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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: December 22, 2015
Subject: Monitoring Report #66 – December 14 to December 20, 2015

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 December 17th.

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. No work occurred in the transition vault during the week.
2. At the time of the CPUC EM site visit on December 17th, no work was being conducted at this location.

Environmental Compliance:

1. Since there were no work activities during the week, no monitoring was conducted.

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

23rd Street, Duct Bank and Vault

1. Clean Harbors removed roll off bins on Monday.
2. Annuzzi conducted pavement grinding and paving on 23rd Street Monday through Wednesday.
3. Underground Construction Co. aided Annuzzi in pavement grinding and paving on Monday.
4. Underground Construction Co. staged equipment on 23rd Street on Tuesday.
5. Underground Construction Co. conducted grounding halo cable installation in the transition vault Tuesday through Friday.
6. Underground Construction Co. conducted housekeeping activities on Friday.
7. At the time of the CPUC EM site visit on December 17st, crews were working in the transition vault installing the grounding halo (see Figure 1).
8. No work activities occurred on Saturday or Sunday.

Environmental Compliance:

1. PG&E's Environmental Inspector conducted monitoring of the work area and activities Monday through Friday, including SWPPP inspections.
2. PG&E's Environmental Inspectors noted no compliance issues at this location.
3. 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 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 conducted.

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 Saturday.
2. Overaa conducted housekeeping and dust control activities Monday through Friday.
3. Overaa aided other work crews Monday through Friday.
4. Metal Set welded and installed steel beams in the GIS building Monday, Tuesday, and Thursday.
5. Sheedy staged construction materials on Wednesday.
6. Sheedy laid steel plates in preparation for transformer delivery on Thursday.
7. Sheedy delivered and staged the transformer on the transformer pad on Thursday and Friday.
8. Sheedy removed equipment and materials from the site on Saturday.
9. APEC built and set wooden forms for the reactor pad in the switchyard Monday through Friday.
10. APEC installed rebar for the reactor pad in the switchyard on Monday, Wednesday, Thursday, and Friday.
11. APEC poured concrete for the reactor pad in the switchyard Monday.
12. APEC installed concrete forms and poured concrete for the transformer pad in the switchyard on Monday.
13. Underground Construction Co. installed temporary plywood around conduit outside the GIS building on Tuesday.
14. Clean Harbors delivered and staged empty roll off bins on Monday and Wednesday.
15. At the time of the CPUC EM site visit on December 17th, the transformer arrived and was being staged to move onto the transformer pad next to the GIS building, crews were setting forms and rebar for the reactor pad in the switchyard, and crews were working within the GIS building (see Figures 2 – 4).
16. No work activities occurred on Sunday.

Substation Adjacent to Potrero Switchyard

1. Contra Costa Electric QEW monitored work in the substation Monday through Friday.

2. APEC set wood forms on Monday and installed rebar on Monday and Tuesday.
3. APEC poured concrete on Monday and Tuesday.
4. APEC conducted dust control activities Monday through Friday.
5. APEC excavated Monday through Friday.
6. APEC conducted housekeeping activities Wednesday through Friday.
7. APEC installed a breaker on Friday.
8. At the time of the CPUC EM site visit on December 17th, crews were excavating for conduit and foundations (see Figure 5).
9. No work activities occurred on Saturday or Sunday.

Environmental Compliance:

1. Cultural monitoring was conducted by Far Western Monday through Friday and cultural constituents were observed, documented, and some collected December 14th, and 16th – 18th.
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.
4. PG&E's Environmental Inspectors noted two compliance issues at this location.
 - On December 16th, sediment track-out was observed on 23rd Street from the Potrero Switchyard gate entrance. The PG&E Environmental Inspector recommended that a street sweeper be used to clean sediment from the pavement. On December 17th, the PG&E Environmental Inspector observed that the track-out was no longer present. This compliance concern was rectified.
 - On December 17th, approximately 2 gallons of hardened concrete waste was observed on the ground by the southwest corner of the Overaa trailer. On December 18th, the concrete waste was no longer present. This compliance concern was rectified.
5. 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 conducted.

Notices to Proceed

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

Table 1
Notice to Proceeds (NTPs)
(Updated 12/22/15)

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 12/22/15)

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 – Crew working in transition vault on 23rd Street. View north, December 17, 2015.



Figure 2 – Transformer being delivered to Potrero Switchyard. View east, December 17, 2015.



Figure 3 – Transformer being staged next to GIS building Potrero Switchyard. View southeast, December 17, 2015.



Figure 4 – Crews working on Reactor Pad in Potrero Switchyard. View southeast, December 17, 2015.



Figure 5 – Excavation work in substation adjacent to Potrero Switchyard. View west, December 17, 2015.