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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 17, 2015

Subject: Monitoring Report #30 – April 6, 2015 to April 12, 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 9th.

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 Wednesday.
- 2. Overaa constructed safety rails around the excavation and stairs into the excavation on Wednesday.
- 3. Proven conducted excavation activities and off-hauled spoils on Monday and Tuesday.
- 4. PSC conducted housekeeping and dust control activities on Monday and Tuesday.
- 5. PSC conducted repairs on the water filtration system on Wednesday and removed water from secondary containment unit of the water filtration system on Thursday.
- 6. PSC operated the water filtration and disposal system on Tuesday and Friday.
- 7. Underground Construction Company delivered water from dewatering activities for filtration and disposal on Friday.
- 8. Street sweeping occurred Monday through Wednesday.
- 9. At the time of the CPUC EM site visit on Thursday, April 9th, no work activities were taking place other than office work in the trailers.
- 10. No construction activities occurred Saturday or Sunday.

Environmental Compliance:

- 1. Air quality monitoring was conducted by ERM Monday through Wednesday.
- 2. Cultural monitoring was conducted by Far Western on Monday and Tuesday. On April 6th, cultural constituents were observed, documented, but not collected.
- 3. PG&E's Environmental Inspector conducted monitoring of this area Monday through Friday, including SWPPP inspections.

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- 4. Nesting bird sweeps were conducted Monday through 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. 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 Saturday.
- 2. Underground Construction Co. backfilled the duct bank trench on Monday and installed pipe lagging in the trench on Tuesday.
- 3. Underground Construction Co. conducted housekeeping activities on Tuesday.
- 4. Underground Construction Co. dewatered the duct bank trench Monday through Wednesday, and Friday.
- 5. Underground Construction Co. poured cement and removed shoring from the duct bank trench on Wednesday.
- 6. Underground Construction Co. pot-holed for utilities on Wednesday and Friday.
- 7. Underground Construction Co. installed shoring Thursday through Saturday.
- 8. Street sweeping occurred Monday through Saturday.
- 9. At the time of the CPUC EM site visit during the day on Thursday, April 9th, crews were pot-holing on Folsom Street just north of Beale Street in the trench that had been excavated to around 4 feet deep (see Figure 1). Another crew was pouring cement slurry in the trench on Folsom Street just south of Spear Street.
- 10. No construction activities occurred on Sunday.

Spear Street

- 1. Underground Construction Co. removed shoring at the vault excavation on Monday and backfilled the vault excavation on Monday and Thursday.
- 2. Underground Construction Co. cut welds between beams and shoring at the vault on Wednesday.
- 3. Underground Construction Co. removed beams and shoring at the vault on Thursday.
- 4. Underground Construction Co. set manhole forms at the vault on Thursday.
- 5. Underground Construction Co. saw cut pavement for the underground duct bank on Wednesday.
- 6. Underground Construction Co. paved pothole excavations for the underground duct bank on Friday.
- 7. Underground Construction Co. excavated at the HDPE transition on Monday, Wednesday, and Thursday.
- 8. Underground Construction Co. installed shoring at the HDPE transition on Monday.
- 9. Underground Construction Co. conducted housekeeping activities at the HDPE transition on Tuesday.
- 10. Underground Construction Co. dewatered the HDPE transition excavation Wednesday through Friday.
- 11. Underground Construction Co. added base rock in the HDPE transition excavation on Wednesday.
- 12. Underground Construction Co. installed sand around the pipe at the HDPE transition on Friday and backfilled with concrete on Friday and Saturday.
- 13. Underground Construction Co. removed shoring at the HDPE transition on Saturday.
- 14. Street sweeping occurred Monday through Saturday.
- 15. At the time of the CPUC EM site visit on Thursday, April 9th, a crew was backfilling with cement slurry at the vault on Spear Street (see Figure 2). At the HDD North Bore 2 HDPE connection on Spear Street, a crew was installing sections of HDPE pipe and fusing it together in the trench (see Figure 3).
- 16. No construction activities occurred on Sunday.

Environmental Compliance:

- 1. Cultural monitoring was conducted Monday through Saturday. On April 6th, cultural constituents were observed, documented, but not collected on Spear Street. On April 8th, cultural constituents were observed, documented, and some collected on Spear Street and Folsom Street. On April 9th, cultural constituents were observed, documented, and some collected on Spear Street and Folsom Street.
- 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. 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. potholed for utilities for the waterline relocation on Monday.
- 2. San Francisco Water Department conducted measurements on Wednesday.
- 3. Underground Construction Co. saw-cut pavement for the waterline relocation on Wednesday and Friday.

- 4. Underground Construction Co. excavated for the waterline relocation Wednesday through Saturday.
- 5. Underground Construction Co. installed new pipe for the waterline relocation Wednesday, Friday and Saturday.
- 6. Underground Construction Co. paved the backfilled trench section on Thursday.
- 7. Clean Harbors off-hauled roll-off bins for sediment disposal on Wednesday.
- 8. Street sweeping occurred Monday through Saturday.
- 9. Fencing was installed around the open trench at the end of each day.
- 10. At the time of the CPUC EM site visit on Thursday, April 9th, crews had been trenching for the waterline relocation throughout the day. At the end of the day, they installed trench plates over the waterline trench and watered the road (see Figure 4).
- 11. No construction activities occurred on Sunday.

Environmental Compliance:

- 1. Cultural monitoring was conducted by Far Western Monday through Saturday. On April 6th and 8th, cultural constituents were observed, documented, but not collected. On April 9th, April 10th and 11th, cultural constituents were observed, documented, and some collected.
- 2. Air quality monitoring was conducted by ERM Monday through Saturday.
- 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.
- 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:

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. conducted housekeeping activities on Monday.
- 4. At the time of the CPUC EM site visit on Thursday, April 9th, 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. On April 9th, an American crow was observed building a nest in a tree approximately 100 feet southeast of the southeast corner of the yard. Yard activities were ongoing when nest building was observed. Due to the large distance between the yard and the nest, and being acclimated with current yard activities, project activities will not impact the nest.
- 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 04/17/15) **Date Date** NTP# Requested Issued **Phase** Description Site preparation and excavation of the 230 kV 6/23/14 **NTP #1** 8/21/14 Potrero Site Potrero Switchyard site on 23rd St., SF. Preparation Horizontal directional drilling on Spear St. and NTP#2 7/31/14 8/28/14 HDD 23rd St. connecting to the SF Bay. 10/09/14 Underground duct bank and vault installation NTP#3 9/18/14 Underground Duct Bank and between the HDD transition on Spear St. to Vaults the Embarcadero Substation on Folsom St. in the northern section, and between the HDD transition on 23rd St. to the Potrero Switchyard in the southern section, SF. **NTP#3** 11/13/14 11/14/14 Underground Trench from the new Potrero Switchyard to MOD Duct Bank and the existing switchyard for the 230 kV/115 kV connections across the Trans Bay Cable. Vaults **NTP #4** 11/19/14 11/21/14 Subsea Cable Rock and debris removal along subsea cable route.

NTP#	Date Requested	Date Issued	Phase	Description
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 04/17/15)

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 – Potholing from within the trench on Folsom Street just north of Beale Street, view north, April 9, 2015.



Figure 2 – Cement slurry poured over vault on Spear Street. View east, April 9, 2015.



Figure 3 – HDPE conduit connection at HDD Bore 2 transition on Spear Street. View west, April 9, 2015.



Figure 4 – Plating waterline trench at the end of the day and watering road on 23rd Street.

View west, April 9, 2015.