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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:** August 13, 2015  
**Subject:** Monitoring Report #47 – August 3 to August 9, 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 August 7<sup>th</sup>.

## **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 23<sup>rd</sup> Street adjacent to the existing Potrero Substation on the corner of 23<sup>rd</sup> 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. Site preparation activities have been completed and all work is now being conducted for the GIS building and cable tie-in work approved by the CPUC under NTP #5 (see below).

#### **Environmental Compliance:**

1. All environmental compliance monitoring will be reported below for the GIS building and cable tie-in work.

### **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 23<sup>rd</sup> 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 (23<sup>rd</sup> 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 23<sup>rd</sup> 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, Duct Bank (day work)**

1. Underground Construction Co. excavated the duct bank trench and installed shoring Monday through Friday.
2. Underground Construction Co. dewatered the trench Monday through Wednesday.
3. Underground Construction Co. removed shoring on Wednesday.
4. Underground Construction Co. saw cut pavement on Saturday.
5. Underground Construction Co. potholed for utilities on Saturday.
6. Clean Harbors hauled off excavated materials Monday through Saturday.
7. At the time of the CPUC site visit on August 7<sup>th</sup>, no work was being conducted on Folsom Street.
8. Street sweeping occurred Monday through Saturday.
9. No construction activities occurred on Sunday.

#### **Spear Street, Duct Bank (between Folsom St and Harrison St)**

1. Underground Construction Co. excavated and dewatered the trench Monday through Saturday.
2. Underground Construction Co. installed rebar in the duct bank trench Monday through Saturday.
3. Underground Construction Co. installed base rock in the trench on Monday, Tuesday and Thursday.
4. Underground Construction Co. installed shoring in the trench on Monday.
5. Underground Construction Co. installed fabric in the trench on Tuesday and conduit pipe on Wednesday.
6. Underground Construction Co. removed shoring from the trench and backfilled with concrete on Friday and Saturday.
7. Clean Harbors hauled off excavated materials Monday through Saturday.
8. Street sweeping occurred Monday through Saturday.
9. At the time of the CPUC EM site visit on August 7<sup>th</sup>, crews were removing saturated sandy soil from the trench with a vac-truck (see Figure 1) and removing shoring from the trench in another location (see Figure 2).
10. No construction activities occurred on Sunday.

#### **Spear Street, Vault**

1. Durocher and Clean Harbors cleaned the transition vault on Thursday.
2. Underground Construction Co. cleaned the transition vault on Friday.
3. At the time of the CPUC EM site visit on August 7<sup>th</sup>, a crew was cleaning the inside of the transition vault.

### **Environmental Compliance:**

1. Cultural monitoring was conducted by Far Western Monday through Saturday. August 3<sup>rd</sup> through 6<sup>th</sup>, and August 8<sup>th</sup>, cultural constituents were observed and documented.
2. PG&E's Environmental Inspector conducted monitoring of the work area and activities on 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 (23<sup>rd</sup> Street):**

#### **23<sup>rd</sup> Street, Duct Bank**

1. Underground Construction Co. excavated the duct bank trench Monday through Friday.
2. Underground Construction Co. cut and removed rebar Monday through Wednesday.
3. Underground Construction Co. backfilled the trench with concrete on Monday.
4. Underground Construction Co. installed shoring in the trench on Tuesday.
5. Underground Construction Co. removed a section of valve and pipe from the Station A feature on Wednesday.
6. PSC dewatered roll-off bins Wednesday through Friday.
7. Clean Harbors delivered and staged roll-off bins on Thursday.
8. Street sweeping was conducted Monday through Friday.
9. At the time of the CPUC EM site visit on August 7<sup>th</sup>, crews had been excavating the duct bank trench around the Station A feature on 23<sup>rd</sup> Street, but encountered an area below the feature with water of an unknown depth. Work was halted for the weekend (see Figure 3).
10. No construction activities occurred on Saturday or Sunday.

#### **23<sup>rd</sup> Street, Vault**

1. Underground Construction Co. cleaned the transition vault on Friday.
2. At the time of the CPUC EM site visit on August 7<sup>th</sup>, a crew was cleaning the inside of the transition vault.

#### **23<sup>rd</sup> Street, Water Line Relocation**

1. Underground Construction excavated for the water line relocation Tuesday through Friday.
2. Underground Construction Co. fused the HDPE conduit for the water line on Thursday.

### **Environmental Compliance:**

1. Cultural monitoring was conducted by Far Western Monday through Friday. On August 3<sup>rd</sup>, and August 5<sup>th</sup> through 7<sup>th</sup>, 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 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.
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. All work activities related to NTP #4 have been completed.

#### **Environmental Compliance:**

1. No compliance monitoring was conducted.

### **E-P Potrero GIS Building and Cable Tie-in**

NTP #5 was issued on March 27, 2015 for construction of the 230 kV Potrero gas-insulated switchgear (GIS) building and cable tie-in component of the Embarcadero-Potrero 230 kV Transmission Project at the Potrero Switchyard site, in the City San Francisco. NTP #5 included conditions that had to be satisfied prior to the start of construction.

#### **Summary of Activity:**

1. Overaa constructed embeds Monday through Friday.
2. Overaa installed embeds Monday and Saturday.
3. Overaa conducted housekeeping and dust control Monday and Saturday.
4. CMC Rebar installed rebar Monday and Wednesday through Friday.
5. CMC Rebar tied rebar Tuesday and Wednesday.
6. MEI set embeds Tuesday through Saturday.
7. MEI pulled up ground stub tails Tuesday through Friday.
8. MEI tied grounding wire on Saturday.
9. PSC delivered water for filtration and disposal Wednesday through Friday.
10. Office trailer use occurred Monday through Saturday.
11. At the time of the CPUC EM site visit on August 7<sup>th</sup>, crews were done installing embeds for the day (see Figure 4).
12. No construction activities occurred on Sunday.

**Environmental Compliance:**

1. Air quality monitoring was conducted by ERM Monday through Saturday.
2. PG&E's Environmental Inspector conducted monitoring of this area 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.

**E-P Submarine Cable Installation**

NTP #6 was issued on April 7, 2015 for the submarine cable installation component of the Embarcadero-Potrero 230 kV Transmission Project in the San Francisco Bay. NTP #6 included conditions that had to be satisfied prior to the start of construction.

**Summary of Activity:**

1. Durocher installed concrete mats Monday, Tuesday, and Thursday through Saturday.
2. Durocher changed out anchors at Pier 50 on Wednesday.
3. At the time of the CPUC site visit on August 7<sup>th</sup>, Durocher was installing concrete mats in the Bay off Pier 30/32.
4. No work activities occurred on Sunday.

**Environmental Compliance:**

1. PG&E's Environmental Inspectors noted no compliance issues regarding this work.

**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. 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 Friday, including SWPPP inspections.
2. Nesting bird sweeps were conducted Monday through 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 08/13/15)

<b>NTP #</b>	<b>Date Requested</b>	<b>Date Issued</b>	<b>Phase</b>	<b>Description</b>
NTP #1	6/23/14	8/21/14	Potrero Site Preparation	Site preparation and excavation of the 230 kV Potrero Switchyard site on 23 <sup>rd</sup> St., SF.
NTP #2	7/31/14	8/28/14	HDD	Horizontal directional drilling on Spear St. and 23 <sup>rd</sup> 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 <sup>rd</sup> 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.

## Minor Project Changes

Table 2 summarizes the Minor Project Changes submitted for the Embarcadero-Potrero Project.

**Table 2**  
**Minor Project Changes (MPCs)**  
(Updated 08/13/15)

<b>MPC #</b>	<b>Date Requested</b>	<b>Date Issued</b>	<b>Phase</b>	<b>Description</b>
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 – Duct Bank North work on Spear Street removing saturated sandy soil from the trench with a vac-truck. View northeast, August 7, 2015.



Figure 2 – Removing shoring from trench on Spear Street. View west, August 7, 2015.



Figure 3 – Duct Bank South work area on 23<sup>rd</sup> Street. View west, August 7, 2015.



Figure 4 – Potrero Switchyard embeds installation. View southeast, August 7, 2015.