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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 27, 2015  
**Subject:** Monitoring Report #49 – August 17 to August 23, 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 21<sup>st</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 (night work)**

1. Underground Construction Co. installed shoring in the duct bank trench on Thursday night.

#### **Folsom Street, Duct Bank (day work)**

1. Underground Construction Co. jackhammered pavement between Fremont and Beale Streets on Tuesday.
2. Underground Construction Co. excavated the duct bank trench between Fremont and Beale Streets on Tuesday, and Thursday through Saturday.
3. Underground Construction installed shoring in the duct bank trench between Fremont and Beale Streets Thursday through Saturday.
4. Underground Construction Co. excavated duct bank trench between Beale and Main Streets on Monday and Wednesday.
5. Underground Construction Co. installed shoring between Beale and Main Streets Monday through Wednesday.
6. Underground Construction Co. removed shoring between Beale and Main Streets on Tuesday.
7. Underground Construction Co. excavated the duct bank trench between Main and Spear Streets Monday through Wednesday.
8. Underground Construction Co. installed shoring between Main and Spear Streets on Monday.
9. Underground Construction Co. installed rebar in the bank trench between Main and Spear Streets on Tuesday and Thursday.
10. Underground Construction Co. installed fabric and base rock in the duct bank trench between Main and Spear Streets on Tuesday.
11. Underground Construction Co. removed boardwalk wood between Main and Spear Streets on Wednesday.
12. Underground Construction Co. installed conduit pipe between Main and Spear Streets on Thursday.
13. Underground Construction Co. removed shoring between Main and Spear Streets Thursday and Saturday.
14. Underground Construction Co. backfilled with concrete between Main and Spear Streets on Friday and Saturday.
15. Underground Construction Co. dewatered the duct bank trench at the Spear Street intersection Monday through Wednesday.
16. Underground Construction Co. installed rebar in the duct bank trench at the Spear Street intersection Monday through Wednesday, and Friday.

17. Underground Construction Co. installed conduit in the duct bank trench at the Spear Street intersection Monday through Wednesday, and Friday.
18. Underground Construction Co. backfilled the duct bank trench with concrete slurry at the Spear Street intersection Tuesday through Saturday.
19. Underground Construction Co. saw cut pavement at the Spear Street intersection on Saturday.
20. Clean Harbors hauled off excavated material Monday through Friday.
21. At the time of the CPUC site visit on August 21<sup>st</sup>, a crew was excavating and shoring the duct bank trench near Fremont Street (see Figure 1), and another crew was backfilling the duct bank trench with cement slurry near the Spear Street intersection (see Figure 2).
22. Street sweeping occurred Monday through Saturday.
23. No construction activities occurred on Sunday.

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

1. Underground Construction Co. saw cut pavement on Thursday.
2. Underground Construction Co. removed pavement on Friday and Saturday.
3. Street sweeping occurred Monday through Saturday.
4. At the time of the CPUC EM site visit on August 21<sup>st</sup>, crews were removing pavement for future repaving (see Figure 3).
5. No construction activities occurred on Sunday.

**Spear Street, Vault**

1. No work occurred at the vault during the week.

**Environmental Compliance:**

1. Cultural monitoring was conducted by Far Western Monday through Saturday. On August 17<sup>th</sup>, 19<sup>th</sup> and 20<sup>th</sup>, cultural constituents were observed, documented, and some collected.
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 one compliance issue at this location. A large hole in the filter fabric under the drainage inlet located at the southeast corner of the Folsom Street and Spear Street intersection was observed on August 19<sup>th</sup>. The fabric was replaced and the issue rectified on August 21<sup>st</sup>.
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 and dewatered the duct bank trench on Monday.
2. Underground Construction Co. cut and removed rebar on Monday.

3. Underground Construction Co. installed walls inside the Station A water circulation vault feature on Friday.
4. Street sweeping was conducted Monday and Friday.
5. At the time of the CPUC EM site visit on August 21<sup>st</sup>, a crew was building a wall inside the Station A water circulation vault feature for the duct bank trench on 23<sup>rd</sup> Street (see Figure 4).
6. No construction activities occurred Tuesday through Thursday, Saturday or Sunday.

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

1. Durocher electrical tested the three power cables in the transition vault on Monday.
2. Durocher electrical tested the two fiber optic cables in the fiber box on Monday.

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

1. No work was conducted for the water line relocation during the week.

### **Environmental Compliance:**

1. Cultural monitoring was conducted by Far Western Monday and Friday. On August 17<sup>th</sup> and 21<sup>st</sup>, cultural constituents were observed and documented.
2. Air quality monitoring was conducted by ERM Monday and 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 wetted the concrete slab blankets on Monday, Tuesday and Friday.
2. Overaa stripped braces and templates on Monday.
3. Overaa stripped stakes on Tuesday.
4. Overaa removed coupler sleeves and covers on Tuesday.
5. Overaa patched pavement with cut-back on Tuesday.
6. Overaa stripped form supports on Wednesday.
7. Overaa removed the recycling dumpster from the site for disposal on Wednesday.
8. Overaa removed edge forms on Wednesday and Thursday.
9. Overaa cut threads and wrapped copper grounding wire on Thursday.
10. Overaa conducted housekeeping and dust control activities Monday through Friday.
11. PSC ran the water filtration and disposal system on Tuesday, Thursday and Friday.
12. Office trailer use occurred Monday through Friday.
13. At the time of the CPUC EM site visit on August 21<sup>st</sup>, the concrete foundation slab was curing (see Figure 5).

**Environmental Compliance:**

1. Air quality monitoring was conducted by ERM Tuesday through Friday.
2. PG&E's Environmental Inspector conducted monitoring of this area Monday through Friday, including SWPPP inspections.
3. Nesting bird sweeps were conducted Monday through Friday.
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 scrapped cable containers and recycled power cable in the Manson Yard Monday through Friday.
2. No work activities occurred on Saturday and 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. At the time of the CPUC EM site visit on August 21<sup>st</sup>, equipment and materials were being stored at the yard and the office trailers were in use.
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 August 14<sup>th</sup>, a parked Hertz water truck was observed leaking oil (approximately 4 Tbsp) onto secondary containment. The secondary containment was cleaned and the vehicle was no longer observed to be leaking on August 18<sup>th</sup>.
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 08/27/15)

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 <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.

<b>NTP #</b>	<b>Date Requested</b>	<b>Date Issued</b>	<b>Phase</b>	<b>Description</b>
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 08/27/15)

<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 – Excavating and shoring the duct bank trench on Folsom Street near Fremont Street. View northwest, August 21, 2015.



Figure 2 – Backfilling trench with cement slurry on Folsom Street near Spear Street. View southwest, August 21, 2015.





Figure 3 – Removing pavement on Spear Street. View northeast, August 21, 2015.



Figure 4 – Building wall in Station A water circulation vault feature for duct bank trench on 23<sup>rd</sup> Street. View south, August 21, 2015.



Figure 5 – Potrero Switchyard building foundation concrete curing. View southeast, August 21, 2015.