

## PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE  
SAN FRANCISCO, CA 94102-3298



October 15, 2020

EA2020-877

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

Subject: Audit of Southern California Edison's Ventura District

Mr. Stark:

On behalf of the Electric Safety and Reliability Branch of the California Public Utilities Commission (CPUC), Calvin Choi, Derek Fong and Joceline Pereira of my staff conducted an electric distribution audit of Southern California Edison's (SCE) Ventura District from August 10, 2020 to August 14, 2020. 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 November 16, 2020, 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 Calvin Choi at (213) 266-4730 or [Calvin.Choi@cpuc.ca.gov](mailto: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: Audit Findings

Cc: Lee Palmer, Director, Safety and Enforcement Division, CPUC  
Nika Kjensli, Program Manager, ESRB, SED, CPUC  
Calvin Choi, Utilities Engineer, ESRB, SED, 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.
- Safety Hazard Notifications.
- Pole loading calculations Records.
- Intrusive testing records.
- Vegetation Management 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 Rule 18, Resolution of Potential Violations of General Order 95 and Safety Hazards**, 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.*

SCE's records indicated that from 2014 to 2019, SCE completed 1,239 work orders past their due date for corrective action. Additionally, as of the date of the audit, SCE had 1,331 open work orders that were past their scheduled due date for corrective action.

**GO 95, Rule 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.*

**GO 165, Standard III-B, Distribution Facilities, Standards for Inspections**, states in part:

*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.*

SCE's records indicated that from June 2010 to June 2020, SCE failed to perform 4,819 overhead detailed inspections and 616 annual grid patrol inspections by SCE's inspection dates.

**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 so as to conform with these rules.*

**GO 165, Standard III-B, Distribution Facilities, Standards for Inspections**, states in part:

*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.*

SCE's records indicated that from June 2010 to June 2020, SCE failed to perform 70 underground detailed inspections by SCE's inspection dates.

### III. Field Inspections

My staff inspected the following facilities during the field inspection:

No.	Structure ID.	Type of Structure	Location
1	518481E	Pole	Ventura
2	2323900E	Pole	Ventura
3	1281030E	Pole	Ventura
4	2323902E	Pole	Ventura
5	2323897E	Pole	Ventura
6	2323898E	Pole	Ventura
7	2323896E	Pole	Ventura
8	2323895E	Pole	Ventura
9	2323894E	Pole	Ventura
10	2323893E	Pole	Ventura
11	1311557E	Pole	Oakview
12	1255677E	Pole	Oakview
13	1255678E	Pole	Oakview
14	1255679E	Pole	Oakview
15	1255680E	Pole	Oakview
16	1508215E	Pole	Oakview
17	4627036E	Pole	Oakview
18	2359401E	Pole	Oakview
19	4510527E	Pole	Ojai
20	4953381E	Pole	Ojai
21	729135E	Pole	Ojai
22	2334790E	Pole	Ojai
23	4796607E	Pole	Ojai
24	360651E	Pole	Ojai
25	883508E	Pole	Ojai
26	2334787E	Pole	Ojai
27	4936818E	Pole	Ojai
28	4831826E	Pole	Ojai
29	82729H	Pole	Ojai
30	786887E	Pole	Ojai
31	82729H	Pole	Ojai
32	474413E	Pole	Ojai
33	1882731E	Pole	Ojai
34	4952838E	Pole	Ojai
35	4217247E	Pole	Ojai
36	1718747E	Pole	Ojai
37	443394E	Pole	Ojai
38	4767459E	Pole	Ojai
39	4300050E	Pole	Ojai
40	2334788E	Pole	Ojai
41	1531604E	Pole	Ojai
42	1531605E	Pole	Ojai
43	95343E	Pole	Santa Paula
44	196084E	Pole	Santa Paula

45	487412E	Pole	Santa Paula
46	196085E	Pole	Santa Paula
47	2027523	Pole	Santa Paula
48	2027524E	Pole	Santa Paula
49	4305312E	Pole	Santa Paula
50	174162E	Pole	Santa Paula
51	882784E	Pole	Santa Paula
52	196240E	Pole	Santa Paula
53	196241E	Pole	Santa Paula
54	2322489E	Pole	Santa Paula
55	196242E	Pole	Santa Paula
56	196243E	Pole	Santa Paula
57	1702991E	Pole	Santa Paula
58	P2525Y	Pole	Santa Paula
59	P2524Y	Pole	Santa Paula
60	925576E	Pole	Santa Paula
61	P1252Y	Pole	Santa Paula
62	4625480E	Pole	Santa Paula
63	117850E	Pole	Fillmore
64	2359151E	Pole	Fillmore
65	4010619E	Pole	Fillmore
66	287725E	Pole	Fillmore
67	1202213E	Pole	Fillmore
68	2102153E	Pole	Fillmore
69	4216994E	Pole	Fillmore
70	4031970E	Pole	Fillmore
71	1130637E	Pole	Fillmore
72	1982472E	Pole	Fillmore
73	1982474E	Pole	Fillmore
74	1896783E	Pole	Fillmore
75	1896782E	Pole	Fillmore
76	1896781E	Pole	Fillmore
77	2116626E	Pole	Fillmore
77	2116627E	Pole	Fillmore
78	2116627E	Pole	Fillmore
79	1054872E	Pole	Fillmore
80	1955377E	Pole	Fillmore
81	1896784E	Pole	Fillmore
82	1561338E	Pole	Fillmore
83	1561341E	Pole	Fillmore
84	287723E	Pole	Fillmore
85	5455905	Pad-mounted Transformer	Fillmore
86	5455924	Pad-mounted Transformer	Fillmore
87	5338840	BURD Transformer	Fillmore
88	5338839	BURD Switch	Fillmore
89	5455903	Pad-mounted Transformer	Fillmore
90	5502517	Pad-mounted Transformer	Fillmore
91	5160033	BURD Transformer	Fillmore
92	5465889	Pad-mounted Switch	Fillmore

93	5465890	Pad-mounted Transformer	Fillmore
94	5502035	Pad-mounted Transformer	Fillmore
95	5745962	Pad-mounted Switch	Santa Paula
96	5745963	Pad-mounted Transformer	Santa Paula
97	5749230	Pad-mounted Transformer	Santa Paula
98	5591869	Pad-mounted Switch	Camarillo
99	5591871	Pad-mounted Transformer	Camarillo
100	5159671	BURD Transformer	Camarillo
101	5159672	BURD Transformer	Camarillo
102	5159673	BURD Transformer	Camarillo
103	5459203	Pad-mounted Switch	Oxnard
104	5459394	Pad-mounted Transformer	Oxnard
105	5197900	BURD	Oxnard
106	3001917E	Pole	Oxnard
107	1500273E	Pole	Camarillo
108	2234164E	Pole	Camarillo
109	143839E	Pole	Camarillo
110	4537455E	Pole	Camarillo
111	1803875E	Pole	Camarillo
112	2334864E	Pole	Camarillo

#### IV. Field Inspection Violations List

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

**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 each of the following SCE poles were damaged and/or missing:

- 518481E
- 2027523
- 196240E
- 196242E
- 196243E
- 1702991E
- 1896783E
- 1896781E
- 2116627E

**GO 95, Rule 54.7, Climbing and Working Space**, states in part:

*Climbing space shall be maintained from the ground level. Climbing space, measured from center line of pole, shall be provided on one side or in one quadrant of all poles or structures...*

The climbing space on each of the following SCE poles was obstructed by vegetation:

- 2323893E
- 196241E

**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 each of the following SCE poles was damaged:

- 2323896E – ground molding is bowed outward and broken, exposing the SCE ground wire.
- 2323894E – ground molding is broken, exposing the SCE ground wire.
- 1255678E – ground molding is broken, exposing the SCE ground wire.
- 196240E – ground molding is bowed outward and broken, exposing the SCE ground wire.
- 196243E – ground molding is broken, exposing the SCE ground wire.
- 1702991E – ground molding is bowed outward and broken, exposing the SCE ground wire.
- 1896783E – ground molding is missing, exposing the SCE ground wire.
- 2116626E – ground molding is bowed outward and broken, exposing the SCE ground wire.

**GO 95, Rule 54.8-C1a, Clearances between Supply Service Drops and Other Conductors**, states in part:

*At crossings in spans, supply service drop conductors may have a clearance of less than 48 inches but not less than 24 inches above any communication line conductors or below communication line conductors not supported on a messenger, provided the crossing is 6 feet or more from any pole which does not support both conductors involved in the crossing.*

SCE service drops attached to the following poles crosses above communications lines and have a vertical clearance of less than 2 feet above the communications lines:

- 4936818E
- 82729H
- 1882731E

**General Order 95, Rule 54.8-B4, Table 10 - Minimum Allowable Clearance of Service Drops of 0 - 750 Volts from Buildings** requires the minimum vertical clearance between Insulated Conductors 0-750 Volts and buildings on other premises to be eight feet.

SCE service drop attached to pole number 82729H has less than 8 feet vertical clearance above a building on an adjacent property.

**General Order 95, Rule 54.8-B4, Table 10 - Minimum Allowable Clearance of Service Drops of 0 - 750 Volts from Buildings** requires the minimum vertical clearance between Insulated Conductors 0-750 Volts and “all portions of buildings including metallic or non-metallic cornice, decorative appendage, eaves, roof or parapet well of the building served” to be 0.5 inches.

SCE service drop attached to pole number 1718747E is touching the roof of the building it is serving.

**General Order 95, Rule 37 - Minimum Clearances of Wires above Railroads, Thoroughfares, Buildings, Etc., Table 1, Case 5, Column B** requires the minimum vertical clearance of supply service drops of 0-750 Volts above ground in areas accessible to pedestrians only to be ten feet.

SCE service drop attached to pole number 443394E has less than 10 feet vertical clearance above an area accessible to pedestrians only.

**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’s facilities on the following two poles were not maintained for their intended use:

- An insulator attached to pole number 196243E was “sunken”.



- A tree branch was hanging from SCE's secondary conductors attached to pole number 1054872E and in contact with communication conductors.

**GO 128, Rule 17.1, 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 [the] communication or supply lines and equipment.*

The following SCE underground facilities were not maintained for their intended use:

- The entry way to padmounted transformer No. 5591869 was obstructed by vegetation within the suggested 8 feet of clearance for the entry way posted on the enclosure door.
- The doors of padmounted switch No. 5465889 were obstructed by the ground and were not able to open out freely.
- The enclosure mount channels of padmounted transformer No. 5459394 were rusted and had deteriorated significantly.

**GO 128, Rule 32.4, Design, Construction and Maintenance**, states in part:

*Handholes and subsurface equipment enclosures shall be of sufficient size to house safely the required transformers, switches, cables, splices, connectors and associated apparatus. Such equipment shall be so arranged that it can be safely installed, operated and maintained.*

The underground enclosure of BURD transformer No. 5197900 was broken, allowing dirt into the enclosure.