STATE OF CALIFORNIA GAVIN NEWSOM, Governor

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE SAN FRANCISCO, CA 94102-3298



March 9, 2023 EA2023-1045

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 Santa Barbara District

Mr. Stark:

On behalf of the Electric Safety and Reliability Branch (ESRB) of the California Public Utilities Commission (CPUC), Richard Le of my staff conducted an electric distribution audit of Southern California Edison's (SCE) Santa Barbara District from February 13, 2023 to February 17, 2023. 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 April 10, 2023, 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, 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 Richard Le, 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 Clearances Records

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:

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 pole load calculations were incorrect:

• The pole load calculation for pole 1675563E incorrectly shows a down-guy as a span-guy. It also recorded the span length in the direction of 41 degrees as 53 feet when the field measurement determined it to be approximately 76 feet.

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 January 2013 through January 2023, SCE completed 79 patrol inspections past SCE's scheduled due date.
- SCE's records indicated that from January 2013 through January 2023, SCE completed 4008
 detailed inspections past SCE's scheduled due date. Additionally, as of the date of the audit, SCE
 had 173 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 these rules.

• SCE's records indicated that from January 2013 through January 2023, SCE completed 423 underground inspections past SCE's scheduled due date. Additionally, as of the date of the audit, SCE had 11 pending underground inspections that were past SCE's 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.

SCE's records indicated that from January 2018 through January 2023, SCE completed 1724 overhead work orders past SCE's due date for corrective action. Additionally, as of the date of the audit, SCE had 724 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 January 2018 through January 2023, SCE completed 310 underground work orders past SCE's due date for corrective action. Additionally, as of the date of the audit, SCE had 328 open underground work orders that were 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 ID.	Type of Structure	Location
1	P5032449	Pad-mounted transformer	Carpinteria
2	B5032509	BURD transformer	Carpinteria
3	P5317163	Pad-mounted transformer	Carpinteria
4	P5483498	Pad-mounted transformer	Carpinteria
5	P5317210	Pad-mounted transformer	Carpinteria
6	2108858E	Pole	Carpinteria
7	4365388E	Pole	Goleta
8	4340069E	Pole	Goleta
9	1324337E	Pole	Goleta
10	1324344E	Pole	Goleta
11	1324345E	Pole	Goleta
12	1324346E	Pole	Goleta
13	1324347E	Pole	Goleta
14	1324313E	Pole	Goleta
15	1324338E	Pole	Goleta
16	1324339E	Pole	Goleta
17	1324340E	Pole	Goleta
18	13243141E	Pole	Goleta
19	S270454	Pole	Goleta
20	1324560E	Pole	Goleta
21	1324559E	Pole	Goleta
22	1482164E	Pole	Goleta
23	1324558E	Pole	Goleta
24	1324557E	Pole	Goleta
25	1664545E	Pole	Goleta
26	1523858E	Pole	Goleta
27	4339723E	Pole	Goleta
28	1523860E	Pole	Goleta
29	1523861E	Pole	Goleta
30	4427398E	Pole	Goleta
31	GT71323	Pole	Goleta
32	1133712E	Pole	Goleta
33	1882441E	Pole	Goleta
34	1324996E	Pole	Goleta
35	4041704E	Pole	Goleta
36	4452827E	Pole	Goleta
37	P5317237	Pad-mounted transformer	Goleta
38	P5317240	Pad-mounted transformer	Goleta
39	P5033294	Pad-mounted transformer	Goleta

40	P5534868	Pad-mounted switch	Goleta
41	P5534869	Pad-mounted transformer	Goleta
42	P5534870	Pad-mounted transformer	Goleta
43	GT254119	Pole	Isla Vista
44	S27981Y	Pole	Isla Vista
45	4946697E	Pole	Isla Vista
46	S23346Y	Pole	Isla Vista
47	1217258E	Pole	Isla Vista
48	1217257E	Pole	Isla Vista
49	1256347E	Pole	Isla Vista
50	1256348E	Pole	Isla Vista
51	4944058E	Pole	Isla Vista
52	1345333E	Pole	Isla Vista
53	1256820E	Pole	Isla Vista
54	1256605E	Pole	Isla Vista
55	1286422E	Pole	Isla Vista
56	1286421E	Pole	Isla Vista
57	1345336E	Pole	Isla Vista
58	1217659E	Pole	Isla Vista
59	1217660E	Pole	Isla Vista
60	1345334E	Pole	Isla Vista
61	1217152E	Pole	Isla Vista
62	1345338E	Pole	Isla Vista
63	1481682E	Pole	Isla Vista
64	1189344E	Pole	Montecito
65	1189343E	Pole	Montecito
66	4892903E	Pole	Montecito
67	2178546E	Pole	Montecito
68	1664670E	Pole	Montecito
69	4428853E	Pole	Montecito
70	4781354E	Pole	Montecito
71	430216E	Pole	Montecito
72	4339415E	Pole	Montecito
73	4452152E	Pole	Montecito
74	4424301E	Pole	Montecito
75	4574192E	Pole	Montecito
76	204617E	Pole	Montecito
77	497829E	Pole	Santa Barbara
78	4892687E	Pole	Santa Barbara
79	1996171E	Pole	Santa Barbara
80	428019E	Pole	Santa Barbara
81	1453757E	Pole	Santa Barbara
82	1453758E	Pole	Santa Barbara
83	4371176E	Pole	Santa Barbara
84	1129913E	Pole	Santa Barbara

85	1129912E	Pole	Santa Barbara
86	1129911E	Pole	Santa Barbara
87	GT60733	Pole	Santa Barbara
88	1189264E	Pole	Santa Barbara
89	4882642E	Pole	Santa Barbara
90	1524730E	Pole	Santa Barbara
91	4476373E	Pole	Santa Barbara
92	4790043E	Pole	Santa Barbara
93	1947188E	Pole	Santa Barbara
94	1675901E	Pole	Santa Barbara
95	4591578E	Pole	Santa Barbara
96	1675904E	Pole	Santa Barbara
97	1828944E	Pole	Santa Barbara
98	1829133E	Pole	Santa Barbara
99	1675934E	Pole	Santa Barbara
100	B5032676	BURD transformer	Santa Barbara
101	P5317246	Pad-mounted transformer	Santa Barbara
102	5446706	Vault	Santa Barbara
103	4128086E	Pole	Santa Barbara
104	1675563E	Pole	Santa Barbara
105	2296286E	Pole	Santa Barbara
106	807892E	Pole	Santa Barbara
107	90343E	Pole	Santa Barbara
108	1256327E	Pole	Santa Barbara
109	B5514644	BURD switch	Summerland
110	B5032310	BURD transformer	Summerland
111	P5317852	Pad-mounted transformer	Summerland
112	4892458E	Pole	Toro Canyon
113	4263188E	Pole	Toro Canyon
114	4263189E	Pole	Toro Canyon
115	4926384E	Pole	Toro Canyon

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.

Customer vegetation at the base of pole 1286421E obstructed the visibility strips.

GO 95, Rule 38, Minimum Clearances of Wires from other Wires, Table 2, Case 19, Column C requires the radial separation between guys and communications conductors supported on the same pole to be not less than 3 inches.

An SCE guy wire attached to pole 4926384E was in contact with a communication conductor.

GO 95, Rule 38, Minimum Clearances of Wires from other Wires, Table 2, Case 10, Column C requires the vertical separation between a secondary conductor and communication conductor supported on the same pole to be not less than 48 inches.

A SCE secondary service drop was in contact with a communication service drop on pole 1256605E.

GO 95, Rule 38, Minimum Clearances of Wires from other Wires, Table 2, Case 10, Column D requires the vertical separation between two secondary conductors supported on the same pole to be not less than 48 inches.

The separation between two SCE secondary conductors on pole 1453757E was less than 48 inches.

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:

- 4424301E
- 1828944E
- GT60733

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 span guy wire on the following poles were loose and not taut:

- 1345333E
- 1345338E
- 1324346E