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

May 20, 2024 EA2024-1126

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 of the California Public Utilities Commission (CPUC), James Miller and Norvik Ohanian of my staff conducted an electric distribution audit of Southern California Edison's (SCE) Tehachapi District from March 18, 2024 to March 22, 2024. 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 20, 2024, by electronic or hard copy, of all corrective measures taken by SCE to remedy and prevent such violations. Please note that ESRB will be posting the audit report and your response to our audit on the CPUC website. If there is any information in your response that you would like us to consider as confidential, we request that in addition to your confidential response, you also provide us with a public or redacted version of your response that can be posted publicly on our website.

If you have any questions concerning this audit, you can contact James Miller at (213) 660- 8898 or James.Miller@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

Enclosures: Audit Findings

Cc: Lee Palmer, Director, Safety and Enforcement Division, CPUC
Nika Kjensli, Program Manager, ESRB, SED, CPUC
Majed Ibrahim, Senior Utilities Engineer (Supervisor), ESRB, SED, CPUC
James Miller, Utilities Engineer, ESRB, SED, CPUC
Norvik Ohanian, Utilities Engineer, ESRB, SED, CPUC

AUDIT FINDINGS

I. Records Review

My staff reviewed the following records during the audit:

- Patrol & Detailed Inspection records.
- Late Inspections
- Work Orders Created from Inspections
- Repair Work Orders
- Intrusive Testing Records
- Third Party Notifications
- Pole Loading Calculation 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 calendar year 2019 through February 2024, SCE had 920 overhead detailed inspections and 86 above ground patrol inspections which had either been completed after SCE's scheduled due date, or were past due and had not yet been completed at the time 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 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 calendar year 2019 through February 2024, SCE had 8 underground detailed inspections which had either been completed after SCE's scheduled due date, or were past due and had not yet been completed at the time of the audit.

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.*

SCE's records indicated that from March 2021 through February 2024, SCE completed 562 overhead work orders past SCE's due date for corrective action. Additionally, as of the date of the audit, SCE had 42 open overhead work orders that were 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 March 2021 through February 2024, SCE completed 17 underground work orders past SCE's due date for corrective action. Additionally, as of the date of the audit, SCE had 10 open underground work orders that were past SCE's scheduled due date for corrective action.

GO95, Rule 44.1, Installation and Reconstruction, states in part:

> *Lines and elements of lines, upon installation or reconstruction, shall provide as a minimum the safety factors specified in Table 4. The design shall consider all supply and communication facilities planned to occupy the structure. For purposes of this rule, the term "planned" applies to the facilities intended to occupy the structure that are actually known to the constructing company at the time of design.*

SED staff discovered the following discrepancies between SCE's pole loading records and conditions in the field:

1. The pole loading records for Pole No. 4901441E indicated that that the pole was designed to support conductor spans of 146 feet in one direction and 140 feet in the other; SED staff

measured these spans in the field and found that their actual lengths were approximately 146 feet and 182 feet, respectively.

2. The pole loading records for Pole No. 4266741E indicated that the pole was designed to support three levels of crossarms, including one double crossarm. My staff observed that this pole actually supported four levels of single crossarms.

III. Field Inspections

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

No.	Facility Identification	Facility Type	Location
1	416509E	Pole	Mojave
2	1870587E	Pole	Mojave
3	1870586E	Pole	Mojave
4	1870585E	Pole	Mojave
5	1870584E	Pole	Mojave
6	1870583E	Pole	Mojave
7	1876100E	Pole	Mojave
8	1876099E	Pole	Mojave
9	2164063E	Pole	Stallion Springs
10	4975099E	Pole	Stallion Springs
11	2059124E	Pole	Stallion Springs
12	4816999E	Pole	Stallion Springs
13	2334449E	Pole	Stallion Springs
14	4816999E	Pole	Stallion Springs
15	4580341E	Pole	Stallion Springs
16	2334450E	Pole	Stallion Springs
17	2059125E	Pole	Stallion Springs
18	2059126E	Pole	Stallion Springs
19	2059127E	Pole	Stallion Springs
20	4180080E	Pole	Stallion Springs
21	4852297E	Pole	Stallion Springs
22	2014729E	Pole	Stallion Springs
23	4009872E	Pole	Stallion Springs
24	4544590E	Pole	Stallion Springs
25	4544589E	Pole	Stallion Springs
26	4837606E	Pole	Stallion Springs
27	4266739E	Pole	Stallion Springs
28	4266740E	Pole	Stallion Springs
29	4901443E	Pole	Stallion Springs
30	4266741E	Pole	Stallion Springs
31	4901442E	Pole	Stallion Springs
32	2466742E	Pole	Stallion Springs
33	4901441E	Pole	Stallion Springs
34	4266851E	Pole	Stallion Springs
35	4266852E	Pole	Stallion Springs
36	4742842E	Pole	Stallion Springs
37	4189644E	Pole	Stallion Springs
38	4415967E	Pole	Stallion Springs

39	4415968E	Pole	Stallion Springs
40	4415969E	Pole	Stallion Springs
41	4415970E	Pole	Stallion Springs
42	4415971E	Pole	Stallion Springs
43	4415972E	Pole	Stallion Springs
44	4415973E	Pole	Stallion Springs
45	4278061E	Pole	Golden Hills
46	4278062E	Pole	Golden Hills
47	Tagless Pole West of Previous	Pole	Golden Hills
48	4278053E	Pole	Golden Hills
49	4278052E	Pole	Golden Hills
50	2007843E	Pole	Golden Hills
51	1160906E	Pole	Golden Hills
52	1197645E	Pole	Golden Hills
53	1897644E	Pole	Golden Hills
54	4180099E	Pole	Golden Hills
55	1897647E	Pole	Golden Hills
56	1987648E	Pole	Golden Hills
57	1987649E	Pole	Golden Hills
58	P5330198	Padmounted Switch	Cummings Valley
59	P5396443	Padmounted Transformer	Cummings Valley
60	5131338	BURD	Cummings Valley
61	P5519468	Padmounted Transformer	Cummings Valley
62	5549625	Padmounted Transformer	Cummings Valley
63	P5382710	Padmounted Transformer	Cummings Valley
64	P5517106	Padmounted Transformer	Cummings Valley
65	4240030E	Pole	Cummings Valley
66	P5775770	Padmounted Transformer	Mountain Meadows
67	P5775771	Padmounted Transformer	Mountain Meadows
68	P5775773	Padmounted Transformer	Mountain Meadows
69	P5571152	Padmounted Transformer	Mountain Meadows
70	P5471649	Padmounted Transformer	Mountain Meadows
71	P5546411	Padmounted Switch	Mountain Meadows
72	P5546418	Padmounted Switch	Mountain Meadows
73	5364796	BURD	Mojave
74	5364793	BURD	Mojave
75	5364794	BURD	Mojave
76	5364795	BURD	Mojave
77	2208092E	Pole	Tehachapi
78	2208093E	Pole	Tehachapi
79	2208094E	Pole	Tehachapi
80	2305874E	Pole	Tehachapi
81	2337488E	Pole	Tehachapi

82	2337489E	Pole	Tehachapi
83	2370322E	Pole	Tehachapi
84	2370325E	Pole	Tehachapi
85	2370323E	Pole	Tehachapi
86	2370326E	Pole	Tehachapi
87	2370324E	Pole	Tehachapi
88	4107657E	Pole	Tehachapi
89	2199946E	Pole	Tehachapi
90	2199947E	Pole	Tehachapi
91	2199948E	Pole	Tehachapi
92	2208089E	Pole	Tehachapi
93	2208090E	Pole	Tehachapi
94	2208091E	Pole	Tehachapi
95	2015515E	Pole	Golden Hills
96	4932598E	Pole	Golden Hills
97	4742838E	Pole	Golden Hills
98	2109567E	Pole	Golden Hills
99	2109568E	Pole	Golden Hills
100	4494511E	Pole	Golden Hills
101	2175396E	Pole	Golden Hills
102	2175397E	Pole	Golden Hills
103	2175398E	Pole	Golden Hills
104	4779432E	Pole	Golden Hills
105	20774T	Pole	Golden Hills
106	4902721E	Pole	Golden Hills
107	4415997E	Pole	Golden Hills
108	4902722E	Pole	Golden Hills
109	4902725E	Pole	Golden Hills
110	20779T	Pole	Golden Hills
111	4960576E	Pole	Golden Hills
112	4447803E	Pole	Golden Hills
113	4447804E	Pole	Golden Hills
114	4447805E	Pole	Golden Hills
115	2015512E	Pole	Golden Hills
116	2015513E	Pole	Golden Hills
117	2226874E	Pole	Golden Hills
118	4932600E	Pole	Golden Hills
119	2015514E	Pole	Golden Hills
120	2038185E	Pole	Golden Hills

IV. Field Inspection Violations List

My staff observed the following violations during the field inspection:

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 on each of the following poles was not taut:

- 2164063E
- 2370332E
- 4266739E

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.*

"High Voltage" signs on each of the following poles were either missing or damaged:

- 2370322E
- 1870585E
- 1870583E
- 1876100E
- 1876099E

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 visibility strips on Pole No. 4415967E were damaged.

GO 95, Rule 56.4, Clearances, states in part:

> *The radial clearances between guys and conductors supported by or attached to the same poles or crossarms shall not be less than as specified in Table 2, Case 19.*

Table 2, Column C, Case 19 requires guy wires and communications conductors supported on the same pole to maintain a radial clearance of three inches.

Two SCE down guy wires were in contact with multiple communications conductors near Pole No. 2059124E.

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 interior of pad-mounted structure 5549625 contained a large amount of dirt and gravel from apparent rodent activity.