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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: January 6, 2016

Subject: Monitoring Report #67 – December 21, 2015 to January 3, 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. Underground Construction Co. removed paint from the embeds within the transition vault on Wednesday, December 23rd.
- 2. Underground Construction Co. conducted grounding halo cable installation in the transition vault Monday through Wednesday, December 28th 30th (see Figure 1)
- 3. Underground Construction Co. dewatered the transition vault into a water buffalo for offsite disposal on Wednesday, December 30th.
- 4. No work was conducted Thursday through Sunday, December 24th through December 27th, and December 31st through January 3rd, due to the Christmas and New Year Holidays.

Environmental Compliance:

- 1. PG&E's Environmental Inspector conducted monitoring of the work area and activities Monday through Wednesday, December 28th 30th, including SWPPP inspections.
- 2. PG&E's Environmental Inspectors noted no compliance issues at this location.

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

23rd Street, Duct Bank and Vault

- 1. Underground Construction Co. conducted grounding halo cable installation in the transition vault Monday through Wednesday, December 21st through 23rd (see Figure 2).
- 2. Underground Construction Co. conducted housekeeping activities Monday through Wednesday, December 21st through 23rd.
- 3. Underground Construction Co. installed a ladder in the transition vault Monday, December 28th.
- 4. Underground Construction Co. conducted paving and installed gravel on the slope for site restoration on Monday, December 28th (see Figure 3).
- 5. Underground Construction Co. reinstalled a DHL fence gate on Tuesday, December 29th.
- 6. No work was conducted Thursday through Sunday, December 24th through December 27th, and December 31st through January 3rd, due to the Christmas and New Year Holidays.

Environmental Compliance:

1. PG&E's Environmental Inspector conducted monitoring of the work area and activities Monday and Tuesday, December 21st and 22nd, and December 28th and 29th, including SWPPP inspections.

2. PG&E's Environmental Inspectors noted no compliance issues 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 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 Wednesday, December $21^{st} 23^{rd}$, and Monday through Thursday, December $28^{th} 31^{st}$.
- 2. Overaa conducted housekeeping and dust control activities Monday through Wednesday, December $21^{st} 23^{rd}$, and Monday through Thursday, December $28^{th} 31^{st}$.
- 3. Overaa aided other work crews Monday through Wednesday, December $21^{st} 23^{rd}$, and Monday through Thursday, December $28^{th} 31^{st}$.
- 4. Metal Set welded and installed steel beams in the GIS building Monday, December 21st, and Monday through Thursday, December 28th 31st.
- 5. APEC built and set wooden forms for the transformer pad on Monday, December 21st and 28th.
- 6. APEC installed rebar for the new reactor pad on Monday and Tuesday, December 21st and 22nd (see Figure 4).
- 7. APEC poured concrete for the new reactor pad on Tuesday, December 22nd.
- 8. APEC installed grounding cable for the new transformer pad on Monday, December 28th.
- 9. Sheedy delivered steel beams into the GIS building Monday through Wednesday, December 28th 30th.
- 10. B.T. Mancini installed pan decking in the GIS building Tuesday through Thursday, December 29th 31st.
- 11. Clean Harbors delivered and staged empty roll off bins and removed full roll off bins for sediment disposal on Monday, December 21st.
- 12. No work activities occurred Thursday through Sunday, December $24^{th} 27$, or Friday through Sunday, January $1^{st} 3^{rd}$, due to the Christmas and New Year Holidays.

Substation Adjacent to Potrero Switchyard

- 1. Contra Costa Electric conducted electrical work inside the control room Monday and Tuesday, December 21st and 22nd.
- 2. APEC excavated, installed conduit, and installed grounding cable Monday through Wednesday, December 21st 23rd, and December 28th 30th.
- 3. APEC conducted housekeeping and dust control activities Monday through Wednesday, December $21^{st} 23^{rd}$, and December $28^{th} 30^{th}$.
- 4. No work activities occurred Thursday through Sunday, December 24th 27th, and December 31st January 3rd, due to the Christmas and New Year Holidays.

Environmental Compliance:

- 1. Cultural monitoring was conducted by Far Western Monday, December 21st; Wednesday, December 23rd; and Monday through Wednesday, December 28th through 30th, at which time cultural constituents were observed, documented, and some collected.
- 2. Air quality monitoring was conducted by ERM Monday through Wednesday, December $21^{st} 23^{rd}$, and December $28^{th} 30^{th}$.
- 3. PG&E's Environmental Inspector conducted monitoring of this area Monday and Tuesday, December 21st and 22nd, and Monday through Thursday, December 28th through 31st, including SWPPP inspections.
- 4. PG&E's Environmental Inspectors noted no compliance issues at this location.

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 conducted.

Notices to Proceed

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

Table 1
Notice to Proceeds (NTPs)

(Updated 1/06/16)

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 1/06/16)

	Date	Date		
MPC#	Requested	Issued	Phase	Description
MPC#1	7/16/14	7/23/14	Amador Stag-	Use of an existing staging and laydown yard
			ing and Lay-	adjacent to Alternate Staging Area #3 (as
			down 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 – Crew working in transition vault on Spear Street. View east, December 30, 2015. Photo courtesy of PG&E.

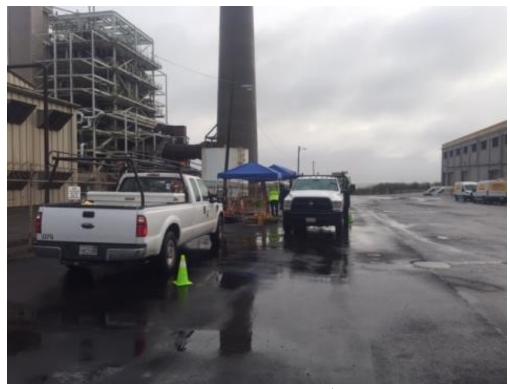


Figure 2 – Crew working in transition vault on 23rd Street. View northeast, December 22, 2015. Photo courtesy of PG&E.



Figure 3 – Rock installed on slope at east end of 23rd Street. View west, December 29, 2015. Photo courtesy of PG&E.



Figure 4 – Crews working on Reactor Pad in Potrero Switchyard. View southeast, December 21, 2015. Photo courtesy of PG&E.