



PROJECT MEMORANDUM

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PG&E EMBARCADERO-POTRERO 230 KV TRANSMISSION PROJECT

To:Billie Blanchard, Project Manager, CPUCFrom:Vida Strong, Aspen Project ManagerDate:March 11, 2016Subject:Monitoring Report #76 – February 29, 2016 to March 6, 2016

This report provides a summary of the construction and compliance activities associated with the PG&E Embarcadero-Potrero (E-P) 230 kV Transmission Project.

A summary of the Notices to Proceed (NTPs) for construction and Minor Project Change (MPC) activities are provided in Tables 1 and 2, respectively (below).

CPUC Environmental Monitor (EM): Jody Fessler

CPUC NTPs

E-P Potrero Switchyard Site Preparation

NTP #1 was issued on August 21, 2014 for the site preparation of the Potrero Switchyard on 23rd Street adjacent to the existing Potrero Substation on the corner of 23rd Street and Illinois Street in San Francisco. NTP #1 included conditions that had to be satisfied prior to the start of construction.

Summary of Activity:

1. Site preparation activities have been completed and all work is now being conducted for the GIS building and cable tie-in work approved by the CPUC under NTP #5 (see below).

Environmental Compliance:

1. All environmental compliance monitoring will be reported below for the GIS building and cable tie-in work.

E-P Horizontal Directional Drill (HDD) Construction

NTP #2 was issued on August 28, 2014 for the HDD Construction on Spear Street, at the northern end of the project, and 23rd Street, at the southern end of the project, in San Francisco. Both HDDs would terminate within the San Francisco Bay and will be tied together in the future via a subsea cable. NTP #2 included conditions that had to be satisfied prior to the start of construction, as well as prior to the start of any work in the Bay.

Summary of Activity at the Northern Bore (Spear Street):

1. The HDD work is complete and HDD Company demobilized from the site during Week #26.

Summary of Activity at the Southern Bore (23rd Street):

1. The HDD work is complete and HDD Company demobilized from the site during Week #26.

E-P Underground Duct Bank Construction

NTP #3 was issued on October 9, 2014 for the underground duct bank and vault installation component of the Embarcadero-Potrero 230 kV Transmission Project between the horizontal directional drill (HDD) transition on Spear Street to the Embarcadero Substation on Folsom Street in the northern section, and between the HDD transition on 23rd Street to the Potrero Switchyard in the southern section, in the City of San Francisco. NTP #3 included conditions that had to be satisfied prior to the start of construction.

Summary of Activity for the Duct Bank North (Folsom St. and Spear St.):

Folsom Street

1. All work activities have been completed at this location.

Spear Street, Duct Bank and Vault (between Folsom St and Harrison St)

1. All work activities have been completed at this location except the pulling of conductor cable, which will be done at a later time.

Environmental Compliance:

1. No compliance monitoring was necessary at this location.

Summary of Activity for the Duct Bank South (23rd Street):

23rd Street, Duct Bank and Vault

1. All work activities have been completed at this location except the pulling of conductor cable, which will be done at a later time.

Environmental Compliance:

1. No compliance monitoring was necessary at this location.

E-P Submarine Rock and Debris Removal

NTP #4 was issued on November 21, 2014 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. NTP #4 included conditions that had to be satisfied prior to the start of construction.

Summary of Activity:

1. All work activities related to NTP #4 have been completed.

Environmental Compliance:

1. No compliance monitoring was necessary at this location.

E-P Potrero GIS Building and Cable Tie-in

NTP #5 was issued on March 27, 2015 for construction of the 230 kV Potrero gas-insulated switchgear (GIS) building and cable tie-in component of the Embarcadero-Potrero 230 kV Transmission Project at the Potrero Switchyard site, in the City San Francisco. NTP #5 included conditions that had to be satisfied prior to the start of construction.

Summary of Activity:

Potrero Switchyard

- 1. Office trailer use occurred Monday through Sunday.
- 2. Overaa conducted housekeeping and dust control activities Monday through Sunday.
- 3. Overaa aided other work crews Monday through Sunday.
- 4. Overaa adjusted concrete curing blankets in the GIS building on Monday (see Figure 1).
- 5. Metal Set welded in the GIS building Monday through Friday.
- 6. APEC excavated and installed cable trays for the cable trench Monday through Friday (see Figure 2).
- 7. APEC removed forms at the transformer pad Monday through Wednesday.
- 8. APEC excavated near the transformer pad Wednesday through Saturday (see Figure 3).
- 9. MEI worked on penetrations of the roof of the GIS building on Thursday.
- 10. CTS provided inspections of the GIS building Monday through Friday.
- 11. NASS and TBEA assembled the reactor (dress and test) Monday through Thursday.
- 12. Proven delivered and distributed baserock on Monday.
- 13. Clean Harbors replaced roll-off bins Monday through Friday.

Substation Adjacent to Potrero Switchyard

- 1. CCE QEW monitored work in the substation Monday through Saturday.
- 2. APEC conducted housekeeping and dust control activities Monday through Saturday.
- 3. APEC excavated in the substation Monday through Friday.
- 4. CCE installed new substation infrastructure on Monday through Sunday.

Environmental Compliance:

- 1. Cultural monitoring was conducted by Far Western Monday through Friday, and cultural constituents were observed, documented, and some collected.
- 2. Air quality monitoring was conducted by ERM Monday through Friday.
- 3. PG&E's Environmental Inspector conducted monitoring of this area Monday through Friday, including SWPPP inspections and nesting bird sweeps.
 - On March 2nd, the PG&E Environmental Inspector observed two active rock dove nests on high beams in the southeast and southwest corners of the GIS building. Rock doves are exempt from the Migratory Bird Treaty Act, The nests were removed by Overaa per PG&E's request for health and safety issues. The southeast nest had one egg and the southwest nest had two eggs.
 - On March 2nd, the PG&E Environmental Inspector observed a common raven building a nest in Station A just outside the southeast corner of the work area (see Figure 4). The nest start was not active; only a few sticks were present and no incubation was observed. The nest start was about 50 feet from the work boundary, but access to the nest for the adults was only 20 feet from the work boundary and faces the work area. The nest start location was visible from the work area. No work is being conducted in this corner currently; only very light foot traffic is occurring. PG&E stated that in a couple of weeks, heavy work with equipment is planned in that corner of the yard in plain view of the nest. This future work would likely impact the nesting pair

if the nest becomes active. Due to this, the PG&E Environmental Inspector recommended deterrent measures or nest removal so the nest start would not become active. On March 3rd, the nest start was removed by Overaa.

- On March 4th, the PG&E Environmental Inspector observed that the pair of common ravens were rebuilding the nest that had been removed the previous day in Station A. Nest construction had just begun and only a few small sticks were in place. The PG&E Environmental Inspector informed PG&E and recommended that they remove the new nest start as soon as possible.
- 4. PG&E's Environmental Inspector noted several housekeeping and compliance issues at this location:
 - On March 1st, two kiddie pools used for concrete washouts were not covered with plastic, and a third pool was not completely covered. The PG&E Environmental Inspector recommended covering all three pools completely with plastic (until concrete was dry and disposed of) to comply with SWPPP requirements. On March 2nd, the three kiddie pools were observed with plastic, but were not completely covered. On March 3rd, the issue was observed to have been rectified; the pools were removed.
 - On March 2nd, a 55 gallon drum of mineral oil was on a pallet without containment in the yard. The PG&E Environmental Inspector recommended putting the drum on a pallet over secondary containment and covering with plastic (since rain was forecasted). On March 3rd, the issue was rectified; the drum was put over containment and covered.
 - On March 2nd, two lighting structures were observed to be without containment in the substation. The PG&E Environmental Inspector recommended putting the structures in containment. On March 3rd, the issue was rectified; the lighting structures were put over containment and covered.
 - On March 4th, several buckets of sealant were left out overnight with no secondary containment. The PG&E Environmental Inspector recommended installing secondary containment under the containers and covering them due to forecasted rain. The issue was rectified; the containers were removed.
 - On March 4th, a trash can near the GIS building had a hole apparently melted through it, approximately 2 inches in diameter. The hole was large enough for a mouse or rat and could allow trash to leak out. The PG&E Environmental Inspector recommended replacing the can or patching the hole with a durable material. The issue was rectified; the trash can was removed.
 - On March 4th, the NASS crane was leaking oil. Secondary containment had already been placed underneath and no oil was observed on the ground. The PG&E Environmental Inspector recommended servicing the vehicle so that it no longer leaks.

E-P Submarine Cable Installation

NTP #6 was issued on April 7, 2015 for the submarine cable installation component of the Embarcadero-Potrero 230 kV Transmission Project in the San Francisco Bay. NTP #6 included conditions that had to be satisfied prior to the start of construction.

Summary of Activity:

1. All work activities for the submarine cable installation were completed during Week #50.

Amador Staging and Laydown Yard

A Minor Project Change #1 was issued on July 23, 2014 for the use of the Amador Staging and Laydown Yard on Amador Street, San Francisco. The Minor Project Change #1 included conditions that had to be satisfied prior to the staging of equipment and materials at the yard.

Summary of Activity:

1. All remaining materials were removed on December 7th and the yard has been turned back over to the Port of San Francisco.

Environmental Compliance:

1. No compliance monitoring was necessary at this location.

Notices to Proceed

Table 1 summarizes the Notices to Proceed (NTP) for the Embarcadero-Potrero Project.

NTP #	Date Requested	Date Issued	Phase	Description
NTP #1	6/23/14	8/21/14	Potrero Site Preparation	Site preparation and excavation of the 230 kV Potrero Switchyard site on 23 rd St., SF.
NTP #2	7/31/14	8/28/14	HDD	Horizontal directional drilling on Spear St. and 23 rd St. connecting to the SF Bay.
NTP #3	9/18/14	10/09/14	Underground Duct Bank and Vaults	Underground duct bank and vault installation between the HDD transition on Spear St. to the Embarcadero Substation on Folsom St. in the northern section, and between the HDD transition on 23 rd St. to the Potrero Switchyard in the southern section, SF.
NTP #3 MOD	11/13/14	11/14/14	Underground Duct Bank and Vaults	Trench from the new Potrero Switchyard to the existing switchyard for the 230 kV/115 kV connections across the Trans Bay Cable.
NTP #4	11/19/14	11/21/14	Subsea Cable	Rock and debris removal along subsea cable route.
NTP #5	2/19/15	3/27/15	Potrero GIS Switchgear Building	Construction of 230 kV Potrero gas-insulated switchgear (GIS) building and cable tie-in component at Potrero Switchyard.

Table 1 Notice to Proceeds (NTPs) (Updated 3/11/16)

Minor Project Changes

Table 2 summarizes the Minor Project Changes submitted for the Embarcadero-Potrero Project.

Table 2 Minor Project Changes (MPCs) (Updated 3/11/16)

MPC #	Date Requested	Date Issued	Phase	Description
MPC #1	7/16/14	7/23/14	Amador Staging and Laydown Yard	Use of an existing staging and laydown yard adjacent to Alternate Staging Area #3 (as identified in the IS/MND)on Amador St., SF.
MPC #2	12/31/14	1/5/15	Staging and Laydown Yard	Use of an existing paved staging and laydown yard at 1215 Michigan Street, SF, two blocks from the Potrero Switchyard.

PROJECT PHOTOS

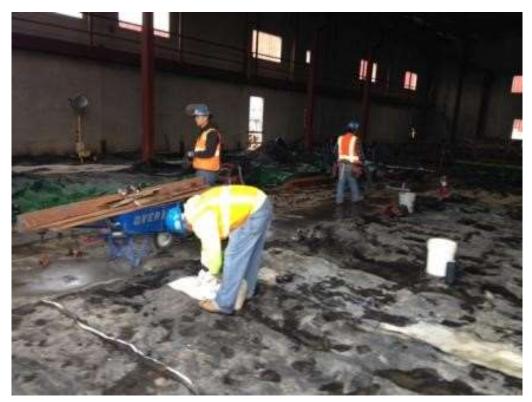


Figure 1 – Crews adjusted concrete curing blankets in the GIS building. View northeast, February 29, 2016. Photo courtesy of PG&E.



Figure 2 – Crews installing cable trays for the cable trench. View north, March 1, 2016. Photo courtesy of PG&E.



Figure 3 – Crews excavated near the transformer pad. View east, March 3, 2016. Photo courtesy of PG&E.



Figure 4 – Common raven nest start in Station A building adjacent to southeast corner of Potrero Switchyard. View east, March 2, 2016. Photo courtesy of PG&E.