

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
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May 3, 2018

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

EA2018-812

Subject: Audit of Southern California Edison's Antelope Valley District

Mr. Stark:

On behalf of the Electric Safety and Reliability Branch of the California Public Utilities Commission (CPUC), Richard Kyo my staff conducted an electric audit of Southern California Edison's (SCE) Antelope Valley District from February 5, 2018, to February 9, 2018. 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 June 4, 2018, 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 Richard Kyo at (213) 576-7081 or richard.kyo@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: Elizaveta Malashenko, Director, Safety and Enforcement Division, CPUC
Lee Palmer, Deputy Director, Office of Utility Safety, CPUC
Charlotte TerKeurst, Program Manager, Electric Safety and Reliability Branch, 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 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.

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

Lines shall be inspected frequently and thoroughly for the purpose of ensuring that they are in good condition so as to conform with these rules. Lines temporarily out of service shall be inspected and maintained in such condition as not to create a hazard.

SCE's records indicate that from 2014 to 2017, SCE completed 46 work orders past their scheduled due date of corrective action. Additionally, SCE records indicate that as of the date of the audit, SCE had 19 work orders open that were past their scheduled due date of corrective action.

III. Field Inspections

My staff inspected the following facilities during the field inspection:

No.	Structure ID.	Type of Structure	Location
1	4630850E	Pole	Lancaster
2	1001818E	Pole	Lancaster
3	1001819E	Pole	Lancaster
4	1200842E	Pole	Lancaster
5	1001976E	Pole	Lancaster
6	4660379E	Pole	Lancaster
7	GT 8047	Pole	Lancaster
8	GT 94988	Pole	Lancaster
9	2208095E	Pole	Lancaster
10	2338543E	Pole	Lancaster
11	1200843E	Pole	Lancaster
12	2200088E	Pole	Lancaster
13	4601453E	Pole	Lancaster
14	GT 118835	Pole	Lancaster
15	4090146E	Pole	Lancaster
16	928378E	Pole	Lancaster
17	928379E	Pole	Lancaster
18	928380E	Pole	Lancaster
19	928381E	Pole	Lancaster
20	1821239E	Pole	Lancaster
21	1021187E	Pole	Lancaster
22	1048730E	Pole	Lancaster
23	1821240E	Pole	Lancaster
24	4380334E	Pole	Lancaster
25	1048731E	Pole	Lancaster
26	1048732E	Pole	Lancaster
27	970522E	Pole	Lancaster
28	970521E	Pole	Lancaster
29	4777500E	Pole	Lancaster
30	2359928E	Pole	Lancaster
31	2359927E	Pole	Lancaster
32	2359926E	Pole	Lancaster
33	2208446E	Pole	Lancaster
34	2208511E	Pole	Lancaster
35	2359925E	Pole	Lancaster
36	2359924E	Pole	Lancaster
37	1048255E	Pole	Lancaster
38	2359924E	Pole	Lancaster
39	2359923E	Pole	Lancaster

40	2359922E	Pole	Lancaster
41	2359921E	Pole	Lancaster
42	2359920E	Pole	Lancaster
43	1070350E	Pole	Lancaster
44	1070349E	Pole	Lancaster
45	2226610E	Pole	Lake Los Angeles
46	2226609E	Pole	Lake Los Angeles
47	2226611E	Pole	Lake Los Angeles
48	2226612E	Pole	Lake Los Angeles
49	2226613E	Pole	Lake Los Angeles
50	1897383E	Pole	Lake Los Angeles
51	1897382E	Pole	Lake Los Angeles
52	1897381E	Pole	Lake Los Angeles
53	1002092E	Pole	Lake Los Angeles
54	1014151E	Pole	Lake Los Angeles
55	1002093E	Pole	Lake Los Angeles
56	4727350E	Pole	Lake Los Angeles
57	1002095E	Pole	Lake Los Angeles
58	1014155E	Pole	Lake Los Angeles
59	970700E	Pole	Lake Los Angeles
60	1219533E	Pole	Lake Los Angeles
61	1200613E	Pole	Lancaster
62	1870539E	Pole	Lancaster
63	1021687E	Pole	Pearblossom
64	1021688E	Pole	Pearblossom
65	1021691E	Pole	Pearblossom
66	4626330E	Pole	Juniper Hills
67	1200112E	Pole	Juniper Hills
68	P5396093	Padmount	Rosamond
69	P5012728	Padmount	Lancaster
70	5157531	C.S.T.	Lancaster
71	P5366879	Padmount	Lancaster
72	5325900	C.S.T.	Lancaster
73	5158308	B.U.R.D.	Palmdale
74	5443954	Padmount	Palmdale

IV. Field Inspection Violations List

My staff observed the following violations during the field inspection:

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 SCE poles were damaged:

- 928378E – A high voltage sign was missing letters.
- 928379E – A high voltage sign was missing.
- 928380E – A high voltage sign was missing.
- 928381E – A high voltage sign was missing.
- 1021187E – A high voltage sign was missing.
- 1048730E – A high voltage sign was missing.
- 970522E – A high voltage sign was missing.
- 1048255E – A high voltage sign was missing.
- 2226609E – The "voltage" sign was damaged.
- 2226611E – The "voltage" sign was damaged.
- 2226612E – The high voltage signs were missing letters.
- 1002092E – A high voltage sign was missing.
- 1002093E – A high voltage sign was missing.
- 1014155E – A high voltage sign was missing
- 970700E – A high voltage sign was missing

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.

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 molding on SCE pole number GT 8047 was damaged, exposing the ground wire.
The ground molding on SCE pole number 928378E was damaged, exposing the ground wire.
The ground molding on SCE pole number 928381E was damaged, exposing the ground wire.
The ground molding on SCE pole number 2359925E was damaged, exposing the ground wire.
The ground molding on SCE pole number 1070350E was damaged, exposing the ground wire.
The ground molding on SCE pole number 2226612E was damaged, exposing the ground wire.

GO 95, Rule 91.3-A1 Stepping, Use of Steps, Pole with Vertical Runs and Risers, states in part:

All jointly used poles which support supply conductors shall be provided with pole steps if vertical runs or risers are attached to the surface of such poles.

SCE pole number 970521E was a jointly used pole supporting supply conductors and did not have pole steps.

GO 128, Rule 32.7, Covers, states:

Manholes and handholes, while not being worked in, shall be securely closed by covers of sufficient strength to sustain such loads as may reasonably be imposed upon them and arrangement shall be such that a tool or appliance shall be required for their opening and cover removal. (Also see Rule 17.8 and Appendix B, Fig. 9)

An SCE handhole cover adjacent to SCE pole number GT 8047 was not securely closed.