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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: December 11, 2015
Subject: Monitoring Report #64 – November 30 to December 6, 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 December 1st.

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. 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 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. The HDD work is complete and HDD Company demobilized from the site during Week #26.

Summary of Activity at the Southern Bore (23rd 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 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 for the Duct Bank North (Folsom St. and Spear St.):

1st Street and Fremont Street

1. Annuzzi poured concrete for sidewalk restoration on Friday.
2. At the time of the CPUC EM site visit on December 1st, no work was being conducted at this location.
3. No work activities occurred Monday through Thursday, and Saturday or Sunday.

Fremont and Beale Streets

4. No work activities occurred at this location throughout the week.

Beale and Main Streets

5. No work activities occurred at this location throughout the week.

Main and Spear Streets

6. No work activities occurred at this location throughout the week.

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. grouted to waterproof inside the transition vault on Tuesday.
3. Underground Construction Co. installed primer in the transition vault on Wednesday.
4. PSC dewatered the transition vault on Tuesday and Wednesday.
5. At the time of the CPUC EM site visit on December 1st, work was being conducted within the transition vault on Spear Street (see Figure 1).
6. No work activities occurred on Monday, or Thursday through Sunday.

Environmental Compliance:

1. PG&E's Environmental Inspector conducted monitoring of the work area and activities Tuesday, Wednesday, and Friday, including SWPPP inspections.
2. PG&E's Environmental Inspectors noted one compliance issue at this location. On November 24th, PG&E's SWPPP consultant (AHTNA) recommended that working crews should install sand or rock bags in the curb gutter on the southeast side of Spear Street on either side of where vehicles/equipment are staged. This was recommended in case there is an unanticipated spill or leak since drainage inlets are no longer protected with filter fabric. On December 2nd, the issue was rectified. The PG&E Environmental Inspector observed that Underground Construction Co. had sandbags onsite and were in use per the recommendation.
3. The CPUC EM noted the drainage inlets lacked sandbags, but otherwise, 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 (23rd Street):

23rd Street, Duct Bank and Vault

1. Underground Construction Co. conducted ground halo cable installation in the transition vault on Monday, Wednesday, and Thursday.
2. Underground Construction Co. installed conduit plugs in the transition vault on Thursday.
3. Clean Harbors staged empty roll off bins on Monday.
4. Annuzzi poured concrete for fire hydrant restoration on Friday.
5. At the time of the CPUC EM site visit on December 1st, no work was being conducted on 23rd Street.
6. No work activities occurred Tuesday, Saturday or 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 one compliance issue at this location. On December 4th, AHTNA recommended that the bare slope on the east side should be further stabilized to stop run-off during future rain events. The recommendation for stabilization were: 1) to cover it with gravel; 2) erosion control blanket; 3) compaction and add a fiber roll (keyed in and staked) in the middle of the small slope to decrease slope length; or 4) visqueen cover anchored with gravel or sand bags.
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.

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:

Potrero Switchyard

1. Office trailer use occurred Monday through Saturday.
2. ABB tailboards occurred Monday through Saturday.
3. Contra Costa Electric conducted electrical wiring on trailers Monday and Friday.
4. Overaa conducted housekeeping and dust control activities Monday through Saturday.
5. Overaa laid out embeds on Monday and installed embeds on Tuesday and Wednesday.
6. Overaa aided other work crews Monday through Saturday.
7. Metal Set welded and installed steel beams in the GIS building Monday through Saturday.
8. Enterprise Roofing Services (ERS) conducted waterproofing of the GIS building Monday through Friday.
9. Sheedy crane delivered steel into the GIS building Monday through Wednesday, and Friday.
10. APEC set forms for the creation of the reactor pad in the switchyard on Monday and Wednesday.
11. APEC built and set wooden forms for the reactor pad in the switchyard on Monday.
12. APEC laid base rock for the reactor pad in the switchyard Monday through Wednesday.
13. APEC installed rebar for the new reactor pad in the switchyard on Tuesday and Wednesday.
14. APEC excavated for the transformer pad in the switchyard on Tuesday and Wednesday.
15. APEC installed concrete forms for the transformer pad in the switchyard Thursday through Saturday.
16. APEC laid base rock for the transformer pad in the switchyard on Tuesday and Wednesday.
17. APEC conducted dust control activities Tuesday through Thursday.
18. Contra Costa Electric conducted electrical work in the GIS building basement on Thursday.
19. Underground Construction Co. installed conduit plugs in the GIS building basement on Thursday.
20. Clean Harbors delivered and staged empty roll off bins on Monday through Thursday.
21. At the time of the CPUC EM site visit on December 1st, crews were working on the transformer pad in the switchyard, working within the GIS building, and waterproofing the outside of the GIS building (see Figures 2 through 4).
22. No work activities occurred on Sunday.

Substation Adjacent to Potrero Switchyard

1. Contra Costa Electric QEW monitored work in the substation Monday through Friday.
2. APEC conducted dust control activities Monday through Friday.
3. APEC excavated Monday through Friday.
4. APEC set rebar cages Monday through Wednesday, and Friday.
5. APEC built and/or set wooden forms Monday through Wednesday.
6. APEC poured concrete Monday through Thursday.
7. At the time of the CPUC EM site visit on December 1st, crews were excavating, and setting rebar cages and wooden forms (see Figure 5).
8. No work activities occurred on Saturday or Sunday.

Environmental Compliance:

1. Cultural monitoring was conducted by Far Western Monday through Friday and cultural constituents were observed, documented, and some November 30th through December 4th.
2. Air quality monitoring was conducted by ERM Monday through Saturday.
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 on Monday at the yard.
2. Tailboard meetings occurred at the yard Monday and Tuesday.
3. Underground Construction Co. conducted dust control activities Monday and Tuesday.
4. Underground Construction Co. removed equipment and materials Monday and Tuesday.
5. Underground Construction Co. removed temporary fencing and staged it along eastern fence line of yard on Wednesday.
6. BVCI conducted a site inspection with the Port of San Francisco and surrendered the yard back to the Port on Tuesday afternoon.
7. Honey Bucket removed a porta-potty and hand wash station from the yard on Wednesday.
8. At the time of the CPUC EM site visit on December 1st, the yard was locked and awaiting a walk through with the Port of San Francisco.
9. No work activities occurred at the yard Thursday through Sunday.

Environmental Compliance:

1. PG&E's Environmental Inspector conducted monitoring of the work area and activities Monday through Wednesday, including SWPPP inspections.
2. PG&E's Environmental Inspectors noted no compliance issues at this location.

- 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 12/11/15)

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 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 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 12/11/15)

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.
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 – Crew working in vault on Spear Street. View east, December 1, 2015.



Figure 2 – Work at Potrero Switchyard. View southeast, December 1, 2015.



Figure 3 – Crews working in GIS building at Potrero Switchyard. View east, December 1, 2015.

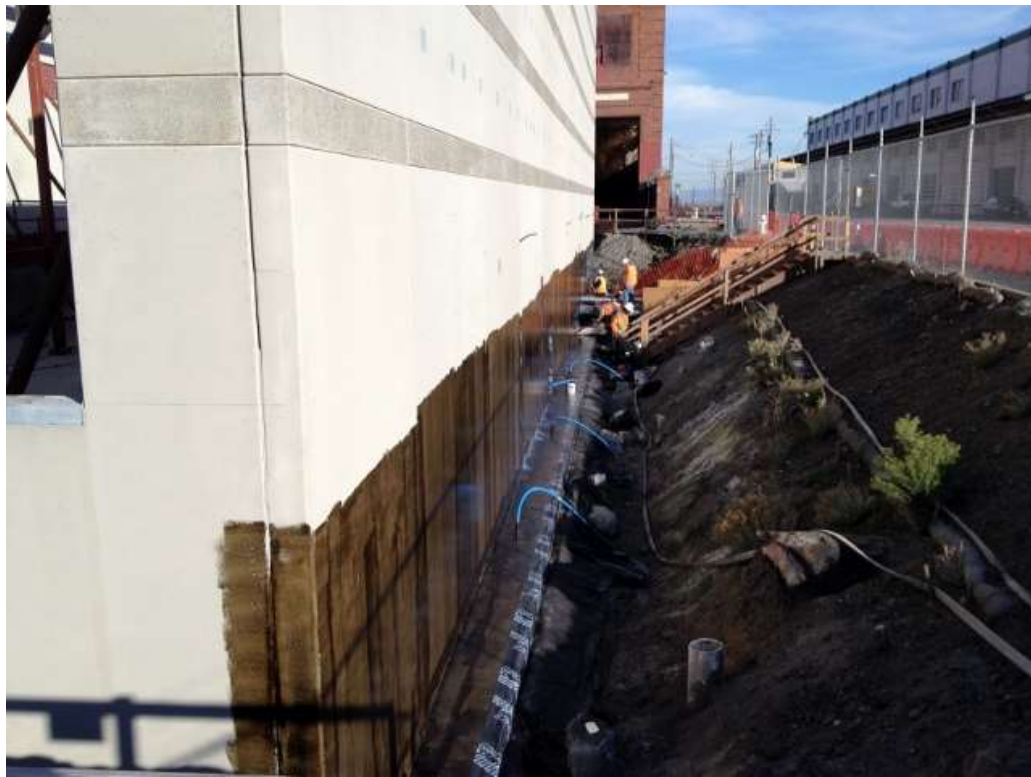


Figure 4 – Crew waterproofing outside of GIS building in Potrero Switchyard. View east, December 1, 2015.



Figure 5 – Crews working in adjacent substation. View south, December 1, 2015.