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March 3, 2025

Tommy Alexander  
California Public Utilities Commission  
Via email: [Tommy.Alexander@cpuc.ca.gov](mailto:Tommy.Alexander@cpuc.ca.gov)

**Subject: PG&E Response to Manning A.24-060017 CPUC Data Request 2**

PG&E has received the California Public Utilities Commission's (CPUC) Data Request 2 regarding Construction Measures and Mitigation Measures for the LS Power Grid California, LLC (LS Power) Manning 500/230kV Substation Project (Application 24-06-017). Pursuant to this data request, PG&E affirms the following:

1. PG&E agrees to implement the construction measures as provided in Attachment 1 during construction of PG&E's transmission line facilities necessary to interconnect LS Power's Manning 500/230 kV Substation Project; and
2. PG&E agrees to submit a comment on the CPUC's proposed IS/MND for LS Power's Manning 500/230 kV Substation Project, as released for public review, reaffirming its agreement to implement these construction measures during construction of PG&E's transmission line facilities.

Thank you for the opportunity to review these construction measures.

Sincerely,

A handwritten signature in black ink that reads 'Doug M. Edwards'.

Doug Edwards  
Principal Land Planner  
Pacific Gas and Electric Company

cc:

Jo Lynn Lambert, PG&E Legal Counsel  
Doug Edwards, PG&E Principal Land Planner  
Creed Young, PG&E Project Manager  
Tim Criner, PG&E Project Manager

Attachment 1: Manning 500/230 kV Substation Project IS/MND PG&E Construction Measures and LSPGC Mitigation Measures

## *Air Quality*

### **Construction Measure [PG&E] / Mitigation Measure [LSPGC] AQ-A: Tier 4 Construction Equipment**

The following measure shall apply for LSPGC and PG&E project components and shall supersede and replace LSPGC APM AIR-1 and PG&E CM AIR-2 as presented in the PEA:

Construction contractors for the project shall use engines that meet the EPA's Tier 4 emission standards, as defined in 40 CFR 1039, in at least 75 percent of construction equipment with a rating between 100 and 750 hp off-road construction equipment and shall comply with the appropriate test procedures and provisions contained in 40 CFR Parts 1065 and 1068. This measure can also be achieved by using battery-electric off-road equipment, as it becomes available, for at least 75 percent of construction equipment and/or by using a combination of engines that meet the EPA's Tier 4 emission standards and battery-electric off-road construction equipment, as long as the total of Tier 4 and battery-electric construction equipment comprises 75 percent of construction equipment.

Implementation of this measure shall be required in the contract the project applicant establishes with its construction contractors. LSPGC and PG&E shall separately demonstrate their plans to fulfill the requirements of this measure in a memorandum that shall be submitted to the CPUC before the use of any off-road diesel-powered construction equipment on the site. Each memorandum shall include a list of the equipment and vehicles to be used during construction of LSPGC and PG&E project components with details including equipment/vehicle engine tiers and expected daily and annual usage hours to demonstrate adherence to the 75 percent requirement above.

## *Biological Resources*

### **Construction Measure [PG&E] / Mitigation Measure [LSPGC] BIO-A: Conduct Protocol-Level Surveys for Special-Status Plants and Compensate for Impacts**

Special-status plant surveys described in APM BIO-4 and CM BIO-2 shall follow the CDFW *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities* (CDFW 2018). The surveys will be conducted within suitable habitat during the typical blooming period for the 10 species determined to have potential to occur in the project alignment area as described in Table 3.4-1.

If plant species protected under ESA (i.e., San Joaquin woollythreads) are found during surveys for special-status plants conducted pursuant to APM BIO-4 and CM BIO-2, following the CDFW protocol described above, a protective buffer of at least 20 feet will be established around individual plants, and the plants will be avoided.

If plant species considered special-status under CEQA (i.e., plants with a CRPR of 1 or 2) are found during surveys for special-status plants conducted pursuant to APM BIO-4 and CM BIO-2, following the CDFW protocol described above, a protective buffer of at least 20 feet will be established around individual plants, and the plants will be avoided, if feasible.

Where avoidance of plants considered special-status under CEQA is not feasible, and the only plants present in a work area are annual plants (see Table 3.4-1), initial disturbances associated with temporary construction work activities will be scheduled to occur after seed set and prior to seedling emergence and when soil is dry. If special-status perennial plants (i.e., recurved larkspur) are present in a work area, this method would not avoid impacts, and these plants would be avoided as described above.

When permanent ground disturbing activities cannot be avoided in known annual special-status plant locations the top 4 inches of soil will be collected and retained onsite prior to disturbance and replaced in

the same approximate location following completion of project activities. If the surface topography is altered by the work, the surface will be re-contoured to existing conditions and the salvaged topsoil will be replaced.

### **Construction Measure [PG&E] / Mitigation Measure [LSPGC] BIO-B: Conduct Protocol-Level Surveys for Blunt-Nosed Leopard Lizard and Implement Avoidance Measures**

The following measure shall supersede and replace LSPGC APM BIO-15 for LSPGC project components and PG&E CM BIO-5 for PG&E project components, as presented in the PEA, for blunt-nosed leopard lizard:

- ▶ Prior to construction of project components in habitats suitable for blunt-nosed leopard lizard (i.e., annual grassland), at least two qualified biologists approved by the CPUC shall conduct surveys following measures in the *Approved Survey Methodology for the Blunt-nosed Leopard Lizard* (CDFW 20019 between April and September, including spring adult surveys and fall hatchling surveys. Biologists shall conduct visual search surveys while walking in parallel on adjacent transects that cover all areas within the project site with potential blunt-nosed leopard lizard habitat. Biologists shall stop periodically to scan the transect for blunt-nosed leopard lizard using close-focusing binoculars. The survey methods applied shall be commensurate with the anticipated level of disturbance, as described below.
- ▶ For project activities that could result in habitat removal:
  - ▶ A total of 12 adult surveys shall take place during the optimal survey period (April 15 to July 15) with a maximum of 4 survey days per week and 8 days within any 30-day time period. At least one survey session shall be conducted for 4 consecutive days, weather permitting.
  - ▶ A total of 5 additional hatchling surveys shall take place during the hatchling optimal survey period (August 1 to September 15).
- ▶ For operation and maintenance activities that would not result in habitat removal:
  - ▶ A total of 8 adult surveys shall take place during the optimal survey period (April 15 to July 15) with a maximum of 3 survey days per week and 6 days within any 30-day time period.
  - ▶ Fall hatchling surveys are not required for activities in this category.
- ▶ If blunt-nosed leopard lizards are observed, biologists shall record the location (UTM coordinates) of individuals and the presence of habitat features important for blunt-nosed leopard lizard (e.g., washes, playas, relative abundance of small mammal burrows). Because this species is designated as Fully Protected under the California Fish and Game Code, complete avoidance of take (i.e., hunting, pursuing, catching, capturing, or killing) is required, unless PG&E and/or LSPGC consult with CDFW and obtain an Incidental Take Permit pursuant to SB 147 (Statutes of 2023) and Fish and Game Code Section 2081.15. PG&E and/or LSPGC will adhere to the provisions and conditions of the Incidental Take Permit that may include compensatory mitigation and would fully mitigate impacts on the species. In the event Fish and Game Code Section 2081.15 is deemed by CDFW to be inapplicable such that incidental take is not permissible, PG&E and/or LSPGC shall initiate consultation with CDFW to determine how the project can be designed to completely avoid take of blunt-nosed leopard lizards and potentially occupied habitat.
- ▶ All blunt-nosed leopard lizard observations shall be reported to the CNDDDB within 30 days.
- ▶ If no blunt-nosed leopard lizards are observed during the survey period, then further mitigation for this species is not required. Surveys shall be accepted for one year from the date of completion.

### **Construction Measure [PG&E] / Mitigation Measure [LSPGC] BIO-C: Conduct Focused Surveys for Special-Status Reptiles and Implement Avoidance Measures**

- ▶ Within 14 days before the initiation of any construction activity, a qualified biologist approved by the CPUC shall conduct a focused visual survey of habitat suitable (i.e., annual grassland, scrub) for California glossy snake, coast horned lizard, and/or San Joaquin coachwhip in the project alignment area and a 100-foot buffer surrounding the project alignment area, which shall include walking linear transects.
- ▶ If California glossy snake, coast horned lizard, or San Joaquin coachwhip are not detected during the focused survey, the qualified biologist shall submit a report summarizing the results of the survey to LSPGC, PG&E, and the CPUC, and further mitigation shall not be required.
- ▶ If California glossy snake, coast horned lizard, or San Joaquin coachwhip are detected, a qualified biologist with an appropriate CDFW Scientific Collecting Permit that allows handling of reptiles shall be present during initial ground-disturbance activities and shall inspect the project site before initiation of project activities. If California glossy snake, coast horned lizard, or San Joaquin coachwhip are detected, the qualified biologist shall move individuals into nearby suitable habitat that will not be disturbed by project activities or will allow the individual to move out of the project area of its own volition if it is not in immediate danger.

### **Construction Measure [PG&E] / Mitigation Measure [LSPGC] BIO-D: Conduct Focused Surveys for Western Spadefoot Toads and Implement Avoidance Measures**

The following measure shall apply for LSPGC project components and shall supersede and replace PG&E CM BIO-6 for PG&E project components, as presented in the PEA, for western spadefoot toads:

- ▶ Within 48 hours prior to project implementation within areas containing habitat suitable for western spadefoot toad, a qualified biologist approved by the CPUC shall conduct focused surveys within identified work and access areas that are located in aquatic (i.e., vernal pool, wetland) and upland (i.e., annual grassland) habitats within approximately 860 feet (262 meters) of aquatic habitat (Baumberger et al. 2019) suitable for the species. Burrows that are unavoidable and considered potentially occupied by western spadefoot toads shall be identified and further examined by a qualified biologist (e.g., with a burrow scope, through hand excavation) to determine whether an adult toad is present in the burrow.
- ▶ If western spadefoot toads are not found, the qualified biologist shall submit a report summarizing the results of the survey to LSPGC, PG&E, and the CPUC, and further mitigation will not be required.
- ▶ If western spadefoot toads are detected during focused surveys, then adults, tadpoles, and egg masses shall be relocated by a qualified biologist with a valid CDFW scientific collecting permit to nearby suitable habitat that will not be disturbed by project activities. This relocation is considered adequate to reduce impacts below the level of significance under CEQA. Because western spadefoot is proposed for listing under the ESA, if the species is listed before construction activities begin, LSPGC and PG&E shall consult with the USFWS to determine whether additional measures or permitting is required to comply with the ESA.

### **Construction Measure [PG&E] / Mitigation Measure [LSPGC] BIO-E: Implement Survey Area Minimums, Survey Timing Standards, and Applicable Protocols for Special-Status and Other Native Birds**

The following measure shall supplement the requirements in APMs BIO-18 and BIO-20 (for LSPGC components) and CM BIO-8 (for PG&E components), as presented in the PEA, for special-status and other native birds:

- ▶ Pre-construction nesting bird surveys conducted pursuant to APMs BIO-18 and BIO-20 (for LSPGC components) and CM BIO-8 (for PG&E components) shall be conducted within work areas and accessible areas in the following buffers surrounding the work area:
  - ▶ 0.25 miles for Swainson's hawk;
  - ▶ 500 feet for northern harrier, short-eared owl, and other native raptors; and
  - ▶ 250 feet for other native bird species.
- ▶ Nesting bird surveys conducted pursuant to APMs BIO-18 and BIO-20 (for LSPGC components) and CM BIO-8 (for PG&E components) shall be conducted no more than 10 days prior to the start of construction activities during the nesting bird season (February 1 to September 15). Continuous construction within an area following a nesting bird survey will negate the need to repeat additional nesting bird surveys. If there is a five day or more lapse in project construction within an area, the nesting bird survey shall be repeated.
- ▶ Focused surveys for Swainson's hawk shall follow the protocols found in *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley* (Swainson's Hawk Technical Advisory Committee 2000).
- ▶ If an active nest is discovered during nesting bird surveys conducted pursuant to APMs BIO-18 and BIO-20 (for LSPGC components) and construction activities would occur during the nesting bird season, no-disturbance buffers shall be established. No-disturbance buffers shall be at least 0.25 miles for Swainson's hawk, 500 feet for northern harrier, short-eared owl, or other native raptors, 100 feet for non-raptor special-status birds, and 20 feet for other native birds (i.e., without special status). Any reduction in the no-disturbance buffer for special-status bird species shall require consultation with the CPUC-approved biologist, and would require additional measures, including biological monitoring to determine whether nesting birds are exhibiting disturbance behaviors, after which the no-disturbance buffer size shall be increased.
- ▶ No-disturbance buffers described in CM BIO-8 (for PG&E components) that would follow the most recent PG&E Nesting Bird Management Plan would be sufficient to maintain impacts on nesting birds at less than significant under CEQA.

### **Construction Measure [PG&E] / Mitigation Measure [LSPGC] BIO-F: Conduct Protocol-Level Surveys for Burrowing Owl and Implement Avoidance Measures**

The following measure shall supersede and replace APMs BIO-6 and APM BIO-10 (for LSPGC components) and CM BIO-7 (for PG&E components), as presented in the PEA, for burrowing owl:

- ▶ A qualified biologist approved by the CPUC shall conduct surveys for burrowing owls in areas of habitat suitable for the species on and within 1,640 feet of the work area. Inaccessible areas (e.g., adjacent private property) will not be surveyed directly, but the biologist may use binoculars or a spotting scope to survey these areas. A minimum of four surveys shall be conducted to determine whether burrowing owls occupy the site. Surveys shall be conducted according to Appendix D of the 2012 *Staff Report on Burrowing Owl Mitigation* prepared by the California Department of Fish and Game (now CDFW) (CDFG

2012) or any subsequent updated guidance. If feasible, at least one survey should be conducted between February 15 and April 15, and the remaining surveys should be conducted between April 15 and July 15, at least three weeks apart. Because burrowing owls may recolonize a site after only a few days, one of the surveys, or an additional survey, shall be conducted no less than 14 days before initiating ground disturbance activities to verify that take of burrowing owl would not occur.

- ▶ If no occupied burrows are found, the qualified biologist shall submit a report documenting the survey methods and results to LSPGC or PG&E and the CPUC, and no further mitigation shall be required.
- ▶ If an active burrow is found within 1,640 feet of pending construction activities, LSPGC or PG&E shall establish and maintain a buffer around the occupied burrow and any identified satellite burrows (i.e., non-nesting burrows that burrowing owls use to escape predators or move young into after hatching) to prevent take of the burrowing owls.
  - ▶ During the nonbreeding season (September 1 through January 31), the minimum buffer distance shall be 164 feet (50 meters). During the breeding season (February 1 through August 31), the minimum buffer distance shall be increased to 1,640 feet (500 meters).
  - ▶ The buffer may be adjusted if, in consultation with the CDFW, the qualified biologist determines that an alternative buffer shall not result in take of burrowing owl adults, young, or eggs because of particular site features (e.g., topography, natural line-of-sight barriers), level of project disturbance, or other considerations. If the buffer is reduced, the qualified biologist shall monitor the behavior of the burrowing owls during all project activities within 1,640 feet of the burrow. If the owls are disturbed or agitated (e.g., vocalizations, bill snaps, fluffing feathers to increase body size appearance, drooping wings and rotating them forward, crouching and weaving back and forth) by the project activities, the biologist shall have the authority to halt the activities and reestablish a buffer consistent with the first item above until the agitated behavior ceases and normal behavior resumes.
  - ▶ The buffer shall remain in place around the occupied burrow and associated satellite burrows until the qualified biologist has determined through noninvasive methods that the burrows are no longer occupied by burrowing owl. A previously occupied burrow will be considered unoccupied if surveys demonstrate that no owls have used the burrow for seven consecutive days.
  - ▶ Locations of burrowing owls detected during surveys shall be reported to the CNDDDB within 30 days.

### **Construction Measure [PG&E] BIO-G: Implement Limited Operating Period, Conduct Focused Surveys, and Implement Avoidance Measures for Crotch's Bumble Bee**

The following measure shall apply for PG&E project components and for Crotch's bumble bee:

- ▶ Initial ground-disturbing work (e.g., grading, vegetation removal, staging) in grassland habitat or edges of agricultural areas that contain grasses or forbs shall take place between August 15 and March 15, if feasible to avoid impacts on nesting Crotch's bumble bees.
- ▶ If the above limited operating period is not feasible (i.e., if limiting ground disturbance to the period between August 15 and March 15 would preclude achieving most of all of the project objectives) as determined by PG&E with concurrence from the CPUC, a qualified biologist approved by the CPUC, familiar with bumble bees of California and experienced using survey methods for bumble bees, shall conduct a habitat assessment and focused survey for Crotch's bumble bee before the start of any ground-disturbing activities in grassland habitat or edges of agricultural areas that contain grasses or forbs. Surveys shall be performed when Crotch's bumble bee is most likely to be identified, typically from April through August (i.e., the colony active period) when floral resources and ideal weather conditions

are present, and shall follow the methods in *Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species* (CDFW 2023). Surveys shall be conducted during the colony active period the same year as the start of planned construction activities.

- ▶ PG&E shall submit a survey report to the CDFW and the CPUC within 1 month of survey completion and shall notify the CDFW and the CPUC within 24 hours if Crotch's bumble bees are detected.
- ▶ If Crotch's bumble bees are detected during the focused survey, appropriate avoidance measures shall be implemented. Avoidance measures shall include, but not be limited to, the following:
  - ▶ Protective buffers shall be implemented around active nesting colonies until these sites are no longer active. A qualified biologist, in coordination with the CDFW, shall determine the appropriate buffer size to protect nesting colonies.
  - ▶ If nesting colonies are detected, avoidance areas shall be implemented in areas near the colony location that contain significant floral resources for the colony, if present. A qualified biologist shall determine the appropriate avoidance area size to protect foraging resources.
  - ▶ If project activities involving temporary disturbance (e.g., staging) would occur where a nesting colony was detected after the nesting colony is no longer active, the area shall be restored to original conditions after the temporary disturbance is complete such that habitat for Crotch's bumble bee would be available.
- ▶ If take of Crotch's bumble bee cannot be avoided, PG&E shall obtain an Incidental Take Permit (ITP) from the CDFW and shall implement all avoidance measures included in the ITP. The CDFW may also require compensatory mitigation through on-site habitat restoration or purchase of credits at an appropriate mitigation bank. Avoidance measures included in the ITP would reduce the likelihood of take of Crotch's bumble bees such that impacts on the species would be fully mitigated. These measures would include but not be limited to:
  - ▶ specifications for construction timing and sequencing requirements to avoid impacts on nesting Crotch's bumble bees;
  - ▶ pre-construction surveys conducted within 30 days prior to the start of ground-disturbing activities;
  - ▶ establishment of seasonal no-disturbance buffers around nest sites;
  - ▶ construction monitoring;
  - ▶ restrictions associated with construction practices, equipment, or materials that may harm bumble bees (e.g., BMPs to minimize the spread of invasive plant species); and
  - ▶ provisions to avoid Crotch's bumble bees or potential Crotch's bumble bees if observed away from a nest during project activity (e.g., ceasing of project activities until the animal has left the work area).
- ▶ Documentation of compliance with this mitigation measure and any required coordination with the CDFW or acquisition of an ITP shall be provided to the CPUC before commencement of any project construction activities.

### **Construction Measure [PG&E] / Mitigation Measure [LSPGC] BIO-H: Conduct Focused Surveys for Tulare Grasshopper Mouse and Implement Avoidance Measures**

Within 14 days before the initiation of any construction activity, a qualified biologist approved by the CPUC shall conduct a survey for potentially suitable burrows for Tulare grasshopper mouse in suitable shrub and grassland habitat in and within 100 feet of the project alignment area.

- ▶ If no burrows suitable for Tulare grasshopper mouse are found, the qualified biologist shall submit a report summarizing the results of the survey to LSPGC, PG&E, and the CPUC, and further mitigation will not be required.
- ▶ If potential Tulare grasshopper mouse burrows are detected, the qualified biologist shall conduct further investigation to determine whether the burrows are occupied by this species. Further investigation may include live trapping (with Sherman live traps; with an applicable CDFW scientific collecting permit) or noninvasive camera trapping for a minimum of 5 nights. Live trapping surveys associated with LSPGC components may be conducted in conjunction with giant kangaroo rat surveys conducted pursuant to APM BIO-7. The CPUC and CDFW shall approve all trapping plans prior to implementation.
- ▶ If burrows are determined to be occupied by Tulare grasshopper mice, APM BIO-10 shall be implemented for this species for LSPGC project components, and the following measures shall be implemented for PG&E project components consistent with APM BIO-3:
  - ▶ If occupied or potentially occupied burrows can be avoided by a minimum of 50 feet, then work can proceed.
  - ▶ If occupied or potentially occupied burrows cannot be avoided by 50 feet, then a qualified biologist shall stake and flag an appropriate work-exclusion zone and remain on site as a biological monitor.
  - ▶ If avoidance of Tulare grasshopper mouse burrows is not possible, the CDFW will be consulted, and species-specific mortality reduction or avoidance plans will be developed for agency review and approval, as appropriate. These plans may include, but will not be limited to the following:
    - Detailed description of trapping methodology,
    - Detailed burrow excavation methods,
    - Release location(s),
    - Detailed release methods,
    - Artificial burrow design and installation methods,
    - Description of exclusion fencing type and implementation, and
    - Identification of a wildlife rehabilitation center or veterinary facility capable of and willing to treat injured special-status species.
  - ▶ Any other construction activities that may adversely affect burrows occupied by Tulare grasshopper mouse (including movement of construction equipment and other activities outside of the fenced/paved areas within wildlife habitat) will be monitored by a qualified biologist. The monitor/inspector will have the authority to stop work activities upon the discovery of sensitive biological resources and allow construction to proceed after the identification and implementation of steps required to avoid or minimize impacts on sensitive resources.

### **Construction Measure [PG&E] / Mitigation Measure [LSPGC] BIO-I: Identify State or Federally Protected Wetlands in Unsurveyed Areas**

If, after implementation of APM BIO-1 (LSPGC) or CM GEN-1 (PG&E), it is determined that state or federal wetlands may be present in unsurveyed portions of the project alignment area, LSPGC and/or PG&E shall retain a qualified biologist, hydrologist, or wetland ecologist approved by the CPUC to prepare a formal delineation of the boundaries of state or federally protected wetlands that are within the project alignment area and may be directly or indirectly adversely affected according to methods established in the USACE wetlands delineation manual (Environmental Laboratory 1987) and the Arid West regional supplement (Environmental Laboratory 2008). The qualified biologist will also delineate the boundaries of wetlands that



may not meet the definition of waters of the United States, but would qualify as waters of the state, according to the state wetland procedures (SWRCB 2021).

### **Construction Measure [PG&E] / Mitigation Measure [LSPGC] BIO-J: Implement Avoidance Measures for State or Federally Protected Wetlands and Obtain Permits for Impacts on Wetlands**

- ▶ If potential state or federally protected wetlands identified in the project alignment area can be avoided, a qualified biologist approved by the CPUC shall establish a buffer around wetlands and mark the buffer boundary with high-visibility flagging, fencing, stakes, or clear existing landscape demarcations (e.g., edge of a roadway). The buffer will be a minimum width of 25 feet but may be larger if deemed necessary. The appropriate size and shape of the buffer zone shall be determined in coordination with the qualified biologist and will depend on the type of wetland present (e.g., seasonal wetland, seep, pond), the timing of project activities (e.g., wet or dry time of year), whether any special-status species may occupy the wetland and the species' vulnerability to the project activities, environmental conditions and terrain, and the project activity being implemented.
  - ▶ Project activities (e.g., ground disturbance, vegetation removal, staging) shall be prohibited within the established buffer. The qualified biologist shall periodically inspect the materials demarcating the buffer to confirm that they are intact and visible, and wetland impacts are being avoided.
- ▶ If it is determined that disturbance or fill of potential state or federally protected wetlands or waters cannot be avoided, LSPGC and/or PG&E shall submit the appropriate permit applications to the relevant regulatory agencies (e.g., USACE, RWQCB).
- ▶ If it is determined that fill of waters of the United States would result from project implementation, LSPGC and/or PG&E shall secure authorization for such fill from the USACE through the Section 404 permitting process. Any waters of the United States that would be affected by the project shall be replaced or restored on a no-net-loss basis in accordance with the applicable USACE mitigation guidelines in place at the time of construction. In association with the Section 404 permit (if applicable) and prior to the issuance of any grading permit, a Section 401 Water Quality Certification shall be obtained from the Central Valley RWQCB. For impacts on waters of the state that are not also waters of the United States and are therefore not covered by the 401 Water Quality Certification, the applicant shall apply to the RWQCB for Waste Discharge Requirements following the State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (SWRCB 2021). Any waters of the United States or waters of the state that are to be affected by the project shall be replaced or restored on a no-net-loss basis in accordance with the applicable USACE and SWRCB mitigation standards in place at the time of construction.
- ▶ If it is determined that disturbance or fill of state protected waters cannot be avoided, LSPGC and/or PG&E shall notify the CDFW before commencing activity that may divert the natural flow or otherwise alter the bed, or bank of any 1602 jurisdictional waterway. If project activities trigger the need for a Lake or Streambed Alteration Agreement, LSPGC and/or PG&E shall obtain such an agreement from the CDFW before the activity commences. LSPGC and/or PG&E shall conduct project construction activities in accordance with the agreement, including implementing reasonable measures in the agreement necessary to protect fish and wildlife resources, when working within the bed or bank of a lake or stream. These measures may include but shall not be limited to demarcation of the construction area, biological monitoring, environmental awareness training for construction crews, and compensatory measures (e.g., restoration, long-term habitat management) such that there would be no net loss.

## **Construction Measure [PG&E] / Mitigation Measure [LSPGC] BIO-K: Develop and Implement an Avian Protection Plan**

- ▶ PG&E shall implement its Avian Protection Plan, *PG&E's Program to Address Avian Electrocutions, Collisions, and Nesting Birds* (PG&E 2018), including all risk reduction measures and training and reporting requirements therein.
- ▶ LSPGC must follow the recommendations outlined in *Reducing Avian Collisions with Power Lines: The State of the Art in 2012* (APLIC 2012 or the most current version). In addition, LSPGC shall develop and implement an Avian Protection Plan according to the Avian Protection Plan Guidelines (APLIC and USFWS 2005). The plan shall include measures to minimize collision and electrocution risk to avian species during project operation. The plan shall be submitted for review to the CDFW and USFWS at least 60 days before construction begins.

### ***Cultural Resources***

## **Construction Measure [PG&E] / Mitigation Measure [LSPGC] CR-A: Conduct Built Environment Historical Resources Surveys for Built Environment Resources**

The following measure shall apply to LSPGC project and PG&E components and shall supersede and replace LSPGC APM CUL-2 and PG&E CM CUL-2, as presented in the PEA, for historic resources:

Prior to the start of construction, a qualified architectural historian who meets the U.S. Secretary of the Interior Professional Qualifications Standards for History or Architectural History and approved by the CPUC shall perform historical resources surveys for built environment features for any portion of the project alignment area not yet surveyed (e.g., private properties with access restrictions) within PG&E or LSPGC project component areas. PG&E and LSPGC shall be responsible for ensuring that historical resources surveys for built environment features are conducted throughout all portions of their respective project component areas. For the purposes of this mitigation measure, built-environment features 50 years and older discovered during surveys shall be assumed to be historical resources as defined by State CEQA Guidelines Section 15064.5, and depending on whether the location of the resource is in LSPGC's or PG&E's project area, either LSPGC or PG&E shall be required to comply with Mitigation Measure CR-B. All such resources will be recorded on a California Department of Parks and Recreation DPR 523 primary form or equivalent documentation by a qualified architectural historian.

## **Construction Measure [PG&E] / Mitigation Measure [LSPGC] CR-B: Protect Historical Built Environment Resources**

The following measure shall apply for LSPGC and PG&E project components and shall supersede and replace LSPGC APM CUL-2 and PG&E CM CUL-2, as presented in the PEA, for built environment historic resources:

If a built environment historical resource is identified in the project area, PG&E or LSPGC (as applicable, depending on whether the location of the resource is in LSPGC's or PG&E's project area) shall redesign the project to avoid direct or indirect impacts to the building or structure.

## **Construction Measure [PG&E] / Mitigation Measure [LSPGC] CR-C: Conduct Archaeological Resources Surveys and Avoid Archaeological Resources**

The following measure shall apply for LSPGC and PG&E project components and shall supersede and replace LSPGC APMs CUL-2 and CUL-3 and PG&E CMs CUL-2 and CUL-3, as presented in the PEA, for archaeological resources:

Prior to the start of construction, a qualified archeologist who meets the U.S. Secretary of the Interior Professional Qualifications Standards for Archaeology and approved by the CPUC shall perform archeological resources surveys for any portion of the project alignment area not yet surveyed (e.g., private properties with access restrictions) within PG&E or LSPGC project component areas. PG&E and LSPGC shall be responsible for ensuring that archeological resources surveys are conducted throughout all portions of their respective project component areas. For the purposes of this mitigation measure, all archaeological resources discovered during surveys shall be assumed to be unique archaeological resources or historical resources as defined by State CEQA Guidelines Section 15064.5 and will be recorded by a qualified archeologist on a California Department of Parks and Recreation DPR 523 primary form or equivalent documentation.

Each such resource will be indicated, such as via a GIS device, through environmentally sensitive areas (ESA) mapping, with flagging tape, safety fencing, and/or signage designating it as an Environmentally Sensitive Area to ensure that PG&E or LSPGC construction crews and heavy equipment will not intrude on these sites during construction. Mapping or GIS marking will be preferred in locations where there is a higher risk of site looting (e.g., near public roads, on land where the owner appears to be an artifact collector). At the discretion of PG&E or LSPGC, monitoring may be done in lieu of or in addition to marking.

If it is determined that the project, as currently designed, cannot avoid impacts on one or more of the sites, then PG&E or LSPGC (as applicable) shall redesign the project so that the archaeological sites will be completely avoided.

#### **Construction Measure [PG&E] / Mitigation Measure [LSPGC] CR-D: For All Ground-Disturbing Construction Activities, Halt Ground Disturbance Upon Discovery of Subsurface Archaeological Features**

The following measure shall apply for LSPGC and PG&E project components and shall supersede and replace LSPGC APMs CUL-2 and CUL-3 and PG&E CMs CUL-2 and CUL-3, as presented in the PEA, for archaeological resources:

In the event that any precontact or historic era subsurface archaeological features or deposits are discovered during construction, including midden (typically characterized by locally darkened soils containing artifacts or surrounding bedrock milling features), all ground-disturbing activity within 50 feet of the discovery shall be halted by construction personnel, and a qualified professional archaeologist who meets the U.S. Secretary of the Interior Professional Qualifications Standards for Archaeology and has been approved by the CPUC shall be retained to assess the significance of the find within 30 days. Assessment methods will depend on the nature of the resource but may include, but are not limited to, archival research, archaeological testing, and further recording. If the qualified archaeologist determines the archaeological material to be Native American in nature, LSPGC or PG&E shall contact the CPUC to identify the appropriate Native American tribe(s). The tribe(s) shall be contacted for their input on the preferred treatment of the find.

If the find is recommended as eligible for the California Register of Historic Resources (CRHR) by the archaeologist and determined eligible by the CPUC, the archaeologist shall develop, and PG&E or LSPGC (as applicable) shall implement appropriate procedures to protect the integrity of the resource and ensure that the resource is not subject to adverse impacts. Procedures to avoid impacts could include, but would not necessarily be limited to: preservation in place (which shall be the preferred approach) and, if necessary, further research (possibly including archaeological testing) to determine the boundaries of the resource. If it is determined that the project, as currently designed, cannot avoid impacts on any newly identified site, then PG&E or LSPGC (as applicable) shall redesign the project so that the archaeological sites will be completely avoided.

## *Noise*

### **Mitigation Measure N-A: Implement Measures to Reduce Exposure of Noise-Sensitive Receptors to Construction-Generated Nighttime Noise [LSPGC]**

Construction noise at Sensitive Receptor (SR) 1 (3,400 feet from the substation site) shall not exceed the County's nighttime noise threshold of 45 dBA between the hours of 9:00 p.m. and 7:00 a.m. To minimize noise levels during nighttime construction activities and maintain nighttime noise below the abovementioned County threshold, LSPGC could implement the following measures during nighttime construction work at the Manning Substation site:

- ▶ Maintain construction equipment and equip with noise-reduction intake and exhaust mufflers and engine shrouds, in accordance with manufacturer recommendations. Equipment engine shrouds shall be closed during equipment operation.
- ▶ Shut down motorized construction equipment when not in use to prevent idling.
- ▶ Locate construction equipment and staging areas as far as possible from nearby noise-sensitive land uses.
- ▶ Equip construction equipment with back-up alarms with either audible self-adjusting backup alarms or alarms that sound only when an object is detected.
- ▶ Install noise control devices on construction equipment, which may include but are not limited to: high-efficiency mufflers; acoustic dampening; protected internal noise absorption layers; enclosures; alternatively powered equipment; and electric motors.

LSPGC shall notify SR 1, the single-family residence on Manning Avenue near the proposed Manning Substation, of the expected nighttime work schedule at least 7 days in advance by mail, email, phone call, personal visit, or door hanger. The notice shall contain a contact and telephone number for receipt of any public complaints and questions. The contact shall be responsible for determining the cause of the complaint and implementing any possible measures to alleviate the problem. If unanticipated work, including in emergency situations, extends to the hours of 9:00 p.m. to 7:00 a.m., LSPGC will immediately notify the CPUC and notify SR 1 via mail, email, phone call or personal visit.