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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 13, 2015
Subject: Monitoring Report #25 – March 2, 2015 to March 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 March 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 housekeeping and dust control activities Monday through Friday.
2. Farrell demobilized materials and equipment on Monday and Tuesday.
3. Proven removed sidewalk cement on Wednesday and excavated under removed sidewalk Wednesday through Friday (see Figure 1).
4. PSC hauled off excavated materials on Thursday.
5. Street sweeping occurred Monday through Friday.
6. At the time of the CPUC EM site visit on Wednesday, March 4th, crews were removing the sidewalk cement with an excavator.
7. No construction activities occurred Saturday or Sunday.

Environmental Compliance:

1. Air quality monitoring was conducted Monday through Friday.
2. Cultural monitoring was conducted Monday, Wednesday, and Thursday. On March 4th, 5th, and 6th, 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 Tuesday, Wednesday, and Friday, and nesting bird sweeps were conducted 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 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 pulled 12-inch and 3-inch HDPE conduit pipe in Bore 1 on Monday.
2. Vortex attached the HDPE pipes in the Bore 1 receiving pit, held the pipes in place during the pull, and protected the floating pipes during the pull on Monday.
3. HDD Company removed sediment from roll off bins for disposal on Tuesday.
4. HDD Company demobilized equipment and materials Tuesday through Saturday.
5. HDD Company and Vortex mandreled the 12-inch and 3-inch conduit in Bore 1 on Tuesday.
6. Vortex removed drilling fluids from the Bore 1 – Bore 3 receiving pits on Wednesday (see Figure 2).
7. Vortex completed sonar survey of air-lifted receiving pits on Thursday.
8. HDD Company removed steel casing from Bore 1 and Bore 2 on Friday and Saturday.
9. 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.
10. An 8-foot-tall chain link fence with sound blankets are in place around the HDD equipment and work area.
11. Street sweeping occurred Monday through Saturday.
12. At the time of the CPUC EM site visit on Wednesday, March 4th, 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.
13. No work activities occurred on Sunday.

Environmental Compliance:

1. Cultural monitoring was conducted Friday and Saturday. On March 6th and 7th, cultural constituents were observed, documented, and collected.
2. 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).
3. Herring monitoring was conducted Monday through Wednesday.
4. Nesting bird surveys were conducted Wednesday and nesting bird sweeps were conducted Tuesday, Friday and Saturday.
5. PG&E's Environmental Inspector noted no compliance issues at this location.

6. The CPUC EM noted that sand bags protecting a drainage inlet at HDD North was damaged (i.e. torn with sand spilling out) and did not appear to be fully functional. The CPUC EM informed the PG&E Environmental Inspector and the damaged sandbags were replaced. 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.

Summary of Activity at the Southern Bore (23rd Street):

1. All three of the Southern Bores have been completed.
2. Underground Construction Co. and Vortex moved the 12-inch and 3-inch HDPE pipes offshore on Monday.
3. Vortex floated the pipes from HDD South to HDD North on Monday.
4. Street sweeping occurred Monday through Friday.
5. At the time of the CPUC EM's site visit on Wednesday, March 4th, no work activities were taking place.
6. No work activities occurred Tuesday through 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 sweeps were conducted Tuesday, Wednesday, and Friday.
4. PG&E's Environmental Inspectors noted an ongoing occurrence at HDD South during the subject week:
 - February 20th – March 2nd, 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. On March 2nd, the PG&E Environmental Inspector noted that the leaking roll-off bin and damaged secondary containment unit was removed from 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 and Friday.
2. Underground Construction Co. backfilled the duct bank trench with sand and concrete slurry on Folsom Street on Tuesday.

3. Underground Construction Co. saw cut pavement for the duct bank trench on Folsom Street Wednesday through Friday and potholed for utilities on Thursday.
4. Underground Construction Co. installed drainage inlet pipe on Folsom Street on Monday and Wednesday, backfilled the drain inlet trench with sand and concrete slurry on Tuesday, and cemented the drainage inlet pipe and paved the excavation on Wednesday.
5. Underground Construction Co. conducted vault excavation on Spear Street Monday through Thursday (see Figure 3).
6. Underground Construction Co. installed shoring in vault excavation on Spear Street Monday through Friday.
7. Underground Construction Co. dewatered vault excavation on Spear Street on Monday and Tuesday.
8. Street sweeping occurred Monday through Friday.
9. At the time of the CPUC EM site visit on Wednesday, March 4th, a crew was saw cutting on Folsom Street between Main Street and Spear Street, and another crew was working on the drainage inlet pipe. On Spear Street, excavation for vault installation continued.
10. No construction activities occurred Saturday or Sunday.

Environmental Compliance:

1. Cultural monitoring was conducted Monday through Friday. On March 3rd and 5th, 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 on Wednesday and nesting bird sweeps were conducted Tuesday, 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. backfilled duct bank excavation with concrete slurry on Monday.
2. Underground Construction Co. installed shoring in duct bank excavation on Monday and removed shoring on Tuesday and Wednesday.
3. Underground Construction Co. conducted duct bank excavation Tuesday, Wednesday, and Friday (see Figure 4).
4. Underground Construction Co. installed conduit in the duct bank excavation on Wednesday.
5. Underground Construction Co. excavated for the water line replacement Monday, Tuesday, Thursday, and Friday.
6. Underground Construction Co. backfilled water line excavation with sand on Tuesday and Wednesday and with slurry on Thursday.
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 Wednesday, March 4th, a crew was working on installing conduit in the duct bank connecting to Bore 1, and another crew was working on the water line relocation.
10. No construction activities occurred on Saturday or Sunday.

Environmental Compliance:

1. Cultural monitoring was conducted Monday through Friday. On March 2nd – 4th, and 6th, 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 sweeps were conducted Tuesday through Friday.
5. PG&E’s Environmental Inspectors noted no compliance issues at this location. However, Under-ground Construction Co. struck and broke a water line during excavation on March 6th, and SFWD was informed and repaired the leak. All water was contained within the excavation and infiltrated into the soil.
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 delivered excavated dirt from Duct Bank North in a vac-truck to store in roll-off bins on Monday.

4. HDD Company removed materials and equipment staged in the yard from the project site Wednesday through Friday.
5. BVCI and Underground Construction Co. conducted the submarine cable link seal strength testing on Thursday and Friday.
6. 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, and nesting bird sweeps were conducted Thursday and Friday.
3. PG&E’s Environmental Inspectors noted no compliance issues at this location.

Notices to Proceed

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

Table 1
Notice to Proceeds (NTPs)
(Updated 03/13/15)

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 03/13/15)

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 – Demolition of sidewalk at Potrero Switchyard, view east, March 4, 2015.



Figure 2 – Vortex set-up at HDD North – Pier 30/32. View north, March 4, 2015.



Figure 3 – Excavating for vault on Spear Street. View west, March 4, 2015.



Figure 4 – Underground conduit tie-in work in duct bank at Bore 1 on 23rd Street. View northwest, March 4, 2015.