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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: July 16, 2015
Subject: Monitoring Report #43 – July 6 to July 12, 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 July 10th.

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.):

Folsom Street, Duct Bank (day work)

1. Underground Construction Co. excavated the duct bank trench and installed shoring Monday through Saturday.
2. Underground Construction Co. installed rebar in the trench Monday through Friday.
3. Underground Construction Co. installed conduit in the trench Wednesday through Friday.
4. Underground Construction Co. poured concrete and removed sheet piles on Saturday.
5. Clean Harbors hauled off excavated materials Monday through Saturday.
6. At the time of the CPUC site visit on July 10th, crews were conducting duct bank work on Folsom Street between Beale Street and Main Street (see Figure 1).
7. Street sweeping occurred Monday through Saturday.
8. No construction activities occurred on Sunday.

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

1. PSC dewatered the duct bank trench on Monday, Tuesday, and Thursday through Saturday.
2. Underground Construction Co. excavated the duct bank trench Monday, Tuesday, Thursday, and Saturday.
3. Underground Construction Co. removed building tie backs on Monday and shoring on Tuesday and Thursday.
4. Underground Construction Co. added base rock to the trench on Tuesday and Thursday.
5. Underground Construction Co. saw cut pavement on Wednesday.
6. Underground Construction Co. installed rebar Thursday and Friday.
7. Underground Construction Co. installed shoring on Saturday.
8. Clean Harbors hauled off excavated materials Monday through Saturday.
9. Street sweeping occurred Monday through Saturday.
10. At the time of the CPUC EM site visit on July 10th, crews were conducting duct bank work (see Figure 2).
11. No construction activities occurred on Sunday.

Spear Street, Vault

1. New River Electric conducted waterproofing on Friday.

Environmental Compliance:

1. Cultural monitoring was conducted by Far Western Monday through Saturday. July 6th through July 11th, cultural constituents were observed, documented, and some collected.
2. PG&E's Environmental Inspector conducted monitoring of the work area and activities Monday through Saturday, including SWPPP inspections.
3. Nesting bird sweeps were conducted Monday through Saturday.
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.

Summary of Activity for the Duct Bank South (23rd Street):**23rd Street, Duct Bank**

1. Underground Construction Co. poured concrete for road base on Tuesday.
2. At the time of the CPUC EM site visit on July 10th, no work activities for the duct bank were taking place on 23rd Street.
3. No construction activities occurred on Monday, or Friday through Sunday.

23rd Street, Vault

1. New River Electric pulled the Phase A cable in South Bore 2 conduit on Tuesday.
2. New River Electric pulled fiber optic cable in the F1 conduit on Tuesday.
3. New River Electric installed link seal plugging ducts at South Bore 2 on Tuesday.
4. New River Electric cut the South Bore 1 Phase C cable in the transmission vault on Wednesday.
5. New River Electric cut excess South Bore 2 Phase A cable into pieces on Wednesday.
6. New River Electric removed the Phase C cable piece from the South Bore 1 conduit between the pull box and transition box on Wednesday.
7. New River Electric stripped the F1 fiber cable in the fiber box on Wednesday.
8. New River Electric conducted wiring in the fiber box on Wednesday.
9. New River Electric removed previously cut pieces of excess cable for recycling on Thursday.

23rd Street, Water Line Relocation

1. Underground Construction Co. met with the San Francisco Water District onsite Tuesday through Thursday.
2. No construction activities occurred for the water line relocation throughout the week.

Environmental Compliance:

1. Air quality monitoring was conducted by ERM on Tuesday.
2. PG&E's Environmental Inspector conducted monitoring of the work area and activities on Monday through Thursday, including SWPPP inspections.
3. Nesting bird sweeps were conducted Monday through Saturday.

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. Overaa proofed forms for building foundation Monday through Wednesday.
2. Overaa proofed the rat slab Tuesday and Wednesday.
3. Overaa conducted housekeeping and dust control activities throughout the week.
4. Overaa delivered and staged rebar on Monday and Tuesday and laid out rebar on Thursday and Friday.
5. Overaa installed brace edge forms on Thursday.
6. Overaa conducted work on embeds on Saturday.
7. CMC Rebar laid out rebar on Saturday.
8. Office trailer use occurred Monday through Saturday.
9. At the time of the CPUC EM site visit on July 10th, crews were laying out rebar for the GIS building foundation (see Figure 3).
10. No construction activities occurred on Sunday.

Environmental Compliance:

1. Air quality monitoring was conducted by ERM Monday through Saturday.
2. PG&E's Environmental Inspector conducted monitoring of this area Monday through Saturday, including SWPPP inspections.
3. Nesting bird sweeps were conducted Monday through Saturday.

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. No compliance monitoring was conducted during the subject week.

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 installed pull eye on the South Bore 2 cable end on Monday.
2. Durocher floated the power cable Phase A off-shore near the South Bore 2 receiving pit on Monday.
3. Durocher conducted diving operations at the South Bore 2 receiving pit on Tuesday.
4. Durocher installed Phase A cable in the South Bore 2 conduit on Tuesday.
5. Durocher installed fiber optic cable in the F1 conduit on Tuesday.
6. Durocher conducted on-boat servicing of equipment on Tuesday.
7. The Durocher vessel picked up the F2 fiber cable reel from Pier 50 and Phase B power cable reel from Pier 80 on Wednesday.
8. At the time of the CPUC site visit on July 10th, no work was taking place due to a large Navy ship docked on Pier 30/32 (see Figure 4).
9. No work activities occurred Thursday through Sunday.

Environmental Compliance:

1. PG&E's Environmental Inspectors noted no compliance issues at this location.

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. 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 no compliance issues at this location.

Notices to Proceed

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

Table 1
Notice to Proceeds (NTPs)
(Updated 07/16/15)

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.
NTP #6	2/19/15	4/07/15	Submarine Cable	Site preparation for submarine cable installation, laying the cable, and pulling the cable to land at either end.

Minor Project Changes

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

Table 2
Minor Project Changes (MPCs)
(Updated 07/16/15)

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 – Duct Bank North work on Folsom Street between Beale Street and Main Street. View north, July 10, 2015.



Figure 2 – Duct bank work on Spear Street. View west, July 10, 2015.



Figure 3 – Crews laying out rebar for GIS building foundation at Potrero Switchyard. View southeast, July 10, 2015.



Figure 4 – Large Navy shipped docked at Pier 30/32. View east, July 10, 2015.