

ATTACHMENT A

Mitigation Monitoring and Reporting Plan

INTERNAL DRAFT – DO NOT DISTRIBUTE

APPENDIX F

Mitigation Monitoring and Reporting Plan

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Appendix F MITIGATION MONITORING AND REPORTING PLAN

F.1 Introduction and Background

The California Public Utilities Commission (CPUC) is the California Environmental Quality Act (CEQA) lead agency for the Estrella Substation and Paso Robles Area Reinforcement Project (Proposed Project). In that role, if the Proposed Project or an alternative is approved, the CPUC would be responsible for ensuring that the mitigation measures included in the Environmental Impact Report (EIR) are fully implemented. Public Resources Code (PRC) Section 21081.6 requires lead agencies to adopt a Mitigation Monitoring and Reporting Plan (MMRP) designed to ensure compliance with mitigation measures during project implementation. Horizon West Transmission, LLC (HWT) and Pacific Gas and Electric Company (PG&E), as the Applicants and project proponents, would be responsible for implementing the mitigation measures, as well as the Applicant Proposed Measures (APMs) included as part of the Proposed Project, any other conditions of project approval imposed by the CPUC, and any conditions imposed in permits or regulations administered by other responsible agencies.

The MMRP establishes the approach to implementing the mitigation measures and APMs identified in the EIR. If the Proposed Project or an alternative is approved and the MMRP described below is adopted by the CPUC, a detailed Mitigation Monitoring, Compliance, and Reporting Program (MMCRP) would be developed, as described in this appendix. The MMCRP would be the mechanism for CPUC implementation of the MMRP and would incorporate the MMRP summary table (Table F-1), included at the end of this appendix.

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. It would detail how and when the mitigation measures would be implemented. The MMCRP would also identify duties and responsibilities of the various parties, communication protocols to follow, and record management requirements. The MMCRP would be adopted after consideration of the Final EIR instituted prior to any notices to proceed being issued or the initiation of any construction.

F.2 MMCRP AUTHORITY, CONTENTS, AND ORGANIZATION

F.2.1 AUTHORITY FOR THE MMCRP

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 it approves a

project that is subject to preparation of an EIR and where the EIR for the project identifies significant adverse 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 HWT and PG&E's application for a Permit to Construct. If the CPUC approves the Proposed Project or an alternative, it also would adopt an MMRP and include the mitigation measures as a condition of approval. The MMRP would be incorporated into the MMCRP. 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.

F.2.2 ORGANIZATION OF THE MMCRP

The MMCRP would contain a concise overview and description of the approved project, outline its physical locations, 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, HWT, and PG&E would use in carrying out the MMRP (e.g., the Final EIR, detailed working maps and plans, issued permits, etc.). The APMs to which HWT and PG&E have committed would be incorporated to the extent they have not been superseded by specific mitigation measures in the Final EIR.

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 California Department of Fish and Wildlife (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 describe the manner in which HWT and PG&E's monitoring team would interact with the CPUC staff and consultants. In addition, the MMCRP would define HWT and PG&E's required submittals to the agencies, and protocol for interactions among agency, HWT, and PG&E team members.

The MMCRP would be structured as follows:

- 1. Introduction
- 2. Scope of the Program
- 3. Roles and Responsibilities
- 4. Procedures
- 5. Records Management

F.2.3 ROLES AND RESPONSIBILITIES

As described above, responsibility for implementing the adopted measures rests with HWT and PG&E, unless otherwise specified in the measure. As the lead agency under CEQA, the CPUC is responsible for monitoring the approved project to ensure that required mitigation measures and APMs are implemented. 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.

HWT and PG&E would deploy their own monitors for their own purposes, to ensure implementation of their commitments and execution of their responsibilities. The number of HWT and PG&E construction monitors assigned to the 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 HWT and PG&E are qualified to undertake those duties.

When a mitigation measure requires that a study or plan be developed during the design or preconstruction phase of the project, HWT and PG&E must submit the final study or plan to the 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 alternative 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 HWT and PG&E. For certain mitigation measures (e.g., AQ-1), the CPUC may ensure compliance by such means as audits of construction equipment.

In the event of a noncompliance issue, as the State's regulator of investor-owned utilities and as the CEQA lead agency, the 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.

F.2.4 Project Changes

During the course of construction, circumstances may arise that require deviations from the 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 Change (MPC) or be the subject of a Petition for Modification (PFM) submitted by the Applicant. MPCs would be strictly limited to changes that do not trigger additional permit requirements, do not increase the severity of an impact or create a new significant impact, and are within the geographic scope of the EIR. If these criteria are not met, HWT and 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.

F.2.5 DISPUTE RESOLUTION

The following procedure will be observed for dispute resolution between CPUC staff and the Applicants:

 Disputes and complaints should be directed to the CPUC's designated Project Manager for resolution. Should this informal process fail, the CPUC Project Manager may initiate enforcement or compliance action to address deviations from the approved project.

F.2.6 CONSTRUCTION PERSONNEL

A key element in the success of mitigation measure implementation 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, shall be taken:

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

F.2.7 REPORTING

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 HWT and PG&E, any issues and their resolution, and photographs of relevant activities and conditions.

HWT and PG&E are required to have their own monitors for particular resources, depending on project needs and activities. These monitors shall provide daily reports/surveys. 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 monitors have validated compliance, and the CPUC has issued a Notice to Proceed.

HWT and PG&E are required to provide the CPUC with written weekly and annual reports of the project, which shall include progress of construction, APM and mitigation measure implementation, and all other noteworthy elements of the project.

F.3 MMRP SUMMARY TABLE

As described above, the MMRP shall be included in the MMCRP should the Proposed Project or one of the alternatives evaluated in the EIR be selected for implementation by the Commission. The following summary table outlines procedures for the implementation of the APMs and mitigation measures included in the EIR; the relative applicability of the APMs and mitigation

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measures to Proposed Project components, the reasonably foreseeable distribution components, and/or alternatives; the monitoring and reporting actions that will need to take place to ensure the measure is properly implemented, responsibility for implementation, the schedule for the monitoring and reporting actions, and the mechanism that verifies that monitoring is complete.

Table F-1. MMRP Summary Table

Applicant Proposed Measure or Mitigation Measure	Applicability ¹	Monitoring and Reporting Action (Responsible Party)	Monitoring Schedule
General			
APM GEN-1. Prepare and Implement a Worker Environmental Awareness Program. The project proponents will prepare and implement a project-specific worker environmental awareness program (WEAP) for construction personnel. All onsite construction personnel will attend the training before they begin work on the project. WEAP training materials will include avoidance and minimization measures being implemented to protect biological resources, surface and groundwater resources, cultural resources, and paleontological resources; minimize air quality impacts; and manage hazardous materials. WEAP training will also discuss terms and conditions of any permits or agreements, information on federal and state environmental laws, and consequences and penalties for violation or noncompliance with these laws and regulations and project permits. Workers will be informed about the presence, identification, life history, and habitat requirements of the special-status species that have a potential to occur in the project area. More specifically, training will include: Recognizing/avoiding exclusion areas and sensitive habitat and specific avoidance or	ES, PPLR, RFDC, SS-1, PLR-1A, PLR-1C, PLR-3, SE-1A, SE-PLR-2	1. Confirm preparation of a WEAP that includes all of the specifications consistent with this APM. (CPUC) 2. Confirm that all onsite construction personnel attend the training. (CPUC)	 Prior to construction. Prior to/during construction.

Applicant Proposed Measure or Mitigation Measure	Applicability ¹	Monitoring and Reporting Action (Responsible Party)	Monitoring Schedule
minimization measures for sensitive species and habitats;			
 How to identify cultural resources; avoidance requirements and procedures to be followed if unanticipated cultural resources are discovered during construction; disciplinary actions that may occur when historic preservation laws and project proponent policies are violated; 			
How to identify paleontological resources, including types of fossils that could occur in the project area and types of lithologies in which the fossils could be preserved; avoidance requirements and procedures to be followed if a fossil is discovered during construction; penalties for disturbing paleontological resources;			
 Hazardous substance spill prevention and containment measures; and 			
Review of mitigation and avoidance measures. A brochure prepared by the project proponents conveying this information will be prepared for distribution to all construction staff and other individuals who enter the construction footprint. All WEAP trainees will receive a project sticker for their hard hat to show they have been trained, and will sign a training sign-in sheet verifying participation and that they understand the training and will comply with the information presented. Focused trainings may be directed at an individual's job-specific task, provided			

Applicant Proposed Measure or Mitigation Measure	Applicability ¹	Monitoring and Reporting Action (Responsible Party)	Monitoring Schedule
that the worker conducts activities within a limited scope (pilots, delivery drivers, site visitors, etc.).			
Aesthetics			
APM AES-1. Substation Hardscaping. Decorative rock and/or other hardscape landscaping will be installed between Estrella Substation and Union Road.	ES	 Incorporate requirements into Project design and bid documents. (Project proponents) Confirm that materials do not contrast substantially with the surrounding landscape. (CPUC) 	 During preparation of plans and specifications. During preparation of plans and specifications.
APM AES-2. Light and Glare Reduction. Construction lighting and permanent substation exterior lighting will be selectively placed and shielded to minimize nighttime glare.	ES, PPLR, RFDC, SS-1, PLR- 1A, PLR-1C, PLR-3, SE-1A, SE-PLR-2	 Incorporate requirements into Project design and bid documents. (Project proponents) Confirm that temporary and permanent construction and substation lighting is selectively placed and shielded. (CPUC) 	 During preparation of plans and specifications. During construction.

Applicant Proposed Measure or Mitigation Measure	Applicability ¹	Monitoring and Reporting Action (Responsible Party)	Monitoring Schedule
 MM AES-1. Use Landscaping, Design and Architectural Elements to Complement the Surrounding Visual Landscape. HWT and PG&E shall implement the following measures: Incorporate drought- and fire-resistant shrubs within the hardscape landscaping proposed in APM AES-1 between Union Road and the Estrella Substation in accordance with the standards provided in PG&E's Wildfire Safety Inspection Program and CAL FIRE's defensible space guidelines. For alternative substation sites, incorporate drought- and fire-resistant shrubs between the adjacent roadway and the substation. Coordinate with CAL FIRE to ensure that any shrubs used in landscaping adjacent to the substation does not substantially increase fire risk. At the substation's southeastern perimeter fronting Union Road (where practicable) incorporate chain link fence slats or mesh fabric using natural colors that are compatible with the surrounding area (i.e., green, light brown, grey) in order to minimize visual contrast. For all Proposed Project and alternative components (not including the power line conductors), use a dulled finish or paint colors that are compatible with the surrounding area 	ES, PPLR, SS-1, PLR-1A, PLR-1C, SE-1A, SE-PLR-2	 Confirm that drought and fire-resistant shrubs have been incorporated into adjacent landscaping in accordance with applicable standards. (CPUC) Confirm that fencing, paint colors, and finishes are compatible with the surrounding area; and where feasible, visual contrast has been minimized. (CPUC) Confirm that applicable, existing landscaping is replaced, in accordance with the measure. (CPUC) 	 During construction. During construction. Prior to completion of construction.

Applicant Proposed Measure or Mitigation Measure	Applicability ¹	Monitoring and Reporting Action (Responsible Party)	Monitoring Schedule
(i.e., dull grey, light brown, or green colors) in order to minimize visual contrast. Examples of dulled finishes include use of galvanized steel or naturally weathered steel. Avoid the use of large expanses of reflective glazing, aluminum panels, and other materials not normally found in the environment.			
Where practicable and in accordance with CPUC G.O. 95 and other applicable laws, HWT and PG&E shall replace any existing landscaping that requires removal due to construction of the proposed 70 kV power line along the publicly accessible portions of Golden Hill Road, unless the underlying land owner specifically requests non-replacement of landscaping.			
Agriculture and Forestry Resources			
APM AG-1. Coordinate with Landowners, Farmers, and Ranchers Regarding Construction Activities. The project proponents will work with farmers, ranchers, and landowners to schedule project-related construction activities in a manner that avoids conflicts with harvest and planting periods, to the extent feasible, and in a manner that minimizes disruptions to agricultural operations. Access across active fields shall be negotiated with the landowner in advance of any construction activities.	ES, PPLR, RFDC, SS-1, PLR-1A, PLR-1C, PLR-3, SE-1A, SE-PLR-2	 Coordinate with farmers, ranchers and landowners to avoid conflicts. (Project proponents) Confirm that access across active fields has been negotiated with landowner. (CPUC) Ensure advance notification of construction activities 	 Prior to construction. Prior to construction. Prior to construction.

Applicant Proposed Measure or Mitigation Measure	Applicability ¹	Monitoring and Reporting Action (Responsible Party)	Monitoring Schedule
 Coordination will include advance notice of construction activities and reporting of complaints, as follows: 		has been provided to surrounding landowners. (CPUC)	
 Prior to construction, the project proponents will give at least 30 days' advance notice of the start of construction-related activities. Notification shall be provided by mailing notices to all properties within 300 feet of the substation or power line route. The notice will describe where and when construction activity is planned and shall provide contact information for a point of contact for complaints related to construction activities. Prior to commencing ground-disturbing activities, the project proponents will submit a copy of the template used for the notification letter and a list of the landowners notified to CPUC. 			
MM AG-1. Provide Compensation for Loss of Agricultural Land.	ES, PPLR, PLR-1A, PLR-1C, SE-PLR-2	Confirm loss of farmland is	1. Prior to construction.
To compensate for the loss of Farmland of Statewide Importance and Unique Farmland, HWT and PG&E shall, prior to construction of the Proposed Project or alternative, either:		compensated for in a manner consistent with the measure. (CPUC)	
 Contribute funds in an amount equal to the fair market value, based upon value prior to beginning of project construction, of the impacted Farmland of Statewide Importance 			

Applicant Proposed Measure or Mitigation Measure	Applicability ¹	Monitoring and Reporting Action (Responsible Party)	Monitoring Schedule
and Unique Farmland, as it applies to each Applicant's specific impacts to the California Farmland Conservancy Program ¹ , or to another public agency or non-profit organization which will achieve similar long-term preservation of agricultural lands in San Luis Obispo County;			
2) Enter into and record one or more conservation easements with landowners for specific land classified as the same or greater FMMP Important Farmland category as the land impacted and is under vineyard production at a 1:1 ratio by acreage for the impacted Farmland of Statewide Importance and Unique Farmland; or			
3) A combination of clauses 1 and 2, above, may be implemented via a financial contribution equaling the fair market value, consistent with clause 1, of any land acreage not conserved via a conservation easement in a 1:1 ratio by acreage, consistent with clause 2.			
Each Applicant may implement this mitigation measure independently or jointly for the acreage of their respective impacts. Any fair market value estimates, proposed recipients of financial contributions, and proposed conservation easements shall be submitted to the CPUC for review and			

¹ The California Farmland Conservancy Program is established under Public Resources Code Section 10200-10277 to promote the long-term preservation of agricultural lands in California though the use of agricultural conservation easements.

Applicant Proposed Measure or Mitigation Measure	Applicability ¹	Monitoring and Reporting Action (Responsible Party)	Monitoring Schedule
approval prior to funding and/or execution to assure fulfillment of the intent of this mitigation measure			
Impacted by Construction Activities. HWT or PG&E shall ensure that agricultural land temporarily impacted by construction activities associated with their respective components is adequately restored following completion of construction. These include areas impacted from establishment of temporary staging and storage areas, installation of the underground fiber optic cable link, installation of the 230 kV interconnection structures, preparation and temporary use of pull sites and crossing guard structures, and preparation and use of helicopter landing zones. Restoration of sites will involve removing any rock or material imported to stabilize the site, replacement of topsoil, decompacting any soil that has been compacted by heavy equipment, and re-planting of equivalent value agricultural crops unless the property owner requests that the material remain for their use. Topsoil may be sourced from other areas of the Proposed Project (e.g., topsoil stripped and stockpiled as part of Estrella Substation construction) or may be purchased within San Luis Obispo County. The depth of topsoil following restoration shall match the pre-project condition. The responsibility of performing these various tasks may be stipulated in an agreement between HWT, PG&E,	ES, PPLR, PLR-1A, PLR-1C, SE-PLR-2	 Track acreage and location of disturbed land such as to enable verification of full restoration later on. (CPUC) Confirm restoration of agricultural lands is completed. (CPUC) 	During construction. Following construction.

Applicant Proposed Measure or Mitigation Measure	Applicability ¹	Monitoring and Reporting Action (Responsible Party)	Monitoring Schedule
and the landowner(s) completed for the Proposed Project or alternatives. If a landowner is better equipped or prefers to replant crops or perform other tasks themselves, then HWT or PG&E shall provide just compensation for this work. HWT and PG&E shall ensure that all restoration activities pursuant to this mitigation measure, including through any agreements with landowners, are consistent with the best management practices (BMPs) in the stormwater pollution prevention plan (SWPPP). Restoration of agricultural land shall be defined as restored to a reasonable equivalent in agricultural viability/suitability in comparison to pre-construction conditions (i.e., soil conditions are as, or more, suitable to support the same or similar crops as preconstruction conditions), unless other arrangements with the land owner for different restoration conditions have been made. PG&E and HWT shall submit a report to CPUC after restoration efforts are completed, documenting completion of the restoration activities required by this mitigation measure.			
Air Quality			
 APM AIR-1. Minimize ROG, NO_x, and PM Combustion. ■ Maintain all construction equipment in proper tune according to manufacturer's specifications; ■ Fuel all off-road and portable diesel-powered equipment with CARB-certified motor vehicle 	ES, PPLR, RFDC, SS-1, PLR- 1A, PLR-1C, PLR-3, SE-1A, SE-PLR-2	Confirm construction equipment and vehicle fleets meet requirements of the APM. (CPUC)	 Prior to construction. During construction. During construction.

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diesel fuel (non-taxed version suitable for use offroad); Use on-road heavy-duty trucks that meet CARB's 2010 or cleaner certification standard for on-road heavy-duty diesel engines, and comply with the state On-Road Regulation;		2. Confirm that construction equipment is maintained per manufacturer specifications. (CPUC)	
 Construction or trucking companies with fleets that that do not have engines in their fleet that meet the engine standards identified in the above two measures (e.g., captive or NOx exempt area fleets) may be eligible by proving alternative compliance; 		3. Confirm that equipment is not idled for more than 5 minutes and all other requirements of APM are complied with.	
• All on and off-road diesel equipment shall not idle for more than 5 minutes. Signs shall be posted in the designated staging areas and substation site to remind drivers and operators of the 5-minute idling limit;		(CPUC)	
 Electrify equipment when feasible; Substitute gasoline-powered in place of diesel-powered equipment, where feasible; and 			
 Use alternatively fueled construction equipment on site where feasible, such as compressed natural gas (CNG), liquefied natural gas (LNG), propane, or biodiesel. 			
APM AIR-2. Air Quality Best Available Control Technology for Construction Equipment.	ES, PPLR, RFDC, SS-1, PLR- 1A, PLR-1C, PLR-3, SE-1A, SE-PLR-2	Confirm that the best available control technology for	1. During construction.

Ар	plicant Proposed Measure or Mitigation Measure	Applicability ¹	Monitoring and Reporting Action (Responsible Party)	Monitoring Schedule
	t available control technology measures for the ject include: Reducing emissions by expanding use of Tier 3 off-road and 2010 on-road compliant engines; and Installing California Verified Diesel Emission Control Strategies.		construction equipment is being utilized. (CPUC)	
APN	A AIR-3. Minimize Fugitive Dust. Reduce the amount of the disturbed area where possible.	ES, PPLR, RFDC, SS-1, PLR- 1A, PLR-1C, PLR-3, SE-1A, SE-PLR-2	dust levels are being minimized by	1. During construction.
•	Use water trucks or sprinkler systems in sufficient quantities to prevent airborne dust from leaving the site.		implementation of the measures outlined in this APM. (CPUC)	
•	All dirt stockpile areas should be sprayed daily as needed.			
•	All disturbed soil areas not subject to revegetation should be stabilized using approved chemical soil binders, jute netting, or other methods approved in advance by San Luis Obispo Air Pollution Control District (SLOCAPCD).			
•	Vehicle speed for all construction vehicles shall not exceed 15 mph on any unpaved surface.			
•	All trucks hauling dirt, sand, soil, or other loose materials are to be covered or should maintain at least two feet of freeboard (minimum vertical distance between top of load and top of trailer) in			

Applicant Proposed Measure or Mitigation Measure	Applicability ¹	Monitoring and Reporting Action (Responsible Party)	Monitoring Schedule
 accordance with California Vehicle Code Section 23114. Sweep streets at the end of each day if visible soil material extending over 50 feet is carried onto adjacent paved roads. Water sweepers with reclaimed water should be used where possible. 			
 Mitigation Measure AQ-1: Prepare a Construction Activity Management Plan for Review by SLOCAPCD and Final Approval by CPUC. Horizon West Transmission (HWT), Pacific Gas and Electric Company (PG&E), or their contractor(s) shall implement the following measures: Prepare a CAMP. The CAMP shall be submitted to the APCD for review and to CPUC for final approval prior to the start of construction and shall include, but not be limited to, the following elements: Evaluation of all SLOCAPCD standard and expanded fugitive dust mitigation measure into the CAMP. Minimum performance criteria for fugitive dust measures to control dust is not to exceed 20% opacity for greater than 3 minutes in any 60-minute period while construction activity is occurring and disturbed areas are not covered, vegetated, or chemically stabilized; 	ES, PPLR, SS-1, PLR-1A, PLR-1C, PLR-3, SE-1A, SE- PLR-2	 Confirm preparation of the CAMP and that CAMP includes all of the components required by the measure. (CPUC) Confirm that all requirements of the CAMP are fully implemented. (CPUC) 	 Prior to construction. During construction.

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2.	Evaluation of all SLOCAPCD standard construction equipment mitigation measures and evaluation of construction equipment BACT for incorporation as a mitigation measure into the CAMP or documentation of infeasibility. Minimum performance standard is meeting or exceeding all applicable CARB mobile source and off-road equipment fleet regulations and documentation on why anything less than a Tier 4 final off-road engine is infeasible for the project such as unavailability of specialized equipment with a Tier 4 Final engine;			
3.	A Dust Control Management Plan that encompasses all, but is not limited to, dust control measures that were listed above in the "fugitive dust control measures" listed in part 1; and include the following additional dust mitigation measures:			
	 Equipment must be washed down before moving from the property onto a paved public road. 			
	 All trucks hauling dirt, sand, soil, or other loose materials are to be tarped with a fabric cover and maintain a freeboard height of 12 inches. 			

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c. Installation of one or more of the following track-out prevention measures:			
 i. A gravel pad designed using good engineering practices to clean the tires of existing vehicles, 			
ii. A tire shaker,			
iii. A wheel wash system,			
iv. Pavement extending for not less than fifty consecutive feet from the intersection with the paved public road, and/or			
v. Any other measure the CPUC finds as effective as the measures listed above.			
d. Control for disturbed surface areas and storage piles that will remain inactive for more than seven (7) days, which shall include one or more of the following:			
 Keep the surface adequately wetted as follows: (A) If the district-approved dust mitigation plan has specified a percent moisture content for specific 			
materials the determination shall be as specified in the district-approved dust mitigation plan; or			
(B) If no moisture threshold is			

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specified in a district-approved			
dust mitigation plan, a sample of			
at least one (1) quart in volume			
shall be taken from the top three			
(3) inches of a road, or bare area			
or from the surface of a stockpile.			
The sample shall be poured out			
from a height of four (4) feet onto			
a clean hard surface. The material			
shall be considered to be			
adequately wetted if there is no			
observable dust emitted when the			
material is dropped.			
ii. Establishment and maintenance of			
surface crusting sufficient to			
satisfy the following:			
Measurement of the stability of			
surface crusting on horizontal			
surfaces" shall be as follows: (A)			
Where a visible crust exists, drop a			
steel ball with a diameter of 15.9			
millimeters (0.625 inches) and a			
mass ranging from 16 to 17 grams			
from a distance of 30 centimeters			
(one foot) directly above (at a 90-			
degree angle perpendicular to) the			
ground surface. If blow sand (thin			
deposits of loose grains covering			
less than 50 percent of the surface			

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that have not originated from the			
surface being tested) is present,			
clear the blow sand from the			
surfaces to be tested before			
dropping the steel ball. Application			
of chemical dust suppressants or			
chemical stabilizers according to			
the manufacturers'			
recommendations; (B) A sufficient			
crust is determined to exist if,			
when the ball is dropped as			
described in A., the ball does not			
sink into the surface so that it is			
partially or fully surrounded by			
loose grains and, upon removing			
the ball, the surface on which it			
was dropped has not been			
pulverized so that loose grains are			
visible. (C) To determine that a			
surface is sufficiently crusted,			
three different test areas must			
pass the ball drop test. Within			
each different test area, the ball is			
dropped three times in each test			
area within a survey area			
measuring 1 foot by 1 foot that			
represents a random portion of			
the surface being evaluated. The			
test area shall be deemed to have			

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passed if at least two of the three times the ball was dropped, the results met the criteria specified in B. Only if all three different test areas pass, the area shall be deemed to be "sufficiently crusted."			
 iii. Covering with tarp(s) or vegetative cover; iv. Installation of wind barriers of fifty (50) percent porosity around three (3) sides of a storage pile; 			
v. Installation of wind barriers across open areas; or vi. Any other measure as effective as			
the measures listed above. e. Suspend grading operations when wind speeds are high enough to result in dust emission crossing the property line ² despite application of dust mitigation measures.			
f. All earth moving activities should be ceased in times of high wind conditions defined as sustained wind speeds exceeding 25 miles per hour and /or if			

² The property line is meant to be the edge of the work area established for the current project activities.

Applicant Proposed Measure or Mitigation Measure	Applicability ¹	Monitoring and Reporting Action (Responsible Party)	Monitoring Schedule
two wind gusts in excess of 25 mph are recorded in a 30- minute period.			
4. Tabulation of on and off-road construction equipment (age, horse-power and miles and/or hours of operation) on a projected and actual monthly basis. Ensure a minimum performance standard for DPM emissions of less than the SLOCAPCD significance threshold of 7 pounds daily and 0.13 tons per quarter is achieved. It is unlikely given the current projections for the Proposed Project that the DPM thresholds would be exceeded. If any monthly projection of emissions associated with the Project's equipment usage is within 10% of this daily or quarterly DPM threshold, HWT, PG&E, and/or its contractors will adjust the equipment used and/or schedule to ensure that exceedance of these thresholds is avoided. The minimum performance standard for quarterly emissions of ROG and NO _x is the Tier 2 threshold of 6.3 tons. To ensure that emissions are below the Tier 2 threshold for ROG and NO _x , PG&E, HWT and its contractors will implement suitable emission reduction measures, which may include, but would not be limited to: a. Work with SLOCAPCD to establish			
emission offsets to reduce net emissions below 6.3 tons in a quarter;			

Applicant Proposed Measure or Mitigation Measure	Applicability ¹	Monitoring and Reporting Action (Responsible Party)	Monitoring Schedule
 b. Limit the length of construction work- day periods and/or implement phased approaches for construction activities; and/or 			
c. Implement any other suitable emission reduction measures to ensure that emissions are below the Tier 2 threshold.			
 Schedule construction truck trips during non- peak hours (i.e. avoid peak commute times such as 7-9 am and 4-6 pm) to reduce peak hour emissions to the extent feasible. 			
Mitigation Measure AQ-2: Prepare a Valley Fever Management Plan for Review by CDPH and San Luis Obispo Department of Public Health and Final Approval by CPUC. HWT, PG&E, or their contractor(s) shall implement the	ES, PPLR, SS-1, PLR-1A, PLR-1C, PLR-3, SE-1A, SE- PLR-2	Confirm preparation of the VFMP and that VFMP includes all of the components required by the massure (CRUC)	 Prior to construction. During construction.
 ■ Prepare a VFMP. The Applicants shall prepare a VFMP and submit to the CPUC for review and approval prior to the start of construction. Prior to submittal of the VFMP to the CPUC, the Applicants shall consult with the California Department of Public Health and the San Luis Obispo Department of Public Health for guidance on all feasible mitigation measures to include in the VFMP. Feasible mitigation measures identified during this consultation shall be 		measure. (CPUC) 2. Confirm VFMP requirements are fully implemented. (CPUC)	

Applicant Proposed Measure or Mitigation Measure	Applicability ¹	Monitoring and Reporting Action (Responsible Party)	Monitoring Schedule
incorporated by the Applicants in the VFMP submitted to the CPUC. The VFMP shall include, but not be limited to, the following elements as currently suggested by the California Department of Public Health:			
 Adopt site plans and work practices that reduce workers' exposure to minimize primary and secondary exposure to the community through direct dispersal of spores or secondary dispersal from contaminated workers or equipment bringing spores to the community. The site plans and work practices may include: 			
 Minimize the area of soil disturbed. Use water, appropriate soil stabilizers, and/or re-vegetation to reduce airborne dust. Stabilize all spoils piles by tarping or other methods. Provide air conditioned cabs for vehicles 			
 Frovide all conditioned cabs for vehicles that generate heavy dust and make sure workers keep windows and vents closed. Suspend work during heavy winds. Onsite sleeping quarters, if provided, should be placed away from sources of dust. 			

Applica	ant Proposed Measure or Mitigation Measure	Applicability ¹	Monitoring and Reporting Action (Responsible Party)	Monitoring Schedule
0	Take measures to reduce transporting spores offsite, such as:			
	 Clean tools, equipment, and vehicles before transporting offsite. 			
	If workers' clothing is likely to be heavily contaminated with dust, provide coveralls and change rooms, and showers where possible.			
0	Identify a health care provider for occupational injuries and illnesses who is knowledgeable about the diagnosis and treatment of Valley Fever. This helps to ensure proper diagnosis and treatment as well as tracking potential outbreaks that may affect the community.			
0	Train workers and supervisors about the risk of Valley Fever, the work activities that may increase the risk, and the measures used onsite to reduce exposure. Also train on how to recognize Valley Fever symptoms. This helps to ensure proper diagnosis and treatment as well as tracking potential outbreaks that may affect community.			
0	Encourage workers to report Valley Fever symptoms promptly to a supervisor. Not associating these symptoms with workplace exposures can lead to a delay in appropriate diagnosis and treatment. This helps to ensure			

Applicant Proposed Measure or Mitigation Measure	Applicability ¹	Monitoring and Reporting Action (Responsible Party)	Monitoring Schedule
proper diagnosis and treatment as well as tracking potential outbreaks that may affect community.			
Biological Resources			
APM BIO-1. Conduct Pre-Construction Survey(s) for Special-Status Species and Sensitive Resource Areas. Biologists will conduct pre-construction survey(s) for special-status species and sensitive resource areas immediately prior to construction activities within suitable aquatic and upland habitat for special-status species. If a special-status species is encountered on the project site, the project proponents will be contacted immediately to determine the appropriate course of action. For federally or state listed species, the project proponents will contact the appropriate resource agency (USFWS and/or CDFW), as required.	ES, PPLR, RFDC, SS-1, PLR-1A, PLR-1C, PLR-3, SE-1A, SE-PLR-2	 Retain a qualified biologist to perform surveys. (Project proponents) If a special-status species is detected on the project site, ensure that the project proponents are contacted. (Project proponents) If a federally or state listed species is detected on the project site, ensure that the project site, ensure that the project proponents contact the appropriate resource agency. (CPUC) 	 Prior to construction. Prior to construction. Prior to construction.
APM BIO-2. Avoid Impacts on Nesting Birds. If work is scheduled during the nesting season (February 1 through August 31), nest detection	ES, PPLR, RFDC, SS-1, PLR- 1A, PLR-1C, PLR-3, SE-1A, SE-PLR-2	Retain a qualified biologist to conduct preconstruction	 Prior to construction. Prior to construction.

Applicant Proposed Measure or Mitigation Measure	Applicability ¹	Monitoring and Reporting Action (Responsible Party)	Monitoring Schedule
surveys will correspond with a standard buffer for individual species in accordance with the species-specific buffers set forth in the project proponent's Nesting Birds: Specific Buffers for PG&E Activities, and will occur within 15 days prior to the start of work activities at designated construction areas, staging areas, and landing zones to determine nesting status by a qualified biologist. Nest surveys will be accomplished by ground surveys and/or by helicopter and will support phased construction, with surveys scheduled to be repeated if construction lapses in a work area for 15 days between March and July. Access for ground surveys will be subject to property access permission. Helicopter flight restrictions for nest detection surveys may be in effect for densely populated residential areas, and will include observance of appropriate established buffers and avoidance of hovering in the vicinity of active nest sites.		surveys. (Project proponents) 2. If construction is scheduled to commence during the nesting season, confirm that nest detection surveys are conducted in accordance with this APM. (CPUC) 3. If active nests are found, ensure that a species-specific nest buffer is established in accordance with this APM. (CPUC)	3. Prior to construction, if necessary.
If active nests containing eggs or young are found, the biologist will establish a species-specific nest buffer, as defined in the project proponent's Nesting Birds: Specific Buffers for PG&E Activities. Where feasible, standard buffers will apply, although the biologist may increase or decrease the standard buffers in accordance with the factors set forth in Nesting Birds: Specific Buffers for PG&E Activities. Nesting pair acclimation to disturbance in areas with regularly occurring human activities will be considered when			

Applicant Proposed Measure or Mitigation Measure	Applicability ¹	Monitoring and Reporting Action (Responsible Party)	Monitoring Schedule
establishing nest buffers. The established buffers will remain in effect until the young have fledged or the nest is no longer active as confirmed by the biologist. Active nests will be periodically monitored until the biologist has determined that the young have fledged or once construction ends. Per the discretion of the biologist, vegetation removal by hand may be allowed within nest buffers or in areas of potential nesting activity. Inactive nests may be removed in accordance with PG&E's approved avian permits. The biologist will have authority to order cessation of nearby project activities if nesting pairs exhibit signs of disturbance. All references in this APM to qualified wildlife biologists refer to qualified biologists with a bachelor's degree or above in a biological science field and demonstrated field expertise in ornithology, in particular, nesting behavior.			
APM BIO-3. Biological Monitoring. Biologists will monitor initial ground-disturbing activities in and adjacent to sensitive habitat areas to ensure compliance with best management practices and APMs, unless the area has been protected by barrier fencing to protect sensitive biological resources and has been cleared by the biologists. The monitor will have authority to stop or redirect work if construction activities are likely to affect sensitive biological resources.	ES, PPLR, RFDC, SS-1, PLR- 1A, PLR-1C, PLR-3, SE-1A, SE-PLR-2	 Retain qualified biologist(s) familiar with the sensitive habitat areas. (Project proponents) Confirm that biologists monitor initial ground-disturbing activities in and adjacent to sensitive habitat areas and implement the 	 Prior to construction. During construction. During construction.

Applicant Proposed Measure or Mitigation Measure	Applicability ¹	Monitoring and Reporting Action (Responsible Party)	Monitoring Schedule
If a listed wildlife species is encountered during construction, project activities will cease in the area where the animal is found until the qualified biologist determines that the animal has moved out of harm's way or, with prior authorization from USFWS and/or CDFW if required, relocates the animal out of harm's way and/or takes other appropriate steps to protect the animal. Work may resume once the qualified biologist has determined that construction activities will not harm any listed wildlife species. The project proponents will be responsible for any necessary reporting to USFWS and/or CDFW.		measures in accordance with this APM. (CPUC) 3. Confirm that the qualified biologists implement the measures in accordance with this APM should a listed wildlife species be encountered. (CPUC)	
APM BIO-4. Special-Status Species Protection. All trenches/excavations in excess of 2 feet deep will have a sloped escape ramp or be covered at the end of the day. All trenches and excavations will be inspected for wildlife at the beginning of the workday and prior to backfilling. In addition, open-ended project-related pipes 4 inches or greater in diameter will be capped if left overnight or inspected for wildlife prior to being moved. If a special-status species is discovered in a trench, excavation, or pipe, the animal will be left undisturbed, and the pipe will not be moved until the special-status species has left the area on its own accord. In the event that any special-status species is trapped and unable to leave on its own accord, a permitted biologist, defined as a qualified biologist	ES, PPLR, RFDC, SS-1, PLR-1A, PLR-1C, PLR-3, SE-1A, SE-PLR-2	 Confirm that trenches/excavations have a sloped escape ramp or are covered at the end of each day. (Project Proponents) Confirm that trenches and excavations are inspected for wildlife at the beginning of the workday and prior to backfilling. (Project Proponents) 	 During construction. During construction. During construction. During construction, if necessary.

Applicant Proposed Measure or Mitigation Measure	Applicability ¹	Monitoring and Reporting Action (Responsible Party)	Monitoring Schedule
that holds the appropriate federal and/or state permits, will recover and relocate the special-status species. In addition, all food scraps, wrappers, food containers, cans, bottles, and other trash from the project area will be deposited in closed trash containers or kept in closed vehicles. Trash containers will be removed from the project area on a regular basis.		3. Confirm that openended pipes are capped or inspected according to this APM, and all other APM requirements are implemented. (CPUC)	
		4. If a special-status species is found, confirm that the guidance provided in this APM is followed. (CPUC)	
APM BIO-5. Dead or Injured Special-Status Wildlife. If any dead or injured special-status wildlife or birds protected by the Migratory Bird Treaty Act are discovered at the project site during construction, work will stop in the immediate vicinity. The project proponents will notify the on-call biologist and the appropriate resource agency (USFWS and/or CDFW) before construction is allowed to resume.	ES, PPLR, RFDC, SS-1, PLR- 1A, PLR-1C, PLR-3, SE-1A, SE-PLR-2	1. Confirm that work is stopped and APM requirements followed if dead or injured special-status wildlife or birds are discovered. (CPUC)	During construction, if necessary.
Mitigation Measure BIO-1. Actions to Further Avoid and Minimize Impacts to Special-Status Species. The additional mitigation actions below supplement the Applicant Proposed Measures (APMs) included as part of the Proposed Project and as applicable to	ES, PPLR, RFDC, SS-1, PLR- 1A, PLR-1C, PLR-3, SE-1A, SE-PLR-2	1. Retain qualified biologist(s) to perform pre-construction and pre-activity surveys for special-status plants and wildlife, per the	 Prior to construction. Prior to construction. Prior to construction. During construction. Prior-to, during, and post construction.

Applicant Proposed Measure or Mitigation Measure	Applicability ¹	Monitoring and Reporting Action (Responsible Party)	Monitoring Schedule
alternatives and distribution components and are discussed separately by resource. a. Special-Status Plants: Pre-construction surveys required under APM BIO-1 shall be conducted of all proposed work, plus a 100-foot buffer, within 1 year before commencement of ground-disturbing activities according to the Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities (CDFW 2018 or current version). Floristic surveys shall be performed during the appropriate bloom period(s) for each species. HWT/PG&E or their contractor(s) shall work with the CPUC-approved qualified botanist to identify plants in the field by staking, flagging, or fencing to avoid, where feasible, special-status plants that are detected within the temporary or permanent work areas, or within a 100-foot radius of these areas. b. Biological Monitoring, Sensitive Habitat Areas, and Special-Status Species: HWT/PG&E shall retain a CPUCapproved biologist(s) to conduct pre-construction surveys for special-status plants and wildlife prior to initial vegetation clearance, grubbing, and ground-disturbing activities. The pre-construction surveys shall be conducted no earlier than 30 days prior to surface		MM requirements. (Project proponents) 2. Ensure sensitive areas have been demarcated (e.g., flagged), as appropriate, per the requirements of the MM. (Project proponents) 3. Submit preconstruction survey report(s) for CPUC review and approval. (Project proponents) 4. Have qualified biologist(s) make office and/or field presentations to field staff, as appropriate. (Project proponents) 5. Schedule vegetation trimming in sensitive habitats for nonsensitive times (Project proponents) 6. In the event of the discovery of a special-	 During construction. Prior-to, during, and post construction. During construction. Prior to construction. During construction. Prior-to, during, and post construction.

Applicant Proposed Measure or Mitigation Measure	Applicability ¹	Monitoring and Reporting Action (Responsible Party)	Monitoring Schedule
disturbance within the work areas. The preconstruction surveys shall incorporate specialized techniques for burrowing owl in accordance with CDFW's 2012 Staff Report on Burrowing Owl Mitigation in areas identified as having suitable habitat for burrowing owl. Additionally, HWT and PG&E shall conduct pre-construction surveys for Swainson's hawks and white-tailed kite based on the Swainson's Hawk Technical Advisory Committee's 2000 Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley. Pre-construction surveys for Crotch's bumble bee shall be conducted during the flying season. The results of the pre-construction surveys shall be documented by the approved biologist in a pre-construction survey report shall be submitted to the CPUC prior to the start of construction, and the results shall be submitted to USFWS and CDFW as required by any regulatory permits or approvals. The pre-construction study report shall include the following: 1 Type, location, and size of project 2 Date, time, weather, surrounding land uses 3 Evaluation of type and quality of habitat 4 Work description and methods for avoidance or minimization of ground disturbance,		status plant, confirm the area is marked for avoidance. (CPUC) 7. Confirm measures to minimize erosion, sedimentation, and wetland and water protection are implemented. (CPUC) 8. Submit weekly and monthly biological construction monitoring reports to responsible agencies and/or the CPUC. (Project proponents) 9. Confirm all trenches have been inspected (CPUC) 10. Ensure contractors and construction scheduling adheres to the nesting bird season identified. (Project proponents) 11. Confirm all County of San Luis Obispo San Joaquin Kit Fox	

Applicant Proposed Measure or Mitigation Measure	Applicability ¹	Monitoring and Reporting Action (Responsible Party)	Monitoring Schedule
including biological monitoring during construction		measures have been implemented. (CPUC)	
 Anticipated impacts and proposed mitigation 			
Map of location of work area			
Areas identified as sensitive habitat areas in the pre-construction survey report, plus a minimum 5-foot buffer for wetlands and waters of the U.S., that will be avoided by construction shall be fenced with orange safety fencing. Biological monitoring required by APM BIO-3 is extended to be necessary when each portion of previously undisturbed ground is disturbed, based on special-status species' requirements and the profession opinion of the qualified biological monitor; however, work within 50 feet of wetlands and waters of the U.S. will be monitored by a biological monitor over its duration.			
In order to ensure that habitats are not adversely affected, the CPUC-approved biologist shall flag boundaries of habitat, which must be avoided. When necessary, the biologist shall also demark			
appropriate equipment laydown areas, vehicle turn around areas, and pads for placement of large construction equipment, such as cranes, bucket trucks, and augers. When appropriate, the biologist shall make office and/or field presentations to field staff to review and become			

Applicant Proposed Measure or Mitigation Measure	Applicability ¹	Monitoring and Reporting Action (Responsible Party)	Monitoring Schedule
familiar with natural resources to be protected on a project site-specific basis.			
The CPUC-approved biologist shall be contacted to perform a pre-activity survey when vegetation trimming is planned in sensitive habitats. Whenever possible, vegetation in sensitive habitats, such as blue oak woodlands, shall be scheduled for trimming in non-sensitive times (i.e., outside of breeding or nesting seasons).			
HWT/PG&E shall maintain a library of special-status plant species locations; known to HWT/PG&E, occurring within the project survey area. "Known" means a verified population either extant or documented using record data. Information on known sites may come from a variety of record data sources, including local agency HCPs, focused plant surveys, preconstruction surveys, or biological surveys conducted for environmental compliance of the Project. Plant inventories shall be consulted as part of pre-construction survey procedures.			
In the event of the discovery of a previously unknown special-status plant, the area shall be marked as an environmentally sensitive area, and avoided to the maximum extent practicable. If avoidance is not possible, HWT/PG&E shall consult			

Applicant Proposed Measure or Mitigation Measure	Applicability ¹	Monitoring and Reporting Action (Responsible Party)	Monitoring Schedule
with USFWS and/or CDFW, as appropriate, given			
the species' status.			
Any project related work scheduled to occur within			
the exclusion/buffer zone of the wetland shall be			
conducted when the wetland is dry as determined			
by the approved biological monitor. Best			
management practices (BMPs) referred to in APM			
BIO-3 indicate stormwater and water quality			
projection BMPs. Erosion and sediment control			
BMPs shall be included in the SWPPP for the			
Proposed Project or alternative and shall be fully			
implemented during construction. These BMPs			
shall effectively minimize any erosion or			
sedimentation into nearby wetlands and/or waters			
of the U.S., and shall be removed upon the			
completion of construction. Weekly biological			
construction monitoring reports shall be prepared			
and submitted to the CPUC throughout the			
duration of the ground-disturbing and vegetation-			
removal construction phase. Monthly biological			
construction monitoring reports shall be prepared			
and submitted to the CPUC throughout the			
duration of project construction to document			
compliance with environmental requirements. In			
the event that any work will occur beyond the			
approved limits, it shall be reported to the CPUC.			

A	pplicant Proposed Measure or Mitigation Measure	Applicability ¹	Monitoring and Reporting Action (Responsible Party)	Monitoring Schedule
c.	Wildlife Protection from Work Areas: In addition to the requirements of APM BIO-4, HWT/PG&E shall retain a CPUC-approved biologist to inspect all uncovered steep trenches and excavations during construction twice daily (i.e., morning and evening) to monitor for wildlife entrapment. Large/steep excavations shall be covered and/or fenced nightly to prevent wildlife entrapment. Excavations shall provide an earthen ramp (where feasible) and, if not, wood planks or escape ramps to allow for a wildlife escape route. All open-ended project-related pipes (not dependent on diameter size) will be capped if left overnight or inspected for wildlife prior to being moved. If wildlife is located in a trench or excavation, the on-site biological resource monitor shall be contacted immediately to remove them if they cannot escape unimpeded. If the biological resource monitor is not qualified to remove the entrapped wildlife, a recognized wildlife rescue agency may be employed to remove the wildlife and transport them safely to other suitable habitats outside of the work area. Nesting Birds: Activities conducted pursuant to APM BIO-2 shall consider the nesting bird season, commencing January 15 for golden eagle and February 1 for all other birds through August 31.			

Applicant Proposed Measure or Mitigation Measure	Applicability ¹	Monitoring and Reporting Action (Responsible Party)	Monitoring Schedule
e. San Joaquin Kit Fox: HWT/PG&E shall implement the County of San Luis Obispo's standard kit fox mitigation measures, including the following:			
 Retain qualified biologist to conduct pre- construction survey of the project site and conducting a pre-construction kit fox briefing for construction workers to minimize kit fox impacts. 			
 Include kit fox protection measures on project plans. 			
 Require a maximum 25 mile per hour speed limit at the project site during construction. 			
 Cover excavation deeper than 2 feet at the end of each working day or provide escape ramps for kit fox. 			
 Inspect pipes, culverts, or similar structures for kit fox before burying, capping, or moving. 			
 Remove food-related trash from project site. 			
 If a kit fox is discovered at any time in the project area, all construction in the immediate vicinity must stop, photos taken as feasible, and the 			
CDFW and USFWS contacted immediately. HWT/PG&E shall consult with USFWS and/or			
CDFW to determine what actions are necessary, if any, before work can resume. Work in the immediate vicinity of the kit fox discovery shall			

Applicant Proposed Measure or Mitigation Measure	Applicability ¹	Monitoring and Reporting Action (Responsible Party)	Monitoring Schedule
not resume until written authorization is obtained from USFWS and/or CDFW.			
MM BIO-2. Compensate for Impacts to Special-Status Plant Species. If avoidance of special-status plants is not feasible, HWT and PG&E shall implement measures to compensate for impacts to special-status plants. Compensation may be provided by purchasing credits at an approved mitigation bank (provided at a minimum 1:1 ratio [mitigation to impact]), or through transplanting perennial species and collecting and dispersing seed of annual species (i.e., salvage and relocation) under the direction of the CPUC. Where salvage and relocation is demonstrated to be feasible and biologically preferred, it shall be conducted pursuant to a CPUC- approved salvage and relocation plan that details the methods for salvage, stockpiling, and replanting, as well as the characteristics of the receiver sites. Monitoring of plant populations shall be conducted annually for 5 years to assess the mitigation's effectiveness. At the end of the 5-year monitoring period, the mitigation shall have met the following success criteria: A surveyed plant population size count equal to or greater than the number of individuals transplanted or number of individuals removed (this total may include transplanted individuals that have survived, seeds that have	ES, PPLR, RFDC, SS-1, PLR-1A, PLR-1C, PLR-3, SE-1A, SE-PLR-2	 If necessary, confirm that compensation is provided for special-status plant species impacts. (CPUC) If salvage and relocation is selected as the compensation method, confirm annual monitoring and achievement of success criteria at the end of 5 years. (CPUC) 	 Once it is known that special-status plants are present and cannot be avoided. Following construction.

Applicant Proposed Measure or Mitigation Measure	Applicability ¹	Monitoring and Reporting Action (Responsible Party)	Monitoring Schedule
grown into plants and have survived, as well as any additional supplemental plantings following the initial transplantation and seed dispersal that have survived at least two growing seasons), and Less than 5 percent cover of invasive weeds (or equivalent cover as compared with adjacent areas) within the receiver site.			
MM BIO-3. Minimize Impacts to Raptors and other Avian Life from Transmission and Power Line Facilities. PG&E, and/or their contractor(s) shall construct all aboveground transmission and power lines to meet applicable Avian Power Line Interaction Committee (APLIC) recommendations, as published in: Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006, and Reducing Avian Collisions with Power Lines: State of the Art in 2012 (APLIC 2006, 2012). In conjunction with these publications, PG&E shall be responsible for implementing the company's Avian Protection Plan (APP) – PG&E's Program to Address Avian Electrocutions, Collisions, and Nesting Birds (April 2018 version; refer to Appendix D in Volume 2 of this FEIR) that incorporates relevant raptor-safe construction guidelines found in APLIC's and USFWS' 2005 Avian Protection Plan Guidelines. As part of the APP, PG&E shall work with USFWS to	ES, PPLR, RFDC, SS-1, PLR-1A, PLR-1C, PLR-3, SE-1A, SE-PLR-2	 Confirm engineering designs incorporate recommended avian protection features. (CPUC) Confirm implementation of the APP, in accordance with the provisions described in the MM. (CPUC) Confirm coordination with USFWS regarding the need for bird diverters. (CPUC) Confirm that nesting bird surveys are completed for construction or replacement work 	 During preparation of plans and specifications. Prior to and during construction. Prior to construction. During operation. Prior to construction.

Applicant Proposed Measure or Mitigation Measure	Applicability ¹	Monitoring and Reporting Action (Responsible Party)	Monitoring Schedule
determine the need for installation of bird diverters in areas near known golden and bald eagle nests. Construction or replacement work shall be avoided during the nesting bird season (commencing January 15 for golden eagle and February 1 for all other birds through August 31) to the extent feasible. If infeasible, HWT and PG&E shall retain a CPUC-approved biologist to conduct a nesting bird survey of the surrounding 500-foot area to determine if any active nest is present. If an active nest is found, the biologist shall establish a no-disturbance nesting buffer until the nest is inactive in accordance with the species-specific buffers set forth in PG&E's Nesting Birds: Specific Buffers for PG&E Activities (Appendix E to the PEA) as detailed in APM BIO-2 and Mitigation Measure BIO-1. If construction activities must occur within this buffer, the biologist shall inform the CPUC of any buffer reductions and/or nest monitoring to avoid impacts to active nests, and will coordinate with CDFW and USFWS if stated to do so in the project's regulatory permits. PG&E shall implement an MRV (as shown in Figure 2-8 on page 2-39 in Volume 1 of this FEIR) to avoid a potential golden eagle nest along Huer Huero Creek at Union Road if this nest is determined to be occupied or is expected to be used by golden eagles in future nesting seasons (based on prior observations and the species' nest site fidelity). The MRV shall be implemented unless PG&E can demonstrate, to the		conducted within nesting season. (CPUC) 5. Confirm that MRV is implemented unless determined unnecessary, in accordance with the measure. (CPUC)	

Applicant Proposed Measure or Mitigation Measure	Applicability ¹	Monitoring and Reporting Action (Responsible Party)	Monitoring Schedule
satisfaction of the CPUC, that the nest in question is not occupied by golden eagles and likely will not be used in future nesting seasons.			
MM BIO-4. Develop and Implement a Restoration Plan for Blue Oak Woodland Habitat. HWT, PG&E, and/or their contractor(s) shall develop and implement a Habitat Restoration Plan to mitigate any temporary and permanent impact on blue oak woodland habitat. For any temporary impact, all disturbed soils and new fill in this habitat shall be revegetated with site-appropriate native species compatible with the facility. For any permanent impact, blue oak woodland habitat shall be mitigated at a ratio of 1.1:1 (replacement to impact). Blue oak trees and valley oak trees that are removed shall be mitigated at a ratio that shall be determined based on the diameter at breast height (dbh) of the tree, as described further below. Oak trees in construction work areas shall be safeguarded by implementing the conditions stated in the City of Paso Robles's Oak Tree Ordinance, Section 10.01.090. This includes documentation of any damages to oak trees, and tree protection fences that will be installed to prevent compaction and injury to a tree's surface roots. For any damage to an oak tree that may occur during construction activities, the Proposed Project Applicants shall immediately report such incidents to the CPUC, in addition to any	PPLR, SS-1, PLR-1A, PLR-1C, PLR-3, SE-1A, SE-PLR-2	 Confirm development of a Habitat Restoration Plan, as needed. (CPUC) Confirm that temporarily impacted areas are fully restored. (CPUC) Confirm that permanently impact blue oak woodland is compensated for at the required ratio. (CPUC) Confirm maintenance and monitoring of revegetated and restored areas, and that success criteria are achieved. (CPUC) 	 Prior to construction. Following construction. Following construction. Following construction.

Applicant Proposed Measure or Mitigation Measure	Applicability ¹	Monitoring and Reporting Action (Responsible Party)	Monitoring Schedule
reporting to the City that may be done pursuant to Section 10.01.090. The Applicants shall be responsible for correcting any damage to the oak trees. Prior to construction, oak trees that have a dbh of 6 inches or greater requiring removal shall be documented. A description of the species of oak, dbh, estimated height, and general health of the trees to be removed shall be recorded. Replacement ratios of removed oak trees shall, at a minimum, be equivalent to 25 percent of the diameter of the removed trees, as described in Section 10.01.050 (E) of the City's Oak Tree Ordinance. Blue oak woodland restoration or compensation may be completed at the work area, in the vicinity, or at a conservation bank with a service area that covers the Proposed Project or selected alternative. Revegetated or restored areas shall be maintained and monitored to ensure a minimum of 65 percent survival of woody plantings after 5 years (or 75 percent after 3 years), or at a conservation bank with a service area that covers the Proposed Project or selected alternative.			
Cultural Resources			
APM CUL-1. Retain a Qualified Cultural Principal Investigator. A cultural resources principal investigator, defined as an archaeologist who meets the Secretary of the Interior's Standards for professional archaeology, will be retained to ensure that all APMs related to archaeological and historical resources are properly	ES, PPLR, RFDC, SS-1, PLR- 1A, PLR-1C, PLR-3, SE-1A, SE-PLR-2	Confirm retention of a cultural resources principal investigator that meets the criteria outlined in this APM. (CPUC)	1. Prior to construction.

Applicant Proposed Measure or Mitigation Measure	Applicability ¹	Monitoring and Reporting Action (Responsible Party)	Monitoring Schedule
implemented. The principal investigator may either be on staff with project proponents or an outside consultant, as appropriate for the project's needs, and will serve in a strictly supervisory capacity, overseeing crews charged with the application of the APMs in the field.			
APM CUL-2. Avoidance. The project is designed to avoid impacts to potentially CRHR-eligible resources identified within the study area. Potentially eligible (i.e., not evaluated) resources in the study area include archaeological sites 36052-S-001, 36052-S-002, and 36052-S-003. In addition, the Johnson House was evaluated for the project and is considered CRHR-eligible (pending CPUC concurrence). To avoid indirect and direct impacts to 36052-S-001, 36052-S-002, or 36052-S-003, a 50-foot buffer will be established around the boundary of each respective resource and designated as environmentally sensitive areas. If work within the 50-foot buffer cannot be avoided, then monitoring will be required. Methods of environmentally sensitive area delineation may include, as applicable, flagging, rope, tape, or fencing. The environmentally sensitive areas should be clearly marked on all pertinent construction plans. Construction activities will avoid impacts to the Johnson House entirely.	ES, PPLR, RFDC, SS-1, PLR-1A, PLR-1C	 Ensure that environmentally sensitive areas are marked on construction plans. (CPUC) Confirm that 50-foot buffer is established around the boundary of each respective resource. (CPUC) If necessary, confirm monitoring of work within 50-feet buffer by a qualified archaeologist. (CPUC) Confirm that construction activities entirely avoid the Johnson House. (CPUC) 	 During preparation of plans and specifications. Prior to construction. During construction. During construction.

Applicant Proposed Measure or Mitigation Measure	Applicability ¹	Monitoring and Reporting Action (Responsible Party)	Monitoring Schedule
APM CUL-3. Inadvertent Discoveries. In the event that unanticipated cultural materials are encountered during any phase of construction, all construction work within 50 feet of the discovery will cease and the principal investigator will be consulted to assess the find. Construction activities may continue in other areas. Avoidance of resources is the preferred option. However, if avoidance of a resource is not feasible, project proponents will assess the find for significance, as defined by PRC Section 21083.2, through implementation of Phase II investigations. If resources are found to be significant, a detailed archaeological treatment plan, including Phase III data recovery, will be developed and implemented by a qualified archaeologist.	ES, PPLR, RFDC, SS-1, PLR-1A, PLR-1C, PLR-3, SE-1A, SE-PLR-2	 In the event that cultural resources are encountered, ensure that work stops immediately and the principal investigator is consulted. (CPUC) If avoidance of resources is not feasible, confirm that the find is assessed for significance through Phase II investigations. (CPUC) Retain a qualified archaeologist to develop and implement an archaeological treatment plan, if needed. (Project proponents) 	 During construction. During construction, if necessary. During construction, if necessary.
APM CUL-4. Discovery of Human Remains. If human remains are discovered, all work within 50 feet of the discovery will cease and the environmental inspector or construction supervisor will notify the County coroner immediately. State of California Health and Safety Code Section 7050.5 stipulates that no	ES, PPLR, RFDC, SS-1, PLR- 1A, PLR-1C, PLR-3, SE-1A, SE-PLR-2	If humans remains are encountered, ensure that work within 50 feet of discovery ceases and the County	 During construction, if necessary. During construction, if necessary.

Applicant Proposed Measure or Mitigation Measure	Applicability ¹	Monitoring and Reporting Action (Responsible Party)	Monitoring Schedule
further disturbance will occur until the County Coroner has made a determination of origin and disposition pursuant to PRC Section 5097.98. The lead cultural resource managers on staff with the project proponents (depending on the location of the remains) and CPUC will also be notified of the find immediately. If the human remains are determined to be prehistoric, the County Coroner will notify the NAHC, which would determine and notify a most likely descendent. The most likely descendent will complete inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.		coroner is contacted. (CPUC) 2. Confirm that any discoveries of human remains are evaluated and addressed properly as outlined in this APM. (CPUC)	
APM CUL-5. Tribal Construction Monitoring. If it becomes necessary to work within 50 feet of Dry Creek, Huer Huero Creek, and the Salinas River, or known prehistoric archaeological sites, a tribal monitor will be selected by CPUC and retained to conduct full-time monitoring of initial ground-disturbing activities (i.e., initial excavation and grading) in areas with high potential to discover prehistoric archaeological resources.	ES, PPLR, RFDC, PLR-1A, PLR-1C, SE-PLR-2,	1. Confirm retention of a tribal monitor to conduct monitoring, if needed, per the APM. (CPUC)	During construction, if necessary.
APM CUL-6. Archaeological Construction Monitoring. If it becomes necessary to work within 50 feet of Dry Creek, Huer Huero Creek, and the Salinas River, or known prehistoric or historic sites, an archaeological monitor, approved by the principal investigator, will	ES, PPLR, RFDC, PLR-1A, PLR-1C, SE-PLR-2	Confirm retention of an archaeological monitor to conduct monitoring, if needed, per the APM. (CPUC)	During construction, if necessary.

Applicant Proposed Measure or Mitigation Measure	Applicability ¹	Monitoring and Reporting Action (Responsible Party)	Monitoring Schedule
be retained to conduct monitoring of initial ground-disturbing activities (i.e., initial excavation and grading) in areas with high potential to discover prehistoric or historic archaeological resources.			
MM CR-1. CPUC Enhancements to APMs CUL-1, CUL-2, CUL-3, CUL-5, and CUL-6. The following actions are designed to augment the APMs provided by the Project proponents to ensure that construction impacts to cultural resources are mitigated to a level of less than significant: a. A Native American representative from a tribe identified by the CPUC shall be retained to monitor the construction activities if the resource is a Native American archaeological site that will be encroached upon. The Project proponent will be responsible for communicating project schedules and needs to the Native American monitor and/or tribe, but it is the responsibility of the tribe to ensure that the monitor is on site when called for, and work may proceed if the Project proponent has provided adequate notice of work. If an archaeological resource will be directly impacted, a detailed archaeological treatment plan shall be developed and implemented by the Project proponent's cultural resources principal investigator, as defined in APM CUL-1. The treatment plan shall be developed using the mitigation options provided under	ES, PPLR, RFDC, SS-1, PLR-1A, PLR-1C, PLR-3, SE-1A, SE-PLR-2	 Confirm retention of a qualified archaeologist that meets criteria outlined in the MM. (CPUC) Ensure that environmentally sensitive areas are marked on construction plans. (CPUC) Confirm that 50-foot buffer is established around the boundary of each respective resource. (CPUC) If necessary, retain a qualified archaeologist and/or a Native American representative to monitor work within 50-feet of a cultural resource, and confirm 	 Prior to construction During preparation of plans and specifications. During construction, if necessary. Prior to work being conducted within 50 feet of the cultural resource. Prior to construction, if necessary. During construction, if necessary.

Applicant Proposed Measure or Mitigation Measure	Applicability ¹	Monitoring and Reporting Action (Responsible Party)	Monitoring Schedule
Section 15126.4(b) of the CEQA Guidelines. The CPUC shall have opportunity to review and approve the proposed treatment plan. If the resource is a Native American archaeological site, tribes that have entered into AB 52 consultation with the CPUC shall have the opportunity to review and comment on the treatment plan. The resource and treatment method shall be documented in a professional-level technical report to be filed with the California Historical Resources Information System. b. If prehistoric or historic-era archaeological resources are encountered during Project implementation, the Project proponents shall immediately cease all construction activity within 50 feet of the find and create a 50-foot buffer area for avoidance. The archaeological monitor shall notify the Project's cultural resources principal investigator immediately, and the principal investigator shall, in turn, notify the CPUC. If an archaeological monitor is not present at the time of the find, Project proponent's environmental inspector or construction supervisor shall make the notifications. The Project's cultural resources principal investigator shall inspect the find within 24 hours of discovery and notify the CPUC of their initial assessment. Prehistoric archaeological materials might include obsidian and chert flaked-stone tools (e.g., projectile points, knives,		monitoring is completed, as outlined in the MM. (Project proponents) 5. If necessary, confirm development of a detailed archaeological treatment plan that meets the criteria outlined in the MM. (CPUC) 6. In the event that cultural resources are encountered, ensure that work within 50 feet stops immediately, the principal investigator is consulted and completes subsequent inspections (as needed), and the CPUC is notified, as described in the MM. (CPUC) 7. If avoidance of resources is not feasible, confirm the	

Applicant Proposed Measure or Mitigation Measure	Applicability ¹	Monitoring and Reporting Action (Responsible Party)	Monitoring Schedule
scrapers) or toolmaking debris; culturally darkened soil ("midden") containing heat-affected rocks, artifacts, or shellfish remains; and stone milling equipment (e.g., mortars, pestles, handstones, or milling slabs); and battered stone tools, such as hammerstones and pitted stones. Historic-era materials might include building or structure footings and walls, and deposits of metal, glass,		CPUC and, as appropriate, Native American Tribes are consulted to determine treatment measures. (CPUC) 8. Confirm monitoring is	
and/or ceramic refuse. If the CPUC determines, based on recommendations from the cultural resources principal investigator, that the resource may qualify as a historical resource or unique archaeological resource (as defined in CEQA Guidelines Section 15064.5), or a tribal cultural resource (as defined in PRC Section 21074), the resource shall be avoided if feasible. Avoidance means that no activities associated with the		conducted for initial ground-disturbing activities that may occur within 100 feet of Dry Creek, Huer Huero Creek, the Salinas River, and the Estrella River, or within 50 feet of all known archaeological sites. (CPUC)	
Project that may affect cultural resources shall occur within the boundaries of the resource or any defined buffer zones. If the assessment of significance can be made by the cultural resources principal investigator based on a small sample of discovered material, then the CPUC will review and approve the findings. In the absence of CPUC approval due to a short opportunity for CPUC review due to construction schedules, the Applicants shall assume the discovery is a historical resource for the purpose		 9. Develop and submit daily monitoring logs to the CPUC, as described in the MM. (Project proponents) 10. Confirm that any discoveries of human remains are evaluated and addressed 	

Applicant Proposed Measure or Mitigation Measure	Applicability ¹	Monitoring and Reporting Action (Responsible Party)	Monitoring Schedule
of avoidance, development of an evaluation study, or development of a treatment plan (as described below).		properly as outlined in this MM CR-2. (CPUC)	
If avoidance is not feasible, the CPUC shall consult with appropriate Native American tribes if the resource is Native American-related, and other appropriate interested parties to determine treatment measures to avoid, minimize, or mitigate any potential impacts to the resource pursuant to PRC Section 21083.2, and CEQA Guidelines Section 15126.4(b). This shall include documentation of the resource and may include data recovery or other measures. Any treatment other than preservation in place must be approved by the CPUC, in consultation with the appropriate tribe(s), if applicable. Treatment for most archaeological resources would consist of (but would not be not limited to) sample excavation, artifact collection, site documentation, and historical research, with the aim to target the recovery of important scientific data contained in the portion(s) of the significant resource, consistent with the Secretary of Interior's Standards for Treatment of Archaeological Properties. The resource and treatment method shall be documented in a professional-level technical report to be filed with the California			
Historical Resources Information System. Work in the area may commence, following concurrence			

Applicant Proposed Measure or Mitigation Measure	Applicability ¹	Monitoring and Reporting Action (Responsible Party)	Monitoring Schedule
from the CPUC that the work performed was sufficient, upon completion of treatment and under the direction of the qualified archaeologist. Should the resource also be identified as a TCR, then measures outlined in Section 4.18 will also apply if resource-specific measures identified during the resource-specific consultation do not supersede them.			
c. Construction monitoring shall be conducted by an archaeologist for initial ground-disturbing activities that may occur within 100 feet of Dry Creek, Huer Huero Creek, the Salinas River, and the Estrella River, or within 50 feet of all known archaeological sites. Ground-disturbing activities are defined as activities that may include, but are not limited to boring, grading, grubbing, excavation, drilling, and trenching, within the project areas. Monitoring of ground disturbance shall also occur in the vicinity of Santa Ysabel Ranch, which was identified as culturally sensitive by AB 52 consulting tribes. The archaeological monitor will complete daily monitoring logs that will provide descriptions of the day's activities, including construction activities, locations, and any cultural materials identified. The logs will be compiled and submitted to the CPUC on a regular hasis to be determined prior to beginning			
basis to be determined prior to beginning construction. Should any archaeological materials be unearthed, the monitor shall follow the			

Applicant Proposed Measure or Mitigation Measure	Applicability ¹	Monitoring and Reporting Action (Responsible Party)	Monitoring Schedule
directives of Mitigation Measure CR-1(b). If human remains are discovered during project construction the archaeological monitor shall comply with Mitigation Measure CR-2. The archaeological monitor will work in tandem with the Native American monitor. The involvement of Native American monitors is described in Mitigation Measure TCR-1.			
MM CR-2. Comply with the legal requirements of PRC 5097.98. California Health and Safety Code Section 7050.5 shall be followed, as described in APM CUL-4, if human remains are discovered during construction of the Proposed Project or the reasonably foreseeable distribution components or alternative. If human remains are discovered, all work within 50 feet of the discovery shall cease and the archaeological monitor shall immediately notify the Project's cultural resources principal investigator. In turn, the principal investigator shall immediately notify the County coroner, as well as the CPUC and their appointed professional archaeologist. If an archaeological monitor is not present at the time of the find, Project proponent's environmental inspector or construction supervisor shall make the notifications. State of California Health and Safety Code Section 7050.5 stipulates that no further disturbance will occur until the County Coroner has made a determination of	ES, PPLR, RFDC, SS-1, PLR-1A, PLR-1C, PLR-3, SE-1A, SE-PLR-2	1. Should human remains be discovered, confirm remains are evaluated, construction processes are halted, and notifications to the appropriate entities are completed in accordance with PRC 5097.98, as outlined in this MM. (CPUC)	During construction immediately following discovery.

Applicant Proposed Measure or Mitigation Measure	Applicability ¹	Monitoring and Reporting Action (Responsible Party)	Monitoring Schedule
origin and disposition pursuant to PRC Section 5097.98. The Project proponent's lead cultural resource manager, the CPUC, and the qualified archaeologist representing the CPUC shall be immediately notified. The County Coroner who evaluated the finds will notify the NAHC by telephone within 24 hours. In turn, the NAHC shall immediately notify those persons it believes to be most likely descended from the deceased Native American. The most likely descendant will complete inspection of the site and make recommendations or preferences for treatment within 48 hours of being granted access to the site. As per Section 5097.98 of the PRC, the landowner shall discuss and confer with the most likely descendant(s) to determine appropriate treatment of remains. Construction will not continue in the protected area until treatment of the remains has been resolved, in compliance with PRC 5097 et seq. and notice is provided to the CPUC documenting the resolution and respectful disposition of the Native American human remains.			
MM CR-3. Complete Cultural Resources Studies, Evaluate Resources for Significance, and Implement Avoidance and Minimization Measures. HWT, PG&E, and/or their contractors shall conduct a pedestrian archaeological survey and built environment resources survey for any alternative substation sites, 70 kV power line alignments (or	RFDC, SS-1, PLR-1A, PLR-1C,	1. Confirm retention of a qualified archaeologist and archaeological historian to perform the required surveys, as needed. (CPUC)	 Prior to construction.

Applicant Proposed Measure or Mitigation Measure	Applicability ¹	Monitoring and Reporting Action (Responsible Party)	Monitoring Schedule
portions of alignments), reasonably foreseeable distribution components, and/or ultimate substation buildout sites that have not yet been investigated and shall prepare a Cultural Resources Technical Report documenting the results of the surveys. The archaeological and built environment resources surveys shall be completed prior to construction of the respective components and prior to final design. If the CPUC will not complete their review within 30 days, they will notify the project proponent and provide a status of the review. Lack of response within 30 days may not be considered concurrence. The pedestrian survey shall include systematic surface inspection with transects spaced at 15-meter (approximately 50-foot) intervals, or less, where feasible and safe (owing to the extant hardscape, such as paving, and landform). Where such transects are not feasible or safe, survey shall provide the most complete coverage possible either through wider transects (ex. on steep slopes near rivers) or opportunistic survey (ex.: locations where private property fences or buildings/pavement don't obscure the ground). The technical report shall explain the conditions requiring less intensive survey. The survey shall cover the entire site or alignment and a 100-foot buffer around the site or alignment. Archaeologists shall examine the ground surface for the presence of prehistoric artifacts (e.g., flaked stone tools, tool-making debris, stone milling tools),		 For previously unsurveyed components, confirm archaeological and/or built resources surveys are completed and documented in a Cultural Resources Technical Report. (CPUC) Should cultural resources be encountered, confirm qualified archaeologists collect data necessary to complete DPR 523 series forms. (CPUC) Should identified potentially CRHReligible resources be discovered, confirm these are marked, as outlined in APM CUL-2. (CPUC) If resources cannot be avoided, confirm a qualified archaeologist 	 Prior to construction. Prior to construction.

Applicant Proposed Measure or Mitigation Measure	Applicability ¹	Monitoring and Reporting Action (Responsible Party)	Monitoring Schedule
historical artifacts (e.g., metal, glass, ceramics), sediment discoloration that might indicate the presence of a cultural midden, roads and trails, and depressions and other features that might indicate the former presence of structures or buildings (e.g., post holes, foundations). When cultural resources are encountered, archaeologists shall collect all data necessary to complete the appropriate California Department of Parks and Recreation (DPR) 523 series forms from the Office of Historic Preservation. The resources shall be mapped with handheld mappinggrade global positioning system (GPS) units with submeter accuracy and differential correction. All GPS data shall be exported into Geographic Information Systems geodatabases and plotted onto the associated geo-referenced USGS 7.5-minute quadrangle to ensure accuracy and to produce location maps of all resources. Each site shall also be photo-documented. No artifacts will be collected during the pedestrian survey. The built environment resources survey shall be conducted for alternatives that have not previously been surveyed by a qualified architectural historian, and shall include all structures, properties, and other built resources within the footprint or alignment and within a 100-foot buffer of the site footprint or alignment. Resources identified through the built environment resources survey will be recorded on the appropriate DPR 523 forms.		prepares a data recovery plan. (CPUC) 6. For Native American archaeological sites, ensure the data recovery plan has the opportunity to be reviewed by consulting tribes. (CPUC) 7. Confirm artifacts removed during evaluations or data recovery excavation are curated, as outlined in the MM. (CPUC) 8. Confirm that any built resources evaluated as historical resources that cannot be avoided are documented. (CPUC)	

Applicant Proposed Measure or Mitigation Measure	Applicability ¹	Monitoring and Reporting Action (Responsible Party)	Monitoring Schedule
Avoidance and delineation of a buffer around any			
potentially CRHR-eligible archaeological resources in			
the study area identified through the field surveys or			
evaluations under this mitigation measure shall follow			
the procedures outlined in APM CUL-2. If the			
resource(s) cannot be avoided, the qualified			
archaeologist shall develop an evaluation plan to			
ascertain the site's eligibility for listing in the CRHR.			
The evaluation plan must be submitted to and			
approved by the CPUC prior to any excavation. The			
CPUC shall ensure consulting tribes have the			
opportunity to review and comment on evaluation			
plans for Native American archaeological sites.			
Archaeological sites found to contain human remains			
must be treated in accordance with the provisions of			
Section 7050.5 of the California Health and Safety			
Code (see APM CUL-4 and Mitigation Measure CR-2).			
The CPUC will provide the project proponent with an			
update on the status of the review within 60 days of			
submittal. Lack of response within 60 days may not be			
considered concurrence.			
Should any archaeological site be determined eligible			
for listing in the CRHR, and if Project proponent design			
engineers determine that any portion of the site that			
contributes to its eligibility cannot be avoided by			
construction, a data recovery program shall be			
necessary and a detailed data recovery plan shall be			
prepared by a qualified archaeologist per Mitigation			
Measure CR-1(a). The data recovery plan must be			

Applicant Proposed Measure or Mitigation Measure	Applicability ¹	Monitoring and Reporting Action (Responsible Party)	Monitoring Schedule
submitted and approved by the CPUC prior to implementation of the plan. The CPUC shall ensure that consulting tribes will have the opportunity to review and comment on the data recovery plan for			
any CRHR-eligible Native American site. The CPUC will provide the project proponent with an update on the status of the review within 60 days of submittal. Lack of response within 60 days may not be considered concurrence.			
For any artifacts removed during project evaluation or data recovery excavations, the Project proponent's qualified archaeologist must provide for the curation of such artifact(s). If the archaeological resource is determined to be a TCR, the CPUC shall work with the			
relevant tribe(s), consistent with Mitigation Measure TCR-1, to determine the disposition of any TCRs artifacts discovered during construction or artifacts resulting from execution of a treatment plan, such as, but not limited to, reburying in close proximity of the			
finds without scientific study, conducting scientific study before reburying the materials either near the origin of the find or in another protected place, or curation at a facility that meets the U.S. Secretary of the Interior's criteria for curation (36 CFR 79).			
For buildings, structures, or objects evaluated as a historical resource(s) that cannot be avoided, the applicant(s) qualified architectural historian shall prepare a treatment plan for the affected resource(s), which may include, but not be limited to preparation			

Applicant Proposed Measure or Mitigation Measure	Applicability ¹	Monitoring and Reporting Action (Responsible Party)	Monitoring Schedule
of documentation according to the Secretary of the Interior's Standards and Guidelines for Architectural and Engineering Documentation and/or other actions to address the criteria for which the historical resource is eligible for the CRHR.			
Geology, Soils, Seismicity, and Paleontological Resourc	es		
APM GEO-1. Soft or Loose Soils. Soft or loose soils, such as sands and loamy sands, are likely to be encountered during construction. Where soft or loose soils are encountered during design studies or construction, appropriate measures will be implemented to avoid, accommodate, replace, or improve soft or loose soils. Such measures may include the following: Locating construction facilities and operation away from areas of soft and loose soil. Over-excavating soft or loose soils and replacing them with non-expansive engineered fill. Increasing the density and strength of soft or loose soils through mechanical vibration and/or compaction. Treating soft or loose soils in place with binding or cementing agents. Construction activities in areas where soft or loose soils are encountered may be scheduled for the dry season, as necessary, to allow safe and reliable equipment access.	ES, PPLR, RFDC, SS-1, PLR-1A, PLR-1C, PLR-3, SE-1A, SE-PLR-2	 Confirm that this measure is included in project plans and specifications. (CPUC) When soft or loose soils are encountered, ensure that appropriate measures, such as those listed in this APM, are implemented. (CPUC) 	 During preparation of plans and specifications. During construction.

Applicant Proposed Measure or Mitigation Measure	Applicability ¹	Monitoring and Reporting Action (Responsible Party)	Monitoring Schedule
APM PALEO-1. Retain a Qualified Paleontological Principal Investigator. A paleontological resources 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.	ES, PPLR, RFDC, SS-1, PLR- 1A, PLR-1C, PLR-3, SE-1A, SE-PLR-2	1. Confirm retention of a paleontological resources principal investigator, as required by the APM. (CPUC)	1. Prior to construction.
 APM PALEO-2. Inadvertent Discoveries. If paleontological resources are discovered during construction activities, the following procedures will be followed: Stop work immediately within 50 feet. Contact the designated lead on staff with the project proponents (depending on the location of the resource) immediately. The designated lead will notify CPUC. Protect the site from further impacts, including looting, erosion, or other human or natural damage. The principal investigator will evaluate the discovery and make a recommendation to CPUC as to whether or not it is a unique paleontological resource. CPUC will have 24 hours to respond to this recommendation, and the lack of response within 48 hours will indicate concurrence with the recommendation. 	ES, PPLR, RFDC, SS-1, PLR-1A, PLR-1C, PLR-3, SE-1A, SE-PLR-2	 In the event that paleontological resources are discovered during construction activities, confirm that work stops immediately and the procedures described in the APM are implemented. (CPUC) Resume work once the resource is determined to be not unique, or appropriate treatment is completed. (Project proponents) 	 During construction. During construction.

Applicant Proposed Measure or Mitigation Measure	Applicability ¹	Monitoring and Reporting Action (Responsible Party)	Monitoring Schedule
 If the resource is not a unique paleontological resource, then it will be documented appropriately, and no further measures will be required. 			
If the resource is a unique paleontological resource, the principal investigator, in consultation with the project proponent, will recommend resource-specific measures to protect and document the paleontological resource, such as photo documentation and avoidance or collection. CPUC will have 24 hours to respond to these measures, with no response within 48 hours indicating concurrence. Unique resources inadvertently discovered during augering will be documented as indicated above, but, due to safety concerns, any remaining resource below ground will not be salvaged. If the resource can be avoided, then CPUC concurrence will not be necessary.			
 If collection is necessary, the fossil material will be properly prepared in accordance with the project proponents, Society of Vertebrate Paleontology guidelines, and CPUC requirements, and/or curation at a recognized museum repository. Appropriate documentation will be included with all curated materials. Any material discovered on private land is the property of the landowner and permission must 			

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be granted by the landowner for the material to be removed and curated. Once the resource is determined to be not unique, or appropriate treatment is completed as described above, work may resume in the vicinity. APM PALEO-3. Paleontological Construction Monitoring.	ES, PPLR, RFDC, SS-1, PLR- 1A, PLR-1C, PLR-3, SE-1A, SE-PLR-2	Confirm retention of a paleontological monitor to conduct	 During construction. During construction, if
Paleontological monitors, approved by the paleontological resources principal investigator, will be retained to conduct monitoring of the initial ground-disturbing activities as described below. Monitoring requirements vary with the sensitivity of the mapped sediments and the type of construction activity, as follows: 1. Estrella Substation: High Surface Sensitivity – project areas mapped as older alluvium (Qoa) or Paso Robles formation (Qtp): In locations where the ground has been previously disturbed by agricultural or other development, monitoring is required only when excavations or grading exceed the depth of previous disturbance. For augering within the substation site, the proponents will follow the protocol identified below under Power Line.	SE-PLK-2	monitor to conduct monitoring, as required. (CPUC) 2. Should monitors identify fossil remains during the course of construction, ensure that APM PALEO-2 is implemented. (CPUC) 3. Confirm that all monitoring activities are properly documented and that a final monitoring report is developed. (CPUC)	necessary. 3. During/ following construction.

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 In locations where no previous disturbance exists, full-time monitoring is required when excavations, grading, or trenching exceeds 3 feet in depth. During monitoring, a qualified paleontological monitor, as determined by the principal investigator, will observe construction activity as well as check any spoils piles to watch for the appearance of fossil resources. 			
Low Surface Sensitivity – project areas mapped as Holocene alluvium (Qa or Qg) – no fossils at the surface:			
 No monitoring is required for surface work. Should ground disturbance exceed the depth of the Holocene sediments (estimated to be 5 feet), monitoring is required as described above for high sensitivity. 			
2. Power Line:			
High Surface Sensitivity – project areas mapped as older alluvium (Qoa) or Paso Robles formation (Qtp):			
 Full-time monitoring will not be required along the power line route. 			
Augering that uses a drill bit 3 feet, or less, in diameter will not be monitored. Small-diameter drill bits generally result in pulverized rock by the time they reach the surface, so any fossils contained within will not be identifiable. Larger-diameter drill bits (i.e.,			

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greater than 3 feet) often bring up intact chunks of rocks that may contain identifiable and scientifically important fossils (particularly microfossils). All large angled tubular steel pole locations will be monitored.			
 During work, a portion of the excavated material will be examined visually and through screen-sifting, if necessary. If screening is necessary, then a sample of spoils may be collected and processed either on site or off site as work on the pole placement proceeds. Should unique fossil material be discovered, it may be recorded and collected if the resource is determined by the principal investigator to be worth salvaging. Otherwise it will be recorded and included in the final monitoring report. Should it be determined that the type of auger or drill being used renders monitoring not useful (i.e., materials come out of the hole in a pulverized powder or a silty mud), monitoring will be discontinued. Because it is extremely unsafe and impractical to excavate fossils from within an auger bore or drill hole, and to do so would unnecessarily disturb fossils further, no effort will be made to collect buried fossils indicated in spoils materials. However, the location and nature of the materials identified will be recorded, and 			

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report and reported to repositories as appropriate.			
These measures are based on the currently available data. As construction proceeds and additional data become available, the principal investigator could revise these measures with CPUC concurrence.			
Should monitors identify fossil remains during the course of construction, APM PALEO-2 will be implemented.			
All monitoring activities will be documented on daily logs. Monitoring logs and reports will include the activities observed, geology encountered, description of any resources encountered, and measures taken to protect or recover discoveries. Photographs and other supplemental information will be included as necessary. A final monitoring report will be developed to document locations, methods, and results of monitoring.			
APM PALEO-4. Fossil Recovery. In the event that unique paleontological resources are encountered, protection and recovery of those resources may be required. The principal investigator will eversee the resource effort in consultation with	ES, PPLR, RFDC, SS-1, PLR- 1A, PLR-1C, PLR-3, SE-1A, SE-PLR-2	Confirm that proper consultation is conducted for encountered fossils. (CPUC)	 During construction, if necessary. During construction, if necessary.
will oversee the recovery effort in consultation with the project proponents (depending on the location of the resource), CPUC, and property owners as appropriate. The principal investigator may designate a paleontologist to implement the recovery, prepare specimens for identification and preservation, and		2. Confirm that encountered fossils are properly documented, preserved, and/or	

Applicant Proposed Measure or Mitigation Measure	Applicability ¹	Monitoring and Reporting Action (Responsible Party)	Monitoring Schedule
complete all field documentation in accordance with the project proponents, Society of Vertebrate Paleontology guidelines, and CPUC requirements, and/or curation at a recognized museum repository. If a fossil is not accepted by a museum for curation, then project proponents will have fulfilled their obligation for fossil recovery.		curated, in accordance with the APM. (CPUC)	
MM GEO-1. Implement Recommendations in the Project or Alternative Geotechnical Investigation Report. HWT, PG&E, and/or their contractors shall implement the recommendations contained in the geotechnical investigation report prepared for the proposed Estrella Substation (RRC 2016) and proposed 70 kV power line (Kleinfelder 2017), as appropriate for the work, as well as any addenda or subsequent modifications to such reports to account for updated structural design criteria based on the latest California Building Code requirements. These include recommendations for a professional geotechnical engineer or his/her representative to be present during construction to evaluate the suitability of excavated soils for use as engineered fill, to observe and test site preparation and fill placement, and to assess the need for densification of subgrade materials.	ES, PPLR	 Confirm retention of a professional geotechnical engineer for support during construction, as applicable, as outlined in the approved project's Geotechnical Investigation Report. (CPUC) Confirm all applicable recommendations have been implemented, as outlined in the approved project's Geotechnical Investigation Report. (CPUC) 	 Prior to construction, as applicable. During construction, as applicable.
MM GEO-2. Paleontological Resources Survey, Technical Report, and Construction Monitoring.	RFDC, SS-1, PLR-1C	Ensure that a paleontological survey	During the design phase.

Applicant Proposed Measure or Mitigation Measure	Applicability ¹	Monitoring and Reporting Action (Responsible Party)	Monitoring Schedule
HWT, PG&E, and/or their contractors shall conduct a paleontological resources survey for any alternative substation sites or 70 kV power line alignments that have not yet been investigated and shall prepare a Paleontological Resources Technical Report (PRTR) documenting the results of the survey. The PRTR shall evaluate the sensitivity of the subject sites or alignments, including identification and review of subsurface geology, literature review and museum records search, and field evaluation of the sites or alignments. The Paleontological Resources Technical Report shall be prepared in accordance with standards provided by the Society for Vertebrate Paleontology and shall assign site sensitivity based on the potential fossil yield classification system utilized by the Bureau of Land Management, and may use additional measures of paleontological sensitivity as determined appropriate by the qualified paleontologist. The paleontological resources survey, as documented in the PRTR, shall inform the monitoring, resource protection, and treatment requirements outlined in APM PALEO-1, PALEO-2, PALEO-3, and PALEO-4. HWT, PG&E, and/or their contractors shall implement the recommendations contained in the alternative project's PRTR. Portions of alternative substation sites or 70 kV power line routes identified as having high surface sensitivity for paleontological resources shall receive at least the same level of monitoring as identified for the Proposed Project in APM PALEO-3		is conducted for applicable alternatives/components. (CPUC) 2. Confirm that PRTR properly documents results of the survey and evaluates site sensitivity. (CPUC) 3. Ensure that results of paleontological surveys properly inform monitoring and protection of resources per applicable APMs. (CPUC)	 During the design phase. During the design phase.

Applicant Proposed Measure or Mitigation Measure	Applicability ¹	Monitoring and Reporting Action (Responsible Party)	Monitoring Schedule
Greenhouse Gas Emissions			
APM GHG-1. Minimize Operational SF ₆ Emissions. During operation and maintenance of Estrella Substation, the project proponents will do the following: ■ Incorporate Estrella Substation into each of the project proponents' system-wide SF ₆ emission reduction programs. CARB requires that company-wide SF ₆ emission rate not exceed 1 percent by 2020. ■ Upon construction completion, the project proponents will have implemented a programmatic plan to inventory, track, and recycle SF ₆ inputs, and inventory and monitor system-wide SF ₆ leakage rates to facilitate timely replacement of leaking breakers. X-ray technology is used to inspect internal circuit breaker components to eliminate dismantling of breakers, reducing SF ₆ handling and accidental releases. As active members of the U.S. Environmental Protection Agency's SF ₆ Emission Reduction Partnership for Electrical Power Systems, the project proponents have focused on reducing SF ₆ emissions from their transmission and distribution operations. ■ Require that the breakers at Estrella Substation have a manufacturer's guaranteed maximum	ES, SS-1, SE-1A	 Ensure that Estrella Substation or a substation located at an alternative site is incorporated into the system-wide SF₆ emission reduction programs. (CPUC) Confirm that a programmatic plan has been implemented that complies with the measures outlined in this APM. (CPUC) Confirm that the breakers at Estrella Substation or a substation located at an alternative site meet the standards for the manufacturer's leakage rate for SF₆, and that they are maintained properly. (CPUC) 	 During operation. During operation. During operation.

Applicant Proposed Measure or Mitigation Measure	Applicability ¹	Monitoring and Reporting Action (Responsible Party)	Monitoring Schedule
 leakage rate of 0.5 percent per year or less for SF₆. Maintain substation breakers in accordance with the project proponents' maintenance standards. Comply with CARB's Early Action Items as these policies become effective. 		4. Confirm compliance with CARB's Early Action Items. (CPUC)	
Hazards and Hazardous Materials		T	
APM HAZ-1. Hazardous Substance Control and Emergency Response. The project proponents will implement hazardous substance control and emergency response procedures as needed. The procedures identify methods and techniques to minimize the exposure of the public and site workers to potentially hazardous materials during all phases of project construction through operation. The procedures address worker training appropriate to the site worker's role in hazardous substance control and emergency response. The procedures also require implementing appropriate control methods and approved containment and spill-control practices for construction and materials stored on site. If it is necessary to store chemicals on site, they will be managed in accordance with all applicable regulations. Material safety data sheets will be maintained and kept available on site, as applicable.	ES, PPLR, RFDC, SS-1, PLR-1A, PLR-1C, PLR-3, SE-1A, SE-PLR-2	 Confirm that hazardous substance control and emergency response procedures are implemented, as needed. (CPUC) Confirm that storage of chemicals on site is in accordance with all applicable regulations. (CPUC) Confirm that material safety data sheets are kept available on site. (CPUC) Ensure that suspected contaminated soils are removed, tested, and 	 During construction and operation. During construction and operation. During construction and operation. During construction. During construction and operation.

Applicant Proposed Measure or Mitigation Measure	Applicability ¹	Monitoring and Reporting Action (Responsible Party)	Monitoring Schedule
In the event that soils suspected of being contaminated (on the basis of visual, olfactory, or other evidence) are removed during site grading activities or excavation activities, the excavated soil will be tested and, if contaminated above hazardous waste levels, will be contained and disposed of at a licensed waste facility. The presence of known or suspected contaminated soil will require testing and investigation procedures to be supervised by a qualified person, as appropriate, to meet state and federal regulations. All hazardous materials and hazardous wastes will be handled, stored, and disposed of in accordance with all applicable regulations, by personnel qualified to handle hazardous materials. The hazardous substance control and emergency response procedures include, but are not limited to, the following: Proper disposal of potentially contaminated soils. Establishing site-specific buffers for construction vehicles and equipment located near sensitive resources. Emergency response and reporting procedures to address hazardous material spills. Stopping work at that location and contacting the County Fire Department Hazardous Materials Unit immediately if visual contamination or chemical odors are detected. Work will be resumed at this location after any necessary		disposed of properly. (CPUC) 5. Ensure that all hazardous materials and hazardous wastes are handled, stored, and disposed of in accordance with applicable regulations, and that the procedures outlined in this APM are followed. (CPUC)	

Applicant Proposed Measure or Mitigation Measure	Applicability ¹	Monitoring and Reporting Action (Responsible Party)	Monitoring Schedule
consultation and approval by the Hazardous Materials Unit.			
MM HAZ-1. Prepare and Implement a Fire Prevention and Management Plan. For alternative components located within a very high or high fire hazard severity zone, HWT and PG&E shall prepare and implement separate fire prevention and management plan. These documents will address fire prevention measures that will be employed during the construction phases, identifying potential sources of ignition and detailing the measures, equipment, and training that will be provided to all site contractors. The fire prevention and management plans shall also address potential ignition risks during operation of the project or alternative components. Coordination with state and local fire agencies is required, as specified below, and the plans shall be submitted to the CPUC for final review and approval prior to start of construction. Where applicable, overlap with the HWT and PG&E Wildfire Mitigation Plans prepared pursuant to California Public Utilities Code Section 8386 shall be highlighted in the fire prevention and management plan. Specifically, the plans will include, at a minimum, the following: Construction Fire Hazard Avoidance and Minimization Responsibilities and duties; Preparedness training and drills for HWT, PG&E, and contractor personnel;	SS-1, PLR-1A, PLR-1C, SE-1A, SE-PLR-2	 Confirm preparation of a fire prevention and management plan. (CPUC) Ensure that the plan includes all of the measures identified in this mitigation measure. (CPUC) Confirm that the plan is reviewed by CAL FIRE. (CPUC) Confirm that fire prevention and management plan is fully implemented. (CPUC) 	 During the design phase. During the design phase. Prior to construction. During and following construction.

Applicant Proposed Measure or Mitigation Measure	Applicability ¹	Monitoring and Reporting Action (Responsible Party)	Monitoring Schedule
 Procedures for fire reporting, response and prevention, including: 			
 Identification of daily site-specific risk conditions; 			
 The appropriate tools and equipment needed on vehicles and on hand at the construction site(s); 			
 Reiteration of fire prevention and safety considerations during tailboard meetings; and 			
 Daily monitoring of the red-flag warning system with appropriate restrictions on types of permissible activity. 			
 Coordination procedures with California Department of Forestry and Fire Prevention (CAL FIRE)/San Luis Obispo County Fire Department officials; and 			
 Crew training, including fire safety practices and restrictions; and 			
 Methods for verifying that the plan protocols and requirements are being followed during construction. 			
<u>Design and Operation Considerations to Minimize Fire</u> <u>Hazard</u>			
 Design and implementation of defensible space around substation components; 			
 Vegetation management activities and schedules for ensuring CPUC General Order 95 clearance requirements are met for transmission line components; 			

Applicant Proposed Measure or Mitigation Measure	Applicability ¹	Monitoring and Reporting Action (Responsible Party)	Monitoring Schedule
 Coordination with the CAL FIRE/San Luis Obispo County Fire Department to provide any needed training and technical support to fire personnel regarding electrical fires and firefighting at energized facilities; 			
 Appropriate design of driveways and access roads to substation components to allow for safe and efficient fire personnel and equipment access; 			
 Development and implementation of protocols for de-energizing the substation and/or transmission line components in the event of a wildfire; and 			
 Inclusion of any needed water storage facilities on-site at the substation accessible to firefighters. 			
The fire prevention and management plan shall be reviewed by the San Luis Obispo County Fire Department. After Fire Department review, the plan shall be submitted to the CPUC for approval a minimum of 40 days prior to commencement of construction activities.			
Hydrology and Water Quality			
APM HYDRO-1. Avoidance of Sensitive Aquatic Features. The project will be designed to avoid sensitive aquatic features (i.e., jurisdictional wetlands, waters, and	ES, PPLR, RFDC, SS-1, PLR- 1A, PLR-1C, PLR-3, SE-1A, SE-PLR-2	Confirm that feasible avoidance strategies are implemented. (CPUC)	 Prior to construction. Prior to construction. Prior to construction.
riparian areas) to the extent feasible. Specific avoidance strategies include the following:		Ensure that sensitive aquatic features slated	

Applicant Proposed Measure or Mitigation Measure	Applicability ¹	Monitoring and Reporting Action (Responsible Party)	Monitoring Schedule
 Siting permanent structures in uplands outside of existing drainage features. Siting staging areas, pole/tower work areas, pull sites, and other temporary staging/materials storage areas in uplands outside of existing drainage features/riparian areas, utilizing developed/urban, agricultural land, or ruderal land in preference to native terrestrial or riparian habitats. Selecting access roads and overland travel routes in uplands while avoiding other sensitive features (e.g., steep slopes, rare plant localities, and sensitive wildlife habitats). Should access or work areas be required through or within jurisdictional wetlands and waters, all regulated activities within jurisdictional wetlands and waters (e.g., waters of the United States and waters of the State) will require regulatory approval/permitting from the appropriate agency including USACE, CDFW, and/or RWQCB prior to any work within jurisdictional features. Prior to construction, sensitive aquatic features slated for avoidance will be identified in the field and clearly marked for avoidance using flagging tape, fencing, and/or high-visibility signage. Construction personnel will be trained on feature avoidance marking and associated restrictions. 		for avoidance are clearly identified and marked prior to construction. (CPUC) 3. Ensure that construction personnel have been trained on feature avoidance marking and restrictions. (CPUC)	

Applicant Proposed Measure or Mitigation Measure	Applicability ¹	Monitoring and Reporting Action (Responsible Party)	Monitoring Schedule
MM HYD/WQ-1. Implement Construction Best Management Practices for Erosion Control. For ground-disturbing construction activities that do not require coverage under the Construction General Permit (e.g., total ground disturbance associated with that action does not exceed 1 acre), HWT, PG&E, and/or their contractors shall implement the following measures during construction of the alternative components, or shall implement alternative measures that are equally or more effective: Implement practices to reduce erosion of exposed soil and stockpiles, including watering for dust control, establishing perimeter silt fences, and/or placing fiber rolls. Minimize soil disturbance areas. Implement practices to maintain water quality, including silt fences, stabilized construction entrances, and storm-drain inlet protection. Where feasible, limit construction to dry periods. Revegetate disturbed areas.	RFDC	1. Confirm that all measures are implemented fully, and that erosion control measures use the best available technology that is economically achievable. (CPUC)	1. During construction.
Noise			
APM NOI-1. Construction Schedule Limits. The project proponents will limit grading, scraping, augering, and pole installation to 7:00 a.m. to 7:00 p.m. daily. Exceptions for work outside of these hours	ES, PPLR, RFDC, SS-1, PLR- 1A, PLR-1C, PLR-3, SE-1A, SE-PLR-2	1. Confirm that noise- generating activities are limited to appropriate work hours. (CPUC)	1. During construction.

Applicant Proposed Measure or Mitigation Measure	Applicability ¹	Monitoring and Reporting Action (Responsible Party)	Monitoring Schedule
will follow the notification requirements outlined in APM AG-1.			
APM NOI-2. Noise Minimization. The project will incorporate various measures to reduce construction-related noise where feasible using the following methods: Construction equipment will use noise reduction devices that are no less effective than those originally installed by the manufacturer. Stationary equipment used during construction will be located as far as practical from sensitive noise receptors. "Quiet" equipment (i.e., equipment that incorporates noise control elements into the design—compressors have "quiet" models) will be used during construction when reasonably available.	ES, PPLR, RFDC, SS-1, PLR-1A, PLR-1C, PLR-3, SE-1A, SE-PLR-2	1. Confirm that noise reduction measures are incorporated using the methods outlined in this APM. (CPUC)	1. During construction.
 MM NOI-1. General Construction Noise. PG&E shall implement the following procedures for construction activities associated with the 70 kV power line: Public Notice. Noise-sensitive receptors within 600 feet of work areas shall be provided written notice at least 7 days prior to beginning construction to inform them of the scheduled construction activities and potential noise disruptions. The specific types of noise-sensitive 	ES, PPLR, RFDC, SS-1, PLR- 1A, PLR-1C, PLR-3, SE-1A, SE-PLR-2	 Confirm public noticing is completed as specified in the MM. (CPUC) Confirm construction equipment is properly equipped, used, and positioned in 	 During construction. During construction. During construction. Prior-to construction. During construction.

Applicant Proposed Measure or Mitigation Measure	Applicability ¹	Monitoring and Reporting Action (Responsible Party)	Monitoring Schedule
receptors to be notified include residences and officials for schools, places of worship, parks, hospitals, theatres, auditoriums, libraries, and commercial/industrial facilities with noise sensitive instruments. The notice shall describe procedures for submitting any noise complaints during construction, including a phone number for submitting such complaints. Mufflers and Maintenance. Construction equipment shall be properly equipped with feasible noise control devices (e.g., mufflers) and properly maintained in good working order. Idling. Vehicles and equipment shall only idle when necessary and shall be shut off when not in use. Stationary Equipment. Stationary equipment (i.e., compressors and generators) shall be positioned as far away from sensitive receptors as practicable, and equipped with engine-housing enclosures. Sensitive Periods. To the extent practicable, construction activities that have a high likelihood of resulting in a noise nuisance for residents in the vicinity shall not be scheduled during sensitive morning or evening periods (7:00 am to 9:00 am, and 7:00 pm to 10:00 pm), to limit the potential for noise nuisance. Nighttime work between the hours of 10:00 pm and 7:00 am shall		accordance with the MM. (CPUC) 3. Confirm nighttime work is restricted, as outlined in the MM. (CPUC) 4. Confirm a construction noise coordinator is designated for response to complaints. (CPUC) 5. Prepare and submit monthly reports to CPUC that include a record of any complaints received, as outlined in the MM. (Project proponents)	

Applicant Proposed Measure or Mitigation Measure	Applicability ¹	Monitoring and Reporting Action (Responsible Party)	Monitoring Schedule
not occur, except when electrical clearances are not available during daytime hours or when safe completion of a construction procedure is needed.			
Noise Complaints. A Construction Noise Coordinator shall be designated to be responsible for responding to any local complaints about construction noise. The Construction Noise Coordinator shall determine the likely cause of the complaint and ensure that reasonable adjustments in the work activities are made to address the problem, to the extent possible. The phone number for noise complaints shall be clearly posted at key work areas in public locations, such as at the entrances to staging areas. Noise complaints shall be addressed within 1 week. HWT and/or PG&E shall provide monthly reports to the CPUC that include a record of any complaints received with a description of the likely cause and how the complaint was resolved.			
 MM NOI-2. Minimize Noise Impacts from Helicopters. HWT and PG&E shall implement the following procedures for helicopter activities: Public Notice. Residences and places of worship (e.g., The Cove) within 1450 feet from any location where helicopter activities may occur, including flight paths if applicable, shall be provided written notice at least 14 days prior to 	ES, PPLR, RFDC, SS-1, PLR- 1A, PLR-1C, PLR-3, SE-1A, SE-PLR-2	1. Confirm that helicopter landing zones and flight paths have been planned in accordance with the measure requirements. (CPUC)	 Prior to construction. Prior to construction (at least 30 days prior to the start of helicopter activities).

Applicant Proposed Measure or Mitigation Measure	Applicability ¹	Monitoring and Reporting Action (Responsible Party)	Monitoring Schedule
beginning helicopter activities to inform them of the schedule for helicopter use and potential noise disruptions. Methods for receptors to reduce noise in structures shall be included in the notice (i.e., closing doors and windows facing the alignment). The notice shall describe procedures for submitting any noise complaints during construction and provide a phone number for submitting such complaints, as required by MM NOI-1.		2. Confirm residences and places of worship have been provided advance noticing. (CPUC)	
■ Flight Paths. Helicopter flight paths shall be planned along routes that would result in the least noise exposure possible to receptors. If helicopter noise complaints are received, work crews will attempt to adjust the flight paths to reduce noise exposure to the complainant, without substantially increasing noise exposure to other receptors.			
Helicopter Hovering. Helicopters shall not operate closer than 200 feet from any receptors unless actively working at pole locations along the alignment. Helicopters may operate closer than these distances if all affected receptors agree in writing to a shorter distance. Prior to reducing the minimum distance from receptors, PG&E shall provide the CPUC with the names, contact information, and written agreements for all affected persons within the applicable distances. The written agreements shall clearly			

Applicant Proposed Measure or Mitigation Measure	Applicability ¹	Monitoring and Reporting Action (Responsible Party)	Monitoring Schedule
 identify the anticipated helicopter noise levels, daily schedule, and duration of helicopter activities in the vicinity. Helicopter Landing Zones. Helicopter landing zones within staging areas shall be positioned as far as possible from receptors. Helicopter landing zones shall not be positioned closer than 1,450 feet from any receptor. Helicopters may land closer than these distances if all affected receptors agree in writing to allow a shorter distance. 			
Transportation			
 APM TR-1. Air Transit Control. The project proponents will implement the following protocols that pertain to helicopter use during construction: Comply with all applicable Federal Aviation Administration regulations regarding air traffic; Helicopter operators will coordinate all project helicopter operations with the Paso Robles Municipal Airport before and during project construction; Coordinate with potentially affected residents or businesses to minimize the duration of necessary work and any resulting inconvenience; and Implement a congested area plan if the helicopter work will take place in a congested or densely 	ES, PPLR, RFDC, SS-1, PLR-1A, PLR-1C, PLR-3, SE-1A, SE-PLR-2	 Confirm compliance with the Federal Aviation Administration regulations. (CPUC) Confirm coordination with the Paso Robles Municipal Airport before and during construction. (CPUC) Confirm coordination with residents and businesses. (CPUC) Confirm implementation a 	 Prior to/during construction. Prior to/during construction. Prior to/during construction. Prior to construction.

Applicant Proposed Measure or Mitigation Measure	Applicability ¹	Monitoring and Reporting Action (Responsible Party)	Monitoring Schedule
populated area. A congested area is anywhere that includes the presence of the non-participating public. A densely populated area is an area of a city, town, or settlement that contains a large number of occupied homes, factories, stores, schools, and other structures.		congested area plan, if necessary. (CPUC)	
MM TR-1. Construction Traffic Control Plan. HWT and PG&E shall each implement a traffic control plan during Proposed Project construction and/or during construction of the reasonably foreseeable distribution components or selected alternative. The traffic control plan will minimize vehicle travel delays and potential roadway hazards on public roadways during construction activities. The traffic control plan may be used to satisfy requirements imposed in encroachment permits issued by Caltrans, County of San Luis Obispo, and/or City of Paso Robles. The traffic control plan shall provide for the following: In situations where slow-moving trucks or construction equipment are operated on public roadways (e.g., accessing the Estrella Substation site or staging or work areas along the Proposed Project's 70 kV power line route), signage and/or flaggers shall be used to warn motorists of potential safety hazards associated with the slow-moving vehicles. For any lane closures, signage, flaggers, and/or other devices shall be used to route vehicle traffic	ES, PPLR, RFDC, SS-1, PLR-1A, PLR-1C, PLR-3, SE-1A, SE-PLR-2	 Confirm the traffic control plan includes all of the elements required by the mitigation measure. (CPUC) Confirm that the traffic control plan is fully implemented. (CPUC) 	 Prior to construction. During construction.

Applicant Proposed Measure or Mitigation Measure	Applicability ¹	Monitoring and Reporting Action (Responsible Party)	Monitoring Schedule
around the construction work area. The traffic control measures shall ensure that pedestrians and bicyclists are provided safe passage around the work area, where applicable. The routing of traffic around the construction work area during temporary lane closures shall be adequate to provide for continuity of access for all vehicles lawfully using the applicable public roadways in compliance with the California Vehicle Code.			
For any road closures, detours will be provided and signage, flaggers, and/or other devices shall be used to ensure motorists, pedestrians, and bicyclists are able to safely pass through the detour areas. Detours during temporary road closures shall be adequate to provide for continuity of access for all vehicles lawfully using the applicable public roadways in compliance with the California Vehicle Code.			
 Protocols from the applicable agencies to notify police, fire, and other emergency services departments serving the area of planned lane or road closures on public roadways at least 48 hours in advance. 			
 Crossing structure installation shall occur during periods of low traffic (e.g., avoiding the morning and evening rush hour periods) to the extent practicable. 			

Applicant Proposed Measure or Mitigation Measure	Applicability ¹	Monitoring and Reporting Action (Responsible Party)	Monitoring Schedule
 All warning signs, lights, devices, and procedures used in the construction traffic control plan shall conform to the latest California Manual of Uniform Traffic Control Devices. 			
Tribal Cultural Resources			
MM TCR-1. Tribal Monitoring and Treatment of Tribal Cultural Resources. Prior to the commencement of any ground disturbing activity, the Proposed Project Applicants (HWT and PG&E) shall retain a monitor from the Xolon-Salinan tribe, who consulted on this project pursuant to AB 52. The Xolon monitor will work in tandem with the archaeological monitor. The Xolon monitor will be present during construction phases that involve ground-disturbing activities to depths of 6 feet that may occur within 100 feet of Dry Creek, Huer Huero Creek, the Salinas River, and the Estrella River, all of which have been identified as culturally sensitive, or within 50 feet of all known Native American archaeological sites. Monitoring of ground disturbance shall also occur in the vicinity of Santa Ysabel Ranch, which was identified as culturally sensitive for buried archaeological resources that could be TCRs by the tribe. Ground-disturbing activities are defined as activities that may include, but are not limited to boring, grading, grubbing, excavation, drilling, and trenching, within the project areas. The tribal monitor will complete daily monitoring logs that will provide	ES, PPLR, RFDC, SS-1, PLR-1A, PLR-1C, PLR-3, SE-1A, SE-PLR-2	 Confirm a monitor from the Xolon-Salinan Tribe is retained for monitoring and monitoring is completed, as required per the MM. (CPUC) In the event of TCR discovery, confirm assessment by the Project proponent's qualified cultural resources principal investigator and the tribal monitor. (CPUC) If the TCR cannot be avoided, confirm development and implementation of a detailed archaeological 	 Prior to and during construction. During construction, as necessary. Prior to construction, as necessary. During construction, as necessary.

Applicant Proposed Measure or Mitigation Measure	Applicability ¹	Monitoring and Reporting Action (Responsible Party)	Monitoring Schedule
descriptions of the day's activities, including construction activities, locations, and any cultural materials identified. Upon discovery of any TCRs, construction activities shall cease in the immediate vicinity of the find (not less than the surrounding 50 feet) until the find can be assessed. All archaeological materials that are identified as potential TCRs unearthed by project activities shall be evaluated by the Applicant's qualified cultural resources principal investigator and the tribal monitor or other tribal representative identified by the Xolon-Salinan Tribe. If the resource cannot be avoided, a detailed archaeological treatment plan shall be developed for CPUC review and after CPUC approval, implemented by the Applicant's cultural resources principal investigator, consistent with Mitigation Measure CR-1. The CPUC shall ensure that the treatment plan is developed with input from the Xolon-Salinan Tribe per Mitigation Measure CR-1. The CPUC shall consult the Xolon-Salinan Tribe to determine the disposition of any TCRs artifacts discovered during construction or artifacts resulting from execution of a treatment plan, such as, but not limited to, reburying in close proximity of the finds without scientific study, allowing scientific study before reburying the materials either near the origin of the find or in another protected place, or curation at a facility that meets the U.S. Secretary of the Interiors criteria for curation (36 CFR 79).		treatment plan. (CPUC) 4. In the event of discovery of human remains, confirm ground disturbance has ceased and Mitigation Measure CR-2 has been implemented. (CPUC)	

Applicant Proposed Measure or Mitigation Measure	Applicability ¹	Monitoring and Reporting Action (Responsible Party)	Monitoring Schedule
If human remains and/or grave goods are discovered or recognized during construction, all ground disturbance shall immediately cease, and the requirements of Mitigation Measure CR-2 shall be implemented.			

1. ES = Estrella Substation; PPLR = Proposed Power Line Route; RFDC = Reasonably Foreseeable Distribution Components and Ultimate Substation Buildout; SS-1 = Bonel Ranch Substation Site Alternative; PLR-1A = Estrella Route to Estrella Substation Alternative; PLR-1C = Estrella Route to Bonel Ranch Alternative; PLR-3 = Strategic Undergrounding Alternative (Options 1 & 2); SE-1A = Templeton Substation Expansion 230/70 kV Substation Alternative; SE-PLR-2 = Templeton-Paso South River Road Route Alternative