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



April 19, 2024

EA2024-1127

Melvin Stark Principal Manager, T&D Compliance Integration Southern California Edison Company (SCE) 1 Innovation Way Pomona, CA 91786

Subject: Electric distribution audit of SCE's Redlands District

Mr. Stark:

On behalf of the Electric Safety and Reliability Branch of the California Public Utilities Commission (CPUC), Eric Ujiiye of my staff conducted an electric distribution audit of SCE's Redlands District from March 25-29, 2024. The audit included a review of SCE's records and field inspections of SCE's facilities.

During the audit, my staff identified violations of one or more General Orders (GOs). Included with this letter is a copy of the audit findings that itemize the violations discovered during the audit. Please advise me no later than May 20, 2024, by electronic or hard copy, of all corrective measures taken by SCE 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, you can contact Eric Ujiiye at (213) 620-2598 or <u>eric.ujiiye@cpuc.ca.gov</u>.

Sincerely,

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

**Enclosures: Audit Findings** 

Cc: Leslie Palmer, Director, Safety and Enforcement Division, CPUC Nika Kjensli, Program Manager, Electric Safety and Reliability Branch, CPUC Eric Ujiiye, Utilities Engineer, ESRB, CPUC

# **AUDIT FINDINGS**

#### I. Records Review

During the audit, my staff reviewed the following records:

- Overhead and underground detailed inspections records.
- Completed and pending corrective action work orders.
- Pole loading calculations.
- Safety hazard notifications.
- Intrusive test records
- SCE's documented inspection program.

# **II.** Records Review – Violations List

My staff observed the following violations during the records review portion of the audit:

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

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.

# GO 95, Rule 31.2, Inspection of Lines, states in part:

Lines shall be inspected frequently and thoroughly for the purpose of insuring that they are in good condition so as to conform with these rules.

SCE's records indicated from July 31, 2021 to December 31, 2023, SCE completed 1303 overhead detailed inspections and 46 annual grid patrols past SCE's scheduled due date.

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

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.

# GO 128, Rule 17.2, Inspection, states:

Systems shall be inspected by the operator frequently and thoroughly for the purpose of insuring that they are in good condition and in conformance with all applicable requirements these rules.

SCE's records indicated that from July 31, 2021 to December 31, 2023, SCE completed 369 underground detailed inspections past SCE's scheduled due date.

# GO 95, Rule 18-A: Resolution of Safety Hazards and General Order 95 Nonconformances, states in part:

Each company (including electric utilities and communications companies) is responsible for taking appropriate corrective action to remedy potential violations of GO 95 and Safety Hazards posed by its facilities.

# GO 95, Rule 31.1, 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 communication or supply lines and equipment.

SCE's records indicated that from July 31, 2021 to December 31, 2023, SCE completed 2210 overhead work orders past SCE's due date for 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.

SCE's records indicated that from July 31, 2021 to December 31, 2023, SCE completed 788 underground work orders past SCE's scheduled due date for corrective action.

# 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 ground line circumference (GLC) of Pole number 1339160E (Pole load packet TD2127973 in the "Existing Poles" folder) reported in the pole load calculation for the "AS-IS" calculation was displayed at 60¼ inches, but the measurement recorded during the field inspection portion of the audit was a GLC of 51 inches.

# III. Field Inspections

No.	Structure ID.	Type of Structure	Location
1	4892810E	Pole	Forest Falls
2	4942834E	Pole	Forest Falls
3	4930715E	Pole	Forest Falls
4	4527063E	Pole	Forest Falls
5	4932602E	Pole	Forest Falls
6	4527062E	Pole	Forest Falls
7	4527061E	Pole	Forest Falls
8	27694CWT	Pole	Forest Falls
9	4669037E	Pole	Forest Falls
10	4527060E	Pole	Forest Falls
11	4527059E	Pole	Forest Falls
12	2210710E	Pole	Oak Glen
13	2190361E	Pole	Oak Glen
14	2190360E	Pole	Oak Glen
15	4303216E	Pole	Oak Glen
16	4303215E	Pole	Oak Glen
17	4303214E	Pole	Oak Glen
18	742486E	Pole	Oak Glen
19	4303217E	Pole	Oak Glen
20	129235E	Pole	Oak Glen
21	483198E	Pole	Beaumont
22	1375809E	Pole	Beaumont
23	4467347E	Pole	Beaumont
24	513857E	Pole	Beaumont
25	1376068E	Pole	Beaumont
26	2190683E	Pole	Beaumont
27	4602164E	Pole	Beaumont
28	4600028E	Pole	Beaumont
29	823593E	Pole	Beaumont
30	823592E	Pole	Beaumont
31	276681E	Pole	Beaumont
32	1196635E	Pole	Beaumont
33	4303222E	Pole	Beaumont
34	124609E	Pole	Beaumont
35	157486E	Pole	Beaumont
36	157485E	Pole	Beaumont
37	364626E	Pole	Beaumont
38	4657275E	Pole	Beaumont
39	512306E	Pole	Beaumont
40	1248063E	Pole	Beaumont
41	824095E	Pole	Beaumont
42	569705E	Pole	Beaumont
43	4019246E	Pole	Beaumont
44	1239919E	Pole	Beaumont

My staff inspected the following facilities during the field inspection:

45 46	4246640E	Pole	Beaumont
40	1216620E	Pole	
17	4246639E		Beaumont
47	4246638E	Pole	Beaumont
48	4246637E	Pole	Beaumont
49	4241910E	Pole	Beaumont
50	4438254E	Pole	Beaumont
51	4774064E	Pole	Calimesa
52	1044701E	Pole	Calimesa
53	4107339E	Pole	Calimesa
54	943487E	Pole	Calimesa
55	2114637E	Pole	Calimesa
56	1181896E	Pole	Calimesa
57	1181897E	Pole	Calimesa
58	1764109E	Pole	Calimesa
59	4332430E	Pole	Calimesa
60	4016351E	Pole	Calimesa
61	1339160E	Pole	Redlands
62	1196562E	Pole	Redlands
63	2099824E	Pole	Redlands
64	1571545E	Pole	Redlands
65	1339004E	Pole	Redlands
66	4016450E	Pole	Redlands
67	4346481E	Pole	Redlands
68	4016449E	Pole	Redlands
69	2162018E	Pole	Redlands
70	4311348E	Pole	Redlands
71	1420443E	Pole	Redlands
72	F7703Y	Pole	Redlands
73	B5172423	BURD	Redlands
74	B5172422	BURD	Redlands
75	1318 Rosalie Ct.	Hand Hole	Redlands
76	B5198051	BURD	Redlands
77	1312 Julie Ct.	Hand Hole	Redlands
78	B5169133	BURD	Redlands
79	P5432066	Pad Mount	Redlands
80	P5462982	Pad Mount	Redlands
81	V5613859	Vault	Redlands
82	P5650555	Pad Mount	Redlands
83	5707648	Pad Mount	Redlands
84	P5308271	Pad Mount	Lomo Linda
85	P5409167	Pad Mount	Lomo Linda
86	P5409156	Pad Mount	Lomo Linda
87	P5409155	Pad Mount	Lomo Linda
88	P5409154	Pad Mount	Lomo Linda
89	P5409157	Pad Mount	Lomo Linda

# IV. Field Inspection Violations List

My staff observed the following violations during the field inspections portion of the audit.

# GO 95, Rule 18-A3, Resolution of Potential Violations of General Order 95 and Safety Hazards, states:

(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 10 business days after the discovery.

The following safety hazards were not documented and reported to the responsible third party:

- Pole 276681E: an alley arm supporting two communications conductors was broken.
- Pole 824095E: a communications service drop supported on pole was contacting an SCE service drop at the weatherhead on 665 Euclid Avenue in Beaumont.

# GO 95, Rule 31.6, Abandoned Lines, states:

Lines or portions of lines permanently abandoned shall be removed by their owners so that such lines shall not become a public nuisance or a hazard to life or property. For the purposes of this rule, lines that are permanently abandoned shall be defined as those lines that are determined by their owner to have no foreseeable future use.

A down guy anchor located 20 feet north of Pole 1339004E was abandoned (and still attached to a broken 10-inch section of down guy wire).

# 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.

SCE facilities attached to each of the following poles required maintenance:

- Pole 4527060E: The attachment point of the SCE down guy wire to the down guy anchor was buried, potentially inviting corrosion.
- Pole 943487E: The attachment point of the SCE down guy wire to the down guy anchor was buried, potentially inviting corrosion.
- Pole 2114637E: The attachment points of an SCE primary and an SCE secondary down guy wire to the down guy anchor was buried, potentially inviting corrosion.

A 12-inch diameter hole from a previously removed pole, located 10 inches from Pole 2099824E, was not filled in causing a safety hazard.

# GO 95, Rule 56.2, 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.

The secondary down guy wire supporting Pole number 2114637E was not maintained taut.

# GO 95, Rule 34, Foreign Attachments, states in part:

Nothing in these rules shall be construed as permitting the unauthorized attachment, to supply, streetlight 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.

A light fixture was attached to Pole number 4246637E at the public level (address: 32053 Tennessee Street).

# 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 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). Scuffing or polishing of the insulation or covering is not considered abrasion.

The following poles supported SCE facilities that were strained by vegetation:

- Pole 4527061E: A service drop was strained and deflected by a fallen tree branch.
- Pole 1376068E: A service drop was strained and deflected in multiple locations by tree branches located within the property being served.

# GO 95, Rule 51.6-A, 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 on the following poles were either damaged or missing:

- Pole 4892810E: a "HIGH VOLTAGE" sign was damaged.
- Pole 2210710E: a "HIGH VOLTAGE" sign was missing.
- Pole 483198E: the "VOLTAGE" portion of the sign was missing.
- Pole 1375809E: the "VOLTAGE" portion of the sign was damaged.
- Pole 1376068E: a "HIGH VOLTAGE" sign was damaged.
- Pole 823592E: a "HIGH VOLTAGE" sign was damaged.
- Pole 4303222E: the "VOLTAGE" portion of a sign was damaged.
- Pole 2210710E: a "HIGH VOLTAGE" sign was missing.
- Pole 943487E: the "VOLTAGE" portion of a sign was damaged.
- Pole 4346481E: a "HIGH VOLTAGE" sign was damaged.
- Pole 2162018E: a "HIGH VOLTAGE" sign was missing.

# 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 on each of the following poles was either missing or damaged:

- Pole 1375809E: two sections of ground moulding were partially detached from the surface of the pole, exposing the ground wire at 8 feet above the ground.
- Pole 4016450E: an 8-foot section of ground moulding was warped outward from the surface of the pole, exposing the ground wire at the communication level.
- Pole 4311348E: a 2-inch section of ground wire was exposed at the base of the pole.

# 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.

The following underground structures required maintenance:

• Handhole located in front of 1318 Rosalie Court in Redlands: the enclosure for the hand hole was damaged and was not able to close properly.

• Padmount 5409157: the padmounted transformer was damaged on one side, causing it to seep oil to the outside of the enclosure, the cement pad, and the nearby ground.