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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: April 24, 2015
Subject: Monitoring Report #31 – April 13 to April 19, 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 April 14th.

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. Overaa constructed safety rails around the excavation and stairs into the excavation on Friday.
3. Proven conducted excavation activities to expose top of pile columns Monday through Thursday (see Figure 1).
4. Proven added rock to a ramp into the excavation on Friday.
5. PSC operated the water filtration system Monday through Friday.
6. Underground Construction Company delivered water from dewatering activities for filtration and disposal Monday through Friday.
7. Street sweeping occurred Monday through Friday.
8. At the time of the CPUC EM site visit on Tuesday, April 14th, Proven had conducted excavation activities to expose the top of pile columns earlier in the day.
9. No construction activities occurred Saturday or Sunday.

Environmental Compliance:

1. Air quality monitoring was conducted by ERM Monday through Friday.
2. Cultural monitoring was conducted by Far Western Monday through Thursday.
3. PG&E's Environmental Inspector conducted monitoring of this area Monday through Friday, including SWPPP inspections.
4. Nesting bird sweeps were conducted Monday through Friday.



5. PG&E's Environmental Inspectors noted one compliance issue at this location. A hydraulic fluid hose on Overaa's bobcat street sweeper broke and sprayed approximately 3 gallons of fluid onto the pavement. The spill was cleaned up properly with spill kit materials. The cleanup was conducted on April 14th.
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. 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

1. Underground Construction Co. conducted duct bank trench excavation Monday through Friday (see Figure 2).
2. Underground Construction Co. laid base rock in the duct bank trench on Tuesday and installed rebar cages in the trench Tuesday through Saturday.
3. Underground Construction Co. potholed for utilities on Tuesday and Wednesday.
4. Underground Construction Co. installed conduit pipe in the duct bank trench Thursday through Saturday.
5. Underground Construction Co. backfilled the duct bank trench with concrete on Saturday.
6. Street sweeping occurred Monday through Saturday.
7. At the time of the CPUC EM site visit during the day on Tuesday, April 14th, crews were installing rebar cages in the duct bank trench on Folsom Street between Beale Street and Main Street.
8. No construction activities occurred on Sunday.

Spear Street

1. Underground Construction Co. excavated duct bank trench Monday through Saturday (see Figure 3).
2. Underground Construction Co. potholed for utilities on Monday.
3. Underground Construction Co. installed shoring in the duct bank trench Tuesday through Saturday.
4. Underground Construction Co. saw cut pavement for duct bank trench on Wednesday.
5. Underground Construction Co. removed shoring from the trench on Saturday.
6. Underground Construction Co. laid filter fabric and installed duct bank pipe in the trench on Saturday.
7. Clean Harbors hauled off excavated sediment for disposal Tuesday through Saturday.
8. Underground Construction Co. excavated at the HDPE transition on Monday, and Wednesday through Friday.
9. Underground Construction Co. dewatered at the HDPE transition Monday through Friday.
10. Underground Construction Co. installed duct bank pipe in the trench at the HDPE transition on Monday.
11. Underground Construction Co. installed shoring in the trench and laid base rock at the HDPE transition on Tuesday.
12. Underground Construction Co. backfilled the duct bank trench with concrete and removed shoring at the HDPE transition on Saturday.
13. Clean Harbors hauled off excavated sediment for disposal from the HDPE transition Tuesday through Friday.
14. Street sweeping occurred Monday through Saturday.
15. At the time of the CPUC EM site visit on Tuesday, April 14th, a crew was excavating on the east side of the vault for the duct bank tie-in. Another crew was installing shoring at the HDPE transition trench excavation.
16. No construction activities occurred on Sunday.

Environmental Compliance:

1. Cultural monitoring was conducted Monday through Saturday. April 13th through 16th, 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.
4. PG&E's Environmental Inspectors noted one compliance issue at this location. On April 16th, a hydraulic fluid hose on Underground Construction Co.'s backhoe broke and sprayed approximately 2 quarts of fluid onto a piece of plywood and partially onto the pavement. The spill was cleaned up properly with spill kit materials and the leaking backhoe was put over secondary containment and serviced that day.
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. excavated for waterline relocation Monday through Friday.
2. Underground Construction Co. installed new pipe for the waterline relocation Monday through Friday.
3. Underground Construction Co. backfilled the waterline pipe Monday through Thursday (see Figure 4).
4. Underground Construction Co. broke out concrete manhole boxes on Monday.
5. Underground Construction Co. potholed for utilities for the waterline relocation on Tuesday.
6. Underground Construction Co. and Sheedy installed the base slab foundation for the vault on Thursday and Friday.
7. Clean Harbors delivered new roll off bins on Monday, Tuesday, and Friday.
8. Clean Harbors hauled off roll-off bins for sediment disposal on Monday and Friday.
9. Street sweeping occurred Monday through Saturday.
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 Tuesday, April 14th, crews had potholed for the waterline relocation throughout the day and were backfilling the excavations. At the end of the day, they installed trench plates over the waterline trench and watered the road.
12. No construction activities occurred on Saturday and Sunday.

Environmental Compliance:

1. Cultural monitoring was conducted by Far Western Monday through Friday. On April 14th, 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 Saturday, including SWPPP inspections.
4. Nesting bird sweeps were conducted Monday through Saturday. On April 13th, a female and male house finch were observed collecting nesting material and building a nest in the ceiling framing of a metal motorcycle parking structure in the DHL parking lot adjacent to the 23rd Street work area. Due to the adults being acclimated with current project activities, no buffer was recommended. On April 19th, incubation behavior was observed with the female sitting in the nest; the nest is presumed active.
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:

1. 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 Saturday at the yard.
2. Tailboard meetings occurred at the yard Monday through Saturday.
3. Underground Construction Co. installed a wildlife escape ramp in the retention pond under the supervision of the PG&E Environmental Inspector on Monday.
4. At the time of the CPUC EM site visit on Tuesday, April 14th, equipment and materials were in use and being stored at the site. Office trailers were in use at the site as well.
5. No work occurred at the yard on 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 sweeps were conducted Monday through Saturday.
3. PG&E's Environmental Inspectors noted a couple of compliance issues at this location.
 - On April 13th, trash and litter was observed on the ground in multiple locations in the yard including: 1) around the porta-potty trash can, 2) under the BVCI trailer and east of the trailer against the yard wall/fence, and 3) (shavings from cutting pipe) at the HDPE pipe staging location. Recommendations were communicated that all trash/litter should be picked up off the ground and disposed of properly. All issues were rectified on April 14th.
 - On April 13th, approximately 4 cups of oil were present on secondary containment in the yard. Recommendations were communicated that spill kits should be used to clean up the oil off the secondary containment and disposed of properly, and the vehicle should be serviced or removed from the project (if found). No vehicle was observed leaking onsite. The cleanup was conducted on April 14th.
 - On April 17th, trash bags on the ground next to full trash bins (one overflowing) without a container or lid were observed near the BVCI trailer, and trash/litter on the ground in multiple locations in the yard including: 1) east of the BVCI trailer against the yard wall/fence and around the nearby generator, 2) near the secondary containments units where work vehicles park, and 3) shavings from cutting pipe at the HDPE pipe staging location. Recommendations were communicated that: 1) all litter/trash should be picked up off the ground and disposed of properly, and 2) empty trash/recycle/compost bins outside the BVCI trailer more frequently or obtain more bins to house trash properly. On April 18th, two trash bags were no longer present on the ground.

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 04/24/15)

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.
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 04/24/15)

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 pile columns at Potrero Switchyard. View southeast, April 14, 2015.



Figure 2 – Duct bank work on Folsom Street between Beale Street and Main Street. View south, April 14, 2015.



Figure 3 – Excavating on east side of vault for tie-in on Spear Street. View east, April 14, 2015.



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Figure 4 – Waterline relocation work on 23rd Street. View west, April 14, 2015.