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

June 14, 2024 EA2024-1135

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 Victorville District

Mr. Stark:

On behalf of the Electric Safety and Reliability Branch of the California Public Utilities Commission (CPUC), Norvik Ohanian of my staff conducted an electric distribution audit of Southern California Edison's (SCE) Victorville District from May 13, 2024 to May 17, 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 July 15, 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, please contact Norvik Ohanian at (213) 660-5528 or Norvik.Ohanian@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: CPUC Audit Findings

Cc: Lee Palmer, Director, Safety and Enforcement Division, CPUC
Nika Kjensli, Program Manager, Electric Safety and Reliability Branch, CPUC
Norvik Ohanian, Utilities Engineer, Electric Safety and Reliability Branch, CPUC

AUDIT FINDINGS

I. Records Review

During the audit, my staff reviewed the following records:

- Patrol & Detailed Inspection records
- Repair Notifications
- 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 insuring that they are in good condition so as to conform with these rules.*

SCE's records indicated that from April 2019 through April 2024, SCE completed 73 patrol inspections past SCE's scheduled due date. Additionally, as of the date of the audit, SCE had 3 pending patrol inspections that were past SCE's scheduled due date.

SCE's records indicated that from April 2019 through April 2024, SCE completed 13,326 detailed inspections past SCE's scheduled due date. Additionally, as of the date of the audit, SCE had 572 pending detailed inspections that were 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 of these rules.*

SCE's records indicated that from April 2019 through April 2024, SCE completed 268 underground inspections past SCE's scheduled due date. Additionally, as of the date of the audit, SCE had 32 pending underground inspections that were past SCE's scheduled due date.

GO 95, Rule 18-A: 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.*

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 April 2019 through April 2024, SCE completed 1,577 overhead work orders past SCE's due date for corrective action. Additionally, as of the date of the audit, SCE had 169 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 April 2019 through April 2024, SCE completed 143 underground work orders past SCE's due date for corrective action. Additionally, as of the date of the audit, SCE had 37 open underground work orders that were past SCE's scheduled due date for corrective action.

III. Field Inspection

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

No.	Structure ID.	Type of Structure	Location
1	4716225E	Pole	Lucerne Valley
2	4716224E	Pole	Lucerne Valley
3	4716223E	Pole	Lucerne Valley
4	527018S	Pole	Lucerne Valley
5	527019	Pole	Lucerne Valley
6	2135913E	Pole	Lucerne Valley
7	67012S	Pole	Lucerne Valley
8	4894282E	Pole	Lucerne Valley
9	4213274E	Pole	Lucerne Valley
10	365109	Pole	Lucerne Valley
11	1552537E	Pole	Lucerne Valley
12	366049	Pole	Lucerne Valley
13	2154657E	Pole	Hesperia
14	5000803E	Pole	Hesperia
15	527506E	Pole	Hesperia
16	4939371E	Pole	Hesperia
17	4301925E	Pole	Hesperia
18	4939373E	Pole	Hesperia
19	4772826E	Pole	Hesperia
20	1552603E	Pole	Hesperia
21	4155858E	Pole	Hesperia
22	4155859E	Pole	Hesperia
23	1552604E	Pole	Hesperia
24	4360924E	Pole	Hesperia
25	1552777E	Pole	Helendale
26	2360702E	Pole	Helendale
27	2360701E	Pole	Helendale
28	2292710E	Pole	Helendale
29	1963423E	Pole	Helendale
30	4169522E	Pole	Helendale
31	1963424E	Pole	Helendale
32	4714536E	Pole	Helendale
33	2377674E	Pole	Helendale
34	4512751E	Pole	Helendale
35	4512752E	Pole	Helendale
36	2001922E	Pole	Helendale
37	4512794E	Pole	Helendale
38	4512792E	Pole	Helendale
39	2252955E	Pole	Adelanto
40	2252956E	Pole	Adelanto
41	300600E	Pole	Adelanto
42	4365291E	Pole	Adelanto

43	4099401E	Pole	Adelanto
44	4099766E	Pole	Adelanto
45	4988799E	Pole	Adelanto
46	2252954E	Pole	Adelanto
47	2252953E	Pole	Adelanto
48	4686660E	Pole	Adelanto
49	4603419E	Pole	Adelanto
50	2250593E	Pole	Adelanto
51	4603418E	Pole	Adelanto
52	2250592E	Pole	Adelanto
53	2185539E	Pole	Hesperia
54	4344099E	Pole	Hesperia
55	2185538E	Pole	Hesperia
56	4052700E	Pole	Hesperia
57	4495060E	Pole	Hesperia
58	526734	Pole	Hesperia
59	4071495E	Pole	Hesperia
60	2185537E	Pole	Hesperia
61	526732	Pole	Hesperia
62	2293856E	Pole	Victorville
63	2293855E	Pole	Victorville
64	4135399E	Pole	Victorville
65	4989002E	Pole	Victorville
66	1601369E	Pole	Victorville
67	1601368E	Pole	Victorville
68	2233789E	Pole	Victorville
69	2233788E	Pole	Victorville
70	4796567E	Pole	Victorville
71	2290798E	Pole	Victorville
72	2179560E	Pole	Victorville
73	2293859E	Pole	Victorville
74	2293858E	Pole	Victorville
75	4490934E	Pole	Victorville
76	4106421E	Pole	Pinon Hills
77	4106423E	Pole	Pinon Hills
78	4092348E	Pole	Pinon Hills
79	4092349E	Pole	Pinon Hills
80	4092350E	Pole	Pinon Hills
81	4288813E	Pole	Pinon Hills
82	4106424E	Pole	Pinon Hills
83	4123098E	Pole	Pinon Hills
84	4123099E	Pole	Pinon Hills
85	4225694E	Pole	Pinon Hills
86	4225695E	Pole	Pinon Hills
87	4224973E	Pole	Pinon Hills
88	4224974E	Pole	Pinon Hills
89	4134900E	Pole	Phelan

90	4935134E	Pole	Phelan
91	4106223E	Pole	Phelan
92	4225632E	Pole	Phelan
93	4225633E	Pole	Phelan
94	4106224E	Pole	Phelan
95	2342341E	Pole	Phelan
96	2342340E	Pole	Phelan
97	2342339E	Pole	Phelan
98	2364083E	Pole	Phelan
99	2364082E	Pole	Phelan
100	2364081E	Pole	Phelan
101	4301947E	Pole	Phelan
102	1121640E	Pole	Wrightwood
103	1121639E	Pole	Wrightwood
104	1121638E	Pole	Wrightwood
105	1184125E	Pole	Wrightwood
106	4739435E	Pole	Wrightwood
107	4764707E	Pole	Wrightwood
108	4875610E	Pole	Wrightwood
109	4156170E	Pole	Wrightwood
110	4156171E	Pole	Wrightwood
111	4647791E	Pole	Wrightwood
112	4591315E	Pole	Wrightwood
113	1219317E	Pole	Wrightwood
114	1219318E	Pole	Wrightwood
115	4647792E	Pole	Wrightwood
116	1103261E	Pole	Wrightwood
117	1103260E	Pole	Wrightwood
118	4647793E	Pole	Wrightwood
119	1103258E	Pole	Wrightwood
120	4647794E	Pole	Wrightwood
121	4739448E	Pole	Wrightwood
122	826038E	Pole	Wrightwood
123	4559682E	Pole	Wrightwood
124	4433340E	Pole	Wrightwood
125	1450701E	Pole	Wrightwood
126	4772400E	Pole	Wrightwood
127	1403900E	Pole	Wrightwood
128	1103277E	Pole	Wrightwood
129	1103276E	Pole	Wrightwood
130	4288816E	Pole	Wrightwood
131	1309622E	Pole	Wrightwood
132	1103275E	Pole	Wrightwood
133	1103274E	Pole	Wrightwood
134	1103273E	Pole	Wrightwood
135	1103272E	Pole	Wrightwood
136	4766074E	Pole	Wrightwood

137	4766075E	Pole	Wrightwood
138	4742492E	Pole	Wrightwood
139	1121403E	Pole	Wrightwood
140	4962885E	Pole	Wrightwood
141	4757892E	Pole	Wrightwood
142	1121404E	Pole	Wrightwood
143	4742490E	Pole	Wrightwood
144	P5400513	Pad-mounted Transformer	Spring Valley Lake
145	P5400514	Pad-mounted Transformer	Spring Valley Lake
146	Next to P5400514	Primary Splice-box (Manhole)	Spring Valley Lake
147	P5416756	Pad-mounted Transformer	Spring Valley Lake
148	P5429964	Pad-mounted Switch	Victorville
149	P5429963	Burd Transformer Vault	Victorville
150	P5520029	Pad-mounted Transformer	Victorville
151	P5519881	Pad-mounted Transformer	Victorville
152	P5332013	Switch Vault	Wrightwood
153	5050063	Switch Vault	Wrightwood
154	P5147473	Pad-mounted Transformer	Wrightwood
155	P5050518	Pad-mounted Transformer	Wrightwood

IV. Field Inspection – Violations List

We observed the following violations during the field inspections:

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 following facilities required maintenance:

- 2233789E – the down guy anchor supporting the pole was buried.
- 4357334E – the cut-out fuse cross arm was not securely fastened on the pole, causing it to swing from side to side.

GO 95, Rule 35, Vegetation Management, states in part:

> *When a supply or communication company has actual knowledge, obtained either through normal operating practices or notification to the company, that its circuit energized at 750 volts or less shows strain or evidences abrasion from vegetation contact, the condition shall be corrected by reducing conductor tension, rearranging or replacing the conductor, pruning the vegetation, or placing mechanical protection on the conductor(s).*

An SCE secondary service drop conductor attached to each of the following poles was strained by vegetation:

- 365109
- 11032748E

GO 95, Rule 38 - Minimum Clearances of Wires from Other Wires, Table 2, Column C, Case 19, requires the minimum radial clearance between guys and span wires passing communication conductors supported on the same poles to be 3 inches.

An SCE down guy wire attached to each of the following poles was in contact with a third-party communications conductor:

- 1184125E
- 4591315E

GO 95, 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.*

The pole loading calculations supplied by SCE for pole 4716225E did not include a third-party communication conductor at approximately 20 feet high and the associated down guy which were present at the time of the field inspection.

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 sign on each of the following poles was either missing or damaged:

- 67012S
- 1552537E
- 366049
- 4155858E
- 1963423E
- 4365291E
- 2250593E
- 4135399E
- 2233788E
- 4288813E
- 4225694E
- 4288816E

GO 95, Rule 56.2, Overhead Guys, Anchor Guys and Span Wire 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 supporting pole 4742490E was loose and not taut.

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 pad mounted transformer P5147473 had signs of oil leakage at the back side of its enclosure.