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PROJECT MEMORANDUM

PG&E EMBARCADERO-POTRERO 230 kV TRANSMISSION PROJECT

To: Billie Blanchard, Project Manager, CPUC
From: Vida Strong, Aspen Project Manager
Date: March 2, 2016
Subject: Monitoring Report #75 – February 22, 2016 to February 28, 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 was on site February 24th.

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 Saturday.
3. Overaa aided other work crews Monday through Saturday.
4. Overaa cut wood forms and metal pipes Monday through Friday.
5. Metal Set welded in the GIS building and prepared for a concrete pour Monday through Friday.
6. APEC excavated for a cable trench Monday through Friday.
7. APEC installed forms and rebar at the transformer pad Monday through Friday.
8. APEC poured concrete at the transformer pad Monday through Friday.
9. MEI grounded embeds in the GIS building on Friday and Saturday.
10. BCI poured concrete in the GIS building on Saturday.
11. BCI laid curing blankets on Sunday.
12. CTS provided inspections of the GIS building Monday through Friday.
13. NASS and TBEA assembled the reactor (dress and test) Monday through Friday.
14. Proven delivered and distributed baserock on Wednesday and Thursday.
15. Clean Harbors delivered and staged roll-off bins on Monday, Thursday, and Friday.
16. At the time of the CPUC EM site visit on February 24th, crews were preparing for the concrete pour on the first floor of the GIS building; continuing to waterproof the outside basement of GIS building; constructing containment walls around the transformer (SPCC); installing radiators, adding oil, and testing the reactor; and excavating for the cable trench (see Figures 1-3).

Substation Adjacent to Potrero Switchyard

1. CCE QEW monitored work in the substation Monday through Sunday.
2. APEC conducted housekeeping and dust control activities Monday through Friday.
3. APEC excavated in the substation Monday through Friday.
4. CCE installed new substation infrastructure on Monday through Sunday.
5. At the time of the CPUC EM site visit on February 24th, crews were excavating in the substation for the 115 kV line and installing substation infrastructure (see Figure 4).

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 February 25th, the PG&E Environmental Inspector observed a common raven carrying nesting material into a roofless NRG building directly east of the Overaa trailer over 100 horizontal feet

and 60 vertical feet from the east project boundary. Due to the distance and a wall acting as a visual block to the project area, the nest will not be impacted by construction activities.

4. PG&E's Environmental Inspector noted several compliance issues at this location:
 - On February 17th, the PG&E Environmental Inspector observed holes in the filter fabric under the drainage inlet cover on 23rd Street close to Illinois Street, south of the substation. Rock bags were missing and the filter fabric was clogged (with non-project related sediment from previous storm runoff) at the drainage inlet on 23rd Street south of the switchyard. The PG&E Environmental Inspector consulted with ATHNA SWPPP Inspector who confirmed that the rock bags are no longer needed and the filter fabric is sufficient since work is no longer being conducted on 23rd Street. On February 27th, the issue was rectified; the filter fabric was replaced.
 - On February 24th, the PG&E Environmental Inspector noted that a kiddie pool was being used for a concrete washout and was not lined with plastic. The PG&E Environmental Inspector informed PG&E of the issue and recommended the following: not adding additional concrete, cover with plastic until dry, and dispose of once dry. The concern was rectified that day; the pool was no longer in use and was covered with plastic for drying and disposal.
5. The CPUC EM noted the issues mentioned above. Besides those compliance issues, the CPUC EM noted that the site was neat and clean, and that SWPPP measures were in place. All observed work activities were in compliance with the mitigation measures (MMs), Applicant Proposed Measures (APMs), and other permit requirements.

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.

Table 1
Notice to Proceeds (NTPs)
 (Updated 3/02/16)

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.

Minor Project Changes

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

Table 2
Minor Project Changes (MPCs)
 (Updated 3/02/16)

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 preparing for concrete pour on first floor of the GIS building. View east, February 24, 2016.



Figure 2 – Crews constructing containment walls around the transformer (SPCC). View southeast, February 24, 2016.



Figure 3 – Crews installing radiators, adding oil, and testing the reactor. View southeast, February 24, 2016.



Figure 4 – Crews were excavating in the substation for the 115 kV line. View west, February 24, 2016.