STATE OF CALIFORNIA GAVIN C. NEWSOM, *Governor*

PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

August 12, 2022 EA2022-1010

Mr. Jason Grace
Electric Operations Manager Supervisor
Roseville Electric Utility
2070 Hilltop Cir.
Roseville, CA 95747

SUBJECT: Electric Distribution Audit of Roseville Electric Utility (REU)

Dear Mr. Grace:

On behalf of the Electric Safety and Reliability Branch (ESRB) of the California Public Utilities Commission (CPUC), Brandon Vazquez and Emiliano Solorio of ESRB staff conducted an electric distribution audit of REU from June 13, 2022 through June 16, 2022. During the audit, ESRB staff conducted field inspections of REU's distribution facilities and equipment and reviewed pertinent documents and records.

As a result of the audit, ESRB staff identified violations of one or more General Orders (GOs). A copy of the audit findings itemizing the violations is enclosed. Please provide a response no later than September 9, 2022, by electronic copy of all corrective actions and preventive measures taken by REU to correct the identified violations and prevent the recurrence of such violations. The response should indicate the date each remedial action and preventive measure was completed. For any outstanding items not addressed, please provide the projected completion dates of all corrective actions for the violations outlined in Section III of the enclosed Audit Report. Please also provide records of the third-party notifications for the field observations listed in Section IV of the enclosed Audit Report.

If you have any questions concerning this audit, please contact Brandon Vazquez at (415) 703-1076 or brandon.vazquez@cpuc.ca.gov.

Sincerely,

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

Enclosure: CPUC Electric Distribution Audit Report for REU

Cc: Lee Palmer, Director, Safety and Enforcement Division, CPUC

Nika Kjensli, Program Manager, ESRB, SED, CPUC
Nathan Sarina, Senior Utilities Engineer (Supervisor), ESRB, SED, CPUC
Rickey Tse, Senior Utilities Engineer (Supervisor), ESRB, SED, CPUC
Brandon Vazquez, Utilities Engineer, ESRB, SED, CPUC
Emiliano Solorio, Utilities Engineer, ESRB, SED, CPUC

ROSEVILLE ELECTRIC UTILITY (REU)
ELECTRIC DISTRIBUTION AUDIT FINDINGS
June 13-16, 2022

I. Records Review

During the audit, ESRB staff reviewed the following records:

- REU's inspection and maintenance procedures.
- Overhead and underground facilities statistics.
- Completed work orders with notifications from the past 12 months, canceled work orders with notifications from the past 12 months, and open work orders from the past 60 months.
- Patrol and detailed inspection records from the past 60 months.
- Reliability metrics and sustained outages for the past 60 months.
- Service area map.
- New Construction projects (both overhead and underground) in the past 12 months.
- Pole loading and safety factor calculations completed in the last 12 months.
- Third Party Safety Hazard notifications sent and received for the past 60 months.
- Inspector list for the past 60 months and inspector qualifications.
- Equipment test records for the past 36 months.
- Intrusive inspection records for the past 36 months.

II. Field Inspection

During the field inspection, ESRB staff inspected the following facilities in Roseville:

Location #	Structure #	Structure Type	Structure Location/Address
1	LF12-0050	Switch	2050 Hilltop Cir
2	PP-2301	Pole	Saugstad Park Bike Trail
3	PP-2489	Pole	816 Vine Ave
4	PP-2487	Pole	812 Vine Ave
5	T-1208	Padmount Transformer	1019 Azure Ct
6	T-1083	Padmount Transformer	1018 Azure Ct
7	PP-4284	Pole	Rear of 131 Riverside Ave
8	PP-4285	Pole	135 Riverside Ave
9	PP-4286	Pole	135 Riverside Ave
10	SP-0807	Secondary Pole	Rear of 1808 Queens Ct
11	PP-6210	60/12 kV Pole	Northeast corner of N Sunrise Ave and Eureka Rd
12	JB-199	Junction Box	375 N Sunrise Ave
13	T-3809	Padmount Transformer	375 N Sunrise Ave
14	PP-6313	60/12 kV Pole	Rear of 324 N Sunrise Ave
15	DF19-0530	Switch	3210 Baseline Rd
16	PP-2066	Pole	515 Main St
17	PP-4491	Pole	518 Lawton Ave
18	SP-0106	Secondary Pole	512 Lawton Ave
19	PP-4492	Pole	403 Los Vegas Ave
20	SP-0105	Secondary Pole	514 Elefa St
21	PP-4480	Pole	901 Lawton Ave
22	PP-1335	Pole	905 Lawton Ave
23	PP-1336	Pole	909 Lawton Ave
24	PP-1547	Pole	324 Coronado Ave
25	PP-1548	Pole	320 Coronado Ave
26	PP-1549	Pole	312A Coronado Ave
27	PP-1564	Pole	300 Tahoe Ave
28	PP-4583	Pole	105 Yosemite Ave
29	PP-1552	Pole	228 Coronado Ave
30	PP-4582	Pole	105 Yosemite Ave
31	PP-1731	Pole	513 Alola St
32	PP-1730	Pole	519 Alola St
33	PP-4161	Pole	Southwest of Atlantic St and Vernon St

34	PP-4160	Pole	Atlantic St and Jefferson St
35	PP-2462	Pole	Rear of 105 Vernon St
36	PP-2463	Pole	111 Vernon St
37	PP-1329	Pole	Corporation Yard Rd
38	PP-1328	Pole	Corporation Yard Rd
39	SP-0029	Secondary Pole	951 Porter Dr
40	T-5739	Padmount Transformer	1910 Taylor Rd
41	PP-1214	60/12 kV Pole (PG&E owned)	2018 Taylor Rd
42	T-6516	Padmount Transformer	1400 E Roseville Pkwy
43	SP-0145	Secondary Pole	918 Pullen St
44	PP-1484	Pole	Rear of 249 Alta Vista Ave
45	T-3075	Padmount Transformer	2300 Quail Ridge W Ln
46	DF21-134	Switch	501 Dereck Pl
47	PP-6708	Pole	51 Hancock Dr
48	T-3843	Padmount Transformer	1309 Kingswood Dr
49	JB-270	Junction Box	1451 Kingswood Dr
50	T-4420	Padmount Transformer	1306 Furhman Way
51	T-3301	Padmount Transformer	1426 Deerfield Cir
52	T-8546	Padmount Transformer	5105 Chico Dr
53	T-9225	Padmount Transformer	Wadsworth Dr
54	DF9B-1292	Switch	Holt Pkwy
55	DF9B-1303	Switch	Earl Rush Dr
56	DF11B-1302	Switch	Earl Rush Dr
57	T-9179	Padmount Transformer	Orange Tip Way
58	T-0856	Padmount Transformer	7-Eleven at Cirby Way and Sunrise Ave
59	JB-800	Junction Box	Rear of 199 S Harding Blvd
60	T-1676	Padmount Transformer	Rear of 199 S Harding Blvd
61	PP-4888	Pole	416 Los Vegas Ave
62	SP-0092	Secondary Pole	422 Lawton Ave
63	PP-4493	Pole	422 Lawton Ave
64	PP-2883	Pole	518 Circuit Dr
65	SP-0264	Secondary Pole	602 Circuit Dr
66	SP-0930	Secondary Pole	300 W Duranta St
67	PP-2047	Pole	710 Circuit Dr
68	PP-4119	Pole	Linda Dr and Folsom Rd

69	PP-2632	Pole	Linda Dr
70	PP-2630	Pole	129 Linda Dr
71	PP-2527	Pole	107 Kings Rd
72	PP-2525	Pole	119 Kings Rd
73	PP-2526	Pole	121 Kings Rd
74	PP-2344	Pole	400 Marietti Way
75	PP-2343	Pole	404 Marietti Way
76	PP-1831	Pole	404 Marietti Way
77	PP-2361	Pole	700 Maple Dr
78	PP-4806	Pole	7851 Foothills Blvd
79	PP-6770	60/12 kV Pole	7851 Foothills Blvd
80	PP-6769	60/12 kV Pole	7851 Foothills Blvd

III. Field Inspection Violations

ESRB staff observed the following violations during the field inspection:

1. **General Order (GO) 95, Rule 54.6-E2, Risers, Covered from 8 Feet Above the Ground Level and Above** states in part:

   "All risers from underground cables or other conductors which pass through an unrelated conductor or cable level shall be covered or encased by material as described in Rule 54.6–E1 or by a suitable protective covering as described in Rule 22.8."

   The top riser section on the pole at the rear of 131 Riverside Ave (Location 7) slipped out of the coupling.

2. **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."

   2.1. A creek is approaching the pole at the rear of 1808 Queens Ct (Location 10) is due to erosion.
   2.2. The pole at the northeast corner of N Sunrise Ave and Eureka Rd (Location 11) needs to be replaced due to a failed intrusive test.
   2.3. The pole at the rear of 324 N Sunrise Ave (Location 14) needs to be replaced due to a failed intrusive test.
   2.4. The pole at 518 Lawton Ave (Location 17) needs to be replaced due to a failed intrusive test.
   2.5. The pole at 514 Elefa St (Location 20) needs to be replaced due to a failed intrusive test.
   2.6. The pole at 324 Coronado Ave (Location 24) needs to be replaced due to a failed intrusive test.
   2.7. The pole at 513 Alola St (Location 31) needs to be replaced due to a failed intrusive test.
   2.8. The pole at Corporation Yard Rd (Location 37) needs to be replaced due to a failed intrusive test.
   2.9. The pole at 951 Porter Dr (Location 39) needs to be replaced due to a failed intrusive test.
   2.10. The pole at the rear of 249 Alta Vista Ave (Location 44) needs to be replaced due to a failed intrusive test.
   2.11. The pole at 51 Hancock Dr (Location 47) needs to be replaced due to a failed intrusive test.

3. **GO 95, Rule 54.6-B, Vertical and Lateral Conductors, Ground Wires** states in part:

"That portion of the ground wire 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)."

3.1. The pole at 515 Main St (Location 16) has an exposed ground wire and loose ground molding.
3.2. The pole at 909 Lawton Ave (Location 23) has an exposed ground wire.
3.3. The pole at 300 Tahoe Ave (Location 27) has an exposed ground wire.
3.4. The pole at 519 Alola St (Location 32) has an exposed ground wire and loose ground molding.
3.5. The pole at Atlantic St and Jefferson St (Location 34) has an exposed ground wire and damaged ground molding.
3.6. The pole at 422 Lawton Ave (Location 63) has an exposed ground wire and damaged ground molding.

4. **GO 95, Rule 35, Vegetation Management** states in part:

"When a supply or communication company has actual knowledge, obtained either through normal operating practices or notification to the company, that dead, rotten or diseased trees or dead, rotten or diseased portions of otherwise healthy trees overhang or lean toward and may fall into a span of supply or communication lines, said trees or portions thereof should be removed.

Communication and electric supply circuits, energized at 750 volts or less, including their service drops, should be kept clear of vegetation in new construction and when circuits are reconstructed or repaired, whenever practicable. When a supply or communication company has actual knowledge, obtained either through normal operating practices or notification to the company, that its circuit energized at 750 volts or less shows strain or evidences abrasion from vegetation contact, the condition shall be corrected by reducing conductor tension, rearranging or replacing the conductor, pruning the vegetation, or placing mechanical protection on the conductor(s)."

4.1. A tree is growing into the pole at 514 Elefa St (Location 20) and causing strain to the service line.
4.2. Vegetation is growing up the pole at 228 Coronado Ave (Location 29).

5. **GO 95, Rule 54.8-D1, From Non-climbable Street Lighting or Traffic Signal Poles or Standards** states:

"Supply service drops of 0-750 volts passing (unattached) nonclimbable street lighting and traffic signal poles or standards including mastarms, brackets and lighting fixtures, shall clear a radial distance of 12 inches as specified in Table 1, Case 10, Column B, except when the drops are mechanically protected from abrasion by materials specified in Rule 22.8. Such mechanical protection shall extend not less

than 15 inches in each direction along the drop from centerline of pole, standard, attaching mastarm or fixture, whether passing above, below or alongside. The drops shall be installed in such a manner so as not to interfere with light distribution from lighting fixtures and shall not hamper workmen when changing lamps or maintaining equipment.

The service line at 519 Alola St (Location 32) is in contact with a streetlight.

6. **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. 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. Such signs shall be of weather and corrosion–resisting material, solid or with letters cut out therefrom and clearly legible."

6.1. The pole southwest of Atlantic St and Vernon St (Location 33) is missing high voltage signs.
6.2. The pole at the rear of 105 Vernon St (Location 35) has a loose voltage sign.
6.3. The pole at 422 Lawton Ave (Location 63) has a damaged/partially missing voltage sign.

7. **GO 95, Rule 56.6-A, Guys in Proximity to Supply Conductors of Less than 35,500 Volts** states in part:

"All portions of guys within both a vertical distance of 8 feet from the level of supply conductors of less than 35,500 volts and a radial distance of 6 feet from the surface of wood poles or structures shall not be grounded, through anchors or otherwise. Where necessary to avoid the grounding of such portions, guys shall be sectionalized by means of insulators installed at locations as specified in Rule 56.7."

The pole at 2018 Taylor Rd (Location 41) has vegetation contact above the anchor guy insulator which is providing a path to ground.

8. **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.

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."

8.1. The padmount transformer at 2300 Quail Ridge W Ln (Location 45) has an oil leak at a valve and rust damage on its enclosure.
8.2. One of the bolts for the lid of the junction box at 1451 Kingswood Dr (Location 49) is broken.

9. GO 95, Rule 56.9, Guy Marker (Guy Guard) states:

"A substantial marker of suitable material, including but not limited to metal or plastic, not less than 8 feet in length, shall be securely attached to all anchor guys. Where more than one guy is attached to an anchor rod, only the outermost guy is required to have a marker."

The pole at 404 Marietti Way (Location 76) does not have an anchor guy marker.

IV. Observations

ESRB staff observed the following third-party potential safety concerns during the field inspection:

GO 95, Rule 18, Reporting and Resolution of Safety Hazards Discovered by Utilities states in part:

"For purposes of this rule, "Safety Hazard" means a condition that poses a significant threat to human life or property…"

GO 95, Rule 18A, Resolution of Potential Violations of General Order 95 and Safety Hazards states in part:

"(3) If a company, while performing inspections of its facilities, discovers a Safety Hazard(s) on or near a communications facility or electric facility involving another company, the inspecting company shall notify the other entity of such Safety Hazard(s) no later than ten (10) business days after the discovery.

(4) To the extent a company that has a notification requirement under (2) or (3) above cannot determine the facility owner/operator, it shall contact the pole owner(s) within ten (10) business days if the subject of the notification is a Safety Hazard, or otherwise within a reasonable amount of time not to exceed 180 days after discovery. The notified pole owner(s) shall be responsible for promptly (normally not to exceed five business days) notifying the company owning/operating the facility if the subject of the notification is a Safety Hazard, or otherwise within a reasonable amount of time not to exceed 180 days, after being notified of the potential violation of GO95.

Note: Each pole owner must be able to determine all other pole owners on poles it owns. Each pole owner must be able to determine all authorized entities that attach equipment on its portion of a pole."

1. A communication ground wire on the pole at 135 Riverside Ave (Location 8) is exposed.
2. There is an abandoned communication line hanging on the pole at 111 Vernon St (Location 36).
3. The pole at 121 Kings Rd (Location 73) has an exposed communication ground wire and broken ground molding.

V. Follow-up Requests

Please provide pole loading calculations completed as a result of failed intrusive inspections for the following poles:

PP-6210, PP-6313, PP-4491, SP-0105, PP-1547, PP-1731, PP-1329, SP-0029, PP-1484, and PP-6708.