

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298



April 4, 2022

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

TA2021-891

Subject: Transmission Audit of Southern California Edison's Orange Coast District

Mr. Stark:

On behalf of the Electric Safety and Reliability Branch of the California Public Utilities Commission (CPUC), James Miller, Calvin Choi, and Richard Le of my staff conducted an electric transmission audit of Southern California Edison's (SCE) Orange Coast District from March 8, 2021 to March 12, 2021. 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 May 4, 2022, by electronic or hard copy, of all corrective measures taken by SCE to remedy and prevent the recurrence 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,

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, CPUC
Majed Ibrahim, Senior Utilities Engineer Supervisor, ESRB, CPUC
James Miller, Utilities Engineer, ESRB, 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.
- 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 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 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 inspection records indicated that from 8/30/2014 to 12/3/2020, SCE performed 4 patrol inspections and 27 underground inspections past SCE's assigned inspection due dates.

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 ...

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 8/13/2020 to 1/30/2021, SCE had not completed 45 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	Circuit	Type	Location
1	4832091E	Not Recorded	Pole	Lake Forest
2	4197397E	Not Recorded	Pole	Lake Forest
3	4256378E	Not Recorded	Pole	Lake Forest
4	4187398E	Not Recorded	Pole	Lake Forest
5	4197399E	Not Recorded	Pole	Lake Forest
6	4742300E	Not Recorded	Pole	Lake Forest
7	4329682E	Not Recorded	Pole	North Laguna Hills
8	4330072E	Not Recorded	Pole	North Laguna Hills
9	4330073E	Not Recorded	Pole	North Laguna Hills
10	4330074E	Not Recorded	Pole	North Laguna Hills
11	25 (Mile)/5 (Tower)	San Onofre-Santiago No.1	Tower	Shady Canyon
12	25/6	San Onofre-Santiago No. 2	Tower	Shady Canyon
13	26/5	San Onofre-Santiago No. 2	Tower	Irvine
14	2000425E	Santiago-Borrego and Santiago-Borrego-Morro	Pole	Irvine
15	26/4	San Onofre-Santiago	Tower	Irvine
16	26/3	San Onofre-Santiago	Tower	Irvine
17	26/2	San Onofre-Santiago	Tower	Irvine
18	2000424E	Not Recorded	Pole	Irvine
19	2000422E	Not Recorded	Pole	Irvine
20	2000423E	Not Recorded	Pole	Irvine
21	4219841E	Not Recorded	Pole	Irvine
22	4219840E	Not Recorded	Pole	Irvine
23	4219839E	Not Recorded	Pole	Irvine
24	4267973E	Not Recorded	Pole	Irvine
25	VT48235	Not Recorded	Vault	Irvine
26	25/2	Chino-Viejo and San Onofre-Serrano	Tower	Modjeska Canyon
27	25/3	Chino-Viejo and San Onofre-Serrano	Tower	Modjeska Canyon
28	26/1	Chino-Viejo and San Onofre-Serrano	Tower	Modjeska Canyon
29	26/2	Chino-Viejo and San Onofre-Serrano	Tower	Modjeska Canyon
30	26/3	Chino-Viejo and San Onofre-Serrano	Tower	Modjeska Canyon
31	27/2	Chino-Viejo and San Onofre-Serrano	Tower	Modjeska Canyon
32	27/3	Chino-Viejo and San Onofre-Serrano	Tower	Modjeska Canyon
33	27/4	Chino-Viejo and San Onofre-Serrano	Tower	Modjeska Canyon
34	VT6000650	Johanna-Cabrillo-Fairview and Johanna-Cabrillo	Vault	Irvine
35	1939336E	Lafayette-Orcogen	Pole	Huntington Beach
36	1939335E	Lafayette-Orcogen	Pole	Huntington Beach

37	1939334E	Lafayette-Orcogen	Pole	Huntington Beach
38	1939338E	Lafayette-Orcogen	Pole	Huntington Beach
39	1835757	Huntington Beach-Wave	Riser	Huntington Beach
40	VT600133	Huntington Beach-Wave	Vault	Huntington Beach
41	4695223E	Huntington Beach-Wave	Pole	Huntington Beach
42	4471547E	Huntington Beach-Wave	Pole	Huntington Beach
43	4471546E	Huntington Beach-Wave	Pole	Huntington Beach
44	VT5532701	Huntington Beach-Wave	Vault	Huntington Beach
45	0/3	Ellis-Huntington Beach Nos. 1,2,3 & 4	Tower	Huntington Beach
46	0/4	Ellis-Huntington Beach Nos. 1,2,3 & 4	Tower	Huntington Beach
47	2/5	Barre-Fullerton-Villa Park	Tower	Anaheim
48	4327222E	Barre-Kinder-Lampson	Pole	Anaheim
49	3/1	Barre-Lewis and Barre-Villa Park	Tower	Anaheim
50	3/2	Barre-Lewis and Barre-Villa Park	Tower	Anaheim
51	3/3	Barre-Lewis and Barre-Villa Park	Tower	Anaheim
52	2/10	Barre-Lewis and Barre-Villa Park	Tower	Anaheim
53	6/3	San Onofre-Viejo and San Onofre-Serrano	Tower	San Clemente
54	6/3	San Onofre-Santiago Nos. 1 & 2	Tower	San Clemente
55	7/3	San Onofre-Santiago Nos. 1 & 2	Tower	San Clemente
56	7/3	San Onofre-Viejo and San Onofre-Serrano	Tower	San Clemente
57	7/5	San Onofre-Santiago Nos. 1 & 2	Tower	San Clemente
58	14/3	San Onofre-Santiago Nos. 1 & 2	Tower	Ladera Ranch
59	15/1	San Onofre-Santiago Nos. 1 & 2	Tower	Ladera Ranch
60	15/1	San Onofre-Serrano and San Onofre-Viejo	Tower	Ladera Ranch
61	15/2	San Onofre-Santiago	Tower	Ladera Ranch
62	4217943E	Viejo-Limestone-Moulton	Pole	Lake Forest
63	4253209E	Viejo-Limestone-Moulton	Pole	Lake Forest
64	4253210E	Viejo-Limestone-Moulton	Pole	Lake Forest
65	4253211E	Viejo-Limestone-Moulton	Pole	Lake Forest
66	4217935E	Viejo-Limestone-Moulton	Pole	Lake Forest
67	4253212E	Viejo-Limestone-Moulton	Pole	Lake Forest
68	4253213E	Viejo-Limestone-Moulton	Pole	Lake Forest
69	23/2	San Onofre-Serrano and Chino-Viejo	Tower	Orange County
70	23/1	San Onofre-Serrano and Chino-Viejo	Tower	Orange County
71	4553705E	Viejo-Chiquita	Pole	Orange County
72	4553710E	Viejo-Chiquita-Oneill	Pole	Orange County
73	22/6	San Onofre-Serrano	Tower	Orange County
74	22/4	Chino-Viejo	Tower	Orange County
75	23/1	San Onofre-Viejo	Tower	Orange County
76	22/5	San Onofre-Serrano	Tower	Orange County
77	22/4	San Onofre-Serrano	Tower	Orange County
78	4553703E	Viejo-Chiquita No.2	Pole	Orange County
79	4553701E	Viejo-Chiquita-Oneill	Pole	Orange County

IV. Field Inspection Violations List

My staff observed the following violations during the field inspections 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.

A spanner was missing between the conductors of the San Onofre-Santiago Circuit between towers 25/5 and 25/6.

The tower identification tags on tower 25/2 of the Chino-Viejo and San Onofre-Serrano Circuits were damaged.

Tree branches and other debris blocked vehicular access to tower 25/3 of the Chino-Viejo and San Onofre-Serrano Circuits.

The brackets on the splice rack of vault VT6000650 were significantly rusted.

Vault VT600133 was missing its identification tag.

Tower 0/3 of the Ellis-Huntington beach Nos. 1 and 2 Circuits had an incorrect circuit marker. Circuit No.2 was incorrectly marked as Circuit No.1.