PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE SAN FRANCISCO, CA 94102-3298



April 22, 2016 EA2016-002

Mr. Adeel Babar Supervisor – Regulatory Compliance Pacific Gas and Electric Company 3401 Crow Canyon Road, #221E San Ramon, CA 94583

SUBJECT: Audit of PG&E's San Jose Division

Dear Mr. Babar:

On behalf of the Electric Safety and Reliability Branch (ESRB) of the California Public Utilities Commission, Wilson Tsai and Ryan Yamamoto of my staff conducted an electric audit of PG&E's San Jose Division from February 22, 2016 to February 25, 2016. The audit included a review of PG&E's records and field inspections of PG&E's facilities.

During the audit, my staff identified violations of one or more General Orders (GOs). A copy of the audit findings itemizing the violations is enclosed. Please advise me no later than May 23, 2016, 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 please contact Wilson Tsai at (415) 703-1359 or wilson.tsai@cpuc.ca.gov.

Sincerely,

Fadi Daye, P.E.

Program and Project Supervisor

Electric Safety and Reliability Branch Safety and Enforcement Division

California Public Utilities Commission

Enclosure: **Audit Findings**

Cc: Elizaveta Malashenko, Director, Safety and Enforcement Division, CPUC

Charlotte TerKeurst, Program Manager, Electric Safety and Reliability Branch, CPUC

AUDIT FINDINGS

I. Records Review

My staff reviewed the following records during the audit:

- a. 2015/2016 GO 95 detailed inspection records for Maps G16 and G1624.
- b. 2015/2016 GO 128 detailed inspection records for Maps F1807 and H1902.
- c. 2015 GO 95 patrol inspection records for Map F1912.
- d. GO165 inspection records for San Jose division from Feb. 2011 to Feb. 2016.
- e. Completed work orders for Maps G1624 and F1711.
- f. Cancelled work orders for Maps E1721, H2009, and I1701
- g. Cancelled S9 notifications for Map G1621.
- h. Pole loading calculations for poles in San Jose.
- i. New Construction records for work orders 108871959, 110878726

II. Records Review - Violations

GO 165, Section III-B, Standards for Inspection, states in part:

Each utility subject to this General Order shall conduct inspections of its distribution facilities, as necessary, to ensure reliable, high quality, and safe operation, but in no case may the period between inspections (measured in years) exceed the time specified in Table 1.

Nine underground maps with a total of 401 facilities were inspected late.

GO 165, Section III-C, Record Keeping, states in part:

For all inspections records shall specify the circuit, area, facility or equipment inspected, the inspector, the date of the inspection, and any problems (or items requiring corrective action) identified during each inspection, as well as the scheduled date of corrective action.

GO 128, Rule 17.1, Design, Construction, and Maintenance, states in part:

Electrical supply and communication systems shall be designed, constructed, and maintained for their intended use, regard being given to the conditions under which they are to be operated, to enable the furnishing of safe, proper, and adequate service.

PG&E's records indicated that from February 1, 2011 to February 22, 2016, a total of 775 work orders completed past their scheduled date of corrective action per PG&E's Electric Notification Prioritization Standards.

GO 95, Rule 44.1, Installation and Reconstruction, states in part:

Lines and elements of lines, upon installation or reconstruction, shall provide as a minimum the safety factors specified in Table 4. The design shall consider all supply and communication facilities planned to occupy the structure. For purposes of this rule, the term "planned" applies to the facilities intended to occupy the structure that are actually known to the constructing company at the time of design.

The following poles had pole loading calculations that were inconsistent with what was observed in the field and should be redone:

- 787 S 3rd St
- 1020 S 2nd St
- Rear of 3043 Kilo Ave
- Rear of 1537 Santa Monica Ave
- Rear of 798 Wedgewood Dr
- Rear of 1646 Karl St
- Rear of 1262 Sundown Ln

III. Field Inspection

My staff inspected the following facilities in the City of San Jose:

Structure Number	Type of Structure	Location	Map Number
N/A	Pole	312 Brokaw Rd	G16
72199	Pole	Corner of Brokaw Rd/Coleman Ave	G16
K2201	Pole	1 Pole West Brokaw/Coleman	G16
N/A	Pole	328 Brokaw Rd	G16
3435	Pole	3 Poles West Brokaw/Coleman	G16
N/A	Pole	340 Brokaw Rd	G16
N/A	Pole	457 S Genevieve Ln	G1621
15507	Pole	1753 Shasta Ave	G1624
N/A	Pole	Corner of Martin Ave/Shasta Ave	G1624
120019775	Pole	1775 W San Carlos St	G1624
N/A	Pole	Front of 1725 Martin Ave	G1624
N/A	Pole	Intersection of Martin/Hanchett	G1624
N/A	Pole	Intersection of Martin/Hanchett	G1624
N/A	Pole	Rear of 1748 Hanchett Ave	G1624
N/A	Overhead Service	1297 Bascom Ave	G1612
N/A	Pole	1639 Willowmont Ave	I1701
N/A	Overhead Transformer	1157 Roycott Way	H1712
N/A	Enclosure Lid	4138 Grapeleaf Way	H2009
T-8833	Underground Transformer	2868 Stallion Way	H1902
J4067	Underground Junction Box	2862 Stallion Way	H1902
N/A	Underground Splice Box	1622 Barberry Ln	H1902
N/A	Underground Junction Box	1578 Barberry Ln	H1902
N/A	Underground Junction Box	Behind 1558 Dina Ln	H1902
T-10172	Underground Transformer	1562 Barberry Ln	H1902
N/A	Enclosure Lid	1665 Alum Rock Ave	G1807
N/A	Light Traffic Lid	1663 Alum Rock Ave	G1807
T-67070	Pad-mounted Transformer	1370 Vander Way	E1721
T10559	Pad-mounted Transformer	Rear of 2153 Paragon Dr	F1711
C-2545	Pad-mounted Transformer	1384 Morrill Rd	F1807
SW31756	Underground Fuse	1374 Morrill Rd	F1807
J2733	Underground Junction Box	1372 Morrill Rd	F1807
SW25446	Underground Interrupter	1368 Morrill Rd	F1807
SW25444	Underground Switch	1366 Morrill Rd	F1807
N/A	Pole	787 S 3 rd St	G1724
N/A	Pole	1020 S 2 nd St	G1724
N/A	Pole	Rear of 3043 Kilo Ave	N/A
N/A	Pole	Rear of 1537 Santa Monica Ave	N/A
N/A	Pole	Rear of 798 Wedgewood Dr	N/A
N/A	Pole	Rear of 1646 Karl St	N/A

Structure Number	Type of Structure	Location	Map Number
N/A	Pole	Rear of 1262 Sundown Ln	N/A
N/A	Pole	310 Gordon Ave	F1912
6728	Pole	Across from 301 Gordon Ave	F1912
6725	Pole	Gordon Ave & McKee Rd	F1912
N/A	Pole	Fairway Dr & McKee Rd	F1912
6760	Pole	5318 Fairway Dr	F1912
N/A	Pole	5345 Fairway Dr	F1912
6759	Pole	Fairway Dr & Crest Dr	F1912
N/A	Pole	5410 Fairway Dr	F1912

IV. Field Inspection – Undocumented Violations List

We observed the following violations during our field inspection. None of these violations were documented and/or addressed by PG&E during its last inspection:

GO 95, Rule 91.3-B, Location of Steps, states in part:

The lowest step shall not be less than 8 feet from the ground line, or any easily climbable foreign structure from which one could reach or step.

The pole located 3 poles west of Brokaw Rd and Coleman Ave had a low pole step. The pole step was approximately 7.5 feet from the ground.

GO 95, Rule 51.6-A, High Voltage Marking, states in part:

Poles which support line conductors of more than 750 volts shall be marked with high voltage signs..... Such signs shall be of weather and corrosion—resisting material, solid or with letters cut out therefrom and clearly legible.

Poles at the following locations did not have "High Voltage" signs:

- 340 Brokaw Road
- Corner of Martin Ave and Shasta Ave

GO 95, Rule 54.6-B, Ground Wires, states in part:

That portion of the ground wires attached on the face or back of wood crossarms or on the surface of wood poles and structures shall be covered by a suitable protective covering

Poles at the following locations had exposed ground moulding:

- In front of 1725 Martin Ave
- Intersection of Martin Ave and Hanchett Ave

GO 95, Rule 56.7-B, Anchor Guys, states in part:

In order to prevent trees, buildings, messengers, metal—sheathed cables or other similar objects from grounding portions of guys above guy insulators, it is suggested that anchor guys be sectionalized, where practicable, near the highest level permitted by this Rule.

The pole located at the corner of Martin Ave and Shasta Ave had vegetation in contact with the secondary down guy above the insulator.

GO 128, Rule 32.7, Covers, states in part:

Manholes, handholes, and subsurface equipment enclosures while not being worked in, shall be securely closed by covers of sufficient strength to sustain such loads as may reasonably be imposed upon them and arrangements shall be such that a 1;001 or appliance shall be required for their opening and cover removal.

The subsurface enclosure lid at 1663 Alum Rock Ave only had a bolt in one of its six holes and was not securely closed.

V. Field Inspection – Documented Violations List

We observed the following violations during our field inspection. These violations were documented and/or addressed by PG&E during its last inspection:

GO 128, Rule 17.1, Design, Construction, and Maintenance, states in part:

Electrical supply and communication systems shall be designed, constructed, and maintained for their intended use, regard being given to the conditions under which they are to be operated, to enable the furnishing of safe, proper, and adequate service.

Transformer T-10559 located at the rear of 2153 Paragon Drive was missing a barrier post.