

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298



April 28, 2017

Melvin Stark
Manager, Maintenance & Inspection
Southern California Edison Company (SCE)
3 Innovation Way
Pomona, CA 91786

EA2017-773

Subject: Audit of Southern California Edison's Blythe District

Mr. Stark:

On behalf of the Electric Safety and Reliability Branch of the California Public Utilities Commission (CPUC), Richard Kyo and Eric Ujiiye of my staff conducted an electric audit of Southern California Edison's (SCE) Blythe District from February 6, 2017 to February 10, 2017. 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 May 29, 2017, 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 Kyo at (213) 576-7081 or richard.kyo@cpuc.ca.gov.

Sincerely,

A handwritten signature in blue ink that reads "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: Elizaveta Malashenko, Director, Safety and Enforcement Division, CPUC
Lee Palmer, Deputy Directory, Safety and Enforcement Division, CPUC
Charlotte TerKeurst, Program Manager, Electric Safety and Reliability Branch, CPUC

AUDIT FINDINGS

I. Records Review

During the audit, my staff reviewed the following records:

- Overhead and underground detailed inspections records.
- Completed and pending corrective action work orders.
- Pole loading calculations.
- Safety hazard notifications.
- Intrusive test records
- SCE's documented inspection program.

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:

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.

GO 95, 31.2, Inspection of Lines, states:

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.

GO 165, Section III-C, Standards for Inspection, states:

For all inspections records shall specify the circuit, area, facility or equipment inspected, the inspector, the date of the inspection, and any problems (or items requiring corrective action) identified during each inspection, as well as the scheduled date of corrective action.

SCE's records indicated that from 2014 to 2017, SCE completed work orders numbered 406671119, 405264573, 406632005, and 406632031 past their scheduled due date of corrective action.

III. Field Inspections

My staff inspected the following facilities during the field inspection:

| No. | Structure ID. | Type of Structure | Location |
|-----|---------------|-------------------|----------|
| 1 | 4186833E | Pole | Blythe |
| 2 | 238412-S | Pole | Blythe |
| 3 | 238413-S | Pole | Blythe |
| 4 | 238414-S | Pole | Blythe |
| 5 | 4797758E | Pole | Blythe |
| 6 | 4794481E | Pole | Blythe |
| 7 | 4507567E | Pole | Blythe |
| 8 | 239699-S | Pole | Blythe |
| 9 | 4627203E | Pole | Blythe |
| 10 | 4627204E | Pole | Blythe |
| 11 | 4627205E | Pole | Blythe |
| 12 | 4627206E | Pole | Blythe |
| 13 | 4627207E | Pole | Blythe |
| 14 | 4627208E | Pole | Blythe |
| 15 | 4627209E | Pole | Blythe |
| 16 | 1232 CRT | Pole | Blythe |
| 17 | 259046-S | Pole | Blythe |
| 18 | 259047-S | Pole | Blythe |
| 19 | 259048-S | Pole | Blythe |
| 20 | 259049-S | Pole | Blythe |
| 21 | 259050-S | Pole | Blythe |
| 22 | 259051-S | Pole | Blythe |
| 23 | 259052-S | Pole | Blythe |
| 24 | 259053-S | Pole | Blythe |
| 25 | 39806-S | Pole | Ripley |
| 26 | 2205448E | Pole | Ripley |
| 27 | 2326419E | Pole | Ripley |
| 28 | 2326418E | Pole | Ripley |
| 29 | 4199798E | Pole | Ripley |
| 30 | 259123-S | Pole | Ripley |
| 31 | 259122-S | Pole | Ripley |
| 32 | 259121-S | Pole | Ripley |
| 33 | 259120-S | Pole | Ripley |
| 34 | 4874120E | Pole | Ripley |
| 35 | 259118-S | Pole | Ripley |
| 36 | 1306 CRT | Pole | Ripley |
| 37 | 4187008E | Pole | Ripley |
| 38 | 4774858E | Pole | Ripley |
| 39 | 259116-S | Pole | Ripley |

| | | | |
|----|----------|--------------------|--------|
| 40 | 259115-S | Pole | Ripley |
| 41 | 439650-S | Pole | Blythe |
| 42 | 1738731E | Pole | Blythe |
| 43 | 1738730E | Pole | Blythe |
| 44 | 4749078E | Pole | Blythe |
| 45 | 4459478E | Pole | Blythe |
| 46 | 1738732E | Pole | Blythe |
| 47 | 4844295E | Pole | Blythe |
| 48 | 1585848E | Pole | Blythe |
| 49 | 239779-S | Pole | Blythe |
| 50 | 4841362E | Pole | Blythe |
| 51 | 4800754E | Pole | Blythe |
| 52 | 2028641E | Pole | Blythe |
| 53 | 1890904E | Pole | Blythe |
| 54 | 2097569E | Pole | Blythe |
| 55 | 59796-S | Pole | Blythe |
| 56 | 2310862E | Pole | Blythe |
| 57 | 2205426E | Pole | Blythe |
| 58 | 2097539E | Pole | Blythe |
| 59 | 439642-S | Pole | Blythe |
| 60 | 39842-S | Pole | Ripley |
| 61 | 239822-S | Pole | Ripley |
| 62 | 2117103E | Pole | Ripley |
| 63 | 2190738E | Pole | Ripley |
| 64 | 2028641E | Pole | Ripley |
| 65 | V558462I | Vault | Blythe |
| 66 | V501715I | Manhole | Blythe |
| 67 | 5006609 | BURD-Transformer | Blythe |
| 68 | P5519399 | Pad - Switch | Blythe |
| 69 | 5171078 | BURD - Transformer | Blythe |
| 70 | B5145721 | BURD-Switch | Blythe |

IV. Field Inspection Violations List

My staff observed the following violations during the field inspection:

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.

GO 95, Rule 51.6-A, 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 following SCE poles had damaged high voltage signs:

- 4186822E - 238412-S - 259047-S - 259049-S - 259118-S
- 1738731E - 1738730E - 4459478E

The following SCE poles were not marked with high voltage signs:

- 259047-S - 259048-S - 259050-S - 259051-S -259052-S - 2326419E
- 2259115-S - 439650-S - 1738731E

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.

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).

SCE pole number 39806-S was missing a section of ground moulding. SCE poles numbered 239699-S, 1738730E, and 2310862E had damaged ground molding.

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.

GO 95, Rule 91.3-A1 Stepping, Use of Steps, Pole with Vertical Runs and Risers, states in part:

All jointly used poles which support supply conductors shall be provided with pole steps if vertical runs or risers are attached to the surface of such poles.

GO 95, Rule 54.7, Climbing Space and Work Space, 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 with dimensions as specified in the following...

SCE pole number 4459478E was a joint use pole supporting a riser and did not have pole steps. Additionally, an SCE secondary riser was obstructing the climbing space.

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 SCE poles were damaged:

- SCE pole 1232 CRT (outer shell at top of pole had impact damage)
- SCE pole 4874120E (impact damage to outer shell approximately two feet above the ground-line of the pole)
- SCE pole 259046-S (impact damage to outer shell at the base of the pole)