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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:** January 15, 2015  
**Subject:** Monitoring Report #17 – January 5, 2015 to January 11, 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 January 5<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. Materials were staged at the switchyard on Monday.
2. Excavation to expose pipes for capping was conducted on Monday and Tuesday (see Figure 1), and the pipes were capped on Tuesday.
3. Grading of the site with an excavator was conducted on Wednesday.
4. The soil displacement contractor, Farrell, conducted preliminary mobilization to the site on Thursday.
5. Street sweeping occurred Monday through Friday.
6. At the time of the CPUC EM site visit on Monday, January 5<sup>th</sup>, excavation of exposed pipes was occurring at the yard. The area was being watered to keep the dust down.
7. No construction activities occurred Saturday and Sunday.

#### **Environmental Compliance:**

1. Cultural monitoring was conducted Monday and Tuesday.
2. Air quality monitoring was conducted Monday and Tuesday.
3. PG&E's Environmental Inspector conducted monitoring of this area Monday through Friday, including SWPPP inspections.
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 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. HDD Company drilled the pilot hole for Bore 2 Monday through Friday.
2. HDD Company removed coil wire from pavement on the Embarcadero on Wednesday.
3. Traffic controls have been established at the corner of Spear Street and Harrison Street by Bay Area Traffic Solutions (BATS). Limited access is provided to Spear Street (a dead end street) including deliveries and people with parking garage permits, as well as construction personnel.
4. An 8-foot-tall chain link fence with sound blankets are in place around the HDD equipment and work area.
5. Street sweeping occurred Monday through Friday.
6. Vortex installed an eco-block near the receiving pits on Monday.
7. On Monday, Vortex pulled a mandrel through the HDPE pipe at Bore 3, and cut and removed the HDPE conduit pipe.
8. Vortex replaced a GIS navigation system on the boat crane on Monday.
9. At the time of the CPUC EM site visit on Monday, January 5<sup>th</sup>, HDD Company was pulling back pipe (tripping out) and preparing to ream.
10. No construction activities occurred on Saturday and Sunday.

### **Environmental Compliance:**

1. PG&E's Environmental Inspector conducted monitoring of the work area and activities Monday through Friday, including SWPPP inspections and checking the drill path in the Bay for signs of drilling fluid release.
2. PG&E's Environmental Inspector noted no compliance issues at this location.
3. 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 at the Southern Bore (23<sup>rd</sup> Street):**

1. HDD Company drilled at Bore 3 Monday through Wednesday, and conducted back-reaming on Thursday.
2. HDPE pipe was fused together on Monday, Thursday, and Friday.
3. Hydrotesting was conducting of the 3-inch HDPE conduit on Tuesday and Wednesday (see Figure 2).
4. Vortex anchored near receiving pits on Tuesday and installed directional coil wire on the boat.
5. Vortex anchored offshore near the receiving pits for HDD Company's use of direction coil on the boat on Wednesday.

6. Vortex installed a back-reamer attachment onto the drill head on Thursday.
7. Vortex and HDD Company floated HDPE conduit onto the water on Friday.
8. HDD Company and Vortex conducted conduit pull-back at Bore 3 on Friday.
9. HDD Company and Vortex sent mandrels through inserted conduits on Saturday.
10. HDD Company and Vortex sent a testing pig through Bore 1 conduit on Saturday.
11. Street sweeping occurred Monday through Saturday.
12. At the time of the CPUC EM site visit on Monday, January 5<sup>th</sup>, Bore 3 was being drilled and had reached about 600 feet.
13. No construction activities occurred on Sunday.

**Environmental Compliance:**

1. PG&E’s Environmental Inspector conducted monitoring of the work area and activities on Monday through Saturday, including SWPPP inspections and checking the drill path in the Bay for signs of drilling fluid release.
2. Air quality monitoring was conducted on Wednesday.
3. Herring monitoring was conducted Monday, Tuesday, Friday, and Saturday.
4. PG&E’s Environmental Inspectors noted a minor problem at this location during the week. A HDD Company vacuum truck was observed leaking oil under the front axle and was removed from the site on January 8<sup>th</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.

**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.):**

1. Underground Construction Co. conducted excavation on Folsom Street Monday through Saturday.
2. Underground Construction Co. potholed for utilities on Folsom Street Monday through Thursday, and Saturday (see Figure 3).
3. Underground Construction Co. stripped hot patch asphalt on Folsom Street between Zeno Place and Beale Street on Monday.
4. Underground Construction Co. excavated for the utility relocation on Spear Street Monday through Saturday.
5. Underground Construction Co. installed shoring and PVC conduit on Spear Street on Wednesday, and backfilled the excavation with concrete.
6. Street sweeping occurred Monday through Saturday.

7. At the time of the CPUC EM site visit on Monday, January 5<sup>th</sup>, crews had stripped the asphalt and excavated cement slurry on Folsom between Zeno Place and Beale Street, and pot-holed at the corner of Main Street and Folsom Street. On Spear Street, crews were excavating and shoring the trench for the utility relocation (see Figure 4).
8. No construction activities occurred on Sunday.

**Environmental Compliance:**

1. Cultural monitoring was conducted Monday through Saturday. On January 10<sup>th</sup>, a red brick-and-mortar manhole was encountered during excavation within the trench line, and will be further exposed on Monday, January 12<sup>th</sup>. The significance of this find has not yet been determined.
2. PG&E's Environmental Inspector conducted monitoring of the work area and activities on Monday through Saturday, including SWPPP inspections.
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.

**Summary of Activity for the Duct Bank South (23<sup>rd</sup> Street):**

1. Underground Construction Co. adjusted trench plates over the duct bank trench on Monday (see Figure 5).
2. Underground Construction Co. conducted excavation for pipe removal on Wednesday.
3. Street sweeping occurred on Monday.
4. At the time of the CPUC EM site visit on Monday, January 5<sup>th</sup>, crews were cleaning up the site and preparing to trench for the duct bank.
5. No construction activities occurred Thursday through Sunday.

**Environmental Compliance:**

1. Cultural monitoring was conducted on Wednesday.
2. Air Quality monitoring was conducted Monday through Wednesday.
3. PG&E's Environmental Inspector conducted monitoring of the work area and activities on Monday through Wednesday, including SWPPP inspections.
4. 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 throughout the week at the yard.
- 2. Tailboard meetings occurred at the yard Monday through Friday.
- 3. HDD Company staged equipment on Saturday
- 4. No construction activities 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. 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. A Modification to NTP #3 was reviewed and approved during the subject week to allow for trenching from the new Potrero Switchyard to the existing switchyard for the 230 kV/115 kV connections across the Trans Bay Cable.

**Table 1**  
**Notice to Proceeds (NTPs)**  
(Updated 01/15/15)

<b>NTP #1</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.

<b>NTP #1</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.

## Minor Project Changes

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

**Table 2**  
**Minor Project Changes (MPCs)**  
(Updated 01/15/15)

<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 – Potrero Switchyard. View southeast, January 5, 2015.



Figure 2 – Hydrotest of HDPE pipe at HDD South. View east, January 5, 2015.



Figure 3 – Potholing for utilities at the corner of Folsom Street and Main Street. View southwest, January 5, 2015.



Figure 4 – Shoring trench excavation on Spear Street. View west, January 5, 2015.





Figure 5 – Underground duct bank trench area on 23<sup>rd</sup> Street. View west, January 5, 2015.