

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298



October 26, 2022

EA2022-978

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

Subject: Electric Distribution 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 of my staff conducted an electric distribution audit of Glendale Water & Power's (Glendale) electric distribution facilities from July 25, 2022 to July 29, 2022. The audit included a review of Glendale's inspection and maintenance records and a field inspection of Glendale'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 November 28, 2022, by electronic or hard copy, of all corrective measures taken by Glendale to remedy and prevent such violations.

If you have any questions concerning this audit, you can contact James Miller at (213) 660-8898 or James.Miller@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: Lee Palmer, Director, Safety and Enforcement Division, CPUC
Nika Kjensli, Program Manager, ESRB, SED, CPUC
Majed Ibrahim, Senior Utilities Engineer, ESRB, SED, CPUC
James Miller, Utilities Engineer, ESRB, SED, CPUC

Audit Findings

I. Records Review

During the audit, my staff reviewed the following records:

- Overhead and underground inspection records
- Completed and pending corrective action work orders
- Pole load calculations
- Safety hazard notifications
- Switch and Transformer testing records

II. Field Inspection

My staff inspected the following facilities during the field portion of the audit:

No.	Facility Identification	Facility Type	Location
1	23111A	Pole	Glendale
2	23112A	Pole	Glendale
3	23113A	Pole	Glendale
4	23114A	Pole	Glendale
5	34919A	Pole	Glendale
6	24829A	Pole	Glendale
7	23117A	Pole	Glendale
8	25577A	Pole	Glendale
9	23119A	Pole	Glendale
10	34036A	Pole	Glendale
11	23121A	Pole	Glendale
12	30024A	Pole	Glendale
13	34103A	Pole	Glendale
14	23917A	Pole	Glendale
15	34102A	Pole	Glendale
16	30900A	Pole	Glendale
17	23125A	Pole	Glendale
18	34109A	Pole	Glendale
19	34104A	Pole	Glendale
20	31233A	Pole	Glendale
21	24956A	Pole	Glendale
22	23130A	Pole	Glendale
23	23131A	Pole	Glendale
24	34063A	Pole	Glendale
25	23877A	Pole	Glendale
26	18271A	Pole	Glendale
27	25838A	Pole	Glendale
28	25837A	Pole	Glendale
29	34113A	Pole	Glendale
30	25835A	Pole	Glendale
31	24980A	Pole	Glendale
32	24979A	Pole	Glendale
33	24978A	Pole	Glendale
34	24977A	Pole	Glendale
35	24926A	Pole	Glendale
36	24975A	Pole	Glendale
37	24973A	Pole	Glendale

38	28349A	Pole	Glendale
39	26071A	Pole	Glendale
40	26099A	Pole	Glendale
41	31012A	Pole	Glendale
42	34136A	Pole	Glendale
43	30707A	Pole	Glendale
44	35146A	Pole	Glendale
45	34865A	Pole	Glendale
46	35048A	Pole	Glendale
47	35001A	Pole	Glendale
48	34865A	Pole	Glendale
49	34156A	Pole	Glorietta
50	34155A	Pole	Glorietta
51	17840A	Pole	Glorietta
52	34695A	Pole	Glorietta
53	34224A	Pole	Glorietta
54	34529A	Pole	Glorietta
55	29792A	Pole	Glorietta
56	29793A	Pole	Glorietta
57	29794A	Pole	Glorietta
58	29795A	Pole	Glorietta
59	29796A	Pole	Glorietta
60	29797A	Pole	Glorietta
61	11534A	Pole	Glorietta
62	18244A	Pole	Glorietta
63	6950A	Pole	Glorietta
64	33680A	Pole	Glorietta
65	31594A	Pole	Glorietta
66	31595A	Pole	Glorietta
67	31596A	Pole	Glorietta
68	31597A	Pole	Glorietta
69	31598A	Pole	Glorietta
70	31599A	Pole	Glorietta
71	31600A	Pole	Glorietta
72	26572A	Pole	Glorietta
73	27687A	Pole	Glorietta
74	18422A	Pole	Kenneth Village
75	18421A	Pole	Kenneth Village
76	28607A	Pole	Kenneth Village
77	28606A	Pole	Kenneth Village
78	23220A	Pole	Kenneth Village
79	33787A	Pole	Kenneth Village
80	25436A	Pole	Riverside Rancho

81	29178A	Pole	Riverside Rancho
82	27116A	Pole	Riverside Rancho
83	27115A	Pole	Riverside Rancho
84	38110A	Pole	Riverside Rancho
85	27114A	Pole	Riverside Rancho
86	27113A	Pole	Riverside Rancho
87	30694A	Pole	Riverside Rancho
88	26088A	Pole	Riverside Rancho
89	26087A	Pole	Riverside Rancho
90	26086A	Pole	Riverside Rancho
91	27112A	Pole	Riverside Rancho
92	33420A	Pole	Riverside Rancho
93	27111A	Pole	Riverside Rancho
94	27110A	Pole	Riverside Rancho
95	27109A	Pole	Riverside Rancho
96	28903A	Pole	Sparr Heights
97	28904A	Pole	Sparr Heights
98	28905A	Pole	Sparr Heights
99	34374A	Pole	Sparr Heights
100	28906A	Pole	Sparr Heights
101	28907A	Pole	Sparr Heights
102	28908A	Pole	Sparr Heights
103	25762A	Pole	Sparr Heights
104	25764A	Pole	Sparr Heights
105	33598A	Pole	Sparr Heights
106	32715A	Pole	Sparr Heights
107	14340A	Pole	Verdugo Woodlands
108	14341A	Pole	Verdugo Woodlands
109	14342A	Pole	Verdugo Woodlands
110	14343A	Pole	Verdugo Woodlands
111	14344A	Pole	Verdugo Woodlands
112	14345A	Pole	Verdugo Woodlands
113	14346A	Pole	Verdugo Woodlands
114	14347A	Pole	Verdugo Woodlands
115	14348A	Pole	Verdugo Woodlands
116	30631A	Pole	Verdugo Woodlands
117	33836A	Pole	Verdugo Woodlands
118	14351A	Pole	Verdugo Woodlands
119	14352A	Pole	Verdugo Woodlands
120	14353A	Pole	Verdugo Woodlands
121	32776A	Pole	Verdugo Woodlands
122	14355A	Pole	Verdugo Woodlands
123	33219A	Pole	Verdugo Woodlands

124	33220A	Pole	Verdugo Woodlands
125	33221A	Pole	Verdugo Woodlands
126	33222A	Pole	Verdugo Woodlands
127	10988	Padmounted Transformer	South Glendale
128	1864	Vault w/ Transformers	South Glendale
129	1988	Vault w/ Transformers & Switch	South Glendale
130	257	Padmounted Transformer	South Glendale
131	1397	Vault w/ Transformers & Switch	South Glendale
132	1531	Primary Box	South Glendale
133	203	Padmounted Transformer	South Glendale
134	2238	Vault w/ Transformers	South Glendale
135	2270	Primary Box	South Glendale
136	1160	Vault w/ Transformers	South Glendale
137	1591	Primary Box	South Glendale
138	1129	Vault w/ Transformers & Switch	South Glendale
139	185	Padmounted Transformer	South Glendale
140	238	Padmounted Transformer	South Glendale
141	236	Padmounted Transformer	South Glendale
142	235	Padmounted Transformer	South Glendale
143	295	Padmounted Transformer	South Glendale
144	2289	Primary Box	South Glendale
145	1348	Vault w/ Transformers & Junctions	Rancho San Rafael
146	1347	Vault w/ Transformers & Junctions	Rancho San Rafael
147	1346	Vault w/ Transformers & Junctions	Rancho San Rafael
148	1345	Vault w/ Transformers & Junctions	Rancho San Rafael
149	449	Vault w/ Junctions	Royal Canyon
150	450	Vault w/ Transformers & Switch	Royal Canyon
151	2001	Vault w/ Transformers & Switches	Royal Canyon

III. Field Inspection – Violations List

GO 95, Rule 31.1, 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.

- Transformers on Pole No. 28907A and Pole No. 25764A had significant corrosion on their housings.

Visibility strips on each of the following poles were damaged:

- 34695A
- 38110A
- 27114A
- 30694A
- 28606A
- 24973A

GO 95, Rule 38, Minimum Clearances of Wires from other Wires, Table 2, Case 8, Column D requires the vertical separation between secondary and communications conductors supported on the same pole to be not less than 48 inches.

- A Glendale triplex cable and a communications service drop attached to Pole No. 29793A, were in contact.

GO 95, Rule 56.2 Overhead Guys, Anchor Guys and Span Wires, Use, states in part:

Guys shall be attached to structures, as nearly as practicable, at the center of load. They shall be maintained taut and of such strength as to meet the safety factors of Rule 44 .

- A down guy wire on Pole No. 27113A was not taut.

General Order 95, Rule 38, Minimum Clearances of Wires from Other Wires, Table 2, Column C, Case 19 requires the minimum radial clearance between guys and span wires passing communication conductors supported on the same poles to be three inches.

A Glendale down guy wire and a communications conductor attached to Pole No. 29796A, were in contact.

GO 95, Rule 34, Foreign Attachments, 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.

Unauthorized foreign attachments were observed on the following poles:

- Pole No. 34695A had an unauthorized “Johnny Nalbanian for Congress” sign attached to it.
- Pole No. 29792A had an unauthorized “Missing Dog” sign attached to it.
- Pole No. 23113A had an unauthorized “Exit Only” sign attached to it.
- Pole No. 25835A had an unauthorized “We Buy Cars” sign attached to it.
- Pole No. 27116A had an unauthorized faded and unreadable sign attached to it.
- Pole No. 28908AA had an unauthorized “Shawerma Kingdom” sign attached to it.

GO 95, Rule 51.6, Marking and Guarding, High Voltage Marking of Poles, states in part:

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 (6) inches in height with letters not less than 3 inches in height. A pair of signs may be stacked to a height of no more than 12 inches. Such signs shall be of weather and corrosion–resisting material, solid or with letters cut out therefrom and clearly legible.

The “High Voltage” signs or bands on each of the following poles were missing or damaged:

- | | | |
|----------|----------|----------|
| • 27687A | • 25436A | • 28607A |
| • 14342A | • 29178A | • 28606A |
| • 14343A | • 27116A | • 23220A |
| • 14346A | • 27114A | • 28903A |
| • 14347A | • 26088A | • 28904A |
| • 14348A | • 26087A | • 28906A |
| • 14353A | • 33420A | • 28907A |
| • 14355A | • 27111A | • 28908A |
| • 33219A | • 27110A | • 25762A |
| • 33220A | • 18422A | • 33598A |
| • 23877A | • 18421A | • 32715A |

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

The lowest step shall be not less than 8 feet from the ground line, or any easily climbable foreign structure from which one could reach or step. Above this point steps shall be placed, with spacing between steps on the same side of the pole not exceeding 36 inches, at least to that conductor level above which only circuits operated and maintained by one party remain. Steps or fixtures for temporary steps shall be installed as part of a pole restoration process. Steps shall be so placed that runs or risers do not interfere with the free use of the steps.

The lowest pole step on the following poles was located at a height of less than eight feet:

- 29795A
- 6950A
- 31596A
- 14342A
- 14353A
- 34919A
- 24977A
- 24973A
- 26071A
- 28908A

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 (see Rule 22.8).

The ground moulding attached to each the following poles was damaged:

- 29795A
- 32776A
- 28907A
- 32715A

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

For all particulars not specified in these rules, design, construction, and maintenance should be done in accordance with accepted good practice for the given local conditions known at the time by those responsible for the design, construction, or maintenance of [the] communication or supply lines and equipment.

- The outer enclosure of Padmounted Transformer No. 203 was full of debris obstructing the doors to the transformer.

The brackets supporting the junction bars in the following vaults were corroded to the extent that the junction bars had fallen off of the vaults' walls:

- V1348
- V1346
- V1347