PACIFIC GAS AND ELECTRIC SOUTH OF PALERMO REINFORCEMENT PROJECT MITIGATION MONITORING, COMPLIANCE, AND REPORTING PROGRAM

Prepared for:

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Prepared by:



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TABLE OF CONTENTS

<u>Sec</u>	<u>ction</u>		Page No.
ACI	RONYN	IS AND ABBREVIATIONS	III
1	INT	RODUCTION	1
	1.1	Authority and Purpose of the Program	1
	1.2	Program Adoption Process	2
	1.3	Project Description	2
	1.4	Agency Jurisdiction	
2	ROL	LES AND RESPONSIBILITIES	9
	2.1	Organization Roles	9
	2.2	Responsibilities	
	2.3	Communication	
	2.4	Organizational Chart	
3	ENV	TRONMENTAL COMPLIANCE AND FIELD PROCEDURES	20
	3.1	Pre-construction Compliance and Reporting	
	3.2	Construction Compliance and Reporting	
	3.3	Minor Project Refinements	
	3.4	Records Management	
	3.5	Public Access to Records	
	3.6	Project Closeout	
4	MIT	IGATION MONITORING PROGRAM TABLE	34
	4.1	Using the Table	
	4.2	Effectiveness Review	
	4.3	Applicant Proposed Measures and Mitigation Measures	
	4.4	Assembly Bill 52 Compliance and Tribal Monitoring	
5	REF	ERENCES	64

EXHIBIT

2-1	Organizational	Chart	19
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DUDEK

TABLE OF CONTENTS (CONTINUED)

Page No.

TABLES

1-1	Estimated Construction Schedule	3
1-2	Required Permits and Approvals for the South of Palermo 115 kV Power Line	
	Reinforcement Project	4
1-3	Contact Information for Permitting Agencies Associated with the South of	
	Palermo 115 kV Power Line Reinforcement Project	6
3-1	PG&E Specialty Monitors Required during Construction	22
4-1	Applicant Proposed Measures and Mitigation Measures	

ATTACHMENTS

- A Project Overview Maps
- B Sample Site Inspection Form
- C Minor Project Refinement Request Form

ACRONYMS AND ABBREVIATIONS

Acronym/Abbreviation	Definition		
APM	applicant proposed measure		
СМ	Construction Manager		
CPUC	California Public Utilities Commission		
EM	environmental monitor		
EMM	Environmental Monitoring Manager		
EPM	Environmental Project Manager		
IS/MND	Initial Study and Mitigated Negative Declaration		
kV	kilovolt		
LEI	Lead Environmental Inspector		
MM	mitigation measure		
MMCRP	mitigation monitoring, compliance, and reporting program		
NCR	noncompliance report		
NTP	Notice to Proceed		
PG&E	Pacific Gas & Electric		
РМ	Project Manager		
SR-	State Route		
SWPPP	stormwater pollution prevention plan		

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1 INTRODUCTION

This chapter outlines the mitigation monitoring, compliance, and reporting program (MMCRP) to ensure effective implementation of the applicant proposed measures (APMs) and mitigation measures required by the California Public Utilities Commission (CPUC) Permit to Construct.

The Final Initial Study and Mitigated Negative Declaration for the South of Palermo 115 kV Power Line Reinforcement Project (Application No. A.16-04-023) (Final IS/MND; CPUC 2017) includes procedures for preparing and implementing an MMCRP to ensure compliance with APMs and mitigation measures approved in the Final MND. This MMCRP includes the information provided in Section G of the California Environmental Quality Act (CEQA) Guidelines (14 CCR 15000 et seq.), as well as specific protocols to be followed prior to and during construction by CPUC third-party environmental monitors (CPUC EMs) and Pacific Gas & Electric (PG&E) project staff.

The South of Palermo Reinforcement Project's (project's) MMCRP includes direct participation and commitment from PG&E and CPUC EMs. The success of the program depends on the project management staff, monitors, and construction contractor personnel. Therefore, the goal of the MMCRP is to provide a clear understanding of the project's organization, establish lines of communication, and effectively document and report compliance with all of the APMs and mitigation measures.

The MMCRP was developed to provide guidelines and standardize procedures for environmental compliance on the project. The procedures have been developed in coordination with PG&E, CPUC, and CPUC EMs to help define the reporting relationships, provide detailed information about the roles and responsibilities of the project's environmental compliance team members, define compliance reporting procedures, and establish a communication protocol.

1.1 Authority and Purpose of the Program

The California Public Utilities Code confers authority upon CPUC to regulate the terms of service and the safety, practices, and equipment of utilities subject to its jurisdiction. CPUC's standard practice, pursuant to its statutory responsibility to protect the environment, is to require that mitigation measures and/or APMs stipulated as conditions of approval are implemented properly, monitored, and reported on. In 1989, this requirement was codified statewide as Section 21081.6 of the California Public Resources Code. Section 21081.6 requires a public agency to adopt an MMCRP when it approves a project that is subject to preparation of a Final MND. CEQA Guidelines, Section 15097, was added in 1999 to further clarify agency requirements for mitigation monitoring or reporting (14 CCR 15097). CPUC views the MMCRP as a working guide to facilitate not only the implementation of APMs and mitigation measures

by the project proponent, but also the monitoring, compliance, and reporting activities of the CPUC and any monitors it may designate.

1.2 **Program Adoption Process**

APMs and mitigation measures for resource areas can be found in each resource section (Sections 5.1 through 5.18) of the Final MND (CPUC 2017), and in Section 4.3, Applicant Proposed Measures and Mitigation Measures, of this MMCRP. A draft version of the MMCRP was distributed to PG&E, CPUC, and CPUC EMs for review and comment.

1.3 Project Description

1.3.1 **Project Overview**

PG&E is proposing the South of Palermo 115 kV Power Line Reinforcement Project to reinforce the existing 115 kilovolt (kV) overhead electric power line system between the Palermo, Pease, Bogue, and Rio Oso Substations near the City of Oroville, and through a small portion of Marysville in Butte, Yuba, and Sutter Counties. The proposed project would replace the existing conductor and modify/replace existing lattice steel towers along approximately 59.5 miles of PG&E's existing Palermo–Rio Oso 115 kV transmission system. Proposed modifications to existing facilities would take place within PG&E's existing utility corridor.

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The project would consist of the following five segments:

- South of Palermo Line (38.7 miles) Located between Palermo Junction near the communities of Oroville and Palermo and Rio Oso Junction in the community of East Nicolaus.
- Palermo Sub-Line Segment (1.6 miles) Extends eastward approximately 1.6 miles from Palermo Junction to Palermo Substation, which is near the intersection of Stageline Road and Drescher Tract Road northeast of the community of Palermo.

- Pease Sub-Line Segment (5.2 miles) Extends approximately 5.2 miles west from the South of Palermo Line, crossing over the Feather River, State Route (SR-) 70, SR-99, and a small portion of Yuba City.
- Bogue Sub-Line Segment (6.4 miles) Extends approximately 6.4 miles west from the South of Palermo Line and crosses over the Feather River. It connects to the South of Palermo Line at Bogue Junction, near George Avenue in the unincorporated town of Olivehurst.
- Rio Oso Sub-Line Segment Loop (7.6 miles) Extends northeast from the South of Palermo Line at Rio Oso Junction to Rio Oso Substation on Hicks Road, and then loops back to Rio Oso Junction along an alignment to the south, for a total of approximately 7.6 miles.

Schedule

Project-related construction activities will not begin until pre-construction APMs and mitigation measure submittals have been satisfied. Once pre-construction APMs and mitigation measures have been completed, CPUC will issue a Notice to Proceed (NTP), indicating that construction can commence. The NTP may include CPUC or other agency conditions or requirements that must be satisfied prior to the start of work or during construction. Section 4.3 of this MMCRP lists the APMs and mitigation measures, the timing for completion, and whether CPUC review or approval is required before construction can commence. The construction elements are provided in Figure 1 and Figure 2 in Attachment A. Table 1-1 shows the estimated construction schedule by activity.

Duration (Months)	Project Activity
June 2018 – July 2019	LOCATIONS OUTSIDE OF ESA PERMIT AREAS: Bogue, Pease, Palermo, South of Palermo (SOP) north, SOP south
	ACTIVIITES: prepare work areas, winterize pullsites and landing zones, replace or modify structures, reconductor, remove foundations, and restoration.
April 2019 – July 2020	LOCATIONS IN ESA AREAS: Bogue, Pease, Palermo, Rio Oso, SOP north ACTIVITIES: prepare work areas, winterize pullsites and landing zones, replace or modify structures, reconductor, remove foundations, and restoration.
April 2020 – Sept 2021	SOP south (locations in ESA areas): prepare work areas, winterize pullsites and landing zones, replace or modify structures, reconductor, remove foundations, and restoration.

Table 1-1Estimated Construction Schedule

Source: PG&E 2018.

1.3.2 Construction Components

The APMs and mitigation measures listed in Section 4.3 of this MMCRP include the location and project component(s) in which the APM or mitigation measure applies. In general, the APMs and mitigation measures are applicable to all project components; however, certain measures are component and/or site specific. PG&E will ensure that site-specific APMs and mitigation measures are clearly identified.

1.3.3 **Project Documents**

This document is intended to provide pertinent information necessary to successfully implement the MMCRP during construction. The APMs and mitigation measures listed in Section 4.3 of this MMCRP can be found in the Final MND's Project Description and at the end of each issue area of the Final MND (CPUC 2017). Detailed discussions on the intent of each APM and mitigation measure and potential impacts that could result if the APMs and mitigation measures are not implemented properly are provided in Section 4.3 of this document.

1.4 Agency Jurisdiction

CPUC, as the lead agency, is responsible for ensuring that permit conditions imposed by jurisdictional agencies are implemented throughout construction. However, jurisdictional agencies may visit the project site from time to time and request information regarding the status of permit conditions. PG&E is responsible for satisfying requests from jurisdictional agencies and will notify and copy CPUC on all correspondence related to final approvals and verifications for the project if CPUC is not otherwise copied on the correspondence. Additional information on communication protocols can be found in Section 2.3, Communication, of this MMCRP. Table 1-2 lists permits and jurisdictional agencies associated with the project. Table 1-3 provides contact information for the permitting agencies.

Table 1-2Required Permits and Approvals for the South of Palermo 115 kV Power Line
Reinforcement Project

Permit/Authorization	Agency	Purpose			
	Federal				
Endangered Species Act Incidental Take Permit (either Section 10 Habitat Conservation Plan (HCP) or Section 7 Biological Opinion)	U.S. Fish and Wildlife Service	Potential impacts on federally listed species			
Section 106 Compliance (National Historic Preservation Act)	State Historic Preservation Officer (consulting through the U.S. Army	Consultation as necessary regarding impacts to cultural resources			

Table 1-2

Required Permits and Approvals for the South of Palermo 115 kV Power Line Reinforcement Project

Permit/Authorization	Agency	Purpose		
Federal				
	Corps of Engineers)			
Notification of Proposed Construction or Alteration	Federal Aviation Administration	Height increase of power line structures		
Section 404 Nationwide Permit (Clean Water Act)	U.S. Army Corps of Engineers	Potential impacts on wetlands		
	State			
Permit to Construct	California Public Utilities Commission	Overall project approval, CEQA review, and issuance of a Permit to Construct		
Lease	California State Lands Commission	Lease for the Pease segment crossing of the Feather River		
Section 2081 Incidental Take Permit or Consistency Determination 2080.1	California Department of Fish and Wildlife	Coverage for potential take of state-listed species		
Section 1602 Streambed Alteration Agreement		Coverage for modification of a streambed or bank		
Encroachment Permits	California Department of Transportation	Activities related to the placement of encroachments within, under, or over state highway rights-of-way		
National Pollutant Discharge Elimination System – General Construction Storm Water Permit (ministerial)	Central Valley Regional Water Quality Control Board	Stormwater discharges associated with construction activities disturbing more than one acre of land		
Section 401 Water Quality Certification (Clean Water Act)		Potential discharge into water body		
Encroachment Permits	Central Valley Flood Protection Board	Activities related to the placement of encroachments near levees or designated waters		
Local				
Encroachment Permit (ministerial)	Butte, Sutter, and Yuba Counties	Work within county roads/road rights-of-way or property, and railroads		

Table 1-3

Contact Information for Permitting Agencies Associated with the South of Palermo 115 kV Power Line Reinforcement Project

Δαρηογ	Address	Contact	Phone	Email Address
Agency	Address	Feison	FIIUIIE	Linai Audress
	ī	Lead	Agency	
California Public	505 Van Ness	Andrew Barnsda	lle, 415.703.3221	Andrew.barnsdale@cpuc.ca.gov
Utilities Commission	Avenue	Project Manager		
	San Francisco,			
	California 94102			
		Federal	Agencies	
U.S. Fish and	Sacramento Fish			lindsey_troutman@fws.gov
Wildlife Service	and Wildlife Office	Lindsey Troutma	in, 916.414.6620	
	2800 Cottage Way,	Fish and Wildlife		
	STE W-2605	Biologist		
	Sacramento, CA			
Otata Ulata da	95825			
State Historic	TDD	TDD	TDD	TRD
Preservation Officer	IBD	IBD	IBD	IBD
the U.S. Army Corps				
of Engineers)				
Federal Aviation	N/A	N/A	N/A	N/A
Administration				
U.S. Army Corps of	1325 J Street	Leah Fisher	916.557.6639	Leah.M.Fisher@usace.army.mil
Engineers (404	Sacramento, CA			
permit)	95814			

State Agencies				
California State Lands Commission	100 Howe Avenue, STE 100-South Sacramento, CA 95825	Marlene Schroeder	916.574.2320	Marlene.Schroeder@slc.ca.gov
California Department of Fish and Wildlife	1701 Nimbus Road, STE A Rancho Cordova, CA 95670	Patrick Moeszinger	916.358.2850	Patrick.Moeszinger@wildlife.ca.gov
California Department of Transportation	TBD	TBD	TBD	TBD
Central Valley Regional Water Quality Control Board (401 certification)	11020 Sun Center Drive, STE 200	Nicholas White	916.464.4856	Nicholas.White@waterboards.ca.gov
Central Valley Flood Protection Board	3310 El Camino Avenue, STE 170 Sacramento, CA 95821	Justin Logan	916.574.1050	Justin.Logan@cvflood.ca.gov
Regional and Local				
Encroachment Permit (ministerial)	TBD	TBD	TBD	TBD

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2 ROLES AND RESPONSIBILITIES

This chapter describes the roles and responsibilities of key project personnel with respect to the MMCRP and identifies project members responsible for implementing the MMCRP and their relationship to other staff working on the project. The information in this chapter establishes preliminary lines of communication within the project team.

2.1 Organization Roles

2.1.1 PG&E

PG&E Project Manager

PG&E's Project Manager (PM) will provide the overall direction, management, leadership, and corporate coordination for the construction project. The PG&E PM has overall responsibility for all aspects of project implementation and will ensure all environmental and permit-related compliance for the project. The responsibilities of the PG&E PM related to the environmental program include, but are not limited to, the following:

- Coordinating between financial, safety, public affairs, construction, engineering, land services, and environmental staff.
- Providing direction by integrating environmental compliance into all levels of the project organization.
- Communicating corporate coordination for all levels of the project organization.
- Ensuring financial support and effective corporate leadership and management of staff to comply with all project policies, requirements, and procedures.
- Ensuring compliance with project specifications, drawings, permit conditions, construction contracts, and applicable codes.
- Notifying Environmental Project Manager (EPM) of project schedule changes.
- Working with PG&E Environmental Project Management Team to evaluate and improve the implementation of the MMCRP as construction progresses.
- Providing leadership for the engineering, procurement, and construction services by integrating environmental responsibility into the project organization.
- Regularly facilitating project meetings.

PG&E Construction Manager and Construction Personnel

Construction activity may take place at any given time within multiple construction components. Construction crews will have significant responsibilities for implementation of and compliance with the environmental requirements of the project. The PG&E Construction Manager (CM) will oversee the day-to-day construction activities conducted by PG&E's construction crews or contractors. The construction crews will be responsible for incorporating all project environmental requirements into their day-to-day construction activities. Key environmental responsibilities for the CM include, but are not limited to:

- Verifying that all construction workers attend the project's environmental awareness training prior to beginning work on the project.
- Reviewing and understanding the environmental requirements.
- Working with the EPM and Lead Environmental Inspector (LEI) to implement and maintain APM and mitigation measure requirements and conditions during construction.
- Responding to requests by PG&E resource leads and EMs during construction.

PG&E Environmental Project Manager and Compliance Lead

PG&E's EPM is responsible for providing the appropriate level of resources for successful implementation of the MMCRP and will provide oversight of all activities required for compliance with the MMCRP. The EPM will provide management, direction, and leadership to the PG&E Environmental Project Management Team. Specific responsibilities of the EPM include, but are not limited to:

- Directing the development and implementation of the pre-construction environmental planning, permitting, and compliance activities.
- Ensuring the development and implementation of environmental awareness training.
- Ensuring all construction personnel receive environmental awareness training.
- Providing the leadership and resources to ensure compliance with the MMCRP.
- Actively communicating with the lead agencies, particularly in regard to the MMCRP.
- Ensuring frequent and clear communication between PG&E environmental staff, construction personnel, responsible resource agencies, and CPUC EMs.
- Establishing and supporting the lines of communication between the PG&E environmental staff, construction personnel, agencies, and EMs.

- Submitting construction status and MMCRP compliance reports to CPUC.
- Coordinating and tracking MMCRP compliance, including the submittal of bi-weekly MMCRP compliance reports and pre-construction submittals in order to receive NTPs.
- Reviewing and approving LEI inspection reports.
- Preparing Minor Project Refinement Request Forms or assisting PG&E crews or contractors with preparation of the requests.
- Coordinating the activities of the aesthetics, air quality, biological, cultural, greenhouse gas, hazards, water, land use, traffic, utilities, and noise APM and mitigation measure requirements, including environmental monitoring.
- Coordinating the development and implementation of the pre-construction environmental planning, permitting, and compliance activities.
- Actively communicating with all agencies respective to the above APM and mitigation measure requirements.
- Submitting reports to responsible resource agencies, as identified in APMs, mitigation measures, or permit conditions.
- Complete actions of LEI identified below if acting as both EPM and LEI.

PG&E Lead Environmental Inspector (if applicable)

PG&E's Lead Environmental Inspector (LEI) will support the EPM for successful day-to-day field implementation of the MMCRP. The LEI's responsibilities include, but are not limited to, the following:

- Coordinating with CPUC EMs as appropriate.
- Coordinating the mobilization of other resource specialists, including biological and stormwater pollution prevention plan (SWPPP) specialists, as required.
- Conducting inspections of construction activities and review of EM reports.
- Coordinating the assessment of work area conditions ahead of construction and providing advance notice of conditions and situations that require specific awareness, planning, or notifications.
- Working closely with the EPM, CM, and CPUC EMs to evaluate the effectiveness of APMs and mitigation measures.
- Providing coordination with the CM and construction and engineering groups to ensure APMs and mitigation measures are understood and implemented.

- Providing and documenting environmental awareness training for project personnel.
- Assisting the EPM with the preparation of Minor Project Refinement Request Forms.

PG&E Specialty Environmental Monitors

Several APMs and mitigation measures require a qualified specialty monitor during construction or in the event of cultural resource discoveries, as presented in Section 4.3 of this MMCRP. PG&E is to provide an on-site specialty monitor to meet the conditions of the APMs and mitigation measures identified in Section 4.3.

Contact information for all specialty EMs will be made available as consultant and contract personnel are finalized. The specialty EMs will provide oversight, protection, and direction for compliance within their field of expertise for the applicable construction components.

2.1.2 CPUC Roles

CPUC Project Manager

The CPUC PM, Andrew Barnsdale, has the overall responsibility for ensuring that APMs and mitigation measures are implemented as adopted by CPUC. He will determine the effectiveness of the MMCRP based on the success criteria included in the mitigation monitoring program tables. CPUC delegates field monitoring and reporting responsibilities to Dudek. The CPUC PM will oversee Dudek's work through telephone calls and review of bi- weekly or monthly compliance status reports. The CPUC PM will be notified of all noncompliance situations immediately by telephone call or email and may suggest measures to help resolve the issue(s). All Minor Project Refinement Request Forms will be submitted to the CPUC PM for review and approval.

The CPUC PM will issue several NTPs for project construction. In the event the NTP covers other jurisdictional lands, CPUC's NTP will authorize construction to start, but only in compliance with all relevant APMs, mitigation measures, and other required permit conditions. No construction may occur on other jurisdictional lands without specific approval (i.e., issuance of permits) by those agencies.

CPUC EMs

The overall monitoring program will be administered under the direction and oversight of the CPUC PM. CPUC has delegated daily monitoring and reporting responsibilities to Dudek, a third-party monitoring firm. The number of CPUC EMs and frequency of site inspections will depend on the number of concurrent construction activities and their locations with respect to sensitive resources

and land uses, and compliance with project APMs, mitigation measures, and permit conditions during construction.

The PG&E EPM has primary responsibility for ensuring that construction activities are conducted in accordance with approved project APMs, and mitigation measures, compliance plans, and permit conditions. The role of the CPUC EMs (Dudek) is to ensure and document that compliance is being achieved using verbal and written communications. Dudek EMs include the following:

- **CPUC Environmental Monitoring Manager.** The Environmental Monitoring Manager (EMM) supervises Dudek's EMs, as well as determining the appropriate level of inspection frequency, and is responsible for bi-weekly or monthly compliance status report preparation. The EMM also serves as the main point of contact with the CPUC PM for major issues and noncompliance discussions.
- **CPUC Environmental Monitors.** CPUC EMs will be an integral part of the project team, will stay apprised of construction activities and schedule changes, and will monitor construction activities for compliance with project APMs and mitigation measures, compliance plans, and permit conditions. The CPUC EMs will document compliance through maintaining daily logs and using an APM and mitigation measure tracking table. The CPUC EMs will also provide input for the draft bi-weekly or monthly compliance status reports. The CPUC EMs will note problems with monitoring, notify designated project members, and report the problems to the CPUC PM. The enforcement and shutdown authority of the CPUC EMs in the field is not limited to issues that address imminent danger to resources. However, these and all other issues will be brought to the attention of the PG&E EPM and the CPUC PM to address appropriately.

2.1.3 Mitigation Monitoring Program Contact List

A project contact list will be finalized prior to the start of construction. The contact list will include the names of PG&E monitoring staff, the CPUC PM, EMM, EMs, supervisory staff, and other members of the project team. The list will also include phone numbers, cell phone numbers, and email addresses where project members can be reached during construction. The contact list will be updated periodically and redistributed to the project team.

2.2 Responsibilities

2.2.1 Monitoring

As the lead agency under CEQA, CPUC is required to monitor this project to ensure that the required APMs and mitigation measures are implemented. CPUC will be responsible for

ensuring full compliance with the provisions of this monitoring program and has primary responsibility for implementation of the monitoring program. As mentioned in Section 2.1.2, CPUC Roles, CPUC has delegated monitoring responsibilities to a third-party monitoring firm. The CPUC EMs will be in the field on a regular basis, particularly when construction activities have the potential to impact a sensitive resource. Responsible agencies, such as the U.S. Fish and Wildlife Service, California Department of Fish and Wildlife, and Regional Water Quality Control Board, may elect to monitor construction or conduct a site visit during construction.

PG&E will have EMs on site as required by the conditions of APMs, mitigation measures, and resource agency permits. Subject matter experts (SMEs) will submit a report for each day of monitoring. PG&E shall be responsible for coordinating specialty monitors and assisting construction crews with interpreting APMs and mitigation measures and correcting compliance problems in a timely manner. EMs would also provide worker environmental awareness training, as required under APM-BIO-1; APM CR-1; APM-HAZ-2; APM HAZ-3 (see Section 4.3), as new workers arrive on the project.

2.2.2 Enforcement

CPUC and other jurisdictional agencies are responsible for ensuring compliance with mitigation measures and APMs, and for enforcing the procedures adopted for monitoring through the CPUC EMs assigned to each project component.

Per Resolution E-4550 (May 9, 2013), CPUC may impose fines in the event PG&E does not comply with APMs and mitigation measures. CPUC Safety and Enforcement staff (SED) will determine whether a fine is appropriate for noncompliance events consistent with Resolution E-4550. Examples of noncompliance that may result in fines being issued by CPUC SED staff include, but are not limited to, the following:

- Continuing construction after an authorized staff person has required construction to stop.
- Starting construction components that have not been approved through an NTP.
- Violating nest buffer zones.
- Encroachment into an exclusion zone or sensitive resource area designated for avoidance.
- Grading, line work, or other ground disturbance without required biological preconstruction surveys or biological monitor on site.
- Use of new access roads, overland travel routes, staging areas, or extra workspaces that have not been approved.
- Failure to properly maintain an erosion or sediment control structure.

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- Working outside of any time limitations identified in APMs/mitigation measures.
- Project personnel working without training.

Pursuant to Resolution E-4550, CPUC Advisory staff (Energy Division and Legal Division) shall meet and confer with PG&E prior to making a final decision on issuing a citation or fine.

Other jurisdictional agencies have the independent authority to halt construction, operation, or maintenance activities associated with the project within their respective jurisdictions if the activities are determined to be a deviation from the approved project or adopted APMs and mitigation measures or put a sensitive resource at undue risk.

2.2.3 Mitigation Compliance

PG&E is responsible for successfully implementing all the APMs and mitigation measures in the MMCRP. Standards for successful mitigation also are implicit in many APMs and mitigation measures that include such requirements as obtaining permits or avoiding a specific impact entirely. Additional mitigation success thresholds may be imposed by applicable agencies with jurisdiction through the permit process.

PG&E shall inform CPUC and its monitors in writing of any APMs and mitigation measures that are not or cannot be successfully implemented. CPUC, in coordination with its EMM and EMs, will assess whether alternative mitigation is appropriate and specify to PG&E the subsequent actions required.

2.3 Communication

Communication is a critical component of a successful environmental compliance program. In order to avoid project delays and possible shut-downs, environmental and construction representatives will need to interact regularly and maintain professional, responsive communications at all times. Similarly, PG&E employees or representatives will need to coordinate closely with CPUC EMM/EMs to address and resolve issues in a timely manner. Therefore, this section of the MMCRP provides a communication protocol to accurately disseminate information about ongoing surveys and APMs, mitigation measures, construction activities, contractors, and planned or upcoming work to all levels of the project team.

2.3.1 Pre-construction Kickoff Meeting

A pre-construction meeting will be held with CPUC, PG&E, and CPUC EMM/EMs to review the MMCRP and mutually agree on the project's communication protocol. Based on discussion at the meeting and input from each party, Chapter 3 of this document will be finalized and incorporated into the MMCRP. *The following section is an example of a typical communication protocol that provides a template from which the ultimate protocol can be derived as necessary.*

2.3.2 Construction Progress Meetings

PG&E will conduct field meetings with the PM, the CM, contract administrators, contractor supervisors, and PG&E's environmental representatives to discuss work completed, work anticipated for the following period, and the status of APMs and mitigation measures. The field meetings will also be a forum for discussing environmental compliance issues or concerns with the construction contractors. PG&E may request CPUC's PM, EMM, and EM(s) to participate in the meeting to help resolve any issue that may have arisen during the previous period. Alternatively, PG&E's or CPUC's EMM/EM(s) may recommend a separate meeting to discuss APMs, mitigation measures, minor project refinement requests, or other project-related issues.

In addition to construction progress meetings conducted at the field level, the PG&E PM, PG&E CM, PG&E EPM, and the CPUC EMM and/or CPUC PM may participate in a teleconference calls. The teleconference calls would be similar to construction progress meetings; however, the conference calls would focus on the MMCRP.

2.3.3 Daily Communication

Many of the problems that come up during construction can be resolved in the field through regular communication between CPUC EMs, and PG&E construction crews. Field staff will be equipped with cell phones and available to receive phone calls at all times during construction. The following subsections provide additional guidelines to ensure effective communication in the field.

CPUC EMs

The CPUC EMs' primary point of contact in the field is PG&E's EPM. The CPUC EMs will contact PG&E's EPM if an activity is observed that conflicts with one or more of the APMs or mitigation measures, so that the situation can be corrected. If the CPUC EMs cannot immediately reach PG&E's EPM, then the PG&E LEI will be contacted to address the problem. Similarly, the CPUC EMs will contact PG&E's EPM for information on where construction crews are working, the status of APMs and mitigation measures, and schedule forecasts. The CPUC EMs will not direct the construction crews; however, the EMs have the authority to stop work, assuming it is safe to do so, if an activity poses an imminent threat or puts a sensitive resource at undue risk (e.g., stopping a clearing crew from unknowingly clearing vegetation in an exclusion area).

PG&E

PG&E will provide the CPUC EMM and EMs with a list of construction monitoring personnel and construction supervisory staff to contact regarding compliance issues. The contact list will include each person's title, responsibility, and whether their position is segment specific. The contact list will be updated as new personnel are assigned to the project and redistributed as necessary.

PG&E will prepare and distribute a bi-weekly construction status and MMCRP compliance report (bi-weekly report) to key project members, including CPUC. The frequency of MMCRP compliance status reports may be modified if construction activities warrant an increase or reduction in reporting frequency, and if approved in advance by the CPUC PM. The CPUC PM will review the reports to ensure that the status of APMs and mitigation measures is consistent with observations in the field. Any questions regarding the status of APMs and mitigation measures will be directed to the PG&E EPM field representative. The environmental compliance status report will also be a tool to keep all parties informed of construction progress and schedule changes.

2.3.4 Questions and Clarifications

Questions and the need to clarify project requirements will periodically arise throughout the implementation process. Both PG&E and the CPUC shall submit important questions and clarifications in writing via email (e.g., full compliance with mitigation measures, procedures, and project changes). Email correspondence and compliance and monitoring reports should be used to document resolutions.

2.3.5 Construction Schedule

PG&E shall keep the CPUC team informed of delays in the construction schedule as contained in the MMCRP. In particular, PG&E shall inform the CPUC of any schedule changes that may affect implementation of the MMCRP. A construction schedule shall be submitted with all NTP requests, consistent with the Final MND.

2.3.6 Communicating Compliance Issues

Section 3.2.3, Compliance and Noncompliance Resolution Process, describes procedures to communicate issues/concerns with implementation of mitigation identified by the CPUC EMs during site inspections.

2.3.7 Coordination with Other Agencies

As discussed in Section 1.4, Agency Jurisdiction, several local, state, and federal agencies have jurisdiction over portions of the project. In addition, some of the APMs and mitigation measures are associated with specific permit conditions or agency input. PG&E will be responsible for contacting resource agencies and immediately notifying them of issues regarding their jurisdiction. The CPUC EMM and/or EMs may request copies of email correspondence, phone logs, or other documentation between PG&E and resource agencies to avoid direct involvement. However, if there is an unresolved issue regarding compliance with an APM, mitigation measure or project-related permit requirement under the jurisdiction of a resource, the CPUC EMM and/or EMs may elect to contact the agency to discuss resolution. The CPUC EMM and/or EMs will coordinate this call with PG&E and provide the opportunity to participate in the call.

2.4 Organizational Chart

Exhibit 2-1 is an organizational chart of CPUC and PG&E personnel that illustrates communication between these personnel. CPUC and PG&E are responsible for informing others about changes in staff.

Exhibit 2-1. Organizational Chart



*This chart depicts primary communication pathways only and does not preclude communication among various CPUC or project proponent field staff (e.g., Compliance Monitors, Environmental Consultants, and Construction Leads/Managers) and/or all Environmental Managers.

3 ENVIRONMENTAL COMPLIANCE AND FIELD PROCEDURES

3.1 **Pre-construction Compliance and Reporting**

PG&E may be required by the terms of the APMs and mitigation measures and the permitting requirements of various other regulating agencies to prepare plans and obtain approval of these documents, in addition to performing various surveys and studies prior to construction. To the extent plans and studies are required, copies of this documentation will be retained by the CPUC EMM and provided to CPUC with all files at the completion of the project. Any plans, surveys, studies, and other documentation required to be completed by PG&E before construction are listed in the APM and mitigation measure table in Section 4.3.

While these documents are being reviewed by the approving agencies, they are also reviewed by CPUC. Compliance with all pre-construction APMs and mitigation measures presented will be verified prior to construction, and construction may not start on any segment before PG&E receives a written NTP from the CPUC PM.

The CPUC EMM and/or EMs, including project management staff and technical experts, will review all mitigation plans and reports and provide comments. Resource agencies will also be involved in the review of applicable plans and reports, primarily restoration related, and will provide comments as required by resource agency permits. Comments on these documents will be provided to PG&E to ensure that they adequately accomplish the intended reduction in impacts. For required local and state agency permitting/consultations, the CPUC EMM and/or EMs will track PG&E's progress as it relates to PG&E's construction plans and project mitigation and permitting requirements. Based on PG&E's construction plans, CPUC may authorize construction to begin on a phased basis, and the CPUC EMM and/or EMs will handle pre-construction compliance review accordingly. CPUC may issue NTPs for construction of each phase separately, as soon as pre-construction compliance for that phase is satisfactorily accomplished.

CPUC will not authorize construction to begin until all pre-construction requirements for a given phase have been fulfilled. To save time, PG&E should identify all workspace required for each phase of construction prior to the start of active construction, so that the locations and their use can be included in the NTP.

3.1.1 NTP Procedures

The CPUC PM and Dudek will ensure that the NTP process is consistent with the adopted CEQA document. The NTP approval shall document that pre-construction APM and mitigation measure requirements, applicable surveys and studies, and project permit requirements have been met.

In general, an NTP request must include the following information:

- A description of the work
- Detailed description of the location, including maps, photos, and/or other supporting documents
- Verification that all APMs and mitigation measures have been met or do not apply to the work covered by the NTP request
- Verification that all applicable permit conditions or requirements, project parameters, or other project stipulations have been met for the work covered by the NTP request
- A request outlining what submittals are outstanding and how they will be met and approved in a timely manner prior to construction (if some outstanding compliance items cannot be met prior to issuance of the NTP)
- Up-to-date biological resource surveys or a commitment to survey and submit results prior to construction
- Cultural resource surveys or verification that no cultural resources would be significantly impacted
- All applicable jurisdictional permits or agency approvals (if necessary)
- Date of expected construction and duration of work

CPUC will review the NTP request and pre-construction requirement submittals per the steps outlined below to ensure that all information required to process the approval is included:

- 1. PG&E submits the NTP to the CPUC PM. CPUC will distribute the NTP request for review as follows:
 - a. To the team biological resources expert for review for biological resources. Review questions/comments will be provided in a letter or email.
 - b. To the team cultural resources expert for review of cultural resources. Review questions/comments will be provided in a letter or email.
 - c. The remaining portions of the NTP request will be sent to issue-area reviewers where appropriate.
- 2. CPUC will also review and, if needed, will prepare a bullet list of outstanding requirements and where additional information or clarification is needed.
- 3. All questions and comments, as well as required additional information or clarifications, will be sent to PG&E by CPUC in an email.

- 4. PG&E will supply clarifications and/or additional information to be added to the NTP request in a memo or letter format along with responses addressing all comments and questions forwarded by CPUC.
- 5. CPUC will complete a compliance status table documenting compliance and any outstanding requirements that can be made conditions of the NTP.
- 6. CPUC will review the draft NTP approval letter and send the approval and an updated compliance table to PG&E.
- 7. CPUC will then post the approved NTP documentation on the public CPUC project website.

3.2 Construction Compliance and Reporting

As the lead agency under CEQA, the CPUC is required to monitor the project to ensure that the APMs and mitigation measures are implemented. The Energy Division has primary responsibility for ensuring full compliance with the provisions of the monitoring program. The CPUC EM, under the supervision of the CPUC PM and EMM, will monitor construction activities in the project areas on a regular basis, particularly when construction activities have the potential to impact a sensitive resource.

3.2.1 PG&E Monitoring and Compliance Reports

The PG&E LEI will be on site as needed to coordinate specialty environmental monitors (such as biologists and archeologists), assist construction crews with interpreting APMs and mitigation measures, and help correct compliance problems in a timely manner. Several APMs and mitigation measures require PG&E to supply a specialty monitor with specific qualifications. These monitors and the related APMs and mitigation measures are identified in Table 3-1.

Specialty Monitor	Related APM or MM	
Qualified Biologist	APM BIO-1, APM BIO-2, APM BIO-3; APM BIO-4; APM BIO-9;	
	APM BIO-11; MM BIO-1; MM BIO-1	
Qualified Archaeologist	APM CR-2, APM CR-3	
Native American monitor	AB 52 sensitive areas monitoring	
Qualified Paleontologist	APM CR-4	

Table 3-1PG&E Specialty Monitors Required during Construction

PG&E will submit a bi-weekly construction status report to the CPUC on Friday showing the anticipated construction activities for the following two weeks. The bi-weekly construction status

report will include the type of work activity (e.g., vegetation clearing, grading, foundation installation, structure erection), the location of the work activity, and the day or days work is anticipated to take place. The CPUC compliance team will communicate with the PG&E EPM or LEI to confirm daily work locations and schedule as needed in order to convey unanticipated minor schedule changes.

PG&E will prepare and submit a bi-weekly MMCRP compliance report to the CPUC no later than the Tuesday following the second week of the reporting period. The MMCRP compliance report will include the following:

- Construction status update for all active work phases and a look-ahead work description and schedule for subsequent work.
- Compliance summary detailing compliance activities such as notable survey efforts, noncompliance incidents and their resolutions, preparation for implementation of mitigation measures for future work phases, recently submitted or processed project changes, a list of outstanding agency deliverables, and representative monitoring photographs. PG&E is required to keep accurate and detailed accounts of noncompliance incidents (and subsequent resolutions) as identified by the CPUC or as self-reported.
- Public Complaint Logs and Non-compliance Incident Reports, as detailed below.

3.2.2 CPUC Monitoring and Compliance Reports

As described in Chapter 2, Roles and Responsibilities, the CPUC EMs will perform compliance inspection throughout the construction period to ensure compliance with all applicable APMs, mitigation measures, plans, permits, and CPUC's conditions of approval. Site visits may be coordinated with PG&E or conducted unannounced. Supplemental information provided by PG&E, including pre-construction submittals, survey reports, bi-weekly MMCRP compliance reports, meeting notes, and agency correspondence, will also be used to verify compliance.

The CPUC EMs will document observations on site through the use of field notes and digital photography. The photos will be provided in the bi-weekly or monthly compliance status reports and correlate to a discussion of specific construction or compliance activity. In addition, field inspection forms will be used in the field to document compliance of specific crews, construction activities, or resource protection measures. The forms will provide a standardized checklist to facilitate inspections, as well as listing APMs and mitigation measures that were verified during the site visit. Information gathered from the inspection forms and field notes will be used to generate bi-weekly or monthly compliance status reports and update the status of APMs and mitigation measures listed in Section 4.3. A sample site inspection form has been included in

Attachment B. Bi-weekly or monthly compliance status reports will be provided to all permitting agencies via email, if required by agency permits, and/or posted on a CPUC public website during construction.

Separate enforcement actions by the regulatory agencies may not follow these steps. The CPUC EMM will use the site inspection forms and supplemental information provided by PG&E, including pre-construction plan submittals, survey result reports, bi-weekly MMCRP compliance reports, meeting notes, and agency correspondence to verify compliance. This information will be compiled into the bi-weekly or monthly compliance status report that Dudek will submit to the CPUC PM.

3.2.2 Non-compliance Reporting

If PG&E discovers a noncompliance incident of any magnitude, they must notify the CPUC EMM of the incident (self-report). Noncompliance incidents may also be discovered by the CPUC compliance monitoring team and brought to the attention of PG&E. For both self-reports and discoveries, the CPUC EMM may request an email or a formal noncompliance incident report from PG&E, either of which must include a description of the incident and corrective actions taken or proposed. Upon receipt of the noncompliance incident email or formal report, the CPUC EMM and/or PM will determine next steps for reporting and follow-up to reestablish compliance. The CPUC EMM or PM will assign the incident a noncompliance level and issue a noncompliance report to PG&E. PG&E must track all noncompliance incidents and document the incidents and implementation of corrective actions in their monthly reports (see Section 3.3.1 for reporting procedures).

3.2.3 Compliance and Noncompliance Resolution Process

The CPUC EMs and PG&E LEI or EPM shall document all observations and communications in a logbook and will determine whether the observed construction activities are consistent with APMs, mitigation measures, and project parameters, as adopted by CPUC. All compliance issues, regardless of level, will be documented in the field notes and bi-weekly MMCRP compliance and compliance status reports, which will be provided to all agencies upon request.

The CPUC EMs will not direct the work of construction crews. A construction activity that deviates from permit conditions, APMs, or mitigation measures, or occurs outside of approved work areas, particularly when the activity puts a resource at risk, would be considered a noncompliance issue. A noncompliance issue may also be reported by the PG&E PM, PG&E CM, PG&E EPM, PG&E LEI, and/or a CPUC EM if an APM or mitigation measure is not implemented according to the timing restrictions listed in the APM and mitigation measures table.

Examples of noncompliance include, but are not limited to, the following:

- Use of new overland access routes, access roads, staging areas, or extra workspaces not identified in the Permit to Construct (PTC) application or approved for use during construction
- Construction activity occurring in areas not identified in the PTC application or approved for use during construction
- Encroachment into an exclusion zone or sensitive resource area designated for avoidance
- Brush clearing outside the approved work limits
- Construction activity during seasonal activity restrictions
- Grading, soil disturbance, or line work without required biological pre-construction surveys or a required biological monitor on site
- Failure of erosion or sediment control structures if it puts a sensitive resource at risk
- Discharge of sediment-laden trench or foundation hole water into a water body or storm drain

PG&E will immediately notify the CPUC EMs and the CPUC EMM and PM if any noncompliance events occur, verbally or through email. PG&E will follow up with a detailed written report of the event within 24 hours or at a time agreed on with the CPUC PM. In the event the noncompliance is observed by a CPUC EM, the CPUC EM will immediately notify the designated PG&E representative of a noncompliance issue that requires immediate corrective action. A noncompliance report (NCR) that outlines the incident will be sent to PG&E from the CPUC PM. The NCR will list all actions required to bring the activity back into compliance and provide a timeline for follow-up. All NCRs and project memoranda will be made available upon request to agencies with resources that were potentially affected by activities reported in the NCR. If a construction activity or observed resource at immediate risk, the CPUC EMM and/or PG&E PM may elect to issue a project memorandum to get the issue corrected. Construction activities that could result in a project memorandum include, but are not limited to, the following:

- Failure to properly maintain an erosion or sediment control structure, without structural failure occurring
- Use of unapproved access routes (first offense)
- Project personnel beginning work on site without proof of training
- Work outside the approved work limits where the incident is within a previously disturbed area, such as a gravel lot

Through the issuance of project memoranda and NCRs, patterns of compliance issues can be discerned, preventive measures can be developed, and remedial work, if needed, can be scheduled.

Incident reports (e.g., reportable spills) would also be tracked in the bi-weekly MMCRP compliance reports. Repeated events that individually might not be considered noncompliant may become noncompliant if continued occurrences are observed and documented after the initial incident. In other words, repeated incidents will result in noncompliance.

Compliance and Noncompliance Violation Levels

Project compliance and noncompliance violation levels and the specific corrective actions are defined below. The compliance and noncompliance violation levels should be used by both the PG&E PM and CPUC EMs to document compliance levels throughout construction.

- Level 0 Compliance. This level indicates that all APMs, mitigation measures, and permit conditions are being complied with, and there are no violations. No corrective action is necessary.
- Level 1 Minor Deviation. This level indicates that a minor deviation from an APM or mitigation measure has been identified, and action is being taken in the field to immediately remedy the situation. No resources are being impacted, and no potential for resource damage exists. If a minor deviation is not expeditiously corrected, it could become a Level 2 Noncompliance issue.
- Level 2 Noncompliance. One or more aspects of an APM or mitigation measure have not been complied with, making the mitigation ineffective and resulting in minor impacts. If allowed to continue, this noncompliance could result in a significant impact over time. Noncompliance may also include one or more of the aspects of an APM or mitigation measure not being complied with and the implementation of an APM or mitigation measure being deficient or nonexistent, resulting in significant impact(s), or immediate threat of major, irreversible environmental damage or property loss. The protocol outlined above for an NCR shall be completed in the event noncompliance is identified by a CPUC EMs and/or the PG&E EPM or LEI.
- Level 3 Noncompliance: A Level 3 Noncompliance incident is an action that deviates from project requirements and results in major impacts, or has the potential to immediately result in major impacts, to environmental resources. These actions are not in compliance with the APMs, mitigation measures, permit conditions, and/or approval requirements (e.g., minor project changes, NTPs), and/or violate local, state, or federal law. Examples include irreparable damage to archaeological sites, destruction of active bird nests, and grading of unapproved areas with native vegetation. A Level 3

Noncompliance notice may also be issued if Level 2 incidents are repeated. Level 3 Noncompliance incidents may result in a full or partial project shutdown following a stop-work order from the CPUC PM.

All noncompliance activity will be reported by Dudek and/or the PG&E EPM or LEI to the CPUC PM via immediate notification or bi-weekly MMCRP compliance or compliance status reporting, depending on the severity of the noncompliance. Based on the severity or pattern of noncompliance activity, the CPUC PM has the authority to shut down project construction activities. If a shutdown of construction activity occurs, construction shall not resume until the CPUC PM authorizes it to do so. Dudek personnel will have the authority to shut down construction activities or redirect work on a component or site-specific basis to address issues of imminent harm to resources or other dangers to the general public. The CPUC will have authority to shut down construction on a project-wide scale.

3.2.4 CPUC Compliance Team Incident Response and Communication

The incident response communication process is described in detail below.

- A noncompliance incident may be discovered by the CPUC EMM (off site) or observed by the CPUC EM (on site) during a site visit.
- If the issue puts sensitive resources or human health and safety at risk and a stop-work order is warranted, the CPUC EMM will contact the CPUC PM and PG&E EPM immediately, as described further below. If the noncompliance incident does not require immediate resolution, the incident will be discussed in a phone call or email to the PG&E EPM or on the weekly conference call.
- If the incident is minor and can be easily resolved in the field by providing clarification to construction crews, if it requires immediate action to prevent an easily avoidable but serious environmental impact, or if time is needed to investigate a compliance incident further, the CPUC EMM will notify the CPUC PM, who may authorize a temporary hold. The temporary hold will be conveyed verbally by the CPUC EMM to the PG&E EPM to halt construction in a safe manner.
- Once the issue is resolved, and after the CPUC EMM consults with the CPUC PM, the EMM will verbally authorize the lift of the hold to PG&E EPM. If the issue is not fully resolved and/or requires further action and/or management discussions, the CPUC EMM will recommend that the CPUC PM issue a stop-work order or initiate a stand-down.
- If on-site PG&E environmental monitors/EPMs are unaware of the issue or are aware of an issue but do not act within a reasonable time period to resolve it, the CPUC EM team

may record the noncompliance in their reports. Level 1 minor deviations are generally recorded in the site inspection form but may also be identified by Environmental Monitors during review of monitoring reports. Level 2 or 3 incidents require consultation with the CPUC PM and are issued in separate formal reports to PG&E.

- PG&E should contact the CPUC PM immediately for serious noncompliance incidents and report minor noncompliance incidents via email and possibly a phone call. The CPUC EMM will send an email notification to the PG&E EPM to ensure tracking of the incident. The CPUC will typically not issue a noncompliance notice for a minor or Level 1 self-reported incident. Noncompliance incident reporting is described in additional detail in Section 3.4.4.
- Following the initial discovery or report, the CPUC EMM may request photographs, a written incident description, and other relevant information from PG&E staff concerning the cause and potential resolution of the issue. The CPUC EMM will direct PG&E to submit the information via email or through a formal noncompliance report, according to the incident severity. The CPUC EMM and/or PM may issue a follow-up noncompliance report from the CPUC for the same incident.
- All noncompliance incidents must be described and tracked in PG&E's monthly report, and will be noted in PG&E's monthly report to the CPUC PM. For serious noncompliance incidents, the CPUC PM may issue a stop-work order as described in Section 3.2.5. Work will be suspended within the affected area until a resolution can be planned and the CPUC PM authorizes the resumption of construction activities in writing.
- A stand-down may be initiated by the CPUC PM, CPUC EMM, or PG&E, as described in Section 3.2.5. In this case, work will be halted temporarily to discuss a current compliance concern and/or re-align compliance activities as appropriate.
- Issues that are not resolved within the length of time agreed upon by PG&E and the CPUC EMM will be subject to further noncompliance notices and potential stop-work orders.
- Serious or emergency compliance incidents that occur on the weekend or after normal business hours (8:00 a.m. to 5:00 p.m.) will be addressed by staff identified as emergency contacts.
- Permitting agencies may require notification if there is an incident that relates to an agency's jurisdiction over the project. PG&E shall be responsible for notifications to permitting agencies and shall provide copies of official notifications and submittals sent to other agencies to the CPUC. If the CPUC finds that a notification to another agency is required, the CPUC may direct PG&E to notify the other agency.

3.2.5 Construction Halts and Stop-Work Orders

Several scenarios may occur during project construction for which the CPUC Environmental Monitoring Team may need to communicate immediately with field staff to halt construction activity (when it is safe to do so), including the following:

- A **temporary hold** is a short-term (i.e., less than 8 hours) cessation of construction activities that could be called by CPUC EMs. This hold would be implemented in circumstances where a minor clarification of a mitigation measure or resolution of a minor issue by the field compliance crews is necessary and construction halt is necessary to ensure environmental compliance where a resource is at risk, or where a serious environmental infraction could occur without immediate intervention. CPUC EMs would consult with the CPUC PM or EMM in the case of a temporary hold and are authorized to end the hold with clear communication to the PG&E EPM and PG&E LEI, if the monitor confirms that environmental compliance will be achieved. Depending on the issue, a temporary hold could transition to a stop-work order (below).
- In the event of a serious noncompliance or safety issue (e.g., unauthorized take of a listed species; repeated, high-level noncompliance incidents concerning the same resource; or serious worker injury), the CPUC may elect to issue a **stop-work order**. The stop-work order would be issued in writing by the CPUC PM and may require work to stop on all or portions of the project, or on certain construction activities, for a time period determined by the CPUC PM on a case-by-case basis. The stop-work order would also include a timeline for resolution of the situation and any potential recommendations from the CPUC compliance team. Resolution of the compliance issue would be communicated in writing by PG&E to the CPUC PM, who would then issue an end to the stop-work order in writing. The applicant would be required to implement any temporary hold or stop-work order in a responsible manner to avoid hazards to public health and safety, as well as to environmental resources. Certain activities cannot be safely halted mid-course, and all work areas must be first safely secured for protection of humans and wildlife prior to complete cessation of work. Additionally, as appropriate, the applicant should address any serious safety issues by calling 911 immediately.
- Either the CPUC PM or EMM, or PG&E, may initiate a construction **stand-down** to discuss resolution of a noncompliance or safety issue. A stand-down differs from a stop-work order in that the issue at hand would not immediately result in serious consequences, but requires an overall re-alignment of protocols or practices to ensure continued compliance or safety. The stand-down could require work to stop on all, or a portion, of the project for up to one full day, or until a process and schedule for resolution can be determined by CPUC staff and PG&E. The purpose of the stand-down would be to give

PG&E the opportunity to re-train construction personnel, confer with management staff to achieve resolution, and/or discuss an issue with the CPUC EMM or PM. As indicated, a stand-down can be a voluntary action by PG&E and should be issued in writing (email is acceptable) with clear timelines and recommendations stated. Resolutions resulting from a stand-down should be submitted in writing to the CPUC PM. A stand-down initiated by PG&E does not require approval by the CPUC to re-start work.

3.2.6 Public Complaints

The public may complain about the project; therefore, PG&E shall provide summaries of public complaints specific to project APMs and mitigation measures in bi-weekly MMCRP compliance reports, including how each complaint was addressed. The CPUC EMs and/or PM will coordinate with PG&E's PM or EPM who will work with PG&E's Regional Public Affairs Manager to determine the adequacy of corrective actions or additional measures to be implemented, as necessary.

Public complaints will not reflect negatively on PG&E's environmental compliance record unless a specific project requirement, permit, or plan requirement was violated.

3.2.7 CEQA Citation Program

See Section 2.2.2, Enforcement

3.3 Minor Project Refinements

The CPUC Energy Division may approve requests by PG&E for minor project refinements that may be necessary to complete the project due to final engineering or other reasons. Minor project refinements cannot create a new significant impact or a substantial increase in the severity of a previously identified significant impact, based on the thresholds used in the environmental document. Minor project refinements cannot require new conditions for approval, without which the proposed refinements would result in a new significant impact or a substantial increase in the severity of a previously identified significant impact. Minor project refinements cannot conflict with any APM, mitigation measure, or applicable law or policy or trigger an additional permit requirement. Specifically, minor project refinements must not change APMs or mitigation measures. Minor project refinements must be located within the geographic boundary of the project study area of the Final MND. PG&E may seek project refinements by a petition to modify the decision.

Requests for staff approval of a project change must be made in writing and should include the following:

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- A detailed description of the proposed refinements, including:
 - An explanation of how the project refinement would deviate from the current project (include photos)
 - The original condition as described and approved
 - Justification for change
 - Maps and figures
 - Environmental impacts
 - Concurrence with other relevant agencies
- Whether certain resources are present within the proposed refinement (e.g., biological or cultural resources), and whether those resources were included in original baseline surveys and/or previous analysis (also include more recent pre-construction surveys, if applicable)
- Identification of applicable CEQA sections and potential impacts of proposed refinements, including original and new levels of impact and avoidance/minimization measures to be taken.

The CPUC PM or EMM may request additional information, agency consultation, or a site visit in order to process the request. Possible examples of project refinements that may be approved by staff after final engineering include, but are not limited to:

- Adding a temporary extra work area (for the duration of construction) or substituting a work area, including laydown and staging, for another work area that is as suitable or more suitable than the originally proposed work area. The temporary extra work area or substitute work area must be located in a disturbed area with no sensitive resources or sensitive land uses adjacent to the proposed work area, must not create any permanent impacts, and must be restored to either its initial condition or an improved condition.
- Adjusting the alignment of a project within the study area, but outside the identified footprint, that was used in the original environmental analysis to avoid unanticipated impacts related to cultural artifacts, buried utility infrastructure, hazardous and toxic substances, and other land use impacts including effects on homeowners, so long as the adjustment does not create a new impact or a substantial increase in the severity of a previously identified impact.
- Adjusting the alignment of a project within the study area, but outside the identified footprint, that was used in the original environmental analysis to avoid or adapt to conditions on the ground that vary from the conditions that existed at the time of the

original environmental analysis, so long as the adjustment does not create a new impact or a substantial increase in the severity of a previously identified impact.

To initiate a project refinement request, PG&E will fill out a Minor Project Refinement Request Form (see Attachment C), prepare the appropriate supporting documentation, and obtain the required signatures. PG&E will complete and submit the Minor Project Refinement Request Form and supporting documentation by email (scanned copy) to CPUC with a copy to Dudek.

3.4 Records Management

Electronic Submittals

All required documentation from PG&E, including plans, permits, reports, and staff qualifications as required by APMs and mitigation measures, will be maintained by PG&E on a SharePoint site with access to these documents provided to CPUC and Dudek. If CPUC is not directly involved with the coordination effort, PG&E shall provide CPUC with electronic records (i.e., emails, permits, and authorizations) related to final agency approvals for the project. Further, pursuant to Public Utilities Code section 314, PG&E must also provide the CPUC with copies of permit amendments and modifications in addition to notifying the CPUC of proposed permit changes. The electronic records may be submitted by email or transmitted via PG&E's SharePoint (or equivalent) site.

On-site Documentation

In addition, copies of the MMCRP and all applicable plans and permits compiled prior to and during construction (e.g., SWPPP, Helicopter Use Plan, etc.) shall be available on site (e.g., construction trailer), and all supervisory staff working on the project should be familiar with their contents.

Administrative Record

The CPUC EMM and other members of the Dudek team will compile all required documentation submitted by PG&E into the project's Administrative Record during construction and will confirm that the record is complete after completion of all activities required by the adopted APMs and mitigation measures. The CPUC EMM will also use this documentation to create a final environmental compliance report or presentation for the CPUC PM that will discuss APM and mitigation measure implementation and success, with the goal of identifying lessons learned that can be applied to future projects.

3.5 Public Access to Records

The public is allowed access to records and reports used to track the monitoring program. Monitoring records and reports will be made available by CPUC for public inspection on request. In order to facilitate public awareness, CPUC will make bi-weekly or monthly compliance status reports and other pertinent project documents accessible on their website at http://www.cpuc.ca.gov/environment/info/dudek/Palmero/index.htm

3.6 Project Closeout

PG&E will send notification to CPUC when all construction activities associated with the PTC have been completed. Following notification being provided to the CPUC, a site inspection of all work areas will be performed by the CPUC EM or EMM to verify compliance with mitigation measures related to project closeout. The CPUC will then submit a memorandum to PG&E following the site inspection to identify any work areas that require corrective actions to ensure commitment with applicable APMs/mitigation measures. Upon all corrective actions being completed, field verified, and signed-off by the CPUC, the construction monitoring and reporting program will be closed out for the project.

Daily inspection and bi-weekly or monthly compliance status reports will then be filed and used by Dudek to prepare a final environmental compliance report for the project. The final report will provide a discussion on how each APM and mitigation measure was implemented and include copies of submittals required for compliance. In addition, the success criteria will be evaluated and used for future projects.

4 MITIGATION MONITORING PROGRAM TABLE

4.1 Using the Table

Section 4.3 lists the APMs and mitigation measures included in the Final MND. The mitigation monitoring program table is the core document for environmental requirements on the project and will be the primary guideline for determining compliance with the MMCRP. A copy of the table should be kept with each crew working on site, and all supervisory staff working on the project should be familiar with its contents.

CPUC will use a modified version of the APM and mitigation measures table during the preconstruction planning and construction monitoring phases of the project to accurately track the status of APMs and mitigation measures. The tables will be sorted and divided into pre-construction measures and measures to be implemented during construction. Similarly, a separate table listing APMs and mitigation measures that require CPUC approval may be generated.

4.2 Effectiveness Review

CPUC may conduct a comprehensive review of conditions that are not effectively mitigating impacts at any time it deems appropriate. If in review CPUC determines that any conditions are not adequately mitigating significant environmental impacts caused by the project, then CPUC may impose additional reasonable conditions to effectively mitigate these impacts. These reviews will be conducted in a manner consistent with CPUC's rules and practices.

4.3 Applicant Proposed Measures and Mitigation Measures

Table 4-1 provides the APMs and mitigation measures that compose the mitigation monitoring program, including implementation actions, monitoring requirements and effectiveness criteria, and timing and location of actions.

4.4 Assembly Bill 52 Compliance and Tribal Monitoring

Following site visit and consultation as part of Assembly Bill 52, Auburn Rancheria Tribes' archeologists have requested additional tribal monitoring for construction active 0.25 miles either side of Bear River.

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APM Number	Description	Implementation Action	Monitoring Requirements and Effectiveness Criteria	Timing and Location of Actions
	Agricultural a	and Forestry Resources		
APM AG-1	 Coordinate with Landowners Prior to Construction and During Restoration Efforts PG&E will coordinate with landowners prior to construction and during restoration efforts. Measures to be implemented may include, but are not limited to, the following: Provide written notice to landowners outlining construction activities and restoration efforts. 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 may provide compensation to the farmer and/or landowner in coordination with the landowner. 	PG&E to implement measure as defined.	PG&E to provide a copy of written notification communication to CPUC. PG&E to provide summary of landowner compensation to CPUC, as applicable. PG&E to provide photo documentation to CPUC, as applicable.	Prior to and post- construction at locations in agricultural areas.
	 Complete pre-project, post-project, and post-restoration site visit with landowners. Take photos of pre-project, post-project, and post-restoration conditions in the affected areas. 			
		Air Quality	<u>.</u>	
APM AQ-1	 Implement Feather River Air Quality Management District (FRAQMD) Standard Construction Mitigation Measures The project applicant shall implement the following standard construction mitigation measures (SMMs) required by the FRAQMD to help reduce construction-related emissions. Note that some FRAQMD SMMs are not listed below, as they are included in the APM identified in APM GHG-1, Greenhouse Gas Emissions [of the PEA]. Implement the Fugitive Dust Control Plan. PG&E shall prepare and submit a Fugitive Dust Control Plan to the 	PG&E to implement measure as defined. PG&E to submit Fugitive Dust Control Plan to FRAQMD and comply with the Plan and other measures during construction.	PG&E to provide a copy of approved Fugitive Dust Control Plan to CPUC. CPUC to inspect periodically that dust and traffic control measures are being implemented.	Prior to and during construction.

APM Number	Description	Implementation Action	Monitoring Requirements and Effectiveness Criteria	Timing and Location of Actions
	 FRAQMD to help reduce construction-related fugitive dust emissions. The Fugitive Dust Control Plan must be submitted by PG&E to the FRAQMD prior to the commencement of construction activities. Utilize existing power sources (e.g., power poles) or clean fuel generators rather than temporary power generators, as practical. Implement a traffic plan to minimize traffic flow interference from construction activities. The above measures will be applied across the entire project area. 	Traffic plans to be prepared and implemented in conjunction with APM TRA-1.		
APM AQ-2	 Implement Butte County Air Quality Management District (BCAQMD) Construction Best Practices PG&E shall implement the following standard construction best practices recommended by the BCAQMD to help reduce construction-related emissions. Note that some BCAQMD construction best practices are not listed below, as they are identified in APM GHG-1. 1. Diesel PM Exhaust from Construction Equipment a. Avoid idling, staging, and queuing of diesel equipment within 1,000 feet of sensitive receptors. b. Install diesel particulate filters or implement other California Air Resources Board (CARB)-verified diesel emission control strategies. c. To the extent feasible, construction truck trips shall be scheduled during non-peak hours to reduce peak hour emissions. 2. Fugitive Dust: The following is a list of measures that may be required throughout the duration of the construction activities: a. Reduce the amount of the disturbed area where possible. 	PG&E to implement measure as defined.	PG&E to provide available documentation of equipment compliance with measure. PG&E to provide a copy of contact sign to CPUC. CPUC to inspect periodically that dust control measures and idling restrictions are being implemented.	Prior to and during construction.

APM Number	Description	Implementation Action	Monitoring Requirements and Effectiveness Criteria	Timing and Location of Actions
	 Use water trucks or sprinkler systems in sufficient quantities to prevent airborne dust from leaving the site 			
	 c. All dirt stockpile areas should be sprayed daily as needed, and covered. 			
	d. Exposed ground areas that will be reworked at dates more than 1 month after initial grading should be sown with a fast-germinating noninvasive grass seed and watered until vegetation is established.			
	 All disturbed soil areas not subject to revegetation should be stabilized using approved chemical soil binders or jute netting. 			
	 f. Vehicle speed for all construction vehicles shall not exceed 15 mph on any unpaved surface at the construction site. 			
	g. All trucks hauling dirt, sand, soil, or other loose materials are to be covered or should maintain at least 2 feet of freeboard (minimum vertical distance between top of load and top of trailer) in accordance with local regulations.			
	 Post a sign in a prominent location visible to the public with the telephone numbers of the contractor and Air District for any questions or concerns about dust from the project. 			
	The above measures will be applied across the entire project area.			
APM AQ-3	Off-Site Mitigation Measures in FRAQMD	PG&E to enter into	PG&E to provide	Prior to construction.
	PG&E shall enter into an off-site mitigation agreement with the ERAOMD to offset construction emissions in excess of 4.5 tons	agreement required by	documentation of payment to	
	per year of NOX to levels below the FRAQMD's 4.5 tons per			
	year significance threshold. The off-site mitigation rate shall be			
	based on the current project cost effectiveness factor from the			

APM Number	Description	Implementation Action	Monitoring Requirements and Effectiveness Criteria	Timing and Location of Actions
	Carl Moyer Memorial Air Quality Standards Attainment Program. The current off-site mitigation rate is \$18,030 per ton of O3 precursor emissions (NOX or ROG) over the District threshold calculated over the length of the expected exceedance.			
	Biolog	gical Resources		
APM BIO-1	Conduct Worker Environmental Awareness Training Program A qualified biologist will develop an environmental awareness training program that is specific to the project. All on-site construction personnel will attend the training before they begin work on the project. Training will include a discussion of the avoidance and minimization measures that are being implemented to protect biological resources as well as the terms and conditions of project permits. Training will include information about the federal Endangered Species Act and the California Endangered Species Act, special-status species as defined in this chapter, and the consequences of noncompliance with these acts. Under this program, workers will be informed about the presence, life history, and habitat requirements of all special- status species that may be affected in the project area. Training also will include information on state and federal laws protecting nesting birds, wetlands, and other water resources. An educational brochure will be produced for construction crews working on the project. The brochure will include color photos of sensitive species as well as a discussion of relevant APMs. In particular, construction personnel will be directed to stop work and contact the biological monitor if special-status species are observed.	PG&E to provide a qualified biologist and implement a Worker Environmental Awareness Training Program.	PG&E to provide a copy of Worker Environmental Awareness Training Program materials to CPUC. PG&E to provide resume of qualified biologist to CPUC. PG&E to provide a copy of the educational brochure to CPUC.	Prior to construction.

APM Number	Description	Implementation Action	Monitoring Requirements and Effectiveness Criteria	Timing and Location of Actions
APM BIO-2	Conduct Preconstruction Survey(s) For Special-Status Species and Sensitive Resource Areas A qualified biologist will conduct pre-construction survey(s) for special-status species and sensitive resource areas immediately prior to construction activities within suitable aquatic and upland habitat for special-status species. If a special-status species is encountered during the pre-construction survey(s), PG&E will be contacted immediately to determine the appropriate course of action. For state- or federally listed species, PG&E will contact the appropriate resource agency (California Department of Fish and Wildlife (CDFW) and/or U.S. Fish and Wildlife Service [USFWS]), as required.	PG&E to conduct preconstruction surveys as defined. PG&E to contact USFWS and/or CDFW, as applicable.	PG&E to provide survey report documentation to CPUC. PG&E to provide documentation to the CPUC of communication with USFWS and/or CDFW, as applicable.	Prior to construction at areas near sensitive species habitat.
APM BIO-3	Identification and Marking of Sensitive Resources Sensitive biological resource areas identified during pre- construction surveys in the project area will be clearly marked in the field or on project maps. Sensitive resource areas will include active bird nests within specified buffer zones (see APM BIO-11), special-status plants, special-status vegetation types, vernal pools and wetland boundaries in/or adjacent to work sites. Such areas will be avoided during construction to the extent practicable.	PG&E to mark sensitive biological resources, as defined and where applicable. PG&E to avoid sensitive biological resources, as defined.	CPUC to inspect periodically that marking is in place, as applicable, and that sensitive biological resources areas are being avoided.	Prior to and during construction in and around sensitive biological areas.
APM BIO-4	Biological Monitoring A qualified biologist will monitor ground-disturbing activities in and adjacent to areas identified in APM BIO-3 to ensure compliance with best management practices (BMPs) and APMs, unless the area has been protected by barrier fencing to protect sensitive biological resources and has been cleared by the qualified biologist. The monitor will have authority to stop or redirect work if construction activities are likely to affect sensitive biological resources.	PG&E to provide a qualified biologist to monitor sensitive biological resource areas during ground disturbing activities, as defined. PG&E to obtain authorization from	PG&E to provide resume of qualified biologist to CPUC. CPUC to inspect periodically that biological monitor is present, where applicable. PG&E to provide	During construction in work areas near sensitive species habitat.

APM Number	Description	Implementation Action	Monitoring Requirements and Effectiveness Criteria	Timing and Location of Actions
	If a listed wildlife species is encountered during construction, project activities will cease in the area where the animal is found until the qualified biologist determines that the animal has moved out of harm's way, or, with prior authorization from the U.S. Fish and Wildlife Service (USFWS) and/or California Department of Fish and Wildlife (CDFW), if required, the qualified biologist relocates the animal out of harm's way and/or takes other appropriate steps to protect the animal. Work may resume once the qualified biologist has determined that construction activities will not harm any listed wildlife species. The PG&E authorized biologist will be responsible for any necessary reporting to USFWS and/or CDFW, including unexpected take of listed wildlife species.	USFWS and/or CDFW, if necessary, and as defined. PG&E to report to USFWS and/or CDFW, if necessary, and as defined.	documentation to the CPUC of authorization from and/or reporting to USFWS and/or CDFW, as applicable.	
APM BIO-5	Restore Habitat for Special-Status Plants Disturbed During Construction In the unlikely event special-status plant species cannot be avoided, PG&E will stockpile separately the upper 6 inches of topsoil during excavations of special-status plant species habitat. PG&E will use the stockpiled topsoil to restore the area after temporary construction has been completed. When this topsoil is replaced, compaction will be minimized to the extent consistent with utility standards. Restoration and reseeding methods using a California native seed mix will be used to restore the sites.	PG&E to implement measure as defined.	PG&E to provide documentation of compliance with this APM, as necessary, in bi-weekly MMCRP compliance report(s). CPUC to inspect periodically that soil stockpiling is being implemented, where applicable.	During and post- construction.

APM Number	Description	Implementation Action	Monitoring Requirements and Effectiveness Criteria	Timing and Location of Actions
APM BIO-6	 Avoid or Minimize Impacts on Habitat For Special-Status Vernal Pool Species PG&E will implement the following measures to reduce potential impacts on vernal pool species and habitat within the project area. These measures may be refined during the Section 10 Habitat Conservation Plan (HCP) process conducted for the project with the USFWS, as applicable. Where feasible, the project will avoid and minimize direct and indirect impacts on vernal pool species and their habitat. Where feasible, new structures will be located outside of suitable habitat features; and work areas and temporary overland access routes will avoid vernal pool habitats. Where feasible, ground-disturbing activities in and adjacent to vernal pools will be conducted during the dry season (generally May 1 to October 15). Any ground-disturbing activities taking place within 50 feet of suitable aquatic habitat for vernal pool species will be minimized by: limiting the duration of work, using rubber tire vehicles to reduce soil compaction, and restricting ground disturbance to well-defined, small work areas. If construction activities must occur on the ground during the wet season, PG&E will implement BMPs consistent with the Storm Water Pollution Prevention Plan (SWPPP) (see APM HYDRO-1), which may include silt fencing to minimize impacts on vernal pool habitat. 	PG&E to implement measure as defined in the Incidental Take Permit from the USFWS.	CPUC to inspect periodically that measure is being implemented, where applicable.	Prior to and during construction.
APM BIO-7	Compensate for Permanent Impacts on Habitat for Vernal Pool Species in Accordance with USFWS Permit PG&E will provide off-site compensation for permanent impacts on vernal pool species habitat at a minimum ratio of 1 acre	PG&E to provide off-site compensation for impacts, as defined, and in accordance with	PG&E to provide documentation of measure compliance to CPUC.	Prior to construction in areas with vernal pool habitat

APM Number	Description	Implementation Action	Monitoring Requirements and Effectiveness Criteria	Timing and Location of Actions
	preserved or created for each acre of direct impact by the project. PG&E will provide this compensatory amount of vernal pool habitat at an off-site location, which may include acquiring mitigation credits at a USFWS-approved conservation area that supports vernal pool fairy shrimp. Final compensation ratios will be based on site-specific information and determined through coordination with the USFWS as part of the permitting processes for the project.	USFWS Take Permit.		
APM BIO-8	Avoid, Minimize, or Compensate for Any Impacts on Valley Elderberry Longhorn Beetle PG&E's Valley Elderberry Longhorn Beetle (VELB) Conservation Program allows PG&E to perform routine operations and maintenance activities and new construction, subject to certain terms and conditions as specified in the USFWS Biological Opinion (BO) (File 1-1-01-F-0114). The VELB BO provides for 30 years of incidental take coverage and was issued on June 27, 2003. It defines reasonable and prudent measures required to avoid and minimize impacts on habitat for the federally listed VELB. PG&E will implement the surveying, avoidance, and any necessary compensation measures required for the Conservation Program as authorized by USFWS. These measures may include: (1) surveying for and flagging all elderberry plants with one or more stems measuring 1 inch or more in diameter at ground level that are within 20 feet of work sites; (2) avoiding all such elderberry plants to the extent feasible; and (3) reporting unavoidable impacts on elderberry shrubs to USFWS for coverage under the Conservation Program's funding of VELB habitat acquisition, development, and protection.	PG&E to implement the surveying, avoidance, and compensation measures, as necessary, as defined in the VELB Conservation Program.	PG&E to submit reports to USFWS, as necessary, and provide report copies to CPUC. CPUC to inspect periodically that measure is being implemented, where applicable.	Prior and during construction in areas with VELB habitat
APM BIO-9	Avoid and Minimize Impacts on Giant Garter Snake	PG&E to implement	CPUC to inspect periodically	Prior and during

APM Number	Description	Implementation Action	Monitoring Requirements and Effectiveness Criteria	Timing and Location of Actions
	 PG&E will implement the following avoidance and minimization measures as may be refined during the permitting processes with USFWS and CDFW for the project: To the fullest extent possible, PG&E will avoid construction activities within 200 feet of the banks of giant garter snake (GGS) aquatic habitat. Habitat disturbance areas and vegetation clearance will be confined to the minimal area necessary to facilitate construction activities. As feasible, construction activity within GGS aquatic and upland habitat in and around agricultural ditches, irrigation and drainage canals, rice fields, and marshes and sloughs, will be conducted within the active period for GGS (May 1 through October 1). Depending on weather conditions and consultation with USFWS and CDFW, it may be possible to extend the construction period into mid- or late October. When construction work must occur during the GGS dormant period (October 2 through April 30), additional 	measure as defined, or refined during the USFWS and CDFW permitting process.	that measure is being implemented, where applicable.	construction in areas with GGS habitat.
	 protective measures will be implemented, which may include: having a biological monitor in sensitive habitat areas or installation of exclusion fencing to prevent giant garter snakes from establishing hibernacula in work areas. Prior to any construction within suitable GGS aquatic habitat, the habitat will be dewatered and must remain dry for at least 15 consecutive days after April 15 and prior to excavating or filling dewatered habitat. Pre-construction surveys in suitable GGS habitat will be conducted in accordance with APM BIO-2. The construction area will be resurveyed whenever there is a lapse in construction activity of 2 weeks or more. 			

APM Number	Description	Implementation Action	Monitoring Requirements and Effectiveness Criteria	Timing and Location of Actions
	 If a GGS is encountered within the construction work area, construction activities will be suspended in accordance with APM BIO-4. Based on the results of preconstruction surveys conducted under APM BIO - 2, the qualified biologist will coordinate with the PG&E biologist to determine whether to install exclusion fencing to keep GGS out of the construction area. In accordance with APM BIO-12, service and refueling procedures will be conducted in uplands at least 100 feet away from wetlands or waterways to minimize potential harm to aquatic species from water quality degradation. 			
APM BIO-10	Compensate for Permanent Loss of Giant Garter Snake Aquatic and Upland Habitat in Accordance with USFWS Permit For any permanent loss of GGS aquatic and upland habitat that cannot be avoided, PG&E will preserve a compensatory amount of GGS habitat, including acquiring mitigation credits at a USFWS-approved conservation area that supports GGS. PG&E will provide off-site compensation for permanent impacts on GGS habitat at a minimum ratio of 1 acre preserved for each acre of impacts, or as otherwise required by the USFWS and the CDFW during the permitting processes for the project.	PG&E to provide offsite compensation for impacts, as defined or refined during the USFWS and CDFW permitting process.	PG&E to provide documentation of measure compliance to CPUC.	Prior to construction in GGS habitat.
APM BIO-11	Avoidance and Minimization of Impacts on Nesting Birds If work is scheduled during the nesting season (February 15 through August 31), nest detection surveys will be conducted within a standard buffer for individual species in accordance with the species-specific buffers set forth in Appendix D of the PEA and will occur within 15 days prior to the start of work activities at designated construction areas, staging areas, and landing zones to determine nesting status by a qualified wildlife biologist. Nest	PG&E to conduct pre- construction nest detection surveys as defined. PG&E to provide a qualified biologist to conduct surveys.	PG&E to provide survey report documentation and verification to CPUC of compliance with measure as defined. PG&E to provide resume of qualified biologist to CPUC.	Prior to and during construction.

APM Number	Description	Implementation Action	Monitoring Requirements and Effectiveness Criteria	Timing and Location of Actions
	surveys will be accomplished by ground surveys and/or by helicopter and will support phased construction, with surveys scheduled to be repeated if construction lapses in a work area for 15 days between March and July. Access for ground surveys will be subject to property access permission. Helicopter flight restrictions for nest detection surveys may be in effect for densely populated residential areas, and will include observance of appropriate established buffers and avoidance of hovering in the vicinity of active nest sites. If active nests containing eggs or young are found, the biologist will establish a species-specific nest buffer, as defined in Appendix D of the PEA. Where feasible, standard buffers will apply, although the biologist may increase or decrease the standard buffers in accordance with the factors set forth in Appendix D. Nesting pair acclimation to disturbance in areas with regularly occurring human activities will be considered when establishing nest buffers. The established buffers will remain in effect until the young have fledged or the nest is no longer active as confirmed by the biologist. Active nests will be periodically monitored until the biologist has determined that the young have fledged or all construction is finished. Per the discretion of the biologist, vegetation removal by hand may be allowed within nest buffers or in areas of potential nesting activity. Inactive nests may be removed in accordance with PG&E's approved avian permits. The biologist will have authority to order the cessation of nearby project activities if nesting pairs exhibit signs of disturbance.	PG&E to implement nest buffers, as defined and as necessary. PG&E to monitor active nests, as defined and as necessary. PG&E to conduct work in nest buffers as defined and as necessary.	CPUC to inspect periodically that construction activity in nest buffers is conducted as defined.	

APM Number	Description	Implementation Action	Monitoring Requirements and Effectiveness Criteria	Timing and Location of Actions
APM BIO-12	 Implement General Protection Measures for Wetlands and Other Waters PG&E will implement the following general measures, in addition to those outlined in Section 2.8.8, Best Management Practices, to minimize or avoid impacts on wetlands and other waters: Avoid wetlands and other waters as identified in BIO APM-3. Establish overland access routes to avoid wetlands and other waters to the extent feasible. Conduct all fueling of vehicles at least 100 feet from wetlands and other water bodies. Set staging areas back at least 50 feet from streams, creeks, or other water bodies. Additionally, per APM HYDRO-1, PG&E will prepare and implement a Storm Water Pollution Prevention Plan (SWPPP) to prevent construction-related erosion and sediments from entering nearby waterways. 	PG&E to implement measure as defined. PG&E to prepare and implement an approved SWPPP. PG&E to implement the terms and conditions of Nationwide Permit 12 and the associated 401 Water Quality Certification.	PG&E to monitor and report in accordance with the approved SWPPP, Nationwide Permit 12, and 401 Water Quality Certification. PG&E to provide a copy of the approved SWPPP to CPUC. CPUC to inspect periodically that measure is being implemented, where applicable.	Prior to and during construction.
APM BIO-13	Compensate for Permanent Impacts on Wetlands and Other Waters in Accordance with Project Permits PG&E will compensate for permanent impacts on wetlands with at least a 2:1 ratio of acre restored or created to acre filled. Final compensation ratios will be based on site-specific information and determined through coordination with the U.S. Army Corps of Engineers and the Central Valley Regional Water Quality Control Board as part of the permitting processes for the project.	PG&E to provide compensation for impacts, as required by USACE and CVRWQCB.	PG&E to provide documentation of measure compliance to CPUC.	Prior to construction.
APM BIO-14	Restore Temporarily Impacted Wetlands and Other Waters All wetlands and other waters that are temporarily disturbed as a result of project activities will be restored upon completion of construction.	PG&E to restore temporarily impacted wetlands and waters in accordance with the	PG&E to provide documentation of compliance with this APM to the CPUC.	Post construction.

APM Number	Description	Implementation Action	Monitoring Requirements and Effectiveness Criteria	Timing and Location of Actions
		terms and conditions of Nationwide Permit 12 and the associated 401 Water Quality Certification.		
MM BIO-1	Prior to initiation of ground-disturbing activities, special-status plant surveys will be conducted by a qualified biologist familiar with the species' biology and habitat requirements in suitable habitat in the project area. The surveys shall be conducted in the appropriate bloom season prior to the commencement of construction, when plants are evident and identifiable. The surveys will be conducted in accordance with applicable California Native Plant Society (CNPS), California Department of Fish and Wildlife (CDFW), and U.S. Fish and Wildlife Service (USFWS) survey protocols. If no special-status plant species are observed during preconstruction surveys, no further mitigation is necessary. If special-status plant species are observed to the maximum extent practicable and flagged during construction to ensure avoidance. If avoidance is not possible, appropriate relocation, seed collection and establishment, or other mitigation measures approved in coordination CDFW and/or USFWS, as appropriate, shall be implemented. Where special-status plant species are observed, and if deemed appropriate by the qualified biologist, vehicle-washing stations would be stationed at site access points. All vehicles and equipment entering and leaving the project site will be washed to minimize the spread of non-native invasive plants.	PG&E to conduct preconstruction surveys as defined. PG&E to provide a qualified biologist. PG&E to flag and avoid special-status plant species occurrences, where applicable. PG&E to relocate special- status plants as defined, and as necessary. PG&E to establish construction vehicle washing stations, and ensure washing, as defined and as necessary.	PG&E to provide survey report documentation and verification to CPUC of compliance with measure as defined. CPUC to inspect periodically that flagging is in place and flagged areas avoided, as applicable. PG&E to provide documentation of relocation actions to CPUC in bi-weekly MMCRP compliance reports, as applicable. CPUC to inspect periodically that washing stations are utilized as defined, as applicable.	Prior to and during construction in work areas with habitat suitable for identified species pursuant to biological studies.
MM BIO-2	This mitigation measure is an extension to Applicant Proposed Measure (APM) BIO-7. Where impacts from construction activities result in permanent loss of function or permanent	PG&E to provide offsite compensation for impacts, as defined.	PG&E to provide documentation of measure compliance to CPUC.	Prior to construction.

APM Number	Description	Implementation Action	Monitoring Requirements and Effectiveness Criteria	Timing and Location of Actions
	change to vernal pool species habitat, Pacific Gas and Electric Company (PG&E) will provide off-site compensation. Impacts to vernal pool species habitat will be compensated at a minimum ratio of 1 acre preserved or created for each acre of disturbance. PG&E will provide this compensatory habitat at an off-site location, which may include acquiring mitigation credits at a U.S. Fish and Wildlife Service (USFWS)-approved conservation area that supports vernal pool fairy shrimp. This mitigation ratio may be refined as appropriate during the future federal Endangered Species Act (ESA) Section 10 consultation process conducted for the project.			
MM BIO-3	Where impacts from construction activities result in permanent loss of function or permanent change to northern hardpan vernal pool habitat Pacific Gas and Electric Company (PG&E) will provide off-site compensation. Impacts to northern hardpan vernal pool habitat will be compensated at a minimum ratio of 1 acre preserved or created for each acre impacted by the project. PG&E will provide this compensatory habitat at an off- site location, which may include acquiring mitigation credits at a U.S. Fish and Wildlife Service (USFWS-approved conservation area). This mitigation ratio may be refined as appropriate during the future federal Endangered Species Act (ESA) Section 10 consultation process conducted for the project.	PG&E to provide offsite compensation for impacts, as defined.	PG&E to provide documentation of measure compliance to CPUC.	Prior to construction.
	Cult	ural Resources		
APM CR-1	Workers Environmental Awareness Training PG&E will provide environmental awareness training on archeological and paleontological resources protection. This training may be administered by the principal cultural resources specialist as a stand-alone training or included as part of the overall environmental awareness training as required by the	PG&E to provide a qualified cultural resources specialist and implement a Worker Environmental Awareness Training Program.	PG&E to provide a copy of Worker Environmental Awareness Training Program materials to CPUC. PG&E to provide resume of	Prior to construction.

APM Number	Description	Implementation Action	Monitoring Requirements and Effectiveness Criteria	Timing and Location of Actions
	project and will at minimum include: types of cultural resources or fossils that could occur at the project site; types of soils or lithologies in which the cultural resources or fossils could be preserved; procedures that should be followed in the event of a cultural resource, human remain, or fossil discovery; and penalties for disturbing cultural or paleontological resources.		qualified cultural resources specialist to CPUC.	
APM CR-2	Flag and Avoid Resources P-51-000150, P-58-001372, P- 58001369, PL-Palermo-011H, Old Marysville Road A qualified archaeologist will flag sites P-51-000150, P-58- 001372, PL-Palermo-011H, and the Old Marysville Road for avoidance. Sites will be marked with flagging tape, safety fencing, and/or sign designated it as an "environmentally sensitive area" to ensure that PG&E construction crews and heavy equipment will not intrude on these sites during construction. For those sites that contain an existing access road within their site boundary or are an existing road (e.g., Old Marysville Road), the road will be used as-is (i.e., no grading, widening, or other substantial improvements), and signs or safety fencing will be established on either side of the road within the site's boundary to avoid impacts caused by construction vehicles. If it is determined that the project cannot avoid impacts on one or more of the sites, then, for those sites that have not been previously evaluated, evaluation for inclusion in the National Register of Historic Places (NRHP)/California Register of Historic Resources (CRHR) will be conducted. Should the site be found eligible, appropriate measures to reduce the impact to a less- than-significant level will be implemented, including but not limited to data recovery, photographic and archival documentation, or other measures as deemed appropriate in	PG&E to provide a qualified archaeologist to flag cultural resource sites, as defined. PG&E to ensure avoidance of identified cultural resource sites, as defined. If impacts to sites are necessary, PG&E to evaluate and develop impact reduction measures and coordinate with CPUC and interested parties, as defined.	PG&E to provide resume of qualified cultural archaeologist to CPUC. PG&E to maintain avoidance area flagging, fencing, or signage, and implement other measures necessary to avoid disturbance of identified cultural resource sites. CPUC to inspect periodically that flagging is in place and flagged areas avoided, as applicable.	Prior to and during construction.

APM Number	Description	Implementation Action	Monitoring Requirements and Effectiveness Criteria	Timing and Location of Actions
	consultation with CPUC and interested parties. If it is determined that sites that have been previously determined to be eligible for inclusion in either the NRHP or CRHR cannot be avoided, measures will be implemented to reduce the impact to a less- than-significant level, including but not limited to data recovery, photographic and archival documentation, or other measures as deemed appropriate in consultation with the CPUC and interested parties.			
APM CR-3	 Manage Unanticipated Cultural Resources Discoveries Properly a. Buried Cultural Resources. If buried cultural resources are inadvertently discovered during site preparation or construction activities, work will stop in that area and within 100 feet of the find until a qualified cultural resources specialist/archaeologist can assess the significance of the find and, if necessary, develop appropriate treatment measures in consultation with PG&E and other appropriate agencies. Work may continue on other portions of the site with the cultural resources specialist/archaeologist's approval. PG&E will implement the cultural resources specialist/archaeologist's recommendations for treatment of discovered cultural resources. b. 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 	PG&E to provide a qualified cultural resource specialist/archaeologist. PG&E to implement work stop and consultation actions, as defined and as applicable. PG&E to provide documentation to the CPUC of consultation with NAHC and other agencies and the identified actions resulting from consultations, as applicable.	 PG&E to provide assessment documentation and verification to CPUC of compliance with measure as defined and as applicable. PG&E to provide resumes of qualified cultural resource specialist/archaeologist to CPUC. CPUC to inspect periodically that identified cultural resources sites are avoided and agency requirements are being implemented, as applicable. 	During construction.

APM Number	Description	Implementation Action	Monitoring Requirements and Effectiveness Criteria	Timing and Location of Actions
	 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 paragraph (a) of this APM should apply. If the remains are human, the cultural resources specialist will immediately implement the applicable provisions in PRC Sections 5097.9 through 5097.996, beginning with the immediate notification to the affected 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, California Health and Safety Code 7050.5 and PRC Section 5097.98 require that the cultural resources specialist contact the Native American Heritage Commission (NAHC) within 24 hours. The NAHC, as required by PRC Section 5097.98, will determine and notify the Most Likely Descendant. c. Paleontological Discoveries. If significant paleontological resources are discovered during construction activities, work will ston within 100 foot and the 			
	construction activities, work will stop within 100 feet and the project cultural resource specialist will be contacted immediately. The project cultural resources specialist will work with the qualified paleontologist to evaluate the discovery. If the discovery is determined to be significant, PG&E will implement measures to protect and document the paleontological resource. Work may not resume within 100 feet of the find until approval by the cultural resource specialist in coordination with the paleontologist. In the event that significant paleontological resources are encountered during the project, protection and recovery of those resources may be required. Treatment and curation			

APM Number	Description	Implementation Action	Monitoring Requirements and Effectiveness Criteria	Timing and Location of Actions
	of fossils will be conducted in consultation with the landowner, PG&E, and CPUC. The paleontologist will be responsible for developing the recovery strategy and will lead the recovery effort, which will include establishing recovery standards, preparing specimens for identification and preservation, documentation and reporting, and securing a curation agreement from the approved agency.			
APM CR-4	Paleo Monitoring Interval (spot check) monitoring for paleontological resources will be required for excavation activities larger than 3 feet in diameter and grading to depths greater than 2 feet that intersect undisturbed sediments in the Riverbank, Modesto, and Laguna formations. Monitoring is not required for shallow excavations into sediments previously disturbed by agricultural activities, development, or construction related to the existing Palermo–East Nicolaus 115 kV Transmission Line regardless of the mapped geologic unit sensitivity ranking because fossils found within such sediments would lack provenience data critical to scientific significance. In the unlikely event that a highly fossiliferous facies is encountered, monitoring will be conducted full time until excavations within that facies are complete. Conversely, monitoring may be reduced or suspended in the absence of encountering paleontologically sensitive sediments. Monitoring will be done by a qualified paleontological monitor. The paleontological monitor will document monitoring activities on monitoring logs. Monitoring logs and reports will include the activities observed, geology encountered, description of any resources encountered, and measures taken to protect or salvage fossils discovered. Photographs and other supplemental information will be	PG&E to provide a qualified paleontological monitor to monitor construction activities, as defined. PG&E's monitor to document activities and observations as defined.	PG&E to provide resume of qualified paleontological monitor to CPUC. PG&E to provide documentation of monitoring to CPUC in bi-weekly MMCRP compliance reports, as applicable. CPUC to inspect periodically that monitors are present at excavation activities defined in measure.	During excavation at work areas in Riverbank, Modesto, and Laguna formations.

APM Number	Description	Implementation Action	Monitoring Requirements and Effectiveness Criteria	Timing and Location of Actions
	included as necessary.			
	Geo	ology and Soils		
APM GEO-1	 Minimize Construction in Soft or Loose Soils Where soft or loose soils are encountered during project construction, several measures are available, feasible and can be implemented to avoid, accommodate, replace, or improve such soils. Depending on site-specific conditions and permit requirements, one or more of these measures may be implemented to eliminate impacts from soft or loose soils: Locating construction facilities and operations away from areas of soft and loose soil. Over-excavating soft or loose soils and replacing them with engineered backfill materials. Increasing the density and strength of soft or loose soils through mechanical vibration and/or compaction. Installing material, such as aggregate rock, steel plates, or timber mats, over access roads. Treating soft or loose soils in place with binding or cementing. 	PG&E to implement measure as defined.	PG&E to monitor and report in accordance with the project's SWPPP and in bi-weekly MMCRP compliance reports. CPUC to inspect periodically that measures are being implemented.	Prior to and during construction.
	Greenho	use Gas Emissions		
APM GHG-1	 Minimize Greenhouse Gas Emissions Encourage construction workers to carpool to the job site to the extent feasible. The ability to develop an effective carpool program for the project will depend upon the proximity of carpool facilities to the area, the geographical commute departure points of construction workers, and the extent to which carpooling will not adversely affect worker arrival time and the project's construction schedule. Minimize unnecessary construction vehicle idling time for on- 	PG&E to implement measure as defined and incorporate discussion of emission minimization into the Worker Environmental Awareness Training Program.	PG&E to provide a copy of Worker Environmental Awareness Training Program materials to CPUC. CPUC to inspect periodically that idling restrictions are being implemented by construction crews.	Prior and during construction.

APM Number	Description	Implementation Action	Monitoring Requirements and Effectiveness Criteria	Timing and Location of Actions
	road and off-road vehicles. The ability to limit construction vehicle idling time will depend on the sequence of construction activities and when and where vehicles are needed or staged. Certain vehicles, such as large diesel- powered vehicles, have extended warm-up times following start-up that limit their availability for use following start-up. Where such diesel-powered vehicles are required for repetitive construction tasks, these vehicles may require more idling time. The project will apply a "common sense" approach to vehicle use, so that idling is reduced as far as possible below the maximum of 5 consecutive minutes allowed by California law; if a vehicle is not required for use immediately or continuously for construction activities, its engine will be shut off. Construction foremen will include 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.			
	 Maintain construction equipment in proper working conditions in accordance with PG&E standards. Minimize construction equipment exhaust by using low-emission or electric construction equipment where feasible. Portable diesel fueled construction equipment with engines 50 horsepower or larger and manufactured in 2000 or later will be registered under the CARB Statewide Portable Equipment Registration Program. Minimize welding and cutting by using compression of 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 recycling construction waste where feasible. 			

Table 4-1
Applicant Proposed Measures and Mitigation Measures

APM Number	Description	Implementation Action	Monitoring Requirements and Effectiveness Criteria	Timing and Location of Actions
	Hazards an	d Hazardous Material		
APM HAZ-1	Hazardous-Substance Control and Emergency Response PG&E will implement its hazardous substance control and emergency response procedures to ensure the safety of the public and site workers during construction. The procedures identify methods and techniques to minimize the exposure of the public and site workers to potentially hazardous materials during all phases of project construction through operation. They address worker training appropriate to the site worker's role in hazardous substance control and emergency response. The procedures also require implementing appropriate control methods and approved containment and spill-control practices for construction and materials stored on-site. If it is necessary to store chemicals on-site, they will be managed in accordance with all applicable regulations. Material safety data sheets will be maintained and kept available on-site, as applicable. Project construction will involve soil surface blading/leveling, excavation of up to several feet, and augering to a maximum depth of 35 feet in some areas. In the event that soils suspected of being contaminated (on the basis of visual, olfactory, or other evidence) are removed during site grading activities or excavation activities, the excavated soil will be tested, and if contaminated above hazardous waste levels, will be contained and disposed of at a licensed waste facility. The presence of known or suspected contaminated soil will require testing and investigation procedures to be supervised by a qualified person, as appropriate, to meet state and federal regulations. All hazardous materials and hazardous wastes will be handled, stored, and disposed of in accordance with all applicable	PG&E to implement measure as defined. PG&E to include discussion and completion of emergency action plan form in Workers Environmental Awareness Training Program. PG&E to establish buffers, as defined.	 PG&E to provide a copy of Worker Environmental Awareness Training Program materials to CPUC. CPUC to inspect periodically that hazardous materials storage, control, and clean-up procedures are being implemented and buffers are being maintained, as defined. PG&E to provide documentation of soil testing and disposal activities to CPUC, as necessary. PG&E to provide documentation of hazardous materials spills and work stoppage and a summary of corrective actions to CPUC, as necessary. 	Prior and during construction.

	Description	Implementation Action	Monitoring Requirements and Effectiveness Criteria	Timing and Location of Actions
regulati The haz procedu • Pr • Es ar • Er ha • St Dr cc re ap PG&E as part to gath site loc	tions, by personnel qualified to handle hazardous materials. Izardous substance control and emergency response lures include, but are not limited to, the following: Proper disposal of potentially contaminated soils. Establishing site-specific buffers for construction vehicles and equipment located near sensitive resources. Emergency response and reporting procedures to address azardous material spills. Etopping work at that location and contacting the County Fire Department Hazardous Materials Unit immediately if visual ontamination or chemical odors are detected. Work will be esumed at this location after any necessary consultation and pproval by the Hazardous Materials Unit. will complete a standard Emergency Action Plan Form t of project tailboard meetings. The purpose of the form is per emergency contact numbers, first aid location, work eating, and tailboard information			

APM Number	Description	Implementation Action	Monitoring Requirements and Effectiveness Criteria	Timing and Location of Actions
APM HAZ-2	 Worker Environmental Awareness Program for Health, Safety, and Environment (WEAP-HSE) The program will include the following components related to hazards and hazardous materials: PG&E Health, Safety, and Environmental expectations and management structure. Applicable regulations. Summary of the hazardous substances and materials that may be handled and/or to which workers may be exposed. Summary of the primary workplace hazards to which workers may be exposed. Overview of the measures identified in APM HAZ-1. Overview of the controls identified in the Storm Water Pollution Prevention Plan (SWPPP under APM HYDRO-1. 	PG&E to prepare and implement WEAP-HSE, as defined.	PG&E to provide a copy of WEAP-HSE training materials to CPUC.	Prior to construction.
APM HAZ-3	Fire Risk Management PG&E will follow its standard fire risk management procedures, including safe work practices, work permit programs, training, and fire response. Project personnel will be directed to park away from dry vegetation. During fire season in designated State Responsibility Areas, all motorized equipment driving off paved or maintained gravel/dirt roads will have federally approved or State-approved spark arrestors. All off-road vehicles will be equipped with a backpack pump (filled with water) and a shovel. Fire-resistant mats and/or windscreens will be used when welding. In addition, during fire "red flag" conditions (as determined by CalFire), welding will be curtailed. Every fuel truck will carry a large fire extinguisher with a minimum rating of 40 B:C, and all flammable materials will be removed from equipment parking and storage areas.	PG&E to implement measure as defined and include fire risk management information in Worker Environmental Awareness Training Program.	PG&E to provide a copy of Worker Environmental Awareness Training Program materials to CPUC. CPUC to inspect periodically that fire risk management procedures are being implemented, as defined.	Prior to and during construction.

APM Number	Description	Implementation Action	Monitoring Requirements and Effectiveness Criteria	Timing and Location of Actions
MM HAZ-1	 Develop and Implement Construction Fire Risk Management Plan. The applicant shall develop a Fire Risk Management Plan that addresses training of construction and maintenance crews, and provides details of fire-suppression procedures and equipment to be used during construction. At minimum, the plan will include the following: Procedures for minimizing potential ignition, including, but not limited to, helicopter operations, vegetation clearing, parking requirements/restrictions, idling restrictions, smoking restrictions, proper use of gas-powered equipment, use of spark arrestors, and hot work restrictions; Work restrictions during Red Flag Warnings and High to Extreme Fire Danger days; Fire coordinator and fire patrol roles and responsibilities; Detailed information for responding to fires; Worker training for fire prevention, initial attack firefighting, and fire reporting; Emergency communication, response, and reporting procedures; Coordination with local fire agencies to facilitate agency access through the project site; Emergency contact information; Demonstrate compliance with applicable wildland fire management plans and policies established by state and local agencies. Information contained in the Plan and location of fire- suppression materials and equipment shall be included as part of the employee environmental training discussed in APM HAZ- 	PG&E to develop and implement a Construction Fire Risk Management Plan, as defined. PG&E to include a discussion of fire risk management in the Workers Environmental Awareness Training Program.	PG&E to provide a copy of Fire Risk Management Plan to CPUC. PG&E to provide a copy of Worker Environmental Awareness Training Program materials to CPUC. CPUC to inspect periodically that fire risk management procedures are being implemented, as defined.	Prior and during construction.

APM Number	Description	Implementation Action	Monitoring Requirements and Effectiveness Criteria	Timing and Location of Actions
	2. At a minimum, fire-suppression equipment and materials shall be kept adjacent to all areas of work and in staging areas, and shall be clearly marked. Water tanks shall be sited in the project area to protect against fire, and all vehicles shall carry fire-suppression equipment. The applicant shall contact and coordinate with local and county fire departments to determine the minimum amounts of fire equipment to be carried on the vehicles and appropriate locations for the water tanks.			
	Hydrology	y and Water Quality		
APM HYDRO-1	 Prepare and Implement a Storm Water Pollution Prevention Plan (SWPPP) PG&E will prepare and implement a SWPPP to prevent construction-related erosion and sediments from entering nearby waterways. The SWPPP will include a list of BMPs to be implemented in areas with potential to drain to any water body in Butte, Yuba, or Sutter counties. BMPs to be part of the project-specific SWPPP may include, but are not limited to, the following control measures. Implementing temporary erosion control measures (such as silt fences, staked straw bales/wattles, silt/sediment basins and traps, check dams, geofabric, sandbag dikes, grass buffer strips, high infiltration substrates, grassy swales, and temporary revegetation or other ground cover) to control erosion from disturbed areas. Protecting drainage facilities in downstream off-site areas from sediment using BMPs accepted to Butte, Sutter, and Yuba counties, and the Central Valley RWQCB. Protecting the quality of surface water from non- stormwater discharges such as equipment leaks, hazardous materials spills, and discharge of 	PG&E will prepare and implement an approved SWPPP.	PG&E will monitor and report in accordance with the approved SWPPP, Nationwide Permit 12, and 401 Water Quality Certification. PG&E to provide a copy of the approved SWPPP to CPUC. CPUC to inspect periodically that measures are being implemented.	Prior, during, and post- construction.

APM Number	Description	Implementation Action	Monitoring Requirements and Effectiveness Criteria	Timing and Location of Actions
	 groundwater from dewatering operations. Restoring disturbed areas, after project construction is completed, unless otherwise requested by the landowner in agricultural land use areas. Requirements of the SWPPP would be coordinated with the requirements of any Section 401 Water Quality Certification issued for the project under the Clean Water Act and/or Streambed Alteration Agreement issued under Fish and Game Code Section 1602, as applicable. 			
APM NOI-1	 Employ Noise-Reducing Construction Practices during Temporary Construction Activities PG&E will employ standard noise-reducing construction practices such as the following: Ensure that all equipment is equipped with mufflers that meet or exceed factory new-equipment standards. Locate stationary equipment as far as practical from noise-sensitive receptors. Limit unnecessary engine idling. Limit all construction activity near sensitive receptors to daytime hours unless required for safety or to comply with line clearance requirements. Minimize noise-related disruption by notifying residents. Should nighttime project construction be necessary because of planned clearance restrictions, affected residents will be notified at least 7 days in advance by mail, personal visit, or door hanger, and informed of the expected work schedule. 	PG&E to implement measure as defined and include discussion in Worker Environmental Awareness Training Program. PG&E to notify affected residents within 300 feet of construction activity, as defined, if nighttime work is necessary.	PG&E to provide a copy of Worker Environmental Awareness Training Program materials to CPUC. CPUC to inspect periodically that measures are being implemented.	During construction.

APM Number	Description	Implementation Action	Monitoring Requirements and Effectiveness Criteria	Timing and Location of Actions
	Tr	ansportation		
APM TRA-1	Temporary Traffic Controls PG&E will obtain any necessary transportation and encroachment permits from Caltrans and the local jurisdictions, as required, including those related to state route crossings and the transport of oversized loads and certain materials, and will comply with permit requirements designed to prevent excessive congestion or traffic hazards during construction. PG&E will develop road and lane closure or width reduction or traffic diversion plans as required by the encroachment permits. Construction activities that are in or along or that cross local roadways will follow best management practices and local jurisdictional encroachment permit requirements—such as traffic controls in the form of signs, cones, and flaggers—to minimize impacts on traffic and transportation in the project area.	PG&E to obtain transportation and encroachment permits, as defined. PG&E to comply with all permit conditions.	PG&E to provide copies of permits to CPUC. CPUC to inspect periodically that measures are being implemented.	Prior and during construction.
APM TRA-2	 Air Transit Coordination PG&E will implement the following protocols related to helicopter use during construction and air traffic: PG&E will comply with all applicable Federal Aviation Administration (FAA) regulations regarding air traffic within 2 miles of the project alignment. PG&E's helicopter operator will coordinate all project helicopter operations with local airports before and during project construction. Helicopter use and landing zones will be managed to minimize impacts on local residents. PG&E will submit to CPUC staff a Helicopter Use Plan, which will identify the anticipated landing zones, flight paths and general helicopter operation procedures. 	PG&E to implement measure as defined and incorporate requirements into aviation contractor specifications.	PG&E to submit Helicopter Use Plan to CPUC. CPUC to ensure that requirements have been incorporated into aviation contractor specifications.	Prior and during construction.

APM Number	Description	Implementation Action	Monitoring Requirements and Effectiveness Criteria	Timing and Location of Actions
APM TRA-3	Coordinate Road Closures with Emergency Service Providers At least 24 hours prior to implementing any road or lane closure, PG&E will coordinate with applicable emergency service providers in the project vicinity. PG&E will provide emergency service providers with information regarding the road or lanes to be closed; the anticipated date, time, and duration of closures; and a contact telephone number.	PG&E to implement measure as defined.	PG&E to document closures and notifications in bi-weekly MMCRP compliance reports, as applicable.	During construction.
MM TRA-1	PG&E shall obtain all necessary transportation and/or encroachment permits and transport of oversized loads and certain materials, and shall comply with permit requirements designed to prevent excessive congestion or traffic hazards during temporary lane closures. PG&E would develop lane closure/width reduction or traffic diversion plans as required by the encroachment permits. Construction activities that are in, along, or cross local roadways shall follow best management practices and/or local jurisdictional encroachment permit requirements, to minimize impacts to traffic and transportation in the Project area. PG&E will demonstrate to the CPUC that it has obtained all permits prior to construction activity in a given jurisdiction or location.	PG&E to obtain transportation and encroachment permits, as defined. PG&E to comply with all permit conditions.	PG&E to provide copies of permits to CPUC. CPUC to inspect periodically that measures are being implemented.	Prior to and during construction.

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5 **REFERENCES**

- 14 CCR 15000–15387 and Appendices A–L. Guidelines for Implementation of the California Environmental Quality Act, as amended.
- California Public Resources Code, Division 13, Environmental Quality, Sections 21080-21098, General.
- CPUC (California Public Utilities Commission). 2017. Final Initial Study and Mitigated Negative Declaration for the PG&E SPRP (Application No. A.15-11-005). Prepared by Dudek for CPUC. San Francisco, California: Dudek. May 2017.
- PG&E. 2016. "PG&E Response to CPUC Data Request 2.0." February 22, 2016.

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ATTACHMENT A

Project Overview Maps





ATTACHMENT B

Sample Site Inspection Form

MITIGATION MONITORING, COMPLIANCE, AND REPORTING PROGRAM

DUDEK

Site Inspection Form

	South of Palermo Project		
Project:	(Application No. A.16-04-023)	Date:	
		Project	
Owner:	PG&E	Component:	
Project Manager:	TBD	Report Number:	
Lead Agency:	California Public Utilities Commission	Representative:	Andrew Barnsdale

SITE INSPECTION CHECKLIST

Air Quality and Greenhouse Gas Emissions	Yes	No	N/A
Are fugitive dust control measures being implemented (i.e., roads watered, stockpiles			
watered and covered, inactive disturbed areas seeded, haul trucks covered or with			
Are patification signs posted?	_		
Are notification signs posted?			
Are speed limits being adhered to?			
Rielegieel Resources	Vac	No	N1/ A
biological Resources	162	NO	IN/A
Are monitoring biologists present where and when necessary?			
Are identified sensitive resource areas being avoided?			
Are sensitive species protection measures being implemented?			
Is topsoil being stockpiled, where and when necessary?			
Is equipment refueling being conducted 100 feet from wetlands/water bodies?			
Are vehicles/equipment being washed prior to entering and leaving the project site, where necessary?			
Are wetlands and water bodies avoided by construction activities?			
Are appropriate measures in place to protect sensitive resources (i.e., flagging, signage, exclusion fencing, buffers, environmental monitor)?			
Are all activities being conducted within the approved work limits?			
Have impacts occurred to adjacent habitat (sensitive or non-sensitive)?			
Cultural Resources	Yes	No	N/A
Are known cultural sites properly identified and avoided?			
Are monitors present where and when necessary?			
Geology and Soils	Yes	No	N/A
Are soft/loose soil areas avoided or alternative techniques implemented (timber mats, aggregate, binders, engineered backfill)?			
Hazards and Hazardous Materials	Yes	No	N/A
Have all spills been cleaned up in accordance with the hazardous substance control			
and emergency response procedures?			
Are appropriate work buffers established and maintained?			
Are hazardous materials being stored, labeled, handled, and managed in accordance			
with the hazardous substance control and emergency response procedures?			
Are fire risk management measures being implemented in accordance with the Fire Risk Management Plan?			
Hydrology and Water Quality	Yes	No	N/A
Are erosion and sediment control measures being implemented in accordance with the project's SWPPP?			

Are BMPs in good condition and functional?			
Noise	Yes	No	N/A
Is stationary equipment located away from sensitive receptors?			
Do vehicles or equipment appear to be idling unnecessarily?			
Transportation	Yes	No	N/A
Are traffic control and diversion measures being implemented in accordance with the project's encroachment permits?			
Are helicopter operations being implemented in accordance with the project's Helicopter Use Plan?			

DESCRIPTION OF OBSERVED ACTIVITY

APMs/MMs VERIFIED

COMPLIANCE

Level 0 (Compliance)

Level 1 (Minor deviation)

Level 2 (Noncompliance)

Level 3 (Noncompliance)

ISSUES REQUIRING FOLLOW-UP

PG&E Notification	Corrective Actions Implemented by PG&E
	PG&E Notification

Photos:

Completed by: Name: Firm: Date:

Distribution:

ATTACHMENT C

Minor Project Refinement Request Form

PG&E SOUTH OF PALERMO PROJECT MINOR PROJECT REFINEMENT REQUEST FORM

Date Submitted:			Request #:				
Date Approval Required:			Landowner:				
APN:							
Refinement from (check all tha	t apply):						
□ Mitigation Measure	\Box APM	□ Pro	Drawing	□ Other			
Identify source (mitigation measure, project description, etc.):							
Attachments (check all that app	ply):						
□ Refinement Screening Form (see Attachment A)	\Box Photos		□ Maps		\Box Other		
As identified in Section 3.3 of the circumstances. In accordance we questions (a) through (d).	As identified in Section 3.3 of the MMCRP, the CPUC may approve minor project refinements under certain circumstances. In accordance with Section 3.3 of the MMCRP, respond "yes" or "no" to the following questions (a) through (d).						
(a) Is the proposed refinement outside the geographic boundary of the IS/MND study area?							
(b) Will the proposed refinement result in a new significant impact or a substantial increase in the severity of a previously identified significant impact based on the criteria used in the IS/MND?							
(c) Does the proposed refineme	nt conflict with a	ny mitiga	tion measure or a	pplicat	ole law or poli	icy?	
(d) Does the proposed refineme	(d) Does the proposed refinement trigger an additional permit requirement?						
Describe refinement being requested (attach drawings and photos as needed):							

Provide need for refinement	(attach d	rawin	igs and	pho	tos as needed)	:			
Data rafinament is expected t	o ho impl	lomon	tode						
Date refinement is expected t	o be mip	lemen	lieu:						
PG&E Approvals									
Title			Ν	Nam	e	Approval Initials	Date	Cone (see at	ditions ttached)
Project Manager								□ Yes	□ No
Environmental Project Manager								□ Yes	□ No
Landowner Approval (if	requir	ed)							
Landowner Name				Signature or Other Consent (see attached) Date				Date	
Resource Agency Coordination									
Resource Agency		Nam	ne		Action Required	ction Date (s		Documentation ee attached if yes)	
							□ Y	les	□ No
						□ Y	/es	□ No	
							□ Y	/es	□ No

ATTACHMENT A: REFINEMENT REQUEST SCREENING FORM

MINOR PROJECT REFINEMENT REQUEST SCREENING FORM

RESOURCE EVALUATION

The proposed minor project refinement was evaluated to verify that the minor project refinement would not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact based on the criteria used in the IS/MND. The following table provides a brief summary of the potential impact for each resource area analyzed in the IS/MND.

IS/MND Section	Summary of Potential Impacts
Agricultural and Forestry Resources	
Air Quality	
Biological Resources	
Cultural Resources	
Geology and Soils	
Greenhouse Gas Emissions	
Hazards and Hazardous Materials	
Hydrology and Water Quality	
Noise	
Transportation	

ATTACHMENT B: SITE MAP

ATTACHMENT C: REPRESENTATIVE PHOTOGRAPHS

Minor Project Refinement Request # Attachment C: Representative Photographs

Photograph 1:

Photograph 2: