

6. Mitigation Monitoring Plan

PG&E proposes to construct and operate the Cressey-Gallo 115 kV Power Line Project (“Proposed Project”). An Initial Study was prepared to assess the Proposed Project’s potential environmental effects. The Initial Study was prepared based on information in the Proponent’s Environmental Assessment (PEA), project site visits, and supplemental research. The majority of the Proposed Project’s impacts would occur during project construction. Within PG&E’s application, Applicant Proposed Measures (APMs) were proposed to reduce potentially significant adverse impacts related to project construction and operation.

The purpose of this Mitigation Monitoring Plan (MMP) is to ensure effective implementation of each APM, as well as the mitigation measures identified by the Initial Study and imposed by the CPUC as part of project approval.

This Mitigation Monitoring Plan includes:

- The APMs and mitigation measures that PG&E must implement as part of the Proposed Project;
- The actions required to implement these measures;
- The monitoring requirements; and
- The timing of implementation for each measure.

The CPUC will use this MMP as the framework for a Mitigation Monitoring, Compliance, and Reporting Program (MMCRP). The MMCRP will be created by the CPUC to formalize protocols to be followed prior to and during construction by CPUC third-party environmental monitors (CPUC EMs) and PG&E project staff. The MMCRP will include, but will not be limited to, the following topics:

- Agency Jurisdiction
- Roles/Responsibilities
- Communication
- Compliance Verification and Reporting
- Project Changes

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

Final language of the MMCRP will be made in consultation with PG&E. Drafted language for the project variance and dispute resolution protocols are provided below.

6.1 Minor Project Changes or Variances

The CPUC Project Manager along with the CPUC Monitoring Team will ensure that any process to consider minor project changes that may be necessary due to final engineering or variances or deviations from the procedures identified under the monitoring program are consistent with CEQA requirements. No minor project changes or variances will be approved by the CPUC if they are located outside of the geographic boundary of the project study area or create new or substantially more severe significant

impacts. A variance should be strictly limited to minor project changes that will not trigger other permit requirements unless the appropriate agency has approved the change, that does not increase the severity of an impact or create a new impact without appropriate agency approval, and that clearly and strictly complies with the intent of the mitigation measure or applicable law or policy. PG&E shall seek any other project refinements by a petition to modify.

A proposed project change that has the potential for creating significant environmental effects will be evaluated to determine whether a petition to modify and/or supplemental California Environmental Quality Act (CEQA) review is required. Any proposed deviation from the approved project, adopted mitigation measures, APMs, and correction of such deviation, will be reported immediately to the CPUC Project Manager for his or her review. The CPUC Monitoring Team will review the variance request to ensure that all of the information required to process the minor project change is included, and then forward the request to the CPUC Project Manager for review and approval. The CPUC Project Manager may request a site visit from the CPUC EM, or may need additional information to process the variance. In some cases, project refinements may also require approval by jurisdictional agencies. In general, a minor project change request must include the information listed below.

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

6.2 Dispute Resolution

It is expected that the Mitigation Monitoring Plan will reduce or eliminate many potential disputes. However, even with the best preparation, disputes may occur.

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

- **Step 1.** Disputes unresolved in the field and complaints (including those from the public) should be directed to the CPUC Project Manager for resolution. The Project Manager will attempt to resolve the dispute informally. Should this informal process fail, the CPUC Project Manager will inform PG&E prior to initiating Step 2.
- **Step 2.** Should this informal process in the field fail, the CPUC Project Manager may issue a formal letter requiring corrective actions to address the unresolved or persistent deviations from the Proposed Project or adopted MMP.
- **Step 3.** If a dispute or complaint regarding implementation or evaluation of the Program or mitigation measures cannot be resolved informally or through a letter request, any affected participant in the dispute or complaint may file a written "notice of dispute" with the CPUC's Executive Director. This notice should be filed in order to resolve the dispute in a timely manner, with copies concurrently served on other affected participants. Within 10 days of receipt, the Executive Director or designee(s) shall meet or confer with the filer and other affected participants to resolve the dispute. The Executive Director shall issue an Executive Resolution describing his/her decision, and serve it to the filer and other affected participants.

- **Step 4.** If one or more of the affected parties is not satisfied with the decision as described in the Resolution, such party(ies) may appeal it to the Commission via a procedure to be specified by the Commission.

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

Table 6-1. Mitigation Monitoring Plan

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Timing of Action
Aesthetics			
APM AE-1	Construction Activities. Construction activities will be kept as clean and inconspicuous as practical.	Ensure that the construction activities be clean and inconspicuous	During construction
APM AE-2	Non-reflective Finish on Permanent Equipment. A galvanized finish that weathers to a dull, non-reflective patina will be used for substation components, chain link fencing, and power structures to reduce the potential for new sources of glare.	Ensure that new sources of glare are reduced	During operation
APM AE-3	Nighttime Substation Lighting to Minimize Potential Visual Impacts. Design and layout for new lighting at the two existing substations will incorporate measures such as use of non-glare fixtures and directional lighting to reduce spillover into areas outside the substation site and minimize the visibility of lighting from off-site locations.	Review design and layout to ensure that lighting spillover is minimized from off-site locations	Prior to construction and during operation
APM AE-4	Distribution Line Co-location. Where the project power line and existing distribution lines are present along the same roadway corridor, distribution lines will be co-located on project poles where feasible, and existing distribution line poles will be removed in order to reduce the number and overall visibility of power poles in the project area. For portions of the power line route, where an existing PG&E distribution line is located on the same side of the road as the project route, the distribution line will be co-located on the new power poles and the distribution line's wood poles will be removed. Where three or more distribution spans are located on the opposite side of the project route, the distribution line will be co-located on project poles and the existing distribution poles will be removed.	Ensure the number and overall visibility of the power poles is reduced; inspect plans for power line	Prior to construction and during operation
Existing Visual Character	V-1: Treat New Galvanized Steel, including New Light-Duty Steel Poles and New Tubular Steel Poles, to Blend with the Sky. Prior to installation, PG&E shall treat new galvanized steel structures, including light-duty steel poles and tubular steel poles with a permanent surface treatment designed to render steel with a light gray color in the short-term and a light gray color and dulled non-reflective patina in the long-term.	Ensure that tubular steel poles are treated and visual impacts of tubular steel poles are reduced	During operation
Existing Visual Character	V-2: Install Slimmer Light Gray Tubular Steel Pole Treated with CrysCoat (or equal) and Vegetative Screening at Mercedes Avenue Crossing. At the 90-degree turn and crossing of Mercedes Avenue, the base of the tubular steel pole installed by PG&E shall be 27-inches or smaller in diameter with appropriate taper, with a permanent surface treatment designed to render steel with a light gray color and a dulled non-reflective patina in the short-term and the long-term (CrysCoat or equal). Additionally, PG&E shall offer to the owner and/or tenant of 1925 Mercedes Avenue additional vegetative screening, if desired, between the residence and the new pole at that location, consistent with feasibility and engineering requirements. Plant materials selected for screening shall be acclimated to the environment of the project area. PG&E shall submit an engineering sketch of the pole, and report landowner requests and PG&E's responses to the CPUC prior to the start of construction.	Review power line plans and route	Prior to and during construction

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Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Timing of Action
Agriculture and Forestry Resources			
Active Agricultural Operations	<p>MM AG-1a: Coordinate with landowners, farmers, and ranchers regarding construction activities. Coordination shall include the following:</p> <p><i>Advance Notice.</i> Prior to and during construction, the Applicant shall 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 project route. The announcement shall:</p> <ul style="list-style-type: none"> ▪ Describe where and when construction is planned; and ▪ Provide contact information for a point of contact for complaints related to construction activities. <p>Prior to commencing ground disturbing activities, the Applicant shall submit a copy of the template used for the notification letter and a list of the landowners notified.</p> <p>As specified in APM LU-1, the Applicant shall “work with farmers and ranchers to schedule project work, to the extent feasible, around their harvest and planting periods in order to minimize disruptions to agricultural operations. Access across active fields shall be negotiated with the farmer and/or landowner in advance of any construction activities. In areas containing permanent crops (i.e., grape vines, orchard crops, etc.) that must be removed to gain access to pole sites for construction purposes, the Applicant shall provide compensation to the farmer and/or landowner in accordance with PG&E’s Project Damage Assessment and Resolution Program” [APM LU-1].</p> <p><i>Reporting of Complaints.</i> The Applicant shall document all complaints and strategies for resolving complaints in regular reporting to the CPUC.</p>	Review notices, proof of compensation, and complaints report(s)	Prior and during construction

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Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Timing of Action
Air Quality			
APM AQ-1	<p>Minimize Fugitive Dust. PG&E will minimize fugitive dust during construction by implementing the following measures. According to SJVAPCD, implementation of the following measures minimizes fugitive dust emissions to a less-than-significant level (SJVAPCD, 2002a).</p> <ul style="list-style-type: none"> ▪ Visible dust emissions (VDE) will not exceed 20 percent opacity during times when soil is disturbed. ▪ All disturbed areas, including storage piles, which are not being actively utilized for construction purposes, will be effectively stabilized to control dust emissions using water, chemical stabilizer/suppressants, or covering soils with a tarp or other suitable cover or vegetative ground cover. ▪ All onsite unpaved roads and offsite unpaved access roads will be effectively stabilized against dust emissions using water or chemical stabilizer/suppressant. ▪ All land clearing, grubbing, scraping, excavation, land leveling, grading, cut and fill, and demolition activities will be effectively controlled to prevent fugitive dust emissions by application of water or presoaking. ▪ When materials are transported offsite, all material will be covered, or effectively wetted to limit VDE, and at least 6 inches of freeboard space from the top of the container shall be maintained. ▪ All operations will limit or expeditiously remove the accumulation of mud or dirt from adjacent public streets at the end of each workday.* ▪ Following the addition of materials to, or the removal of materials from, the surface of outdoor storage piles, said piles will be effectively stabilized to control fugitive dust emissions by application of water or chemical stabilizer/suppressant. ▪ Within urban areas, track-out will be immediately removed when it extends 50 or more feet from the site and at the end of each workday. ▪ Vehicle speeds will be limited to 15 miles per hour on unpaved roads. 	Ensure particulate matter emissions are minimized during construction	During construction

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Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Timing of Action
APM AQ-2	<p>Minimize Construction Exhaust Emissions – Criteria Pollutants and GHGs. The following measures will be implemented during construction to further minimize the less-than-significant construction emissions:</p> <ul style="list-style-type: none"> ▪ Construction equipment will be properly maintained. All offroad construction diesel engines not registered under the CARB Statewide Portable Equipment Registration Program will meet at a minimum the Tier 1 California Emission Standards for Off-Road Compression-Ignition Engines as specified in California Code of Regulations (CCR) Title 13, Chapter 9, Sec. 2423(b)(1). ▪ Idling times will be minimized either by shutting equipment or commercial motor vehicles off when not in use or reducing the maximum idling time to 5 minutes (as required by CCR Title 13, Chapter 9, Section 2449 and Chapter 10, Section 2485). The ability to limit construction vehicle idling time is dependent upon the sequence of construction activities and when and where vehicles are needed or staged. Certain vehicles, such as large diesel-powered vehicles, have extended warm up times following start up that limit their availability for use following startup. Where such diesel powered vehicles are required for repetitive construction tasks, these vehicles may require more idling time. The project will apply a “common sense” approach to vehicle use; if a vehicle is not required for use immediately or continuously for construction activities, its engine will be shut off. Construction foremen will provide briefings to crews on vehicle use as part of pre-construction conferences. Those briefings will include discussion of a “common sense” approach to vehicle use. ▪ Minimize welding and cutting by using compression or mechanical applications where practical and within standards. ▪ Encourage use of natural gas powered vehicles for passenger cars and light duty trucks where feasible and available. ▪ Encourage the recycling of construction waste where feasible. ▪ *Per SJVAPCD Rule 8041, the use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the VDE. The use of blower devices is expressly forbidden. 	Ensure emissions from construction equipment exhaust are reduced	During construction
APM AQ-3	<p>Avoid and Minimize Potential Sulfur Hexafluoride (SF6) Emissions. PG&E will continue to include the project substations in PG&E’s system-wide SF6 emission reduction program, which includes inventorying and monitoring system-wide SF6 leakage rates and employing X-ray technology to inspect internal circuit breaker components to eliminate dismantling of breakers and reduce accidental releases. New project breakers will have a manufacturer’s guaranteed SF6 leakage rate of 0.5 percent per year or less and will be maintained in accordance with PG&E’s maintenance guidelines.</p>	Ensure potential for SF ₆ leaks is minimized according to a leak reduction standard that would be consistent with the CARB Climate Change Scoping Plan.	Prior to construction and during operation

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Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Timing of Action
Construction-Phase Air Quality	<p>A-1: Minimize Fugitive Dust near Sensitive Receptors (Proposed to supplement APM AQ-1 "Minimize Fugitive Dust"). The following implemented for locations near (within 1,000 feet) of residences or other sensitive receptors in conjunction with the measures in APM AQ-1 (SJVACPD, 2002b):</p> <ul style="list-style-type: none"> ▪ Limit area subject to excavation, grading, and other construction activity at any one time ▪ Increased dust suppression or watering frequency shall be applied whenever wind speeds exceed 20 miles per hour (mph) and visible dust emissions occur. 	Ensure implementation during construction to minimize particulate matter emissions	Prior to and during construction
Construction-Phase Air Quality	<p>A-2: Facilitate Carpooling to Construction Sites (Proposed to supplement APM AQ-2 "Minimize Construction Exhaust Emissions"). To minimize GHG and criteria pollutant emissions during construction, PG&E shall identify a central place to meet, such as a substation, staging area, or a service center in the project vicinity and encourage construction workers to carpool to the work site to the extent feasible. The ability to develop an effective carpool program for the Proposed Project shall depend on the proximity of carpool facilities to the work site, the geographical commute departure points of construction workers, and the extent to which carpooling shall not adversely affect worker arrival time and the project's construction schedule. Crew transportation to the project site is addressed in Section 5.16, Transportation and Traffic.</p>	Ensure implementation during construction to minimize GHG and criteria pollutant emissions	During construction
Construction-Phase Air Quality	<p>A-3: Reduce Toxic Diesel Particulate Matter (Proposed to supplement APM AQ-2 "Minimize Construction Exhaust Emissions"). The following measures shall be implemented during construction to reduce toxic diesel particulate matter (DPM) emissions:</p> <ul style="list-style-type: none"> ▪ On- and off-road equipment shall be subject to the following restrictions: ▪ Alternative-fueled equipment shall be used when reasonably available. ▪ Signs shall be posted at substation delivery locations to remind delivery vehicle operators of the 5-minute idling restriction identified in Section 2449(d)(3) of CARB's In-Use off-Road Diesel regulation: www.arb.ca.gov/regact/2007/ordiesl07/frooal.pdf. 	Ensure implementation during construction to reduce toxic diesel particulate matter (DPM) emissions	During construction

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Biological Resources			
APM BIO-1	<p>General Avoidance of Biological Resources Impacts. This APM consists of the following components:</p> <ul style="list-style-type: none"> ▪ Environmental awareness training. Environmental awareness training will be conducted for on-site construction personnel prior to the start of construction activities. The training will explain measures to prevent impacts on nesting birds and special-status species with moderate or high potential to occur in the project area. The training will also include a description of these special-status species and their habitat needs, and an explanation of the status of these species and their protection under the federal ESA, CESA, and other statutes. A brochure will be provided with color photos of sensitive species as well as a discussion of project measures. A copy of the training and brochure will be provided to the CPUC at least 30 days prior to the start of construction. Training logs and sign-in sheets will be provided to CPUC staff. As needed, in-field training will be provided to new on-site construction personnel by a qualified biological monitor who will be identified by the PG&E’s biologist, or initial training will be recorded and replayed for new personnel. ▪ Biological monitoring to avoid impacts near or in potentially sensitive habitat. A qualified biological monitor will be onsite during ground-disturbing construction activities near and in sensitive habitat or resources as defined in the project’s Biological Resources Technical Report and will monitor implementation and compliance with APMs relating to the sensitive habitat. The monitor will have the authority to stop work or implement alternative work practices as determined by PG&E’s biologist in consultation with agencies and construction personnel, as appropriate, if construction activities are likely to impact sensitive biological resources. ▪ Marking of sensitive habitat or resource areas. Sensitive habitat or resources identified during the reconnaissance-level field surveys or pre-construction surveys that are in or adjacent to project work areas, such as occupied burrowing owls burrows, occupied migratory bird nests, elderberry shrubs, and seasonal ponded areas, will be either clearly marked or the limits of an adjacent worked will be clearly marked. Project resource maps may be updated to reflect active nest buffers or changes to the resources adjacent to work areas based on pre-construction survey findings. Such areas will be avoided during construction and additional measures (described below) will be implemented to further avoid impacts. ▪ Litter and trash management. All food scraps, wrappers, food containers, cans, bottles, and other trash from the project area will be deposited in closed trash containers. Trash containers will be removed from the project area at the end of each working day. ▪ Parking. Vehicles and equipment will be parked on pavement, existing roads, and previously disturbed or developed areas or work areas as identified in this document. Off-road parking will only be permitted in previously identified and designated work areas. ▪ Route and work area limitations. Vehicles will be confined to established roadways and pre-approved access roads, overland routes and access areas. Access routes and construction work areas will be limited to the minimum necessary to achieve the project goals. 	Avoid biological resources; review training and brochure	Prior to and during construction

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Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Timing of Action
	<ul style="list-style-type: none"> ▪ Maintenance and refueling. All equipment will be maintained such that there will be no leaks of automotive fluids such as fuels, solvents, or oils. All refueling and maintenance of vehicles and other construction equipment will be restricted to designated staging areas located at least 100 feet from any down gradient aquatic habitat unless otherwise isolated from habitat (please see APM WQ-1 in Section 3.8.4.2). Proper spill prevention and cleanup equipment will be maintained in all refueling areas. ▪ Pets and firearms. No pets or firearms will be permitted at the project site. 		
APM BIO-2	<p>Pre-construction Nesting Surveys. If construction is to occur during the avian nesting season (February 1 through August 31), a pre-construction migratory bird and raptor nesting survey will be performed by a qualified biologist in accordance with CDFW survey guidelines. No additional measures will be implemented if active nests are more than the following distances from the nearest work site: (a) 300 ft for raptors, or (b) 75 feet for passerine birds (or as otherwise agreed to by USFWS and CDFW). If active nests are closer than those distances to the nearest work site, then an appropriate nest protection zone will be established by a qualified biologist and the active nest(s) will be monitored for signs of disturbance. Factors to be considered include intervening topography, roads, development, type of work, visual screening from the nest, nearby noise sources, etc. Buffers will not apply to construction related traffic using existing roads that are not limited to project-specific use (i.e., county roads, highways, farm roads, etc.). Consideration will also include timing of nesting (i.e., if the bird nests in the project area during actual construction). If the biologist determines that a disturbance is occurring and/or if nesting raptors are identified in areas susceptible to disturbance from construction activities, PG&E will consult with the USFWS and CDFW to determine the specific buffer zone to be maintained for that nest.</p>	Survey for nesting birds in accordance with CDFW guidelines and establish buffer zone if necessary	Prior to and during construction
APM BIO-3	<p>Swainson's Hawk Surveys. Swainson's hawk surveys will be conducted according to Swainson's Hawk Technical Advisory Committee (2000) suggested protocol. To meet CDFW's recommendations for avoidance and protection of Swainson's hawks, surveys will be conducted for a 0.5-mile radius around all project activities where access is available (e.g., on public land, along public roads, etc.). If active nesting is identified in an area susceptible to disturbance from active construction activities, PG&E will discuss the occurrence with CDFW. Surveys will be completed during at least two of the survey periods identified in the protocol (January through March 20, March 20 through April 5, April 5 through April 20, and/or June 10 through July 30) immediately prior to the project's initiation. Surveys will not be conducted between April 21 and June 10 because this is during the nesting phase when nests are difficult to locate, and CDFW does not typically consider this a valid survey period.</p>	Survey for nesting birds in accordance with Swainson's Hawk Technical Advisory Committee guidelines and discuss with CDFW if necessary	Prior to and during construction

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Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Timing of Action
APM BIO-5	<p>Trenches and Excavations Design and Inspection. All excavations in excess of 2 feet deep will be sloped, have escape ramps installed that are suitable for the escape of the Blainville's horned lizard and other wildlife or be thoroughly covered at the end of the day. All trenches and excavations will be inspected for wildlife at the beginning of the work day and prior to backfilling. If a special-status species is discovered in a trench or excavation, work in the area will be redirected, and the special-status species will be allowed to leave the trench and the area of its own accord. In the event any special-status species is trapped in a trench or an excavation and unable to leave on its own accord, the USFWS and the CDFW will be contacted by the PG&E biologist unless the PG&E biologist identifies an individual with appropriate permits (for example, a CDFW collecting permit) to relocate the special-status species.</p>	Inspect trenches for slopes or escape ramps; inspect for wildlife before backfilling	During construction
APM BIO-6	<p>Open-ended Pipe Covers and Inspection. 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 pipe, the animal will be left undisturbed, and the pipe will not be moved until the special-status species has left the pipe and the area of its own accord. In the event any special-status species is trapped in an open pipe and unable to leave on its own accord, the USFWS and the CDFW will be contacted by the PG&E biologist unless the PG&E biologist identifies an individual with appropriate permits (for example, a CDFW collecting permit) to relocate the special-status species.</p>	Ensure pipes are capped and/or inspected prior to being moved	During construction
APM BIO-7	<p>Valley Elderberry Longhorn Beetle (VELB) Habitat Protection and Avoidance. The project is designed to avoid elderberry plants during construction. When activities are conducted in an area of potential VELB habitat, a qualified individual, as determined by the PG&E biologist, will use project documented elderberry shrub data and review the presence of elderberry plants within a minimum of 25 feet from the worksite. Potential impacts to elderberry plants with one or more stems measuring 1 inch or more in diameter at ground level will be avoided by the qualified individual flagging the plant or the limits of the nearby work area. No work will occur within the flagged buffer zone.</p> <p>During operations and maintenance, if impacts (pruning/trimming, removal, ground disturbance, or damage) are unavoidable or occur, then additional measures identified in the PG&E VELB conservation plan in Appendix D of the PG&E San Joaquin Valley Operations & Maintenance HCP (Jones and Stokes, 2006b), and compliance brochure will be implemented. The VELB compliance brochure must be carried in all operation and maintenance vehicles performing activities within the potential range of VELB.</p>	Review presence of elderberry plants within 25 feet of worksites and avoid VELB Habitat	Prior to and during construction, during operation

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Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Timing of Action
Special-Status Plant and Animal Species and Wetlands	<p>B-1: Conduct reconnaissance level Biological Resources Surveys for proposed construction staging areas not previously surveyed. Areas which have been evaluated using database tools (i.e., CNDDDB) although not included in the detailed analysis in the IS/MND may be identified as construction staging areas through additional, reconnaissance surveys. Before any construction or staging activities in areas that have not previously been surveyed for the Proposed Project, qualified biologist(s) (a botanist, a wildlife specialist, and/or a wetland specialist approved by the CPUC) shall conduct a thorough reconnaissance survey including an assessment of the site for sensitive species, their habitat, and wetlands or regulated waters.</p> <p>Survey results shall be documented in a technical report that will address the occurrence of any sensitive habitats, wetlands or regulated waters, and special-status wildlife and plant species that are observed in the proposed construction area. The report may build on the analysis in the earlier biological report for the project (GANDA, 2011 and 2012) and in the IS/MND. The report shall be submitted to and approved by the CPUC before any construction and staging activities occur in these areas.</p> <p>If survey results indicate that wetlands, sensitive habitats or special-status species will be affected in locations that were not previously surveyed, additional consultation with Army Corps of Engineers, CDFW and/or USFWS shall be required. Work within the new construction or staging area will not begin until agency consultation is completed. All project mitigation measures shall apply to these areas, and larger exclusion areas may be required based on resource agency consultation.</p>	Approve biologist has appropriate credentials for surveys; review and approve biological report.	Prior to and during construction.

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Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Timing of Action
Special-Status Species and Wetlands	<p>B-2: Develop and implement environmental awareness training. Develop and implement environmental awareness training. This measure incorporates and supplements portions of APM BIO 1. As stated in APM BIO-1, environmental awareness training shall be conducted for on-site construction personnel prior to the start of construction activities. The training shall:</p> <ul style="list-style-type: none"> ▪ Explain measures to prevent impacts on nesting birds and special-status species with potential to occur in the project area. ▪ Include a description of these special-status species and their habitat needs, and an explanation of the status of these species and their protection under the federal ESA, CESA, and other statutes. Provide a brochure with color photos and/or illustrations of sensitive species, descriptions of these species, and a discussion of project measures related to these species. <p>The environmental compliance supervisor shall be provided with:</p> <ul style="list-style-type: none"> ▪ Project resource maps showing seasonal ponded areas, valley elderberry shrubs, active nests, and any special-status species identified during the biological surveys of the project site and the pre-construction surveys. Maps shall show all relevant buffer areas. Maps shall be updated as needed to show locations of any newly identified nesting birds or special-status species. <p>Per APM BIO-1, a copy of the training and training materials shall be provided to the CPUC at least 30 days prior to the start of construction. Training logs and sign-in sheets shall be provided to CPUC staff within 7 days of training being presented. As needed, in-field training shall be provided to new on-site construction personnel by the environmental compliance supervisor or a qualified individual who shall be identified by the PG&E's biologist, or initial training shall be recorded and replayed for new personnel.</p>	Review training materials, logs and sign-in sheets, review documentation that PG&E environmental compliance supervisor has project resource maps	Prior to and during construction

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Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Timing of Action
Special-Status Plant Species and Wetlands	<p>B-3: Protect seasonal ponded areas and other water features. Construction activities shall be designed to minimize disturbance of wetlands (including seasonal ponded areas) and regulated water in the project area to the extent feasible.</p> <p><i>Avoidance Measures.</i> Construction activities shall not take place within any potential wetland or regulated water except as provided below. All seasonal ponded areas, wetlands or regulated water identified during the biological surveys will be identified on maps of the project site, which will be provided to the environmental compliance supervisor. Exclusion fencing or flagging will be installed 10 feet out side of the regular high-water line of any wetland or regulated water located adjacent to a construction site and no construction will be allowed within the fenced exclusion area.</p> <p>Wetlands. If potential wetlands or regulated water cannot be completely avoided:</p> <ul style="list-style-type: none"> ▪ a wetland delineation shall be conducted by a qualified biologist approved by CPUC. The wetland delineation shall be verified by United States Army Corps of Engineers (USACE) prior to ground disturbance. In lieu of preparing a wetland delineation, a preliminary jurisdiction determination can be completed by the Army Corps of Engineers and permitting can be initiated as appropriate. ▪ An assessment of areas that may meet the definition of wetlands or jurisdictional waters according to CDFW and USFWS shall be conducted by a qualified biologist approved by CPUC. ▪ No USACE, CDFW, or Regional Water Quality Control Board (RWQCB) jurisdictional waters shall be impacted before obtaining permits from the respective agency. <p>If vernal pools with occupied or suitable habitat for state or federally listed species are identified during preconstruction surveys in areas that may be affected by construction activities, additional consultation with CDFW/USFWS shall be required and larger exclusion areas may be necessary.</p> <p><i>Irrigation Canals.</i> A qualified biologist approved by the CPUC shall determine appropriate buffer distances/setbacks and/or other protective measures (e.g., erosion control best management practices such as those included in APM WQ 1) to be implemented to minimize the impacts of project construction activities on irrigation canals. All plans related to work within 10 feet of irrigation canals shall be evaluated by the qualified biologist to determine if the canal is subject to jurisdiction. If it is determined that the CDFW has jurisdiction and the project may result in direct impacts to a stream subject to CDFW jurisdiction, a Streambed Alteration Agreement may be required.</p>	Ensure avoidance of ponded areas and other water feature	During construction
Special-Status Plant Species and Wetlands	<p>B-4: Minimize noxious weeds. Precautions shall be taken to minimize the introduction of any invasive weeds. Construction equipment shall be clean before it arrives at work areas in the project corridor. Any landscaping involving vegetation other than trees and/or shrubs shall consist of native seed mix or other ecologically appropriate, non-invasive, plants. Only weed-free straw or mulch shall be used.</p>	Ensure noxious weeds are not introduced	During construction and prior to landscaping

Table 6-1. Mitigation Monitoring Plan

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Timing of Action
Special-Status Animal Species	<p>B-5: Protect valley elderberry longhorn beetle habitat. Prior to construction activities in any areas with potential valley elderberry longhorn beetle habitat, a qualified biologist (approved by the CPUC) shall survey for elderberry plants within 25 feet of areas of potential ground disturbance. The qualified biologist shall flag and fence buffer zones at least 20 feet wide surrounding the drip line of each potential valley elderberry longhorn beetle host plant (any elderberry shrub with at least one stem with a diameter of one inch or greater). Flagging and fencing shall be monitored during the duration of construction by a qualified biological monitor (approved by CPUC). The biological monitor shall have the authority to stop work or implement alternative practices (as determined in consultation with USFWS as appropriate) if mature elderberry shrubs are likely to be impacted by construction activities.</p>	Survey for VELB and avoid potential habitat; consult with USFWS	Prior to and during construction
Special-Status Animal Species	<p>B-6: Identify and relocate special-status amphibians and reptiles. A qualified biologist (approved by CPUC) shall conduct preconstruction surveys for western spadefoot toad, Blainville's horned lizard, and western pond turtle no more than 7 days prior to construction in suitable habitats within the project work areas.</p> <p>If individuals of these species are found near any proposed construction areas, impacts to individuals and their habitat shall be avoided to the extent feasible. If occupied habitat can be avoided, an exclusion zone shall be established around the habitat and temporary plastic fencing shall be installed around the buffer area. If avoidance is not possible and the species is determined to be present in work areas, the biologist possessing a CDFW Scientific Collecting permit shall capture individuals prior to construction activities and relocate them to nearby, suitable habitat out of harm's way.</p> <p>As necessary, exclusion fencing shall be installed to prevent special-status amphibians and reptiles from re-entering the work area. For the duration of work in these areas the biologist shall conduct at least weekly follow-up visits to monitor effectiveness and take appropriate corrective action if protection measures are not adequate.</p>	Survey for amphibians and reptiles and avoid habitat if feasible and relocated if avoidance is not feasible	7 days prior to construction in suitable habitats and during construction
Special-Status Animal Species	<p>B-7: Avoid impacts on nesting birds. If construction activities occur during the avian nesting season (February 1 through September 15), a preconstruction survey for nesting birds shall be conducted by a qualified wildlife biologist (approved by the CPUC) within 7 days prior to the start of ground-disturbing construction or vegetation trimming or removal activities in any new work area. If there is no work in an area for 7 days, it will be considered a new work area if construction or vegetation trimming or removal begins again.</p> <p>No additional measures will be implemented if active nests are more than the following distances from the nearest work site: (a) 500 feet for raptors, or (b) 250 feet for passerine birds. Buffers shall not apply to construction related traffic using existing roads that is not limited to project-specific use (i.e., county roads, highways, farm roads, etc.).</p> <p>All references in this mitigation measure to wildlife biologists refer to qualified biologists approved by the CPUC; these biologists may be PG&E employees or subcontractors. References to independent avian biologists refer to qualified avian biologists approved by the CPUC who report directly to CPUC.</p>	Survey and establish buffers for nesting birds	Prior to and during construction

Table 6-1. Mitigation Monitoring Plan

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Timing of Action
	<p>Buffer reduction. The specified buffer sizes for birds may be reduced on a case-by-case basis if, based on compelling biological or ecological reasoning (e.g. the biology of the bird species, concealment of the nest site by topography, land use type, vegetation, and level of project activity) and as determined by a qualified wildlife biologist that implementation of a specified smaller buffer distance will still avoid project-related “take” (as defined by Fish and Game Code Section 86). Requests to reduce standard buffers must be submitted to the independent avian biologist(s) to be reviewed in coordination with the California Department of Fish and Wildlife (CDFW). Requests to reduce buffers must include: the species, location, size and expected duration of proposed buffer reduction, reason for the buffer reduction, the name and contact information of the qualified wildlife biologist(s) who request the buffer reduction and will conduct subsequent monitoring. The independent avian biologist shall respond to PG&E’s request for a buffer reduction within 24 hours.</p> <p>Non-special status species found building nests within the standard buffer zone after specific project activities begin, shall be assumed tolerant of that specific project activity and such nests will be protected by the maximum buffer practicable (as determined by the qualified biologist). However, these nests shall be monitored on a daily basis by a qualified biologist until the qualified biologist has determined that the young have fledged, are no longer dependent upon parental care, or construction ends within the buffer zone (whichever occurs first). If the qualified biologist determines that the nesting bird(s) are not tolerant of project activity, the standard buffer shall be implemented. As appropriate, exclusion techniques may be used for any construction equipment that is left unattended for more than 24 hours to reduce the possibility of birds nesting in the construction equipment.</p> <p>If nesting birds show signs of distress within a reduced buffer zone and that stress appears to be related to construction activities, the qualified wildlife biologist shall reinstate the recommended buffers. The recommended buffers may only be reduced again following the same process as identified above after the qualified biologist has determined that the nesting birds are no longer exhibiting signs of stress.</p> <p>Monitoring and reporting. All nests with a reduced buffer shall be monitored on a daily basis by a qualified wildlife biologist until the biologist has determined that the young have fledged, are no longer dependent upon parental care, or construction ends within the reduced buffer (whichever occurs first). A monthly written report shall be submitted to CDFW and CPUC. Monthly reports shall include: all of the information included in buffer reduction requests in addition to duration of buffer reduction, and outcomes for nests, eggs, young and adults during construction within a reduced buffer. No reporting will be required if construction activities do not occur within a reduced buffer during any calendar month. A final report shall be submitted to CDFW and CPUC at the end of each nesting season summarizing all monitoring results and outcomes for the duration of project construction.</p> <p>Burrowing owl. A qualified wildlife biologist shall conduct pre-construction surveys for burrowing owls within construction right-of-way and publicly accessible lands following the Burrowing Owl</p>		

Table 6-1. Mitigation Monitoring Plan

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Timing of Action
	<p>Survey Protocol and Mitigation Guidelines developed by The California Burrowing Owl Consortium (1993) where PG&E has access rights. If any ground disturbing activities are planned during the burrowing owl nesting season (approximately February 1 through August 31), avoidance measures shall include a no construction buffer zone of a minimum distance of 656 feet. If occupied burrows are closer than those distances to the nearest work site, the specified buffer size may be reduced on a case-by-case basis using the process outlined above for other nesting birds. Buffers may only be reduced after approval by the independent avian biologist. Reporting shall also follow the process outlined above for other nesting birds. If the nesting owls show signs of distress within a reduced buffer zone, and that stress appears to be related to construction activities, the qualified wildlife biologist shall reinstate the recommended buffers. The recommended buffers will only be reduced again after the qualified biologist has determined that the nesting owls are no longer exhibiting signs of stress and has submitted a buffer reduction request following the same process as identified above. Reporting regarding reduction of buffers will be documented in a written report and will follow the procedure described above.</p> <p>Listed and fully protected species. A qualified wildlife biologist shall conduct pre-construction surveys for listed and fully protected species within 500 feet of work areas (within construction right-of-way and publicly accessible lands where PG&E has access rights) within 7 days of the start of construction. If any construction activities are planned during the nesting season (approximately February 1 through August 31), avoidance measures shall include a no construction buffer zone of a minimum distance of 500 feet for raptors or 250 feet for passerine birds. If occupied nests are closer than these distances to the nearest work site, consultation with CPUC and CDFW (and USFWS as appropriate) shall be required to discuss how to implement the project and species avoidance measures to avoid “take”.</p> <p>California Avian Species of Special Concern. A qualified wildlife biologist shall conduct pre-construction surveys for California Avian Species of Special Concern within construction right-of-way and publicly accessible lands where PG&E has access rights. If any construction activities are planned during the nesting season (approximately February 1 through August 31), the avoidance measures for nesting birds detailed above will be implemented.</p>		
Special-Status Animal Species	<p>B-8: Avoid impacts to roosting western red bat. Prior to start of construction, a survey for roosting bats or maternity roosts shall be performed by a qualified biologist (approved by CPUC) within seven (7) days of the construction start date for all proposed work areas adjacent to appropriate roosting habitat and accessible from public or project areas during the appropriate time of day to maximize detectability. Western red bat roost and maternity roost habitat in the project area is mature riparian woodland, mature orchards, and mature ornamental trees. The survey shall include the work areas and any publicly accessible roosts within 250 feet of a work area. If an active roost is found within 100 feet of a work area, or if a maternity roost is found within 250 feet of a work area, the limits of the work area will be clearly marked and a qualified biological monitor shall be provided and shall remain on-site during construction activities within the vicinity of the roost or maternity roost. The biologist will ensure that construction activities do not encroach upon the 100 foot buffer around an active roost or 250 foot buffer around a maternity colony site.</p>	Survey for bats and avoid active maternity colonies if feasible	Prior to and during construction

Table 6-1. Mitigation Monitoring Plan

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Timing of Action
	<p>All references in this mitigation measure to biologists or biological monitors refer to qualified biologists approved by the CPUC; these biologists may be PG&E employees or contractors. References to independent biologists refer to qualified biologists approved by the CPUC who report directly to the CPUC.</p> <p>Requests to reduce buffers or to exclude bats must be submitted to an independent biologist to be reviewed in coordination with California Department of Fish and Wildlife (CDFW). An independent biologist shall respond to requests to reduce buffers within 24 hours and shall respond to requests to exclude bats within 5 days. Requests to reduce buffers or exclude bats must include: location, size of buffer and expected duration of proposed buffer reduction, reason for the buffer reduction or exclusion, the proposed exclusion plan, and the name and contact information of the qualified biologist(s) who request the buffer reduction or exclusion plan and will conduct subsequent monitoring.</p> <p>In addition, proposed exclusion plans shall describe all construction work that has the potential to affect bats, identify measures to be implemented to exclude bats from the work areas, and describe the features incorporated to minimize potential effects. The plan may include the following:</p> <ul style="list-style-type: none"> ▪ If fall/winter hibernacula cannot be avoided, humane techniques may be implemented to passively vacate bats from roosts. Methods to passively evict bats from tree roosts may include incrementally trimming limbs to alter the air flow and temperature around the roost feature where slight changes to the surrounding environment of roost features encourage bats to vacate roost features on their own. Any trees with nesting birds would be subject to Mitigation Measure B-7. ▪ If a roost is lost, PG&E shall consult with the CDFW to see if additional compensation for loss of habitat is required. Required compensation may include planting new trees to provide roost habitat, as appropriate to ensure that adequate roost sites are available in the project vicinity, as determined by CDFW. <p>Trees containing maternity roosts shall not be removed during the breeding season (March 1 through August 31) to avoid disturbing females with young that cannot fly. No trees containing maternity roosts may be removed until the qualified biologist determines that breeding is complete and young are flying.</p> <p>If buffer reductions are requested and approved, a monthly report shall be submitted to CPUC and CDFW with all of the information in the buffer reduction requests, monitoring results, effects on bats, bat exclusion activities, and bat behavior following implementation of the exclusion plan. Reports shall be submitted for the duration of construction activities within buffer areas.</p>		

Table 6-1. Mitigation Monitoring Plan

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Timing of Action
Cultural Resources			
APM CU-1	<p>Pre-construction Worker Environmental Awareness Program. PG&E will design and implement a worker environmental awareness program that will be provided to project personnel who might encounter or alter historical resources or important/unique archaeological properties, including construction supervisors and field personnel. No construction worker will be involved in field operations without having participated in the worker environmental awareness program.</p> <p>The worker environmental awareness program will include a kick-off tailgate session to present site avoidance requirements and procedures to be followed if unanticipated cultural resources are discovered during project implementation, and a discussion of disciplinary and other actions that could be taken against persons violating historic preservation laws and PG&E policies.</p> <p>All project workers involved with ground-disturbing activities will receive a pamphlet listing how to identify cultural resources and what to do if an unanticipated discovery is made during construction. The worker environmental awareness program may be conducted in concert with other environmental or safety awareness and education programs for the project, and may be recorded for use in subsequent training sessions.</p>	Avoid unanticipated cultural resources, train project workers	Prior to and during construction
APM CU-2	<p>Management of Unanticipated Discoveries. In the unlikely event that previously unidentified cultural resources are uncovered during project implementation, all work within 100 feet of the discovery will be halted and redirected to another location. The find will be secured, and PG&E's cultural resources specialist or designated representative will be contacted immediately. The specialist will inspect the discovery and determine whether further investigation is required. If additional impacts to the discovery can be avoided, the resource will be documented on California Department of Parks and Recreation (DPR) cultural resource records (Form DPR 523) and filed at the CHRIS; no further effort will be required. If additional disturbance to the resource cannot be avoided, PG&E will evaluate the significance and CRHR eligibility of the resource and (if warranted) implement data recovery excavation or other appropriate treatment measures. The methods and results of evaluation or data recovery work at an archaeological find will be documented in a professional level technical report to be filed with the CCIC.</p>	Construction personnel sign an environmental training attendance sheet. No damage to archaeological resources results from project construction.	During construction

Table 6-1. Mitigation Monitoring Plan

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Timing of Action
APM CU-3	<p>Treatment of Human Remains. In the unlikely event that human remains or suspected human remains are uncovered during pre-construction testing or during construction, all work within 100 feet of the discovery will be halted and redirected to another location. The find will be secured, and PG&E's cultural resources specialist or designated representative will be contacted immediately to inspect the find and determine whether the remains are human. If the remains are not human, the cultural resources specialist will determine whether the find is an archaeological deposit and whether APM CU-2 applies. If the remains are human, the cultural resources specialist will immediately implement the provisions in PRC Sections 5097.9 through 5097.996, beginning with the immediate notification to the County coroner. The coroner has two working days to examine human remains after being notified. If the Coroner determines that the remains are Native American, he or she must contact the NAHC within 24 hours. The NAHC, as required by the PRC Section 5097.98, determines and notifies the Most Likely Descendant (MLD).</p>	<p>No damage to human remains results from the project. Any discovered cultural resources are treated according to agency-approved mitigation and in compliance with State and federal regulations.</p>	<p>Prior to and during construction</p>
APM PR-1	<p>Worker Environmental Awareness Program Paleontological Resources Module. The project's worker environmental awareness program, which all workers will complete prior to beginning work on the project site, will include a module on paleontological resources (fossils). The module will discuss the laws protecting paleontological resources, recognition in the field and types of paleontological resources that could be encountered on the project, and the procedures to be followed if a paleontological resource is discovered. A copy of the project's worker environmental awareness training will be provided to the CPUC for recordkeeping prior to the start of construction.</p>	<p>Construction personnel complete an environmental awareness programs, no impacts to paleontological resources occur</p>	<p>Prior to and during construction</p>
APM PR-2	<p>Paleontological Resource Monitoring. If paleontological resources are observed during construction activities, a qualified paleontologist will be notified to review the need for paleontological monitoring during subsequent ground-disturbing activities with the potential to affect paleontologically sensitive sediments at that location. The qualified paleontologist will be responsible for the reassessment of paleontological sensitivity upon the receipt of additional information from ongoing excavations, which may result in reducing, or increasing, the amount of monitoring required.</p> <p>The current project description identifies one location, Cressey Substation, where ground-disturbing activities have potential to affect sediments with high paleontological sensitivity. The ground anode installations at Cressey Substation are expected to reach a depth of 100 feet, which is the approximate depth at which the Corcoran Clay is expected to begin at this location. A paleontological monitor will be present during this drilling when a depth of approximately 80 feet or greater is reached to monitor for paleontological resources that may be encountered in the Corcoran Clay layer. The paleontological monitor will be able to: (1) recognize fossils and paleontological deposits, and deposits that may be paleontologically sensitive; (2) take accurate and detailed field notes, photographs, and locality coordinates; and (3) document project-related ground-disturbing activities, their locations, and other relevant information, including a photographic record.</p>	<p>Monitor for paleontological resources at Cressey Substation and other locations, as necessary</p>	<p>During construction</p>

Table 6-1. Mitigation Monitoring Plan

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Timing of Action
APM PR-3	<p>Unanticipated Paleontological Resource Discovery. If fossils are observed during excavation, work in the immediate vicinity of a paleontological find will be halted or redirected to avoid additional impact to the specimen(s), and to allow the qualified paleontologist to assess the scientific importance of the find and determine appropriate treatment. If the discovery is significant, but can be avoided and no further impacts will occur, the resource will be documented in the appropriate paleontological resource records and no further effort will be required. If the resource is significant, but cannot be avoided and may be subject to further impact, the paleontologist will evaluate the significance of the resource and implement data recovery excavation, if appropriate, to scientifically recover the specimen as well as its stratigraphic and other pertinent contextual information, or other appropriate treatment measures as approved by the landowner. Any such discoveries on private land are the property of the landowner.</p> <p>If a scientifically controlled recovery occurs, the fossil materials will be prepared so that they can be properly identified and used in research, and curated into an appropriate museum repository. A report will be prepared to accompany the finds that will include descriptions of the geological and stratigraphic context of the find, attendant analyses such as radiocarbon dating and specimen identification, a narrative summary including preliminary interpretations, and a catalog of specimens.</p>	Any discovered paleontological resources are assessed and treated appropriately	During construction
Known Cultural Resources	<p>C-1: Conduct Preconstruction Cultural Resources Surveys for Areas Not Previously Surveyed. Before any construction or staging activities occur in areas that have not previously been surveyed for the project, a qualified cultural resources specialist, approved by the CPUC, shall conduct an intensive pedestrian survey for archaeological and built-environment resources.</p> <p>If any resources are identified during preconstruction surveys the preferred strategy shall be avoidance or preservation in place. If the resource cannot be avoided, it shall be evaluated by the CPUC-approved qualified cultural resources specialist to determine if it is a historical resource as defined by CEQA Guidelines (Section 15064.5). All resources identified shall be documented on California Department of Parks and Recreation (DPR) cultural resource records (Form DPR 523) and filed at the Cultural and Historic Resource Information System (CHRIS).</p> <p>If the resource is determined to be a historical resource, the cultural resource specialist shall consult with CPUC staff regarding methods to ensure that substantial adverse change to the significance of the resource pursuant to CEQA Guidelines Section 15064.5(b) would be minimized. Other methods to be considered shall include evaluation, collection, recordation, and analysis of any significant cultural materials in accordance with a Cultural Resources Management Plan prepared by the CPUC-approved qualified cultural resource specialist. The methods and results of evaluation or data recovery work at an archaeological or historic find shall be documented in a professional level technical report to be filed with CHRIS. Work may commence upon completion of treatment, as approved by the CPUC.</p>	Survey of any areas that have not previously been surveyed for the project	Prior to construction

Table 6-1. Mitigation Monitoring Plan

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Timing of Action
Known Cultural Resources	<p>C-2: Avoid Known Historical Resources. Known historical resources shall be avoided during construction. The portions of historical resources that cross into or are immediately adjacent to the project area (i.e., within 25 feet) shall be marked with visible flagging tape to create a 10-foot buffer around the site. The construction crews shall be instructed that no vehicle access, travel, equipment staging, storage, or other construction-related work shall occur outside the flagged areas to ensure that known historic resources are not inadvertently damaged during implementation of the project.</p>	Flag and avoid known cultural resources	Prior to and during construction
Geology, Soils and Mineral Resources			
APM GM-1	<p>Appropriate Design Measures Implementation. Based on available references, sands and loamy sands are the primary soil types expected to be encountered in the graded and excavated areas as project construction proceeds. Potentially problematic subsurface conditions may include soft or loose soils. 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 encountered during construction. Such measures may include the following:</p> <ul style="list-style-type: none"> ▪ 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. 	Ensure design of the project is appropriate for the conditions; review project design	Prior to and during construction

Table 6-1. Mitigation Monitoring Plan

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Timing of Action
Hydrology and Water Quality			
APM WQ-1	<p>SWPPP or Erosion Control Plan Development and Implementation. Following project approval, PG&E will prepare and implement a SWPPP, if required by state law, or erosion control plan to minimize construction impacts on surface water and groundwater quality. Implementation of the SWPPP or erosion control plan will help stabilize graded areas and reduce erosion and sedimentation. The plan will designate BMPs that will be adhered to during construction activities. Erosion and sediment control measures, such as straw wattles, covers, and silt fences, will be installed before the onset of winter rains or any anticipated storm events. Suitable stabilization measures will be used to protect exposed areas during construction activities, as necessary. During construction activities, measures will be in place to prevent contaminant discharge.</p> <p>The project SWPPP or erosion control plan will include erosion control and sediment transport BMPs to be used during construction. BMPs, where applicable, will be designed by using specific criteria from recognized BMP design guidance manuals. Erosion-minimizing efforts may include measures such as the following:</p> <ul style="list-style-type: none"> ▪ Defining ingress and egress within the project site ▪ Implementing a dust control program during construction ▪ Properly containing stockpiled soils <p>Erosion control measures identified will be installed in an area before construction begins during the wet season and before the onset of winter rains or any anticipated storm events. Temporary measures such as silt fences or wattles, intended to minimize sediment transport from temporarily disturbed areas, will remain in place until disturbed areas have stabilized.</p> <p>A copy of the SWPPP or erosion control plan will be provided to the CPUC prior to construction for recordkeeping. The plan will be updated during construction as required by the SWRCB.</p>	Ensure a SWPPP is developed and sedimentation is minimized	Prior to and during construction
APM WQ-2	<p>Worker Environmental Awareness Program Development and Implementation. The project's worker environmental awareness program will communicate environmental issues and appropriate work practices specific to this project. This awareness will include spill prevention and response measures, and proper BMP implementation. The training will emphasize site specific physical conditions to improve hazard prevention (such as identification of flow paths to nearest water bodies) and will include a review of all site specific water quality requirements, including applicable portions of erosion control and sediment transport BMPs, health and safety plan, and hazardous substance control and emergency response plan. A copy of the project's worker environmental awareness training will be provided to the CPUC for recordkeeping prior to the start of construction.</p>	Review worker environmental awareness training program	Prior to construction

Table 6-1. Mitigation Monitoring Plan

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Timing of Action
Land Use and Planning			
APM LU-1	Agriculture Impacts Avoidance and Compensation. To avoid or minimize potential less-than-significant impacts to agriculture, PG&E will work with farmers and ranchers to schedule project work, to the extent feasible, around their harvest and planting periods. Access across active fields will be negotiated with the farmer and/or landowner in advance of any construction activities. In areas containing permanent crops (i.e., grape vines, orchard crops, etc.) that must be removed to gain access to pole sites for construction purposes, PG&E will provide compensation to the farmer and/or landowner in accordance with its Project Damage Assessment and Resolution Program.	Coordinate project work with farmers and ranchers where feasible and compensate farmers/landowners for project impacts	Prior to and during construction
Divide a property	MM L-1: Re-route the proposed transmission to avoid dividing a parcel. PG&E shall reroute the proposed Cressey-Gallo transmission line route north of Arena Way after the crossing of the existing irrigation canal to follow the eastern property line of parcel 140-190-051, as shown in Figure 5.10-2. PG&E shall coordinate with the property owner and use techniques such as strain poles, to reduce interference with the farming operation consistent with feasibility and engineering requirements. PG&E shall submit an engineering sketch or other construction plan for the re-route demonstrating compliance with this measure to the CPUC for review prior to the start of construction of this section of the project.	Review construction plans demonstrating compliance	Prior to construction of this portion of the project
Noise			
APM NO-1	Noise Minimization with Portable Barriers. Compressors and other small stationary equipment used during construction will be shielded with portable barriers if located near a residence.	Ensure implementation during construction such that construction noise to nearby residents is minimized.	During construction
APM NO-2	Noise Minimization with Quiet Equipment. Quiet equipment (for example, equipment that incorporates noise control elements into the design; compressors can be quiet models) will be used during construction whenever possible.	Ensure implementation during construction such that construction noise is minimized.	During construction
APM NO-3	Noise Minimization through Direction of Exhaust. Equipment exhaust stacks and vents will be directed away from buildings.	Ensure implementation during construction such that construction noise to nearby buildings and residents is minimized.	During construction
APM NO-4	Noise Minimization through Truck Traffic Routing. Truck traffic will be routed away from noise sensitive areas where feasible.	Ensure implementation during construction such that noise-related complaints from nearby residents are minimized.	During construction

Table 6-1. Mitigation Monitoring Plan

Impact	Applicant Proposed Measure (APM) or Mitigation Measure	Monitoring Requirement	Timing of Action
APM NO-5	Noise Disruption Minimization through Residential Notification. In the event that nighttime construction is necessary because of clearance restrictions, affected residents will be notified in advance by mail, personal visit, or door-hanger and informed of the expected work schedule.	Review notification; noise-related complaints from nearby residents are minimized.	During construction
Construction Noise	N-1: PG&E Construction Hours. PG&E shall limit grading, scraping, hole augering and pole installation to daylight hours. Exceptions for work outside of these hours shall be allowed for project safety or to take advantage of the limited times when the power line can be taken out of service. If nighttime work is needed because of clearance restrictions on the power line, PG&E shall take appropriate measures to minimize disturbance to local residents through APM NO-5 to inform them of the work schedule and probable inconveniences.	Review PG&E's procedures for implementing best management practices (BMPs) for noise to ensure completeness; ensure implementation during construction	During construction
Traffic and Transportation			
APM TT-1	Traffic Management Implementation. PG&E will follow its standard safety practices, including installing appropriate barriers between work zones and transportation facilities, posting adequate signs, and using proper construction techniques. PG&E will coordinate construction traffic access at Gallo Substation with Gallo Winery during the E. & J. Gallo Winery Eastside Expansion Project construction. PG&E is a member of the California Joint Utility Traffic Control Committee, which published the <i>California Joint Utility Traffic Control Manual (2010)</i> . PG&E will follow the recommendations in this manual regarding basic standards for the safe movement of traffic on highways and streets in accordance with Section 21400 of the CVC. PG&E will comply with all notification requirements as prescribed by County of Merced and Caltrans encroachment permits.	Ensure traffic safety practices are implemented	During construction

Note: Applicant Proposed Measures (APMs) appear in the Proponent's Environmental Assessment (A.11-11-020).

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