

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
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January 17, 2025

TA2024-1278

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

SUBJECT: Transmission Audit of SCE's Metro East Transmission Grid

Mr. Stark:

On behalf of the Electric Safety and Reliability Branch of the California Public Utilities Commission (CPUC), Calvin Choi of my staff conducted an electric transmission audit of SCE's Metro East Transmission Grid from November 18 – 22, 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). A copy of the audit findings itemizing the violations is enclosed. Please advise me no later than February 17, 2025, 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, please contact Calvin Choi at (213) 219-3034 or Calvin.Choi@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
Calvin Choi, Utilities Engineer, Electric Safety and Reliability Branch, CPUC

AUDIT FINDINGS

I. Records Review

During the audit, my staff reviewed the following records:

- Patrol & Detailed Inspection Records
- Repair Notifications
- Vegetation Management Records
- Third Party Notifications
- Infrared Testing Records
- Intrusive Test Records
- Structural Load Calculations
- Foundation Resistance Test Records

II. Records Review – Violations List

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

GO 165, Section IV, Transmission Facilities, states in part:

Each utility shall prepare and follow procedures for conducting inspections and maintenance activities for transmission lines.

GO 128, Rule 17.2, Inspection, states in part:

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 inspection records indicated that in 2024, SCE performed 22 underground detailed inspections past SCE's assigned inspection due dates.

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 2023 to 2024, SCE had 100 overhead repair notifications that were completed or pending completion past SCE's scheduled due date for corrective action.

III. Field Inspection

My staff inspected the following structures during the field inspection portion of the audit:

No.	Structure ID.	Type of Structure
1	4506724E	Steel Pole
2	4506722E	Steel Pole
3	2131046E	Wood pole
4	1781290E	Wood pole
5	7012155	Lattice Tower
6	1781289E	Wood pole
7	7012154	Lattice Tower
8	1781288E	Wood pole
9	7012153	Lattice Tower
10	1781287E	Wood pole
11	7012148	Lattice Tower
12	1781278E	Wood pole
13	7012147	Lattice Tower
14	1761277E	Wood pole
15	7012146	Lattice Tower
16	1781276E	Wood pole
17	7012145	Lattice Tower
18	1781275E	Wood pole
19	7030404	Lattice Tower
20	1177838E	Wood pole
21	1177837E	Wood pole
22	4434240E	Wood pole
23	4797929E	Wood pole
24	1180458E	Wood pole
25	1180457E	Wood pole
26	1180456E	Wood pole
27	1180455E	Wood pole
28	2317469E	Wood pole
29	1180453E	Wood pole
30	1180452E	Wood pole
31	1180451E	Wood pole
32	1740553E	Steel Pole
33	4757524E	Steel Pole
34	1740551E	Wood pole
35	1740550E	Wood pole
36	1740549E	Wood pole
37	1740548E	Steel Pole
38	1740547E	Wood pole
39	1740546R	Steel Pole
40	1740545E	Wood pole
41	1740544E	Steel Pole

42	7029585	Lattice Tower
43	7028297	Lattice Tower
44	7020027	Lattice Tower
45	7028298	Steel Pole
46	7020028	Lattice Tower
47	7028299	Steel Pole
48	7020029	Lattice Tower
49	7028300	Lattice Tower
50	7020030	Lattice Tower
51	1376871E	Wood pole
52	1376870E	Wood pole
53	1376869E	Wood pole
54	1376868E	Wood pole
55	1376867E	Wood pole
56	1376866E	Wood pole
57	1376865E	Wood pole
58	1376864E	Wood pole
59	1376863E	Wood pole
60	1376862E	Wood pole
61	7010452	Lattice Tower
62	7014059	Lattice Tower
63	7028421	Lattice Tower
64	7028422	Lattice Tower
65	7014058	Lattice Tower
66	7010453	Lattice Tower
67	7010454	Lattice Tower
68	7014057	Lattice Tower
69	7028423	Lattice Tower
70	7010455	Lattice Tower
71	7014056	Lattice Tower
72	7028424	Lattice Tower
73	7028425	Lattice Tower
74	7011417	Lattice Tower
75	7012379	Lattice Tower
76	7012050	Lattice Tower
77	7012378	Lattice Tower
78	7012381	Lattice Tower
79	7012383	Lattice Tower
80	7012049	Lattice Tower
81	7011414	Lattice Tower
82	7012384	Lattice Tower
83	7012385	Lattice Tower
84	7012048	Lattice Tower
85	7012387	Lattice Tower
86	7012388	Lattice Tower
87	7011412	Lattice Tower

88	7011409	Lattice Tower
89	7012416	Lattice Tower
90	7012415	Lattice Tower
91	7012047	Lattice Tower
92	7011408	Lattice Tower
939	7012046	Lattice Tower
4	7012418	Lattice Tower
95	7012419	Lattice Tower
96	7012045	Lattice Tower
97	7011407	Lattice Tower
98	7012427	Lattice Tower
99	7012425	Lattice Tower
100	7011406	Lattice Tower
101	7012044	Lattice Tower
102	7012457	Lattice Tower
103	7012429	Lattice Tower
104	7011405	Lattice Tower
105	7012043	Lattice Tower
106	7012486	Lattice Tower
107	7012460	Lattice Tower
108	905013E	Wood pole
109	905012E	Wood pole
110	905011E	Wood pole
111	827831E	Wood pole
112	1168147E	Wood pole
113	4465375E	Wood pole
114	4465372E	Wood pole
115	4086495E	Wood pole
116	4086494E	Wood pole
117	2184547E	Steel Pole
118	4086493E	Wood pole
119	1794987E	Wood pole
120	1794988E	Wood pole
121	1349619E	Wood pole
122	1662222E	Wood pole
123	1662221E	Wood pole
124	1662219E	Wood pole
125	1662220E	Wood pole
126	V6000863	Vault
127	V6000864	Vault
128	V6001524	Vault
129	V6001178	Vault
130	V6001179	Vault
131	V6001180	Vault
132	V6001181	Vault
133	VT43201	Vault

134	V6001408	Vault
135	V6001405	Vault
136	V6001402	Vault
137	V6001410	Vault
138	V6001407	Vault

IV. Field Inspection – Violations List

We observed the following violations during the field inspections portion of the audit:

GO 95, Rule 51.6-A, Marking and Guarding, 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.

The high voltage signs on each of the following poles were damaged:

- 1761277E
- 1177838E
- 1177837E
- 4434240E
- 1180458E
- 1180457E
- 1180456E
- 2317469E
- 1376864E
- 4086493E

GO 95, Rule 56.2, Overhead Guys, Anchor Guys and Span Wire, 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 down guy wire supporting each of the following poles was loose:

- 1781290E
- 1761277E

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.

The following facilities required maintenance:

- 7012154 – the concrete footings supporting the tower were buried.

- 7012153 – the tower had a bent steel member.
- 7012148 – there was excessive vegetation underneath the tower.
- 7012147 – the tower had a bent steel member.
- 7012146 – there was excessive vegetation underneath the tower.
- 7012145 – the tower had a bent steel member.

GO 95, Rule 61.6-A, Towers, Marking and Guarding, Marking, states in part:

All towers shall be equipped with signs designed to warn the public of the danger of climbing same. Additionally, such signs shall include a graphic depiction of the dangers of falling or electrocution associated with climbing the towers. Such signs shall be placed and arranged so that they may be read from the four corners of the tower.

“No climbing” signs on the following towers were missing or not visible from all corners of the towers:

- 7029585
- 7028297
- 7028300
- 7028424
- 7028425
- 7012046
- 2184547E

GO 95, Rule 54.6-B, Vertical and Lateral Conductors, 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 damaged:

- 2317469E
- 1376866E
- 4086494E

GO 95, Rule 61.6-B, Marking and Guarding, Guarding, states in part:

When a fence or wall is used as a suitable barrier around a tower the construction shall be designed, installed and maintained in such manner as to reasonably deny access over, under or through the fencing or wall to all but authorized persons.

The fencing around the Lattice Tower No. 7012381 had the grating pried open near the bottom.