



235 Montgomery Street, Suite 935, San Francisco, CA 94104
Tel. 415-955-4775, Fax 415-955-4776, 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: November 25, 2014
Subject: Monitoring Report #9 – November 10 to November 16, 2014

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 13, 2014.

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. Foundation demolition and excavation activities occurred Monday through Saturday (see Figure 1).
2. Foundation concrete was removed from the site Monday through Saturday.
3. Removal of rebar from concrete for recycling occurred Monday through Saturday.
4. Paradise Mechanical Inc. removed sand from condensate tank Tuesday and Wednesday, and removed the tank on Friday.
5. Street sweeping occurred Monday through Saturday.
6. At the time of the CPUC EM site visit on Tuesday, November 13th, foundation demolition and excavation were occurring with the use of excavators. The area was being watered to keep the dust down as they excavated.
7. No work was conducted on Sunday.

Environmental Compliance:

1. Cultural monitoring was conducted Monday through Saturday. Cultural constituents were observed, documented, and some collected on November 10th, 11th, and 13th.
2. Air quality monitoring was conducted Monday through Saturday.
3. PG&E's Environmental Inspector conducted monitoring of this area throughout the week, 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 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. HDD drilling activities continued at Bore 3 Monday through Sunday (see Figure 2).
2. Sediment was removed from roll-out bins Monday.
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 Sunday.
6. Submarine work conducted by Vortex included dredging Bore 1 – Bore 3 receiving pits in-water east of HDD North on Monday, and conducting post-dredge surveys of the receiving pits on Tuesday.
7. At the time of the CPUC EM site visit in the early afternoon on November 13th, no HDD drilling was occurring because the shaker machine (shakes out solids from liquids) motor had broken and they were replacing a part. They were also switching out a reamer head. They had drilled around 800+ feet. The CPUC EM conducted another site visit around 6:00 pm and crews were reaming with a 22-inch reamer.

Environmental Compliance:

1. PG&E's Environmental Inspector conducted monitoring of the work activities throughout the week, including SWPPP inspections and checking the drill path in the Bay for signs of drilling fluid release.
2. PG&E's Environmental Inspectors noted no compliance issues at this location.
3. The CPUC EM noted that SWPPP measures were in place, traffic controls were established, and the site was neat and clean. Observed work activities were in compliance with the MMs, APMs, and other permit requirements.

Summary of Activity at the Southern Bore (23rd Street):

1. Equipment delivery occurred on Monday.
2. HDD drilling activities continued at Bore 1 Monday through Sunday (see Figure 3).
3. High density polyethylene (HDPE) 12-inch conduit was fused Monday and Wednesday through Friday.
4. The HDPE was prepared for hydro-testing on Thursday and hydro-testing occurred on Friday.
5. Street sweeping occurred Monday through Sunday.
6. Submarine work conducted by Vortex included installing coil and buoys in-water east of HDD South and excavated Bore 1 – Bore 3 receiving pits.
7. At the time of the CPUC EM site visit on November 13th, crews had just attached a 15-inch reamer to the drill and started reaming. They had drilled 900+ feet.

Environmental Compliance:

1. PG&E's Environmental Inspector conducted monitoring of the work activities throughout the week, including SWPPP inspections and checking the drill path in the Bay for signs of drilling fluid release.
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 SWPPP measures were in place. Observed work activities were in compliance with the MMs, 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 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:

1. Duct bank trench excavation occurred Monday and Wednesday through Saturday on Folsom Street (see Figure 4).
2. Traffic control setup occurred on Monday and Wednesday through Saturday on Folsom Street.
3. Street sweeping occurred Monday and Wednesday through Saturday.
4. 12 kV relocation work on Spear Street occurred Wednesday through Saturday (see Figure 5).
5. Pot-holing work for utilities on Spear Street for the 12 kV relocation occurred on Friday.
6. BMPs were installed on Spear Street for the 12 kV relocation work on Friday.
7. At the time of the CPUC EM site visit on November 13th, crews were placing shoring in the trench and excavating on Folsom Street between Beale Street and Zeno Place. The work was slow going because of the sandy soils. The trenches were plated at the end of the work day. The CPUC EM also observed work taking place on Spear Street between Harrison Street and Folsom Street for the 12 kV relocation work.
8. No work occurred on Tuesday and Sunday.

Environmental Compliance:

1. Cultural monitoring was conducted Monday and Wednesday through Saturday. Cultural constituents were observed and documented during the Spear Street excavation work on November 14th. A cultural constituent was observed, documented, and collected during the Folsom Street excavation work on November 15th.
2. PG&E's Environmental Inspector conducted monitoring of the work area and activities throughout the week, including SWPPP inspections.
3. PG&E's Environmental Inspectors noted no compliance issues at this location.
4. On Folsom Street, the CPUC EM noted that the site was neat and clean, SWPPP measures were in place, and traffic controls were established. Observed work activities were in compliance with the MMs, APMs, and other permit requirements.
5. On Spear Street, the CPUC EM noted that the site was not neat and clean and SWPPP measures were not in place around storm drain inlets. The CPUC EM was informed that PG&E's EI was not monitoring this work because it was under a different contract than the other work for the

Embarcadero-Potrero Project. However, there was supposedly a cultural monitor on site. The CPUC EM informed the PG&E EI and CH2M Hill of the compliance issues and that the CPUC views the utility relocation work as part of the Project, and therefore, there should be environmental monitoring of this work. After PG&E internal discussions, the CPUC EM was informed that from now on the subject work would be monitored by PG&E's EI.

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 Sunday at the yard.
2. Tailboard meetings occurred at the yard Monday and Wednesday through Saturday.
3. At the time of the CPUC EM site visit on November 13th, the yard was observed to be neat and clean, and SWPPP measures were in place.

Environmental Compliance:

1. PG&E's Environmental Inspector conducted monitoring of the work area and activities throughout the week, 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 11/25/14)

NTP #1	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 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 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 rd 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 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 11/25/14)

MPC	Date Requested	Date Issued	Phase	Description
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.

PROJECT PHOTOGRAPHS



Figure 1 – Demolition of foundations at Potrero Switchyard. View southeast, November 13, 2014.



Figure 2 – HDD night work on Spear Street. View west, November 13, 2014.



Figure 3 – HDD South on 23rd Street. View west, November 13, 2014.



Figure 4 –Excavation work on Folsom Street. View north, November 13, 2014.



Figure 5 – 12 kV relocation activities on Spear Street. View east, November 13, 2014.