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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 11, 2015
Subject: Monitoring Report #24 – February 23, 2015 to March 1, 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 February 26th.

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 housekeeping and dust control activities Monday through Friday.
2. Farrell conducted drill displacement column installation Monday through Thursday (see Figure 1).
3. Farrell drilled piers Monday through Thursday.
4. Farrell performed soil strength testing on Friday.
5. Farrell demobilized materials and equipment on Friday.
6. Street sweeping occurred Monday through Friday.
7. At the time of the CPUC EM site visit on Thursday, February 26th, Farrell had just drilled the last displacement column installation.
8. No construction activities occurred Saturday or Sunday.

Environmental Compliance:

1. Air quality monitoring was conducted Monday through Friday.
2. Cultural monitoring was conducted Monday through Friday. On February 25th, cultural constituents were observed, documented, and collected.
3. PG&E's Environmental Inspector conducted monitoring of this area Monday through Friday, including SWPPP inspections.
4. Nesting bird surveys were conducted Monday, Wednesday, and Friday.
5. PG&E's Environmental Inspectors noted no compliance issues at this location.
6. 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. HDD Company conducted drilling and reaming at Bore 1 Monday through Wednesday.
2. HDD Company and Vortex installed coil wire along Piers 30/32 and on the Vortex barge on Monday.
3. The Vortex barge was staged along Piers 30/32 Tuesday through Friday (see Figure 2).
4. HDD Company punched out into the Bore 1 receiving pit on Wednesday and Vortex divers confirmed punch-out location that same day.
5. Vortex removed coil wire on Thursday.
6. HDD Company performed reaming of Bore 1 Thursday and Friday.
7. Vortex removed eco blocks Thursday and Saturday.
8. Vortex conducted rigging of the drill head attachment on Saturday.
9. HDD Company conducted housekeeping activities on Saturday.
10. Traffic controls have been established at the corner of Spear Street and Harrison Street by Bay Area Traffic Solutions (BATS). Limited access is provided to Spear Street (a dead end street) including deliveries and people with parking garage permits, as well as construction personnel.
11. An 8-foot-tall chain link fence with sound blankets are in place around the HDD equipment and work area.
12. Street sweeping occurred Monday through Saturday.
13. At the time of the CPUC EM site visit on Thursday, February 26th, HDD Company was reaming with a 22-inch reamer at Bore 1, and Vortex was going to send divers down in the evening to switch out the reamer.
14. No work activities occurred on Sunday.

Environmental Compliance:

1. PG&E's Environmental Inspector conducted monitoring of the work area and activities Monday through Saturday, including SWPPP inspections and checking the drill path in the Bay for signs of drilling fluid release (Monday through Thursday).
2. Herring monitoring was conducted Wednesday, Thursday, and Saturday.
3. Nesting bird sweeps were conducted Monday through Friday.
4. PG&E's Environmental Inspector 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 at the Southern Bore (23rd Street):

1. All three of the Southern Bores have been completed.
2. Underground Construction Co. fused high density polyethylene (HDPE) conduit pipe Monday through Friday.
3. HDD Company and Vortex pulled the HDPE conduit for the Bore 1 North 20–30 feet into the Bay on Saturday.
4. Street sweeping occurred Monday through Friday.
5. At the time of the CPUC EM's site visit on Thursday, February 26th, HDPE conduit was being fused.
6. No work activities occurred on Sunday.

Environmental Compliance:

1. Air quality monitoring was conducted Monday through Friday.
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 Friday.
4. PG&E's Environmental Inspectors noted a couple of ongoing occurrences at HDD South during the subject week:
 - February 20th, a sediment bin staged on the south side of 23rd Street storing sediment excavated from Duct Bank North was leaking sediment laden water from the bin into secondary containment. It was determined that PG&E would follow up with Clean Harbors to ensure that onsite roll-off bins receive new, functioning secondary containment units.
 - February 20th–24th, a Clean Harbors truck was observed leaking oil (approximately ¼ cup) onto the pavement at 23rd Street. On February 24th, the PG&E Environmental Inspector observed that the leaked oil had been satisfactorily cleaned up.
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 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.):

1. Underground Construction Co. conducted excavation of duct bank trench on Folsom Street Monday and Tuesday.
2. Underground Construction Co. installed shoring for duct bank excavation on Folsom Street Wednesday through Friday.
3. Underground Construction Co. conducted vault excavation on Spear Street Monday through Friday (see Figure 3).

4. Underground Construction Co. installed shoring in vault excavation on Spear Street on Monday.
5. Underground Construction Co. dewatered vault excavation on Spear Street on Thursday.
6. Street sweeping occurred Monday through Friday.
7. At the time of the CPUC EM site visit on Thursday, February 26th, duct bank shoring work continued on Folsom Street and excavation for vault installation continued on Spear Street.
8. No construction activities occurred Saturday or Sunday.

Environmental Compliance:

1. Cultural monitoring was conducted Monday through Friday. On February 23rd, cultural constituents were observed, documented, and collected.
2. PG&E's Environmental Inspector conducted monitoring of the work area and activities on Monday through Friday, including SWPPP inspections.
3. Nesting bird sweeps were conducted Monday and Friday.
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):

1. Underground Construction Co. conducted duct bank trench excavation Monday through Wednesday.
2. Underground Construction Co. backfilled duct bank trench excavation with concrete slurry on Monday.
3. Underground Construction Co. installed conduit in the duct bank trench on Wednesday.
4. Underground Construction Co. backfilled the duct bank trench excavation with sand on Wednesday and Thursday.
5. Underground Construction Co. excavated for the water line replacement Monday through Friday (see Figure 4).
6. Underground Construction Co. saw cut pavement for the water line replacement on Tuesday.
7. Street sweeping occurred Monday through Friday.
8. Fencing was installed around the open trench at the end of each day.
9. At the time of the CPUC EM site visit on Thursday, February 26th, the duct bank trench was shored and chain link fencing was installed around the work area (see Figures 4 and 5).
10. No construction activities occurred on Saturday or Sunday.

Environmental Compliance:

1. Cultural monitoring was conducted Monday through Friday. On February 26th, cultural constituents were observed, documented, but not collected.
2. Air quality monitoring was conducted Monday through Friday.
3. PG&E's Environmental Inspector conducted monitoring of the work area and activities on Monday through Thursday, including SWPPP inspections.
4. Nesting bird sweeps were conducted Monday through Thursday.

5. PG&E's Environmental Inspectors noted no compliance issues at this location.
6. 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. No construction activity related to NTP #4 occurred during the subject week. Manson crews completed rock and debris removal during Week #14, except for several debris items that were too near the north end exit pits and the HDD work. These few items will be removed when the submarine cable installation begins June 1, 2015.

Environmental Compliance:

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

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. Clean Harbors removed roll-off bins containing non-hazardous excavated materials for disposal Tuesday through Thursday.
4. At the time of the CPUC EM's site visit on Thursday, February 26th, office trailer use and storage of materials and equipment was being conducted at the yard.
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 Saturday, including SWPPP inspections.
2. Nesting bird surveys were conducted on Monday, Wednesday, and Friday.
3. PG&E's Environmental Inspectors noted one compliance issues at this location: For the period of February 26th–28th the trash can next to the porta-potties was overfull. On February 28th, the PG&E Environmental Inspector observed that the trash can had been emptied.
4. The CPUC EM noted an overflowing trash can and notified PG&E's Environmental Inspector. Other than that, 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 03/11/15)

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	Under Review	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	Under Review	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 03/11/15)

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 – Potrero Switchyard, view southeast, February 26, 2015.



Figure 2 – Vortex set-up at HDD North – Pier 30/32. View north, February 26, 2015.

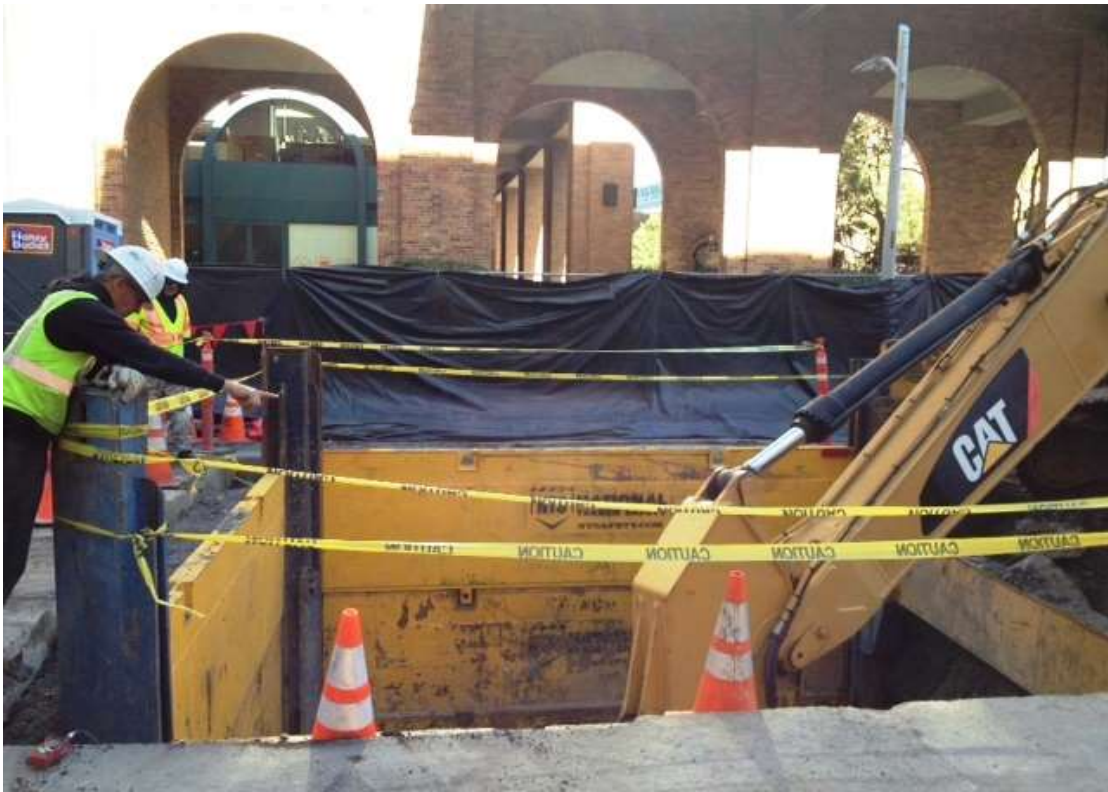


Figure 3 – Excavating for vault on Spear Street. View northeast, February 26, 2015.



Figure 4 – Water line relocation work at Duct Bank South on 23rd Street. View northwest, February 26, 2015.