

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298



February 2, 2024

SA2023-1099

Daniel Scorza, P.E.
Chief Assistant General Manager
Glendale Water & Power
141 N. Glendale Avenue Ste. 450
Glendale, CA 91206

SUBJECT: Substation Audit of Glendale Water & Power

Mr. Scorza:

On behalf of the Electric Safety and Reliability Branch (ESRB) of the California Public Utilities Commission (CPUC), James Miller and Sultan Tipu of my staff conducted a substation audit of Glendale Water & Power (GWP) October 30, 2023 to November 3, 2023. The audit included a review of GWP's records and field inspections of GWP'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 March 4, 2024, by electronic or hard copy, of all corrective measures taken by GWP to remedy and prevent such violations.

Please note that ESRB will be posting the audit report and your response to our audit on the CPUC website. If there is any information in your response that you would like us to consider as confidential, we request that in addition to your confidential response, you also provide us with a public or redacted version of your response that can be posted publicly on our website.

If you have any questions concerning this audit, please contact James Miller at (213) 660-8898 or James.Miller@cpuc.ca.gov.

Sincerely,

A handwritten signature in blue ink that reads "Fadi Daye".

Fadi Daye, P.E.
Program and Project Supervisor
Electric Safety and Reliability Branch
Safety and Enforcement Division
California Public Utilities Commission

Enclosures: CPUC Audit Findings

Cc: Lee Palmer, Director, Safety and Enforcement Division, CPUC
Nika Kjensli, Program Manager, Electric Safety and Reliability Branch, CPUC
Majed Ibrahim, Senior Utilities Engineer, ESRB, SED, CPUC
James Miller, Utilities Engineer, ESRB, SED, CPUC
Sultan Tipu, Utilities Engineer, ESRB, SED, CPUC

AUDIT FINDINGS

I. Records Review

During the audit, my staff reviewed the following records and documents:

- Current Substation Inspection Procedures
- Current Substation Equipment Testing Procedures
- Substation Inspection Records
- Oil Sample Testing Results
- Infrared Inspection Records
- Recent Open and Completed Work Orders Generated from Inspections

II. Field Inspections

My staff inspected the following substations during the field inspections:

No.	Substation Name	City
1	Kellog	Glendale
2	Grandview	Glendale
3	Western	Glendale
4	Bel-Air	Glendale
5	Fremont	Glendale
6	Rossmoyne	Glendale
7	Acacia	Glendale
8	Tropico	Glendale
9	Colombus	Glendale
10	Howard	Glendale
11	Montrose	Glendale
12	Glorietta	Glendale
13	Scholl	Glendale

III. Field Inspections – Violations List

My staff observed the following violations during the field inspection:

GO 174, Rule 12, General, states in part:

Substations shall be designed, constructed, and maintained for their intended use, regard being given to the conditions under which they are to be operated, to promote the safety of workers and the public and enable adequacy of service.

Design, construction, and maintenance should be performed in accordance with accepted good practices for the given local conditions known at the time by those responsible.

Facilities at the following substations were not maintained for their intended use:

Grandview Substation

1. The No. 2 69/12 kV transformer was leaking oil from its southeast corner.
2. The No. 1 69/12 kV transformer was leaking oil from a valve on its north side.

Western Substation

3. The No. 2 34.5/12 kV transformer had a small oil leak near its moisture excluder.
4. The Bus C-Phase potential transformer was leaking oil.

Fremont Substation

5. One of the two ventilation fans in the battery room was not operational.
6. Extensive corrosion was present on the radiators of transformers No. 4, 6, 7, and 8, and transformers No. 4, 6, and 8 also presented with corrosion around their bases.

Rossmoyne Substation

7. The No. 4 34.5/4 kV transformer had an oil leak between its main body and load tap changer (LTC).
8. The nitrogen blanket pressure gauges on the No. 2 and No. 4 34.5/4 kV transformers displayed a reading of less than 0 PSIG.
9. The Rack Tie South Bus C-phase circuit breaker was leaking oil.

Acacia Substation

10. The nitrogen blanket pressure gauges on transformers No. 4, 5, 6, and 7 all displayed a reading of less than 0 PSIG.
11. Transformer No. 4 was leaking oil.

Tropico Substation

1. The nitrogen blanket pressure gauges on Bank Transformer No 1 and transformers No. 7 and 8 all displayed a reading of less than 0 PSIG.
2. Corrosion was observed on the radiator transformer No. 7.
3. Bank Transformer No. 1 was leaking oil from its oil pump gasket.

Colombus Substation

4. Part of the plastic shielding was missing from the battery rack.
5. Corrosion was observed on the anode of battery No. 29.
6. The nitrogen blanket pressure gauges on transformers No. 1 and 4 displayed a reading of less than 0 PSIG.
7. Transformer No. 4 was leaking oil from its bus neck.
8. Oil was observed leaking into the control cabinets of the substation's three circuit breakers.

Howard Substation

9. Voltage regulator No. 17 was leaking oil.
10. Corrosion was observed on the anode of battery No. 60.
11. The nitrogen blanket pressure gauges on the A, B, and C-phase transformers all displayed a reading of less than 0 PSIG.
12. The substation's spare 34.5/4 kV transformer was leaking oil.
13. The Bank No. 1 A, B, and C-phase transformers were all leaking oil.

Montrose Substation

14. Transformer No. 1 had a small oil leak on its radiator.
15. The B-phase potential transformer for the Bank No. 2 Tie transformer was leaking oil.

Scholl Substation

16. Transformers No. 3 and 4 were leaking oil.