activities in the vicinity of all known cultural resources within the proposed project area. The requirements for archaeological monitoring would be noted on the construction plans. The archaeologist's duties would include monitoring, evaluation of any finds, analysis of collected materials, and preparation of a monitoring results report conforming to Archaeological Resource Management Reports guidelines.	• Ensure that the applicant has a cultural monitor present.	During construction and restoration.
	APM CUL-3: Avoid Known Cultural Resources. Known cultural resources that can be avoided would be demarcated as Environmentally Sensitive Areas. Construction crews would be instructed to avoid disturbance of these areas.	• Ensure that the applicant demarcates known cultural resources.	Prior to and during construction.
	APM CUL-4: Unanticipated Cultural Finds. In the event that cultural resources are discovered, the archaeologist would have the authority to divert or temporarily halt ground disturbance to allow evaluation of potentially significant cultural resources. The archaeologist would contact SDG&E's Cultural Resource Specialist and Environmental Project Manager at the time of discovery. The archaeologist, in consultation with SDG&E's Cultural Resource Specialist, would determine the significance of the discovered resources. SDG&E's Cultural Resource Specialist and Environmental Project Manager must concur with the evaluation procedures to be performed before construction activities are allowed to resume. For significant cultural resources, a Research Design and Data Recovery Program would be prepared and carried out to mitigate impacts.	• Ensure that the applicant follows protocols during an unanticipated cultural find.	During construction and restoration.

Table 4-1 Mitigation Monitoring, Compliance, and Reporting Program

Impact	Applicant Proposed Measure (APM) or Mitigation Measure (MM)	Monitoring Requirements	Timing
	APM CUL-5: Curate Cultural Discoveries. All collected cultural remains would be cataloged and permanently curated with an appropriate institution. All artifacts would be analyzed to identify function and chronology as they relate to the history of the area. Faunal material would be identified as to species.	• Ensure that the applicant follows protocols during an unanticipated cultural find.	During construction and restoration.
	APM CUL-6: Archeological Monitoring Results Report. An archaeological monitoring results report (with appropriate graphics), which describes the results, analyses, and conclusions of the monitoring program, would be prepared and submitted to SDG&E's Cultural Resource Specialist, SDG&E's Environmental Project Manager, and the CPUC. Any new cultural sites or features encountered would be recorded with the *SCCIC or SCIC*.	• Ensure that the applicant follows protocols during a new cultural find.	During construction and restoration.
	APM CUL-7: Monitoring by Native Americans. Native American monitoring may be implemented if transmission line construction has the potential to impact identified and mapped traditional locations and places. The role of the Native American monitor would be to represent tribal concerns and communicate with the tribal council. Appropriate representatives would be identified based on the location of the identified traditional location or place.	• Ensure that the applicant has a Native American monitor present.	During construction and restoration.
	APM CUL-10: Building of Distinction Requirements. The applicant proposes to take the following steps found in Council Policy 602, which applies to the alteration, modification, or demolition of "significant" structures: 1. Advertise, for a period of three months, that the former utility structure may be available for relocation. 2. Prepare a photographic record of the former utility structure. Photographs will include: a. Each elevation; b. Close-ups of any unusual or unique architectural features; and c. Views of the structure from a distance. In addition, measured drawings or plans will be included. If not relocated, allow the removal of any architectural elements of the former utility structure for a period of two weeks at the expense of any local historic interest group or organization removing the element.	• Ensure that the applicant implements the steps for Council Policy 602.	Prior to construction.

Table 4-1 Mitigation Monitoring, Compliance, and Reporting Program

Impact	Applicant Proposed Measure (APM) or Mitigation Measure (MM)	Monitoring Requirements	Timing
	MM CUL-1: Supplemental Worker Training for Cultural Resource. As a supplement to APM CUL-1, this measure requires the applicant to incorporate the following specific topics into the pre-construction cultural resource training for all on-site personnel: • Describe the role of cultural and paleontological resources monitors and the role of Native American monitors; • Describe the types of cultural and paleontological resources that may be found in the project area; • Describe the potential for human remains to be discovered during ground disturbing activities; and • Describe the penalties associated for breaking the laws relevant to the protection of cultural and paleontological resources. The cultural and paleontological resources training components will be developed by a CPUC-approved cultural resources consultant (see MM CUL-3) and CPUC-approved paleontological consultant (see MM CUL-6). The applicant shall provide a copy of the training material and trainee sign-in sheets to the CPUC prior to construction.	• Ensure that the applicant includes required topics in the worker training for cultural resources.	Prior to and during construction and restoration.
	MM CUL-2: Construction Monitoring Plan. Prior to construction, the applicant will submit a Construction Monitoring Plan for the proposed project, prepared by the approved consultant(s) (MM CUL-3) for review and approval by the CPUC. The final Construction Monitoring Plan shall be implemented, as specified, throughout construction and restoration. The Construction Monitoring Plan shall, at a minimum: • Identify areas where native soil will be disturbed by construction or restoration of the proposed project or where known cultural resources (APM CUL-2) occur in the project area as areas that will be monitored by a CPUC-approved archaeologist. • Confirm that archeological monitoring will be performed during all ground disturbing activities along Segment 1a of the 230-kV transmission line, Segment A of the 12-kV distribution line, and within the proposed San Juan Capistrano Substation to prevent potential damage to buried Juaneño/Acjachemen deposits.	• Ensure that the applicant prepares and implements a construction monitoring plan.	Prior to and during construction and restoration.

Table 4-1 Mitigation Monitoring, Compliance, and Reporting Program

Impact	Applicant Proposed Measure (APM) or Mitigation Measure (MM)	Monitoring Requirements	Timing
	• Describe monitoring procedures that will take place for each project component area, as required. • Describe how often monitoring will occur (e.g., full time, part time, spot checking). • Describe monitoring reporting requirements (APM CUL-6). • Describe the Testing and Evaluation Plans and Data Recovery Plans (APM CUL-4 and APM CUL-5). • Include contact information for those to be notified or reported to.	•	
	MM CUL-3: Qualified Cultural Resources Consultants. The applicant will retain the services of qualified professional (CPUC-approved) cultural resources consultants who meet or exceed the United States Secretary of the Interior qualification standards for professional archaeologists published in 36 Code of Federal Regulations (CFR) 61 and who have experience working in the jurisdictions traversed by components of the proposed project sufficient to identify the full range of cultural resources that may be found in the proposed project area. The consultants will also have knowledge regarding the cultural history of the proposed project area. The resumes and supporting information for each cultural resources consultant will be submitted to the CPUC for approval. At least one qualified cultural resources consultant must be approved by the CPUC prior to start of construction.	• Ensure that the applicant retains a qualified cultural resources consultant.	Prior to construction.
	MM CUL-4: Native American Consultation and Participation Planning. As a supplement to APM CUL-7, prior to construction, the applicant will provide evidence to the CPUC that tribes requesting consultation with the applicant regarding the project design and impacts on cultural resources were consulted. In addition, the applicant will provide evidence to the CPUC that tribes that express interest in the project during any phase (i.e., project application through end of construction and restoration) have been given the opportunity to participate in additional cultural resources surveys (MM CUL-5) and/or cultural resources monitoring when performed by a CPUC-approved cultural resources consultant (MM CUL-3).	• Ensure that the applicant prepares and implements a Native American consultation and participation plan	Prior to and during construction and restoration.

Table 4-1 Mitigation Monitoring, Compliance, and Reporting Program

Impact	Applicant Proposed Measure (APM) or Mitigation Measure (MM)	Monitoring Requirements	Timing
	To outline the expected duties and responsibilities of all parties involved, the applicant and a CPUC-approved cultural resources consultant will submit a Native American Participation Plan prior to construction. The final Native American Participation Plan shall be implemented, as specified, throughout construction and restoration. Tribes that have expressed interest in the project prior to construction will be given the opportunity to participate in development of the plan. At a minimum, the plan will specify that: • Native American monitors, if approved by a tribe, are expected to participate in worker environmental awareness and health and safety training and follow all health and safety protocols. • Attendance by Native American monitors during construction and restoration of the proposed project is at the discretion of the tribe, and the absence of a Native American monitor, should the tribes choose to forgo monitoring for some reason, will not delay work. • The Native American monitors will have the ability to notify a CPUC-approved cultural resources consultant who has the authority to temporarily stop work (MM CUL-3) if they find a cultural resource that may require recordation and evaluation. • Interpretation of a find will be requested from Native American monitors involved with the discovery, evaluation, or data recovery of unanticipated finds for inclusion in the final Cultural Resources Report. • The tribes involved with preparation of the Native American Participation Plan will be given the opportunity to participate in the development of Testing and Evaluation Plans and Data Recovery Plans (MM CUL-2) if the development of these plans is required. • Native American monitors approved by a tribe for monitoring work on the project will be notified 30 days prior to start of construction of the various project components. • The Native American monitors will be compensated for their time. If more than one tribal group wishes to participate in the monitoring, SDG&E will work out an agreement for sharing of monitoring compensation.		

Table 4-1 Mitigation Monitoring, Compliance, and Reporting Program

Impact	Applicant Proposed Measure (APM) or Mitigation Measure (MM)	Monitoring Requirements	Timing
	• Define a process to inform tribes of completed cultural surveys and to provide a copy of the survey to interested tribes.		
	MM CUL-5: Additional Cultural Resources Surveys. Prior to issuance of the notice to proceed, the applicant will ensure that qualified archaeological consultants, as specified in MM CUL-3, will conduct intensive-level cultural resources surveys (transects no greater than 10 meters) for all areas to be disturbed that have not already been surveyed for cultural resources and that, prior to the project, had been undisturbed. Surveys shall also include a California Historic Resources Information System search and Native American Heritage Commission Sacred Lands file database search. Reports that specify the research design, methods, and survey results will be submitted to the CPUC for review and must be accepted by the CPUC prior to the start of ground disturbance in the previously unsurveyed areas.	• Ensure that the applicant conducts cultural resources surveys.	Prior to construction.
	MM CUL-6: Qualified Paleontological Consultants. The applicant will retain the services of qualified professional paleontological consultants with knowledge of the local paleontology and the minimum levels of experience and expertise, as defined by the Society of Vertebrate Paleontology's Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources (2010). The resumes and supporting information for each paleontological consultant will be submitted to the CPUC for approval. At least one qualified paleontological consultant must be approved by the CPUC prior to start of construction.	• Ensure that the applicant retains a qualified paleontological consultant.	Prior to construction.
	MM CUL-8: Preservation of Former Utility Structure at Capistrano Substation. The applicant shall incorporate the following design specifications at the Capistrano Substation and features shown in Appendix S of this EIR with the purpose to rehabilitate the west wing of the former utility structure at Capistrano Substation per the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings: • Replacement of the current landscaping with landscaping that returns the existing utility structure's setting to an earlier appearance. • Construction of an approximately 5-foot-tall retaining wall parallel to the northern and eastern walls of the retained West Wing. • Construction of a masonry wall approximately 10 feet tall on the inside of the	• Ensure that the applicant incorporates design specifications pursuant to the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings	Prior to and during construction

Table 4-1 Mitigation Monitoring, Compliance, and Reporting Program

Impact	Applicant Proposed Measure (APM) or Mitigation Measure (MM)	Monitoring Requirements	Timing
	western perimeter of the substation. When viewed from the exterior, the masonry would vary from 12 to 15 feet in height due to grading behind the substation wall. The northern and southern perimeter walls would remain at approximately 10 feet in height. • The existing utility structure shall remain approximately 4 inches from the western perimeter wall. • The southern and western walls of the retained portion of the existing substation shall be located outside of the secured substation facility and will be visible from Camino Capistrano. The northern and eastern walls of the existing utility structure shall effectively act as part of the substation security wall. • Installation of new steel doors to replace the doors in the southern, eastern and northern walls of the existing utility structure. The northern and eastern doors will serve as part of the security wall. • Construction of a driveway from the main substation access to the structure's southern door. • Set back the southern driveway vehicle access gate by approximately 80 feet from Camino Capistrano. • Set back the northern driveways access gate by approximately 35 feet from Camino Capistrano. • The northern and southern vehicular access gate shall be approximately 30 feet wide. Each pair of gates will be made of black wrought iron and be approximately 15 feet in width. • Grading and the phased site development would be similar to that of the Proposed Project Substation. Modifications to the existing utility structure shall include: • East Wing Demolition: Retain 12 inches of roof and walls where the east wing intersects the west wing of the existing structure. This will allow the remaining portion of the roof and wall visually to read as a "ghost" of the east wing once it is removed.		

Table 4-1 Mitigation Monitoring, Compliance, and Reporting Program

Impact	Applicant Proposed Measure (APM) or Mitigation Measure (MM)	Monitoring Requirements	Timing
	• West Wing Rehabilitation: - Western Wall: the exterior wall, concrete wall iron jacking, and windows will be repaired. Security bars will be installed on all interior windows. - Northern Wall: Deteriorated, non-original, sidelights and transom windows shall be replaced to match the original. Those that are replaced shall be made from steel rather than wood for increased security. Door assembly does not require glazing, but shall be constructed exclusively of steel following the original pattern. This wall and replacement door will only be accessible from the interior. - Eastern Wall: The interior door shall be replaced with a new exterior door that matches the original but is designed for exposure to the elements. Glazing is not required for the door or existing windows, but design should follow the original pattern. The eastern wall, window and door will only be accessible from the interior. - Southern Wall: Deteriorated, non-original, sidelights and transom windows shall be replaced to match the original. Those that are replaced shall be made from steel rather than wood for increased security. Door assembly does not require glazing, but shall be constructed exclusively of steel following the original pattern. Due to visibility from the street, the door should include translucent wire glass at the transom. Where glazing occurs at the transom, security bars shall be installed on the interior. - Interior Window Sills: Where water damage has occurred, windows sills shall be repaired. - Interior Crane: The movable crane shall be retained. - Lighting: A lighting plan shall be developed and implemented. It will include manually operating exterior wall scones on the north and south walls. Applicant shall prepare and implement a historic architect monitoring plan. The plan shall include, but shall not be limited to, the following information: • Qualifications of the historic architect monitor (must meet the Secretary of the Interior's Professional Qualifications Standards);		

Table 4-1 Mitigation Monitoring, Compliance, and Reporting Program

Impact	Applicant Proposed Measure (APM) or Mitigation Measure (MM)	Monitoring Requirements	Timing
	• Activities that shall be monitored by the historic architect monitor; • Authority given to the historic architect monitor to halt construction on the former utility structure in order to prevent damage to the structure; • Procedures of how the historic architect monitor will halt construction and the procedures to restart construction; and • Reporting procedures for the historic architect. The historic monitoring plan shall be submitted to the CPUC for approval at least six weeks prior to start of construction on the former utility structure. The applicant shall also prepare a Historic American Building Survey (HABS) photographic documentation for the utility structure before the east wing is removed. The applicant shall provide the HABS documentation to the CPUC at least six weeks prior to start of construction on the former utility structure.		
Impact CUL-2: Substantial adverse change in the significance of an archaeological resource.	**APM CUL-1: Worker Training for Cultural Resources.** See above. **APM CUL-2: Cultural Resource Monitoring.** See above. **APM CUL-3: Avoid Known Cultural Resources.** See above. **APM CUL-4: Unanticipated Cultural Finds.** See above. **APM CUL-5: Curate Cultural Discoveries.** See above. **APM CUL-6: Archeological Monitoring Results Report.** See above. **MM CUL-1: Supplemental Worker Training for Cultural Resource.** See above. **MM CUL-2: Construction Monitoring Plan.** See above. **MM CUL-3: Qualified Cultural Resources Consultants.** See above. **MM CUL-4: Native American Consultation and Participation Planning.** See above. **MM CUL-5: Additional Cultural Resources Surveys.** See above. **MM CUL-6: Qualified Paleontological Consultants.** See above.		
Impact CUL-3: Directly or indirectly destroy a unique paleontological resource or site or unique geologic	**APM CUL-1: Worker Training for Cultural Resources.** See above. **MM CUL-1: Supplemental Worker Training for Cultural Resource.** See above.		

Table 4-1 Mitigation Monitoring, Compliance, and Reporting Program

Impact	Applicant Proposed Measure (APM) or Mitigation Measure (MM)	Monitoring Requirements	Timing
feature.	**MM CUL-6: Qualified Paleontological Consultants.** See above.		
	APM CUL-8: Paleontological Monitoring. A paleontological monitor would work under the direction of a qualified project paleontologist and would be on site to observe excavation operations that involve the original cutting of previously undisturbed deposits with high paleontological resource sensitivity. A paleontological monitor is defined as an individual who has experience in the collection and salvage of fossil materials.	• Ensure that the applicant has a paleontological monitor present.	During construction and restoration.
	APM CUL-9: Discovery of Fossils. In the event that fossils are encountered, the paleontological monitor would have the authority to divert or temporarily halt construction activities in the area of discovery to allow recovery of fossil remains in a timely fashion. The paleontologist would contact SDG&E's Cultural Resource Specialist and Environmental Project Manager at the time of discovery. The paleontologist, in consultation with SDG&E's Cultural Resource Specialist, would determine the significance of the discovered resources. SDG&E's Cultural Resource Specialist and Environmental Project Manager must concur with the evaluation procedures to be performed before construction activities are allowed to resume. Because of the potential for recovery of small fossil remains, it may be necessary to set up a screen-washing operation on site. When fossils are discovered, the paleontologist (or paleontological monitor) would recover them along with pertinent stratigraphic data. In most cases, this fossil salvage can be completed in a short period of time. Because of the potential for recovery of small fossil remains, such as isolated mammal teeth, recovery of bulk 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 would be cleaned, repaired, sorted, cataloged, and deposited in a scientific institution with permanent paleontological collections, and a paleontological monitoring report would be written.	• Ensure that the applicant follows protocols during the discovery of a fossil.	During construction and restoration.
	MM CUL-7: Paleontological Monitoring and Treatment Plan. Prior to start of construction, the applicant will submit a Paleontological Monitoring and Treatment Plan for the proposed project that is prepared by a CPUC-approved paleontological consultant (MM CUL-6) to the CPUC for approval. This plan will be adapted from the Society of Vertebrate Paleontology's Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources (2010) to specifically address each project component. In addition, the plan will, at a minimum: • Describe the criteria used to determine whether an encountered resource is	• Ensure that the applicant prepares and implements a paleontological monitoring and treatment plan.	Prior to and during construction and restoration.

Table 4-1 Mitigation Monitoring, Compliance, and Reporting Program

Impact	Applicant Proposed Measure (APM) or Mitigation Measure (MM)	Monitoring Requirements	Timing
	significant and if it should be avoided or recovered. • Identify construction and restoration impact areas of moderate to high sensitivity for encountering paleontological resources and the shallowest depths at which those resources may be encountered. • Describe methods of recovery, preparation, and analysis of specimens, final curation of specimens at a federally accredited repository, data analysis, and reporting. • Briefly identify and describe the types of paleontological resources that may be encountered. • Describe monitoring procedures that will take place for each component of the project that requires monitoring. • Describe how often monitoring will occur (e.g., full time, part time, spot checking), as well as the circumstances under which monitoring will be increased or decreased. • Describe the circumstances that will result in the halting of work. • Describe the procedures for halting work and for notifying construction and restoration crews when work is to be halted and to be resumed. • Include testing and evaluation procedures for resources encountered. • Describe procedures for curating any collected materials. • Outline coordination strategies to ensure that the CPUC-approved paleontological consultant (MM CUL-6) conducts full-time monitoring of all grading activities in sediments determined to have a moderate to high sensitivity. • Include reporting procedures. • Include contact information for those to be notified or reported to. For sediments of low or undetermined sensitivity, the Paleontological Monitoring and Treatment Plan will specify the level of monitoring necessary. Sediments with no sensitivity will not require paleontological monitoring. The plan will define specific conditions in which monitoring of earthwork activities could be reduced		

Table 4-1 Mitigation Monitoring, Compliance, and Reporting Program

Impact	Applicant Proposed Measure (APM) or Mitigation Measure (MM)	Monitoring Requirements	Timing
	and/or depth criteria established to trigger monitoring. These factors will be defined by an approved (MM CUL-6) paleontologist.		
Impact CUL-4: Disturb any human remains, including those interred outside of formal cemeteries.	**APM CUL-1: Worker Training for Cultural Resources.** See above. **APM CUL-2: Cultural Resource Monitoring.** See above. **APM CUL-3: Avoid Known Cultural Resources.** See above. **APM CUL-4: Unanticipated Cultural Finds.** See above. **APM CUL-5: Curate Cultural Discoveries.** See above. **APM CUL-6: Archeological Monitoring Results Report.** See above. **MM CUL-1: Supplemental Worker Training for Cultural Resource.** See above. **MM CUL-2: Construction Monitoring Plan.** See above. **MM CUL-3: Qualified Cultural Resources Consultants.** See above.		
4.6 Geology, Soils, and Mineral Resources			
Impact GE-2: Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking.	**APM GEO-1: Conduct an Engineering-level Geotechnical Investigation for Liquefaction Potential and Implement Recommended Design Measures.** A geologic hazard evaluation was conducted by URS in 2008 to evaluate the pole locations along the Proposed Project transmission line route for the presence of geologic hazards that may affect the new towers and poles. The geologic hazard evaluation indicated the presence of geologic conditions potentially susceptible to liquefaction at the locations of proposed Pole Nos. 8, 9 and 10. Prior to construction, an engineering-level geotechnical investigation would be performed at these locations under the supervision of a California Certified Engineering Geologist or California licensed Geotechnical Engineer to further evaluate the liquefaction potential at each of these pole locations and to develop design measures to minimize the potential for damage to Proposed Project structures in the event of strong ground shaking. Recommendations of the geotechnical investigation would be incorporated into the final design for these structures. These recommendations would include augmented grading practices, expanded erosion control measures and deeper foundations.	• Ensure that the applicant conducts and incorporates geotechnical investigation into project design.	Prior to and during construction and restoration.
	APM GEO-2 Conduct an Engineering-level Geotechnical Survey for Landslides and Implement Recommended Design Measures to Ensure Slope Stability is not Impacted and the Potential for Damage to Protect Structures is Minimized. A geologic hazard evaluation was conducted by URS in 2008 to	• Ensure that the applicant conducts and incorporates geotechnical investigation into	Prior to and during construction and restoration.

Table 4-1 Mitigation Monitoring, Compliance, and Reporting Program

Impact	Applicant Proposed Measure (APM) or Mitigation Measure (MM)	Monitoring Requirements	Timing
	evaluate the structure locations along the Proposed Project transmission line route for the presence of geologic hazards that may affect the new towers and poles. The geotechnical hazard evaluation identified areas with recent and ancient landslides along the Proposed Project transmission line route due to unstable slope conditions in portions of both the Capistrano and Monterey formations Prior to construction, an engineering-level geotechnical investigation would be performed at each pole location along the transmission line route that is in or near a mapped landslide or other unstable slope condition. This investigation would be performed under the supervision of a California Certified Engineering Geologist or California licensed Geotechnical Engineer, and would identify protection measures to be designed and implemented to ensure that the Proposed Project does not materially increase slope stability risks and to minimize potential for damage to Proposed Project structures in the event of landslides. These recommendations would include augmented grading practices, expanded erosion control measures and deeper foundations.	project design.	
Impact GE-3: Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction.	**APM GEO-1: Conduct an Engineering-level Geotechnical Investigation for Liquefaction Potential and Implement Recommended Design Measures. See above.**		
	MM GEO-1: Conduct an Engineering-level Geotechnical Investigation for Liquefaction Potential and Implement Recommended Design Measures. Prior to construction, an engineering-level geotechnical investigation shall be performed at Pole Nos. 1a through5a under the supervision of a California Certified Engineering Geologist or California licensed Geotechnical Engineer to further evaluate the liquefaction potential at each of these pole locations and to develop design measures to minimize the potential for damage to Proposed Project structures in the event of strong ground shaking. Recommendations of the geotechnical investigation shall be incorporated into the final design for these structures.	• Ensure that the applicant conducts and incorporates geotechnical investigation into project design.	Prior to and during construction and restoration.
Impact GE-4: Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides.	**APM GEO-1: Conduct an Engineering-level Geotechnical Investigation for Liquefaction Potential and Implement Recommended Design Measures.** See above. **APM GEO-2 Conduct an Engineering-level Geotechnical Survey for Landslides and Implement Recommended Design Measures to Ensure Slope Stability is not Impacted and the Potential for Damage to Protect Structures is Minimized.** See above.		

Table 4-1 Mitigation Monitoring, Compliance, and Reporting Program

Impact	Applicant Proposed Measure (APM) or Mitigation Measure (MM)	Monitoring Requirements	Timing
Impact GE-6: Be 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.	**APM GEO-1: Conduct an Engineering-level Geotechnical Investigation for Liquefaction Potential and Implement Recommended Design Measures.** See above. **APM GEO-2 Conduct an Engineering-level Geotechnical Survey for Landslides and Implement Recommended Design Measures to Ensure Slope Stability is not Impacted and the Potential for Damage to Protect Structures is Minimized.** See above.		
Impact GE-7: Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property.	**APM GEO-1: Conduct an Engineering-level Geotechnical Investigation for Liquefaction Potential and Implement Recommended Design Measures.** See above. **APM GEO-2 Conduct an Engineering-level Geotechnical Survey for Landslides and Implement Recommended Design Measures to Ensure Slope Stability is not Impacted and the Potential for Damage to Protect Structures is Minimized.** See above.		
4.7 Greenhouse Gases			
Impact GG-1: Generate greenhouse gas (GHG) emissions, either directly or indirectly, that may have a significant impact on the environment.	**APM AQ-2: Minimize NO_X and PM Emissions from Off-Road Diesel-Powered Construction Equipment.** See above.		
	APM GHG-1: Operations Emissions Controls. SDG&E developed this APM to ensure that sulfur hexafluoride is properly managed. SDG&E would implement its existing sulfur hexafluoride mitigation strategies during the operation and maintenance of sulfur hexafluoride-containing equipment installed as part of the proposed project. These strategies include: • Recording company-wide sulfur hexafluoride purchases, use, and emissions rates to comply with the USEPA's requirements for Electrical Transmission and Distribution Equipment Use (Mandatory Reporting of Greenhouse Gases, 40 CFR Part 98, Subpart DD) and the CARB's Regulation for Reducing Sulfur Hexafluoride Emissions from gas-insulated switchgear (Code Regs. Tit. 17, § 95350-95359); • Implementing a sulfur hexafluoride recycling program; • Training employees on the safety and proper handling of sulfur hexafluoride; • Continuing to report GHG emissions with the Climate Registry; and • Implementing SDG&E's sulfur hexafluoride leak detection and repair program.	• Ensure that the applicant implements SF6 mitigation strategies.	During operation.

Table 4-1 Mitigation Monitoring, Compliance, and Reporting Program

Impact	Applicant Proposed Measure (APM) or Mitigation Measure (MM)	Monitoring Requirements	Timing
	This program includes monthly visual inspections of each GCB, which includes checking pressure levels within the breaker and recording these readings in SDG&E's Substation Management System. During the installation or major overhaul of any GCB, the unit is tested over a 24-hour period to ensure 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 sulfur hexafluoride 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 sulfur hexafluoride gas; and – Using a laser-detection camera to detect the presence of sulfur hexafluoride gas when the above two methods are unsuccessful in finding a leak.		
4.8 Hazards and Hazardous Materials			
Impact HZ-1: Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.	**APM HAZ-2: Hazardous Materials and Waste Management Plan.** The applicant would prepare a project-specific Hazardous Materials and Waste Management Plan (HMWMP) following final CPUC project approval and be submitted to the CPUC prior to issuance of any applicable Notice to Proceed for the project. Handling, recycling, and waste transportation, and temporary waste storage procedures would be outlined within the HMWMP. The project-specific HMWMP would include site-specific procedures and would be developed based on SDG&E standards and applicable hazardous materials laws, standards, and regulations. Sampling and cleanup levels would be established in the HMWMP as follows: • Confirmation samples would be taken to ensure that site conditions are consistent with current and proposed land uses (i.e., electric substation); • Confirmation samples would be taken, utilizing industry standard testing	• Ensure that the applicant prepares and implements a hazardous materials and waste management plan.	Prior to and during construction and restoration.

Table 4-1 Mitigation Monitoring, Compliance, and Reporting Program

Impact	Applicant Proposed Measure (APM) or Mitigation Measure (MM)	Monitoring Requirements	Timing
	methods (e.g. EPA Methods), for appropriate site specific contaminants of concern; • Final sampling procedures would be included within the project-specific HMWMP; and • Final cleanup levels would be identified in the HMWMP and be consistent with acceptable levels for Commercial Industrial land uses. Plans for the unanticipated discovery of contaminated soil and/or groundwater during construction would be included in the HMWMP, including: • Procedures in response to the discovery of contaminated soil or groundwater, including those for stopping work, securing the contaminated area, preventing the spread of contamination, and appropriate waste management (testing, profiling, shipping disposal); • Training requirements for construction workers performing excavation activities; • Dewatering procedures; and • Procedures for notifying SDG&E and agency personnel in the event of the discovery of contaminated soil and/or groundwater. The applicant's outline of environmental procedures for management of the following would be addressed in the HMWMP: • Asbestos Management; • Hazardous Materials Transportation Security Plans; • Hazardous Materials and Waste Management; • Hazardous Material and Waste Shipping; • Hazardous Waste Minimization Plans; and • Field Guidelines for Emergency Incidents. Soil sampling and building materials sampling results from applicable Environmental Site Assessments would be applied to development of the HMWMP.		
	APM HAZ-3: Personal Protection Equipment. Specialized crews would be	• Ensure that the applicant has	During construction and

Table 4-1 Mitigation Monitoring, Compliance, and Reporting Program

Impact	Applicant Proposed Measure (APM) or Mitigation Measure (MM)	Monitoring Requirements	Timing
	utilized to conduct any remediation (safe removal of contaminants) at the Capistrano Substation site prior to actual construction of the proposed project commencing. Proper personal protection equipment would be utilized by all remediation workers that may come into contact with known contaminated soil or hazardous building materials. Personal protection equipment would be determined based upon the nature of the contamination present at any given portion of the substation site and would comply with all applicable CalOSHA standards.	workers wear personal protection equipment during work with hazardous materials or waste.	restoration
	MM HAZ-1: Hazardous Substances Contamination Prevention Plan. Prior to construction, the applicant shall prepare and implement a Hazardous Substances Contamination Prevention Plan supplementing the Hazardous Material Business Plan to prevent the release of hazardous materials and hazardous waste. The plan will include the following requirements and procedures: • Training requirements for construction workers in appropriate work practices, including spill prevention and response measures. Additional training requirements for those performing excavation activities shall be required and shall include training on types of contamination (e.g., petroleum hydrocarbons, lead, asbestos, and *hazardous materials* (as defined by the California Health and Safety Code) and identifying potentially hazardous contamination (e.g., stained or discolored soil and odor). • Contain all hazardous materials at work sites and properly dispose of all such materials. – Hazardous materials shall be stored on pallets within fenced and secured areas and protected from exposure to weather and further contamination. – Fuels and lubricants shall be stored only at designated staging areas. • Maintain hazardous material spill kits for small spills at all active work sites and staging areas. Thoroughly clean up all spills as soon as they occur. • Store sorbent and barrier materials at all construction staging areas, including staging areas used during activities for decommissioning. Sorbent and barrier materials will be used to contain runoff from contaminated areas and from accidental releases of oil or other potentially hazardous materials to prevent the runoff from entering the storm drainage system. • Perform all routine equipment maintenance at a shop or at the staging area and	• Ensure that the applicant prepares and implements a hazardous materials contamination prevention plan.	Prior to and during construction and restoration.

Table 4-1 Mitigation Monitoring, Compliance, and Reporting Program

Impact	Applicant Proposed Measure (APM) or Mitigation Measure (MM)	Monitoring Requirements	Timing
	recover and dispose of wastes in an appropriate manner. • Monitor and remove any vehicles with chronic or continuous leaks from use and complete repairs before returning them to operation. • Store shovels and drums at the staging areas. If small quantities of soil become contaminated, use shovels to collect the soil and store in drums before proper off-site disposal. Large quantities of contaminated soil may be collected using heavy equipment and stored in drums or other suitable containers prior to disposal. Should contamination occur adjacent to staging areas because of runoff, shovels and/or heavy equipment shall be used to collect the contaminated material. • Procedures for transporting, shipping, and disposal of hazardous waste. • Procedures for managing asbestos containing material. • Procedures for notifying applicant and agency personnel in the event of the discovery of contaminated soil and/or groundwater. Contact information for federal, regional, and local agencies, the applicant's environmental coordinator(s) responsible for the cleanup of contaminated soil or groundwater, and licensed disposal facilities and haulers. • Procedures for dewatering, including storage, testing, treatment, and disposal requirements and dewatering BMPs with reference to the applicant's Stormwater Pollution Prevention Plan (SWPPP). This plan will be submitted to the CPUC for review and approval 30 days prior to the start of project construction.		
	MM HAZ-2: Contaminated Materials from MCB Camp Pendleton. Excavation, grading, or removal of any materials within MCB Camp Pendleton boundaries shall be accomplished in accordance with EPA Best Management Practices for Outdoor Shooting Ranges (EPA-902-B-01-001), RCRA, the Clean Water Act, 40 CFR 260 (Federal Hazardous Waste Regulations), and California Title 22 (California Hazardous Waste Regulations). All work shall be accomplished with every effort to prevent the spread of any potential contamination or release of any potential existing contaminants to the environment in accordance with all federal, state, and local laws, regulations and instructions. Prior to the removal of any soil or wood and construction debris that has been used in live fire training and received impact	• Ensure that the applicant handles hazardous materials from MCB Camp Pendleton properly.	During construction and restoration.

Table 4-1 Mitigation Monitoring, Compliance, and Reporting Program

Impact	Applicant Proposed Measure (APM) or Mitigation Measure (MM)	Monitoring Requirements	Timing
	from rounds, the soil or debris shall be sampled for appropriate hazardous in accordance with all federal, state, and local laws, regulations, and instructions. Also, prior to the removal of any wood and construction debris that has been used in live fire training and received impact from rounds, the debris should be sampled for lead and other constituents. If the soil, wood, or debris is determined to be hazardous waste, it will be handled and disposed of in accordance with applicable hazardous waste regulations. All hazardous waste manifests shall be signed by the Hazardous Waste Branch, AC/S Environmental Security. Solid lead or copper removed from the base shall be recycled in accordance with the base Qualified Recycling Program regulations.		
Impact HZ-2: Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.	**APM HAZ-2: Hazardous Materials and Waste Management Plan** See above. **MM HAZ-1: Hazardous Substances Contamination Prevention Plan.** See above. **MM HAZ-2: Contaminated Materials from MCB Camp Pendleton** See above.		
	APM HAZ-5: Recycling and Reuse. It is SDG&E's practice to reuse or recycle all old structures/ poles, materials, and components following the retirement of substations, transmission lines, and structures/poles. Whatever cannot be reused or recycled is disposed of at an appropriate facility pursuant to all applicable laws.	• Ensure that the applicant recycles materials, as feasible.	During construction and restoration.
	MM HAZ-3: Worker Safety Training. As part of the worker environmental awareness program, the applicant will prepare a safety training module, in coordination with an appropriate representative from MCB Camp Pendleton, to inform all on-site personnel of the active military training activities occurring within MCB Camp Pendleton and the potential hazards associated with working at Talega Substation. The worker environmental awareness program shall include training on how to identify unexploded ordinance and what procedures shall be followed if potential unexploded ordinance is identified, including the "Three R's" method: Recognize, immediately Retreat, and Report to the Provost Marshal's Office at (760) 725-3888 or dial 911 immediately. The applicant shall provide a copy of the training material and trainee sign-in sheets to the CPUC prior to construction.	• Ensure that the applicant implements a worker training for hazardous materials.	Prior to and during construction.
	MM HAZ-5: Discovery of an Unrecorded Oil or Gas Well. If an unrecorded oil and gas well is discovered during construction of the proposed project and the well is located within 50 feet of a construction disturbance area, the applicant shall immediately cease work within 50 feet of the well and notify the California Department of Conservation Division of Oil, Gas, and Geothermal Resources	• Ensure that the applicant follows protocols during discovery of an unrecorded oil or gas well.	During construction and restoration.

Table 4-1 Mitigation Monitoring, Compliance, and Reporting Program

Impact	Applicant Proposed Measure (APM) or Mitigation Measure (MM)	Monitoring Requirements	Timing
	(DOGGR) Cypress District Office. Work shall not resume within 50 feet of the unrecorded well until DOGGR has determined appropriate actions to be taken and has given written notice of approval for work to resume.		
Impact HZ-3: Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school.	**APM HAZ-2: Hazardous Materials and Waste Management Plan.** See above. **APM HAZ-5: Recycling and Reuse.** See above. **MM HAZ-1: Hazardous Substances Contamination Prevention Plan.** See above.		
	APM HAZ-1: Conduct Environmental Site Assessment. Prior to the start of earth disturbance activities at the upper yard portion of the existing Capistrano Substation site, a Phase II Environmental Site Assessment (soil sampling) would be performed and, if any contaminated soil is found to be present, contaminated soils would be managed, removed, transported, and disposed of in accordance with all applicable laws, ordinances and safety standards. The Environmental Site Assessment would be completed pursuant to American Society for Testing and Materials International standard requirements.	• Ensure that the applicant conducts a Phase II Environmental Site Assessment.	Prior to construction.
Impact HZ-4: Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment.	**APM HAZ-1: Conduct Environmental Site Assessment.** See above. **APM HAZ-2: Hazardous Materials and Waste Management Plan.** See above. **APM HAZ-3: Personal Protection Equipment.** See above.		
Impact HZ-5: Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.	**APM TR-3: Emergency Access.** See below. **APM TR-7: Traffic Control Plans.** See below.		

Table 4-1 Mitigation Monitoring, Compliance, and Reporting Program

Impact	Applicant Proposed Measure (APM) or Mitigation Measure (MM)	Monitoring Requirements	Timing
Impact HZ-6: 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.	**APM HAZ-6: Fire Control.** Construction restrictions would occur during times of high fire threat such as Red Flag Warnings issued by the National Weather Service or other severe fire weather conditions as identified by SDG&E. Consistent with SDG&E's Electric Standard Practice 113.1 and the project-specific fire plan, prior to starting construction activities, SDG&E would clear dead and decaying vegetation from proposed project work areas where personnel are active or where equipment is in use or being stored within ROWs, staging areas, stringing sites, and access roads. Cleared dead and decaying vegetation would either be removed or chipped and spread on site.	• Ensure that the applicant implements fire control measures.	During construction and restoration.
	The project-specific fire plan would requirements for equipping diesel and gasoline operated engines with spark arrestors, carrying emergency fire suppression equipment, furnishing a water truck on or immediately adjacent to the proposed project work area, restricting smoking and vehicle idling, construction restrictions during Red Flag Warning periods (as applicable); and conducting pre-activity tailgate meetings that include fire safety discussions.		
	MM HAZ-4: Fire Prevention and Emergency Response Plan. The applicant will develop and implement a Fire Prevention and Emergency Response Plan. This plan, and a record of contact and coordination with the Orange County Fire Authority (OCFA) will be submitted to the CPUC for review and approval 30 days prior to the start of construction of the proposed project. The plan will describe fire prevention and response practices that the applicant will implement during construction of the proposed project to minimize the risk of fire and, in the case of fire, provide for immediate suppression and notification. The plan will include: • Fire prevention and response practices, including the proper dispensing and storage of gasoline, diesel, and other fuels and combustible chemicals; power tool and equipment use; emergency access; fire suppression equipment and training; vegetation clearing; designated parking areas; appropriate climatic conditions and designated areas to perform welding or blow torch activities and other hot-work activities; and ceasing any or all work activities, including helicopter use, as directed by the OCFA or other applicable fire department representatives. • Communication protocols for onsite workers to coordinate with local agencies and emergency personnel and for the applicant's environmental health and safety personnel to coordinate with on-site workers in the event of fire, flood, or other emergencies or increased risk of emergency during construction or operation of	• Ensure that the applicant prepares and implements a fire control and emergency response plan.	Prior to and during construction and restoration.

Table 4-1 Mitigation Monitoring, Compliance, and Reporting Program

Impact	Applicant Proposed Measure (APM) or Mitigation Measure (MM)	Monitoring Requirements	Timing
	the project. • The~~-~~Project Construction Manager, Contract Administrators, and/or Site Foreman will be present at each worksite during construction activities~~,~~ and it will be their responsibility to monitor the contractor's fire-prevention activities. The Project Construction Manager, Contract Administrators, and/or Site Foreman will have full authority to stop construction as needed to prevent fire hazards. The Project Construction Manager, Contract Administrators, and/or Site Foreman responsibilities will include: - Maintain a complete copy of the Fire Prevention and Emergency Response Plan; - Serve as a point of contact for fire departments in the event of fire or other emergency; - Manage the prevention, detection, control, and extinguishing of fires started accidentally as a result of construction activity; - Review site-specific fire prevention and emergency response plan~~s~~ with construction personnel prior to starting work in each project area; - Ensure that all construction personnel are trained in fire safety measures relevant to their responsibilities. At minimum, construction personnel will be trained in fire prevention and emergency reporting. Each member of the construction work force will be trained and equipped to extinguish small fires (i.e., the fire can be controlled or extinguished by portable fire extinguishers, small hose systems, or portable water supplies without the need for protective clothing or breathing apparatus); - Be equipped with radio and cellular telephone access for the duration of each work day; - Ensure that all construction personnel are provided with operational radio and/or cellular telephone access to allow for immediate reporting of fires or other emergencies and ensure that communication pathways and equipment are tested and confirmed operational each day prior to initiating construction activities at each worksite; - Maintain an updated key personnel and emergency services contact (telephone and email) list onsite and available to construction personnel;		

Table 4-1 Mitigation Monitoring, Compliance, and Reporting Program

Impact	Applicant Proposed Measure (APM) or Mitigation Measure (MM)	Monitoring Requirements	Timing
	and - Construction workers will immediately report all fires to the nearest Fire Risk Manager. • The-required fire suppression equipment, tools, and other materials to be with each construction vehicle on the Project.		
4.9 Hydrology and Water Quality			
Impact WQ-6: Substantially degrade water quality.	**MM HAZ-5: Discovery of an Unrecorded Oil or Gas Well.** See above.		
	MM WQ-1: Pesticide Application. If pesticides are used during construction or operations, they shall be applied in accordance with Federal Insecticide, Fungicide, and Rodenticide (FIFRA) labels. Applicators shall be appropriately trained and shall be certified by the California Department of Pesticide Regulation. Prior to any use of pesticides, the type of pesticides proposed for use shall be approved by the CPUC. Prior to each pesticide application the national weather service (forecast.weather.gov) shall be consulted, and no pesticides shall be applied if the chance of rain exceeds 70% within 24 hours of the proposed application time and location. Records of type and amount of pesticides used and locations of application shall be kept and submitted to the CPUC on a monthly basis during construction.	• Ensure that the applicant uses pesticides in accordance with	
4.10 Land Use and Planning			
Impact LU-2: Conflict with applicable plans, policies, or regulations.	**APM PS-2: Repair Damage to Public Facilities.** See below.		
Impact LU-3: Conflict with any applicable HCP or NCCP.	**SDG&E Subregional Natural Community Conservation Plan (NCCP)/Habitat Conservation Plan (HCP) Operational Protocols:** See above. **MM BR-10: Mitigation Plan Development.** See above.		

Table 4-1 Mitigation Monitoring, Compliance, and Reporting Program

Impact	Applicant Proposed Measure (APM) or Mitigation Measure (MM)	Monitoring Requirements	Timing
4.11 Noise and Vibration			
Impact NV-1: Noise levels in excess of standards established in the local general plan or noise ordinance.	**APM NOISE-1: Nighttime and Weekend Activities.** Any endeavors during the construction phase wherein nighttime and/or weekend activities are necessary (such as due to Caltrans transportation constraints for conductor stringing (I-5) or oversized/ overweight loads or CAISO outage constraints) would be limited to the extent feasible so that noise would not exceed the pertinent maximum noise level limits or the hourly L_{50} limits when measured at the nearest residential property. For example, to minimize potential noise disturbances during nighttime deliveries of transformers, the applicant would make every reasonable effort to minimize the duration of trucking activities at the project site. This would entail pulling delivery vehicles onto the project site, parking them overnight, and unloading/installing the item(s) during normal daytime construction hours. If nighttime or weekend activities cannot be conducted to meet the city's noise standards, SDG&E would communicate the exception to the appropriate local agency at least 24 hours in advance of conducting work that may exceed the threshold(s).	• Ensure that the applicant adheres to protocols during nighttime and weekend activities.	During construction and restoration.
	MM NV-1: Nighttime and Weekend Construction Noise Controls. Before performing any construction activities required during periods of time not allowed by local ordinances (i.e., nighttime and weekends), the applicant will: • Obtain authorization from the local jurisdiction where work will be performed (city or county, as applicable) prior to initiating work at night and on weekends; • Notify occupants of the sensitive receptors properties located within 230 feet of the work a minimum of one week prior to the potential activities and their anticipated duration; • Ensure that noise levels will not exceed exterior noise standards of 55 A-weighted decibels (dBA) at the property boundary during the period of 6:00 p.m. to 10 p.m. and 45 dBA between 10 p.m. and 7 a.m.; • Minimize the duration of trucking activities at work sites to less than 30 minutes, when feasible; • Monitor noise levels during a cumulative period of more than 30 minutes in any hour (L_{50}) and maximum noise levels (L_{max}) at the nearest residential property boundary during the period when nighttime or weekend construction is performed;	• Ensure that the applicant adheres to protocols during nighttime and weekend activities.	During construction and restoration.

Table 4-1 Mitigation Monitoring, Compliance, and Reporting Program

Impact	Applicant Proposed Measure (APM) or Mitigation Measure (MM)	Monitoring Requirements	Timing
	• Report noise levels (hourly L_{50} and L_{max}) measured at the nearest residential property to the local jurisdiction (city or county, as applicable) and the CPUC within one week. Noise level measurements shall be conducted and reported in compliance with the City of San Juan Capistrano and City of San Clemente requirements, as applicable; and • If nighttime or weekend activities cannot be conducted to meet the local ordinance exterior noise standards, the applicant will implement additional mitigation measures, such as: – Reducing trucking activities to shorter periods of time; – Using low noise electrical equipment; – Installing portable noise barriers surrounding the work sites; or – Offering potentially affected residents an alternative place to stay overnight or for a weekend, as necessary.		
	MM NV-2: Low-Noise Substation Equipment and Noise Barriers. The applicant will ensure that San Juan Capistrano Substation's operational noise levels will not exceed 45 dBA at the property boundary during the period of 10 p.m. to 7 a.m. This will be achieved by ensuring that the final substation layout provides sufficient setback between the project facilities and closest residential receptors, use of low-noise substation equipment, or installation of noise barriers in the perimeter of the substation. The 230-/138-kV and 138-/12-kV transformers will be located at a minimum distance of 100 feet from the nearest residential property. The applicant will conduct a noise survey at the closest receptors to the substation once the substation is fully operational to confirm that sufficient measures have been implemented to reduce noise levels to 45dBA at the property boundary. The applicant will submit the noise survey results to the CPUC.	• Ensure that the applicant implements appropriate setbacks and noise barriers.	During operation.
Impact NV-2: Excessive groundborne vibration or groundborne noise levels.	**MM NV-3: Construction Vibration Control Measures.** The applicant will implement the following measures to reduce construction vibration at substations, transmission lines, distribution lines, and staging areas located within 100 feet of residential and other vibration-sensitive receptors: • Route heavily loaded trucks away from residential streets, if possible. Select streets with the fewest homes if no alternatives are available; • Operate earth-moving equipment on construction sites as far away from residential and other vibration-sensitive receptors as possible;	• Ensure that the applicant implements vibration control measures.	During construction and restoration.

Table 4-1 Mitigation Monitoring, Compliance, and Reporting Program

Impact	Applicant Proposed Measure (APM) or Mitigation Measure (MM)	Monitoring Requirements	Timing
	• Phase earth-moving and ground-impacting operations so as not to occur in the same time period; • Avoid nighttime activities; • Avoid the use of vibratory rollers near noise- and vibration-sensitive areas; • Conduct pre-construction notifications for sensitive receptors located within 100 feet of construction activities within 30 days prior to construction; • Develop a construction vibration mitigation and monitoring plan during final project design to be reviewed and approved by the CPUC; and • Implement a compliance monitoring program during construction to ensure implementation of vibration control measures.		
Impact NV-3: Permanent increase in ambient noise levels in the project vicinity.	**MM NV-2: Low-Noise Substation Equipment and Noise Barriers.** See above.		
	MM NV-4: Corona Noise Reduction during Wet Weather Conditions. The applicant will ensure that the 230-kV transmission line corona noise levels will not exceed FTA Cumulative Noise Levels Allowed by Criteria (Figure 4.11-1) at the closest sensitive receptor during nighttime operations (10 p.m. to 7 a.m). This will be achieved by the use of additional insulation equipment and additional technological solutions to reduce corona noise levels during rainy weather conditions. To verify the efficiency of the corona noise reduction equipment, the applicant will measure operational noise levels at sensitive residential receptors located within 45 feet of the 230-kV line segments during three rain events during the first two rainy seasons when the 230-kV line is operating. Monitoring reports shall indicate the existing ambient noise levels and weather conditions during measurements. The applicant shall conduct noise level measurements in compliance with the City of San Juan Capistrano and City of San Clemente requirements, as applicable. The applicant will submit results of the monitoring to the CPUC annually. If the monitoring reports determine that the corona noise levels exceed FTA Cumulative Noise Levels Allowed by Criteria at sensitive residential receptors located within 45 feet, the applicant will implement additional technological solutions and installation equipment and will repeat the measuring of operational noise levels at sensitive residential receptors located	• Ensure that the applicant monitors and addresses corona noise as necessary.	During operation.

Table 4-1 Mitigation Monitoring, Compliance, and Reporting Program

Impact	Applicant Proposed Measure (APM) or Mitigation Measure (MM)	Monitoring Requirements	Timing
	within 25 feet of the 230-kV line segments during three rain events during the subsequent two rainy seasons, until the FTA Cumulative Noise Levels Allowed by Criteria threshold is no longer exceeded during rain events.		
Impact NV-4: Substantial temporary or periodic increase in ambient noise levels in the project vicinity.	**APM NOISE-1: Nighttime and Weekend Activities.** See above. **MM NV-1: Nighttime and Weekend Construction Noise Controls.** See above. **MM NV-2: Low-Noise Substation Equipment and Noise Barriers.** See above. **MM NV-4: Corona Noise Reduction during Wet Weather Conditions.** See above.		
	MM NV-5. Noise Control Plan. Prior to the start of construction, the applicant shall prepare a Noise Control Plan for the construction and restoration of the proposed project. The applicant shall submit the Noise Control Plan to the CPUC at least 30 days prior to the start of construction for review and approval. The Noise Control Plan shall include measures that the applicant shall employ during construction and restoration of the proposed project to keep generated noise levels below the Severe Impact range shown in Figure 4.11-1 (FTA 2006) of this EIR at the nearest sensitive receptors to each project construction location, in order to avoid significant impacts from temporary ambient noise increases. The Noise Control Plan shall include measures, such as the following: • Install and maintain an absorptive noise control barrier in the perimeter of the San Juan Capistrano Substation construction site. • Limit heavy equipment activity adjacent to residences or other sensitive receptors to the shortest possible period required to complete the work activity. • Ensure that proper mufflers, intake silencers, and other noise reduction equipment are in place and in good working condition. • Maintain construction equipment according to manufacturer recommendations. • Minimize construction equipment idling. • Noise from back-up alarms (alarms that signal vehicle travel in reverse) in construction vehicles and equipment shall be reduced by providing a layout of construction sites that minimizes the need for back-up alarms and using flagmen to minimize time needed to back up vehicles.	• Ensure that the applicant prepares and implements a noise control plan.	Prior to and during construction and restoration.

Table 4-1 Mitigation Monitoring, Compliance, and Reporting Program

Impact	Applicant Proposed Measure (APM) or Mitigation Measure (MM)	Monitoring Requirements	Timing
	• When possible, use construction equipment specifically designed for low noise emissions (i.e., equipment that is powered by electric or natural gas engines instead of diesel or gasoline reciprocating engines). Electric engines have been reported to have lower noise levels than internal combustion engines. • Where practical, locate stationary equipment such as compressors, generators, and welding machines away from sensitive receptors or behind barriers. The Noise Control Plan shall detail the frequency, location and methodology for noise monitoring prior to and during various construction and restoration activities to ensure that generated noise levels do not exceed the Severe Impact range shown in Figure 4.11-1 of this EIR. The Noise Control Plan shall detail the actions and procedures that the applicant shall implement to mitigate impacts in the event that monitoring detects that noise levels have exceeded the Severe Impact range shown in Figure 4.11-1 of this EIR. Noise level measurements shall be conducted in compliance with the City of San Juan Capistrano, City of San Clemente, and Orange County requirements. The Noise Control Plan shall designate a Construction Relations Officer that is readily available to answer questions or respond to complaints during any hours or days that construction or restoration is occurring. The applicant shall send pre-construction notifications to sensitive receptors located within 100 feet from construction activities at least 30-days prior construction. The notification shall include a phone number for the public to contact the Construction Relations Officer. Additionally, each construction site shall include clearly visible signs with a phone number for the public to contact the Construction Relations Officer. The applicant shall submit on a monthly basis to the CPUC a summary report of the complaints submitted to the Construction Relations Officer. The summary report shall include detail on how each complaint was responded to, if and when the complaint was resolved, and contact information for the member of the public that submitted the complaint.		
4.12 Population and Housing			
No applicable APMs or MMs.			

Table 4-1 Mitigation Monitoring, Compliance, and Reporting Program

Impact	Applicant Proposed Measure (APM) or Mitigation Measure (MM)	Monitoring Requirements	Timing
4.13 Public Services and Utilities			
Impact PS-1: Results in substantial, adverse, physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives.	**AMP PS-1: Recreational Facility Access.** Construction within existing public parks would not completely restrict access through the parks. Where necessary, SDG&E would create temporary foot and bicycle paths along with appropriate advanced notice and signage to direct and allow for the pedestrian and bicycle access through each affected park.	• Ensure that the applicant maintains access to recreational facilities.	Prior to and during construction and restoration.
	APM PS-2: Repair Damage to Public Facilities. All recreational facilities that are physically impacted during construction activities would be returned to an approximate pre-construction state, allowing for SDG&E operation and maintenance activities, following the completion of the proposed project. SDG&E would make replacements of any public damaged or removed equipment, facilities, and infrastructure, in a timely manner.	• Ensure that the applicant repairs damage to public facilities.	During restoration.
	APM PS-3: Roadway Repair. SDG&E Contract Administrators oversee all aspects of construction and would ensure that contractors repair any damage caused by construction activities. Contract Administrators would also work with the customers and/or local agency to ensure repairs are sufficient and consistent with pre-construction conditions. Contractors working for SDG&E typically photograph and/or video document pre-construction conditions. At the completion of construction activities, this documentation is used to ensure that any damage that is caused by construction work is repaired.	• Ensure that the applicant repairs damage to roadways.	During restoration.
Impact PS-3: Insufficient water supplies available to serve the project from existing entitlements and resources or new or expanded entitlements required.	**MM PS-1: Water Efficiency Plan.** The applicant will make reasonable attempts to reduce overall water use and will reduce potable water use by at least 20 percent during drought conditions, as declared by the State of California. The applicant will be required to research reclaimed water sources and acquire reclaimed water to the greatest extent practicable. The applicant will prepare and submit a Water Efficiency Plan to the California Public Utilities Commission (CPUC) for review and approval at least 60 days prior to construction. The Water Efficiency Plan will detail the applicant's water efficiency measures, including the use of reclaimed water, palliatives, alternative construction methods, or other measures proposed by the	• Ensure that the applicant prepares and implements a water efficiency plan.	60 days ~~P~~prior to and during construction and restoration.

Table 4-1 Mitigation Monitoring, Compliance, and Reporting Program

Impact	Applicant Proposed Measure (APM) or Mitigation Measure (MM)	Monitoring Requirements	Timing
	applicant. The Water Efficiency Plan will detail the applicant's attempts to secure reclaimed water. In the event that a sufficient supply of reclaimed water cannot be reasonably obtained, the applicant will provide a well-documented justification for any use of potable water to be used for construction activities. If, at any time during construction, the State Water Resources Control Board (SWRCB) rescinds their Emergency Regulations (Resolution No. 2014-0038) due to a cessation of drought conditions in the state, the applicant may request that the CPUC rescind this mitigation measure. Alternatively, the applicant will need to revise their Water Efficiency Plan to remain in compliance with future adopted SWRCB regulations regarding water use during drought conditions.		
4.14 Recreation			
No applicable APMs or MMs.			
4.15 Transportation and Traffic			
Impact TT-1: Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system including, but not limited to, intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit.	**APM TR-1: Avoid Traffic Near Schools.** Construction generated traffic associated with the San Juan Capistrano Substation and construction of the 138kV getaways (new underground cable packages and new Pole Nos. 1a through 7a) would avoid the start and ending time for the Saddleback Valley Christian School and the JSerra Catholic High School. Workers would arrive at construction sites by 7:30 AM and would not leave prior to 3:30 PM.	• Ensure that the applicant avoids schools during identified times.	During construction and restoration.
	APM TR-2: Avoid SR-74 Traffic. Construction generated traffic associated with the San Juan Capistrano Substation and construction of the 138kV getaways (new underground cable packages and new pole Nos. 1a through 7a) would avoid the SR-74 off ramp from I-5. Avoidance of the SR-74 and I-5 interchange would ensure that construction generated traffic would not exacerbate existing conditions on the stretch of road between the intersections of SR-74 and Rancho Viejo Road and SR-74 and Del Obispo.	• Ensure that the applicant avoids the SR-74 and I-5 interchange.	During construction and restoration.
	APM TR-7: Traffic Control Plans. Contractors working for SDG&E would develop specific traffic control plans immediately prior to the start of construction that adhere to the Standard Traffic Control Procedure from the authority having jurisdiction (federal, state, county, city, or municipality) of the roadway being impacted. The traffic control plans would be created for the various construction phases of the San Juan Capistrano Substation, underground transmission and underground distribution segments leaving the San Juan Capistrano Substation, and overhead transmission. The approved traffic control plans would describe lane closures and other methods	• Ensure that the applicant prepares and implements traffic control plans.	Prior to and during construction and restoration.

Table 4-1 Mitigation Monitoring, Compliance, and Reporting Program

Impact	Applicant Proposed Measure (APM) or Mitigation Measure (MM)	Monitoring Requirements	Timing
	for reducing adverse construction-related traffic impacts and require SDG&E to coordinate in advance with emergency service providers to avoid restricting movements of emergency vehicles, to ensure that emergency vehicle access is maintained and that impacts to traffic flow are minimized. All traffic control plans would be developed, reviewed and approved by the authority having jurisdiction of the specific roadway being impacted. The traffic control plans would include vehicular and non-vehicular traffic and would be communicated to the public at least 48 hours in advance of the traffic control measures being installed in the roadway or as required by the traffic control permit.		
	MM TR-5: Content Requirements of the Traffic Control Plan. The applicant shall include and implement the following restrictions within their Traffic Control Plan (APM TR-7): • Lane closures along Vista Montana shall only be implemented on days when San Juan Hills High School is not in session. • Construction-generated traffic associated with the project shall avoid the start and ending time for San Juan Hills High School. Workers shall avoid traveling along Vista Montana during the periods of 6:30 to 8:00 AM and 2:00 to 3:30 PM on days that San Juan Hills High School is in session. These times shall be modified as necessary over the duration of the project in response to changing school arrival/dismissal times. Additionally, a final traffic control plan shall be provided to the CPUC for approval prior to the start of construction.	• Ensure that the applicant prepares and implements traffic control plans.	Prior to and during construction
Impact TT-2: Conflict with an applicable congestion management program	**APM TR-2: Avoid SR-74 Traffic.** See above **APM TR-4: Off-Peak Deliveries.** See above **APM TR-7: Traffic Control Plans.** See above		
Impact TT-3: Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks	**APM TR-6: Helicopter Use.** When helicopters are in use for construction activities, designated fly yards would be kept clear of all other construction activity. If helicopters are used during construction of the proposed project, existing helicopter landing areas would be used wherever feasible. Helicopter landing areas along the existing ROW would be located away from residences and other land uses (generally at least one mile from sensitive noise receptors).	• Ensure that the applicant adheres to protocols during helicopter use.	During construction and restoration.

Table 4-1 Mitigation Monitoring, Compliance, and Reporting Program

Impact	Applicant Proposed Measure (APM) or Mitigation Measure (MM)	Monitoring Requirements	Timing
	MM TR-2[(a)]: Helicopter Safety Plan and External-Load Training Program. Prior to start of construction, SDG&E must submit a Helicopter Safety Plan and External-Load Training Program prepared by qualified personnel to the CPUC. All workers that shall be present when helicopters are in use for construction of the project shall be trained regarding helicopter external loads. A sign-in sheet recording the names and dates of all individuals trained shall be maintained by SDG&E. Helicopter Safety Plan and Worker Environmental Awareness training shall include the following, at minimum: • An overview of the general steps taken by the certified Rotorcraft External-Load Operators before starting operations, including a survey of the flight area; the typical ground worker instructions from certified Rotorcraft External-Load Operators; the ramp inspection checklist (14 CFR 133 Ramp Inspection Job Aid) and examples of typical causes of unsatisfactory ramp inspections; and the equipment typically required for Class A, B, C, and D loads as specified in 14 CFR 133; • A summary of the contents of the FAA-approved Rotorcraft Load Combination Flight Manuals applicable to external-load operations planned for the project including maximum loads (internal and external) and load types and general performance capabilities, under approved operating procedures and limitations, for each type of helicopter to be used; • Detailed instruction regarding the proper methods of loading, rigging, or attaching external loads and examples of improper rigging and resultant accidents and incidents; and • Detailed information about planned helicopter construction techniques. A safety brief, plan of operations, and refresher helicopter external-load operations training shall occur at the start of all days during which helicopter external-load operations are planned to occur. The planned flight paths, landing areas, and timing and types of helicopter construction activities for the day shall be presented. At minimum, the refresher training shall include examples load types and maximum loads (internal and external) for each type of helicopter to be used that day and a demonstration of proper external-load attaching and restraining means for all types of attaching and retraining devices that may be used. No SDG&E personnel or contractor, including helicopter pilots and crewmembers,	• Ensure that the applicant prepares and presents helicopter safety plan and external-load training program.	Prior to and during construction and restoration.

Table 4-1 Mitigation Monitoring, Compliance, and Reporting Program

Impact	Applicant Proposed Measure (APM) or Mitigation Measure (MM)	Monitoring Requirements	Timing
	shall work in proximity to or be involved with helicopter external-load operations unless they receive the initial training and attend the daily safety brief and refresher training. Signatures of all personnel and contractors that attend the daily safety brief and refresher training shall be collected and clear indication on the worker (e.g., sticker on the hardhat color-coded by training day) shall be visible to indicate that the worker, pilot, or crewperson is approved to work in proximity to or otherwise be involved with helicopter external-load operations for the day.		
	MM TR-3: Notification and Monitoring of Helicopter Use. SDG&E will notify the Long Beach Flight Standards District Office at least one week in advance of all days during which helicopter operations are planned to occur or as required by the Flight Standards District Office. In addition, SDG&E will notify all residents, businesses, and owners of property within 0.25 miles of planned helicopter flight paths and landing areas along the Project alignment at least one week in advance of all days during which helicopter operations are planned to occur. In compliance with 14 CFR Part 133, the loading and unloading of all helicopter external loads shall be monitored by lineman (non-apprentice) certified by SDG&E to rig and inspect helicopter external loads. All accidents or incidents reported to the National Transportation and Safety Board (NTSB) or FAA shall, at the same time of reporting, be reported to the CPUC. Near misses involving helicopters that had the potential to result in an accident or incident as defined by NTSB but do not require NTSB notification, shall be recorded by SDG&E and immediately reported to the applicant's safety coordinator and the CPUC.	• Ensure that the applicant provides one week notice of helicopter use.	During construction and restoration.
Impact TT-4: Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).	**APM PS-2: Repair Damage to Public Facilities.** See above. **APM TR-7: Traffic Control Plans.** See above.		
	APM TR-5: Material Removal, City Streets. For any underground work along city streets, materials would be removed from work areas on a daily basis to minimize traffic impacts.	• Ensure that the applicant clears materials from work areas.	During construction and restoration.
Impact TT-5: Result in inadequate emergency access.	**APM TR-7: Traffic Control Plans.** See above.		
	APM TR-3: Emergency Access. SDG&E would coordinate with local emergency response agencies during all construction within existing roadways. Coordination with local emergency response agencies (such as Orange County Sheriff's Department and Orange County Fire Authority) would ensure that impacts to emergency access are less than significant.	• Ensure that the applicant coordinates with local emergency response agencies.	During construction and restoration.

Table 4-1 Mitigation Monitoring, Compliance, and Reporting Program

Impact	Applicant Proposed Measure (APM) or Mitigation Measure (MM)	Monitoring Requirements	Timing
Impact TT-6: Conflict with adopted policies, plans or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.	**APM PS-2: Repair Damage to Public Facilities.** See above. **APM TR-5: Material Removal, City Streets**. See above. **APM TR-7: Traffic Control Plans.** See above.		
	MM TR-4: City of San Juan Capistrano and City San Clemente Traffic Engineer and Parks and Recreation Review. Prior to commencing work within city boundaries of San Juan Capistrano and San Clemente, the applicant shall submit a draft Traffic Control Plan (APM TR-7) for the project to the City of San Juan Capistrano and City of San Clemente traffic engineers and Parks and Recreation departments for their review. A Draft Traffic Control Plan shall be submitted according to the timeframe established by the authority having jurisdiction of the roadway or trail being impacted. The applicant shall incorporate any recommendations from this review related to bikeway, sidewalk, and unpaved trail facilities into a final Traffic Control Plan prior to com. The applicant shall provide a copy of the final Traffic control plan to the City of San Juan Capistrano, the City of San Clemente and the CPUC prior to commencing work.	• Ensure that the applicant prepares and coordinates traffic control plan with local agencies.	Prior to and during construction and restoration

Note:
[a] MM TR-1 was deleted in the Final EIR.

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5.0 References

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