STATE OF CALIFORNIA GAVIN NEWSOM, *Governor*

PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

July 13, 2021 EA2021-897

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 Tehachapi District

Mr. Stark:

On behalf of the Electric Safety and Reliability Branch (ESRB) of the California Public Utilities Commission (CPUC), Richard Le, Stacey Ocampo, and Mily Vaidya of my staff conducted an electric distribution audit of Southern California Edison's (SCE) Tehachapi District from April 26, 2021 to April 30, 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 August 13, 2021, 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 Le at (213) 999 – 9053 or Richard.Le@cpuc.ca.gov .

Sincerely,

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
Majed Ibrahim, Senior Utilities Engineer, ESRB, SED, CPUC
Stacey Ocampo, 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.
- Vegetation Management 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 February 2016 through February 2021, SCE completed 256 overhead detailed inspections past their 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 February 2016 through February 2021, SCE completed 31 underground inspections past their scheduled due date.

GO 95, 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.*

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 February 2016 to February 2021, SCE completed 269 work orders past their due date for corrective action. Additionally, as of the date of the audit, SCE had 36 open work orders that were past their scheduled due date for corrective action.

III. Field Inspection

My staff inspected the following facilities during the field inspection:

No.	Structure ID.	Type of Structure	Location
1	1661057E	Pole	Tehachapi
2	1661058E	Pole	Tehachapi
3	1661059E	Pole	Tehachapi
4	1661056E	Pole	Tehachapi
5	1661055E	Pole	Tehachapi
6	1661054E	Pole	Tehachapi
7	1661053E	Pole	Tehachapi
8	1661052E	Pole	Tehachapi
9	1661051E	Pole	Tehachapi
10	1421458E	Pole	Tehachapi
11	1955014E	Pole	Tehachapi
12	1421459E	Pole	Tehachapi
13	4491753E	Pole	Tehachapi
14	1421460E	Pole	Tehachapi
15	4332735E	Pole	Tehachapi
16	4332736E	Pole	Tehachapi
17	1355602E	Pole	Tehachapi
18	1355601E	Pole	Tehachapi
19	778163E	Pole	Tehachapi
20	4573889E	Pole	Tehachapi
21	725641E	Pole	Tehachapi
22	778164E	Pole	Tehachapi
23	778165E	Pole	Tehachapi
24	778166E	Pole	Tehachapi
25	778168E	Pole	Tehachapi
26	4418120E	Pole	Tehachapi
27	1295367E	Pole	Tehachapi
28	4589510E	Pole	Tehachapi
29	4205600E	Pole	Tehachapi
30	1660774E	Pole	Tehachapi
31	778162E	Pole	Tehachapi
32	P5346606	Pad-mounted Transformer	Tehachapi
33	P5449545	Pad-mounted Transformer	Tehachapi
34	P5426028	Pad-mounted Transformer	Tehachapi
35	P5330189	Pad-mounted Switch	Tehachapi
36	PM5330190	Pad-mounted Transformer	Tehachapi
37	P5346862	Pad-mounted Switch	Tehachapi
38	P5572730	Pad-mounted Switch	Tehachapi
39	P5572733	Pad-mounted Transformer	Tehachapi

40	P5346860	Pad-mounted Transformer	Tehachapi
41	P5519470	Pad-mounted Transformer	Tehachapi
42	P5650209	Pad-mounted Transformer	Tehachapi
43	P5576380	Pad-mounted Transformer	Tehachapi
44	V5613162	Vault	Tehachapi
45	4901204E	Pole/Vegetation	Tehachapi
46	1560284E	Pole/Vegetation	Tehachapi
47	9467T	Pole/Vegetation	Tehachapi
48	4573860E	Pole/Vegetation	Tehachapi
49	4932598E	Pole/Vegetation	Tehachapi
50	2365794E	Pole/Vegetation	Tehachapi
51	2109567E	Pole/Vegetation	Tehachapi
52	2109568E	Pole/Vegetation	Tehachapi
53	2175396E	Pole/Vegetation	Tehachapi
54	4837186E	Pole	Stallion Springs
55	4854859E	Pole	Stallion Springs
56	20083T	Pole	Stallion Springs
57	4837244E	Pole	Stallion Springs
58	4858924E	Pole	Stallion Springs
59	4858925E	Pole	Stallion Springs
60	4869645E	Pole	Stallion Springs
61	20088T	Pole	Stallion Springs
62	1983853E	Pole/Vegetation	Stallion Springs
63	2038827E	Pole/Vegetation	Stallion Springs
64	2038825E	Pole/Vegetation	Stallion Springs
65	2038826E	Pole/Vegetation	Stallion Springs
66	686376E	Pole	Loraine
67	686377E	Pole	Loraine
68	686378E	Pole	Loraine
69	4571940E	Pole	Loraine
70	2261552E	Pole	Loraine
71	1218370E	Pole	Loraine
72	2261286E	Pole	Loraine
73	2261287E	Pole	Loraine
74	2261288E	Pole	Loraine
75	2261296E	Pole	Loraine
76	4549588E	Pole	Loraine
77	4692359E	Pole	Loraine
78	686374E	Pole	Loraine
79	4203169E	Pole	Keene
80	2250132E	Pole	Keene
81	2227253E	Pole	Keene
82	2227247E	Pole	Keene
83	2227246E	Pole	Keene
84	2227245E	Pole	Keene

85	2227244E	Pole	Keene
86	2227243E	Pole	Keene
87	4530048E	Pole	Keene
88	2227242E	Pole	Keene
89	2370272E	Pole	Keene
90	2370271E	Pole	Keene
91	2227241E	Pole	Keene
92	2227240E	Pole	Keene
93	2135131E	Pole	Golden Hills
94	1900265E	Pole	Golden Hills
95	1900266E	Pole	Golden Hills
96	1900267E	Pole	Golden Hills
97	2200042E	Pole	Golden Hills
98	1900268E	Pole	Golden Hills
99	4718701E	Pole	Golden Hills
100	1900270E	Pole	Golden Hills
101	1900271E	Pole	Golden Hills
102	4011436E	Pole	Golden Hills
103	2370504E	Pole	Golden Hills
104	2370505E	Pole	Golden Hills
105	4451410E	Pole	Bear Valley Springs
106	1984086E	Pole	Bear Valley Springs
107	4834705E	Pole	Bear Valley Springs
108	1970049E	Pole	Bear Valley Springs
109	1970050E	Pole	Bear Valley Springs
110	1938171E	Pole	Bear Valley Springs
111	1938172E	Pole	Bear Valley Springs
112	4412256E	Pole	Bear Valley Springs
113	2227299E	Pole	Bear Valley Springs
114	1938177E	Pole	Bear Valley Springs
115	4313053E	Pole	Bear Valley Springs
116	2189031E	Pole	Bear Valley Springs
117	1938179E	Pole	Bear Valley Springs
118	4205531E	Pole	Bear Valley Springs
119	1938180E	Pole	Bear Valley Springs
120	2093278E	Pole	Bear Valley Springs
121	2301250E	Pole	Bear Valley Springs
122	5354090	BURD Transformer	Mojave
123	5354091	BURD Transformer	Mojave
124	5321751	Enclosed Switch	Mojave
125	5321977	BURD Transformer	Mojave
126	5321976	BURD Transformer	Mojave

IV. Field Inspection – Violations List

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 poles required maintenance:

- 1900267E – damaged visibility strip
- 2301250E – damaged visibility strip
- 2038825E – damaged visibility strip

The guy anchor attached to the following SCE poles was buried in the ground:

- 1661056E
- 2189031E

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 either missing or damaged:

- 1661056E
- 778165E
- 20083T
- 2261288E
- 2227246E
- 2227245E

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 the following poles was damaged:

- 1661051E
- 20088T

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 on each of the following SCE poles was loose and not taut:

- 1661051E
- 1421460E
- 20083T
- 2135131E
- 1900271E

GO 95, Rule 38, Minimum Clearances of Wires from other Wires, Table 2, Case 8, Column D *requires the vertical separation between secondary and communications conductors supported on the same pole to be not less than 48 inches.*

The separation between SCE's secondary conductors and third parties communication conductors on the following poles was less than 48 inches:

- 4858924E
- 2261288E
- 2227243E
- 4718701E
- 1938179E

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.*

- The enclosure of Pad-mounted transformer PM5330190 was damaged at its base.