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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: May 4, 2015
Subject: Monitoring Report #32 – April 20 to April 26, 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

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 Monday.
3. Overaa excavated to expose piles (drill displacement columns – DDCs) on Tuesday and Thursday, and cleaned the exposed piles on Friday.
4. PG&E replaced the mobile work trailer on Tuesday with a new trailer.
5. Proven backfilled excavations on Monday (see Figure 1).
6. Proven excavated to expose piles on Tuesday.
7. PSC operated the water filtration system Monday through Friday.
8. Underground Construction Company delivered water from dewatering activities for filtration and disposal Monday through Friday.
9. Street sweeping occurred Monday through Friday.
10. 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, Tuesday, and 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 no compliance issues at this location.



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.
2. Underground Construction Co. installed rebar cages in the trench on Monday and removed shoring from the duct bank trench on Tuesday.
3. Underground Construction Co. backfilled the trench on Tuesday and Wednesday.
4. Underground Construction Co. paved the backfilled trench on Thursday.
5. Street sweeping occurred Monday through Saturday.
6. No construction activities occurred on Sunday.

Spear Street

1. Underground Construction Co. conducted duct bank excavation Monday through Saturday.
2. Underground Construction Co. removed shoring from the duct bank trench Tuesday through Saturday.
3. Underground Construction Co. installed shoring in the duct bank trench Wednesday through Saturday.
4. Underground Construction Co. backfilled the duct bank trench with sand on Wednesday.
5. Underground Construction Co. dewatered the trench Thursday through Saturday.
6. Underground Construction Co. backfilled the duct bank trench with concrete Thursday and Friday.
7. Underground Construction Co. installed duct bank pipe on Thursday.
8. Clean Harbors hauled off excavated sediment for disposal Monday through Saturday.

9. Underground Construction Co. dewatered the vault excavation Tuesday through Saturday, and the PG&E Environmental Inspector obtained a water sample on Thursday.
10. Underground Construction Co. replaced link seal on Tuesday.
11. Underground Construction Co. backfilled the HDPE transition area on Monday.
12. Underground Construction Co. excavated at the HDPE transition Tuesday through Saturday (see Figure 2).
13. Underground Construction Co. dewatered at the HDPE transition Monday through Saturday.
14. Underground Construction Co. installed shoring in the trench at the HDPE transition Wednesday through Saturday.
15. Clean Harbors hauled off excavated sediment for disposal from the HDPE transition Tuesday through Saturday.
16. Street sweeping occurred Monday through Saturday.
17. No construction activities occurred on Sunday.

Environmental Compliance:

1. Cultural monitoring was conducted Monday through Saturday. April 20th through 25th, 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 no compliance issues at this location.
5. William Self Associates, CPUC cultural resources expert, conducted an inspection of Spear Street excavations on Tuesday.

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

1. Underground Construction Co. excavated for waterline relocation Monday through Thursday.
2. Underground Construction Co. installed new pipe for the waterline relocation Tuesday through Thursday.
3. Underground Construction Co. potholed for utilities for the waterline relocation on Tuesday and Wednesday.
4. Underground Construction Co. backfilled for waterline relocation Tuesday through Thursday.
5. San Francisco Water District hydrotested pipe for waterline relocation on Monday, collected water samples on Tuesday, and conducted chlorination test on Wednesday.
6. Underground Construction Co. and Sheedy installed the sides and top of the vault on Wednesday and Thursday (see Figure 3).
7. Underground Construction Co. built a sand pad for the vault on Wednesday and dismantled the sand pad and stockpiled sand on Thursday.
8. Underground Construction Co. staged manhole rings for vault on Thursday and installed the manhole rings on Friday.
9. Underground Construction Co. removed shoring for vault on Friday and Saturday.

10. Underground Construction Co. backfilled vault with concrete on Friday and Saturday.
11. Street sweeping occurred Monday through Saturday.
12. Fencing was installed around the open trench at the end of each day.
13. No construction activities occurred on Sunday.

Environmental Compliance:

1. Cultural monitoring was conducted by Far Western Monday through Thursday. On April 20th, 21st, and 23rd, cultural constituents were observed, documented, but not collected. On April 22nd, cultural constituents were observed, documented, and 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 25th, a female house finch, followed by a male, were observed collecting nesting material and delivering the material under an awning of a building on NRG property 50-60 feet from the nearest work area. The female was observed delivering nest material to the nest location while multiple persons with heavy equipment worked at the vault; work activities included installing manhole rings, pouring concrete, and removing shoring. The location of the nest in the metal awning framing of the structure blocks views of the project work area. The nest is not yet active since nest building was observed. Due to the distance from the work area and the adults being acclimated with current project activities, no buffer was recommended.
5. PG&E's Environmental Inspectors noted no compliance issues at this location.

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. Equipment and materials were stored at the yard throughout the week (see Figure 4).
4. 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.
 - The HDPE shavings that were observed on April 18th were cleaned up and no longer present on April 21st.
 - On April 24th, three bags of hazardous waste (i.e. spill kit materials including kitty litter and oil-absorbent rags used to clean up spills) were observed in the containment unit for the hazardous/flammable cabinet in the ‘Fueling and Maintenance Area’ at the Amador Yard. BVCI was informed that the materials should be removed and disposed of, or moved to Duct Bank North or South and held in proper containment. On April 25th, the bags were no longer present.

Notices to Proceed

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

Table 1
Notice to Proceeds (NTPs)
 (Updated 05/04/15)

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 05/04/15)

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 – Proven backfilling excavation at Potrero Switchyard. View northeast, April 20, 2015. Photo courtesy of PG&E.



Figure 2 – Hand excavating at N1 for HDPE transition on Spear Street where possible pier structure has been encountered. View east, April 21, 2015. Photo courtesy of PG&E.



Figure 3 – Vault after sides and top were installed on 23rd Street for the underground duct bank. View west, April 23, 2015. Photo courtesy of PG&E.



Figure 4 – Cutback stockpile properly covered and contained at Amador Yard. View south, April 25, 2015. Photo courtesy of PG&E.