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PROJECT MEMORANDUM

PG&E EMBARCADERO-POTRERO 230 KV TRANSMISSION PROJECT

To:Billie Blanchard, Project Manager, CPUCFrom:Vida Strong, Aspen Project ManagerDate:May 8, 2015Subject:Monitoring Report #33 – April 27 to May 3, 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 28th.

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 installed a walk-in gate on the fence along the southern boundary of the yard on Monday.
- 3. Overaa installed batter boards on Thursday.
- 4. Alpha Pacific conducted excavation on Saturday, backfilled on Sunday, and installed shoring on Saturday and Sunday.
- 5. PSC conducted maintenance of the water filtration system on Monday and operated the water filtration system Wednesday through Friday.
- 6. Underground Construction Company delivered water from dewatering activities for filtration and disposal Wednesday through Friday.
- 7. Street sweeping occurred Monday through Sunday.
- 8. At the time of the CPUC EM site visit on Tuesday, April 28th, no work was being conducted (see Figure 1).
- 9. Construction activities occurred Monday through Sunday.

Environmental Compliance:

- 1. Air quality monitoring was conducted by ERM Monday, Saturday and Sunday.
- 2. PG&E's Environmental Inspector conducted monitoring of this area Monday through Sunday, including SWPPP inspections.
- 3. Nesting bird sweeps were conducted Monday through Sunday.

- 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.

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 Thursday and installed shoring on Thursday and Friday.
- 2. Underground Construction Co. backfilled the trench on Thursday and Friday.
- 3. Street sweeping occurred Monday through Saturday.
- 4. No construction activities occurred on Sunday.

Spear Street, Duct Bank

- 1. Underground Construction Co. conducted duct bank excavation Monday through Friday (see Figure 2) and installed shoring Monday through Wednesday.
- 2. Underground Construction Co. dewatered Monday through Friday.
- 3. Underground Construction Co. removed shoring from the duct bank trench Monday, and Tuesday through Friday.
- 4. Underground Construction Co. installed and removed grounding rods on Wednesday.
- 5. Underground Construction Co. wrapped and cut conduit on Wednesday, and installed conduit in duct bank trench Wednesday through Saturday.
- 6. Underground Construction Co. backfilled the duct bank trench Wednesday and Thursday through Saturday.

- 7. Underground Construction Co. fused duct bank conduit on Thursday and Friday.
- 8. Clean Harbors hauled off excavated sediment for disposal Monday through Saturday.
- 9. Street sweeping occurred Monday through Saturday.
- 10. At the time of the CPUC EM site visit on Tuesday, April 28th, a crew was excavating west and east of the vault on Spear Street.
- 11. No construction activities occurred on Sunday.

Spear Street, Vault

- 1. Underground Construction Co. dewatered vault Monday through Friday.
- 2. Underground Construction Co. fused conduit on Friday.
- 3. At the time of the CPUC EM site visit on Tuesday, April 28th, no work was being conducted at the vault other than dewatering.
- 4. No construction activities occurred on Sunday.

Spear Street, HDPE Transition

- 1. Underground Construction Co. backfilled the duct bank trench Monday, Thursday, and Friday.
- 2. Underground Construction Co. dewatered the duct bank trench on Monday and Tuesday.
- 3. Underground Construction Co. poured cement in the duct bank trench on Tuesday (see Figure 3).
- 4. Underground Construction Co. excavated the duct bank trench Monday through Saturday.
- 5. Underground Construction Co. installed rock and sand in the duct bank trench on Wednesday.
- 6. Underground Construction Co. installed duct bank conduit in the trench on Wednesday and Thursday.
- 7. Underground Construction Co. installed shoring on Saturday.
- 8. At the time of the CPUC EM site visit on Tuesday, April 28th, cement, or flowable thermal backfill (FTB) was being poured in the duct bank trench at the HDPE transition.
- 9. No construction activities occurred on Sunday.

Environmental Compliance:

- 1. Cultural monitoring was conducted Monday through Saturday. On April 28th and 30th, 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. On April 28th, an active Anna's hummingbird nest was discovered in a tree near the Spear Street cul-de-sac. The PG&E Environmental Inspector observed both incubation and trips to and from the nest. The female hummingbird is presumed currently incubating eggs or small young. The nest is located on a tree branch approximately 18-20 feet above the ground, and overhangs the temporary fence approximately 5 feet into the project area. During nest building and incubation thus far, project vehicles have consistently parked directly below the nest, and there has been regular project foot, vehicle, and equipment traffic in the vicinity of the nest. In addition, high amounts of foot traffic and noise from the public occurs under the nest tree. A minimal work buffer was recommended for this nest due to habituation of the adult to ongoing construction activity. It was recommended that large vehicles

(e.g. semi-trucks, excavators, and fork lifts) do not park or drive under the nest tree so the nest is not impacted physically. A small work buffer (i.e. delineators, A-frames, signage, and flagging) was constructed under the nest. Since personal vehicles and regular-sized pickups have been consistently parking here, it was deemed acceptable for this to continue within the work buffer, with restricted idling and loitering around vehicles.

- 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. Clean Harbors delivered new roll off bins and hauled off full bins for sediment disposal on Monday.
- 2. Underground Construction Co. excavated for waterline relocation Monday through Friday.
- 3. Underground Construction Co. removed shoring from the waterline trench on Wednesday and Thursday.
- 4. Underground Construction Co. installed conduit for the waterline relocation and backfilled on Tuesday and Thursday (see Figure 4).
- 5. Underground Construction Co. saw cut pavement for the waterline relocation on Friday.
- 6. San Francisco Water District inspected the waterline relocation work on Thursday.
- 7. Underground Construction Co. removed shoring from the vault on Monday and Tuesday.
- 8. Street sweeping occurred Monday through Friday.
- 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 Tuesday, April 28th, the waterline trench was being back-filled, compacted, and paved over.
- 11. No construction activities occurred on Saturday or Sunday.

Environmental Compliance:

- 1. Cultural monitoring was conducted by Far Western Monday through Friday. April 27th through May 1st, cultural constituents were observed, documented, and some 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.
- 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. Equipment and materials were stored at the yard throughout the week.
- 4. At the time of the CPUC EM site visit on Tuesday, April 28th, the yard was being used for equipment and materials storage.
- 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 one compliance issue at this location. On April 27th, the PG&E Environmental Inspector was informed that at 10 a.m. a small amount of diesel fuel (approximately less than 1 gallon) was spilled onto the ground during off haul of a light plant rental unit by the rental company Ahern. BVCI informed Ahern of the spill and the required cleanup activities. Ahern returned to the site in the afternoon and removed all contaminated soil from the project site for disposal. Gravel was used to replace the excavated soil that was removed. On April 28th, BVCI notified SF Port via email of the spill and cleanup.
- 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 05/08/15)

	Date	Date		
NTP #	Requested	Issued	Phase	Description
NTP #1	6/23/14	8/21/14	Potrero Site	Site preparation and excavation of the 230 kV
			Preparation	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	Underground duct bank and vault installation
			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 23 rd 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
			Vaults	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	Construction of 230 kV Potrero gas-insulated
			Switchgear	switchgear (GIS) building and cable tie-in
			Building	component at Potrero Switchyard.
NTP #6	2/19/15	4/07/15	Submarine	Site preparation for submarine cable instal-
			Cable	lation, 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 05/08/15)								
	Date	Date						
MPC #	Requested	Issued	Phase	Description				
MPC #1	7/16/14	7/23/14	Amador	Use of an existing staging and laydown yard				
			Staging and	adjacent to Alternate Staging Area #3 (as				
			Laydown Yard	identified in the IS/MND)on Amador St., SF.				
MPC #2	12/31/14	1/5/15	Staging and	Use of an existing paved staging and laydown				
			Laydown Yard	yard at 1215 Michigan Street, SF, two blocks				

from the Potrero Switchyard.

PROJECT PHOTOS



Figure 1 – Drill displacement columns (DDCs) exposed at Potrero Switchyard. View southeast, April 28, 2015.



Figure 2 – Excavating duct bank trench on Spear Street west of vault. View west, April 28, 2015.



Figure 3 – Pouring cement slurry in duct bank trench at HDPE transition on Spear St. View east, April 28, 2015.



Figure 4 – Backfilling waterline trench on 23rd Street. View southeast, April 28, 2015.