CALIFORNIA PUBLIC UTILITIES COMMISSION

# PACIFIC GAS & ELECTRIC
# HUMBOLDT BAY – HUMBOLDT #1 60 KV RECONDUCTORING PROJECT

Final Initial Study/Mitigated Negative Declaration

April 2020

A.19-02-004
State Clearinghouse No. 2020029041

Prepared for:
California Public Utilities Commission

Prepared by:
Environmental Science Associates

ESA

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## Pacific Gas & Electric Humboldt Bay-Humboldt #1 60 kV Reconductoring Project (CPUC A.19-02-004) Final Initial Study/ Mitigated Negative Declaration

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# CHAPTER 1
# Introduction

## 1.1 CEQA Process

Pursuant to the requirements of the California Environmental Quality Act (CEQA) and California Public Utilities Commission (CPUC) General Order (GO) 131-D, the CPUC prepared an Initial Study (IS) to evaluate potential environmental impacts of the application from Pacific Gas and Electric Company (PG&E) (A.19-02-004) for a Permit to Construct (PTC) the proposed Humboldt Bay-Humboldt No. 1 60kV Reconductoring Project (Project). The IS determined that the Project would not have a significant adverse effect on the environment, and the CPUC prepared a Draft Mitigated Negative Declaration (Draft MND).

This Final IS/MND has been prepared pursuant to CEQA and the CEQA Guidelines,[1] which outline all aspects of the preparation of the Draft IS/MND and its review, as well as the subsequent steps to preparing a Notice of Determination. This document incorporates comments received during the public review period, and contains responses by the Lead Agency (the CPUC) to those comments. The comments received resulted in minor changes to the IS contained in the Draft IS/MND, and some additional minor changes were made to improve the clarity of the Draft IS/MND. Those changes are reflected in Final IS/MND Chapter 2, Comments and Responses, and Chapter 3, Mitigation Monitoring, Compliance, and Reporting Program (MMCRP). Changes are shown using underline to denote new language, and ~~strike-through~~ to denote deleted language. The Final IS/MND provides corrections and clarity to certain facts set forth in the Draft IS/MND and, if necessary, ensures accuracy. No new significant environmental impacts are identified in this Final IS/MND. Additionally, no mitigation measures presented in the Draft IS/MND were deleted in this Final IS/MND.

The Final IS/MND is an informational document prepared by the CPUC to be considered by decision makers before approving or denying a proposed project. Consistent with CEQA Guidelines Section 15071, this Final IS/MND consists of the following:

(a) A description of the Project (See Chapter 2, Project Description, of the Draft IS/MND in Appendix A);

(b) The location of the Project and the name of Project components (See Chapter 2 of the Draft IS/MND in Appendix A);

[1] Public Resources Code Section 21000 et seq.; Title 14, California Code of Regulations, Chapter 3, Sections 15000 through 15387 and Appendices, accessible at http://opr.ca.gov/ceqa/.

(c) A finding that the Project would not have a significant effect on the environment (See Section 1.3, below);

(d) An IS documenting reasons to support this finding, updated to address comments received on the Draft IS/MND published February 12, 2020 (See Chapter 3 of the Draft IS/MND in Appendix A, as amended by Final IS/MND Chapter 2, Comments and Responses);

(e) Mitigation Measures included in the Project to avoid potentially significant effects (see Final IS/MND Chapter 3, MMCRP).

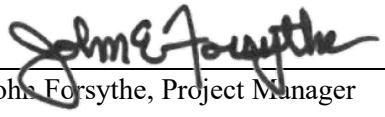
## 1.2 Public Review Process

On February 12, 2020, the CPUC filed a Notice of Completion (NOC) with the Governor's Office of Planning and Research (State Clearinghouse, SCH# 2020029041), published a Notice of Intent (NOI) to Adopt a Mitigated Negative Declaration, and released the Draft IS/MND for a 30-day public review period. The Draft IS/MND was distributed to federal, State, and local agency representatives, and the NOI was distributed to property owners within 300 feet of the Project, as outlined in Appendix A of the Draft IS/MND. A legal notice was published on February 12, 2020 in the Eureka Times-Standard announcing the availability of the Draft IS/MND for public review in compliance with CEQA.

In accordance with Section 15105(b) of the CEQA Guidelines the public review and comment period began on February 12, 2020, and ended on March 13, 2020. The CPUC established a Project voice mail phone number (707) 796-7011, email address (CPUCHumboldtReconductoring@esassoc.com), and Project web site (https://www.cpuc.ca.gov/environment/info/esa/humboldt/index.html) to enable the public to ask questions, provide comments, and obtain additional information on the Project analyzed in the Draft IS/MND. Copies of all written comments received on the Draft IS/MND are provided in Chapter 2 of this Final IS/MND.

## 1.3 Findings

Based on the analysis conducted in this Final IS/MND, the CPUC has found, on the basis of the whole record before it (including all Project application materials, the Draft IS/MND, comments received, and other materials), that there is no substantial evidence that the Project would have a potential significant environmental impact. Substantial evidence includes facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts. Argument, speculation, and unsubstantiated opinion or narrative does not constitute substantial evidence (Pub. Res. Code §21080(e); CEQA Guidelines §15064(f)(5)). Project features and mitigation measures identified in the Final IS/MND to be required as a condition of certification of approval for the proposed Project would avoid or reduce all of the impacts to a less-than-significant level.



John Forsythe, Project Manager

April 17, 2020
Date

Energy Division
California Public Utilities Commission

# CHAPTER 2
# Comments and Responses

## 2.1 Introduction

This chapter includes a copy of the PG&E comment letter received during the public review period on the Draft IS/MND for the Humboldt Bay – Humboldt #1 60 kV Reconductoring Project, Application A.19-02-004, and the responses to those comments.

## 2.2 List of Comment Letters Received

One comment letter from PG&E was received on the Draft IS/MND (herein after referred to as IS/MND).

## 2.3 Responses to Comments

This section contains responses to all of the substantive comments received on the IS/MND during the public review period from February 12, 2020 through March 13, 2020. Each substantive comment was assigned a comment number (e.g., A-1, A-2, etc.). The comment letter is reproduced in its entirety followed by the responses to each comment within the letter. The comments received resulted in minor revisions to the IS/MND, as addressed in this section.

## 2.4 Revisions to the IS/MND

As a result of comments, some changes have been made to the previously published text of the IS/MND. Changes include: minor corrections made to improve writing clarity, grammar, and consistency; clarifications, additions, or deletions resulting from specific responses to comments; and text changes to update information in the IS/MND. These text revisions are included following each response. The specific additions and deletions use the following conventions:

- Text deleted from the IS/MND is shown in ~~strike-out text~~.
- Text added to the IS/MND is shown in <u>underline text</u>.

# Comment Letter A

## Cory Barringhaus

**From:** Rice, Erin <E1RJ@pge.com>
**Sent:** Friday, March 13, 2020 12:52 PM
**To:** Forsythe, John (John.Forsythe@cpuc.ca.gov); Cory Barringhaus
**Cc:** Michael Manka; jblanchard@rudderlawgroup.com; Janet Liver (Janet.Liver@erm.com)
**Subject:** Humboldt Bay-Humboldt #1 60 kV Reconductoring Project - PG&E Minor Comments
**Attachments:** Fig 2-2 PG&E edits -Draft ISMND .pdf

Dear John and Cory:

Thank you for the opportunity to review the public draft IS/MND for the Humboldt Bay-Humboldt #1 60kV Reconductoring Project. PG&E has the following minor comments on the CEQA document:

1. Page ES-1, Executive Summary Introduction (1st paragraph, 6th line) – The back tie is to Humboldt Bay Substation, not Humboldt Bay Power Plant. A-1

2. Page ES-1, Project Description – The Project travels through the City of Eureka as well as through Humboldt County. A-2

3. Page ES-26 and Page 5-26, Mitigation Measure NOI-1c: Construction Noise Management Plan – The word "Plan" should be removed to update the measure to be consistent with page 3.13-13. A-3

4. Page 5-14, Table 5-1, Mitigation Monitoring, Reporting and Compliance Program (MMRCP) – Needs to include APM BIO-12: Minimize Impact to Marbled Murrelet (see pages 2-37 and 3.4-28). A-4

5. Figures 2-2 through 2-5: We suggest making the following changes to these figures to more accurately reflect the project description:

A. The shading on Figures 2-2 and 2-5 currently obscures proposed matting at four locations (three on Figure 2-2 and one on Figure 2-5) . See the attached Figures indicating the exact locations.

B. Please revise the legend in Figure 2-2 to say “temporary matting” rather than “timber matting.” The actual matting could include “temporary matting or other protection measures (e.g. rig mats, timber roads, plating, or tracked vehicles [preferably rubber tracked]), as indicated in APM BIO-9 and Page 2-20 of IS/MND.

C. Poles at four locations on Figure 2-3 will be replaced with light-duty steel poles (LDS poles), not wood. See the locations and clarifications in the attached Figure.

D. The lines coming out from Humboldt Bay Substation in Figure 2-2 reflect the existing lines and not the proposed project. See the attached Figure with further clarifications.

E. Please include the following qualifier on all project description figures, in particular, Figures 2-2 through 2-5: “Subject to Final Design and Engineering” as the detailed information depicted on the figure could change during final design (e.g. exact location of the replacement pole, or a change of pole type). A-5

6. Page 2-21, please add the word "approximately" when describing the diameter and depth of the LSTs. A-6

7. Page 2-22, Installing Tubular Steel Poles (TSPs) (1st sentence) – please add “or micropiling” to construction technique that could be used to install TSPs. A-7

8. Page 3.7-10 - The IS/MND suggests that the structures would be subject to the California Building Code, which is not correct. PG&E's transmission line poles and structures are regulated under the CPUC's General Order 95, not the California Building Code. A-8

9. As discussed on February 26, we look forward to meeting with the CPUC to review the implementation of the MMRCP. We note that in Table 5-1 there is a monitoring/reporting requirement to coordinate with CDFW regarding establishment of nesting buffers (APM BIO-6). As indicated during our February call, the document "Nesting Birds: Species-Specific Buffers for PG&E Activities" (Appendix C of the Proponent's Environmental Assessment) was developed in coordination with CDFW. Therefore, further coordination with CDFW on implementation of these buffers is unnecessary. We look forward to having a more in-depth discussion of the implementing actions, monitoring/reporting requirements, and timing of each of the measures to finalize the MMCRP, which could lead to additional clarifications in the table to facilitate compliance at the time of construction. A-9

Thanks again for all of your hard work on this project!

Erin

**Erin Rice**
**Sr. Land Planner**
**Pacific Gas and Electric Company**
**Environmental Management, Electric Transmission**
2730 Gateway Oaks, Rm 220, #235B
Sacramento, CA 95833
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E1RJ@pge.com

# Response to Letter A – PG&E

**Response A-1:** The second sentence of the first paragraph on page ES-1 is revised as follows:

> PG&E proposes to reconductor approximately 7.8 miles of single circuit power lines to maintain electric transmission system reliability in the City of Eureka and serve as critical back tie between the Humboldt Bay ~~Power Plant~~ Substation and the Humboldt Substation, pursuant to CPUC General Order (GO) 131-D.

**Response A-2:** The third sentence of the last paragraph on page ES-1 is revised as follows:

> From Humboldt Bay Substation, the Project would travel northeast through unincorporated Humboldt County and the City of Eureka, then back through Humboldt County, terminating at Humboldt Substation located east of Eureka near Myrtle Avenue.

**Response A-3:** Mitigation Measure NOI-1c in Table ES-2 on page ES-26 and in Table 5-1 on page 5-26 is revised as follows:

> **Mitigation Measure NOI-1c: Construction Noise Management ~~Plan~~**

**Response A-4**: The following APM is added to Table 5-1 on page 5-14:

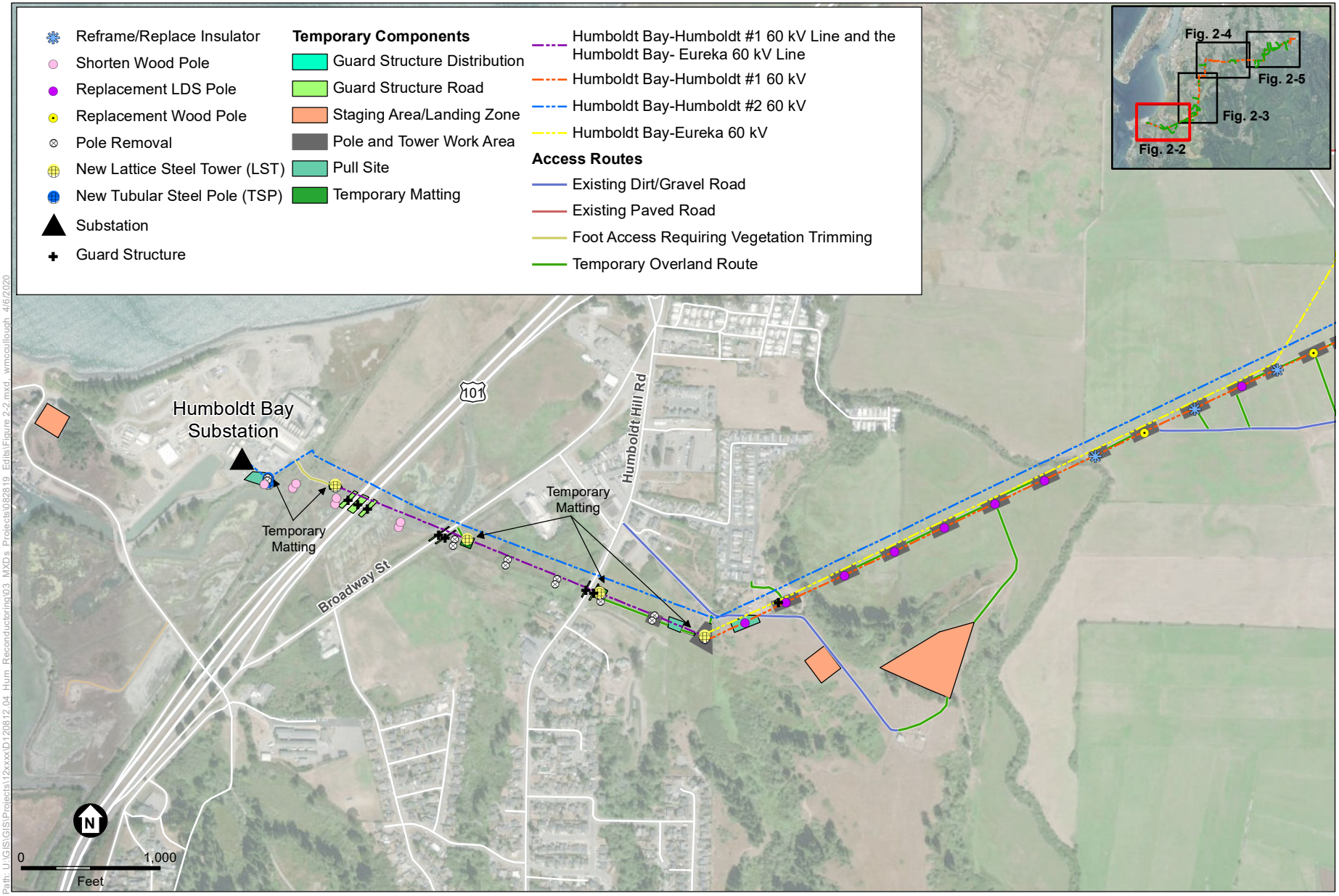
> **APM BIO-12: Minimize Impact to Marbled Murrelet.** Helicopter work will not commence until at least two hours after sunrise and will end at least one hour before sunset to avoid the potential to interrupt peak daily feeding cycles for marbled Murrelet.

**Response A-5:** Figures 2-2 through 2-5 have been updated and revised versions are shown on the following pages.

**Response A-6:** As indicated in the third column of Table 2-2 on page 2-11, dimensions of proposed LSTs as well as other proposed structures are approximate. Therefore, the request to clarify the diameter and depth of LSTs on page 2-21 is unnecessary.

**Response A-7:** The first sentence under "Installing Tubular Steel Poles" on page 2-22 is revised as follows:

> The foundations for the two TSPs would be installed using the drilled pier technique or micropiling due to the presence of groundwater and to reduce ground disturbance.

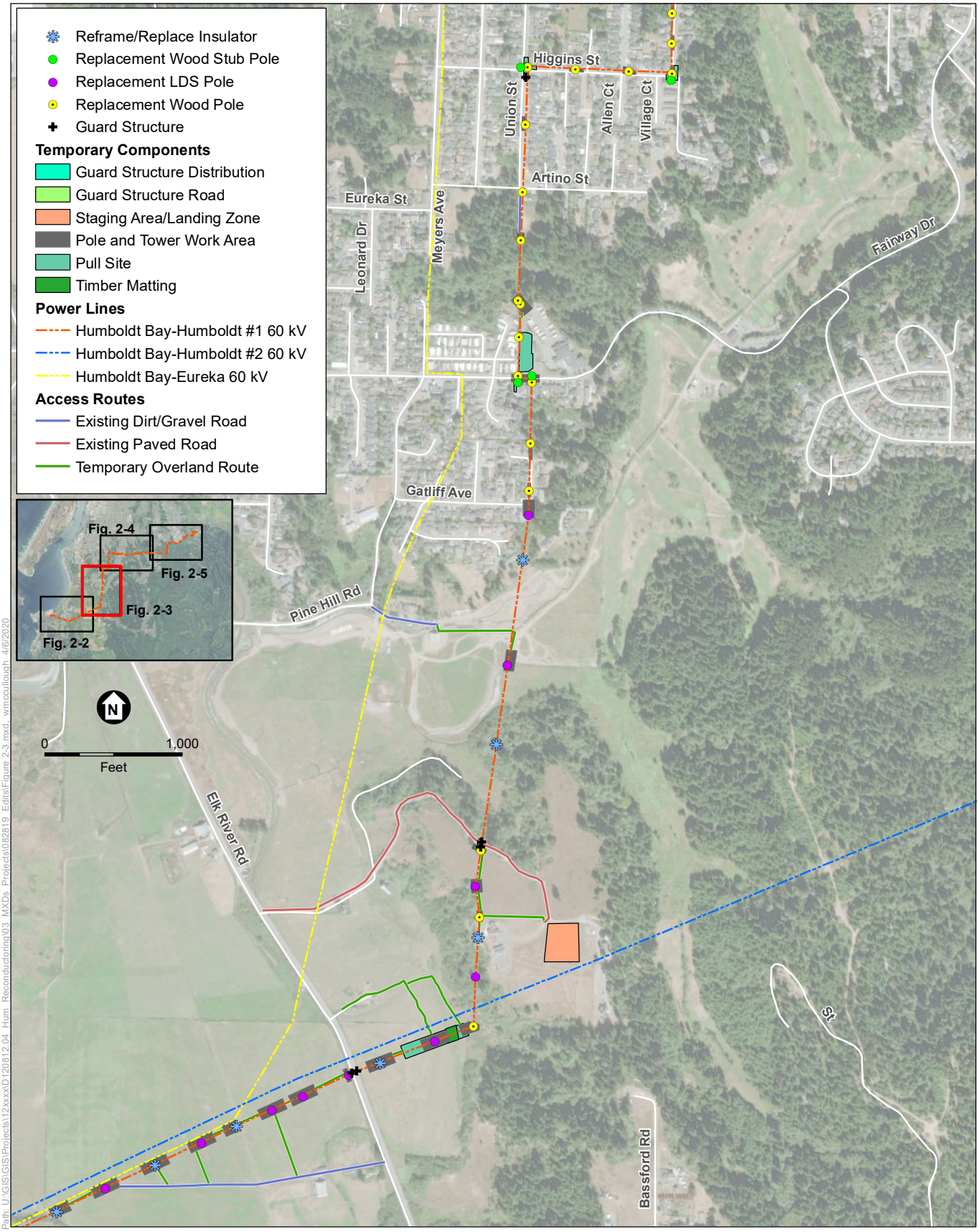



SOURCE: PG&E, 2019

HUMBOLDT BAY – HUMBOLDT #1 60 KV RECONDUCTORING PROJECT

**Figure 2-2**

Proposed Project: Detailed Alignment (Panel 1 of 4)

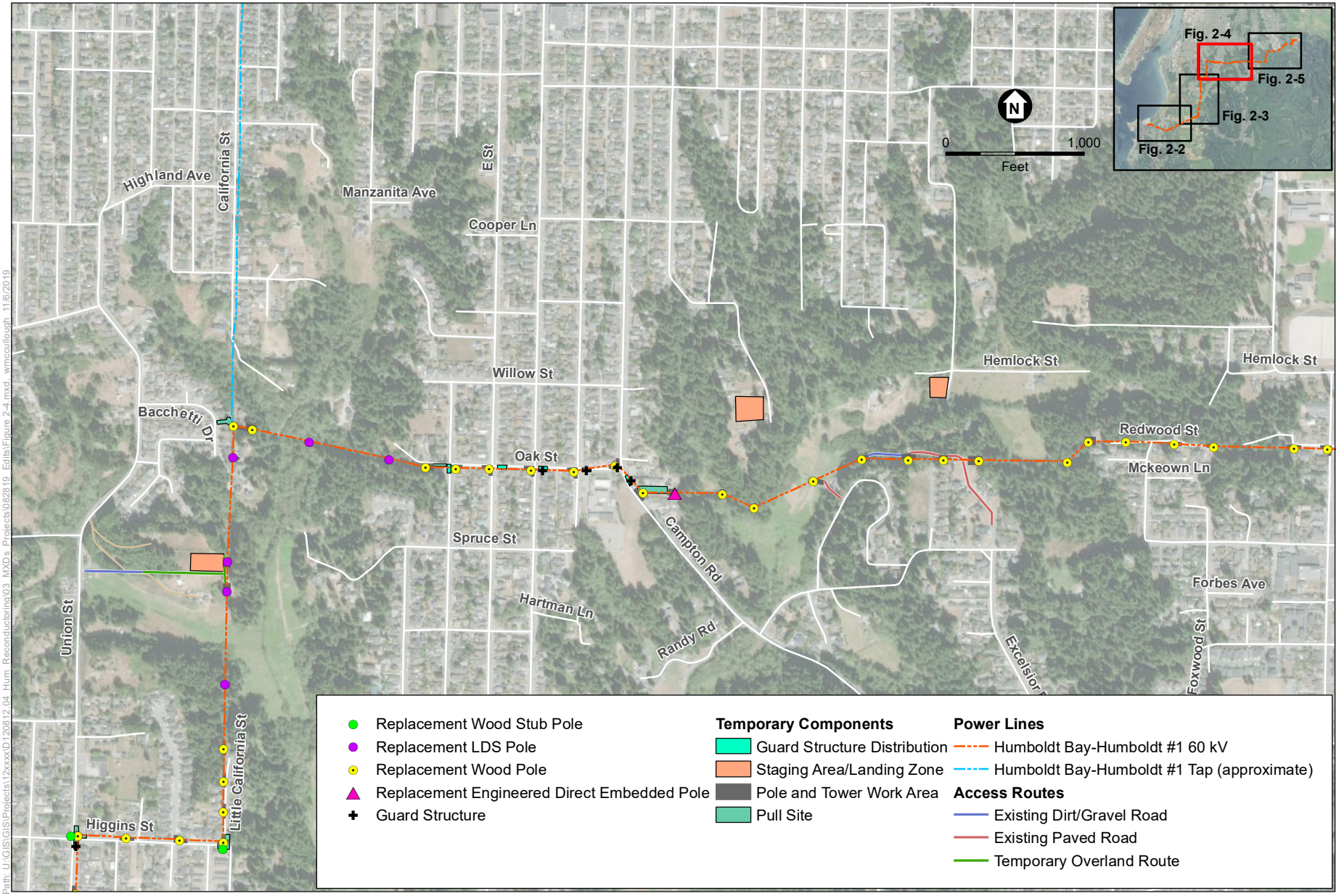



SOURCE: PG&E, 2019

HUMBOLDT BAY – HUMBOLDT #1 60 KV RECONDUCTORING PROJECT

**Figure 2-3**

Proposed Project: Detailed Alignment (Panel 2 of 4)




Path: U:\GIS\GIS\Projects\12xxxx\D120812.04_Hum_Reconductoring\03_MXDs_Projects\082819_Edits\Figure 2-4.mxd wmcullough 11/6/2019



SOURCE: PG&E, 2019

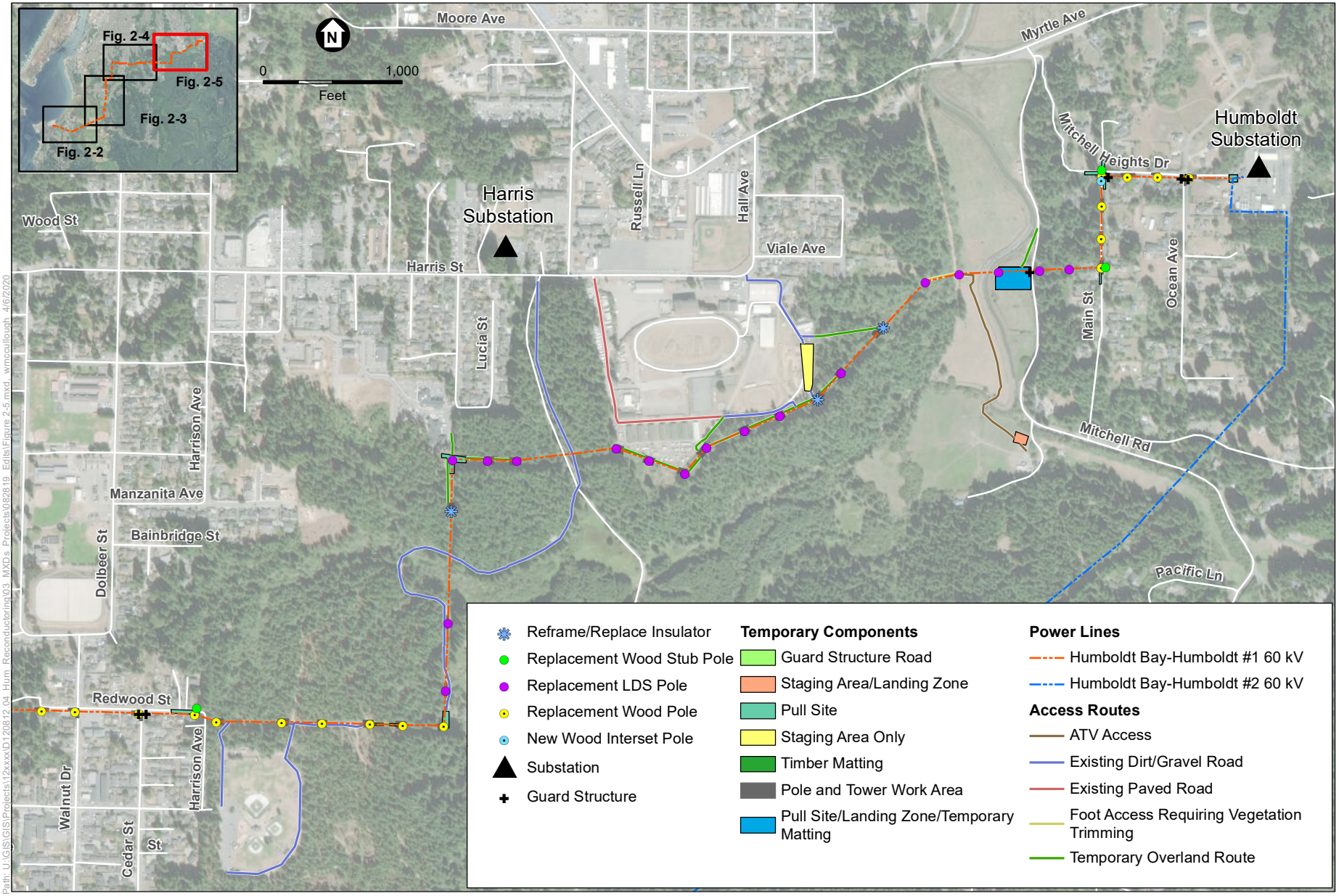
HUMBOLDT BAY – HUMBOLDT #1 60 KV RECONDUCTORING PROJECT

**Figure 2-4**

Proposed Project: Detailed Alignment (Panel 3 of 4)

ESA

Subject to Final Design and Engineering




SOURCE: PG&E, 2019

HUMBOLDT BAY – HUMBOLDT #1 60 KV RECONDUCTORING PROJECT

**Figure 2-5**

Proposed Project: Detailed Alignment (Panel 4 of 4)



ESA

Subject to Final Design and Engineering

**Response A-8:** The first paragraph on page 3.7-10 is revised as follows:

> ~~While the Project does not propose to erect any buildings or structures that would be occupied by people, the Project remains under the purview of the CBC because the towers, poles, foundations, retaining walls, etc., associated with this Project are considered structures. The California Health and Safety Code defines a "structure" as including any piece of work artificially built or composed of parts joined together in some definite manner (Health and Safety Code §18908). Title 24 also states that the construction, installation, alteration, removal, repair, or replacement of any electrical system is regulated by CBC.~~

**Response A-9:** The Monitoring/Reporting Requirements of APM BIO-6: Nesting Bird Impact Avoidance and Protection in Table 5-1 on page 5-12 is revised as follows:

> ~~PG&E biologist to coordinate with CDFW regarding establishment of nesting buffers and allowable construction activities within nesting bird exclusion zones.~~

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# CHAPTER 3
# Mitigation Monitoring, Compliance, and Reporting Program

## 3.1 Summary of Revisions to the MMCRP

This chapter includes an updated version of Draft IS/MND Table 5-1, Mitigation Monitoring, Compliance, and Reporting Program for the Humboldt Bay – Humboldt #1 60 kV Reconductoring Project. The purpose of the updated table in this chapter is to provide a single comprehensive list of impacts, mitigation measures, Applicant Proposed Measures (APMs), monitoring and reporting requirements, and timing of implementation. Therefore, the text revisions and additions to impacts, mitigation measures, and APMs that are shown in Chapter 2 of this Final MND are shown in final form in this chapter and not depicted in underline and strike out format. Following review of public comments received during the public review period, the CPUC has determined that no new significant environmental impacts are identified in this Final MND. Additionally, no mitigation measures presented in the Draft IS/MND were deleted in this Final MND.

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PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

# MITIGATION MONITORING, COMPLIANCE, AND REPORTING PROGRAM

## Pacific Gas and Electric's Humboldt Bay - Humboldt #1 60kV Reconductoring Project
(APPLICATION NO. A.19-02-004)

## Introduction

This document describes the mitigation monitoring, compliance, and reporting program (MMCRP) for ensuring the effective implementation of the mitigation measures required for the California Public Utilities Commission (CPUC) approval of the Pacific Gas and Electric's (PG&E) application to construct, operate and maintain the Humboldt Bay-Humboldt #1 60kV Reconductoring Project (Project). The MMCRP includes all measures proposed by PG&E (APMs), and all mitigation measures identified by the CPUC to reduce potentially significant impacts to less than significant. All APMs and mitigation measures are presented in **Table 3-1** provided at the end of this MMCRP.

If the Project is approved, this MMCRP would serve as a self-contained general reference for the Mitigation Monitoring, Compliance, and Reporting Program adopted by the CPUC for the Project. If and when the Project is approved by the Commission, the CPUC will compile the Final Plan from the Mitigation Monitoring Program in the Final Mitigated Negative Declaration (MND), as adopted.

### California Public Utilities Commission – MMCRP Authority

The California Public Utilities Code in numerous places confers authority upon the CPUC to regulate the terms of service and the safety, practices, and equipment of utilities subject to its jurisdiction. It is the standard practice of the CPUC, pursuant to its statutory responsibility to protect the environment, to require that mitigation measures 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 Public Resources Code. Section 21081.6 requires a public agency to adopt a reporting or monitoring program when it adopts a mitigated negative declaration for a project that could have potentially significant environmental effects. California Environmental Quality Act (CEQA) Guidelines Section 15097 was added in 1999 to further clarify agency requirements for mitigation monitoring and reporting.

The purpose of a MMCRP is to ensure that measures adopted to mitigate or avoid significant impacts of a project are implemented. The CPUC views the MMCRP as a working guide to facilitate not only the implementation of mitigation measures by the project proponent, but also the monitoring, compliance, and reporting activities of the CPUC and any monitors it may designate.

The CPUC will address its responsibility under Public Resources Code Section 21081.6 when it takes action on PG&E's application. If the CPUC approves the application, it also will adopt a MMCRP that includes the mitigation measures ultimately made conditions of approval by the CPUC. Because the CPUC must decide whether or not to approve the PG&E application and because the application may cause either direct or reasonably foreseeable indirect effects on the environment, CEQA requires the CPUC to consider the potential environmental impacts that could occur as the result of its decision and to consider mitigation for any identified significant environmental impacts.

If the CPUC approves PG&E's application for authority to reinforce the electric transmission and distribution system, PG&E would be responsible for implementation of all of the Applicant Proposed Measures (APM) and all mitigation measures governing the construction, operation, and maintenance of the Project. Though other federal, State, and local agencies would have permit and approval authority over some aspects of the Project, the CPUC would continue to act as the lead agency for monitoring compliance with all mitigation measures required by the adopted IS/MND. All approvals and permits obtained by PG&E would be submitted to the CPUC prior to commencing the activity for which the permits and approvals were obtained.

In accordance with CEQA, the CPUC reviewed the impacts that would result from approval of the application. The activities considered include replacement of 7.8 miles of existing bare single circuit conductors and insulators on the Humboldt Bay to Humboldt #1 (HB-H#1) 60kV Power Line (reconductoring) between the existing Humboldt Bay and Humboldt Substations. The Project would also include relocation of 0.6 miles of Humboldt Bay to Eureka (HB-E) 60kV Power Line to a new tubular steel pole (collocated with HB-H#1), and relocation of Humboldt Bay to Humboldt #2 Power Line (including pole removal and relocation) onto the new tubular steel pole on the HB-E Power Line. Reconductoring would involve removal and/or replacement of power poles, placement of new poles and lattice steel towers, shortening of poles, insulators, and other infrastructure upgrades.

The CPUC review concluded that implementation of the Project would not result in any significant unmitigable impacts. All potential impacts would be mitigated to less-than-significant levels or would be less than significant. PG&E has agreed to incorporate all the CPUC-recommended mitigation measures into the Project. The CPUC has included the stipulated mitigation measures as conditions of approval of the application and has circulated an IS/proposed MND for public review.

Because the CPUC must decide whether or not to approve the PG&E application and because the application may cause either direct or reasonably foreseeable indirect effects on the environment, CEQA requires the CPUC to consider the potential environmental impacts that could occur as the result of its decisions and to consider mitigation for any identified significant environmental impacts.

The attached IS/MND presents and analyzes potential environmental impacts that would result from construction, operation, and maintenance of the Project, and recommends mitigation measures as appropriate. Based on the IS/MND, approval of the application would have no impact or less than significant impacts in the following areas:

- Aesthetics
- Agriculture and Forestry Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Population and Housing
- Public Services
- Recreation
- Transportation
- Utilities and Service Systems
- Wildfire

The IS/MND indicates that approval of the application would result in potentially significant impacts in the areas listed below, and so identifies APMs and mitigation measures that have been accepted by PG&E to reduce the significance below established thresholds.

- Air Quality
- Biological Resources
- Cultural Resources
- Noise
- Tribal Cultural Resources

## Roles and Responsibilities

As the lead agency under CEQA, the CPUC is required to monitor the Project to ensure that the required mitigation measures and all APMs are implemented, as described in the IS/MND. The CPUC will be responsible for ensuring full compliance with the provisions of this MMCRP and has primary responsibility for implementation of the monitoring program. The purpose of the monitoring program is to document that the mitigation measures and APMs required and relied upon by the CPUC are implemented and that mitigated environmental impacts are reduced to a less-than-significant level. The CPUC has the authority to halt any activity associated with the Project if the activity is determined to be a deviation from the approved Project or the adopted APMs and mitigation measures.

The CPUC may delegate duties and responsibilities for monitoring to other mitigation monitors or consultants as deemed necessary. The CPUC will ensure that the person(s) delegated any duties or responsibilities are qualified to monitor compliance.

The CPUC, along with its mitigation monitor, will ensure that any variance process, which will be designed specifically for the Project, or deviation from the procedures identified under the monitoring program is consistent with CEQA requirements; no Project variance will be approved by the CPUC if it creates new significant environmental impacts. As defined in this MMCRP, a variance should be strictly limited to minor Project changes that will not trigger other permit requirements, that does not increase the severity of an impact or create a new impact, and that clearly and strictly complies with the intent of the mitigation measure. A change to the Project that has the potential for creating significant environmental effects will be evaluated to determine whether

supplemental CEQA review is required. Any proposed deviation from the approved Project and adopted mitigation measures, including correction of such deviation, shall be reported immediately to the CPUC and the mitigation monitor assigned to the construction for their review and CPUC approval. In some cases, a variance also may require approval by a CEQA responsible agency.

# Enforcement and Responsibility

The CPUC is responsible for enforcing the procedures for monitoring through the environmental monitor. The environmental monitor shall note problems with monitoring, notify appropriate agencies or individuals about any problems, and report the problems to the CPUC. The CPUC has the authority to halt any construction, operation, or maintenance activity associated with the Project if the activity is determined to be a deviation from the approved Project or adopted APMs or mitigation measures. The CPUC may assign its authority to its environmental monitor.

# Mitigation Compliance Responsibility

PG&E is responsible for successfully implementing all of the adopted APMs and mitigation measures in this MMCRP. The MMCRP contains criteria that define whether mitigation is successful. Standards for successful mitigation also are implicit in many mitigation measures that include such requirements as obtaining permits or avoiding a specific impact entirely. Additional mitigation success thresholds will be established by applicable agencies with jurisdiction through the permit process and through the review and approval of specific plans for the implementation of mitigation measures.

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

## Dispute Resolution Process

The MMCRP is expected to reduce or eliminate potential disputes between CPUC staff and the applicant concerning implementation of the adopted mitigation measures. Issues should first be addressed informally at the field level between the CPUC Environmental Monitoring Team and the PG&E Environmental Compliance Team with questions that may be raised to the PG&E Project Manager or Construction Manager, as necessary. Should the issue not be resolved at the field level, the following procedure will be observed for dispute resolution between CPUC staff and the applicant:

- Disputes and complaints should be directed first to the CPUC's designated Project Manager for resolution. The Project Manager will attempt to resolve the dispute.
- Should this informal process fail, the CPUC Project Manager may initiate enforcement or compliance action to address deviations from the approved Project or MMCRP.

# General Monitoring Procedures

## Mitigation Monitor

Many of the monitoring procedures will be conducted during the construction phase of the Project. The CPUC and the mitigation monitor are responsible for integrating the mitigation monitoring procedures into the construction process in coordination with PG&E. To oversee the monitoring procedures and to ensure success, the mitigation monitor assigned to the construction must be on site during that portion of construction that has the potential to create a significant environmental impact or other impact for which mitigation is required. The mitigation monitor is responsible for ensuring that all procedures specified in this MMCRP are followed.

## Construction Personnel

A key feature contributing to the success of mitigation monitoring will be obtaining the full cooperation of construction personnel and supervisors. Many of the mitigation measures and APMs require action on the part of the construction supervisors or crews for successful implementation. To ensure success, the following actions, detailed in specific mitigation measures included in this MMCRP, will be taken:

- PG&E shall require all contractors to comply with the conditions of Project approval, including all applicable APMs and mitigation measures.
- One or more pre-construction meetings will be held to inform all and train construction personnel about the requirements of the MMCRP.
- A written summary of mitigation monitoring procedures will be provided to construction supervisors for all APMs and mitigation measures requiring their attention.

## General Reporting Procedures

Site visits and specified monitoring procedures performed by other individuals will be reported to the mitigation monitor assigned to the construction. A monitoring record form will be submitted to the mitigation monitor by the individual conducting the visit or procedure so that details of the visit can be recorded and progress tracked by the mitigation monitor. A checklist will be developed and maintained by the mitigation monitor to track all procedures required for each mitigation measure and to ensure that the timing specified for the procedures is adhered to. The mitigation monitor will note any problems that may occur and take appropriate action to rectify the problems. PG&E shall provide the CPUC with written quarterly reports of the Project, which shall include progress of construction, resulting impacts, mitigation implemented, and all other noteworthy elements of the Project. Quarterly reports shall be required as long as mitigation measures are applicable.

## 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 for public inspection by the CPUC on request. The CPUC and PG&E will develop a filing and tracking system.

### Condition Effectiveness Review

In order to fulfill its statutory mandates to mitigate or avoid significant effects on the environment and to design a MMCRP to ensure compliance during project implementation (Pub. Res. Code §21081.6):

- The CPUC may conduct a comprehensive review of conditions which are not effectively mitigating impacts at any time it deems appropriate, including as a result of the Dispute Resolution procedure outlined above; and
- If in either review, the CPUC determines that any conditions are not adequately mitigating significant environmental impacts caused by the project, or that recent proven technological advances could provide more effective mitigation, then the CPUC may impose additional reasonable conditions to effectively mitigate these impacts.

These reviews will be conducted in a manner consistent with the CPUC's rules and practices.

## Mitigation Monitoring, Compliance, and Reporting Program

The table attached to this MMCRP presents a compilation of the adopted APMs and mitigation measures in the IS/MND. The purpose of the table is to provide a single comprehensive list of impacts, mitigation measures, adopted APMs, monitoring and reporting requirements, and timing. PG&E proposed APMs to minimize environmental impacts associated with implementation of the Project. In some instances, those APMs have been superseded by CPUC-recommended mitigation measures, as described in the IS/MND. The table below identifies only those APMs that have not been superseded and will be implemented as part of the Project.

**TABLE 3-1**
**MITIGATION MONITORING, COMPLIANCE, AND REPORTING PROGRAM FOR THE PG&E HUMBOLDT BAY- HUMBOLDT #1 60 KV PROJECT**

| Environmental Impact | Applicant Proposed Measures (APMs) and Mitigation Measures (MMs) Identified in the IS/MND | Implementing Actions | Monitoring/ Reporting Requirements | Timing |
|---|---|---|---|---|
| **Aesthetics** | | | | |
| **Impact 3.1.a:** Have a substantial adverse effect on a scenic vista. | **APM AE-1: Nighttime lighting to minimize potential visual impacts of construction activity.** In the unlikely event that nighttime construction activities are necessary, measures such as use of non-glare or hooded fixtures and directional lighting will be used to reduce spillover into areas outside the construction site and minimize the visibility of lighting from off-site locations wherever feasible.<br><br>**APM AE-2: Construction Cleanup.** Construction debris will be picked up regularly from construction areas. The appearance of disturbed land areas will be restored through implementation of re-contouring and/or re-vegetation.<br><br>**APM AE-4: Design and operation of staging areas to minimize potential visual impacts.** Security lighting may be installed at staging areas including helicopter sites. If nighttime security lighting is required in close proximity to sensitive locations such as existing residences, it will be directional and focused to minimize potential spillover or glare with respect to areas outside the staging area, and non-glare or hooded fixtures may be utilized. | PG&E and its contractors to implement measure as defined | CPUC monitor to inspect compliance. | During construction of the project. |
| **Impact 3.1.c:** Substantially degrade the existing visual character or quality of public views of the site and its surroundings, or since the project is in an urbanized area, whether it would conflict with applicable zoning and other regulations governing scenic quality | Implement APMs AE-2 and AE-4 (listed under Impact 3.1.a). | PG&E and its contractors to implement measure as defined | CPUC monitor to inspect compliance. | During construction of the project. |
| **Impact 3.1.d:** Create a new source of substantial light or glare which would adversely affect daytime or nighttime views in the area | **Implement APMs AE-1, AE-2, and AE-4 (listed under Impact 3.1.a) and APM AE-3**<br><br>**APM AE-3:** Use of Galvanized Finish on LDSs, TSPs, and LSTs. Use of a galvanized finish that will weather to a dull, non-reflective patina on new steel poles and lattice towers will reduce potential for a new source of glare resulting from introduction of project elements. | PG&E and its contractors to implement measure as defined | CPUC monitor to inspect compliance. | During construction of the project. |

**TABLE 3-1 (CONTINUED)**
**MITIGATION MONITORING, COMPLIANCE, AND REPORTING PROGRAM FOR THE PG&E HUMBOLDT BAY- HUMBOLDT #1 60 KV PROJECT**

| Environmental Impact | Applicant Proposed Measures (APMs) and Mitigation Measures (MMs) Identified in the IS/MND | Implementing Actions | Monitoring/ Reporting Requirements | Timing |
|---|---|---|---|---|
| **Agriculture and Forestry Resources** | | | | |
| **Impact 3.2.e:** Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use | Implement APM AE-2 (listed under Impact 3.1.a). | PG&E and its contractors to implement measure as defined | CPUC mitigation monitor to inspect compliance. | During construction of the project. |
| **Air Quality** | | | | |
| **Impact 3.3.a:** Conflict with or obstruct implementation of the applicable air quality plan | **APM AQ-1: Minimize Fugitive Dust.** PG&E will minimize fugitive dust during construction by implementing the following measures:<br>• Reduce the amount of the disturbed area where possible.<br>• Use water trucks or sprinkler systems in dry weather in sufficient quantity to prevent airborne dust from leaving the site.<br>• Implement dust control measures as soon as possible following completion of any soil-disturbing activities.<br>• Establish a policy that vehicle speed for all construction vehicles is not to exceed 15 miles per hour on any unpaved surface.<br>• Water all active construction areas (including storage piles) as needed to suppress dust. Base the frequency on the type of operation and the soil and wind exposure.<br>• Cover or maintain at least 2 feet of free board space on haul trucks transporting soil, sand, or other loose material on the site.<br>• Sweep adjacent public roads if visible soil material is carried out from a work site. | PG&E and its contractors to implement measure as defined | CPUC mitigation monitor to inspect compliance. | Prior to and during construction. |
| **Impact 3.3.b:** Violate any air quality standard or result in a cumulatively considerable net increase in an existing or projected air quality violation | Implement APM AQ-1 (listed under Impact 3.3.a) and Mitigation Measure AQ-1<br>**Mitigation Measure AQ-1: Supplemental Best Management Practices.** The following measures shall be implemented during the construction phase by PG&E and/or its construction contractors:<br>• All exposed surfaces that could cause dust (e.g., undeveloped parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered one to two times per day during dry conditions. | PG&E and its contractors to implement measure as defined | CPUC mitigation monitor to inspect compliance. | Prior to and during construction. |

**TABLE 3-1 (CONTINUED)**
**MITIGATION MONITORING, REPORTING, AND COMPLIANCE PROGRAM FOR THE PG&E HUMBOLDT BAY- HUMBOLDT #1 60 KV PROJECT**

| Environmental Impact | Applicant Proposed Measures (APMs) and Mitigation Measures (MMs) Identified in the IS/MND | Implementing Actions | Monitoring/ Reporting Requirements | Timing |
|---|---|---|---|---|
| **Air Quality (cont.)** | | | | |
| **Impact 3.3.b** (cont.) | • All haul trucks transporting soil, sand, or other loose material off-site shall be covered.<br>• All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.<br>• All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible.<br>• Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Construction workers will be trained on this requirement during tailboard construction trainings.<br>• All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.<br>• Post a publicly visible sign with the telephone number and person to contact at PG&E regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations. | PG&E and its contractors to implement measure as defined | CPUC mitigation monitor to inspect compliance. | Prior to and during construction. |
| **Impact 3.3.c:** Expose sensitive receptors to substantial pollutant concentrations | Implement APM AQ-1 (listed under Impact 3.3.a) and APM GHG-1<br>**APM GHG-1: Minimize GHG Emissions.**<br>• Maintain construction equipment in proper working conditions in accordance with PG&E standards.<br>• Minimize unnecessary construction vehicle 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.<br>• Maintain construction equipment in proper working condition 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 of 50 horsepower or larger and manufactured in 2000 or later will be registered under the CARB Statewide Portable Equipment Registration Program.<br>• Minimize welding and cutting by using compression of mechanical applications where practical and within standards.<br>• Encourage the recycling of construction waste where feasible | PG&E and its contractors to implement measure as defined | CPUC mitigation monitor to inspect compliance. | Prior to and during construction. |

**TABLE 3-1 (CONTINUED)**
**MITIGATION MONITORING, COMPLIANCE, AND REPORTING PROGRAM FOR THE PG&E HUMBOLDT BAY- HUMBOLDT #1 60 KV PROJECT**

| Environmental Impact | Applicant Proposed Measures (APMs) and Mitigation Measures (MMs) Identified in the IS/MND | Implementing Actions | Monitoring/ Reporting Requirements | Timing |
|---|---|---|---|---|
| **Biological Resources** | | | | |
| **Impact 3.4.a:** Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service | **APM BIO-1: Development and implementation of a Worker Environmental Awareness Program.** A qualified biologist will conduct an environmental awareness program for all on-site construction personnel 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 and state Endangered Species Acts and the consequences of noncompliance with these acts. Under this program, workers shall be informed of the presence, life history, and habitat requirements of all special-status species that may be affected in the project area, and about 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. Color photos of special-status species will be included, as well as a discussion of relevant APMs and specific avoidance or minimization measures for special-status species and habitats. | PG&E and its contractors to implement measure as defined | CPUC biological monitor to inspect compliance. | Prior to construction and during all phases of construction activities. |
| | **APM BIO-2: General Resource Protection Measures.** This APM consists of the following components:<br>• *Litter and trash management.* All food scraps, wrappers, food containers, cans, bottles, and other trash will be removed from the site daily.<br>• *Parking.* Vehicles and equipment will be parked on pavement, existing roads, developed areas, or approved construction work areas.<br>• *Route and speed limitations*. Vehicles will be confined to established roadways or previously disturbed roadways and pre-approved access roads, overland routes, and construction work areas. Access routes and temporary construction work areas will be limited to the minimum necessary to achieve the project goals. Vehicular speeds will be limited to 15 miles per hour on unpaved roads<br>• *Maintenance and refueling.* All equipment will be maintained to avoid leaks of automotive fluids such as fuels, solvents, or oils. All refueling and maintenance of vehicles and other construction equipment will be restricted to designated staging areas located at least 100 feet from any down-gradient aquatic habitat, unless otherwise isolated from habitat by secondary containment. Proper spill prevention and cleanup equipment will be maintained in all refueling areas.<br>• *Hazardous materials spills.* Emergency spill response and cleanup kits will be readily available for immediate containment and cleanup of an accidental spill. Construction crews will be trained in safe handling of hazardous materials and cleanup responsibilities. Any spills into aquatic habitat will be reported to the CPUC, USACE, State Water Resources Control Board, and the California Coastal Commission (if within the coastal zone) within 24 hours. | PG&E and its contractors to implement measure as defined | CPUC biological monitor to inspect compliance | Prior to onset of construction and during all phases of construction activities. |

**TABLE 3-1 (CONTINUED)**
**MITIGATION MONITORING, REPORTING, AND COMPLIANCE PROGRAM FOR THE PG&E HUMBOLDT BAY- HUMBOLDT #1 60 KV PROJECT**

| Environmental Impact | Applicant Proposed Measures (APMs) and Mitigation Measures (MMs) Identified in the IS/MND | Implementing Actions | Monitoring/ Reporting Requirements | Timing |
|---|---|---|---|---|
| **Biological Resources (cont.)** | | | | |
| **Impact 3.4.a** (cont.) | • *Pets and firearms.* No pets, hunting, open fires (such as barbecues), or firearms will be permitted at the project site.<br>• *Reporting and communication*. The PG&E project biologist will be responsible for immediately reporting any capture and relocation, or inadvertent harm, entrapment, or death of a federally or state listed species under ESA or CESA, respectively to the USFWS and CDFW, respectively.<br>• *Restore temporarily disturbed habitats.* All habitat areas for special-status species that are temporarily disturbed as a result of project activities will be restored upon completion of construction. Disturbed areas will be restored to pre-project conditions in coordination with land owners and in compliance with resource agency permit conditions. Tidal marsh areas will be allowed to passively restore or as otherwise required by resource agency permit requirements.<br>• *Erosion control materials.* Only tightly woven netting or similar material will be used for all geo-synthetic erosion control materials such as coir rolls and geo-textiles. No plastic monofilament matting will be used.<br>• *Minimize grading and vegetation removal along access roads and construction work areas, to the extent feasible.* PG&E will only trim, clear, or remove vegetation as necessary to establish the access routes and allow equipment use. Trees will be directionally felled away from sensitive biological resource areas, and if that is not possible, removed in sections. Damage to adjacent trees will be avoided to the extent possible.<br>• *Weed management*. Vehicles and construction equipment will be cleaned of mud and dirt on site at a PG&E wash facility or otherwise approved wash-down location as needed to minimize transport of weed plant parts or seed. Vehicles will also be cleaned at the completion of the project or when off-road use for that vehicle has been completed. | | | |
| | **APM BIO-3: Conduct Preconstruction Survey(s) for Special-Status Species and Sensitive Biological Resource Areas.** A qualified biologist will conduct pre-construction survey(s) in areas identified in the BRTR as having habitat for special-status species and sensitive biological resource areas, either during the appropriate phenological period for plants or within 7 days prior to construction activities for wildlife. If any special-status species is encountered during the pre-construction survey(s), the PG&E project biologist will be contacted immediately. If any special-status species are found nearby but outside the construction work area, they will not be disturbed. If recommended by the biologist, a temporary silt-fence barrier may be installed to prevent special-status species from entering the construction work area(s) during project activities. | PG&E and its contractors to implement measure as defined. | CPUC biological monitor to inspect compliance. | Within 7 days prior to construction and during all phases of construction activities. |

**TABLE 3-1 (CONTINUED)**
**MITIGATION MONITORING, COMPLIANCE, AND REPORTING PROGRAM FOR THE PG&E HUMBOLDT BAY- HUMBOLDT #1 60 KV PROJECT**

| Environmental Impact | Applicant Proposed Measures (APMs) and Mitigation Measures (MMs) Identified in the IS/MND | Implementing Actions | Monitoring/ Reporting Requirements | Timing |
|---|---|---|---|---|
| **Biological Resources (cont.)** | | | | |
| **Impact 3.4.a** (cont.) | **APM BIO-4: Identification and Marking of Sensitive Biological Resource Areas.** Sensitive biological resources (e.g., special-status plants, wetlands) in or adjacent to construction work areas identified during the pre-construction surveys, will be clearly marked in the field and on project maps. Such areas will be avoided during construction to the extent practicable. | PG&E and its contractors to implement measure as defined. | CPUC biological monitor to inspect compliance. | Within 30 days prior to construction. |
| | **APM BIO-5: Biological Monitor On-Site during Construction Activities in Sensitive Biological Resource Areas.** A qualified biologist will be onsite during ground-disturbing construction activities in sensitive biological resource areas identified in APM BIO-4 above unless the area has been protected by barrier fencing to protect sensitive biological resources and previously cleared by the qualified biologist. The qualified biologist will ensure implementation and compliance with all avoidance and mitigation measures and have the authority to stop or redirect work if construction activities are likely to affect sensitive biological resources. | PG&E and its contractors to implement measure as defined | CPUC biological monitor to inspect compliance. | During all phases of construction activities. |
| | **APM BIO-6: Nesting Bird Impact Avoidance and Protection.** If construction work is scheduled during the nesting season (February 1 through August 31), nest detection surveys will correspond with a standard buffer for individual species in accordance with the species-specific buffers set forth in Appendix C of the PEA and will occur within 7 days prior to the start of construction to determine nesting status by a qualified biologist. Nest surveys will be accomplished by ground surveys and will support phased construction, with surveys scheduled to be repeated if construction lapses in a construction work area for 7 days between March and July. Access for ground surveys will be subject to property owner permission.<br><br>If active nests containing eggs or young are found, the biologist will establish a species-specific nest buffer, as defined in Appendix C 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 C. 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 once construction ends. At 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 and its contractors to implement measure as defined. | PG&E biologist to CPUC biological monitor to inspect compliance. | Up to 30 days prior to construction and during construction. |

**TABLE 3-1 (CONTINUED)**
**MITIGATION MONITORING, REPORTING, AND COMPLIANCE PROGRAM FOR THE PG&E HUMBOLDT BAY- HUMBOLDT #1 60 KV PROJECT**

| Environmental Impact | Applicant Proposed Measures (APMs) and Mitigation Measures (MMs) Identified in the IS/MND | Implementing Actions | Monitoring/ Reporting Requirements | Timing |
|---|---|---|---|---|
| **Biological Resources (cont.)** | | | | |
| **Impact 3.4.a** (cont.) | **APM BIO-7:** Prior to the start of construction and in conjunction with APM-BIO 3, a qualified botanist will resurvey mapped populations of Lyngbye's sedge and flag or otherwise mark (e.g., stake, fence) all special-status plant populations documented adjacent to construction work areas for avoidance as feasible. After project activities have been completed at a given worksite, all staking, fencing, or flagging will be removed.<br>If complete avoidance of special-status plant populations is not possible, PG&E will implement the following:<br>• PG&E will limit driving across special-status plant populations to the greatest extent feasible. Where direct disturbance to topsoil (except excavation) is unavoidable, matting and other protection measures (e.g., rig mats, timber roads, plating, or tracked vehicles) will be used to minimize soil compaction or destruction of underground plant structures. Matting and other protection measures will be approved by a qualified biologist before work begins at that location.<br>• For any unavoidable excavation required within Lyngbye's sedge populations, the upper 6 inches of topsoil containing the plant's rhizomes will be stockpiled. PG&E will use the stockpiled topsoil to restore the area after temporary construction has been completed. | PG&E and its contractors to implement measure as defined. | CPUC biological monitor to inspect compliance. | Immediately prior to and during construction. |
| | **APM BIO-8: Special-Status Amphibian and Reptile Impact Avoidance and Protection.** During wet weather or the rainy season, all open holes, pits, and trenches will be protected to ensure that frogs, salamanders, and/or turtles do not become entrapped. Protective fencing, coverings, or ramps will be installed to either prevent wildlife from falling into excavations or to allow for escape. At the end of each work day, steep-walled holes or trenches more than six inches deep will be covered or provided with one or more escape ramps and/or fenced. Open excavations will be inspected each morning, prior to the start of construction activities, to ensure that no wildlife are trapped. Construction personnel will also check underneath vehicles and within materials to be moved (i.e., tires, tracks, pipes, etc.) for the presence of frogs, salamanders, and/or turtles when parked or placed near suitable aquatic or upland dispersal habitat. Any species found will be captured and relocated to an approved location as approved by the resource agencies, if required, and in compliance with any regulatory permits issued for the project | PG&E and its contractors to implement measure as defined. | CPUC biological Monitor to inspect compliance. | During construction. |
| | **APM BIO-9: Implement General Protection Measures for Wetlands and Other Waters.** PG&E will implement the following general measures to minimize or avoid impacts on wetlands and other waters:<br>• Avoid wetlands and other waters to the extent feasible.<br>• Construction activities in wetlands will generally occur during the dry season (May 1 to October 15) to the extent feasible. | PG&E and its contractors to implement measure as defined. | CPUC biological monitor to inspect compliance. | Prior to and during ground disturbing construction activities. |

**TABLE 3-1 (CONTINUED)**
**MITIGATION MONITORING, COMPLIANCE, AND REPORTING PROGRAM FOR THE PG&E HUMBOLDT BAY- HUMBOLDT #1 60 KV PROJECT**

| Environmental Impact | Applicant Proposed Measures (APMs) and Mitigation Measures (MMs) Identified in the IS/MND | Implementing Actions | Monitoring/ Reporting Requirements | Timing |
|---|---|---|---|---|
| **Biological Resources (cont.)** | | | | |
| **Impact 3.4.a** (cont.) | • Ground-based construction activities in tidally influenced wetlands near Buhne Slough will not occur during extreme high tide events that would flood the construction work areas.<br>• Where travel across seasonal wetlands is necessary, it will occur during dry conditions, when feasible, to avoid soil compaction or mixing. If travel is required during wet or moist conditions, temporary matting or other protection measure (e.g., rig mats, timber roads, plating, or tracked vehicles [preferably rubber tracked]) will be used to avoid soil compaction or mixing. Matting and other protection measures will be approved by a qualified biologist before construction work at that location begins.<br>• Conduct all fueling of vehicles at least 100 feet from wetlands and other water bodies unless approved by a qualified biologist.<br>• Set construction work areas back at least 50 feet from streams, creeks, or other water bodies unless approved by a qualified biologist.<br>• Implement a Storm Water Pollution Prevention Plan (SWPPP) to minimize construction-related erosion and sediments from entering nearby waterways (see APM WQ-1). | | | |
| | **APM BIO-12: Minimize Impact to Marbled Murrelet.** Helicopter work will not commence until at least two hours after sunrise and will end at least one hour before sunset to avoid the potential to interrupt peak daily feeding cycles for marbled Murrelet. | PG&E and its contractors to implement measure as defined. | CPUC biological monitor to inspect compliance. | During construction. |
| | **MM BIO-1: Pre-construction Bat Survey.** A pre-construction survey for special-status bat (i.e., Townsend's big-eared bat [Corynorhinus townsendii] and pallid bat [Antrozous pallidus]) habitat shall be conducted by a qualified biologist (i.e., who is experienced in the identification of special-status bat habitat) in advance of any tree removal, to identify signs of potential bat habitat and use (e.g., basal hollows in large trees or snags, large cavities or crevices, spaces under loose/exfoliating tree bark, or deep bark fissures). Bat maternity colonies will be avoided during construction. Should potential roosting habitat, or active bat roosts be found in trees to be removed, the following measures shall be implemented:<br>• Tree removal shall occur outside of months of maternity roosting (approximately April 15 to August 15) and winter torpor (approximately October 31 to March 31), to the extent feasible.<br>• Trees with maternity roosts shall be avoided during the roosting period (April 15 to August 15). If pre-construction surveys identify suitable bat roosting habitat in a tree planned for removal, a qualified biologist shall be present during tree removal. Trees shall be disturbed only when no rain is occurring or is not forecast to occur for three days and when daytime temperatures are at least 50 degrees Fahrenheit (°F). | PG&E and its contractors to implement measure as defined. | CPUC biological monitor to inspect compliance. | Prior to final design and construction. |

**TABLE 3-1 (CONTINUED)**
**MITIGATION MONITORING, REPORTING, AND COMPLIANCE PROGRAM FOR THE PG&E HUMBOLDT BAY- HUMBOLDT #1 60 KV PROJECT**

| Environmental Impact | Applicant Proposed Measures (APMs) and Mitigation Measures (MMs) Identified in the IS/MND | Implementing Actions | Monitoring/ Reporting Requirements | Timing |
|---|---|---|---|---|
| **Biological Resources (cont.)** | | | | |
| **Impact 3.4.a** (cont.) | • Trimming and removal of trees containing or suspected to contain roost sites shall be done under supervision of a qualified biologist and implemented over two days. On day one, branches and limbs not containing cavities or fissures in which bats could roost shall be cut using chainsaws. The following day, the remainder of the tree, including branches or limbs containing roost sites shall be removed under the supervision of the biologist, also using chainsaws. | | | |
| **Impact 3.4.b:** Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service | Implement APMs BIO-1 through BIO-5 (listed under Impact 3.4.a).<br><br>**MM BIO-2: Habitat Restoration Plan.** A qualified ecologist shall prepare and implement a restoration plan with detailed specifications for restoring all temporarily disturbed sensitive natural communities. The plan shall provide for the following:<br>• Pre–construction surveys by a qualified biologist of representative impact areas to characterize vegetation present.<br>• Use of locally native, ecologically suitable species for revegetation.<br>• Sanitation measures (e.g., locally sourced cuttings, elimination of container stock, or exclusive use of container plants grown according to plant pathogen best management practices) to prevent the introduction and/or spread of sudden oak death, other plant pathogens, and invasive plants during revegetation.<br>• Monitoring by a qualified biologist up to a period of five years unless performance standards are met earlier, or as specified by state and federal permitting agencies.<br>• Include minimum performance criteria for combined native and naturalized plant cover (50 percent, or equal to or greater than baseline within the monitoring period, or as specified by state and federal permitting agencies); and for maximum invasive plant cover (to return the project back to baseline conditions, or as specified by state and federal permitting agencies). | PG&E and its contractors to implement measure as defined. | CPUC biological monitor to inspect compliance. | As part of final design and prior to construction.<br><br>At the conclusion of construction. |
| **Impact 3.4.c:** Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means | Implement APMs BIO-1 through BIO-5, BIO-9, WQ-1, WQ-2, HAZ-1, and HAZ-2<br><br>**APM BIO-10: 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 following completion of construction in accordance with any applicable resource agency permits.<br><br>**APM BIO-11: Compensate for Permanent Impacts on Wetlands and Other Waters in Accordance with Project Permits.** PG&E will compensate for permanent impacts on wetlands by providing at least 1:1 mitigation for any unavoidable permanent impacts to wetlands and waters within the coastal zone and in compliance with resource agency | PG&E and its contractors to implement measure as defined. | CPUC biological monitor to inspect compliance. | As part of final design and prior to construction.<br><br>At the conclusion of construction.<br><br>To be completed as part of permitting. |

**TABLE 3-1 (CONTINUED)**
**MITIGATION MONITORING, COMPLIANCE, AND REPORTING PROGRAM FOR THE PG&E HUMBOLDT BAY- HUMBOLDT #1 60 KV PROJECT**

| Environmental Impact | Applicant Proposed Measures (APMs) and Mitigation Measures (MMs) Identified in the IS/MND | Implementing Actions | Monitoring/ Reporting Requirements | Timing |
|---|---|---|---|---|
| **Biological Resources (cont.)** | | | | |
| **Impact 3.4.c** (cont.) | permit requirements. Final compensation ratios for impacts to wetlands and waters throughout the project alignment will be based on site-specific information and finalized through discussions with the U.S. Army Corps of Engineers and the North Coast Regional Water Quality Control Board as part of the permitting processes for the project. | | | |
| **Cultural Resources** | | | | |
| **Impact 3.5.b:** Cause a substantial adverse change in the significance of a unique archaeological resource pursuant to CEQA Guidelines Section 15064.5. | **APM CUL-1: Workers Environmental Awareness Training.** PG&E will provide environmental awareness training on archaeological resources protection. This training may be administered by the principal cultural resource specialist (CRS) as a stand-alone training or included as part of the overall environmental awareness training as required by the 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 could be preserved; procedures that should be followed in the event of a cultural resource or human remain discovery; and penalties for disturbing cultural resources. | PG&E and its contractors to implement measure as defined. | CPUC mitigation monitor to inspect compliance. | Prior to any ground-disturbance. |
| | **APM CUL-2: Flag and Avoid Resources (Spiegelberg Homestead Archaeological Deposit).** The archaeological deposit at the Spiegelberg Homestead is not in the PAL, but adjacent to it. There are no roadway or land improvements proposed in this location as use of this area is limited to access to a landing zone. Additionally, no pole replacements or installations are proposed at this location. However, to ensure no inadvertent impacts occur to this resource, a qualified archaeologist will establish exclusion flagging or safety fencing around the archaeological site. | | | |
| | **Mitigation Measure CUL-1:** This measure supersedes APM CUL-3(a) and CUL-4. If indigenous or historic-era archaeological resources are encountered during proposed Project development or operation, PG&E and/or its contractors shall immediately cease all construction activity within 100 feet of the find and flag off the area for avoidance. The CPUC and a qualified archaeologist, defined as one meeting the U.S. Secretary of the Interior's Professional Qualifications Standards for Archeology and with expertise in California archaeology, shall be immediately informed of the discovery. The qualified archaeologist shall inspect the discovery and notify the CPUC of their initial assessment. Indigenous archaeological materials might include obsidian and chert flaked-stone tools (e.g., projectile points, knives, scrapers) or toolmaking debris; culturally darkened soil (midden) containing heat-affected rocks, artifacts, or shellfish remains; stone milling equipment (e.g., mortars, pestles, handstones, or milling slabs); and battered stone tools, such as hammerstones and pitted stones. Historic-era materials might include building or structure footings and walls, and deposits of metal, glass, and/or ceramic refuse. If the qualified archaeologist determines that the resource is or is potentially indigenous in origin, culturally affiliated California Native American Tribes shall be contacted to assess the find and determine whether it is potentially a tribal cultural resource | PG&E and its contractors to implement measure as defined. | CPUC mitigation monitor to inspect compliance. | Prior to and during construction involving ground-disturbance. |

**TABLE 3-1 (CONTINUED)**
**MITIGATION MONITORING, REPORTING, AND COMPLIANCE PROGRAM FOR THE PG&E HUMBOLDT BAY- HUMBOLDT #1 60 KV PROJECT**

| Environmental Impact | Applicant Proposed Measures (APMs) and Mitigation Measures (MMs) Identified in the IS/MND | Implementing Actions | Monitoring/ Reporting Requirements | Timing |
|---|---|---|---|---|
| **Cultural Resources (cont.)** | | | | |
| **Impact 3.5.b** (cont.) | If the CPUC determines, based on formal evaluations of California Register-eligibility (at Public Resources Code Section 5024.1[c]) documented by the qualified archaeologist and the culturally affiliated California Native American Tribes (if the resource is indigenous), that the resource is either an historical resource or unique archaeological resource (as defined in CEQA Guidelines Section 15064.5 and Public Resources Code Section 21083.2), or that the resource may qualify as a tribal cultural resource (as defined in Public Resources Code Section 21074), then the resource shall be avoided if feasible. Avoidance means that no activities associated with the proposed Project that may impact cultural resources shall occur within the boundaries of the resource or any defined buffer zones. The CPUC shall determine whether avoidance is feasible considering factors such as the nature of the find, project design, costs, and other considerations. Formal significance evaluations under California Register Criterion 4 shall be guided by research designs developed by a qualified archaeologist.<br><br>If avoidance of such a resource is not feasible, the CPUC shall consult with a qualified archaeologist, culturally affiliated California Native American Tribes (if the resource is indigenous), and other appropriate interested parties to determine treatment measures to minimize or mitigate any potential impacts to the resource pursuant to Public Resources Code Section 21083.2 and CEQA Guidelines Section 15126.4.<br><br>If avoidance is not feasible, the CPUC shall prepare and implement an Archaeological (and/or Tribal Cultural) Resources Treatment Plan that outlines the treatment measures for the resource based on the resource's values/significance as detailed in the formal California Register-eligibility evaluation.<br><br>Any treatment measures implemented shall be documented in a professional-level technical report (e.g., Archaeological Testing Results Report, Archaeological Data Recovery Report, Ethnographic Report, etc.), to be authored by a qualified archaeologist and filed with CHRIS. Construction work at the location of the find may commence upon completion of the approved treatment and authorization by the CPUC. Work may proceed in other parts of the C-APE while the mitigation is being carried out.<br><br>If the CPUC determines during project implementation that portions of the C-APE may be sensitive for archaeological resources or tribal cultural resources, the CPUC may authorize construction monitoring of these locations by a qualified archaeologist and Native American monitor. Any monitoring by a Native American monitor shall be done under agreements between PG&E or their designated contractor and culturally affiliated California Native American Tribes. | | | |

**TABLE 3-1 (CONTINUED)**
**MITIGATION MONITORING, COMPLIANCE, AND REPORTING PROGRAM FOR THE PG&E HUMBOLDT BAY- HUMBOLDT #1 60 KV PROJECT**

| Environmental Impact | Applicant Proposed Measures (APMs) and Mitigation Measures (MMs) Identified in the IS/MND | Implementing Actions | Monitoring/ Reporting Requirements | Timing |
|---|---|---|---|---|
| **Cultural Resources (cont.)** | | | | |
| **Impact 3.5.c:** Disturb any human remains, including those interred outside of formal cemeteries. | Implement APM CUL-1<br><br>**APM CUL-3: Manage Unanticipated Cultural Resources Discoveries.**<br><br>***a) Cultural Resources***<br><br>If 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 PG&E CRS/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 CRS/archaeologist's approval. PG&E will implement the CRS/archaeologist's recommendations for treatment of discovered cultural resources.<br><br>***b) Human Remains***<br><br>In keeping with the provisions provided in 7050.5 CHSC and Public Resource Code 5097.98, in the unlikely event that human remains or suspected human remains are encountered during any project-related activity, PG&E will:<br><br>• Stop all work within 100 feet;<br>• Immediately contact the CRS, who will then notify the county coroner and the CPUC;<br>• Secure the location, but do not touch or remove remains and associated artifacts;<br>• Do not remove associated spoils or pick through them;<br>• Record the location and keep notes of all calls and events; and<br>• Treat the find as confidential and do not publicly disclose the location.<br><br>If the coroner determines that the remains are Native American, California Health and Safety Code7050.5 and PRC Section 5097.98 require that the PG&E CRS contact the NAHC within 24 hours. The NAHC, as required by PRC Section 5097.98, will determine and notify the Most Likely Descendant. | PG&E and its contractors to implement measure as defined. | CPUC mitigation monitor to inspect compliance. | Prior to and during construction involving ground-disturbance. |
| **Geology, Soils, and Paleontological Resources** | | | | |
| **Impact 3.7.a.iii:** Directly or indirectly cause substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction. | **APM GEO-1: Minimization of Construction in Soft or Loose Soils.** Where soft or loose soils are encountered during project construction, appropriate measures will be implemented to avoid, accommodate, replace, or improve such soils. Depending on site-specific conditions and permit requirements, these measures may include excavating soft or loose soils and replacing them with engineered backfill materials, or installing matting in temporary work areas. | PG&E and its contractors to implement measure as defined. | CPUC mitigation monitor to inspect compliance. | Prior to construction activities. |

**TABLE 3-1 (CONTINUED)**
**MITIGATION MONITORING, REPORTING, AND COMPLIANCE PROGRAM FOR THE PG&E HUMBOLDT BAY- HUMBOLDT #1 60 KV PROJECT**

| Environmental Impact | Applicant Proposed Measures (APMs) and Mitigation Measures (MMs) Identified in the IS/MND | Implementing Actions | Monitoring/ Reporting Requirements | Timing |
|---|---|---|---|---|
| **Geology, Soils, and Paleontological Resources (cont.)** | | | | |
| **Impact 3.7.a.iii** (cont.) | **APM GEO-2: Reduction of Slope Instability during Construction.** Existing natural or temporarily constructed slopes affected by construction or operations will be evaluated for stability. Grading plans will be designed to limit the potential for slope instability and minimize the potential for erosion. | | | |
| **Impact 3.7 a.iv:** Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides. | Implement APM GEO-2 (listed under Impact 3.7.a.iii) | PG&E and its contractors to implement measure as defined. | CPUC mitigation monitor to inspect compliance. | Prior to construction activities. |
| **Impact 3.7.b:** Result in substantial soil erosion or the loss of topsoil. | Implement APM WQ-1 | PG&E and its contractors to implement measure as defined. | CPUC mitigation monitor to inspect compliance. | Prior to and during construction. |
| **Impact 3.7.c:** Be located on geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse | Implement APM GEO-1 and GEO-2 (listed under Impact 3.7.a.iii) | PG&E and its contractors to implement measure as defined. | CPUC mitigation monitor to inspect compliance. | Prior to construction activities. |
| **Impact 3.7.f:** Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. | **APM PALEO-1: Unanticipated Potential Paleontological Resource.** If significant paleontological resources are discovered during construction activities, the following procedures will be followed:<br>• Stop work immediately within 100 feet.<br>• Contact the designated project inspector and PG&E CRS immediately;<br>• Protect the site from further impacts, including looting, erosion or other human or natural damage; | PG&E and its contractors to implement measure as defined. | CPUC mitigation monitor to inspect compliance. | During construction activities involving ground disturbance. |

**TABLE 3-1 (CONTINUED)**
**MITIGATION MONITORING, COMPLIANCE, AND REPORTING PROGRAM FOR THE PG&E HUMBOLDT BAY- HUMBOLDT #1 60 KV PROJECT**

| Environmental Impact | Applicant Proposed Measures (APMs) and Mitigation Measures (MMs) Identified in the IS/MND | Implementing Actions | Monitoring/ Reporting Requirements | Timing |
|---|---|---|---|---|
| **Geology, Soils, and Paleontological Resources (cont.)** | | | | |
| **Impact 3.7.f** (cont.) | • The PG&E CRS in tandem with CPUC will arrange for a qualified paleontologist to evaluate the discovery. The paleontologist will be responsible for developing the recovery strategy in tandem with PG&E 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; and,<br>• Work may not resume within 100 feet of the find until approval by the paleontologist and PG&E CRS. | PG&E and its contractors to implement measure as defined. | CPUC mitigation monitor to inspect compliance. | Training shall take place prior to and during construction for new staff. |
| | **APM PALEO-2: Worker's Environmental Awareness Training.** Moderate and potentially high sensitivity formations are identified within the PAL; therefore, PG&E will provide environmental awareness training on paleontological resources protection. This training may be administered as a stand- alone training or included as part of the overall environmental awareness training as required by the project. The training will include, at minimum, the following:<br>• The types of fossils that could occur at the project site.<br>• The types of lithologies in which the fossils could be preserved.<br>• The procedures that should be taken in the event of a fossil discovery.<br>• Penalties for disturbing paleontological resources. | | | |
| **Greenhouse Gas Emissions** | | | | |
| **Impact 3.8.a:** Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment. | **APM GHG-1: Minimize GHG Emissions.**<br>• Maintain construction equipment in proper working conditions in accordance with PG&E standards.<br>• Minimize unnecessary construction vehicle 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.<br>• Maintain construction equipment in proper working conditions in accordance with PG&E standards. | PG&E and its contractors to implement measure as defined. | CPUC mitigation monitor to inspect compliance. | Prior to and during all phases of construction. |

**TABLE 3-1 (CONTINUED)**
**MITIGATION MONITORING, REPORTING, AND COMPLIANCE PROGRAM FOR THE PG&E HUMBOLDT BAY- HUMBOLDT #1 60 KV PROJECT**

| Environmental Impact | Applicant Proposed Measures (APMs) and Mitigation Measures (MMs) Identified in the IS/MND | Implementing Actions | Monitoring/ Reporting Requirements | Timing |
|---|---|---|---|---|
| **Greenhouse Gas Emissions (cont.)** | | | | |
| **Impact 3.8.a** (cont.) | • Minimize construction equipment exhaust by using low-emission or electric construction equipment where feasible. Portable diesel-fueled construction equipment with engines of 50 horsepower or larger and manufactured in 2000 or later will be registered under the CARB Statewide Portable Equipment Registration Program.<br>• Minimize welding and cutting by using compression of mechanical applications where practical and within standards.<br>• Encourage the recycling of construction waste where feasible | | | |
| **Hazards and Hazardous Materials** | | | | |
| **Impact 3.9.a:** Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials**.** | **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 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.<br>No known soil contamination was identified within the project site. In the event that soils suspected of being contaminated (on the basis of visual, olfactory, or other evidence) are unearthed during site grading 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.<br>All hazardous materials and hazardous wastes will be handled, stored, and disposed of in accordance with all applicable regulations, by personnel qualified to handle hazardous materials. The hazardous substance control and emergency response procedures include, but are not limited to, the following:<br>• Proper disposal of potentially contaminated soils.<br>• Establishing site-specific buffers for construction vehicles and equipment located near sensitive resources.<br>• Emergency response and reporting procedures to address hazardous material spills. | PG&E and its contractors to implement measure as defined. | CPUC mitigation monitor to inspect compliance. | Prior to and during construction. |

**TABLE 3-1 (CONTINUED)**
**MITIGATION MONITORING, COMPLIANCE, AND REPORTING PROGRAM FOR THE PG&E HUMBOLDT BAY- HUMBOLDT #1 60 KV PROJECT**

| Environmental Impact | Applicant Proposed Measures (APMs) and Mitigation Measures (MMs) Identified in the IS/MND | Implementing Actions | Monitoring/ Reporting Requirements | Timing |
|---|---|---|---|---|
| **Hazards and Hazardous Materials (cont.)** | | | | |
| **Impact 3.9.a** (cont.) | • Stopping work at that location and contacting the County Fire Department Hazardous Materials Unit immediately if visual contamination or chemical odors are detected. Work will be resumed at this location after any necessary consultation and approval by the Hazardous Materials Unit.<br>PG&E will complete a standard Emergency Action Plan Form as part of project tailboard meeting. The purpose of the form is to gather emergency contacts numbers, first aid location, work site location, and tailboard information. | PG&E and its contractors to implement measure as defined. | CPUC mitigation monitor to inspect compliance. | Prior to and during construction. |
| | **APM HAZ-2: Worker Environmental Awareness Program (WEAP) for Health, Safety, and Environment.** The WEAP will include the following components related to hazards and hazardous materials:<br>• PG&E health, safety, and environmental expectations and management structure.<br>• Applicable regulations.<br>• Summary of hazardous substances and materials that may be handled and/or to which workers may be exposed.<br>• Summary of the primary workplace hazards to which workers may be exposed.<br>• Overview of the measures identified in APM HAZ-1.<br>• Overview of the controls identified in the Stormwater Pollution Prevention Plan under APM HYDRO-1.<br>This measure will be coordinated with worker training required under APM BIO-1 and APM WQ-2. | PG&E and its contractors to implement measure as defined. | CPUC mitigation monitor to inspect compliance. | Prior to construction and ongoing for new staff. |
| **Impact 3.9.b:** Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. | Implement APMs HAZ-1 and HAZ-2 (listed under Impact 3.9.a) | PG&E and its contractors to implement measure as defined. | CPUC mitigation monitor to inspect compliance. | Prior to construction and ongoing for new staff. |

**TABLE 3-1 (CONTINUED)**
**MITIGATION MONITORING, REPORTING, AND COMPLIANCE PROGRAM FOR THE PG&E HUMBOLDT BAY- HUMBOLDT #1 60 KV PROJECT**

| Environmental Impact | Applicant Proposed Measures (APMs) and Mitigation Measures (MMs) Identified in the IS/MND | Implementing Actions | Monitoring/ Reporting Requirements | Timing |
|---|---|---|---|---|
| **Hazards and Hazardous Materials (cont.)** | | | | |
| **Impact 3.9.c:** Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school. | Implement APMs HAZ-1 and HAZ-2 (listed under Impact 3.9.a) | PG&E and its contractors to implement measure as defined. | CPUC mitigation monitor to inspect compliance. | Prior to construction and ongoing for new staff. |
| **Impact 3.9.e:** Be located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area | **APM TT-2: Air Traffic Control.** PG&E will implement the following protocols related to helicopter use:<br>• PG&E will comply with all applicable FAA regulations regarding air traffic;<br>• PG&E will prepare a Helicopter Use Plan;<br>• Helicopter operators will coordinate all project helicopter operations with local airports before and during project construction; and<br>• PG&E will comply with FAA requirements for helicopter activities in residential areas that will reduce safety risks, an if necessary coordinate with residents that may need to temporarily evacuate their properties. | PG&E and its contractors to implement measure as defined. | CPUC mitigation monitor to inspect compliance. | Prior to and during construction. |
| **Impact 3.9.f:** Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. | Implement APMs TT-1 and APM TT-3 (see Impact 3.17a, and Impact 3.17.d) listed under Transportation. | | | |
| **Impact 3.9.g:** Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires. | Implement Mitigation Measure WF-1, WF-2, and WF-3, (see Impact 3.20.a and 3.20.b) listed under Wildfire.<br>**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, all motorized equipment driving off paved or maintained gravel/dirt roads will have federal- or state-approved spark arrestors. All off-road vehicles will be equipped with a shovel and backpack pump filled with water and all fuel trucks will carry a large fire extinguisher with minimum rating of B:C. | PG&E and its contractors to implement measure as defined. | CPUC mitigation monitor to inspect compliance. | Prior to and during construction. |

**TABLE 3-1 (CONTINUED)**
**MITIGATION MONITORING, COMPLIANCE, AND REPORTING PROGRAM FOR THE PG&E HUMBOLDT BAY- HUMBOLDT #1 60 KV PROJECT**

| Environmental Impact | Applicant Proposed Measures (APMs) and Mitigation Measures (MMs) Identified in the IS/MND | Implementing Actions | Monitoring/ Reporting Requirements | Timing |
|---|---|---|---|---|
| **Hydrology and Water Quality** | | | | |
| **Impact 3.10.a:** Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality. | Implement APM HAZ-1 (see Impact 3.9.a) and APM BIO-2 (see Impact 3.4.a), listed under Hazards and Hazardous Materials and Biological Resources, respectively.<br><br>**APM WQ-1: Development and Implementation of a SWPPP.** Following project approval, PG&E will prepare and implement a SWPPP to minimize construction impacts on surface water and groundwater quality. The SWPPP will be designed specifically for the hydrologic setting of the proposed project (e.g., surface topography, etc.). The SWPPP will include procedures and standards to stabilize graded areas, reduce erosion, avoid release of hazardous materials and sediment to surface waters, and manage dewatering effluents. The SWPPP will identify BMPs and erosion and sediment control measures, such as straw wattles, water bars, covers, silt fences, storm drain inlet protection, mud trackout controls, and sensitive area access restrictions (e.g., flagging) that will be installed before the onset of winter rains or anticipated storm events to minimize impacts on surface water and groundwater. | PG&E and its contractors to implement measure as defined. | CPUC mitigation monitor to inspect compliance. | Prior to construction. |
| **Impact 3.10.b:** Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin. | Implement APM WQ-1 (listed under Impact 3.10.a) | PG&E and its contractors to implement measure as defined. | CPUC mitigation monitor to inspect compliance. | Prior to construction. |
| **Impact 3.10.c.i:** Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site. | Implement APM WQ-1 (listed under Impact 3.10.a) | PG&E and its contractors to implement measure as defined. | CPUC mitigation monitor to inspect compliance. | Prior to construction. |

**TABLE 3-1 (CONTINUED)**
**MITIGATION MONITORING, REPORTING, AND COMPLIANCE PROGRAM FOR THE PG&E HUMBOLDT BAY- HUMBOLDT #1 60 KV PROJECT**

| Environmental Impact | Applicant Proposed Measures (APMs) and Mitigation Measures (MMs) Identified in the IS/MND | Implementing Actions | Monitoring/ Reporting Requirements | Timing |
|---|---|---|---|---|
| **Hydrology and Water Quality (cont.)** | | | | |
| **Impact 3.10.c.iii:** Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. | Implement APM WQ-1 (listed under Impact 3.10.a) | PG&E and its contractors to implement measure as defined. | CPUC mitigation monitor to inspect compliance. | Prior to construction. |
| **Land Use and Planning** | | | | |
| No mitigation required. | | | | |
| **Mineral Resources** | | | | |
| No mitigation required. | | | | |
| **Noise and Vibration** | | | | |
| **Impact 3.13.a:** Generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. | **APM NOI-3: Notify Sensitive Receptors of Helicopter Use.** Sensitive receptors within 300 feet of areas where helicopters will be used for construction will be notified by mail, personal visit, door hanger, or email at least 7 days prior to beginning helicopter activities. Notification will include posting signs in appropriate locations with a contact number to call with questions and concerns. | PG&E and its contractors to implement measure as defined. | CPUC mitigation monitor to inspect compliance. | At least 7 days prior to helicopter activities. |
| | **Mitigation Measure NOI-1a: Adherence to City of Eureka Construction Hour Restrictions.** Construction activities within the City of Eureka shall be restricted to the daytime hours between 7:00 a.m. and 7:00 p.m., except as allowed pursuant to Mitigation Measure NOI-1b. | PG&E and its contractors to implement measure as defined. | CPUC mitigation monitor to inspect compliance. | Prior to construction. |

**TABLE 3-1 (CONTINUED)**
**MITIGATION MONITORING, COMPLIANCE, AND REPORTING PROGRAM FOR THE PG&E HUMBOLDT BAY- HUMBOLDT #1 60 KV PROJECT**

| Environmental Impact | Applicant Proposed Measures (APMs) and Mitigation Measures (MMs) Identified in the IS/MND | Implementing Actions | Monitoring/ Reporting Requirements | Timing |
|---|---|---|---|---|
| **Noise and Vibration (cont.)** | | | | |
| **Impact 3.13.a** (cont.) | **Mitigation Measure NOI-1b: Nighttime Construction.** In the event construction would be required to occur outside the hours specified in Mitigation Measure NOI-1a and within 500 feet of sensitive receptors, PG&E and/or its contractors shall implement the following measures to reduce any potential nighttime noise impacts.<br>• Plan construction activities to minimize the amount of nighttime construction.<br>• When nighttime construction activities take place within 200 feet of noise sensitive receptors, use portable construction noise barriers, such as paneled noise shields, barriers, enclosures, or sound curtains adjacent to or around loud stationary equipment. Noise control shields shall be made featuring a solid panel and a weather-protected, sound-absorptive material on the construction-activity side of the noise shield.<br>• Offer temporary relocation of residents within 200 feet of nighttime construction activities that would occur after 10:00 p.m.<br>• The notification requirements in APM NOI-2 shall be extended to include residences within 500 feet of planned nighttime construction activities. All residents within 500 feet of the proposed nighttime construction site(s) shall be notified at least 7 days in advance by mail, personal visit, door hanger, or e-mail and informed of the expected work schedule. | PG&E and its contractors to implement measure as defined. | CPUC mitigation monitor to inspect compliance. | Prior to construction. |
| | **Mitigation Measure NOI-1c: Construction Noise Management.** PG&E and/or its contractors shall implement the measures identified below to ensure that construction noise levels are reduced to 90 dBA Leq or less at sensitive receptors located within 100 feet.<br>1. Comply with manufacturer's muffler requirements on all construction equipment engines and ensure exhaust mufflers are in good condition;<br>2. Turn off construction equipment when not in use, where applicable;<br>3. Locate stationary equipment, construction staging areas, helicopter landing zones, and construction material areas as far as practical from sensitive receptors;<br>4. Include noise control requirements for construction equipment and tools in specifications provided to construction contractors to the maximum extent practicable, including performing all work in a manner that minimizes noise; using equipment with effective mufflers; undertaking the noisiest activities during times of least disturbance to surrounding residents and occupants; and selecting haul routes that avoid residential areas;<br>5. PG&E shall provide notice by mail at least 1 week prior to construction activities to all sensitive receptors and residences within 500 feet of construction sites, staging yards, and access roads, and within 1,000 feet of helicopter landing zones and flight paths. PG&E shall also post notices in public areas, including recreational use areas, | PG&E and its contractors to implement measure as defined. | CPUC mitigation monitor to inspect compliance. | Prior to construction. |

**TABLE 3-1 (CONTINUED)**
**MITIGATION MONITORING, REPORTING, AND COMPLIANCE PROGRAM FOR THE PG&E HUMBOLDT BAY- HUMBOLDT #1 60 KV PROJECT**

| Environmental Impact | Applicant Proposed Measures (APMs) and Mitigation Measures (MMs) Identified in the IS/MND | Implementing Actions | Monitoring/ Reporting Requirements | Timing |
|---|---|---|---|---|
| **Noise and Vibration (cont.)** | | | | |
| **Impact 3.13.a** (cont.) | 6. within 500 feet of the Project alignment and construction work areas. The announcement shall state approximately where and when construction will occur in the area. For areas that would be exposed to helicopter noise, the announcement shall provide approximate details on the schedule of the dates, times, and duration of helicopter activities. Notices shall provide tips on reducing noise intrusion, for example, by closing windows facing the planned construction. PG&E shall identify and provide a public liaison before and during construction to respond to concerns of neighboring receptors, including residents, about construction noise disturbance. PG&E shall also establish a toll-free telephone number for receiving questions or complaints during construction and develop procedures for responding to callers. Procedures for reaching the public liaison officer via telephone or in person shall be included in the above notices and also posted conspicuously at the construction site(s). PG&E shall address all complaints within 1 week of when the complaint is filed. PG&E shall provide monthly reports with records of complaints and responses to the CPUC. These reports shall be provided to the CPUC within 15 days of the end of the month.<br>7. When construction activities take place within 100 feet of noise sensitive areas, use portable construction noise barriers such as paneled noise shields, barriers, or enclosures, or sound curtains adjacent to or around loud stationary equipment. Noise control shields shall be made featuring a solid panel and a weather-protected, sound-absorptive material on the construction-activity side of the noise shield. Noise control shields with a minimum performance rating of STC-25 and Noise Reduction Coefficient (NRC) of 0.75 are capable of attenuating noise levels by up to 15 dBA.<br>8. Route all construction traffic via designated truck routes where possible and prohibit construction related heavy truck traffic in residential areas where feasible. | | | |
| **Public Services** | | | | |
| **Impact 3.15.a.i: Fire protection.** | Implement APM HAZ-3 (see Impact 3.9.g), APM WF-3 (see Impact 3.20.b), and APM TT-3 (see Impact 3.17.d). | PG&E and its contractors to implement measure as defined. | CPUC to inspect compliance. | At least 24 hours prior to implementing any road or lane closures. |
| **Recreation** | | | | |
| **Impact 3.16.a:** Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. | **APM REC-1: Coordination and Signage.** PG&E will coordinate with the operators of the Redwood Fields Ballpark, Redwood Acres Fairgrounds, and McKay Community Forest during project construction activities to minimize any potential construction impacts from the project. Signage notifying of construction activities will be posted at these recreational facilities at least one week in advance of construction. | PG&E and its contractors to implement measure as defined. | CPUC mitigation monitor to inspect compliance. | Signage to be posted at least one week prior to construction. |

**TABLE 3-1 (CONTINUED)**
**MITIGATION MONITORING, COMPLIANCE, AND REPORTING PROGRAM FOR THE PG&E HUMBOLDT BAY- HUMBOLDT #1 60 KV PROJECT**

| Environmental Impact | Applicant Proposed Measures (APMs) and Mitigation Measures (MMs) Identified in the IS/MND | Implementing Actions | Monitoring/ Reporting Requirements | Timing |
|---|---|---|---|---|
| **Transportation** | | | | |
| **Impact 3.17.a:** Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit. | **APM TT-1: Temporary Traffic Controls.** PG&E will obtain 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 closures or width reduction or traffic diversion plans as required by the encroachment permits. Construction activities that are in, along, or cross local roadways will follow best management practices and local jurisdictional encroachment permit requirements, which may include traffic controls such as signs, cones, and flaggers to minimize impacts on traffic and transportation in the Project area. PG&E will coordinate with ETS regarding the schedule and scope of construction activities that could interfere with bus routes crossed by the Project alignment and will coordinate temporary relocation of bus stops if necessary. | PG&E and its contractors to implement measure as defined. | CPUC mitigation monitor to inspect compliance. | Prior to applicable phases of construction involving traffic control. |
| **Impact 3.17.c:** Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks. | Implement APM TT-1 (see Impact 3.17.a) | PG&E and its contractors to implement measure as defined. | CPUC mitigation monitor to inspect compliance. | Prior to applicable phases of construction involving traffic control. |
| **Impact 3.17.d:** Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). | Implement APM TT-1 (see Impact 3.17.a) | PG&E and its contractors to implement measure as defined. | CPUC mitigation monitor to inspect compliance. | Prior to applicable phases of construction involving traffic control. |
| | **APM TT-3: Coordination Road Closures with Emergency Service Providers and School Districts.** At least 24 hours prior to implementing any road or lane closure, PG&E will coordinate with applicable emergency service providers and school districts in the Project vicinity. PG&E will provide information regarding the road or lanes to be closed, the anticipated date, time, and duration of closures, and a contact telephone number. | | | Construction. At least 24 hours prior to implementing any road or lane closures. |

**TABLE 3-1 (CONTINUED)**
**MITIGATION MONITORING, REPORTING, AND COMPLIANCE PROGRAM FOR THE PG&E HUMBOLDT BAY- HUMBOLDT #1 60 KV PROJECT**

| Environmental Impact | Applicant Proposed Measures (APMs) and Mitigation Measures (MMs) Identified in the IS/MND | Implementing Actions | Monitoring/ Reporting Requirements | Timing |
|---|---|---|---|---|
| **Tribal Cultural Resources** | | | | |
| **Impact 3.18.a.i:** Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k). | Implement APM CUL-1 and Mitigation Measure CUL-1 (see Impact 3.5.b and 3.5.c) | PG&E and its contractors to implement measure as defined. | CPUC mitigation monitor to inspect compliance. | Prior to and during construction involving ground-disturbance. |
| **Impact 3.18.a.ii:** A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. | Implement APM CUL-1 and Mitigation Measure CUL-1 (see Impact 3.5.b and 3.5.c) | PG&E and its contractors to implement measure as defined. | CPUC mitigation monitor to inspect compliance. | Prior to and during construction involving ground-disturbance. |
| **Utilities and Service Systems** | | | | |
| **Impact 3.19.a:** Require or result in the relocation or construction of new or expanded water, wastewater treatment, storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects. | Implement APM GEO-2 (see Impact 3.7.a.iii) and APM WQ-1 (see Impact 3.10.a) which can be found under Geology and Soils, and Hydrology and Water Quality, respectively. | PG&E and its contractors to implement measure as defined. | CPUC mitigation monitor to inspect compliance. | Prior to and during construction. |

**TABLE 3-1 (CONTINUED)**
**MITIGATION MONITORING, COMPLIANCE, AND REPORTING PROGRAM FOR THE PG&E HUMBOLDT BAY- HUMBOLDT #1 60 KV PROJECT**

| Environmental Impact | Applicant Proposed Measures (APMs) and Mitigation Measures (MMs) Identified in the IS/MND | Implementing Actions | Monitoring/ Reporting Requirements | Timing |
|---|---|---|---|---|
| **Wildfire** | | | | |
| **Impact 3.20.a:** Substantially impair an adopted emergency response plan or emergency evacuation plan | Implement APMs TT-1 (see impact 3.17.a) and TT-3 (see Impact 3.17.d), listed under Transportation. | PG&E and its contractors to implement measure as defined. | CPUC mitigation monitor to inspect compliance. | During construction |
| | **APM WF-1: Smoking and Fire Rules.** Smoking will not be permitted on site, except in barren areas that measures a minimum of 20 feet in diameter and are cleared to mineral soil. Under no circumstances will smoking be permitted during the fire season (approximately July through October) while employees are operating equipment, or while walking or working in grass and woodlands. | | | During all phases of construction and operation of the project. |
| | **APM WF-2: Carry Emergency Fire Suppression Equipment.** PG&E construction crew trucks and large equipment shall have, at a minimum, a standard roundpoint shovel and a fire extinguisher. If construction activities likely to cause sparks (e.g., welding, grinding, or grading in rocky terrain) are conducted, emergency fire tool boxes shall be readily available to crews. The emergency fire tool boxes shall contain fire-fighting items such as shovels, axes, and water. | PG&E and its contractors to implement measure as defined. | CPUC mitigation monitor to inspect compliance. | During construction and operation of the project. |
| **Impact 3.20.b:** Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. | **APM WF-3: Construction Fire Prevention Plan.** PG&E shall prepare a Construction Fire Prevention Plan consistent with the measures identified in APM HAZ-3, Fire Risk Management, that addresses procedures for fire prevention at active construction sites. The Construction Fire Prevention Plan shall include requirements for carrying emergency fire suppression equipment, conducting "tailgate meetings" that cover fire safety discussions, restricting smoking, idling vehicles, and restricting construction during red flag warnings. The Construction Fire Prevention Plan shall address the following fire risk reduction measures:<br>• Training and briefing all personnel working on the project in fire prevention and suppression methods.<br>• Conducting a fire prevention discussion at each morning's safety meeting.<br>• Storage of prescribed fire tools and backpack pumps with water within 50 feet of work activities.<br>• Assigning personnel to conduct a "fire watch" or "fire patrol" to ensure that risk mitigation and fire preparedness measures are implemented, immediate detection of a fire, and to coordinate with emergency response personnel in the event of a fire.<br>The Construction Fire Prevention Plan will be submitted to the CPUC for review at least 30 days prior to construction | PG&E and its contractors to implement measure as defined. | CPUC mitigation monitor to inspect compliance. | Plan shall be prepared and submitted to the CPUC for review at least 30-days prior to construction. |

**TABLE 3-1 (CONTINUED)**
**MITIGATION MONITORING, REPORTING, AND COMPLIANCE PROGRAM FOR THE PG&E HUMBOLDT BAY- HUMBOLDT #1 60 KV PROJECT**

| Environmental Impact | Applicant Proposed Measures (APMs) and Mitigation Measures (MMs) Identified in the IS/MND | Implementing Actions | Monitoring/ Reporting Requirements | Timing |
|---|---|---|---|---|
| **Wildfire (cont.)** | | | | |
| **Impact 3.20.d:** Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes | Implement APMs WF-1, WF-2, WF-3 (see Impact 3.20.a, 3.20.b) and HAZ-3 (see Impact 3.9.g). | PG&E and its contractors to implement measure as defined. | CPUC mitigation monitor to inspect compliance. | |