

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298



December 9, 2021

EA2021-912

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

Subject: Audit of Southern California Edison's Kernville District

Mr. Stark:

On behalf of the Electric Safety and Reliability Branch (ESRB) of the California Public Utilities Commission (CPUC), Mily Vaidya and James Miller of my staff conducted an electric distribution audit of Southern California Edison's (SCE) Kernville District from September 13, 2021 to September 17, 2021. The audit included a review of SCE's inspection and maintenance records and a field inspection 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 January 10, 2022, 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 Mily Vaidya at (213) 999-8528 or Mily.Vaidya@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

Enclosure: Audit Findings

Cc: Lee Palmer, Director, Safety and Enforcement Division, CPUC
Nika Kjensli, Program Manager, ESRB, SED, CPUC
Derek Fong, Senior Utilities Engineer, ESRB, SED, CPUC
Mily Vaidya, Utilities Engineer, ESRB, SED, CPUC

Audit Findings

I. Records Review

During the audit, my staff reviewed the following records:

- Overhead and underground detailed inspection records
- Patrol records
- Completed and pending corrective action work orders
- Pole load calculations
- Intrusive test records
- Safety hazard notifications
- SCE's documented inspection program.
- Tree Trimming Records

II. Records Review – Violations List

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

GO 165, Section III-B, Distribution Facilities, Standards for Inspection, states:

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.

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.

SCE's records indicated that from August 2016 through August 2021, SCE completed 244 overhead detailed inspections past SCE's scheduled due date.

GO 165, Section III-B, Distribution Facilities, Standards for Inspection, states:

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.

GO 128, Rule 17.2, Inspection, states:

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 records indicated that from August 2016 through August 2021, SCE completed 33 underground inspections past SCE's scheduled due date.

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.

Pre-2018 version of GO 95, Rule 18A: Resolution of Safety Hazards and General Order 95 Nonconformances, states in part:

Each company (including utilities and CIPs) is responsible for taking appropriate corrective action to remedy safety hazards and GO 95 nonconformances posed by its facilities.

Current GO 95 Rule 18A: 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.

SCE's records indicated that from 2016 to 2021, SCE completed 571 overhead work orders past SCE's scheduled due date for corrective action.

GO 128, Rule 17.1, 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 records indicated that from 2016 to 2021, SCE completed 2 underground work orders past SCE's scheduled due date for corrective action.

III. Field Inspection

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

No.	Structure Number	Type of Structure	City
1	2002328E	Pole	Havilah
2	2002329E	Pole	Havilah
3	2002330E	Pole	Havilah
4	2002331E	Pole	Havilah
5	2002332E	Pole	Havilah
6	2002333E	Pole	Havilah
7	2002334E	Pole	Havilah
8	2002335E	Pole	Havilah
9	2002336E	Pole	Havilah
10	2002337E	Pole	Havilah
11	4878351E	Pole	Havilah
12	4648498E	Pole	Havilah
13	4648499E	Pole	Havilah
14	4822355E	Pole	Havilah
15	4823556E	Pole	Havilah
16	1349502E	Pole	Havilah
17	4091334E	Pole	Havilah
18	4038123E	Pole	Havilah
19	4605293E	Pole	Havilah
20	1828339E	Pole	Havilah
21	1940826E	Pole	Havilah
22	1828341E	Pole	Havilah
23	1828342E	Pole	Havilah
24	1828343E	Pole	Havilah
25	4388372E	Pole	Bodfish
26	4911164E	Pole	Bodfish
27	1799201E	Pole	Bodfish
28	4699343E	Pole	Bodfish
29	4295977E	Pole	Bodfish
30	4295976E	Pole	Bodfish
31	4866633E	Pole	Bodfish
32	4622961E	Pole	Bodfish
33	1536330E	Pole	Bodfish
34	1442065E	Pole	Bodfish
35	1442029E	Pole	Bodfish
36	4731343E	Pole	Bodfish
37	4593653E	Pole	Bodfish
38	4319846E	Pole	Riverkern
39	995326E	Pole	Riverkern
40	817916E	Pole	Riverkern
41	897915E	Pole	Riverkern
42	817914E	Pole	Riverkern
43	817913E	Pole	Riverkern
44	817912E	Pole	Riverkern
45	1144523E	Pole	Riverkern
46	4038242E	Pole	Riverkern
47	1144524E	Pole	Riverkern

48	531773E	Pole	Riverkern
49	4091337E	Pole	Riverkern
50	2261512E	Pole	Riverkern
51	4389242E	Pole	Riverkern
52	582127E	Pole	Riverkern
53	4236867E	Pole	Riverkern
54	4389234E	Pole	Riverkern
55	509091E	Pole	Riverkern
56	509090E	Pole	Riverkern
57	2299311E	Pole	Riverkern
58	4614816E	Pole	Kernville
59	1828532E	Pole	Kernville
60	1828460E	Pole	Kernville
61	1828533E	Pole	Kernville
62	4714613E	Pole	Kernville
63	4781893E	Pole	Kernville
64	1823459E	Pole	Kernville
65	957775E	Pole	Kernville
67	1761188E	Pole	Kernville
68	1761189E	Pole	Kernville
69	1761190E	Pole	Kernville
70	4694968E	Pole	Kernville
71	1617416E	Pole	Kernville
72	1617417E	Pole	Kernville
73	4606619E	Pole	Kernville
74	1400959E	Pole	Kernville
75	1400958E	Pole	Kernville
76	1400957E	Pole	Kernville
77	2197714E	Pole	Kernville
78	2197713E	Pole	Kernville
79	4441743E	Pole	Granile Road
80	4974209E	Pole	Granile Road
81	4974210E	Pole	Granile Road
82	4974211E	Pole	Granile Road
83	4441742E	Pole	Granile Road
84	4441741E	Pole	Granile Road
85	4441740E	Pole	Granile Road
86	4448047E	Pole	Granile Road
87	4441739E	Pole	Granile Road
88	4254347E	Pole	Granile Road
89	4441738E	Pole	Granile Road
90	4441737E	Pole	Granile Road
91	4441736E	Pole	Granile Road
92	957789E	Pole	Lake Isabella
93	33985	Pole	Lake Isabella
94	4252824E	Pole	Lake Isabella
95	1368733E	Pole	Lake Isabella
96	957790E	Pole	Lake Isabella
97	1235583E	Pole	Lake Isabella
98	1235599E	Pole	Lake Isabella
99	1536351E	Pole	Lake Isabella
100	4082598E	Pole	Lake Isabella
101	1144529E	Pole	Lake Isabella

102	1193033E	Pole	Lake Isabella
103	4515807E	Pole	Lake Isabella
104	P5590390	Padmount	Wofford Height
105	B5959948	Padmount	South Lake
106	5127301	Burd (Transformer)	Weldon
107	5180163	Burd (Transformer)	Weldon
108	P5581757	Burd (Transformer)	Robin
109	5180137	Burd (Transformer)	Weldon
110	5180118	Burd (Transformer)	Southlake
111	5180069	Burd (Transformer)	Southlake
112	5127330	Burd (Transformer)	Southlake
113	B5309123	Burd (Transformer)	Southlake
114	5127315	Burd (Transformer)	Southlake
115	5127314	Burd (Transformer)	Southlake
116	5180063	Burd (Transformer)	Southlake
117	P5717626	Padmount	Southlake
118	P5717625	Padmount	Southlake
119	P5717628	Padmount	Southlake
120	P5717620	Padmount	Southlake
121	P5717619	Padmount	Southlake
122	P5717617	Padmount	Southlake
123	P5127304	Padmount	Southlake
124	4319940E	Pole	Kernville
125	4319941E	Pole	Kernville
126	1177897E	Pole	Weldon
127	1177896E	Pole	Weldon
128	1177895E	Pole	Weldon
129	4038103E	Pole	Weldon
130	4038104E	Pole	Weldon
131	1761281E	Pole	Weldon
132	4512813E	Pole	Weldon
133	1761279E	Pole	Weldon
134	1761278E	Pole	Weldon

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.

The ground molding attached to each of the following SCE poles was damaged:

- 509091E
- 1828460E
- 1823459E
- 1761190E
- 957790E
- 1235583E
- 1235599E
- 1536351E

The visibility strip attached to each of the following SCE poles was damaged:

- 1828342E
- 957789E

The bird guard attached to SCE pole number 2002328E was damaged.

GO 95, Rule 35, Vegetation Management, Table 1, Case 14, Column E requires the minimum radial clearance between bare line supply conductors of 750 to 22,500 volts and vegetation in Extreme and Very High Fire Threat Zones in Southern California to be 48 inches.

The radial clearance between vegetation and a primary conductor on the following poles, located in an Extreme High Fire Threat Zone, was 2-3 feet.

- 4319940E
- 4319941E

GO 95, Rule 56.2 Overhead Guys, Anchor Guys and Span Wires, Use, 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 attached to each of the following SCE poles was loose and not taut:

- 2002329E

- 2002330E
- 957775E
- 1177897E
- 4389234E

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 SCE poles were missing:

- 1536330E
- 897915E
- 509091E
- 1235583E
- 1761281E
- 1761278E

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

- 995326E
- 817914E
- 4389234E
- 1761188E
- 1761189E
- 1761190E
- 1368733E
- 1235599E
- 1193033E
- 4038104E

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.

Foreign attachments were attached to each of the following SCE poles:

- 4319846E – camera attachment
- 995326E – chain attached to pole and fence
- 817912E – Private Property sign
- 4236867E – extension to feed meter
- 1536351E – Private Property sign

GO 95, Rule 91.3B, Location of Steps, states in part:

The lowest step shall be not less than 8 feet from the ground line, or any easily climbable foreign structure from which one could reach or step.

A pole step attached to SCE pole number 817913E was less than 8 feet above ground.