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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: June 16, 2016

Subject: Monitoring Report #90 – June 6, 2016 to June 12, 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 was on site June 9th

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.

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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 with the exception of pulling of conductor cable, which is scheduled to start in July 2016.

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

 All work activities have been completed at this location with the exception of pulling of conductor cable, which is scheduled to start in July 2016 after conductor is pulled from Spear Street to the Embarcadero Substation.

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:

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 aided other work crews and conducted housekeeping and dust control activities Monday through Saturday (see Figure 1).
- 3. Overaa backfilled areas with baserock Monday through Friday.
- 4. APEC installed wood forms around the GIS building Monday through Friday.
- 5. MEI conducted electrical work in the GIS building Monday through Sunday.
- 6. Cosco installed fire alarms in the GIS building Monday through Sunday.
- 7. CER installed infrastructure in the GIS building Monday through Thursday.
- 8. Farrell drilled holes, constructed rebar cages, set rebar in holes, and backfilled with concrete and rock for the blast wall Monday through Wednesday.
- 9. Proven excavated for the perimeter wall Wednesday through Saturday (see Figure 2).
- 10. Shooter and Butts worked on landscaping on the roof Monday through Friday (see Figure 3).
- 11. APEC installed conduit and steel for the duct bank Monday through Friday.
- 12. Clean Harbors replaced roll-off bins Monday through Saturday.
- 13. At the time of the CPUC EM site visit on June 9th, crews were backfilling with baserock, watering for dust control, installing wood forms around the GIS building, conducting electrical work in the GIS building, installing infrastructure in the GIS building, excavating for perimeter wall, and installing conduit and steel for the duct bank.

Substation Adjacent to Potrero Switchyard

- 1. APEC conducted housekeeping and dust control activities Monday through Friday.
- 2. APEC installed rebar, conduit, cable tray lids, and backfilled cable trays and around the 115 kV bus Monday through Friday (see Figure 4).
- 3. CCE conducted electrical work in the control building Monday through Friday.
- 4. CCE QEW monitored work in the substation Monday through Friday.
- 5. Nexans conducted electrical termination work on the 115 kV bus Wednesday through Friday.
- 6. At the time of the CPUC EM site visit on June 9th, crews were installing rebar and conduit, and backfilling.

Environmental Compliance:

- 1. No cultural monitoring was conducted by Far Western during the week since all excavation was conducted in previously disturbed areas.
- 2. Air quality monitoring was conducted by ERM Monday through Saturday.
- 3. PG&E's Environmental Inspector (EI) conducted monitoring of this area Monday and Thursday, including SWPPP inspections and nesting bird sweeps. No biological finds were noted.
- 4. PG&E's El noted several housekeeping and compliance issues at this location:

- On June 6th, a kiddy pool used as a concrete washout was overflowing. The PG&E EI recommended that the washout no longer be used since it was full, and any spilled concrete washout and any contaminated soil be put in another washout. It was also recommended that the washout be covered with plastic until the concrete was dry, and disposed of when dry. On June 6th, the PG&E EI observed that the occurrence was rectified.
- On June 10th, the PG&E EI observed that a pipe threader had inadequate secondary containment to contain/catch lubricant. Flat cardboard was being used under the threader. It was recommended that a proper walled secondary containment be used instead of the cardboard and the cardboard be disposed of properly.
- On June 10th, the PG&E EI observed kitty litter was used to clean up oil in and around (on the ground) the containment under the cable reel machinery. It was recommended that 1) all oil and kitty litter be cleaned up and disposed of properly, 2) a larger containment be used, and 3) the cable reel machinery be serviced or replaced.
- 5. PG&E's EI noted that the following previous housekeeping and compliance issues were resolved:
 - On June 2nd, litter was accumulating on the ground along the east side of the GIS building, under the scaffolding of the transformer, and within the cement containment of the transformer. On June 6th, the PG&E EI observed that the occurrence was rectified.
- 6. The CPUC EM observed 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. 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 06/16/16)

NTP#	Date	Date Issued	Phase	
	Requested			Description
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 06/16/16)

	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: Overview of Potrero Switchyard from GIS rooftop, June 9, 2016.



Figure 2: Proven excavated for the perimeter wall, June 9, 2016.



Figure 3: Landscaping work on the GIS building roof, June 9, 2016.



Figure 4: Substation work around the 115 kV bus, June 9, 2016.