

**PUBLIC UTILITIES COMMISSION**

505 VAN NESS AVENUE  
SAN FRANCISCO, CA 94102-3298



November 21, 2014

Robert Donovan  
Senior Land Planner  
Pacific Gas & Electric  
Environmental Management - Transmission  
245 Market Street, N10A  
San Francisco, CA 94105

RE: Embarcadero-Potrero 230 kV Transmission Project (E-P): Notice to Proceed #4

Dear Mr. Donovan,

On November 19, 2014, Pacific Gas and Electric Company (PG&E) submitted a Notice to Proceed request to the California Public Utilities Commission (CPUC) for the rock removal obstructing the path of the submarine cable component of the Embarcadero-Potrero 230 kV Transmission Project along the submarine cable line and off shore of Pier 50 in the San Francisco Bay, in the City of San Francisco, San Francisco County, California.

The PG&E Embarcadero – Potrero 230 kV Transmission Project was evaluated in accordance with the California Environmental Quality Act (CEQA). The mitigation measures and applicant-proposed measures (APMs) described in the Final Mitigated Negative Declaration (MND) were adopted by the CPUC as conditions of project approvals. The CPUC also adopted a Mitigation, Monitoring, Compliance and Reporting Program (MMCRP) to ensure compliance with all mitigation measures imposed on the Embarcadero – Potrero 230 kV Transmission Project during implementation. The CPUC voted on January 16, 2014 to approve the Final MND for the PG&E Embarcadero – Potrero 230 kV Transmission Project (Decision D.14-01-007) and a Notice of Determination was submitted to the State Clearinghouse (SCH#2013082047).

The Embarcadero – Potrero Project will be constructed in 6 phases and NTPs will be issued for each phase. This is a typical process for transmission line projects. Given that the Embarcadero – Potrero Project has been approved by the CPUC, as described above, this phased construction review process allows PG&E to proceed with individual project components where compliance with all applicable mitigation measures and conditions can be documented.

This letter documents the CPUC's thorough evaluation of all activities covered in this NTP, including the mitigation compliance table provided with the subject NTP. The evaluation process ensures that all mitigation measures applicable to the location and activities covered in the NTP are implemented, as required in the CPUC's Decision.

NTP #4 for the off shore rock removal component of the Embarcadero- Potrero 230 kV Transmission Project is granted by the CPUC based on the factors described below.

## **PG&E NTP Request**

The CPUC has carefully reviewed the NTP request (NTPR) submitted by PG&E, and verified that it incorporates compliance with all applicable mitigation measures and APMs. Excerpts from the PG&E NTPR dated November 19, 2014 are presented as follows (indented):

As previously discussed with CPUC, PG&E intends to construct the project in several phases to coincide with construction phasing, environmental restrictions, and implementation of the preconstruction mitigation measures. This fourth Notice to Proceed (NTP #4) is being sought for the rock removal obstructing the submarine cable path component of the project. Rock removal consists of removing rock and other debris along the submarine cable line and rock mounds found off shore of Pier 50 during the final project design phase. This rock and debris would otherwise block the hydroplow operation and rock must be removed prior to construction. Rock debris removal was incorporated into resource agency permit applications and has been approved for removal and upland disposal per the approved USACE, RWQCB, and BCDC permits. This work is planned for November-December 2014. A Dredge Operations Plan and Pre-Dredge Survey has been submitted to USACE and BCDC prior to the work.

The following is a list of all major dredging equipment that will be used for dredging and disposal operations, including capacity for each scow. All equipment will be properly permitted for San Francisco County.

- “DB Einer” – A Clamshell dredge operating on diesel power (116 ft. long and 52 ft. wide), with a 5 CY capacity bucket.
- “DB Njord” – A Clamshell dredge operating on diesel power (147 ft. long and 77 ft. wide), with a 36 CY capacity bucket (May be used when the “DB Njord” becomes available)
- “Rockport” – 4,000 CY Dump Scow (238 ft. long and 54 ft. wide) May be used when the “DB Njord” becomes available.
- “Manson 47 Barge” – flat barge (135 ft. long and 50 ft. wide, 749 tons Capacity)
- “Manson 62 Barge” – flat barge (180 ft. long and 44 ft. wide, 1599 tons Capacity)
- “Peter M” – 2,000 HP Tending/Towing Tug boat (80 ft. long and 27 ft. wide)
- “Westar” – Tending/Towing Tug boat
- CAT 973 FE – Loader
- CAT JD 225 – Excavator
- Dump Trucks

## **CPUC Evaluation of Preconstruction Mitigation Implementation**

All applicable project mitigation measures, APMs, compliance plans, and permit conditions shall be implemented. Some measures have on-going/time-sensitive requirements and are required to be implemented prior to and during construction where applicable. For biological resources, those additional conditions are discussed and defined in this section. The Compliance Status Table in PG&E’s NTPR provides preconstruction compliance information for the other issue areas addressed by the Embarcadero – Potrero MND.

Following the discussion of biological, cultural, paleontological, and water resources, a list of bulleted conditions is presented to define additional information and clarifications regarding outstanding requirements. In some cases, these items exceed the requirements of the Mitigation Measures and Applicant Proposed Measures, and are based on specific site conditions. In these cases, the conditions will not appear in the NTPR mitigation compliance table.

## **Biological Resources, Marine Habitat**

The submarine portions of the Project route would pass through natural and artificial intertidal, subtidal, and open-water habitats. Marine habitats and associated marine communities in the Project area include natural (rock) and artificial (concrete, rock riprap, wood, and concrete pilings) hard intertidal areas near shore; soft substrate subtidal habitat; and open water (NMFS, 2007a; CCC, 2010). The Bay depth in the Project area is about 10 feet along the east-west portion near the former Potrero Power Plant. The depth ranges from approximately 30 feet along the southern portion to 70 feet deep along the northern portion of the proposed submarine route. Ambient underwater noise levels in the Project area are heavily influenced by the anthropogenic activity in the Bay, such as marine vessels or construction that occurs in the water (Aspen 2013, MND 5-51 – 5-51).

Intertidal habitat is habitat between the low and high tide lines. The Project would include drilling through sediment beneath the Bay shoreline and adjacent intertidal habitat, 40 to 50 feet below the water surface. Intertidal habitat located along the Project route consists of riprap and soft-bottom mud at the southern cable landing and pavement, ports, wharfs, and soft-bottom mud at the northern cable landing. There are no natural rocky areas, sandy beaches, or wetlands on the shore along the proposed route (Aspen 2013, MND 5-51).

Subtidal habitat consists of the submerged area below the low tide mark. Within the San Francisco Bay, these habitats include mud, shell, sand, rocks, artificial structures, shellfish beds, eelgrass beds, algal beds, and the water column above the bay bottom (CCC, 2010). Subtidal habitat along the proposed route consists of soft-bottom mud and sandy habitats and the water column above them. There are no eelgrass (*Zostera marina*) beds, shell, or rock areas along the route, nor are there any planned eelgrass or shell bed restoration projects in the area (Subtidal Habitat Goals Project [SHGP], CCC, 2012). The project route passes through subtidal open-water and bottom-sediment habitat (PG&E, 2012; Aspen 2013, MND 5-51).

There are 11 special-status marine species (fish and mammals) with high or moderate potential to be present in the Project area and include: green sturgeon (*Acipenser medirostris*), central California coast Coho salmon (*Oncorhynchus kisutch*), Chinook salmon (*Oncorhynchus tshawytscha*), California central coast steelhead (*Oncorhynchus mykiss irideus*), longfin smelt (*Spirinchus thaleichthys*), Pacific herring (*Clupea pallasii*), great white shark (*Carcharodon carcharias*), Pacific harbor seal (*Phoca vitulina richardsi*), California sea lion (*Zalophus californianus*), harbor porpoise (*Phocoena phocoena*), and gray whale (*Eschrichtius robustus*). The San Francisco Bay is federally designated as critical habitat for the southern Distinct Population Segment (DPS) of North American green sturgeon and for the DPS of Central California Coast steelhead (Aspen 2013, MND 5-52).

The NMFS issued a not likely to adversely affect letter for the Project and no USFWS permit is required because no potential for species under their jurisdiction will be impacted. CDFW has conditionally authorized the Project to proceed, requiring a qualified biological observer approved by the Department be present during all Project activities to monitor for the presence of Pacific herring during the extension of the environmental work window from December 1 until midnight December 31, 2014. A BCDC permit was also obtained. All construction personnel will receive biological resource and environmental awareness training prior to starting work.

## **Cultural Resources**

A records search for information was performed at the Northwest Information Center (NWIC) and the California Historical Resources Information System (CHRIS) on April 20, 2012. The records search conducted for the proposed route centered on the alignment and included a one-quarter mile buffer on either side. The

records search included a review of base maps and resource records on file at the NWIC, as well as the California Office of Historic Preservation (OHP) listings of significant resources. A search of the Sacred Lands Files maintained by the Native American Heritage Commission (NAHC) was requested on June 27, 2012 and again on July 6, 2012. In its response, the NAHC noted that a search of the Sacred Lands Files failed to indicate the presence of Native American cultural resources in the immediate Project area, and provided a list of recommended contacts that may have additional information concerning archaeological sites or traditional cultural properties near the Project area.

Deeper areas of the Bay, generally those that lie 30 feet (10 meters) or more below sea level, were fully inundated by sea level rise during the early Holocene more than 7,000 years ago, making them unavailable for subsequent human use and occupation in the Holocene. Additionally, rapid sea level rise during the early and middle Holocene may have eroded portions of this surface along with any associated archaeological deposits. These factors further reduce the potential of discovering buried prehistoric archaeological deposits beneath the Bay Mud in this part of the project area (Aspen 2013, MND 5-83).

There is a higher potential for buried prehistoric sites within the near-shore zone, where Bay Mud deposits are generally thinner and inundation occurred later in time. However, since the earth disturbances proposed in these zones is relatively small and highly localized, relatively little, if any, of the buried surfaces with the potential for buried prehistoric archaeological deposits (if present) would be impacted by project-related activities (Aspen 2013, MND 5-84).

**Marine Geophysical Survey:** A maritime archaeologist reviewed the *Final Embarcadero to Potrero ZA-1 230kV Underground Transmission Project Feasibility Study* prepared by Black and Veatch for PG&E (B&V Project No. 173915.42.3008). A review of the Black and Veatch report included a detailed examination of *Exhibit K, Final Report, Submarine Utility Corridor Investigation, Marine Geophysical Survey, Proposed AZ-1 Transmission Line, San Francisco Bay, California* (OSI Report No. 11ES057), the geophysical report prepared by Ocean Surveys, Inc. (OSI) for Black and Veatch. The review also included a detailed examination of the digital geophysical datasets collected by OSI, specifically the side scan sonar and magnetometer data. Although OSI collected a suite of geophysical data, the datasets most relevant to an evaluation of the potential that historical resources in the form of cultural/archaeological deposits are present within the APE are the side scan sonar imagery and the magnetometer data. As detailed in the OSI report, side scan sonar uses acoustical data to create an image of the sea floor, while the magnetometer records variations in the earth's magnetic field that may represent ferrous metal objects. The side scan sonar imagery records objects visible above the sea floor, while the magnetometer can determine the presence of either visible or buried material. Used together, the instruments are the primary tools used by maritime archaeologists to determine the presence of submerged cultural resources, primarily shipwrecks (Aspen 2013, MND 5-82).

The online California State Lands Commission (CSLC) Shipwreck Database ([http://shipwrecks.slc.ca.gov/ShipwrecksDatabase/Shipwrecks\\_Database.asp](http://shipwrecks.slc.ca.gov/ShipwrecksDatabase/Shipwrecks_Database.asp)) lists shipwrecks by county and is based primarily on historical accounts of these incidents. The San Francisco Planning Department updated information in the CSLC database using research provided by the Institute for Western Maritime Archaeology. Additional potential shipwreck locations are maintained in the San Francisco Maritime Museum archives. Additional information about shipwreck locations along the submarine portion of the transmission cable alignment was sought at the J. Porter Shaw Library at San Francisco Maritime National Historical Park. The NOAA Office of the Coast Survey's AWOIS database was also consulted for information about potential shipwrecks along the submarine portion of the transmission cable alignment. There are six named shipwrecks mapped within one-half mile of the project area listed in the CSLC database. These are primarily located in the Mission Bay and China Basin areas. The location of only one of these shipwrecks has been confirmed. The AWOIS database and the NOAA Chart no. 18650 depict a charted shipwreck in the vicinity of the transmission

cable alignment. No information is known about the shipwreck other than its location, size, and orientation (Aspen 2013, MND 5-87).

The results of the Marine Geophysical Survey indicate a variety of small, isolated side scan sonar targets and magnetometer anomalies throughout the survey area. These are typical results expected in a harbor that has had an active maritime industry for more than 150 years. OSI documented 106 side scan sonar targets (OSI, 2011; Appendix 3). The majority is identified as isolated “linear” or “oblong” objects varying in length from 3 ft. to 220 ft. Five targets are identified as tires or groups of tires; one target (SS62) is identified as a rectangular object measuring 19 ft. long by 7 ft. wide by 2 ft. high, which OSI indicated as a possible wreck. There is no magnetic anomaly directly associated with the target (the nearest magnetic anomaly is approximately 80 ft. north), and additional review by a maritime archaeologist suggests the object is unlikely to be a shipwreck, but is most likely an isolated piece of non-ferrous debris. The most striking side scan sonar target recorded in the survey area is a large shipwreck located in the northeastern portion of the survey area. The target is approximately 300 ft. long by 150 ft. wide and is located approximately 165 ft. east of the 600-ft survey corridor centerline, extending outside the survey corridor. The side scan sonar target corresponds to the charted wreck location from NOAA’s AWOIS database. Review of the side scan sonar data by a maritime archaeologist revealed that no other targets of interest were recorded (Aspen 2013, MND 5-93).

OSI recorded 272 magnetic anomalies in the survey area, ranging in size from less than 20 gammas to nearly 15,000 gammas (OSI, 2011; Appendix 4). The majority of the anomalies are low to moderate intensity and of short duration, indicating they are likely caused by isolated ferrous masses. Additional processing of the magnetometer data using magnetic gradient processing, which looks for changes in the earth’s magnetic field over short distances, helped to isolate magnetic anomalies that may be associated with cultural objects such as shipwrecks. The largest magnetic anomaly recorded during the OSI survey, which is nearly 15,000 gammas, is associated with the shipwreck also recorded by the side scan sonar (see above). The extremely large magnetic anomaly associated with the shipwreck suggests the vessel is iron or steel. There are a number of large magnetic anomalies associated with piers at both the southern and northern ends of the survey area and associated with the Trans Bay Cable in the southern end of the survey area. One additional magnetic anomaly recorded within the survey area is of interest. The anomaly is an 800 gamma anomaly with a 368-ft duration located in the southern half of the survey area (identified by OSI as anomaly no. M63 at 6019099E, 2106491N). There is no side scan sonar target associated with M63, indicating that the source of the anomaly is buried beneath the bay floor. Although it is impossible to predict the size or composition of the ferrous material causing the anomaly, the high intensity and long duration suggests it is either a very large, isolated ferrous object or a cluster of smaller ferrous masses (Aspen 2013, MND 5-93).

All construction personnel will receive cultural resource training prior to starting work. In the event that an unanticipated discovery of cultural materials is made within the HDD sites, the find shall be managed in compliance with the *Archaeological Monitoring and Inadvertent Discovery Plan for the Potrero Portion of the Embarcadero-Potrero 230 kV Transmission Project, City of San Francisco, California* (July 2014 FINAL), prepared by Far Western Anthropological Research Group, Inc.

### **Paleontological Resources**

Published and available unpublished geological and paleontological literature was reviewed to develop a baseline paleontological resource inventory of the Project area, and to assess the potential paleontological productivity of the stratigraphic units that may be affected by the Project. Sources included geological maps, paleontological and geological reports, and available electronic databases. A paleontological resources record review was conducted for the Project on May 12, 2012 using the online database maintained by the University of California at Berkeley Museum of Paleontology (UCMP) (Aspen 2013, MND 5-82).

Geologic mapping by Schlocker (1974) was used to determine the underlying geology for each of the project components. The submarine portion of the proposed transmission route would be through Holocene deposits of Bay Mud (Aspen 2013, MND 5-87). Bay Mud consists of water-saturated, estuarine mud underlying the marshlands and tidal mud-flats of the San Francisco Bay, and in subtidal areas. Generally composed of soft and silty clays, Bay Mud also typically contains lenses of fine sand and peaty material. Bay Mud deposits were laid down after the post-glacial rise of sea level inundated the San Francisco Bay area approximately 10,000 radiocarbon years ago (Atwater, 1979) and, as such, are Holocene in age. This unit is therefore designated as having low paleontological sensitivity (Aspen 2013, MND 5-89).

All construction personnel will receive paleontological resource training prior to starting work.

### **Water Resources**

PG&E received a USACE Nationwide Permit and Regional Water Quality Control Board 401 certification for work in the marine environment.

### **Conditions of NTP Approval**

The conditions noted below shall be met by PG&E and its contractors:

- All applicable Project mitigation measures, APMs, compliance plans, and permit conditions shall be implemented. Some measures have on-going/time-sensitive requirements and shall be implemented prior to and during construction where applicable.
- Copies of all relevant permits, compliance plans, and this NTP #4 shall be available on site for the duration of construction activities.
- Per the letter from CDFW to PG&E dated November 17, 2014, a qualified biological observer approved by the Department shall be present during all Project activities to monitor for the presence of Pacific herring during the extension of the environmental work window from December 1 until midnight December 31, 2014.
- If unanticipated biological resources or special-status species are encountered, the CPUC EM shall be notified immediately, as well as the appropriate resource agencies.
- Prior to the start of construction and in accordance with APM TR-2, PG&E shall submit to the CPUC documentation of coordination with the United States Coast Guard regarding Vessel Safety Zone and documentation of Notices to Mariners.
- Prior to the start of construction, PG&E shall provide documentation that all vessels, barges, and marine equipment are from within the San Francisco Bay, or provide an Invasive Marine Species Control Plan as required by MM B-1.
- PG&E shall submit to the CPUC copies of the USACE required disposal site verification and summary logs on a weekly basis.
- All crew members shall be Worker Environmental Awareness Program (WEAP) trained prior to working on the Project. A log shall be maintained on-site with the names of all crew personnel trained. For any crew members with limited English, a translator shall be on-site to ensure understanding of the training

program. In place of a translator, the WEAP training brochure can be provided in Spanish or other languages as appropriate. All participants will receive a hard-hat sticker for ease of compliance verification.

- In the case of an unanticipated cultural resources discovery, the CPUC Environmental Monitor (EM) shall be notified immediately and the find shall be managed in compliance with the *Archaeological Monitoring and Inadvertent Discovery Plan for the Potrero Portion of the Embarcadero-Potrero 230 kV Transmission Project, City of San Francisco, California* (July 2014 FINAL), prepared by Far Western Anthropological Research Group, Inc.
- All complaints received by PG&E in regard to the Project shall be logged and reported immediately to the CPUC. This includes complaints relevant to noise, dust, etc. Complaints shall also be forwarded to the City of San Francisco. If complaints cannot be resolved, activities at the site may need to be modified and/or sound attenuation devices may be to be installed, etc., depending on the nature of the complaint.
- No movement or staging of construction vehicles or equipment shall be allowed outside of the approved areas. If additional temporary workspace areas or access routes, or changes in technique and mitigation implementation to a lesser level are required, a Minor Project Change Request shall be submitted for CPUC review.
- If construction debris or spills enter into environmentally sensitive areas, appropriate jurisdictional agencies and the CPUC EM shall be notified immediately.

Sincerely,



Billie Blanchard  
CPUC Environmental Project Manager

cc: V. Strong, Aspen