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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 12, 2015
Subject: Monitoring Report #38 – June 1 to June 7, 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 June 4th.

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. Overaa conducted dust control activities on Wednesday.
2. PSC removed pumps from dewatering wells and removed PVC piping connecting dewatering wells on Friday.
3. PSC set up secondary containment to store materials on Friday.
4. At the time of the CPUC EM site visit on June 4th, no work was being conducted at the switchyard other than office trailer use and one electrician working on site.
5. No construction activities occurred Saturday or Sunday.

Environmental Compliance:

1. PG&E's Environmental Inspector conducted monitoring of this area Monday through Friday, including SWPPP inspections.
2. Nesting bird sweeps were conducted Monday through Friday.
3. PG&E's Environmental Inspectors noted no compliance issues at this location.
4. 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 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, Night Work

1. Underground Construction Co. installed rebar, conduit, and spacers in HDPE pipe on Monday.
2. Underground Construction Co. built bulkheads and prepared for grout injection work on Tuesday.
3. Underground Construction Co. injected grout into a 36-inch pipe on Thursday.
4. Underground Construction Co. stripped formwork from pipe ends and mandreled pipe on Friday.
5. Underground Construction Co. cleaned excavation pits on Friday.
6. At the time of the CPUC site visit during the daytime of June 4th, no work was taking place on Folsom Street.
7. Street sweeping occurred Monday through Friday.
8. No construction activities occurred on Sunday.

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

1. Underground Construction Co. excavated the duct bank trench Monday through Thursday.
2. Underground Construction Co. installed rebar Monday and Wednesday through Friday.
3. Underground Construction Co. installed shoring in the duct bank trench on Wednesday and Thursday.
4. Underground Construction Co. installed conduit on Friday.
5. PSC dewatered the duct bank trench on Monday and Wednesday through Friday.
6. New River Electric installed pull anchors in the pull box on Tuesday.
7. New River Electric pulled messenger wire on Friday and Saturday.
8. Clean Harbors hauled off excavated material and pavement for disposal Monday through Thursday.
9. Street sweeping occurred Monday through Friday.
10. At the time of the CPUC EM site visit on June 4th, crews were excavating trench between the vault and Folsom Street (see Figure 1).
11. No construction activities occurred on Sunday.

Spear Street, Duct Bank (between Harrison St and cul-de-sac)

1. Underground Construction Co. and Annuzzi conducted grinding and pavement removal on Monday and Tuesday.
2. Underground Construction Co. and Annuzzi conducted paving on Tuesday and Thursday.
3. At the time of the CPUC EM site visit on June 4th, paving was taking place at the intersection of Spear Street and Harrison Street (see Figure 2).
4. Street sweeping occurred Monday through Friday.
5. No construction activities occurred on Sunday.

Spear Street, Vault

1. Durocher and New River Electric conducted an inspection on Monday.
2. PSC dewatered the vault on Tuesday.
3. Underground Construction Co. welded in the vault on Tuesday and Thursday.
4. Underground Construction Co. excavated backfilled materials to expose manholes on Friday.
5. At the time of the CPUC EM site visit on June 4th, a crew was welding embeds in the vault.
6. No construction activities occurred in the area on Sunday.

Environmental Compliance:

1. Cultural monitoring was conducted by Far Western Monday through Thursday. From June 1st through June 3rd, cultural constituents were observed, documented, and some collected.
2. PG&E's Environmental Inspector conducted monitoring of the work area and activities Monday through Saturday, including SWPPP inspections.
3. Nesting bird sweeps were conducted Monday through Saturday. The Anna's hummingbird nest discovered on April 28th in a tree overhanging the work area near the Spear Street cul-de-sac is no longer active. No hummingbirds were observed at the nest location for three days in a row from June 2nd through June 4th.
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.

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

23rd Street, Duct Bank

1. Underground Construction Co. excavated the duct bank trench Monday through Friday.
2. Underground Construction Co. fused conduit on Monday.
3. Underground Construction Co. installed shoring Monday through Wednesday.
4. Underground Construction Co. installed rebar Tuesday through Friday.
5. Underground Construction Co. dewatered on Wednesday.
6. Underground Construction Co. installed base rock on Wednesday.
7. Underground Construction Co. installed HDPE pipe Wednesday and Friday.

8. Clean Harbors hauled off excavated materials Monday through Friday.
9. Street sweeping occurred Monday through Friday.
10. Fencing was installed around the open trench at the end of each day.
11. At the time of the CPUC EM site visit on June 4th, crews were excavating the duct bank trench and installing conduit (see Figure 3).
12. No construction activities occurred Saturday or Sunday.

23rd Street, Vault

1. Durocher and New River Electric conducted an inspection on Monday.
2. New River Electric pulled messenger wire on Wednesday and Thursday.
3. At the time of the CPUC site visit on June 4th, no work was being conducted at the vault.
4. No construction activities occurred Saturday or Sunday.

23rd Street, Water Line Relocation

1. No work was conducted on the water line relocation throughout the subject week.

Environmental Compliance:

1. Cultural monitoring was conducted by Far Western Monday through Friday. From June 2nd through June 5th, cultural constituents were observed, documented, but not collected.
2. Air quality monitoring was conducted by ERM Monday through Friday.
3. PG&E's Environmental Inspector conducted monitoring of the work area and activities on Monday through Friday, including SWPPP inspections.
4. Nesting bird sweeps were conducted Monday through Friday. The house finch nest discovered on April 13th under the motorcycle parking awning south of the work area in the DHL parking lot is no longer active. No house finch were observed at the nest location for three days in a row from June 2nd through June 4th.
5. PG&E's Environmental Inspectors noted one potential compliance issues at this location. On June 4th, an unknown oily black substance was observed by the Black & Veatch/Underground Construction Co. crew seeping into the trench from the trench wall. The CPUC EM was on site and also noted the oily substance (see Figure 4) and recommended that Black & Veatch notify Marc Morolla (PG&E). The Black & Veatch Inspector informed Marc Morolla (PG&E) and the PG&E Environmental Inspector. PG&E informed Black & Veatch that the soils have been adequately profiled for disposal to a hazardous waste facility, and the onsite treatment system at the Potrero Switchyard has the capacity to remove any free phase product and secondary aqueous phase constituents prior to discharging under the existing SFPUC permit. PG&E stated that going forward, if the seep remains minimal, soils can continue to be off hauled under the current process. However, if flow increases and there is significant accumulation of liquids in the base of the trench, a vacuum truck should be utilized to remove the liquids for input to the treatment system in the Potrero Switchyard prior to any additional excavation activities. In addition, Marc Morolla notified the PG&E remediation group about the observation.
6. The CPUC EM observed the oily substance and recommended that Black & Veatch notify Marc Morolla (PG&E). 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. Durocher and Manson conducted in-water debris removal near Pier 30/32 on Monday.

Environmental Compliance:

1. PG&E's Environmental Inspectors noted no compliance issues 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:

1. No construction activity related to NTP #5 occurred during the subject week; however, the building permits from the City of San Francisco were received by PG&E on June 9, 2015.

Environmental Compliance:

1. No compliance monitoring was conducted during the subject week.

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. Durocher and Manson cut flanges from the three ends of the 12-inch HDPE conduit pipe at the North Bore 1 - North Bore 3 receiving pits near Pier 30/32 on Tuesday.
2. Durocher and Manson installed messenger wire and mandreled the 12-inch HDPE pipe in South Bore 1 on Wednesday.
3. Durocher and Manson installed messenger wire in South Bore 2 and South Bore 3, and mandreled the three 12-inch HDPE pipes in South Bore 1 – South Bore 3 and two fiber optic pipes on Thursday.
4. Durocher and Manson installed messenger wire and mandreled the two 12-inch HDPE pipes in North Bore 2 and North Bore 3, and the two F1 and F2 fiber optic pipes on Friday.
5. Durocher and Manson installed messenger wire and mandreled the 12-inch HDPE pipes in North Bore 1 and the two F1 and F2 fiber optic pipes on Saturday.
6. Testing of barge equipment is ongoing.
7. A barge tour took place on June 10 from Pier 50.
8. No work occurred on Sunday.

Environmental Compliance:

- 1. PG&E’s Environmental Inspectors noted no compliance issues at this location.

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. At the time of the CPUC site visit on June 4th, equipment and materials were being stored at the yard and the office trailers were in use.
- 5. No work 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. Nesting bird sweeps were conducted Monday through Saturday. On June 2nd, a white-crowned sparrow pair was observed building a nest in a fennel plant near the pond in the northeast corner of the Amador Yard. The nest was not yet active and was removed. The PG&E Environmental Inspector recommended that all fennel in the yard and the high grass around the rebar stockpile be cut to deter birds from nesting. On June 4th, the PG&E Environmental Inspector observed that the fennel around the pond was cut down.
- 3. PG&E’s Environmental Inspectors noted no compliance issues at this location.
- 4. 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 06/12/15)

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 #	Date Requested	Date Issued	Phase	Description
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.
NTP #6	2/19/15	4/07/15	Submarine Cable	Site preparation for submarine cable installation, laying the cable, and pulling the cable to land at either end.

Minor Project Changes

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

Table 2
Minor Project Changes (MPCs)
(Updated 06/12/15)

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 – Excavating duct bank trench on Spear Street between vault and Folsom Street. View west, June 4, 2015.



Figure 2 – Paving at the intersection of Spear Street and Harrison Street. View west, June 4, 2015.



Figure 3 – Excavating duct bank trench on 23rd Street. View west, June 4, 2015.



Figure 4 – Oily black substance in trench on 23rd Street. View northwest, June 4, 2015.