PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE SAN FRANCISCO, CA 94102-3298



June 21, 2012

TA2012-001

John Hagen, P.E.
Pacific Gas and Electric
Manager, Transmission Compliance
77 Beale Street, #2383
San Francisco, CA 94105

SUBJECT: Audit of PG&E's UG-Daly City and Fresno Areas Electric Transmission Facilities

Dear Mr. Hagen:

On behalf of the Electric Safety and Reliability Branch of the California Public Utilities Commission, Ben Brinkman, Alok Kumar, and Paul Penney conducted an audit of PG&E's electric transmission facilities in the UG-Daly City and Fresno areas from May 7 - 18, 2012. The audit included a review of PG&E's maintenance records and inspections of PG&E's facilities.

During the audit, we identified violations of one or more General Orders. A copy of the audit summary itemizing the violations is enclosed. Please advise me no later than July 23, 2012, by electronic or hard copy, of all corrective measures taken by PG&E to remedy and prevent such violations.

If you have any questions concerning this audit you can contact Ben Brinkman of my staff at (213) 576-7093 or Benjamin.Brinkman@cpuc.ca.gov.

Sincerely,

Raffy Stepanian, P.E.

Program Manager

Electric Safety and Reliability Branch

Consumer Protection and Safety Division

Enclosure: Audit Summary

CC: Raymond Fugere, Program and Project Supervisor, CPUC

Ben Brinkman, Senior Utilities Engineer, CPUC

Audit Summary

Company: PG&E UG-Daly City and Fresno Area Systems

Electric Transmission Infrastructure Provider

Date: May 7 - 18, 2012

Programmatic Violations

GO 165, Section IV, Transmission Facilities, states:

"Each utility shall prepare and follow procedures for conducting inspections and maintenance activities for transmission lines.

Each utility shall maintain records of inspection and maintenance activities. Commission staff shall be permitted to inspect records and procedures consistent with Public Utilities Code Section 314 (a)."

A. PG&E's December 2009 procedures, titled *Transmission Owner Maintenance Practices Electric Underground Transmission Facilities*, section 8.2 states, in part:

"The typical Detailed Inspection Form, when completed, is kept in files by circuit name at the responsible transmission line supervisor's headquarters."

Table 4-1 of PG&E's Maintenance Practices requires a detailed inspection of alarms for Pipe-Type cables once every calendar year.

PG&E was unable to provide the following Detailed Inspection Forms for calendar year 2011:

- ETU9975ALARM, Cooley Landing-Stanford, HPGF, Manhole 183-20
- ETU9961ALARM, CL-1, HPGF, 115 KV
- ETU9963ALARM, DL-1, HGPF, 115 KV
- **B.** PG&E's December 2009 procedures, titled *Transmission Owner Maintenance Practices Electric Underground Transmission Facilities*, Table 4-6, titled *Typical Detailed Inspection Operational Reading Activities Pipe-Type Cable Systems Pipe to Soil Readings* states:

"At manholes and terminal risers- Check pipe-to-soil readings. If below .850 V, note and contact a transmission engineer and/or transmission specialist."

The January 31, 2012, Detailed Inspection Form for ETU 9980, San Mateo-Martin, Manhole #121-34 shows pipe-to-soil readings of .810 V and .730 V, but the "Comments" and "Notifications" section are blank.

C. PG&E's December 2009 procedures, titled Transmission Owner Maintenance Practices Electric Underground Transmission Facilities, Table 4-6, titled Typical Detailed Inspection Operational Reading Activities Pipe-Type Cable Systems – Pipe to Soil Readings states:

"Gas-filled cable pressures, low-low alarms, and trip switches set at 140 psi. Low alarm set at 185 psi."

- The October 20, 2009, ETU9975ALARM, Cooley Landing-Stanford, HPGF (High Pressure Gas Filled) Detailed Inspection Form indicates that the PG&E inspector found the low-low alarm set at 139 psi, and the low alarm set at 184 psi and left the alarms at these settings.
- The October 28, 2010, ETU9975ALARM, Cooley Landing-Stanford, HPGF (High Pressure Gas Filled) Detailed Inspection Form indicates that the PG&E inspector found the low-low alarm set at 139 psi and left the alarm at this setting.
- **D.** PG&E's December 2009 procedures, titled *Transmission Owner Maintenance Practices Electric Underground Transmission Facilities*, section 8.2 states, in part:

"The Detailed Inspection Form documents inspection of all underground transmission facilities"

The September 21, 2010 Detailed Inspection Form ETU9975.MANH, CL-Stanford Manhole #183-20 did not indicate the condition of the equipment.

E. PG&E's December 2009 procedures, titled *Transmission Owner Maintenance Practices Electric Underground Transmission Facilities*, section 8.2 states, in part:

"Attachment 2, Underground Corrective Work Form, is the notification form identifying specific condition of a facility that requires corrective action, follow-up inspection, or referral to other departments or entities."

PG&E's December 2009 procedures, titled *Transmission Owner Maintenance Practices Electric Underground Transmission Facilities*, section 6, states, in part:

"If repair is appropriate, the repair work is assigned an appropriate Priority/Repair Code from Attachment 1 in accordance with section 5.1, and the repair is completed within the time frame associated with the assigned Priority Code."

The September 21, 2010, Detailed Inspection Report for the Cooley-Stanford Manhole #183-21, Equipment ID 41113107, indicated the manhole was paved over. A Corrective Work Form, Order #41613114, Created Notification #105592873, incorrectly indicated that the issue was indentified on September 21, 2011.

PG&E staff confirmed the manhole work was completed and provided photographic evidence of the repair. However it is unclear when PG&E completed the manhole repair work and thus it is difficult to ascertain how long it took PG&E to complete the repair from the time the problem was identified.

Field Violations

1.	Structure ID / Location:	Oro Loma-Mendota Transmission Line, Pole 46-13, Fresno, CA
	Previous PG&E Visit Details:	February 27, 2012
	Date of CPUC Inspection:	May 16, 2012

Explanation of Violation(s):

Foreign Attachment

GO 95, Rule 34, Additional Construction, states in part:

"Nothing in these rules shall be construed as permitting the unauthorized attachment, to supply, street light or communication poles or structures, of antennas, signs, posters, banners, decorations, wires, lighting fixtures, guys, ropes and any other such equipment foreign to the purposes of overhead electric line construction.

Nothing herein contained shall be construed as requiring utilities to grant permission for such use of their overhead facilities; or permitting any use of joint poles or facilities for such permanent or temporary construction without the consent of all parties having any ownership whatever in the poles or structures to which attachments may be made; or granting authority for the use of any poles, structures or facilities without the owner's or owners' consent.

All permanent attachments must be approved by the Commission (see Rule 15.1) and the owner(s) involved."

Pole #46-13 on the Oro-Loma Mendota circuit had an unauthorized "owl box" attached to it. This violation was not documented when PG&E last visited the pole.