

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298



April 19, 2011

FILE NO. EA 2011-001

Melvin Stark, Manager
Maintenance and Inspection
Power Delivery
Southern California Edison
2885 W. Foothill Blvd.
Rialto, CA 92376

SUBJECT: Electric Audit of Southern California Edison Company's (SCE) Santa Barbara District

Dear Mr. Stark:

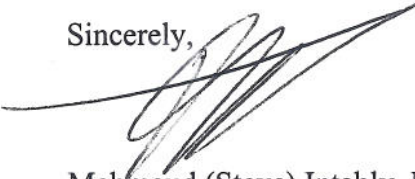
On behalf of the Utilities Safety and Reliability Branch of the California Public Utilities Commission, I conducted an electric audit of SCE's facilities in Santa Barbara District on January 31 through February 4, 2011.

As part of the audit, I conducted inspections in areas where SCE recently performed detailed inspections of overhead and underground facilities. I found that SCE's personnel did not document all General Orders (GOs) 95 and 128 violations at the time of inspections as required by GO 165. Attached to this letter is a list of the violations I observed during the audit.

Within 30 days from the date of this letter, provide us with a written response indicating the corrective measures taken by SCE regarding the violations noted, and the dates they were or will be corrected.

If you have any questions, you may contact me at (213) 576-7016.

Sincerely,



Mahmoud (Steve) Intably, P.E.
Utilities Engineer
Utilities Safety and Reliability Branch
Consumer Protection and Safety Division

Enclosure: Violations List

Violations List

List of General Orders (GOs) 95 and 128 violations that were observed during the audit and were not documented in SCE's inspection records.

GO 95, Rule 31.1 Design, Construction and Maintenance

Rule 31.1 states:

“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... “

Pole number 1674958E had a bent step.

Poles numbered 1345769E and 1324566 had tree limbs that were exerting strain on them.

Guy wires attached to poles numbered 1324572E and 1324568E had tree limbs that were exerting strain on the guy wires.

GO 95, Rule 31.6 Abandoned Lines

Rule 31.6 states:

“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...”

The following poles had abandoned insulator(s):

- 1345780E
- 1216913E
- 1324338E
- S28423Y
- 1324345

GO 95, Rule 35 Tree Trimming

Rule 35 states:

“Communication and electric supply circuits, energized at 750 volts or less, including their service drops, should be kept clear of vegetation in new construction and when circuits are reconstructed or repaired, whenever practicable. When a utility has actual knowledge, obtained either through normal operating practices or notification to the utility, that any 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). For the purpose of this rule, abrasion is defined as damage to the insulation resulting from the friction between the tree and conductor. Scuffing or polishing of the insulating covering is not considered abrasion. Strain on a conductor is present when deflection causes additional tension beyond the allowable tension of the span. Contact between vegetation and conductors, in and of itself, does not constitute a violation of the rule.”

Each of the following poles had a service drop in contact with trees and showing signs of abrasion:

- 1345769E
- 1287028E
- 1324572E
- 1324337E

GO 95, Rule 38 Minimum Clearances of Wires from Other Wires

38 states:

“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.

The clearances in Table 2 shall in no case be reduced more than 10 percent because of temperature and loading as specified in Rule 43 or because of a difference in size or design of the supporting pins, hardware or insulators. All clearances of less than 5 inches shall be applied between surfaces, and clearances of 5 inches or more shall be applied to the center lines of such items.”

Each of the following poles had a guy wire with less than 3 inches of radial clearance from a communication cable:

- 1453025E
- 1133765E

GO 95, Rule 51.6A High Voltage Marking

Rule 51.6A states:

“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. Such signs shall be of weather and corrosion–resisting material, solid or with letters cut out therefrom and clearly legible.”

Pole number 1256052E supported line conductors of more than 750 volts and was not marked with high voltage signs.

GO95, Rule 54.6E Risers

Rule 54.6E requires risers to be encased. Pole number 1287124E had a damaged riser's casing.

GO 95, Rule 54.8C4 Clearances between Supply Service Drops, 0 – 750 Volt and Communication Service Drops

Rule 54.8C4 states:

“The radial clearance between supply service drop conductors and communication service drop conductors may be less than 48 inches as specified in Table 2, Column C, Cases 4 and 9; Column D, Cases 3 and 8, but shall be not less than 24 inches. Where within 15 feet of the point of attachment of either service drop on a building, this clearance may be further reduced but shall be not less than 12 inches.”

Pole number 1324572E supported a service drop that had less than 24 inches of radial clearance from a communication service drop.

Pole number 4365388E supported a service drop that had less than 12 inches of radial clearance from communication service drops within 15 ft from the point of attachment.

GO 95, Rule 56.2 Overhead Guys, Anchor Guys and Span Wires

Rule 56.2 states:

“Where mechanical loads imposed on poles, towers, or structures are greater than can be supported with safety factors as specified in Rule 44, additional strength shall be provided by the use of guys or other suitable construction. Where guys are used with poles or similar structures capable of considerable deflection before failure, the guys shall be able to support the entire load, the pole below the point of guy attachment acting merely as a strut.

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.”

Each of the following poles had a loose or a broken guy wire:

- 1286788E
- 1413603E
- 1413474E
- 4238861E
- 1324344E
- 422111E

- 1287120E

- 1665074E

GO 95, Rule 91.3A (1) Use Of Steps

Rule 91.3A(1) states:

“Poles with Vertical Runs or Risers: 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...”

Each of the following poles had a vertical run attached to the surface of the pole and were not provided with pole steps:

- 4129854E

- 1665071E

GO 95, Rule 93 Climbing Space

Rule 93 states:

“Climbing space shall be provided on all jointly used poles which support conductors and the provisions of Rules 54.7 and 84.7 are directly applicable to such poles. Climbing space on jointly used poles shall be so correlated between conductor levels that its position in relation to the pole is not changed by more than 90 degrees in a vertical distance of less than 8 feet. Climbing space shall be maintained from the ground level.”

Each of the following poles had a climbing space obstruction:

- 1345770E (tree)
- S27044Y (telephone ground wire)
- 4238859E (tree)
- 1287124E (telephone drop)
- 4647196E (tree)

- 1324341E (palm tree)
- 1324346E (cable)
- 1324348E (cable drop)
- 1453022E (tree)
- 1665074E (cable)

GO 128, Rule 34.3A Strength

Rule 34.3A states:

“The equipment case or enclosure shall be secured in place and be of sufficient strength to resist entrance or damage to the equipment by unauthorized persons.”

Equipment casing for the above ground structure number P5394770 was not secured in place (bolted down)

GO 165, Section IV, Paragraph 5: Standards for Inspection, Record-keeping, and Reporting

Paragraph 5 states:

“For all inspections, within a reasonable period, company records shall specify the circuit, area, or equipment inspected, the name of the inspector, the date of the inspection, and any problems identified during each inspection, as well as the scheduled date of corrective action. For detailed and intrusive inspections, companies shall also rate the condition of inspected equipment. Upon completion of corrective action, company records will show the nature of the work, the date, and the identity of persons performing the work”

SCE audit summary report from 2008 through 2011 showed that:

1. Sixty two Work Orders rated priority 2 were completed late.
2. One hundred forty-six Work Orders rated priority 2 were still open/past due.