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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: October 20, 2016
Subject: Monitoring Report #107 – October 3, 2016 to October 16, 2016

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

The PG&E Embarcadero-Potrero 230 kV Transmission Project was fully energized on Sunday, September 11, 2016. Additional work continues at the Potrero Switchyard.

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

1. All work activities have been completed at this location.

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

1. All work activities have been completed at this location.

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

23rd Street, Duct Bank and Vault

1. All work activities have been completed at this location.

Environmental Compliance:

1. No compliance monitoring was necessary at this location.

E-P Submarine Rock and Debris Removal

NTP #4 was issued on November 21, 2014 for the removal of rock 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:

2. No compliance monitoring was necessary at this location.

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 Friday of both weeks.
2. Overaa installed fire extinguishers in the GIS building, aided other work crews, and conducted housekeeping and dust control Wednesday through Friday the week of October 3rd – 9th, and Monday through Wednesday the week of October 10th – 16th.
3. Overaa conducted punchline item tasks for PG&E Monday through Wednesday the week of October 10th – 16th.
4. CCE conducted electrical work in the GIS building Monday through Wednesday the week of October 3rd – 9th, and Monday through Friday the week of October 10th – 16th.
5. CCE conducted punchline item tasks for PG&E Monday through Friday the week of October 10th – 16th.
6. CER conducted punchline item tasks for PG&E Monday through Wednesday the week of October 10th – 16th.
7. Spencer Masonry demobilized equipment and materials Monday through Wednesday the week of October 3rd – 9th.
8. Spencer Masonry conducted grout touchup on the perimeter wall Monday through Wednesday the week of October 10th – 16th.
9. SSI removed scaffolding from transformer wall Monday and Tuesday the week of October 3rd – 9th.
10. APEC backfilled and compacted the unpaved area around the GIS building Monday through Friday the week of October 3rd – 9th, and Monday through Wednesday the week of October 10th – 16th.
11. APEC backfilled with rock south of the GIS station for curb and gutter installation Monday through Wednesday the week of October 3rd – 9th.
12. APEC excavated north of the GIS building for electrical installation Monday through Wednesday of both weeks.
13. APEC excavated and installed wood forms, rebar, and conduit near the southeast corner of the GIS building for the water and sewer tie in Monday through Friday the week of October 3rd – 9th (see Figures 1 and 2); and excavated and installed wood forms and rebar Monday through Wednesday the week of October 10th – 16th (see Figure 3).
14. APEC excavated near the southwest corner of the GIS building for the water and sewer tie-in Wednesday through Friday the week of October 3rd – 9th (see Figure 4).
15. APEC demobilized and removed equipment and materials Monday through Friday of both weeks.
16. ACME installed security systems around the site Monday through Wednesday the week of October 3rd – 9th.
17. E. Mitchell conducted plumbing in the GIS building Monday through Wednesday the week of October 10th – 16th.
18. Clean Harbors replaced roll-off bins Monday through Friday the week of October 3rd – 9th, and Monday through Wednesday the week of October 10th – 16th.

Substation Adjacent to Potrero Switchyard

1. Materials and equipment were staged Monday through Friday of both weeks.

Environmental Compliance:

- Cultural monitoring was conducted by Far Western Monday through Friday the week of October 3rd – 9th, and Monday through Wednesday the week of October 10th – 16th, in the Potrero Switchyard and on 23rd Street for the water and sewer line tie-in work, and cultural constituents were observed.
- Air quality monitoring was conducted by ERM Monday through Friday the week of October 3rd – 9th, and Monday through Wednesday the week of October 10th – 16th.
- PG&E's Environmental Inspector (EI) conducted monitoring of this area on Monday and Thursday the week of October 3rd – 9th, and Monday and Friday the week of October 10th – 16th, including SWPPP inspections and nesting bird sweeps. No biological finds were noted.
- PG&E's EI noted two rectified housekeeping and compliance issues the week of October 3rd – 9th:
 - On September 29th, the PG&E EI observed several cigarette butts scattered on the ground south of the Overaa trailer near the dumpster. On October 3rd, the PG&E EI observed the issue was rectified.
 - On October 3rd, the PG&E EI observed that secondary containment under the porta-potty in the northeast corner of the substation was not fully functional. On October 6th, the PG&E EI observed that the porta-potty was removed from the project site rectifying the issue.
- PG&E's EI noted two rectified housekeeping and compliance issues the week of October 10th – 16th:
 - On October 14th, the PG&E EI observed an old section of pipe that had been removed and staged south of the Overaa trailer, a pallet of Quikrete that was uncovered near the electrician's trailers, and several bags of patching material uncovered near the reactor. These compliance concerns were rectified and the site prepared prior to the weekend rain event.
 - On October 14th, the PG&E EI observed a bag of concrete or pother material that was torn open and spilling onto the ground near the electrician's trailers. This compliance concern was rectified and the site prepared prior to the weekend rain event.

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. All remaining materials were removed on December 7th and the yard has been turned back over to the Port of San Francisco.

Environmental Compliance:

1. No compliance monitoring was necessary 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 10/20/16)

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 10/20/16)

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 – APEC installing sewer pipe in southeast corner at Potrero Switchyard, October 3, 2016. Photo courtesy of PG&E.



Figure 2 - APEC installing rebar and wood forms for sewer tie-in in southeast corner at the Potrero Switchyard, October 6, 2016. Photo courtesy of PG&E.



Figure 3 - APEC installing rebar and wood forms for sewer tie-in in southeast corner at the Potrero Switchyard, October 10, 2016. Photo courtesy of PG&E.



Figure 4 - APEC excavating for sewer tie-in in southwest corner at the Potrero Switchyard, October 6, 2016. Photo courtesy of PG&E.