



5020 Chesebro Road, Suite 200, Agoura Hills, CA 91301-2285  
Tel. 818-597-3407, Fax 818-597-8001, www.aspeneg.com

**PROJECT MEMORANDUM**

**PG&E EMBARCADERO-POTRERO 230 kV TRANSMISSION PROJECT**

**To:** Billie Blanchard, Project Manager, CPUC  
**From:** Vida Strong, Aspen Project Manager  
**Date:** December 2, 2015  
**Subject:** Monitoring Report #62 – November 16 to November 22, 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 November 17<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.):**

#### 1<sup>st</sup> Street and Fremont Street

1. Underground Construction Co. conducted housekeeping on Monday.
2. Annuzzi poured concrete for sidewalk restoration on Wednesday.
3. Annuzzi conducted road surface grinding and paving on Saturday with assistance from Underground Construction Co.
4. At the time of the CPUC EM site visit on November 17<sup>th</sup>, no work was being conducted at this location.
5. No work activities occurred on Tuesday, Thursday, Friday, or Sunday.

#### Fremont and Beale Streets

6. Underground Construction Co. removed previously cut pavement on Monday and Tuesday.
7. Underground Construction Co. backfilled with concrete on Monday and Tuesday.
8. Underground Construction Co. conducted temporary paving with hot asphalt Monday through Wednesday.
9. Annuzzi conducted road surface grinding and paving on Saturday with assistance from Underground Construction Co.
10. At the time of the CPUC site visit on November 17<sup>th</sup>, a crew was preparing to pour concrete for street base before paving (see Figure 1).
11. No work activities occurred on Thursday, Friday, or Sunday.

#### Beale and Main Streets

12. Underground Construction Co. removed previously cut pavement on Wednesday.
13. Annuzzi conducted road surface grinding and paving on Friday with assistance from Underground Construction Co.
14. At the time of the CPUC EM site visit on November 17<sup>th</sup>, no work was being conducted at this location.
15. No work activities occurred Monday, Tuesday, Thursday, Saturday, or Sunday.

#### Main and Spear Streets

16. Underground Construction Co. excavated previously cut pavement Tuesday through Thursday.
17. Underground Construction Co. backfilled with concrete Tuesday through Thursday.
18. Underground Construction Co. conducted temporary paving with hot asphalt on Monday, Tuesday, and Thursday.

19. Annuzzi conducted road surface grinding and paving on Friday with assistance from Underground Construction Co.
20. At the time of the CPUC EM site visit on November 17<sup>th</sup>, crews were excavating cut pavement (see Figure 2)
21. No work activities occurred on Saturday or Sunday.

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

1. Spear Street has been paved and temporary striping applied.
2. Underground Construction Co. cleaned the transmission vault on Wednesday and Thursday.
3. Underground Construction Co. scoped the conduit with a camera on Friday.
4. Underground Construction Co. removed mule tape from the conduit pipe in the transition vault on Friday and Saturday.
5. Underground Construction Co. mandreled and cleaned conduit pipe inside the transition vault on Saturday.
6. At the time of the CPUC EM site visit on November 17<sup>th</sup>, no work was being conducted on Spear Street or within the transition vault.
7. No work activities occurred Monday, Tuesday, or Sunday.

#### **Environmental Compliance:**

1. PG&E's Environmental Inspector conducted monitoring of the work area and activities Monday through Friday, including SWPPP inspections. On November 16<sup>th</sup>, a tree was damaged by Underground Construction Co. equipment during work activities in front of 301 Folsom Street between Fremont Street and Beale Street. An approximate 6-foot limb (2 inches wide at base) was broken off from the tree. The fallen limb was approximately 3-5% of the tree canopy. It was recommended that the 10-inch branch piece that was left be cut off cleanly where it meets the next branch for the health of the tree. On November 17<sup>th</sup>, the tree was trimmed.
2. PG&E's Environmental Inspectors noted one compliance issues at this location. On November 18<sup>th</sup>, an Annuzzi crew was onsite completing restoration of the sidewalk in front of the Embarcadero Substation. Four persons with the crew were working without receiving the environmental training. It was recommended that BVCi be reminded that all personnel require training prior to conducting work on the project.
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 for the Duct Bank South (23<sup>rd</sup> Street):**

##### 23<sup>rd</sup> Street, Duct Bank and Vault

1. Underground Construction Co. mandreled conduit pipe in the transition vault on Monday.
2. Underground Construction Co. painted the inside of the transition vault on Tuesday.
3. Underground Construction Co. mandreled fiber optic conduit pipe in the fiber/communications box on Tuesday.
4. Underground Construction Co. backfilled the two fire hydrant trenches with sand on Tuesday and Wednesday.

5. Underground Construction Co. removed wood recycling dumpster on Wednesday.
6. Underground Construction Co. excavated, installed bollards, and poured cement at four new fire hydrant locations on Thursday.
7. Clean Harbors removed roll off bins for sediment disposal on Tuesday.
8. Clean Harbors mixed cement and clay-based absorbent in roll off bins with wet sediment Wednesday through Friday.
9. At the time of the CPUC EM site visit on November 17<sup>th</sup>, crews had backfilled the two fire hydrant trenches with sand and 13 roll off bins were being staged on 23<sup>rd</sup> Street (see Figure 3).
10. No work activities occurred on Saturday or Sunday.

**Environmental Compliance:**

1. Air quality monitoring was conducted by ERM Monday through Friday.
2. Cultural monitoring by Far Western was conducted on Thursday, and cultural constituents were observed and documented.
3. PG&E's Environmental Inspector conducted monitoring of the work area and activities 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 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. Office trailer use occurred Monday through Sunday.
2. Overaa conducted housekeeping and dust control activities Monday through Friday.
3. Overaa grouted in the GIS building on Monday, Tuesday, and Friday.

4. Overaa laid out steel in the GIS building on Monday and Tuesday.
5. Overaa aided Metal Set with steel removal from the GIS building on Wednesday.
6. Metal Set welded in the GIS building on Monday and Tuesday.
7. Metal Set installed steel infrastructure in the GIS building on Tuesday.
8. Mid State grouted in the GIS building Monday through Wednesday.
9. Sheedy crane delivered steel into the GIS building on Tuesday.
10. Sheedy crane removed steel from the GIS building on Wednesday.
11. Clean Harbors delivered and staged new roll off bins Tuesday, Thursday, and Friday.
12. Clean Harbors removed full roll off bins for sediment disposal on Wednesday.
13. APEC excavated for the creation of the new reactor pad in the switchyard on Tuesday and Wednesday.
14. APEC set forms for the new reactor pad in the switchyard on Wednesday and Thursday.
15. APEC conducted dust control activities in the switchyard Thursday through Sunday.
16. APEC excavation for the creation of the new transformer pad in the switchyard Thursday through Sunday.
17. APEC set forms for the new transformer pad on Thursday.
18. APEC delivered and staged rebar cages on Thursday.
19. APEC excavated to expose and demolish concrete foundations in the adjacent substation Monday through Friday.
20. APEC conducted dust control activities in the adjacent substation Monday through Friday.
21. APEC potholed for utilities in the adjacent substation on Monday.
22. APEC marked new infrastructure locations in the adjacent substation Monday through Wednesday.
23. APEC excavated and augured for the new foundations in the adjacent substation on Friday.
24. At the time of the CPUC EM site visit on November 17<sup>th</sup>, crews were grouting, welding, and installing steel beams in the GIS building; excavating for a new reactor pad; and excavating for foundations in the adjacent substation (see Figure 4).

**Environmental Compliance:**

1. Cultural monitoring was conducted by Far Western Monday through Friday and cultural constituents were observed, documented, and some collected November 16<sup>th</sup> through 20<sup>th</sup>.
2. Air quality monitoring was conducted by ERM Monday through Sunday.
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 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. All work activities for the submarine cable installation were completed during Week #50.

## **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. Underground Construction Co. conducted dust control activities Monday through Saturday.
5. Underground Construction Co. prepared materials for removal Monday through Friday.
6. Underground Construction Co. removed equipment and materials Monday through Friday.
7. At the time of the CPUC EM site visit on November 17<sup>th</sup>, the office trailers were in use and equipment and materials were being stored at the yard.
8. No work 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 Friday, including SWPPP inspections.
2. PG&E's Environmental Inspectors 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.

## **Notices to Proceed**

Table 1 summarizes the Notices to Proceed (NTP) for the Embarcadero-Potrero Project.

**Table 1**  
**Notice to Proceeds (NTPs)**  
(Updated 12/02/15)

<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 12/02/15)

<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 – Preparing to pour cement base on Folsom Street between Fremont and Beale Streets. View south, November 17, 2015.



Figure 2 – Excavating pavement on Folsom Street between Main and Spear Streets. View south, November 17, 2015.





Figure 3 – Roll off bins staged on 23<sup>rd</sup> Street. View west, November 17, 2015.



Figure 4 – Potrero Switchyard work. View southeast, November 17, 2015.