

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298



FINAL
Mitigated Negative Declaration
Pacific Gas & Electric Company's
Embarcadero-Potrero 230 kV Transmission Project
Application No. A.12-12-004

Lead Agency: California Public Utilities Commission
Energy Division
505 Van Ness Avenue, 4th Floor
San Francisco, California 94102

Contact: Billie Blanchard, Project Manager
(415) 703-2068 or billie.blanchard@cpuc.ca.gov

1. Mitigated Negative Declaration

1.1 Project Information

Project: Embarcadero-Potrero 230 kV Transmission Project
San Francisco, California

Project Sponsor: Pacific Gas and Electric Company
77 Beale Street, B30A
San Francisco, California 94105
(800) 743-5000

1.2 Introduction

Pursuant to California Public Utilities Commission's (CPUC) General Order 131-D, Pacific Gas and Electric Company (PG&E), a regulated California utility, filed an application and Proponent's Environmental Assessment (PEA) on December 11, 2012 (Application No. A.12-12-004), for a Certificate of Public Convenience and Necessity (CPCN) to authorize construction of the Embarcadero-Potrero 230 kilovolt (kV) Transmis-

sion Project (Proposed Project). The CPUC Energy Division deemed the PEA and Application complete on January 10, 2013.

Pursuant to CEQA, the CPUC must prepare an Initial Study (IS) for the Proposed Project to determine if any significant adverse effects on the environment would result from project implementation. The IS utilizes the significance criteria outlined in Appendix G of the CEQA *Guidelines*. If the IS for the project indicates that a significant adverse impact could occur, the CPUC would be required to prepare an Environmental Impact Report (EIR).

According to Article 6 (Negative Declaration Process) and Section 15070 (Decision to Prepare a Negative Declaration or Mitigated Negative Declaration) of the CEQA *Guidelines*, a public agency shall prepare or have prepared a proposed negative declaration or mitigated negative declaration for a project subject to CEQA when:

- (a) *The initial study shows that there is no substantial evidence, in light of the whole record before the agency, that the project may have a significant effect on the environment, or*
- (b) *The initial study identifies potentially significant effects, but:*
 - (1) *Revisions in the project plans or proposals made by, or agreed to by the applicant before a proposed mitigated negative declaration and initial study are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur, and*
 - (2) *There is no substantial evidence, in light of the whole record before the agency, that the project as revised may have a significant effect on the environment.*

Based on the analysis in the Initial Study, it has been determined that all project-related environmental impacts could be reduced to a less than significant level with the incorporation of feasible mitigation measures. Therefore, adoption of a Mitigated Negative Declaration (MND) will satisfy the requirements of CEQA. The mitigation measures included in this MND are designed to reduce or eliminate the potentially significant environmental impacts described in the Initial Study. Where a measure described in this document has been previously incorporated into the project, either as a specific project design feature or as an Applicant Proposed Measure, this is noted in the discussion. Mitigation measures are structured in accordance with the criteria in Sections 15126.4 and 15370 of the CEQA *Guidelines*.

1.3 Project Description

The proposed Embarcadero-Potrero 230 kV Transmission Project would include construction, operation, and maintenance of a new 230 kV transmission line entirely within the City and County of San Francisco from the Embarcadero Substation at the corner of Fremont and Folsom Streets, to the Potrero Switchyard on Illinois Street between 22nd and 23rd Streets.

The new 230 kV transmission line would be approximately 3.5 miles in total length, including approximately 2.5 miles to be installed offshore in the San Francisco Bay, 0.4 miles to be installed in horizontal directional drills (HDD) between onshore transition points and the bay, and approximately 0.6 miles to be installed underground in paved areas, including Spear Street and Folsom Street in San Francisco's Rincon Hill neighborhood. Construction of a new 230 kV switchyard would occur near the existing Potrero Switchyard, but no new substation work is proposed to occur at the existing Embarcadero Substation beyond the proposed termination of the new cable into the 230 kV bus.

PG&E's project objectives include improving the reliability of the existing transmission system in San Francisco to provide a high likelihood of continued electric service to downtown San Francisco in the

event of overlapping outages on both of two existing 230 kV transmission lines that presently feed Embarcadero Substation.

1.4 PG&E PEA Alternatives Considered

CEQA does not require the inclusion of an alternatives analysis in a Mitigated Negative Declaration because the Initial Study concludes that, with incorporation of mitigation measures, there would be no significant adverse impacts resulting from the Proposed Project (CEQA Guidelines Sections 15063(d) and 15071). However, PG&E was required to provide an alternative analysis in its PEA that was submitted as part of its CPCN application (A.12-12-004) for the Proposed Project.

Although no alternatives analysis is required to be provided in this document, this section summarizes the process that PG&E used to develop its Proposed Project, because this process involved evaluation of several options that could meet the project objectives. As described in the PEA, PG&E initially screened 10 potential routes, three possible transition locations for the cables at each end of the route, and three switchyard locations before narrowing the options to the following, which were further evaluated in a feasibility study (PG&E, 2012a; B&V, 2012):

- Three switchyard site location alternatives, including the proposed site immediately east of the existing Potrero Switchyard
- Two onshore alternative transmission line routes
- Proposed submarine route (Proposed Project)
- No Project Alternative

In accordance with Section IX (A)(1)(a) of CPUC General Order 131-D, PG&E provided a discussion and an evaluation of the advantages and disadvantages of each of these alternatives in the PEA, as well as a brief description of the criteria for choosing the proposed route and switchyard location. The PEA determined that the Proposed Project would have considerably less impact on urbanized areas than either of the alternative onshore routes given that it has only 0.6 mile of underground construction, and therefore, would have the least impact on urbanized residential and commercial areas, including the least construction impacts to land uses, traffic, transportation, noise, and air quality. PG&E also concluded in the PEA that the proposed route would be the most reliable seismically of the three route alternatives and would best meet the project purpose and need. PG&E selected the proposed switchyard site due to engineering feasibility and ease of connectivity to existing facilities (PG&E, 2012a). PG&E's PEA section that addresses alternatives is available at the following website:

<http://www.cpuc.ca.gov/Environment/info/aspen/embarc-potrero/pea/5-Alternatives.pdf>

1.5 CAISO San Francisco Peninsula Reliability Assessment

The San Francisco-Peninsula transmission system is in the center of PG&E's service territory, serving urban load centers across a unique geographic landscape. The California Independent System Operator (CAISO) considered the Proposed Project during 2011 and 2012, and during other transmission planning cycles the CAISO has or will consider other San Francisco-area proposals. On March 23, 2012, the CAISO Governing Board found the Proposed Project to be needed for reliability, as shown in its 2011-2012 Transmission Plan (pp. 107-108 of CAISO, 2012).

Since then, the CAISO 2012-2013 Transmission Plan initiated a study of the potential need for transmission reinforcement of the San Francisco Peninsula as being particularly vulnerable to lengthy

outages in the event of extreme contingencies (i.e., seismic, third-party action, and/or co-located facility failure). CAISO is in the process of conducting the San Francisco Peninsula Extreme Event Reliability Assessment to determine the need and urgency for reinforcement and is engaging stakeholders in the evaluation of risks and potential alternatives. The purpose of the CAISO study is to:

- identify the system performance after extreme events;
- identify the risk and impacts of extreme events in the San Francisco Peninsula area; and
- based upon the system performance, risks and impacts, identify potential alternatives to mitigate for the extreme events. (CAISO, 2013)

The CAISO conducted a detailed assessment and held a stakeholder meeting on May 29, 2013, soliciting comments from stakeholders by June 19, 2013. Based on the assessment, the following mitigation alternatives are going to be considered by the CAISO in developing the mitigation plan for the extreme event in the peninsula area (CAISO, 2013):

- No mitigation (not acceptable based upon the CAISO's assessment)
- Expanded mobile and spare equipment contingency plans and strategy
- Modifications or upgrades to 230 kV system
- Upgrades to 115 kV system
- New 230 kV supply into North Peninsula area:
 - Moraga
 - Pittsburg
 - East Shore
 - San Mateo

Depending upon the results, additional transmission upgrades may be brought to the CAISO Board of Governors as early as September in late 2013 or early 2014.

Due to the sensitive nature of the material, the reliability assessment and presentations from the stakeholder meeting are being handled on a confidential basis. However, in compliance with FERC Order 890, the CAISO provides stakeholders access to confidential information used in the transmission planning process through a secured website. Information on how to join the stakeholder process and access the secured transmission planning webpage can be found at:

http://www.caiso.com/Documents/2012-2013_TransmissionPlanningProcessAdditionalStudyAssessmentMaterialsAvailableJun6_2013.htm.

1.6 San Francisco Port Commission Negotiations

The San Francisco Port Commission (SF Port) established a Revised Term Sheet with PG&E after the August 2013 release of the Draft MND. At its September 10, 2013 meeting, the Port Commission considered Resolution 13-34 to endorse the Revised Term Sheet. In contrast to the original term sheet from November 2012, the Revised Term Sheet now contemplates a requirement for PG&E to screen or otherwise enclose the existing 115 kV Potrero Switchyard along Illinois Street between 22nd Street and 23rd Street. This means that the recent Port Commission decision to endorse the Revised Term Sheet is at least partially based on the SF Port License "obligating PG&E to screen the Potrero Switchyard" (at p.1 of the Term Sheet).

Because the Term Sheet endorsed by the Port defines a future requirement for PG&E to screen or enclose the existing Potrero Switchyard, this MND/Initial Study evaluates whether enclosing the switchyard amounts to an activity that would either be undertaken as part of the Proposed Project, caused by the project, or caused indirectly by the project. If so, the physical changes in the environment stemming from screening the switchyard would need to be disclosed to the extent they are reasonably foreseeable (see CEQA Guidelines 15064).

This MND/Initial Study does not treat screening the existing Potrero Switchyard as a reasonably foreseeable consequence of PG&E developing the Proposed Project. Although the City wishes to obligate PG&E to either enclose a substantial portion of the existing 115 kV Potrero Switchyard within a building or construct a screen around the perimeter of the switchyard, the Term Sheet itself is not contractually binding, and it does not presently commit PG&E to screening or enclosing the switchyard. The Term Sheet specifies that the City must first, within 10 years after executing the License for the Proposed Project, provide PG&E with notice of its preference, through a “Designation Notice” of the City’s “Preferred Screen”, which would then be subject to the Port’s Waterfront Design Advisory Committee review. Following the Port’s design committee review of PG&E’s screening proposal, PG&E must then obtain the necessary approvals before commencing construction of the screen or enclosure. The Term Sheet also notes that negotiations will continue to occur before a License for the Proposed Project can be executed by PG&E and the Port Commission, and the binding form of the License will only become known after the present environmental review for the Proposed Project has been completed. The final terms and conditions of the negotiated transaction for the License are subject to the approval of the Port Commission.

PG&E has not presented to the CPUC any plans for an enclosure or screen at this time. After the City’s designation, PG&E will need to apply for future approvals to construct the City’s preferred screen, and this may require conducting a future project-level environmental review under CEQA of that proposal. PG&E notes that the purpose of the screening would be separate from the objectives of the Embarcadero-Potrero 230 kV Transmission Project, and screening could be implemented entirely separately of the Proposed Project [PG&E in Response to CPUC Data Request PD-18, General Reply to SFPUC Letter, October 3, 2013 (PG&E, 2013a)].

Foreseeable Environmental Effects of Screening for Potrero Switchyard. Although construction of screening for or enclosing the existing Potrero Switchyard would not be directly or indirectly caused by the Proposed Project, and no design is proposed, certain environmental effects would generally be expected from this type of project. Developing a perimeter screen for the existing 115 kV Potrero Switchyard would create impacts related to construction activity along Illinois Street between 22nd Street and 23rd Street. This could result in PG&E removing street trees along Illinois Street, creating temporary ground disturbance for the foundations or footings of the screening, and temporarily impacting parking conditions, traffic, air quality, and noise along Illinois Street during the work to install the switchyard screen. Alternatively, if the switchyard were to be enclosed within a new building, construction-phase impacts would be more intense than what would occur with building a screening wall. The primary long-term physical change to the environment would be to shield views of the existing open-air equipment and to reduce the industrial aesthetics of the existing streetscape. Overall, the City’s goal is to improve the compatibility of the site with mixed uses.

1.71.6 Environmental Determination

The Initial Study was prepared to identify the potential environmental effects resulting from Proposed Project implementation, and to evaluate the level of significance of these effects. The Initial Study relies

on information in PG&E's PEA filed on December 11, 2012 (Application No. A.12-12-004), project site reconnaissance by the CPUC environmental team between January and March 2013, CPUC data requests, and other environmental analyses.

PG&E's PEA identified measures to address potentially significant environmental impacts — the Applicant Proposed Measures (APMs) — and these APMs are considered to be part of the description of the Proposed Project. Based on the Initial Study analysis, additional mitigation measures are identified for adoption to ensure that impacts of the Proposed Project would be less than significant. The additional mitigation measures either supplement, or supersede the APMs. PG&E has agreed to implement all of the additional recommended mitigation measures as part of the Proposed Project.

Implementation of the mitigation measures listed here and presented fully in the Initial Study would avoid potentially significant impacts identified or reduce them to less than significant levels.

Mitigation Measure for Construction-Phase Air Quality

MM A-1 **Achieve minimum emission standards.** This measure incorporates and supplements portions of APM AQ-2, Minimize Construction Exhaust Emissions. PG&E shall maintain all construction equipment properly in accordance with manufacturer's specifications, and ensure that equipment is checked by a certified visible emissions evaluator. All off-road construction diesel engines not registered under the CARB Statewide Portable Equipment Registration Program shall meet at a minimum the Tier 2 California Emission Standards for Off-Road Compression-Ignition Engines as specified in California Code of Regulations (CCR) Title 13, Chapter 9, Sec. 2423(b)(1). All marine commercial harbor craft, except gasoline-powered small craft, shall meet at a minimum the Tier 2 Marine Engine Emission Standards (CCR Title 17, Sec. 93118.5).

Mitigation Measures for Special-Status Species

MM B-1 **Implement an Invasive Marine Species Control Plan.** PG&E shall develop and implement an Invasive Marine Species Control Plan prior to any in-water work. The plan shall include measures designed to effectively limit the introduction and spread of invasive marine species. PG&E shall submit this plan to the CPUC for approval at least 60 days before the start of marine activities. Vessels originating outside San Francisco Bay shall follow existing compliance measures established by the California State Lands Commission as part of the Marine Invasive Species Program, relating to hull fouling and ballast water control. In addition, if used outside the San Francisco Bay area prior to use on this project, the hydroplow and associated equipment shall be examined and any invasive species handled and disposed of according to the developed plan. Similarly, if the equipment is to be used outside the San Francisco Bay after this use, the equipment shall be examined and cleaned prior to leaving the area.

PG&E shall coordinate plan preparation with the CPUC, U.S. Coast Guard, U.S. Army Corps of Engineers, National Marine Fisheries Service [NMFS], Regional Water Quality Control Board, and California Department of Fish and Wildlife [CDFW] as appropriate. The plan shall include: environmental training for all crew members working in marine areas addressing invasive marine species and actions to be taken to prevent release and spread of invasive marine species. Training shall include procedures for safe removal and disposal of any invasive species found on project equipment. Before and after boats and equipment leave the water, a qualified biologist (approved by the CPUC) shall assist

crew members in removing plants, plant debris, and any other potentially invasive species.

MM B-2

Protect marine mammals from high noise levels. PG&E shall consult with the National Marine Fisheries Service (NMFS) to determine whether Incidental Harassment Authorization (IHA) or Letter of Authorization (LOA) for marine mammals is necessary. If NMFS determines that an IHA or LOA is not necessary, PG&E shall submit evidence of this determination to the CPUC prior to the start of marine construction activities.

Monitoring. PG&E shall prepare and implement a Marine Mammal Monitoring Plan. PG&E shall submit this plan to the CPUC for approval before the start of marine activities. The Marine Mammal Monitoring Plan shall include the following elements:

- Establishment of an appropriate buffer zone around the work area, generally 400 feet or as defined in consultation with NMFS, that would require work be slowed or otherwise modified if the work approaches a marine mammal within the established buffer zone.
- A qualified biologist (approved by the CPUC) shall be on board the hydroplowing ship during construction.
- The qualified biologist shall monitor marine mammal presence and behavior in the vicinity of the ship and the surface above hydroplow operations.
- The qualified biologist shall have the authority to slow or stop work, if safe to do so, and shall consult with the CPUC and NMFS about the implementation of additional minimization measures if, based on observations, project construction appears to be disrupting marine mammal behavior in ways that indicate harassment or injury.
- Any disruption of marine mammal behavioral patterns shall be reported to the CPUC and NMFS within two working days with a description of actions taken to curtail work and reduce noise source levels and a demonstration that the disruption caused no potential for injury or mortality.
- PG&E shall submit weekly reports of marine mammal observations to the CPUC during marine construction activities.

As an alternative to preparing and implementing the Marine Mammal Monitoring Plan specified in this mitigation measure, PG&E may provide adequate evidence, to the CPUC for approval at least 30 days before the start of marine activities, based upon actual data collected for this project or other projects using similar equipment in a similar submarine environment, that demonstrates to the satisfaction of the CPUC that underwater noise source levels generated by the project hydroplow and marine activities cannot ~~not~~ be reasonably expected to exceed the 180 dB threshold recently used by NMFS for marine mammal protection.

MM B-3

Protect marine species. PG&E shall consult with CDFW to obtain an Incidental Take Permit for longfin smelt or a determination from the agency that the project ~~is-will~~ not ~~likely to adversely affect~~ result in take of longfin smelt.

Fish screens. As stated in APM BIO-6, all hydroplow water jet intakes shall be covered with a mesh screen or screening device to minimize potential for impingement or entrain-

ment of fish species, especially longfin smelt. Additional requirements to minimize or prevent entrainment and impingement are also required to supplement APM BIO-6:

- The mesh screen or screening device shall comply with applicable state (CDFW) and federal (NMFS) criteria for screening intakes such as those found in NMFS's 1996 *Juvenile Fish Screen Criteria for Pump Intakes* and [CDFW's Fish Screening Criteria \(http://www.dfg.ca.gov/fish/Resources/Projects/Engin/Engin_ScreenCriteria.asp\)](http://www.dfg.ca.gov/fish/Resources/Projects/Engin/Engin_ScreenCriteria.asp) or as required ~~in coordination with~~ ~~by~~ NMFS and CDFW.

Monitoring. A qualified biologist (approved by CPUC) shall verify that the screens are in place at the beginning of each hydroplow work period and examine them for impinged longfin smelt or other fish species at the end of each work period, or whenever the screens are cleaned or the hydroplow is raised out of the water during the cable laying. Injury or mortality shall be reported to CPUC within two working days, with a discussion of actions taken to prevent or minimize any additional longfin smelt injury or mortality or as otherwise determined with CDFW and NMFS. Any injury or mortality of longfin smelt shall also be reported as determined in permitting discussions with CDFW and NMFS.

MM B-4

Avoid impacts to nesting birds. This measure supersedes APM BIO-2. If onshore construction activities occur during the avian nesting season, a preconstruction survey for nesting birds shall be conducted by a qualified wildlife biologist (PG&E employees or contractors, approved by the CPUC) within 7 days prior to the start of noise-generating construction or vegetation trimming or removal activities in any new work area. Surveys shall cover all public areas within 50 feet of work sites. For San Francisco County, the avian nesting season regularly occurs between February 15 and August 31, but a survey may be appropriate earlier or later depending on species, location, and weather conditions as determined by the qualified wildlife biologist.

Work areas that cause no appreciable increase in ambient noise, such as where work is performed manually, by hand, or on foot and activities that cause no observable disturbances to nesting birds (e.g., operating switches, driving on access roads, normally occurring activities at substations, staging or laydown areas) would not warrant a preconstruction survey.

Protective measures for birds. If an active bird nest for a species covered by the Migratory Bird Treaty Act or California Fish and Game Code is found within 50 feet of project work areas, the qualified biologist shall determine appropriate protective measures to reduce the likelihood of nest failure. Protective measures for active nests shall include one or more of the following: avoiding or limiting certain project-related activities within a designated buffer zone surrounding the nest, shielding of the nest from project disturbance using a temporary soundwall or visual screen, or other shielding method as appropriate. The width of the buffer zone (in which work may not occur) shall be based on the disturbance tolerance and conservation status of the species, and the nature of planned construction activities and other human activities in the immediate area. Buffer zones of less than 50 feet shall be allowed only when planned construction activities involve relatively low disturbance or birds have demonstrated tolerance of noise and disturbance. Buffers shall not apply to construction-related vehicle or pedestrian traffic using city streets and sidewalks. As appropriate, exclusion techniques may be used for any construction equipment that is left unattended for more than 24 hours to reduce the

possibility of birds nesting in the construction equipment. An example exclusion technique is covering equipment with tarps.

Bird species found building nests within the work areas after specific project activities begin may be assumed tolerant of that specific project activity; the CPUC approved, qualified biologist shall implement an appropriate buffer or other appropriate measures to protect such nests, after taking into consideration the position of the nest, the bird species nesting on site, the type of work to be conducted, and duration of the construction disturbance.

Protective measures for special-status birds. If an active nest for a special-status bird is found, PG&E shall record the position of the nest in the monitoring report and notify the CPUC through the reporting process outlined below. The qualified biologist shall implement buffers and set other protective measures (described above), as appropriate, to protect special-status nesting birds from construction activities in consultation with CPUC, and as appropriate the California Department of Fish and Wildlife (CDFW) and/or United States Fish and Wildlife Service (USFWS). Buffer zones of less than 50 feet shall be allowed only when planned construction activities involve relatively low disturbance or birds have demonstrated tolerance of noise and disturbance. Requests for buffers of less than 50 feet for special-status nesting birds must be submitted to the CPUC's independent biologist(s) for review. The CPUC's independent biologist shall respond to PG&E's request for a buffer reduction (and buffer reduction terms) within one business day; if a response is not received, PG&E can proceed with the buffer reduction. If nesting birds in the presence of the CPUC-approved qualified biologist show signs of intolerance to construction activities within a reduced buffer zone, the qualified biologist shall reinstate the recommended buffer. The recommended buffer may only be reduced again following the same process, as identified above, and after the CPUC-approved, qualified biologist has determined that the nesting birds are no longer exhibiting signs of intolerance to construction activities. Nests shall be monitored daily by the qualified biologist when construction is active at that location. Any potentially significant construction-related disturbance shall be reported to CPUC, CDFW, and USFWS.

Monitoring. Active nests shall be monitored at least once daily during construction until nestlings have fledged and dispersed or until nest failure has been documented. Daily nest checks shall be at least 30 minutes or more as determined by the qualified biologist based on the type of construction activity (duration, equipment being used, potential for construction-related disturbance) and other factors related to assessment of nest disturbance (weather variations, pair behavior, nest stage, nest type, species, etc.).

The qualified biologist shall record the construction activity occurring at the time of the nest check and note any work exclusion buffer in effect at the time of the nest check. The qualified biologist shall record any sign of disturbance to the active nest, including but not limited to parental alarm calls, agitated behavior, distraction displays, nest fleeing and returning, chicks falling out of the nest or chicks or eggs being predated as a result of parental abandonment of the nest. If the qualified biologist determines that project activities are contributing to nest disturbance, they shall notify CPUC (and CDFW/USFWS as appropriate in the case of special-status bird nests) and coordinate with the Construction Manager to limit the duration or location of work, and/or increase appropriate protective measures (as described above).

Reporting. If there are active nests present within 50 feet of the project area during construction, a weekly written report shall be submitted to CPUC. A final report shall be submitted to CPUC at the end of each nesting season summarizing all nest monitoring results and nest outcomes for the duration of project construction. No avian reporting shall be required for construction occurring outside of the nesting season and if construction activities do not occur within a reduced buffer during any calendar month. Nests located in areas of existing human presence and disturbance, such as in yards of private residences, or within commercial and or industrial properties are likely acclimated to disturbance and may not need to be monitored, as determined by the CPUC-approved, qualified biologist and approved by the CPUC's independent biologist.

Permits. Prior to the start of construction, PG&E may obtain a permit authorized by Section 3503 and/or Section 3503.5 of the California Fish and Game Code, or by any regulation adopted pursuant thereto, pertaining to nesting birds. If PG&E obtains such a permit under the above authorities, where that permit conflicts with the measures outlined above, the conditions of the permit shall govern.

Mitigation Measure for Preservation of Unanticipated Discoveries

MM C-1 Unanticipated discoveries of cultural deposits. This mitigation supersedes APM CUL-4. In the event that previously unidentified archaeological, cultural, or historical sites, artifacts, or features are uncovered during implementation of the project, work will be suspended within 100 feet (30 meters) of the find and redirected to another location. The CPUC-approved cultural resources specialist shall be contacted immediately to examine the discovery and determine if further investigation is needed. If the discovery can be avoided or protected and no further impacts will occur, the resource will be documented on California Department of Parks and Recreation 523 forms and no further effort will be required.

If the resource cannot be avoided and may be subject to further impact, the CPUC-approved cultural resource specialist/archaeologist shall evaluate the resource and determine whether it is: (1) eligible for the CRHR (and thus a historical resource for purposes of CEQA); or (2) a unique archaeological resource as defined by CEQA. If the resource is determined to be neither a unique archaeological nor an historical resource, work may commence in the area. If the resource meets the criteria for either an historical or unique archaeological resource, or both, work shall remain halted, and the cultural resources specialist/archaeologist shall consult with CPUC staff regarding methods to ensure that no substantial adverse change would occur to the significance of the resource pursuant to CEQA Guidelines Section 15064.5(b).

Preservation in place, i.e., avoidance, is the preferred method of mitigation for impacts to historical or unique archaeological resources. Alternative methods of treatment that may be demonstrated ~~by~~ to the CPUC to be effective include evaluation, collection, recordation, and analysis of any significant cultural materials in accordance with a Cultural Resources Management Plan prepared by the CPUC approved qualified cultural resource specialist/archaeologist. The methods and results of evaluation or data recovery work at an archaeological find shall be documented in a professional level technical report to be filed with CHRIS. Work may commence upon completion of treatment, as approved by the CPUC.

Mitigation Measure to Avoid Known and Potential Cultural Resources

MM C-2 **Avoid known and potential shipwreck locations.** This measure incorporates and supplements portions of APM CUL-2, Resource Avoidance. During installation of the submarine cable, PG&E and its contractors shall map the as-built alignment of the cable in relation to known cultural resources, and the contractors shall ensure that the cable passes at least 100 feet to the west of the known shipwreck located in the northeastern portion of the marine geophysical survey area and mapped on NOAA Chart no.18650. In addition, prior to the installation of the cable, PG&E and its contractors shall map a 50 foot buffer around the magnetic anomaly identified by OSI as anomaly no. M63 in the southern half of the marine geophysical survey area and located at 6019099E, 2106491N, as the anomaly may result from the remains of a shipwreck buried beneath the bay floor in that location. PG&E and its contractors shall ensure that no sediment disturbing excavation or hydroplowing is conducted within the 50 foot buffer zone. If the project cannot be routed around the anomaly, additional evaluation and mitigation as detailed in Mitigation Measure C-1, for unanticipated discoveries, and detailed in the Unanticipated Discoveries Plan may be necessary prior to excavation.

Mitigation Measure for Underground Transmission Line Construction Noise

MM N-1 **Implement General Noise Control Measures.** PG&E shall implement the following general noise control measures in addition to APMs NO-1 to NO-7, with APMs NO-2 and NO-3 superseded:

- PG&E and contractors shall use equipment that incorporates noise-control elements into the design.
- PG&E and contractors shall ensure equipment exhaust stacks and vents are directed away from buildings.
- Where use of pneumatic tools, such as impact tools (e.g., jack hammers and pavement breakers), is unavoidable, a noise source screen such as a barrier around the activity using the tools, an external noise jacket, or an exhaust muffler on the compressed air exhaust shall be used and shall be designed to reduce noise levels from the source by 10 dBA.
- PG&E shall include noise control requirements in specifications provided to construction contractors. Such contract specifications would include, but not be limited to, performing all work in a manner that minimizes noise; use of equipment with effective mufflers; undertaking the most noisy activities during times of least disturbance to surrounding residents, day care operations, and commercial uses; and using haul routes that avoid residential buildings inasmuch as such routes are otherwise safely available.
- PG&E shall respond to and track complaints pertaining to construction noise. PG&E shall provide a complaint hotline phone number that shall be answered at all times during construction and designate an on-site construction complaint and enforcement manager for the project. The noise complaint and response process shall be described in the residential notifications required under APM NO-5 and posted publicly near work areas that are within 300 feet of residential buildings or day care operations.

Mitigation Measure for 24-Hour HDD Noise

MM N-2 Obtain Special Permit for Nighttime HDD Noise. This mitigation measure is to supplement and ensure enforceability of APM NO-6 for noise sources at the Embarcadero HDD Transition Area.

- PG&E shall apply to the San Francisco Director of Public Works and obtain a special permit for nighttime or 24-hour activity at the Embarcadero HDD Transition Area, consistent with Section 2908 of the Police Code. Prior to commencing construction of the HDD, PG&E shall provide to the CPUC a copy of the special permit or evidence that no permit is required by San Francisco.
- PG&E shall provide to the CPUC at least 7 days prior to commencing construction of the Embarcadero HDD Transition Area the results of actual ambient hourly (Leq) noise measurements for each hour between 8:00 p.m. to 7:00 a.m. at the edge of the nearest private property containing residential use obtained from monitored noise levels as specified in APM NO-6.
- PG&E and contractors conducting nighttime work at the Embarcadero HDD Transition Area, between 8:00 p.m. to 7:00 a.m., shall implement noise attenuation features, including acoustical barriers, blankets and enclosures as identified in APM NO-6, to achieve no more than 5 dBA above existing local ambient noise levels at the edge of the nearest private property containing residential use, based on 1-hour Leq.
- PG&E shall provide a report to the CPUC regarding actions taken to reduce the duration or level of noise within 48 hours of monitoring noise levels found to be in excess of the ambient noise level by 5 dBA, at the edge of the nearest private property containing residential use, based on 1-hour Leq.

Mitigation Measure for Accidental Utility Service Disruptions

MM UT-1 Protect underground utilities. Prior to commencing construction of the underground transmission line, PG&E shall submit to the CPUC written documentation of the following:

- Construction plans designed to protect existing utilities, showing the dimensions and location of the finalized alignment as well as the corrosion and induced currents study;
- Records that the Applicant provided the plans to the City and County of San Francisco for review, revision and final approval;
- Construction plans approved by the City and County of San Francisco detailing the steps taken to prevent damage to two large SFPUC storm sewers, including but not limited to an appropriate shoring plan, work zone restrictions, and setbacks for the adjacent structures, at the following locations: (1) in the intersection of Spear and Folsom; and (2) at the end of the route as it turns to enter Embarcadero Substation;
- Evidence of coordination with all utility owners within the approved right-of-way, including their review of construction plans, results of the induced current and corrosion potential analysis, and a description of any protection measures or compensation to be implemented to protect affected facilities;
- Copy of the Applicant's database of emergency contacts for utilities that may be in close proximity or require monitoring during construction of the project;

- Evidence that the project meets all applicable local requirements;
- Evidence of compliance with design standards; and
- Copies of any necessary permits, agreements, or conditions of approval.

Based on the analysis and conclusions of the Initial Study, the impacts of the project as proposed by PG&E would be mitigated to less than significant levels with the implementation of the mitigation measures presented herein, which have been incorporated into the Proposed Project.

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