

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298



July 18, 2011

Varoojan Avedian, P.E.
Electrical Engineer II
Glendale Water & Power
141 N. Glendale Avenue, Level 4
Glendale, CA 91206

SUBJECT: Electric Audit of Glendale Water & Power (GWP)

Dear Mr. Avedian:

On behalf of the Utilities Safety and Reliability Branch of the California Public Utilities Commission, I conducted an Electric Audit of Glendale Water & Power on June 13 – 17, 2011. The audit included a review of GWP's records and field inspections of GWP's facilities.

During the audit, I found that GWP did not document all General Orders (GO) 95 and 128 violations at the time of its inspections. In addition, GWP's work order priority system did not assign completion dates as required by GO 165. A copy of the audit summary itemizing the violations is enclosed.

Please advise me no later than August 19, 2011, by electronic or hard copy, of all corrective measures taken by GWP to remedy and prevent such violations.

If you have any questions, you can contact me at (213) 576-6850.

Sincerely,

A handwritten signature in black ink that reads "Derek Fong".

Derek Fong
Utilities Engineer
Utilities Safety and Reliability Branch
Consumer Protection and Safety Division

Enclosure: Audit Summary

AUDIT SUMMARY

**Company: Glendale Water & Power
Electric Audit
Date: June 13 – 17, 2011**

The following violations were observed:

1. **GO 95, Rule 38: Minimum Clearances of Wires from other Wires**
Table 2, Case 8, Column D requires that the minimum vertical separation between "communication conductors and service drops" and "0 – 750V" supply conductors be at least 48 inches. [EXCEPTION: May be reduced to 36 inches vertically at midspan only when the supply conductors consist of abrasion resistant cable with a grounded metallic sheath or neutral-supported cable.]

Pole 11809A – a supply service and a communications conductor had less than a 3 foot clearance at midspan.
2. **GO 95, Rule 51.6A: High Voltage Marking**
"Poles which support line conductors of more than 750 volts shall be marked with high voltage signs. This marking shall consist of a single sign showing the words "HIGH VOLTAGE", or pair of signs showing the words "HIGH" and "VOLTAGE", not more than six inches in height with letters not less than 3 inches in height. Such signs shall be of weather and corrosion-resisting material, solid or with letters cut out therefrom and clearly legible".

The following poles had a damaged "voltage" sign:

- 1) Pole 18422A
- 2) Pole 31345A
- 3) Pole 32227A
- 4) Pole 32527A
- 5) Pole 32528A
- 6) Pole 32530A
- 7) Pole 31765A

The following poles had a missing "high voltage" sign:

- 1) Pole 27832A had a missing "high voltage" sign.
- 2) Pole 25743A had a missing "high voltage" sign.

3. GO 95, Rule 54.7: Climbing and Working Space

"Climbing space shall be maintained from the ground level. Climbing space, measured from the center line of pole, shall be provided on one side or in one quadrant of all poles or structures ..."

- 1) Pole 32814A had an unknown cable in the climbing space.
- 2) Pole at 1731 Glenwood Rd had a Charter box in the climbing space.
- 3) Pole across from 1845 Mountain St had vegetation and a communications cable in the climbing space.

The following poles had a communications cable in the climbing space:

- 1) Pole 18170A
- 2) Pole 18657A
- 3) Pole 19619A
- 4) Pole 32154A
- 5) First pole south of Cumberland Rd, on Grandview Ave.

4. GO 95, Rule 31.1: Design, Construction and Maintenance

"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".

Pole 18421A had a bent pole step.

The following poles, which no longer support GWP facilities, have been abandoned for several years and should be removed:

- 1) Pole 33755A
- 2) Pole 18658A
- 3) Pole 33897A
- 4) Pole 33017A

5. GO 95, Rule 35: Tree Trimming

"Where overhead wires pass through trees, safety and reliability of service demand that tree trimming be done in order that the wires may clear branches and foliage by a reasonable distance..."

Pole 33920A had a supply service drop strained by a tree.

6. GO 95, Rule 54.6B: Ground Wires

"... That portion of the ground wire attached to the face or back of wood crossarms or on the surface of wood poles and structures shall be covered by a suitable protective covering (see Rule 22.8)."

Pole 32151A had an exposed ground wire.

7. GO 128, Rule 17.1: Design, Construction and Maintenance

"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."

The SF6 switch inside Vault 1949 did not have adequate pressure.

8. GO 165, Section IV – Standards for Inspection, Record-keeping, and Reporting, states:

"For all inspections, within a reasonable period, company records shall specify the circuit, area, or equipment inspected, the name of the inspector, the date of the inspection, and any problems identified during each inspection, as well as the scheduled date of corrective action."

During the audit, I identified twenty-seven GO 95 violations that were not documented by GWP during its own inspections.

9. GO 165, Section IV – Standards for Inspection, Record-keeping, and Reporting, states:

"For patrol inspections ... all required facilities will be covered during the year."

GWP did not patrol all of its facilities as required by this rule.

10. GO 95, Rule 18: Reporting and Resolution of Safety Hazards Discovered by Utilities

"Prior to the work being completed, the company shall document the current status of the safety hazard, including whether the safety hazard is located in an Extreme and Very High Fire Threat Zone in Southern California, and shall include a scheduled date of corrective action."

GWP work orders did not indicate a scheduled date of corrective action.