

## PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE  
SAN FRANCISCO, CA 94102-3298



January 3, 2023

TA2022-988

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

Subject: Transmission Audit of SCE Metro West Grid

Mr. Stark:

On behalf of the Electric Safety and Reliability Branch of the California Public Utilities Commission (CPUC), Kyle King and Calvin Choi of my staff conducted a transmission audit of Southern California Edison's (SCE) Metro West Grid from August 15, 2022, to August 19, 2022. The audit included a review of SCE's records and field inspections of SCE's transmission 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 3, 2023, by electronic or hard copy, of all corrective measures taken by SCE to remedy and prevent such violations.

If you have any questions concerning this audit, you can contact Kyle King at (213) 222-3260 or [Kyle.King@cpuc.ca.gov](mailto:Kyle.King@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: Audit Findings

Cc: Lee Palmer, Director, Safety and Enforcement Division, CPUC  
Nika Kjensli, Program Manager, ESRB, SED, CPUC  
Kyle King, Utilities Engineer, ESRB, SED, CPUC

## AUDIT FINDINGS

### I. Records Review

During the audit, my staff reviewed the following records:

- Circuit facility inspection records.
- Completed and pending corrective action work orders.
- Pole loading calculations.
- Tower Structure Analysis Records
- 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 95, Rule 18, Rule 18-B1, Maintenance Programs**, states in part:

*Companies shall undertake corrective actions within the time periods stated for each of the priority levels set forth below. Scheduling of corrective actions within the time periods below may be based on additional factors, including the following factors, as appropriate*

SCE's records indicated that for the 2021, SCE did not complete 26 work orders by SCE's own scheduled due date for corrective action.

### III. Field Inspections

My staff inspected the following facilities during the field inspection:

No.	Structure ID	Structure Type
1	2056399	Steel Pole
2	1915675E	Steel Pole
3	2056398E	Steel Pole
4	1915676E	Steel Pole
5	2056397E	Steel Pole
6	1915677E	Steel Pole
7	1915668E	Steel Pole
8	1915669E	Steel Pole
9	1915666E	Steel Pole
10	1915665E	Steel Pole
11	1915667E	Steel Pole
12	1915657E	Steel Pole
13	1915658E	Steel Pole
14	1915656E	Steel Pole
15	1915620E	Steel Pole
16	1915621E	Steel Pole
17	1915622E	Steel Pole
18	1915623E	Steel Pole
19	1915624E	Steel Pole
20	1915619E	Steel Pole
21	1915618E	Steel Pole
22	1915617E	Steel Pole
23	1915603E	Steel Pole
24	1915602E	Steel Pole
25	1915601E	Steel Pole
26	1915600E	Steel Pole
27	1915599E	Steel Pole
28	1915598E	Steel Pole
29	7012633 M3 T5	Tower
30	7013987 M3 T5	Tower
31	1852888E	Wood Pole
32	1852887E	Wood Pole
33	1852886E	Wood Pole
34	7012628 M3 T4	Tower
35	7013986 M3 T4A	Tower
36	1852885E	Wood Pole
37	1852884E	Wood Pole
38	1923397E	Wood Pole
39	7012627 M3 T4	Tower
40	7013985 M3 T4	Tower

41	7012626 M3 T3	Tower
42	1852883E	Wood Pole
43	7013983 M3 T3A	Tower
44	1852880E	Wood Pole
45	7012625 M3 T3	Tower
46	7013981 M3 T3	Tower
47	1766289E	Wood Pole
48	7012624 M3 T2 A	Tower
49	7013979 M3 T2 A	Tower
50	1852877E	Wood Pole
51	7012617 M3 T2	Tower
52	7013976 M3 T2	Tower
53	1852876E	Wood Pole
54	1852867E	Wood Pole
55	1923395E	Wood Pole
56	7013964 M2 T5 A	Tower
57	7012610 M2 T5 A	Tower
58	1852868E	Wood Pole
59	7013967 M3 T1	Tower
60	7012613 M3 T1	Tower
61	7012615 M3 T1 A	Tower
62	7013974 M3 T1 A	Tower
63	1852874E	Wood Pole
64	1852875E	Wood Pole
65	1852873E	Wood Pole
66	1852872E	Wood Pole
67	1852871E	Wood Pole
68	1852870E	Wood Pole
69	1852869E	Wood Pole
70	1852868E	Wood Pole
71	1923396E	Wood Pole
72	7014135 M0 T2	Tower
73	La Fresa-Redondo #1- La Fresa-Redondo #2 M0 T2	Tower
74	La Fresa Redondo-Rolling Hills Topaz No. 2	Steel Pole
75	La Fresa Redondo-Rolling Hills Topaz No. 1	Steel Pole
76	2056161E	Steel Pole
77	7014140 M0 T5	Tower
78	La Fresa Redondo #1 -La Fresa Redondo #2 M0 T6	Tower
79	796943E	Steel Pole
80	796942E	Steel Pole
81	La Fresa Redondo-Rolling Hills-Topaz #1 PS 205	Steel Pole
82	La Fresa Redondo #1-La Fresa Redondo #2 M0 T7	Tower
83	7014143 M0 T6	Tower
84	4835866E	Steel Pole
85	4835865E	Steel Pole

86	La Fresa Redondo #1- La Fresa Redondo #2 M0 T9	Tower
87	7014148 M0 T7 A(2)	Tower
88	La Fresa Redondo #1-La Fresa Redondo #2 M0 T8	Tower
89	7014146 M0 T7	Tower
90	1444701E	Wood Pole
91	1444702E	Wood Pole
92	La Fresa Redondo #1-La Fresa Redondo #2 M0 T10	Tower
93	7014157 M0 T8	Tower
94	2278820E	Steel Pole
95	2278821E	Steel Pole
96	4692592E	Steel Pole
97	7014159 M1 T1	Tower
98	La Fresa Redondo #1-La Fresa Redondo #2 M1 T1	Tower
99	LA Fresa Redondo- Rolling Hills Topaz #2 M3 T3	Tower
100	La Fresa Redondo -Rolling Hills Topaz #1 M3 T3	Tower
101	1751994E	Wood Pole
102	1751995E	Wood Pole
103	Alamitos Center -Alamitos Lighthipe 0/5	Tower
104	Alamitos Barre #1- Alamitos Barre #2 M0 T5	Tower
105	Alamitos Clark -Del Amo 5/2	Tower
106	1751993E	Wood Pole
107	1751992E	Wood Pole
108	1751991E	Wood Pole
109	1751990E	Wood Pole
110	Alamitos Lighthipe -Alamitos Center 0/5	Tower
111	Alamitos Barre #1 -Alamitos Barre #2 M0 T6	Tower
112	1751989E	Wood Pole
113	1751988E	Wood Pole
114	1751987E	Wood Pole
115	Alamitos Lighthipe -Alamitos Center 0/6	Tower
116	Alamitos Barre #1 -Alamitos Barre #2 0/7	Tower
117	Alamitos Clark Del Amo 5/1	Tower
118	Alamitos Center- Alamitos Lighthipe 0/6 A	Tower
119	Alamitos Barre #1 -Alamitos Barre #2 0/8	Tower
120	Alamitos Lighthipe -Alamitos Center 0/7	Tower
121	Alamitos Barre #1 -Alamitos Barre #2 0/9	Tower
122	Alamitos Clark -Del Amo 4/4	Tower
123	Alamitos Lighthipe -Alamitos Center 0/8	Tower
124	Alamitos Barre #1 -Alamitos Barre #2 1/1	Tower
125	Alamitos Clark -Del Amo 4/3	Tower
126	Alamitos Center- Alamitos Lighthipe 0/8	Tower
127	Alamitos Barre #1 -Alamitos Barre #2 1/1	Tower
128	Alamitos Clark -Del Amo 4/3 B	Tower
129	1659535E	Steel Pole
130	1751973E	Wood Pole

131	1751974E	Wood Pole
132	1751975E	Wood Pole
133	1751976E	Wood Pole
134	1751977E	Wood Pole
135	1751978E	Wood Pole
136	1751979E	Wood Pole
137	1751980E	Wood Pole
138	1751981E	Wood Pole
139	4329197E	Wood Pole
140	1751983E	Wood Pole
141	1751984E	Wood Pole
142	1751985E	Wood Pole
143	4219648E	Steel Pole
144	Del Amo Center -Alamitos Center M1 T3	Tower
145	922745E	Wood Pole
146	1019400E	Wood Pole
147	1019399E	Wood Pole
148	Center Stewart -Idle 1/2	Tower
149	Center Dougoil Imperial -Idle 1/2	Tower
150	Alamitos Center- Del Amo Center 1/3	Tower
151	Alamitos Center- Del Amo Center 1/4	Tower
152	Center Dougoil Imperial -Idle	Tower
153	Center Stewart -Idle	Tower
154	Alamitos Center -Del Amo Center 2/2	Tower
155	Alamitos Center- Del Amo Center M2 T2	Tower
156	Alamitos Center -Del Amo Center 2/1	Tower
157	VT4328	Vault
158	VT4327	Vault
159	1890769E	Steel Pole
161	2194013E	Wood Pole
161	4747951E	Wood Pole
162	VT44026	Vault
163	VT44170	Vault
164	VT144172	Vault
165	VT44168	Vault

#### IV. Field Inspection - Violations List

My staff observed the following violations during the field inspection portion of the audit:

**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 SCE transmission facilities required maintenance:

- Pole Number 1915620E had a damaged insulator.
- Pole Number 1915621E had a damaged insulator.
- Hinson La Fresa – La Fresa Lagunal Bell (Tower Number 7012625) had a damaged structural member.
- Hinson La Fresa – La Fresa Laguna Bell (Tower Number 7012617) had a damaged structural member.
- Lighthipe Redondo – Mesa Redondo (Tower Number 7013976) had a concrete foundation that was buried.
- La Fresa Laguna Bell-Hinson La Fresa (Tower Number 7012610) had a damaged structural member.
- Lighthipe Redondo-Mesa Redondo (Tower Number 7013967) had a concrete foundation that was damaged.
- Lighthipe Redondo – Mesa Redondo (Tower Number 7014148) had a damaged structural member.
- Lighthipe Redondo – Mesa Redondo (Tower Number 7014159) had a damaged “No Climbing” sign.
- Alamitos Center – Alamitos Lighthipe 0/5 miles needed weed abatement.
- Alamitos Barre #1 – Alamitos Barre #2 M0 T5 needed weed abatement.
- Alamitos Clark Del Amo 5/2 miles needed weed abatement.
- Alamitos Lighthipe – Alamitos Center 0/5 miles needed weed abatement.
- Alamitos Barre #1 – Alamitos Barre #2 M0 T6 needed weed abatement.
- Alamitos Center – Alamitos Lighthipe 0/6 A had a damaged structural member.

- Alamitos Barre #1 – Alamitos Barre #2 0/8 had a damaged structural member and had a concrete foundation that was damaged.
- Alamitos Lighthiipe – Alamitos Center 0/7 had a damaged structural member.
- Alamitos Barre #1 – Alamitos Barre #2 0/9 had a damaged structural member.
- Alamitos Clark – Del Amo 4/4 had a damaged structural member.
- Alamitos Center – Alamitos Lighthiipe 0/8 had a damaged structural member.
- Pole Number 1751984E had a damaged insulator.
- Pole Number 922745E had a buried down guy anchor.

**GO 95, Rule 61.6, Marking and Guarding**, 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.*

Warning signs attached to the following SCE transmission towers were illegible/missing from all four corners of the tower.

- Alamitos Center – Del Amo Center 1/3
- Center Dougoil Imperial - Idle
- Center Stewart - Idle

**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 on each of the following poles were either missing or damaged:

- |            |            |
|------------|------------|
| • 1751979E | • 1751983E |
| • 1751980E | • 1751984E |
| • 1751981E | • 2194013E |
| • 4329197E | • 1890769E |

**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.*

A foreign object was attached to a conductor on the middle conductor of the tower next to Alamitos Center – Center Del Amo ¼.