STATE OF CALIFORNIA Gavin Newsom, *Governor*
PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

December 14, 2023 EA2023-1097

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 Fullerton District

Mr. Stark:

On behalf of the Electric Safety and Reliability Branch (ESRB) of the California Public Utilities Commission (CPUC), Stacey Ocampo and Jose Lastra of my staff conducted an electric distribution audit of Southern California Edison's (SCE) Fullerton District from October 16, 2023 to October 20, 2023. 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 January 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 Stacey Ocampo at (213) 266-4712 or Stacey.Ocampo@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, Electric Safety and Reliability Branch, CPUC
Stacey Ocampo, Utilities Engineer, Electric Safety and Reliability Branch, 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 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 August 2018 through August 2023, SCE completed 2 patrol inspections past SCE's scheduled due date. Additionally, as of the date of the audit, SCE had 5 pending patrol inspections that were past SCE's scheduled due date.

- SCE's records indicated that from August 2018 through August 2023, SCE completed 10,191 detailed inspections past SCE's scheduled due date. Additionally, as of the date of the audit, SCE had 779 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 August 2018 through August 2023, SCE completed 385 underground inspections past SCE's scheduled due date. Additionally, as of the date of the audit, SCE had 29 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 August 2018 through August 2023, SCE completed 206 overhead work orders past SCE's due date for corrective action. Additionally, as of the date of the audit, SCE had 183 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 August 2018 through August 2023, SCE completed 209 underground work orders past SCE's due date for corrective action. Additionally, as of the date of the audit, SCE had 146 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 | 1655106E | Wood Pole | La Habra Heights |
| 2 | 4088246E | Wood Pole | La Habra Heights |
| 3 | 4792042E | Wood Pole | La Habra Heights |
| 4 | 661937E | Wood Pole | La Habra Heights |
| 5 | 1390682E | Wood Pole | La Habra Heights |
| 6 | 661938E | Wood Pole | La Habra Heights |
| 7 | W9916Y | Wood Pole | La Habra Heights |
| 8 | 4611781E | Wood Pole | La Habra Heights |
| 9 | 4769967E | Wood Pole | La Habra Heights |
| 10 | 718045E | Wood Pole | La Habra Heights |
| 11 | 4007367E | Wood Pole | La Habra Heights |
| 12 | 1914698E | Wood Pole | La Habra Heights |
| 13 | W9919Y | Wood Pole | La Habra Heights |
| 14 | 2062059E | Wood Pole | La Habra Heights |
| 15 | 1530473E | Wood Pole | La Habra Heights |
| 16 | 4374335E | Wood Pole | Whittier |
| 17 | 4374332E | Wood Pole | Whittier |
| 18 | 4462645E | Wood Pole | Whittier |
| 19 | 663631E | Wood Pole | Whittier |
| 20 | 2365351E | Wood Pole | Whittier |
| 21 | 4232248E | Wood Pole | Whittier |
| 22 | 675242E | Wood Pole | Whittier |
| 23 | 4385607E | Wood Pole | Whittier |
| 24 | 783963E | Wood Pole | Whittier |
| 25 | 4374331E | Wood Pole | Whittier |
| 26 | 4551418E | Wood Pole | Whittier |
| 27 | 2274435E | Wood Pole | Whittier |
| 28 | 4374184E | Wood Pole | Whittier |
| 29 | 4707808E | Wood Pole | Whittier |
| 30 | W13599Y | Wood Pole | Whittier |
| 31 | 4811937E | Wood Pole | Whittier |
| 32 | 4791687E | Wood Pole | La Habra Heights |
| 33 | 551450E | Wood Pole | La Habra Heights |
| 34 | W10755Y | Wood Pole | La Habra Heights |
| 35 | 562751E | Wood Pole | La Habra Heights |
| 36 | W10756Y | Wood Pole | La Habra Heights |
| 37 | 562752E | Wood Pole | La Habra Heights |
| 38 | W1075Y | Wood Pole | La Habra Heights |
| 39 | 4374522E | Wood Pole | La Habra Heights |
| 40 | W10758Y | Wood Pole | La Habra Heights |
| 41 | 562754E | Wood Pole | La Habra Heights |

| | | | |
|---|---|---|---|
| 42 | 1973658E | Wood Pole | La Habra Heights |
| 43 | 1043778E | Wood Pole | Brea |
| 44 | 274618E | Wood Pole | Brea |
| 45 | 274617E | Wood Pole | Brea |
| 46 | 274616E | Wood Pole | Brea |
| 47 | 1077232E | Wood Pole | Brea |
| 48 | 274615E | Wood Pole | Brea |
| 49 | 1162944E | Wood Pole | Brea |
| 50 | 1124431E | Wood Pole | Brea |
| 51 | 1162945E | Wood Pole | Brea |
| 52 | 641610H | Wood Pole | Brea |
| 53 | 1162943E | Wood Pole | Brea |
| 54 | 1162942E | Wood Pole | Brea |
| 55 | 1162941E | Wood Pole | Brea |
| 56 | 1162940E | Wood Pole | Brea |
| 57 | 4551096E | Wood Pole | Brea |
| 58 | 1617033E | Wood Pole | Brea |
| 59 | 4016652E | Wood Pole | Brea |
| 60 | 4426854E | Wood Pole | Yorba Linda |
| 61 | 4602801E | Wood Pole | Yorba Linda |
| 62 | 4703358E | Wood Pole | Yorba Linda |
| 63 | 4426853E | Wood Pole | Yorba Linda |
| 64 | 4851777E | Wood Pole | Yorba Linda |
| 65 | 4853852E | Wood Pole | Yorba Linda |
| 66 | 1498034E | Wood Pole | Yorba Linda |
| 67 | 4919219E | Wood Pole | Yorba Linda |
| 68 | 1272286E | Wood Pole | Yorba Linda |
| 69 | 1272287E | Wood Pole | Yorba Linda |
| 70 | 4705197E | Wood Pole | Yorba Linda |
| 71 | 1314214E | Wood Pole | Fullerton |
| 72 | 1272622E | Wood Pole | Fullerton |
| 73 | 972610E | Wood Pole | Fullerton |
| 74 | 1129219E | Wood Pole | Fullerton |
| 75 | 677358E | Wood Pole | Fullerton |
| 76 | 4908705E | Wood Pole | Fullerton |
| 77 | 744869H | Wood Pole | Fullerton |
| 78 | 4458440E | Wood Pole | Fullerton |
| 79 | 677356E | Wood Pole | Fullerton |
| 80 | 1272252E | Wood Pole | Fullerton |
| 81 | 1272251E | Wood Pole | Fullerton |
| 82 | 1291615E | Wood Pole | Fullerton |
| 83 | 1291614E | Wood Pole | Fullerton |
| 84 | 1543175E | Wood Pole | Fullerton |
| 85 | 484620H | Wood Pole | Fullerton |
| 86 | 1762343E | Wood Pole | Fullerton |
| 87 | 1543174E | Wood Pole | Fullerton |
| 88 | 1719898E | Wood Pole | Fullerton |

| | | | |
|---|---|---|---|
| 89 | 1683550E | Wood Pole | Fullerton |
| 90 | 1272264E | Wood Pole | Fullerton |
| 91 | P5399446 | Pad-mounted Transformer | Whittier |
| 92 | P5487247 | Pad-mounted Transformer | Whittier |
| 93 | P5439178 | Pad-mounted Transformer | La Habra |
| 94 | P5703091 | Pad-mounted Transformer | La Habra |
| 95 | P5146290 | Pad-mounted Transformer | La Habra |
| 96 | V5318745 | Vault | La Habra |
| 97 | B5147035 | BURD Transformer | La Habra |
| 98 | S5177823 | Subsurface Structure | Fullerton |

## 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.*

An insulator attached to the secondary crossarm on Pole 1314214E was sunken.

The "eye" of the SCE down guy anchor attached to each of the following SCE poles was buried:

- 1530473E
- 4374522E
- 1162945E
- 4919219E

**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 foreign attachments were observed on each of the following SCE poles:

- Pole W9916Y had an unauthorized "No Stopping Any Time" sign attached to it.
- Pole 4611781E had an unauthorized "No Stopping Any Time" sign attached to it.
- Pole 4769967E had an unauthorized "No Stopping Any Time" sign attached to it.
- Pole 718045E had an unauthorized "No Stopping Any Time" sign attached to it.

**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.

- An SCE secondary service drop was in contact with a communication service drop on pole 4385607E.
- An SCE secondary service drop was in contact with a communication service drop on pole 783963E.

**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:

- 4462645E
- 4232248E

**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.

The radial clearance between an SCE down guy wire and a third-party communications conductor on Pole 4551096E was less than 3 inches.

**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 the following poles contained incorrect information:

- 1314214E – The pole loading data did not include a span guy which was present at the time of the field inspection.
- 1129219E – The pole loading data did not include a down guy which was present at the time of the field inspection.

**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 Pole 4919219E is missing on the bottom section of the pole, exposing the ground wire.

**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:

- W9916Y
- W1075Y
- W10758
- 1077232E
- 1272286E
- 677358E
- 484620H

**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 attached to Pole 4385607E was touching the roof of the home it was servicing.

**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 attached to Pole 4811937E was loose and not taut.
- The down guy wire attached to Pole 1973658E was loose and not taut.
- The down guy wire attached to Pole 4703358E was loose and not taut.

**GO 95, Rule 56.9 Guy Marker (Guy Guard), states in part:**

> *A substantial marker of suitable material, including but not limited to metal or plastic, not less than 8 feet in length, shall be securely attached to all anchor guys. Where more than one guy is attached to an anchor rod, only the outermost guy is required to have a marker***.**

The outer most down guy wire attached to pole 4705197E did not have a guy marker.

**GO 95, Rule 54.7, Climbing 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….*

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

- 4374335E
- W13599Y
- 4703358E
- 4426853E

**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 step on each of the following poles was located at a height of less than eight feet:

- 4426854E
- 4853852E
- 1272286E
- 1291614E