STATE OF CALIFORNIA GAVIN NEWSOM, *Governor*

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

October 10, 2022 EA2022-977

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 South Bay District

Mr. Stark:

On behalf of the Electric Safety and Reliability Branch (ESRB) of the California Public Utilities Commission (CPUC), Joceline Pereira and Eric Ujiiye of my staff conducted an electric distribution audit of Southern California Edison's (SCE) South Bay District from June 27, 2022 through July 1, 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 November 10, 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 Joceline Pereira at (213) 620-2598 or Eric.Ujiiye@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
Eric Ujiiye, 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 insuring that they are in good condition so as to conform with these rules.*

SCE's records indicated from January 2015 through January 2022, SCE had 45 annual grid patrol inspections and 8941 overhead detailed inspections that were completed or pending completion past the 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 from January 2015 through January 2022, SCE had 999 underground detailed inspections that were completed or pending completion past the 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 2017 to 2022, SCE had 1,416 overhead notifications that were completed or pending completion past the 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 June 2021 through June 2022, SCE had 370 underground notifications that were completed or pending completion past the 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	1319142E	Utility Pole	Palos Verdes
2	1319143E	Utility Pole	Palos Verdes
3	1319141E	Utility Pole	Palos Verdes
4	1319140E	Utility Pole	Palos Verdes
5	1319139E	Utility Pole	Palos Verdes
6	1319138E	Utility Pole	Palos Verdes
7	1319137E	Utility Pole	Palos Verdes
8	1319144E	Utility Pole	Palos Verdes
9	1319146E	Utility Pole	Palos Verdes
10	1157144E	Utility Pole	Palos Verdes
11	1157145E	Utility Pole	Palos Verdes
12	1139366E	Utility Pole	Palos Verdes
13	1394752E	Utility Pole	Palos Verdes
14	1157927E	Utility Pole	Palos Verdes
15	1231881E	Utility Pole	Palos Verdes
16	1139364E	Utility Pole	Palos Verdes
17	1139363E	Utility Pole	Palos Verdes
18	1158379E	Utility Pole	Palos Verdes
19	1139362E	Utility Pole	Palos Verdes
20	1158378E	Utility Pole	Palos Verdes
21	1158397E	Utility Pole	Palos Verdes
22	1158398E	Utility Pole	Palos Verdes
23	1803683E	Utility Pole	Palos Verdes
24	1639794E	Utility Pole	Palos Verdes
25	1158400E	Utility Pole	Palos Verdes
26	1230551E	Utility Pole	Palos Verdes
27	1230552E	Utility Pole	Palos Verdes
28	1230553E	Utility Pole	Palos Verdes
29	811283E	Utility Pole	Palos Verdes
30	1284380E	Utility Pole	Torrance
31	515226H	Utility Pole	Torrance
32	4865294E	Utility Pole	Torrance
33	1284379E	Utility Pole	Torrance
34	510824H	Utility Pole	Torrance
35	1284378E	Utility Pole	Torrance
36	510813H	Utility Pole	Torrance
37	1284377E	Utility Pole	Torrance
38	1726292E	Utility Pole	Torrance

39	1018645H	Utility Pole	Torrance
40	1726291E	Utility Pole	Torrance
41	1726290E	Utility Pole	Torrance
42	1726289E	Utility Pole	Torrance
43	4940052E	Utility Pole	Redondo Beach
44	4574100E	Utility Pole	Redondo Beach
45	2140968E	Utility Pole	Redondo Beach
46	4322404E	Utility Pole	Redondo Beach
47	GT16796	Utility Pole	Redondo Beach
48	631605E	Utility Pole	Redondo Beach
49	4402577E	Utility Pole	Redondo Beach
50	3008267E	Utility Pole	Redondo Beach
51	1867301E	Utility Pole	Redondo Beach
52	873906E	Utility Pole	Redondo Beach
53	2141035E	Utility Pole	Redondo Beach
54	4853776E	Utility Pole	Redondo Beach
55	GT14987	Utility Pole	Redondo Beach
56	4853772E	Utility Pole	Redondo Beach
57	4853773E	Utility Pole	Redondo Beach
58	GT14988	Utility Pole	Redondo Beach
59	1640366E	Utility Pole	Redondo Beach
60	GT14927E	Utility Pole	Redondo Beach
61	4821720E	Utility Pole	Redondo Beach
62	GT14929	Utility Pole	Redondo Beach
63	4940105E	Utility Pole	Redondo Beach
64	GT141931	Utility Pole	Redondo Beach
65	GT14932	Utility Pole	Redondo Beach
66	GT14933	Utility Pole	Redondo Beach
67	1729759E	Utility Pole	Torrance
68	1729760E	Utility Pole	Torrance
69	850935E	Utility Pole	Torrance
70	850934E	Utility Pole	Torrance
71	1394373E	Utility Pole	Torrance
72	4706920E	Utility Pole	Torrance
73	850937E	Utility Pole	Torrance
74	850938E	Utility Pole	Torrance
75	850940E	Utility Pole	Torrance
76	4407695E	Utility Pole	Hawthorne
77	1264405E	Utility Pole	Hawthorne
78	2027921E	Utility Pole	Hawthorne
79	1836612E	Utility Pole	Hawthorne
80	1297967E	Utility Pole	Hawthorne
81	583667E	Utility Pole	Hawthorne
82	1636474E	Utility Pole	Hawthorne
83	105090H	Utility Pole	Hawthorne

84	583665E	Utility Pole	Hawthorne
85	1297963E	Utility Pole	Hawthorne
86	1006433E	Utility Pole	El Segundo
87	1264504E	Utility Pole	El Segundo
88	1204720E	Utility Pole	El Segundo
89	1006666E	Utility Pole	El Segundo
90	679257H	Utility Pole	El Segundo
91	4583532E	Utility Pole	El Segundo
92	784959H	Utility Pole	El Segundo
93	1674067E	Utility Pole	El Segundo
94	784960H	Utility Pole	El Segundo
95	1264502E	Utility Pole	Inglewood
96	1264501E	Utility Pole	Inglewood
97	1129935E	Utility Pole	Inglewood
98	1129934E	Utility Pole	Inglewood
99	482938E	Utility Pole	Inglewood
100	975638E	Utility Pole	Torrance
101	975639E	Utility Pole	Torrance
102	975637E	Utility Pole	Torrance
103	1393514E	Utility Pole	Redondo Beach
104	A5293Y	Utility Pole	Redondo Beach
105	5292Y	Utility Pole	Redondo Beach
106	4836164E	Utility Pole	Redondo Beach
107	683940E	Utility Pole	Redondo Beach
108	1318439E	Utility Pole	Redondo Beach
109	559601E	Utility Pole	Redondo Beach
110	1458786E	Utility Pole	Gardena
111	1713730E	Utility Pole	Gardena
112	224010E	Utility Pole	Gardena
113	4489421E	Utility Pole	Gardena
114	440744E	Utility Pole	Hawthorne
115	1892986E	Utility Pole	Hawthorne
116	4407445E	Utility Pole	Hawthorne
117	4840388E	Utility Pole	El Segundo
118	682809H	Utility Pole	El Segundo
119	1191450E	Utility Pole	Lennox
120	1158983E	Utility Pole	Lennox
121	440211H	Utility Pole	Lennox
122	1158820E	Utility Pole	Lennox
123	1158821E	Utility Pole	Lennox
124	1265830E	Utility Pole	Lennox
125	P5054044	Pad mounted transformer	Palos Verdes
126	P5054043	Pad mounted transformer	Palos Verdes
127	5149099	BURD Transformer	Palos Verdes
128	P5651672	Pad mounted transformer	Palos Verdes

129	5120118	BURD Transformer	Rolling Hills
130	5120117	BURD Transformer	Rolling Hills
131	5120116	BURD Transformer	Rolling Hills
132	5130552	BURD Transformer	Rolling Hills
133	P5120266	Pad mounted transformer	Rolling Hills
134	P5148486	Pad mounted transformer	Rolling Hills
135	P5057151	Pad mounted transformer	Rolling Hills
136	P5055000	Pad mounted transformer	Rolling Hills
137	P5057152	Pad mounted transformer	Rolling Hills
138	5150550	BURD Transformer	Torrance
139	5150548	BURD Transformer	Torrance
140	5150544	BURD Transformer	Torrance

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.*

Facilities attached to the following poles were not maintained for their intended use:

- Pole 850938 - The 4" riser conduit supported on the pole was damaged near the base, allowing access to the conductor.
- Pole 850940 - The 3" riser conduit supported on the pole was separated near the base, allowing access to the conductor.
- Pole 1319138 – pole step was damaged.
- Pole GT14933 – pole step was damaged.
- Pole 850938E – two pole steps were damaged.

GO 95, Rule 34, Foreign Attachments, states in part:

> *Nothing in these rules shall be construed as permitting the unauthorized attachment, to supply, streetlight 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.*

The following poles had foreign attachments:

- Pole 631605E – 2 x 4 wood pieces were attached above the public level.
- Pole 1319143E – no parking sign attached.
- Pole 1319144E – no parking sign attached.
- Pole 1726290E – no parking sign attached.

GO 95, Rule 54.8, Table 10 requires the minimum vertical clearance of insulated service drops of 0-750 volts above the roof of the house being served to be 0.5 inches.

A service drop supported on Pole 583665E was touching the roof of the home it was servicing.

GO 95, Rule 38, Minimum Clearances of Wires from Other Wires, states in part:

> *The minimum vertical, horizontal or radial clearances of wires from other wires shall not be less than the values given in Table 2 and are based on a temperature of 60° F. and no wind. Conductors may be deadended at the crossarm or have reduced clearances at points of transposition, and shall not be held in violation of Table 2, Cases 8–15 , inclusive*

GO 95, Rule 38, Table 2, Column C, Case 8, requires the minimum vertical clearance of "Communication Conductors (Including Open Wire, Cables and Service Drops)" and "Communication Conductors and Supply Drops" supported on the same pole to be 12 inches. A service drop supported on pole GT14929 and attached to a private home at 221 South Helberta Ave. in Redondo Beach was touching communication service drops.

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 attached to each of the following SCE poles were damaged and/or missing:

- Pole 1319140E – The pole did not have "HIGH VOLTAGE" markings on both sides of the cross-arm.
- Pole 1319139E - The pole did not have "HIGH VOLTAGE" markings on one side of the cross-arm and missing the "HIGH" on the other.
- Pole 1319138E - The pole did not have "HIGH VOLTAGE" markings on one side of the cross-arm and displayed only the "TAGE" on the other side.
- Pole 1319137E - The pole only displayed the "HIGH" marking on one side of the lower most cross-arm.
- Pole 1319144E - The pole did not have "HIGH VOLTAGE" markings on both sides of the cross-arm.
- Pole 850935E- The pole only displayed the "VOLTAGE" marking on one side of the upper and middle cross-arms.
- Pole 975638E– The pole did not have "HIGH VOLTAGE" markings on both sides of the upper cross-arm. Additionally, the "HIGH VOLTAGE" markings supported on both sides of the lower cross-arm were illegible.

- Pole 4407445E – The pole did not have "HIGH VOLTAGE" markings on one side of the cross-arm.
- Pole 682809H - The pole only displayed the "HIGH" marking on one side of the cross-arm.

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 attached to each of the following poles was damaged:

- Pole 1319138E – A section of the ground moulding was damaged above the public level exposing the ground wire.
- Pole 1394373E – The ground moulding at the public level was damage, exposing the ground wire at the public level in addition to a missing section below the communication level.
- Pole 1264502E – A section of the ground moulding was damaged above the public level exposing the ground wire.

GO 95, Rule 54.7, Climbing and Working Space, states in part:

> *Climbing space shall be maintained from the ground level. Climbing space, measured from center line of pole, shall be provided on one side or in one quadrant of all poles or structures with dimensions as specified in the following:*

The climbing space on the following poles was obstructed by vegetation:

- Pole 1319146E
- Pole 811283E
- Pole 4322404E

GO 95, Rule 56.2, 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 anchor on Pole 850938E was protruding 3 feet from the ground, causing the down guy wire it was supporting to be loose.

GO 95, Rule 18-A3, Maintenance Programs and Resolution of Potential Violations of General Order 95 and Safety Hazards, A. Resolution of Potential Violations of General Order 95 and Safety Hazards, states in part:

> *(3) If a company, while performing inspections of its facilities, discovers a Safety Hazard(s) on or near a communications facility or electric facility involving another company, the inspecting company shall notify the other entity of such safety hazard(s) no later than 10 business days after the discovery.*

For the following poles, SCE needs to notify the third party of a safety hazard:

- Pole 4407444E – a deteriorated guard arm was detached from the pole and lying on the communications conductor.
- Pole 4407445E – a communications down guy anchor was detached from the pole and lying on the sidewalk.
- Pole 1158398E – the third-party CIP needed to complete a pole transfer from a buddy pole.
- Pole 1264501E – the third-party CIP needed to complete a pole transfer from a buddy pole.