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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: February 26, 2015
Subject: Monitoring Report #23 – February 16, 2015 to February 22, 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 20th.

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 Tuesday through Saturday.
2. Farrell conducted drill displacement column installation Tuesday through Saturday.
3. Farrell drilled piers Tuesday through Saturday.
4. Street sweeping occurred Tuesday through Saturday.
5. At the time of the CPUC EM site visit on Friday, February 20th, Farrell was conducting the drill displacement column installation (see Figure 1).
6. No construction activities occurred Monday or Sunday.

Environmental Compliance:

1. Air quality monitoring was conducted Tuesday through Saturday.
2. Cultural monitoring was conducted Tuesday through Saturday.
3. PG&E's Environmental Inspector conducted monitoring of this area Tuesday through Saturday, including SWPPP inspections.
4. Nesting bird surveys were conducted Tuesday 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 Sunday.
2. 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.
3. An 8-foot-tall chain link fence with sound blankets are in place around the HDD equipment and work area.
4. Street sweeping occurred Monday through Sunday.
5. At the time of the CPUC EM site visit on Friday, February 20th, HDD Company was reaming with a 22-inch reamer at Bore 1 (see Figure 2).

Environmental Compliance:

1. PG&E's Environmental Inspector conducted monitoring of the work area and activities Monday through Sunday, including SWPPP inspections and checking the drill path in the Bay for signs of drilling fluid release.
2. Nesting bird surveys were conducted Thursday through Sunday.
3. PG&E's Environmental Inspector noted one minor problem at HDD North: HDD Company truck (CA license plates 5W86441) had a small leak. On February 18th, the PG&E Environmental Inspector confirmed that the vehicle had been removed from the site.
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.

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 Thursday.
3. Underground Construction Co. moved HDPE pipe east near Bay shoreline on Monday.
4. Underground Construction Co. built a secondary containment unit around the east pipe end for future hydrotest on Tuesday.
5. Underground Construction Co. conducted hydrotest of fused HDPE conduit pipe on Friday.
6. Vortex conducted post mud removal sonar surveys of the receiving pits on Wednesday.
7. At the time of the CPUC EM's site visit on Friday, February 20th, materials and equipment were being staged in the work area, including the HDPE pipe.
8. No work activities occurred Saturday or 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 Friday, including SWPPP inspections.
3. Nesting bird surveys were conducted Thursday and Friday.
4. PG&E's Environmental Inspectors noted a couple of occurrences at HDD South on 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.
 - A Clean Harbors truck was observed leaking oil (approximately ¼ cup) onto the pavement at 23rd Street. The street sweeper was used to clean the pavement, but the oil was still present and Clean Harbors will clean it up when they return to the site.
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 through Thursday.
2. Underground Construction Co. conducted potholing on Folsom Street on Monday through Wednesday, and Friday.
3. Underground Construction Co. backfilled monitoring well holes on Folsom Street Monday through Wednesday, and Friday.
4. Underground Construction Co. saw cut pavement for duct bank excavation on Folsom Street on Tuesday, Wednesday, and Friday.
5. Underground Construction Co. installed shoring for vault installation on Spear Street on Monday and Tuesday.
6. Underground Construction Co. augured post holes for shoring installation on Spear Street on Thursday.
7. Street sweeping occurred Monday through Friday.
8. At the time of the CPUC EM site visit on Friday, February 20th, duct bank work continued on Folsom Street and 8 piers for the vault shoring on Spear Street had been completed (see Figure 3).
9. No construction activities occurred Saturday or Sunday.

Environmental Compliance:

1. Cultural monitoring was conducted Monday through Friday. On February 16th, cultural constituents were observed, documented, but not 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 surveys were conducted Thursday 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. installed and fused HDPE conduit pipe in duct bank trench on Monday.
2. Underground Construction Co. excavated the duct bank trench Tuesday through Friday and hauled off excavated materials from the duct bank trench Tuesday and Thursday.
3. Underground Construction Co. backfilled the duct bank trench with sand and concrete slurry on Tuesday and Wednesday.
4. Underground Construction Co. installed shoring in the duct bank trench on Thursday and Friday.
5. Underground Construction Co. excavated and hauled excavated materials for the water line replacement Tuesday through Thursday.
6. Underground Construction Co. potholed for the water line replacement on Friday.
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 Friday, February 20th, 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 17th, an unanticipated cultural resource was discovered, documented, but not collected. The cultural resource will be further studied to assess the significance. On February 20th, 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 Friday, including SWPPP inspections.
4. Nesting bird surveys were conducted on Wednesday, Thursday 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 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. At the time of the CPUC EM's site visit on Friday, February 20th, office trailer use and storage of materials and equipment was being conducted at the yard.
4. 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 surveys were conducted on Monday and 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.

Notices to Proceed

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

Table 1
Notice to Proceeds (NTPs)
 (Updated 02/26/15)

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 02/26/15)

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 20, 2015.



Figure 2 – HDD Company drilling at HDD North. View northwest, February 20, 2015.



Figure 3 – Vault shoring work on Spear Street. View southeast, February 20, 2015.



Figure 4 – Work area at Duct Bank South on 23rd Street. View east, February 20, 2015.



Figure 5 – Duct Bank South trench shored on 23rd Street and surrounded by chain link fence. View west, February 20, 2015.