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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: June 22, 2016
Subject: Monitoring Report #91 – June 13, 2016 to June 19, 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 with the exception of pulling of conductor cable, which is scheduled to start in early July 2016.

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. APEC excavated for the water and sewer line tie-in on Friday (see Figure 1).
2. All other work activities have been completed at this location with the exception of pulling of conductor cable, which is scheduled to start in July 2016 after conductor is pulled from Spear Street to the Embarcadero Substation.

Environmental Compliance:

1. PG&E's Environmental Inspector (EI) conducted monitoring of this area on Friday, including SWPPP inspections and nesting bird sweeps. No biological finds were noted.
2. PG&E noted no compliance concerns at this location.

E-P Submarine Rock and Debris Removal

NTP #4 was issued on November 21, 2014 for the removal of rock 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 aided other work crews and conducted housekeeping and dust control activities Monday through Sunday.
3. Overaa backfilled areas with baserock Monday through Wednesday.
4. Cosco installed fire alarms in the GIS building Wednesday through Sunday.
5. MEI conducted electrical work in the GIS building Monday through Sunday.
6. CER installed infrastructure in the GIS building Monday through Sunday.
7. Proven excavated for the perimeter wall Monday through Wednesday (see Figure 2).
8. Shooter and Butts worked on landscaping on the roof Monday through Friday.
9. APEC installed conduit and steel for the duct bank Monday through Wednesday.
10. Nexans conducted electrical termination work on the reactor and transformer Wednesday through Friday.
11. CMC installed rebar in the perimeter wall excavation Wednesday through Friday (see Figure 3).
12. Clean Harbors replaced roll-off bins Monday through Friday.

Substation Adjacent to Potrero Switchyard

1. APEC conducted housekeeping and dust control activities Monday through Friday.
2. APEC installed rebar, conduit, cable tray lids, and backfilled cable trays and around the 115 kV bus Monday through Friday.
3. CCE conducted electrical work in the control building Monday through Friday.
4. CCE QEW monitored work in the substation Monday through Friday.
5. Nexans conducted electrical termination work on the 115 kV bus Monday through Friday.

Environmental Compliance:

1. Cultural monitoring was conducted by Far Western on Friday and cultural constituents were observed.
2. Air quality monitoring was conducted by ERM Monday through Friday.
3. PG&E's Environmental Inspector (EI) conducted monitoring of this area Tuesday and Friday, including SWPPP inspections and nesting bird sweeps. No biological finds were noted.
4. PG&E's EI noted two housekeeping and compliance issues at this location:

- On June 14th, the secondary containment (i.e. plastic fiber roll) was not fully functional in the north side of the substation. On June 17th, the PG&E EI observed the issue was rectified; the containment was fixed.
 - On June 17th, a light structure in the yard near the reactor was without secondary containment/drip tray. The PG&E EI recommended that the unit have containment/drip tray.
5. PG&E's EI noted that the following previous housekeeping and compliance issues were resolved:
- On June 10th, the PG&E EI observed that a pipe threader had inadequate secondary containment to contain/catch lubricant used in the cutting process. It was recommended that a proper walled secondary containment be used instead of the cardboard, and the cardboard be disposed of properly. On June 17th, the PG&E EI observed the issue was rectified. The threader was not present; it had been removed from the site or stored away.
 - On June 10th, the PG&E EI observed kitty litter was used to clean up oil in and around (on the ground) the containment under the cable reel machinery. On June 14th, the PG&E EI observed the kitty litter was cleaned up, but the containment was missing (see Figure 4). On June 17th, the PG&E EI observed the issue was rectified. Oil on the unit was cleaned off and the unit was no longer leaking. The machinery will no longer be used and is waiting to be hauled off.

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 06/22/16)

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 06/22/16)

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: APEC excavating for the water and sewer line tie-in on 23rd Street, June 17, 2016. Photo courtesy of PG&E.



Figure 2: Proven excavated for the perimeter wall, June 14, 2016. Photo courtesy of PG&E.



Figure 3: CMC installed rebar in the perimeter wall excavation, June 17, 2016. Photo courtesy of PG&E.



Figure 4: Secondary containment missing under cable reel machinery, June 14, 2016. Photo courtesy of PG&E.