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PROJECT MEMORANDUM Tel. 818-597-3407, Fax PG&E EMBARCADERO-POTRERO 230 KV TRANSMISSION PROJECT

To: Billie Blanchard, Project Manager, CPUC From: Vida Strong, Aspen Project Manager

Date: February 17, 2016

Subject: Monitoring Report #73 – February 8, 2016 to February 14, 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

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:

 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.

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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 except the pulling of conductor cable, which will be done at a later time.

Environmental Compliance:

1. No compliance monitoring was necessary 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 except the pulling of conductor cable, which will be done at a later time.

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 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 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 Sunday.
- 2. Overaa conducted housekeeping and dust control activities Monday through Sunday.
- 3. Overaa aided other work crews Monday through Sunday.
- 4. Overaa cut wood forms Monday through Friday.
- 5. Metal Set welded in the GIS building Monday through Friday.
- 6. MEI conducted work on embeds Monday through Friday.
- 7. MEI conducted grounding work in the GIS building on Wednesday and Friday.
- 8. CMC conducted rebar layout in the GIS building on Monday and Tuesday.
- 9. APEC excavated for cable trench on Monday, Tuesday, and Friday (see Figure 1).
- 10. APEC installed forms and rebar at the transformer pad on Tuesday (see Figure 2).
- 11. ERS conducted waterproofing work on the GIS building Monday through Saturday (see Figure 2).
- 12. Contra Costa Electric (CCE) conducted electrical work in the control room basement Monday through Sunday.
- 13. Sheedy used a crane to move the reactor onto its pad on Wednesday.
- 14. B.T. Mancini did panel repairs of Friday.
- 15. Clean Harbors delivered and staged roll-off bins on Tuesday and Friday.

Substation Adjacent to Potrero Switchyard

- 1. CCE QEW monitored work in the substation Monday through Friday.
- 2. APEC conducted housekeeping and dust control activities Monday through Friday.
- 3. APEC excavated Monday through Friday.
- 4. CCE installed new infrastructure to new foundations on Monday and Tuesday (see Figure 3).
- 5. Contra Costa installed new aboveground infrastructure on the new foundations on Sunday.

Environmental Compliance:

- 1. Cultural monitoring was conducted by Far Western Monday through Friday, and cultural constituents were observed, documented, and some collected.
- 2. Air quality monitoring was conducted by ERM Monday through Sunday.
- 3. PG&E's Environmental Inspector conducted monitoring of this area Monday through Wednesday, and Friday, including SWPPP inspections and nesting bird sweeps.
- 4. PG&E's Environmental Inspector noted several compliance issues at this location:
 - On February 3rd, the PG&E Environmental Inspector noted damaged sand bags at two locations: 1) at the drainage inlet in the substation just northwest of the 23rd Street gate, and 2) along pavement just west of the Overaa porta-potties and hazardous waste bins. Replacement of sandbags was recommended. On February 10th, the PG&E Environmental Inspector observed that the damaged sandbags west of the hazardous waste bins had been removed, and the

sandbags at the drainage inlet northwest of the 23rd Street gate had been replaced. The concern has been rectified.

- On February 3rd, the PG&E Environmental Inspector observed three items in the yard laying on the ground between the GIS building and the 23rd Street gate that were damaged and nonfunctional including: 1) an unused torn, half-filled sand bag, 2) an old pipe piece, and 3) a used non-functional fiber roll. On February 5th, 1) and 3) were disposed of, and 2) was disposed of on February 10th. The concern has been rectified.
- On February 8th, the PG&E Environmental Inspector observed an air compressor leaking antifreeze (approximately 1/3 cup) into secondary containment underneath it west of the new GIS building (see Figure 4). Cleanup of the antifreeze from the secondary containment and replacement or servicing of the compressor were recommended. The compressor was replaced that afternoon.
- On February 8th, the PG&E Environmental Inspector observed that the secondary containment under a lighting structure was no longer functional; the berm was not present around all sides.
 On February 9th, it was observed that the concern was rectified; the containment berm was replaced.

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 2/17/16)

	Date	Date		
NTP#	Requested	Issued	Phase	Description

NTP#	Date Requested	Date Issued	Phase	Description
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NTP #1	6/23/14	8/21/14	Potrero Site	Site preparation and excavation of the 230 kV
			Preparation	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	Underground duct bank and vault installation
			Duct Bank and	between the HDD transition on Spear St. to
			Vaults	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	11/13/14	11/14/14	Underground	Trench from the new Potrero Switchyard to
MOD			Duct Bank and	the existing switchyard for the 230 kV/115 kV
			Vaults	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	Construction of 230 kV Potrero gas-insulated
			Switchgear	switchgear (GIS) building and cable tie-in
			Building	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 2/17/16)

	Date	Date		
MPC#	Requested	Issued	Phase	Description
MPC#1	7/16/14	7/23/14	Amador	Use of an existing staging and laydown yard
			Staging and	adjacent to Alternate Staging Area #3 (as
			Laydown Yard	identified in the IS/MND)on Amador St., SF.
MPC#2	12/31/14	1/5/15	Staging and	Use of an existing paved staging and laydown
			Laydown Yard	yard at 1215 Michigan Street, SF, two blocks
				from the Potrero Switchyard.

PROJECT PHOTOS



Figure 1 – APEC excavating for cable trench in Switchyard. View south, February 8, 2016. Photo courtesy of PG&E.



Figure 2 – APEC installing forms at transformer pad and ERS waterproofing GIS building. View northwest, February 9, 2016. Photo courtesy of PG&E.



Figure 3 – CCE installing infrastructure in substation. View northwest, February 9, 2016. Photo courtesy of PG&E.



Figure 4 – Air compressor leaking antifreeze onto secondary containment. February 8, 2016. Photo courtesy of PG&E.