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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: November 23, 2015
Subject: Monitoring Report #60 – November 2 to November 8, 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 November 3rd.

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.):

1st Street and Fremont Street

1. Underground Construction Co. exposed I-beam shoring on Monday and Tuesday, and removed it Monday and Tuesday nights.
2. Underground Construction Co. installed mule tape inside conduit pipe Tuesday through Thursday.
3. Underground Construction Co. mandreled conduit pipe Tuesday through Thursday.
4. Underground Construction Co. pillow-cleaned conduit pipe on Thursday.
5. Underground Construction Co. saw-cut pavement on Wednesday and removed pavement on Thursday.
6. Underground Construction Co. backfilled with concrete on Friday.
7. Underground Construction Co. conducted street sweeping Monday through Friday.
8. At the time of the CPUC EM site visit on November 3rd, a crew was exposing the I-beam shoring for removal that night (see Figure 1) and installing mule tape in the conduit.
9. No work activities occurred on Saturday or Sunday.

Fremont and Beale Streets

10. Underground Construction Co. exposed I-beam shoring on Monday and removed I-beam shoring Monday and Tuesday nights.
11. Underground Construction Co. saw-cut pavement on Monday and Tuesday.
12. Underground Construction Co. jackhammered and removed pavement on Monday.
13. At the time of the CPUC site visit on November 3rd, a crew was saw-cutting the pavement.
14. No work activities occurred on Saturday or Sunday.

Beale and Main Streets

15. Underground Construction Co. backfilled the trench with concrete Tuesday, Wednesday, and Friday.
16. Underground Construction Co. removed pavement on Wednesday and Friday.
17. Underground Construction Co. conducted temporary paving on Thursday and Friday.
18. At the time of the CPUC EM site visit on November 3rd, a crew was backfilling with concrete at the Main Street intersection (see Figure 2).
19. No work activities occurred on Saturday or Sunday.

Main and Spear Streets

20. No work activities occurred Monday through Sunday.

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

1. Spear Street has been paved and temporary striping applied.
2. Underground Construction Co. installed mule tape inside the conduit pipe from inside the transition vault Tuesday through Thursday.
3. Underground Construction Co. mandreled conduit pipe from inside the transition vault Tuesday through Thursday.
4. Underground Construction Co. pillow-cleaned conduit pipe on Thursday.
5. Underground Construction Co. removed mule tape on Friday.
6. Underground Construction Co. camera scoped a conduit pipe on Friday.
7. At the time of the CPUC EM site visit on November 3rd, a crew was installing mule tape and mandreling conduit pipe from within the transition vault (see Figure 3).
8. No work activities occurred Monday, Saturday or Sunday.

Spear Street, Vault

1. Underground Construction Co. worked in the transition vault Tuesday through Friday.
2. PSC dewatered the transition vault on Tuesday.
3. At the time of the CPUC EM site visit on November 3rd, a crew was working down in the transition vault.
4. No work activities occurred Monday, 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.

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

23rd Street, Duct Bank

1. Clean Harbors/PSC managed spoils in roll-off bins on Tuesday and Wednesday.
2. At the time of the CPUC EM site visit on November 3rd, a PSC crew was managing the roll-off bins.
3. No work activities occurred on Monday, or Thursday through Sunday.

23rd Street, Vault

1. No work was conducted in the vault during the week.

Environmental Compliance:

1. Air quality monitoring was conducted by ERM Monday through Saturday.
2. PG&E's Environmental Inspector conducted monitoring of the work area and activities Monday through Friday, including SWPPP inspections.

3. PG&E's Environmental Inspectors noted three compliance issues at this location:
 - On October 30th, the PG&E Environmental Inspector observed approximately 4–5 gallons of cement slurry dried on the pavement around the T-cut conducted the previous day by Underground Construction Co. The PG&E Environmental Inspector recommended that it be vacuumed up or sprayed with water into the concrete filled trench. On November 2nd, the slurry had dried to the existing pavement and could not be cleaned up.
 - On November 3rd and 4th, PSC spilled approximately 100 gallons of mud onto the pavement on 23rd Street near the Clean Harbor roll off bins (see Figure 4). The mud came from the Potrero Switchyard BTI water filtration tanks that were being emptied prior to the tanks removal; the mud was being transferred via Vac-truck between the BTI tank and the Clean Harbors roll off bin. Cleanup activities included watering and vacuuming; no chemicals or soap were used.
 - On November 4th through 6th, two Clean Harbor roll off bins were observed with sediment material around and under them. On November 5th, a third spill (1-2 gallons) near another bin was observed. On November 6th, two of the three spills were cleaned up. The remaining bin had approximately 1 gallon of dirt under it. The PG&E Environmental Inspector will follow up with crews when the bin is removed to clean up what is left under it.
4. The CPUC EM observed PSC attempting to contain and clean up the spill on November 3rd. Other than the spill, the CPUC 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:

1. Office trailer use occurred Monday through Saturday.
2. ABB set up the new office trailer on Tuesday and Wednesday.
3. Overaa conducted housekeeping and dust control activities Monday through Saturday.
4. Overaa aided APEC during demo and removal of bus foundations and transite pipe on Monday.
5. Overaa aided Mid State in grouting Tuesday through Saturday.

6. Mid State grouted and welded wall panels to the foundation Tuesday through Saturday.
7. PSC cleaned and removed water filtration equipment Monday through Thursday.
8. APEC excavated to expose and remove conduit pipe in the adjacent substation on Monday.
9. APEC excavated to expose and demolish concrete foundations in the adjacent substation Monday through Friday.
10. APEC and CCE conducted dust control activities in the adjacent substation Monday through Friday.
11. APEC hauled off concrete for disposal on Thursday.
12. At the time of the CPUC EM site visit on November 3rd, crews were demobilizing the crane (see Figure 5), and excavating foundations in the adjacent substation.

Environmental Compliance:

1. Cultural monitoring was conducted by Far Western Monday through Friday and cultural constituents were observed, documented, and some collected November 2nd through November 6th.
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 no compliance issues at this location.
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. Office trailer use occurred Monday through Friday at the yard.
2. Tailboard meetings occurred at the yard Monday through Friday.
3. Equipment and materials were stored at the yard throughout the week.
4. Underground Construction Co. conducted dust control activities Monday through Friday.
5. Underground Construction Co. removed materials from trailers in preparation for haul off on Friday.
6. At the time of the CPUC EM site visit on November 3rd, the office trailers were in use and equipment and materials were being stored at the yard.
7. No work activities occurred at the yard 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.

Notices to Proceed

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

Table 1
Notice to Proceeds (NTPs)
 (Updated 11/23/15)

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 11/23/15)

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 – Exposing I-beam shoring on Folsom Street in front of Embarcadero Substation. View southwest, November 3, 2015.



Figure 2 – Backfilling with cement at Main and Folsom Streets intersection. View east, November 3, 2015.



Figure 3 – Installing mule tape and mandreling conduit at transition vault on Spear Street. View southeast, November 3, 2015.



Figure 4 – PSC working on cleaning up spoils spill on 23rd Street. View west, November 3, 2015.



Figure 5 – Demobilizing crane at Potrero Switchyard. View southeast, November 3, 2015.