STATE OF CALIFORNIA GAVIN NEWSOM, *Governor*

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

May 12, 2022 EA2022-964

Melvin Stark
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Southern California Edison Company
1 Innovation Way
Pomona, CA 91786

Subject: Audit of Southern California Edison's Long Beach District

Mr. Stark:

On behalf of the Electric Safety and Reliability Branch (ESRB) of the California Public Utilities Commission (CPUC) James Miller of my staff conducted an electric distribution audit of Southern California Edison's (SCE) Long Beach District from February 7, 2022 to February 11, 2022. 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 June 13, 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 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

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
James Miller, 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 December 2010 through October 2021, SCE completed 7949 overhead detailed inspections and 52 above ground patrol 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 October 2010 through November 2021, SCE completed 588 underground inspections 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 2021 to December 2021, SCE completed 47 overhead work orders past SCE's 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 2021 to November 2021, SCE completed 54 underground work orders past SCE's due date for corrective action.

III. Field Inspection

My staff inspected the following facilities during the field inspection:

No.	Structure Identification	Structure Type	Location
1	1710162E	Pole	Traffic Circle
2	4405181E	Pole	Traffic Circle
3	44963E	Pole	Traffic Circle
4	4939563E	Pole	Traffic Circle
5	217982E	Pole	Traffic Circle
6	217983E	Pole	Traffic Circle
7	124046E	Pole	Traffic Circle
8	424350E	Pole	Traffic Circle
9	1568563E	Pole	Belmont Shore
10	1568554E	Pole	Belmont Shore
11	B10587Y	Pole	Belmont Shore
12	10588Y	Pole	Belmont Shore
13	1834698E	Pole	Belmont Shore
14	4152744E	Pole	Belmont Shore
15	4857249E	Pole	Belmont Shore
16	4377630E	Pole	Belmont Shore
17	92896E	Pole	Belmont Shore
18	841378E	Pole	Belmont Shore
19	841371E	Pole	Belmont Shore
20	829624E	Pole	Belmont Shore
21	4454238E	Pole	Belmont Shore
22	2276667E	Pole	Belmont Shore
23	92910E	Pole	Poly High
24	B143193Y	Pole	Poly High
25	92911E	Pole	Poly High
26	4454881E	Pole	Poly High
27	B6186Y	Pole	Poly High
28	4526034E	Pole	Poly High
29	694706E	Pole	Poly High
30	694707E	Pole	Poly High
31	1488885E	Pole	Poly High
32	694709E	Pole	Poly High
33	694710E	Pole	Poly High
34	645704E	Pole	Bixby Knolls
35	4280630E	Pole	Bixby Knolls
36	4367538E	Pole	Bixby Knolls
37	643378E	Pole	Bixby Knolls
38	643250E	Pole	Bixby Knolls

39	643249E	Pole	Bixby Knolls
40	643247E	Pole	Bixby Knolls
41	643246E	Pole	Bixby Knolls
42	943246E	Pole	Bixby Knolls
43	1474456E	Pole	Bixby Knolls
44	643244E	Pole	Bixby Knolls
45	2147761E	Pole	Los Altos
46	1183510E	Pole	Rossmoor
47	1183466E	Pole	Rossmoor
48	1221313E	Pole	Rossmoor
49	1221314E	Pole	Rossmoor
50	4256252E	Pole	Rossmoor
51	4095626E	Pole	Rossmoor
52	4559533E	Pole	Rossmoor
53	1183512E	Pole	Rossmoor
54	1183536E	Pole	Rossmoor
55	1183537E	Pole	Rossmoor
56	1183517E	Pole	Rossmoor
57	1183516E	Pole	Rossmoor
58	768526E	Pole	North Long Beach
59	10250Y	Pole	North Long Beach
60	828955E	Pole	North Long Beach
61	2103745E	Pole	North Long Beach
62	788974E	Pole	North Long Beach
63	636810E	Pole	North Long Beach
64	636811E	Pole	North Long Beach
65	636812E	Pole	North Long Beach
66	636078E	Pole	North Long Beach
67	4338630E	Pole	North Long Beach
68	636080E	Pole	North Long Beach
69	B144154Y	Pole	North Long Beach
70	4447332E	Pole	Artesia
71	1578171E	Pole	Artesia
72	1578172E	Pole	Artesia
73	1578173E	Pole	Artesia
74	4453920E	Pole	Artesia
75	1578175E	Pole	Artesia
76	4084032E	Pole	Artesia
77	2167519E	Pole	Artesia
78	1578176E	Pole	Artesia
79	1925963E	Pole	Artesia
80	4400434E	Pole	Artesia
81	M13395Y	Pole	Artesia

82	M13394Y	Pole	Artesia
83	4721513E	Pole	Artesia
84	M13393Y	Pole	Artesia
85	213392Y	Pole	Artesia
86	2147865E	Pole	Artesia
87	2167520E	Pole	Artesia
88	1282717E	Pole	Artesia
89	M9857Y	Pole	Artesia
90	4378415E	Pole	Long Beach
91	4469592E	Pole	Long Beach
92	540018E	Pole	Long Beach
93	444610E	Pole	Long Beach
94	840794E	Pole	Lakewood
95	962654E	Pole	Lakewood
96	962652E	Pole	Lakewood
97	864170E	Pole	Los Alamitos
98	1542553E	Pole	Los Alamitos
99	1542554E	Pole	Los Alamitos
100	V5616305	Vault with Gas Switch	Long Beach
101	V5133093	Vault with Gas Switch	Long Beach
102	V5133282	Vault with Gas Switch	Long Beach
103	V5132737	BURD Switch	Long Beach
104	5105695	BURD Transformer	Seal Beach
105	5105696	BURD Transformer	Seal Beach
106	5105698	BURD Transformer	Seal Beach
107	P5192570	Padmounted Transformer	Cerritos
108	P5135181	Padmounted Transformer	Cerritos
109	P5135236	Padmounted Transformer	Cerritos
110	P5134826	Padmounted Transformer	Cerritos
111	P5134828	Padmounted Transformer	Cerritos
112	P5134830	Padmounted Transformer	Cerritos

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.*

- A visibility strip on each of poles numbered 4400434E and 124046E was damaged.
- The pole tag on Pole No. 4454238E was covered by a U-guard.
- A crossarm on Pole No. 636078E was damaged.
- A conduit on Pole No. 4453920E was damaged.
- A balloon ribbon was caught on a primary conductor on Pole No. 643246E.

GO 95, Rule 31.6, Abandoned Lines, states in part:

> *Lines or portions of lines permanently abandoned shall be removed by their owners so that such lines shall not become a public nuisance or a hazard to life or property. For the purposes of this rule, lines that are permanently abandoned shall be defined as those lines that are determined by their owner to have no foreseeable future use.*

Insulators on poles numbered 217982E and 636078E were abandoned and not removed.

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.*

A communications service drop was in contact with an SCE service drop near Pole No. 636811E.

General Order 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 three inches.

A down guy wire on Pole No. 636810E was in contact with two communications conductors.

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.*

Unauthorized signs were attached to each of the following poles:

- Pole No. M13394Y
- Pole No. 4939563E

- Pole No.124046E
- Pole No. 10250Y

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 or band on each of the following poles was missing or damaged:

- 1183512E
- 768526E
- 636078E
- 4338630E
- 1710162E
- 1568554E
- B10587Y
- 841378E
- 829624E
- 2276667E
- 92911E
- 694707E
- 1488885E
- 694709E
- 4280630
- 4367538E
- 643250E
- 643249E
- M13395Y
- 2147865E
- 2167520E

GO 95, Rule 91.3 Stepping, B. 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. Above this point steps shall be placed, with spacing between steps on the same side of the pole not exceeding 36 inches, at least to that conductor level above which only circuits operated and maintained by one party remain. Steps or fixtures for temporary steps shall be installed as part of a pole restoration process. Steps shall be so placed that runs or risers do not interfere with the free use of the steps.*

The lowest pole steps on each of the following poles was located at a height of less than eight feet:

- 10250Y
- B6186Y
- M9857Y

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 moulding on each of the following poles was damaged:

- 768526E
- 217983E
- 636078E
- 636080E

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 equipment tag on Vault V5133282 was damaged.
- The base of Padmounted Transformer P5134826 showed significant corrosion.