Mitigation Monitoring and Reporting Plan

The purpose of this Mitigation Monitoring and Reporting Plan (MMRP) is to ensure effective implementation of each mitigation measure identified in this IS/MND and imposed by the CPUC as part of project approval. As the CEQA Lead Agency, the CPUC would be responsible for ensuring monitoring and reporting on required mitigation if the Proposed Project is approved. PG&E, as the Applicant and project proponent, would be responsible for implementing all applicable measures, including the adopted mitigation measures, conditions of project approval, and conditions imposed in any permits or regulations administered by other responsible agencies.

The MMRP is presented in Table 1. Table 1 is organized first by environmental topic and subsequently by mitigation measure. Table 1 includes:

- APMs and mitigation measures that PG&E must implement as part of the Proposed Project
- Monitoring and reporting requirements
- Effectiveness criteria
- Timing and location of implementation for each measure

The CPUC will use this MMRP as the framework for a Mitigation Monitoring and Compliance Reporting Program (MMCRP) if the Proposed Project is approved. The MMCRP would be the basis for the CPUC's environmental monitoring and reporting activities throughout project construction, including during site rehabilitation and restoration after construction is completed. The MMCRP would detail how and when the mitigation measures would be implemented and would identify duties and responsibilities of the various parties, communication protocols to follow, and record management requirements. The MMCRP would be prepared and instituted prior to any notice to proceed (NTP) being issued or the initiation of any construction.

Authority for Mitigation Monitoring

California Public Utilities Commission

The California Public Utilities Code confers authority upon the CPUC to regulate the terms of service and the safety, practices, and equipment of utilities subject to its jurisdiction. It is CPUC practice, pursuant to its statutory responsibility, to protect the environment and to require that mitigation measures stipulated as conditions of approval be properly implemented, monitored, and reported on. This requirement is codified statewide as PRC section 21081.6, which requires

a public agency to adopt a mitigation monitoring or reporting program when the agency approves a project that is subject to preparation of an IS/MND and where the IS/MND for the project identifies significant environmental effects. CEQA Guidelines section 15097 describes agency requirements for mitigation monitoring or reporting.

The CPUC would address its responsibilities under PRC section 21081.6 when it takes action on PG&E's application for a Permit to Construct. If the Commission approves the Proposed Project, it will also adopt an MMRP and include the mitigation measures as a condition of approval. The MMRP would be incorporated into the MMCRP.

The purpose of an MMCRP is to ensure that the measures adopted to mitigate or avoid significant impacts of a project are implemented and to report on their implementation. The CPUC views the MMCRP as a working guide to facilitate implementation of mitigation measures imposed by the approving agencies measures and any measures proposed by the project proponent and to provide for the monitoring, compliance, and reporting activities of the CPUC and its designated monitors.

Content and Organization of the MMCRP

If the Proposed Project is approved, the CPUC will compile the Final MMRP and include it in the Final MND, as adopted. Based on the MMRP, the MMCRP would be prepared and would serve as a self-contained guide for implementing the MMRP throughout project construction.

The Final MMCRP would contain a concise overview and description of the approved project, outline its physical locations and geographic limits, and, to the extent known, provide the project schedule. It would include all adopted mitigation measures and would specify the master reference document(s) that the monitors and PG&E would use in carrying out the MMRP (i.e., the Final MND, detailed working maps and plans, issued permits, etc.). The APMs to which PG&E has committed would be incorporated to the extent they have not been superseded by specific mitigation measures in the MND.

The MMCRP would include a list of the agencies having jurisdiction over various aspects of the project, and a description of where these respective jurisdictions occur. For example, the MMCRP would state which CDFW regional office has jurisdiction and provide contact information, including the designated representative's name, address, email, and telephone and fax numbers.

The MMCRP would also include definition of the manner in which PG&E's monitoring team would interact with the CPUC staff and consultants. In addition, the MMCRP would define PG&E's required submittals to the agencies and protocol for interactions among agency and PG&E team members.

The MMCRP would be structured as follows:

1. Introduction

a. Authority and Purpose of the MMCRP
b. Jurisdictional Agencies
c. Project Description
d. Organization of the MMCRP

2. Roles and Responsibilities
   a. Monitoring Responsibility
   b. Enforcement Responsibility
   c. Mitigation Compliance Responsibility
   d. Communications
   e. Dispute Resolution
   f. PG&E Roles
      i. Identification of the qualified PG&E team members who would verify that all adopted measures and conditions have been successfully implemented.
      ii. Organization of the PG&E team, including specifying duties, roles, and responsibilities.
      iii. Identification of primary PG&E contacts for CPUC environmental monitoring staff liaison.
3. General Monitoring and Compliance Procedures
   a. Environmental Monitors
   b. Construction Personnel
   c. General Reporting Requirements
      i. PG&E Compliance Levels for internal reporting
      ii. PG&E Daily Incident Summary format and protocol
      iii. PG&E Weekly Monitoring Report format and content
      iv. PG&E Annual Monitoring Report format and content
4. Records Management and Public Access to Records
5. Mitigation Measure Tables
6. Roles and Responsibilities

Responsibility for implementing the adopted measures rests with PG&E unless otherwise specified in the measure.

As Lead Agency under CEQA, the CPUC is responsible for monitoring an approved project to ensure that required mitigation measures and APMs are implemented. The required MMRP would be implemented through the MMCRP. The purpose of the MMRP is to document that the mitigation measures required by the CPUC are implemented and that mitigated environmental impacts are reduced to the level identified in the MND.

The CPUC may delegate duties and responsibilities for monitoring to environmental monitors or consultants working on behalf of the CPUC. Additionally, some monitoring responsibilities may be assumed by responsible agencies where areas or resources under their jurisdiction are potentially affected or involved.

PG&E would deploy its own monitors for its own purposes to ensure implementation of its commitments and execution of its responsibilities. The number of PG&E construction monitors assigned to the Proposed Project would be determined by the utility and would depend on the number of concurrent construction activities underway, their locations, and the types of resources potentially affected. The CPUC would ensure that persons assigned monitoring duties by PG&E are qualified to undertake those duties.

When a mitigation measure requires that a study or plan be developed during the design or pre-construction phase of the project, PG&E must submit the final study or plan to CPUC for review and approval. Any study or plan that requires approval of the CPUC must allow at least 60 days for adequate review unless noted otherwise in the mitigation measure. Other agencies and jurisdictions with authority over aspects of the Proposed Project or particular resources may require additional review time. The CPUC environmental monitoring team would be responsible for confirming that appropriate agency reviews have occurred and required approvals were obtained by PG&E.

During the course of construction, circumstances may arise that require deviations from the Proposed Project as approved. The CPUC, along with their environmental monitors, would evaluate any proposed deviations from the approved project to ensure they are consistent with CEQA requirements. Depending on its nature, a requested deviation would be processed as a Minor Project Refinement (MPR) or be the subject of a Petition for Modification (PFM) submitted by the Applicant.

MPRs would be strictly limited to minor project changes that do not trigger additional permit requirements, do not increase the severity of an impact or create a new impact, and are within the geographic scope of the MND.

If a project change would create or have the potential to create a new significant impact, increase the severity of an impact, or occur outside the geographic area evaluated in the MND, PG&E would be required to submit a PFM. The CPUC would evaluate the PFM under CEQA, as appropriate, to determine what form of supplemental environmental review would be required.

Enforcement Responsibility

The CPUC would be responsible for monitoring implementation of the MMCRP and enforcing the procedures adopted. Generally, this would be done through the Environmental Monitors assigned by the permitting agencies. In addition, if the permitting agencies' Environmental Monitors note conditions or situations falling within the purview of other agencies, they may notify the appropriate agencies or individuals about any problems and report these to the CPUC.

As the State's regulator of investor-owned utilities, CPUC has the authority to halt any construction, operation, or maintenance activity associated with the project if the activity is determined to be a deviation from the approved project or the adopted mitigation measures.

Compliance Responsibility

PG&E would be responsible for successfully implementing all the adopted mitigation measures in the MMCRP. The MMCRP would contain criteria that define whether mitigation is successful. Standards for successful mitigation also are implicit in many mitigation measures that include such requirements as obtaining permits or avoiding a specific impact entirely. Additional mitigation success thresholds may be established through the review and approval of specific plans required under mitigation measures. Other requirements may be stipulated by another agency with applicable jurisdiction during that agency's permitting process. PG&E would inform CPUC and the Environmental Monitors in writing of any mitigation measures that are not or cannot be successfully implemented and provide alternative approaches for successful mitigation implementation. The CPUC, in coordination with their Environmental Monitors, would review the alternative approach to determine if it is adequate and whether an MPR or PFM would apply.

Dispute Resolution

It is expected that the Final MMCRP would greatly reduce or eliminate potential disputes. However, even with the best preparation, disputes may occur. In such an event, the following procedure would be observed:

- **Step 1**.Disputes and complaints (including those from the public) should be directed first to the CPUC Project Manager or designee, as appropriate, for resolution. The Project Manager or designee would 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 approved project or adopted MMRP.

The following steps apply to the CPUC only:

- **Step 3**. If a dispute or complaint regarding the implementation or evaluation of the MMRP or the mitigation measures 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's Executive Director. This notice should be filed expeditiously 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 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, they may appeal it to the Commission via a procedure to be specified by the Commission.

Parties may also seek review by the Commission through existing procedures specified in the Commission's Rules of Practice and Procedure for formal and expedited dispute resolution although a good faith effort should be made to use the foregoing procedure first.

General Monitoring Procedures

Environmental Monitoring

Many of the monitoring procedures would be conducted during the construction phase of the project. The CPUC and Environmental Monitors are responsible for integrating the mitigation monitoring procedures into the construction process in coordination with PG&E. To oversee the monitoring procedures and to ensure success, the Environmental Monitors assigned must be on site during any construction activity for which mitigation is required. The Environmental Monitors are responsible for ensuring that all procedures specified in the MMCRP are followed.

Construction Personnel

A key element in the success of mitigation and mitigation monitoring is the full cooperation of construction personnel and supervisors. Successful implementation of many of the mitigation measures requires specific actions and behaviors on the part of the construction supervisors or crews. To ensure success, the following actions, detailed in specific mitigation measures included in the MMCRP, would be taken:

- Procedures to be followed by construction companies engaged to do the work would be written into their contracts with PG&E. Procedures to be followed by construction crews would be written into a separate agreement that all construction personnel would be asked to sign, denoting consent to the procedures.
- As specified by mitigation, a Safety and Environmental Awareness Program (SEAP) would be conducted to inform and train construction personnel regarding the requirements of the monitoring program (as detailed in the MMCRP). The CPUC Environmental Monitors would verify that each crew member receives the required training.
- A written summary of mitigation monitoring procedures would be provided to construction supervisors for all mitigation measures requiring their attention.

Reporting Procedures

Detailed weekly reports would be prepared and submitted by the CPUC environmental monitoring team. These would include detailed information on construction activities, compliance activities observed by the Environmental Monitors and others documented by PG&E, any issues and their resolution, and photographs of relevant activities and conditions.

PG&E is required to have its own monitors for particular resources, depending on project needs and activities. These monitors provide daily reports/surveys that are entered into PG&E's Field

Record Environmental Database (FRED) system. It is assumed that FRED or a similar database would be employed on this project. CPUC Environmental Monitors would have access to the reports. Construction is not allowed to start in a particular area until the required pre-construction surveys and flagging/staking are completed per the MMCRP, the CPUC environmental monitor has validated compliance, and the CPUC has issued a Notice to Proceed.

PG&E is required to provide the CPUC with written weekly and annual reports of the project, which shall include progress of construction, resulting impacts, mitigation implemented, and all other noteworthy elements of the project.

Public Access to Records

The public is allowed access to records and reports used to track the monitoring program.

Monitoring records and reports would be made available for public inspection by the CPUC on request. The CPUC and PG&E would develop a filing and tracking system. For additional information on mitigation monitoring and reporting for the project, the Energy Division of the CPUC would maintain an Internet website, accessible at:

https://ia.cpuc.ca.gov/environment/info/panoramaenv/Hinkley/index.html

To facilitate the public's awareness, the CPUC would make weekly reports available on the website.

Table 1 Mitigation Monitoring and Reporting Program

Applicant Proposed Measure (APM) / Mitigation Measure (MM)	Applicable Location	Requirements and Timing
AIR QUALITY (AIR)		
APM AIR-1: Dust Control During Construction PG&E will control fugitive dust by using the following BMPs, as follows: • Water or cover with coarse rock all exposed surfaces with the potential to generate dust to reduce the potential for airborne dust from leaving the site. • Limit the simultaneous occurrence of more than two ground-disturbing construction phases on the same area at any one time. Phase activities to reduce the amount of disturbed surfaces at any one time. • Cover all haul trucks entering/leaving the site and trim their loads, as necessary. • Use wet power vacuum street sweepers to sweep all paved access roads, parking areas, staging areas, and public roads adjacent to the project site daily (at minimum) during construction. Do not use dry power sweeping • Wash off all trucks and equipment, including their tires, prior to leaving the project site. • Apply gravel or non-toxic soil stabilizers on all unpaved access roads, parking areas, and staging areas at the project site. • Water and/or cover soil stockpiles daily. • Plant vegetative ground cover in disturbed areas as soon as possible and water it appropriately until vegetation is established. • Limit all vehicle speeds to 15 miles per hour (mph) or less on unpaved areas. • Implement dust monitoring in compliance with the standards of MDAQMD. • Halt construction during any periods when wind speeds exceed 50 mph.	All Project areas	Before Construction: N/A During Construction: Workers and contractor to implement dust control measures. After Construction: N/A
APM AIR-2: Minimize Construction Equipment Exhaust In accordance with APM GHG-1, PG&E will minimize construction equipment exhaust by using low-emission or electric construction	All Project areas	Before Construction: N/A During Construction: Workers would minimize vehicle and equipment exhaust during construction.

Applicant Proposed Measure (APM) / Mitigation Measure (MM)	Applicable Location	Requirements and Timing
equipment where feasible and by minimizing idling time. In particular, cranes, off-highway trucks, and tractors/loaders/backhoes used during project construction will comply with Tier 4 emissions standards.		After Construction: N/A
BIOLOGICAL RESOURCES (BIO)		
APM BIO-1: Protect nesting birds If construction is to occur during the avian nesting season (March 1 through August 15), a preconstruction migratory bird and raptor nesting survey will be performed by a qualified biologist who is familiar with local avian species and nesting birds. Surveys will occur only in publicly accessible areas and areas where PG&E has existing access; private property will not be accessed and will instead be observed from adjacent accessible areas. Preconstruction nesting bird surveys will be performed in accordance with PG&E's Nesting Bird Management Plan. The preconstruction survey will cover a radius of 200 feet for nonlisted raptors and 100 feet for nonlisted passerines from project locations that will be actively worked at in the near term. The survey will cover all affected areas where ground disturbance is required. If any active nests containing eggs or young are found, an appropriate nest exclusion zone will be established by the PG&E biologist in accordance with PG&E's Nesting Bird Management Plan. No heavy equipment will be operated in this exclusion zone until the biologist has determined that the nest is no longer active, and the young have fledged. If it is not practicable to avoid work in an exclusion zone around an active nest, work activities will be modified to minimize disturbance of nesting birds but may proceed in these zones at the discretion of the biologist. As appropriate, the biologist will monitor work activities in these zones daily or periodically when construction is occurring and assess their effect on the nesting birds. If the biologist determines that certain activities pose a high risk of disturbing an active nest, the biologist will recommend additional, feasible measures to minimize the risk of nest disturbance. If work cannot proceed without disturbing the nesting birds, or signs of disturbance are observed by the monitor, work may need to be halted or	All Project areas	Before Construction: Preconstruction nesting bird surveys will be performed in accordance with PG&E's Nesting Bird Management Plan. During Construction: Appropriate nest exclusion zones, work activities modification, or biological monitoring will occur at the discretion of the PG&E biologist. After Construction: N/A

Applicant Proposed Measure (APM) / Mitigation Measure (MM)	Applicable Location	Requirements and Timing
redirected to other areas until the nesting and fledging is completed or the nest has otherwise failed for reasons not related to construction.		
APM BIO-2: Protect wildlife trapped in trenches or steep-walled holes Field crews will fit open trenches or steep-walled holes with escape ramps of plywood boards or sloped earthen ramps at each end if left open overnight. Field crews will search open trenches or steep-walled holes every morning prior to initiating daily activities to ensure wildlife is not trapped. If any wildlife is found, work will stop, and the PG&E biologist will be contacted to move the animal out of harm's way.	All Project areas	Before Construction: N/A During Construction: Covering or filling excavated holes and trenches at end of each workday or creating a temporary wildlife escape ramp. After Construction: N/A
APM BIO-3: Preconstruction surveys Preconstruction biological clearance surveys will be completed by a qualified biologist prior to construction activities beginning and will occur throughout the project site to minimize impacts on wildlife.	All Project areas	Before Construction: A pre-construction clearance survey is performed. During Construction: N/A After Construction: N/A
APM BIO-4: Worker Environmental Awareness Program – Biological Resources Portion A worker environmental awareness program (WEAP) will be prepared for the project to communicate environmental issues and appropriate work practices specific to the project to all construction field personnel before they begin work on the project. A PG&E biologist or designee familiar with resources in the area will deliver the WEAP biological resources portion. Training will include a discussion of the potential for nesting birds and possible buffers, along with the requirement to protect wildlife from becoming trapped in trenches or steep-walled holes. Training will include information about federal laws protecting nesting birds. A copy of the training sign-in sheets documenting participation in the training will be provided to the CPUC.	All Project areas	Before Construction: The training material is submitted to the CPUC at least 30 days before construction During Construction: Workers receive the training prior to working on the site. After Construction: N/A
Mitigation Measure BIO-1: Desert Tortoise and Mohave Ground Squirrel Preconstruction clearance surveys for any burrows potentially containing desert tortoise or Mohave ground squirrel burrows shall be completed by a qualified biologist within 500 feet of the project footprint prior to the onset of construction activities. If the burrow has any sign of recent use by a desert tortoise or Mohave ground squirrel, the burrow shall be monitored	All Project areas (work area and staging area)	Before Construction: A pre-construction clearance survey is performed. During Construction: (1) Work restriction buffers are implemented, and (2) Construction activities near active burrows are monitored.

Applicant Proposed Measure (APM) / Mitigation Measure (MM)	Applicable Location	Requirements and Timing
by a qualified biologist for signs of activity. No construction activity shall be allowed within 200 feet of a burrow containing desert tortoise or Mohave ground squirrel without obtaining approval from CDFW. All project activities within 500 feet of an occupied desert tortoise or Mohave ground squirrel burrow shall be monitored by a qualified biologist to ensure avoidance of the species.		After Construction: N/A
Mitigation Measure BIO-2 Desert Kit Fox If an active, non-natal den is detected within the project footprint, then a 100-foot construction exclusion zone will be established, and passive relocation techniques may be used as determined by the qualified biologist. The buffer area will be maintained until passive relocation is successfully completed. If an active natal den is detected within the project footprint a 500-foot construction exclusion zone will be established, and passive relocation will not be implemented until monitoring confirms that the den is no longer in active use as a natal den.	Where active desert kit fox natal dens are present within 500 feet or non-natal dens within 200 feet of the Project footprint (work area and staging area)	Before Construction: A pre-construction clearance survey is performed. During Construction: (1) Work restriction buffers are implemented, and (2) Construction activities near active dens are monitored. After Construction: N/A
Mitigation Measure BIO-3 Burrowing Owl Preconstruction clearance surveys for active burrowing owl burrows shall be completed by a qualified biologist prior to the onset of construction activities to minimize impacts from construction. Surveys shall be conducted according to CDFW guidelines (California Department of Fish and Game (CDFG) 2012) or updated guidelines should they become available). If burrows are located, avoidance buffers shall be determined in coordination with CDFW and based on the recommendations below: • From April 1-August 15, buffers shall be 200 meters (approximately 656 feet) for low levels of disturbance (i.e., vehicles, worker presence), and 500 meters (approximately 1,600 feet) for moderate to high levels of disturbance (i.e., trenching, demolition, etc.) • From August 16-October 15, buffers shall be 200 meters (approximately 656 feet) for low and moderate levels of disturbance and 500 meters (approximately 1,600 feet) for high levels of disturbance. • From October 16-March 31, buffers shall be 50 meters (approximately 165 feet) for low levels of disturbance; be 200 meters (approximately 656	Where active burrowing owl nesting sites are present within 500 meters of work/staging area	Before Construction: A pre-construction clearance survey is performed. During Construction: (1) Work restriction buffers are implemented, and (2) Construction activities near active burrows are monitored. After Construction: N/A

Applicant Proposed Measure (APM) / Mitigation Measure (MM)	Applicable Location	Requirements and Timing
feet) for moderate levels of disturbance, and 500 meters (approximately 1,600 feet) for high levels of disturbance. • Binocular surveys may be substituted for protocol field surveys on private lands adjacent to the project site only when PG&E has made reasonable attempts to obtain permission to enter the property for survey work but was unable to obtain such permission. Reduced buffers may be requested by the qualified biologist due to existing noise and disturbance levels at the compressor station. Buffer reductions would require CDFW approval. No burrowing owl may be relocated without first obtaining a CDFW incidental take permit.		
Mitigation Measure BIO-4 Invasive Species Any ground- or vegetation-disturbing equipment and tools will be cleaned free of mud, soil, and plant material before entering the project site, and any time after driving off pavement outside the project site. Cleaning can be through car washes, compressed air, pressure washes, brushes, or similar equipment.	All project areas	Before Construction: N/A During Construction: Workers would clean all equipment before entering the project site and before leaving the project site After Construction: N/A
CULTURAL RESOURCES (CUL)		
APM CUL-1: Worker Environmental Awareness Training Program – Cultural Resources Portion A worker environmental awareness training program (WEAP) will be prepared to communicate environmental issues and appropriate work practices specific to the project to all construction field personnel before they begin work on the project performing excavation or trenching activities. This training will be administered by a qualified cultural resource professional either as a standalone training or as part of the overall environmental awareness training required by the project and may be recorded for use in subsequent training sessions. The WEAP program will be provided separately to CPUC staff prior to construction. The WEAP will address, among other topics, at a minimum: • A review of archaeology, history, precontact, and Native American cultures associated with historical resources near the project.	Environmentally Sensitive Areas	Before Construction: The cultural resource training material is submitted to the CPUC at least 30 days before construction. During Construction: Workers receive the cultural resource training prior to working on the site. After Construction: N/A

Applicant Proposed Measure (APM) / Mitigation Measure (MM)	Applicable Location	Requirements and Timing
• A review of applicable local, state, and federal ordinances, laws, and regulations pertaining to historic preservation. • A discussion of procedures to be followed if unanticipated cultural resources are discovered during implementation of the project. • A discussion of disciplinary and other actions that could be taken against persons violating historic preservation laws and PG&E policies. • A statement by the construction company or applicable employer agreeing to abide by the Worker Education Program, PG&E policies, and other applicable laws and regulations.		
APM CUL-3: Unanticipated Discovery of Human Remains If human remains or suspected human remains are discovered during PG&E construction, work within 100 feet of the find will stop immediately and the construction supervisor will contact the PG&E cultural resources specialist who meets the Secretary of Interior's Standards for archaeology. Upon discovery, the Specialized Investigations Division of the San Bernardino County Sheriff's Department will be contacted for identification of human remains. The Coroner has 2 working days to examine the remains after being notified. If the remains are Native American, the Coroner must notify the NAHC about the discovery within 24 hours. The NAHC then will identify and contact a Most Likely Descendant (MLD). The MLD may make recommendations to the landowner or representative for the treatment or disposition, with proper dignity, of the remains and grave goods. When proper consultation has occurred, a procedure that may include the preservation, excavation, analysis, and curation of artifacts and/or reburial of those remains and associated artifacts will be formulated and implemented. If the remains are not Native American, the Coroner will consult with the archaeological research team and the lead agency to develop a procedure for the proper study, documentation, and ultimate disposition of the remains. If a determination can be made as to the likely identity – either as an individual or as a member of a group – of the remains, an attempt should be made to identify and contact any living descendants or	All project areas	Before Construction: Training of Personnel on procedures for discovery of human remains During Construction: (1) Work within 100 feet of discovered resources stops, (2)The required personnel, PG&E Cultural Resource Specialist, and CPUC agencies are notified, (3) Adequate reporting and documentation occurs, (4) Significant resources are completely avoided or mitigated from impacts, and (5) Work only resumes near the resource after treatment or disposition is complete as determined by the County Coroner, or landowner and MLD as appropriate required procedures are complete, to the satisfaction of CPUC. After Construction: N/A

Applicant Proposed Measure (APM) / Mitigation Measure (MM)	Applicable Location	Requirements and Timing
representatives of the descendant community. As interested parties, these descendants may make recommendations to the owner or representative for the treatment or disposition, with proper dignity, of the remains and grave goods. Final disposition of any human remains or associated funerary objects will be determined in consultation between the landowner and the Most Likely Descendant (MLD).		
Mitigation Measure Cutural-1: Archaeological Monitoring During trenching and excavation activities in soil or sediment that is not imported or not previously disturbed, a tribal monitor from one tribe to be identified by the lead agency, shall be invited to be retained by PG&E to inspect for potential archaeological deposits or Tribal cultural resources. In the event of the discovery of archaeological deposits or Tribal cultural resources, a tribal representative shall have the authority to halt work within 100 feet of the discovery, and CPUC shall be notified within 48 hours of the discovery. All procedures in Mitigation Measure CUL-2 shall be implemented during investigation of the resource.	Environmentally Sensitive Areas	Before Construction: Personnel Training During Construction: Tribal monitor is invited to inspect. After Construction: N/A
Mitigation Measure Cultural-2: Inadvertent Cultural Resource Discoveries (Supersedes APM CUL-2) If unanticipated cultural resources are identified during construction, the following procedures will be initiated: • All ground-disturbing construction activities within 100 feet of the discovery will halt immediately. • A qualified archaeologist meeting Secretary of Interior standards shall be hired to assess the find. • The construction crew will protect the discovery from further disturbance until a qualified archaeologist has assessed it. • The construction supervisor will immediately contact the project environmental inspector and the PG&E cultural resource specialist. Work on the other portions of the project outside of the buffered area may continue during this assessment period. The PG&E cultural resources specialist will coordinate with the CPUC and NAHC, as appropriate. Additionally, the Yuhaaviatam of San Manuel Nation Cultural Resources	All project areas	Before Construction: N/A During Construction: (1) Work within 100 feet of discovered cultural resources stops, (2)The required personnel, PG&E Cultural Resource Specialist, CPUC, and Native Americans are notified, (3) Adequate reporting and documentation occurs, (4) Significant resources are completely avoided or mitigated from impacts through preparation of a historic properties treatment plan, (5) YSMN Is contacted regarding any pre-contact discoveries and coordinated with during preparation of the historic properties treatment plan (6) Work only resumes near the resource after required procedures are complete in coordination with YSMN and CPUC. After Construction: N/A

Applicant Proposed Measure (APM) / Mitigation Measure (MM)	Applicable Location	Requirements and Timing
Department (YSMN) shall be contacted, regarding any pre-contact finds and be provided information after the archaeologist makes his/her initial assessment of the nature of the find, so as to provide Tribal input with regards to significance and treatment. Tribal input will be provided within 10 days. If the discovery can be avoided or protected and no further impacts will occur, then the resource will be documented on DPR 523 forms, and no further effort will be required. If the resource cannot be avoided and may be subjected to further impacts, qualified personnel will evaluate the significance of the discovery in accordance with the state laws outlined previously; personnel will implement data recovery or other appropriate treatment measures, if warranted. A qualified historical archaeologist will complete an evaluation of historic period resources, while evaluation of precontact resources will be completed by a qualified archaeologist specializing in California prehistoric archaeology. Evaluations may include archival research, oral interviews, and/or field excavations to determine the full depth, extent, nature, and integrity of the deposit. If significant pre-contact cultural resources, as defined by CEQA (as amended, 2015), are discovered and avoidance cannot be ensured, a Cultural Resource Monitoring and Treatment Plan shall be prepared by the archaeologist in coordination with YSMN, and all subsequent finds shall be subject to the Cultural Resource Monitoring and Treatment Plan. The Plan shall allow for a monitor to be present that represents YSMN for the remainder of the project ground disturbing activities, should YSMN elect to place a monitor on-site.		
GEOLOGICAL, SOIL, AND PALEONTOLOGICAL RESOURCES (PAL)		
APM PAL-1: Retain a Qualified Paleontological Principal Investigator A Paleontological Principal Investigator who meets the standards set forth by the Society of Vertebrate Paleontology will be retained to ensure that all APMs related to paleontological resources are properly implemented during construction. The Paleontological Principal Investigator will have a master's degree or Ph.D. in geology or paleontology, have knowledge of	All project areas	Before Construction: Retain a Qualified Paleontological Principal Investigator. During Construction: N/A After Construction: N/A

Applicant Proposed Measure (APM) / Mitigation Measure (MM)	Applicable Location	Requirements and Timing
the local paleontology, and be familiar with paleontological procedures and techniques.		
APM PAL-2: Worker Environmental Awareness Training Program – Paleontological Portion A WEAP will be prepared to communicate environmental issues and appropriate work practices specific to the project to all construction field personnel before they begin work on the project performing excavation or trenching activities. The WEAP will address, among other topics, paleontological resources protection. Training may be provided by PG&E as a stand-alone training, or it may be included as part of the overall environmental awareness training as required by the project. The WEAP program will be provided separately to CPUC staff prior to construction. The paleontological training portion will include the following: • The types of fossils that could occur at the project site • The types of lithologies in which the fossils could be preserved • The procedures that should be taken in the event of a fossil discovery • Penalties for disturbing paleontological resources	All project areas	Before Construction: Personnel Training During Construction: N/A After Construction: N/A
APM PAL-3: Paleontological Resource Monitoring for Project Excavation or Trenching Activities A paleontological monitor will be present to monitor for paleontological resources where excavation or trenching occurs. Monitoring is not required if this work occurs in soil or sediment that is imported or previously disturbed. The paleontological monitor will be able to: (1) recognize fossils and paleontological deposits and deposits that may be paleontologically sensitive; (2) take accurate and detailed field notes, photographs, and locality coordinates; and (3) document project-related ground-disturbing activities, their locations, and other relevant information, including a photographic record. The qualified paleontologist will be responsible for a weekly reassessment of paleontological sensitivity after reviewing monitoring reports, which may result in reducing or increasing the amount of monitoring required.	All project areas	Before Construction: N/A During Construction: Paleontological monitoring and reporting. After Construction: N/A

Applicant Proposed Measure (APM) / Mitigation Measure (MM)	Applicable Location	Requirements and Timing
AMP PAL-4: Unanticipated Paleontological Discovery If significant paleontological resources are discovered during PG&E's excavation and trenching activities, the following procedures will be followed: • Stop work immediately within 100 feet of the fossil find. • Contact the designated project inspector and PG&E Cultural Resource Specialist (CRS) immediately. • Protect the site from further impacts, including looting, erosion, or other human or natural damage. • Arrange for a qualified paleontologist to evaluate the discovery. If the discovery is determined to be significant, PG&E will implement measures to protect and document the paleontological resource. Work may not resume within 100 feet of the find until approved by the paleontologist and CRS. • Collect and curate fossils only when it is safe for the qualified paleontologist to be in the project work area. Collect fossils only when the collection activity will not damage the resource further than not collecting it as determined by the qualified paleontologist. Curate all fossils discovered in an appropriate repository.	All project areas	Before Construction: Training of Personnel on procedures for discovery of paleontological resources. During Construction: (1) Work within 100 feet of discovered resources stops, (2) The required personnel and agencies are notified, (3) Adequate reporting and documentation occurs, (4) Significant resources are completely avoided or mitigated from impacts, and (5) Work only resumes near the resource after required procedures are complete. After Construction: N/A
GREENHOUSE GAS EMISSIONS (GHG)		
APM GHG-1: PG&E Minimize GHG Emissions PG&E will implement the following measures to minimize GHG emissions consistent with the recommendations provided in the CPUC's Draft Environmental Measures: • Encourage construction workers to carpool to the job site if suitable park-and-ride facilities are available in the project vicinity. • Develop a carpool program to the job site. • Maintain on-road and off-road vehicle tire pressures to manufacturer specifications. Check and reinflate tires at regular intervals. • Recycle demolition debris for reuse to the greatest extent feasible. • Maintain construction equipment per manufacturer's specifications.	All Project areas	Before Construction: Register portable diesel-fueled construction equipment with engines 50 horsepower or larger and manufactured in 2000 or later under the CARB's statewide Portable Equipment Registration Program. During Construction: Implement GHG minimization measures in adherence with APM GHG-1 After Construction: N/A

Applicant Proposed Measure (APM) / Mitigation Measure (MM)	Applicable Location	Requirements and Timing
• Minimize unnecessary construction vehicle idling time. The ability to limit construction vehicle idling time will depend on the sequence of construction activities and when and where vehicles are needed or staged. Certain vehicles, such as large diesel-powered vehicles, have extended warm-up times following startup that limit their availability for use following startup. Where such diesel-powered vehicles are required for repetitive construction tasks, these vehicles may require more idling time. The project will apply a "common sense" approach to vehicle use, so that idling is reduced as far as possible below the maximum of 5 consecutive minutes allowed by California law; if a vehicle is not required for use immediately or continuously for construction activities, its engine will be shut off. Construction supervisors will include briefings to crews on vehicle use as part of preconstruction conferences. Those briefings will include discussion of a "common sense" approach to vehicle use. • Register portable diesel-fueled construction equipment with engines 50 horsepower or larger and manufactured in 2000 or later under the CARB Statewide PERP.		
HAZARDS AND HAZARDOUS MATERIALS (HAZ)		
APM HAZ-1: Development and Implementation of Hazardous Material and Emergency Response Procedures PG&E will implement construction controls, training, and communication to minimize the potential exposure of the public and site workers to potential hazardous materials during all phases of project construction. Construction procedures that will be implemented include worker training appropriate to the worker's role, and PG&E containment and spill control practices.	All project areas	Before Construction: Hazardous Materials Management Plan is submitted to the CPUC at least 30 days prior to construction During Construction: (1) Workers receive hazardous materials management training, and (2) BMPs maintained on-site After Construction: N/A
APM HAZ-2: Emergency Spill Supplies and Equipment Materials will be available on the project site during construction to contain, collect, and dispose of any minor spill. Oil-absorbent material, tarps, and storage drums will be available on the project site during construction and will be used to contain and control any minor releases of oil. If excess water and liquid concrete escape during pouring, they will be	All project areas	Before Construction: N/A During Construction: Materials will be available on the project site during construction to contain, collect, and dispose of any minor spill. After Construction: N/A

Applicant Proposed Measure (APM) / Mitigation Measure (MM)	Applicable Location	Requirements and Timing
directed to lined and bermed areas within the staging area, where the concrete will dry and then be transported for disposal per applicable regulations.		
APM HAZ-3: Shock Hazard Safety Measures All authorized personnel working onsite during either construction or O&M will be trained according to PG&E shock hazard safety standards.	All project areas	Before Construction: Personnel training During Construction: N/A After Construction: N/A
APM HAZ-4: Worker Environmental Awareness Program – Hazards Portion A WEAP will be prepared to communicate environmental issues and appropriate work practices specific to the project to all construction field personnel before they begin work on the project. The WEAP will address, among other topics, hazards and hazardous materials. The training program will emphasize site-specific physical conditions to improve hazard prevention and will include a review of spill response and proper BMP implementation. The WEAP program will be provided separately to CPUC staff prior to construction.	All project areas	Before Construction: Training material is submitted to the CPUC at least 30 days before construction During Construction: Workers receive training prior to working on the site. After Construction: N/A
APM HAZ-5: Potentially Contaminated Soil Where existing data are not available and there is known potential of contaminated soil in the trenching or excavation area, crews will be notified prior to commencement of earth-moving activities in that area. Excavation or trenching areas either within or directly adjacent to locations of known or suspected contaminated soil will be evaluated by PG&E's Remediation and Industrial Hygiene departments prior to soil disturbance to ensure soil-disturbing activities are supervised and conducted by appropriately trained and qualified individuals, as appropriate. In accordance with standard protocol for any soil-disturbing activities at PG&E facilities, soil showing visual, olfactory, or other evidence of contamination will be stockpiled and managed separately. Soil that is known or suspected of being contaminated (based on existing analytical data or visual, olfactory, or other evidence) and is removed during trenching or excavation activities will be segregated and stockpiled on top of one layer of 20-mil polyethylene sheeting (or equivalent). When	In Areas with a Known Potential of Contaminated Soil	Before Construction: Prior to soil disturbance, suspected contaminated soil will be evaluated by PG&E's Remediation and Industrial Hygiene departments. During Construction: Contaminated soil will be segregated, stockpiled, secured, and tested. Soil will be disposed in accordance with landfill requirements. After Construction: N/A

Applicant Proposed Measure (APM) / Mitigation Measure (MM)	Applicable Location	Requirements and Timing
the stockpiled material is not actively being handled, top sheeting will be adequately secured, or equivalent soil stabilization methods will be employed so that all surface areas are covered or equivalently prevented from dispersion or mixing with nearby soils. The stockpiled soil will have a temporary berm placed around the stockpile to prevent runoff from leaving the area and will not be positioned near storm drains. Soil sampling and testing will be conducted for each stockpile, the purpose of which will be to characterize the chemical quality of the soil for potential reuse, disposal, and worker health and safety risks. The location, distribution, and frequency of the sampling locations where there is known or suspected contaminated soil in a trenching or excavation area will be determined by a qualified Environmental Scientist based on the quantity of excavated material to ensure analytical data adequately characterizes the material with the intent to provide adequate representation of the conditions in the construction area. All soil intended for disposal will be tested in accordance with landfill requirements, regardless of known or suspected contamination being present. Appropriate handling, transportation, and disposal locations for soil will be determined based on results of the analyses. If the soil is contaminated at concentrations greater than state or federal hazardous waste levels, it will be contained and disposed of offsite at a licensed hazardous waste facility. In addition, results will be provided to contractors and construction crews to inform them about soil conditions and potential hazards.		
HYDROLOGY AND WATER QUALITY (HYD)		
APM HYD-1: Worker Environmental Awareness Program – Water Quality Portion A WEAP will be prepared for the project to communicate environmental issues and appropriate work practices specific to the project to all construction field personnel before they begin work on the project. The WEAP will include, among other topics, spill prevention and response measures and proper BMP implementation. A copy of the training	All project areas	Before Construction: Training material is submitted to the CPUC at least 30 days before construction During Construction: Workers receive training prior to working on the site. After Construction: N/A

Applicant Proposed Measure (APM) / Mitigation Measure (MM)	Applicable Location	Requirements and Timing
materials and training sign-in sheets documenting participation in the training will be provided to the CPUC.		
NOISE (NOI)		
APM NOI-1: General Construction Noise Management PG&E will employ standard noise-reducing construction practices such as the following: • Comply with manufacturer's muffler requirements on all construction equipment engines and ensure exhaust mufflers are in good condition. • Turn off construction equipment when not in use, where applicable. • Include noise control requirements for construction equipment and tools in specifications provided to construction contractors to the maximum extent practicable, including performing all work in a manner that minimizes noise.	All project areas	Before Construction: N/A During Construction: Implement standard noise reducing construction practices After Construction: N/A
APM NOI-2: Noise Minimization with Portable Barriers Portable air compressors and other small stationary equipment used during construction of PG&E project components will be shielded with portable barriers if appropriate and in response to a noise complaint.	All project areas	Before Construction: N/A During Construction: Placing portable barriers After Construction: N/A
APM NOI-3: Noise Minimization with Quiet Equipment Quiet equipment will be used during construction of PG&E project components whenever possible (for example, equipment that incorporates noise-control elements into the design, such as quiet model compressors or generators [75 dBA at 20 feet], can be specified).	All project areas	Before Construction: N/A During Construction: Quiet equipment will be used during construction of PG&E project components whenever possible. After Construction: N/A
APM NOI-4: Noise Minimization through Direction of Exhaust When in proximity to noise-sensitive uses, equipment exhaust stacks and vents will be directed away from those noise-sensitive uses where feasible.	All Project areas	Before Construction: N/A During Construction: When in proximity to noise-sensitive uses, equipment exhaust stacks and vents will be directed away from those noise-sensitive uses where feasible. After Construction: N/A
APM NOI-5: Nighttime Noise Disruption Minimization through Sensitive Receptor Notification	All Project areas	Before Construction: N/A

Applicant Proposed Measure (APM) / Mitigation Measure (MM)	Applicable Location	Requirements and Timing
In the event that nighttime construction is necessary – for instance, if certain activities need to continue to completion and the noise of the construction equipment expected to be in use is audible at the station fenceline over the ambient noise of the station operation – sensitive receptors within 0.5 mile of the work area will be notified in advance by mail, personal visit, phone call, or door hanger and will be informed of the expected work schedule.		During Construction: In the event that nighttime construction is necessary and the noise of the construction equipment expected to be in use is audible at the station fence line over the ambient noise of the station operation, sensitive receptors within 0.5 mile of the work area will be notified in advance. After Construction: N/A
APM NOI-6: Noise Minimization Equipment Specification PG&E will specify general construction noise reduction measures that require the contractor to ensure that all equipment is in good working order, adequately muffled, and maintained in accordance with the manufacturers' recommendations and that stationary equipment such as the temporary generators be in sound-reducing acoustic enclosures that limit noise, for example, to 75 dBA at 20 feet.	All Project areas	Before Construction: N/A During Construction: General noise reduction measures will be required. After Construction: N/A
TRIBAL CULTURAL RESOURCES (TCR)		
APM TCR-1: Undiscovered Potential Tribal Cultural Resources After stopping work and following the procedure for determining eligibility in Mitigation Measure Cultural-2, if a prehistoric or protohistoric site is identified and cannot be avoided, PG&E will contact the CPUC and NAHC to identify an appropriate tribe with whom to consult on treatment. If no agreement can be reached for mitigation after discussions with the California Native American Tribe(s) or it is determined that the tribe(s)' preferred mitigation is not feasible, PG&E will implement one of the example mitigation measures listed in PRC Section 21084.3(b), or other feasible mitigation.	All Project areas	Before Construction: N/A During Construction: PG&E to contact the CPUC and NAHC to identify an appropriate tribe with whom to consult on treatment. After Construction: N/A