

## PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE  
SAN FRANCISCO, CA 94102-3298



March 25, 2009

Mark Judy  
Southern California Edison (SCE)  
1444 E. McFadden Avenue  
Santa Ana, CA 92705

**CPUC File No.: E2008-30**

**SUBJECT:** Electric Audit of SCE's Bishop/Mammoth Lakes District

On behalf of the Utilities Safety and Reliability Branch of the California Public Utilities Commission (CPUC), Cynthia Lee and I conducted an electric audit of SCE's Bishop/Mammoth Lakes District on October 20-23, 2008. The audit included a review of your records for the period of 2005 – 2008 and a field inspection in areas where SCE recently performed inspections of overhead and underground facilities.

During the audit, SCE informed that it did not perform any repairs on its facilities after June 2008, therefore, no work orders were issued. However, in January 2009, SCE emailed us an electronic file of work orders that were issued after June 2008, indicating that an error occurred while searching for these documents during the audit. The electronic files indicated that repairs were actually performed on SCE's facilities after June 2008. The inaccuracy of the information provided to us by SCE's personnel during the audit resulted in auditing a summary sheet that was inadequate.

Some of the inspection records were not provided to us at the start of the audit, SCE's personnel stated to us that they were "understaffed and unable to provide these records". Indeed the records were not provided to us until one month after the audit.

The field portion of the audit was delayed because SCE's personnel arrived late and because the field crew did not know the location of SCE's facilities.

During the audit, we have requested inspection records for various poles (see Attachment), however, we still have not received these records as of the date of this letter.

We also found that SCE did not document all General Orders (GOs) 95 and 128 violations at the time of its inspections. Some GO 95 and GO 128 violations that your staff discovered and classified as priority one during detailed inspections were not corrected by SCE's due dates. Attached to this letter is a list of the violations we observed during the audit.

Please advise me within 30 days from the date of the letter of corrective measures taken by SCE regarding the above violations. If you have any questions, please contact me at (213) 576-7099 or Cynthia Lee at (213) 620-2780.

Sincerely,

A handwritten signature in black ink, appearing to read "Ryan T. Yamamoto", with a large, sweeping flourish at the end.

Ryan T. Yamamoto  
Utilities Engineer  
Utilities Safety and Reliability Branch  
Consumer Protection and Safety Division

Cc: Melvin Stark, Maintenance and Inspection Organization – SCE  
1444 E. McFadden Avenue, Santa Ana, CA 92705

Enclosure: Inspection Report

## Inspection Report

List of GOs 95 and 128 violations that were observed during the field portion of the electric audit of SCE's Bishop/Mammoth Lakes District.

### **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.*

*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 following poles had bent or damaged steps:

- 1569194E
- 524088E
- 1543503E
- 524626S

### **GO 95, Rule 34 Foreign Attachments**

Rule 34 states:

*“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...”*

- Pole CTC81567 had an unauthorized attachment (metal sign).

### **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 limbs and foliage, 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 notifications to the utility, that any circuit energized at 750 volts or less shows strain or evidences abrasion from tree contact, the condition shall be corrected by slacking or rearranging the line, trimming the tree 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 there is additional tension causing a deflection of the conductor beyond the slack of the span. Contact between limbs and these conductors, in and of itself, does not constitute a violation of the rule."*

The following poles had secondary service drop(s) showing strain from tree contact:

- 1569121E
- 1901321E (2)

### **GO 95, Rule 38 Minimum Clearances of Wires from Other Wires.**

Rule 38 states:

*"The minimum vertical, horizontal or radial clearances of wire from other wire shall not be less than the values given in Table 2..."*

- Pole 1901323E had a secondary conductor touching a telephone cable.
- Pole 1901325E had the down guy wire touching a television cable.

### **GO 95, Rule 49.1A(1) Strength**

Rule 49.1A(1) states:

*"Wood poles shall be of sound timber..."*

- Pole CTC82748 was leaning and its strength was questionable.

### **GO 95, Rule 51.6A High Voltage Marking of Poles**

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. 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 poles had damaged or missing high voltage signs:

- 524088E
- 1618167E

### **GO 95. Rule 54.6B Ground Wires**

Rule 54.6B states:

*“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 following poles had damaged or missing ground moldings:

- 452615E
- 1901321E
- 1994525E

### **GO 95, Rule 54.7 Climbing and Working Space**

Rule 54.7 states:

*“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...”*

- Pole 1569194E did not provide climbing space on one side or in one quadrant due to communication facilities installed in the climbing space.

### **GO 95, Rule 56.2 Use**

Rule 56.2 states:

*“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 following poles had a slack or broken down guy wire:

- CTC82748
- 2042843E
- 1618167E
- 1901322E

### **GO 95, Rule 56.9 Guy Marker (Guy Guard)**

Rule 56.9 states:

*“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.”*

- Pole 4472700E had a missing guy marker.

## **GO 128, Rule 12.2 Maintenance**

Rule 12.2 states:

*“Systems shall be maintained in such condition as to secure safety to workmen and the public in general.”*

- SS5016449 had two bolts missing to secure the cover.
- Enclosure E5044350 was missing all the bolts to secure the cover.

## **GO 128, Rule 17.2 Inspection**

Rule 17.2 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. (See Rule 12.3)”*

- Padmount P5023074 was shifted off its base, thus exposing live parts.

## **GO 128, Rule 17.8 Identification of Manholes, Handholes, Subsurface and Self-contained Surface-mounted Equipment Enclosures**

Rule 17.8 states:

*“Manholes, handholes, subsurface and self-contained surface-mounted equipment enclosures shall be marked as to ownership to facilitate identification by persons authorized to work therein and by other persons performing work in their vicinity.”*

- Enclosure E5044350 was not marked to ownership.

## **GO 128, Rule 35.3 Warning Signs**

Rule 35.3 states:

*“Warning signs indicating high voltage shall be installed on an interior surface, or barrier if present, inside the entrance of vaults, manholes, handholes, pad mounted transformer compartments, and other above ground enclosures containing exposed live parts above 750 volts. Such warning signs shall also be installed on an exterior surface of all such pad mounted transformer compartments and other above ground enclosures. Such signs shall be clearly visible to a person in position to open any such access door, other opening, or barrier.”*

- Enclosure E5044350 which contained exposed live parts above 750 volts was missing high voltage signs

During the field inspection we asked for inspection records (detailed and patrolling) for the following poles. However, the inspection records have not been provided to us as of the date of this letter.

- CTC82748
- 4512967E
- 4030793E
- 524084E
- 524085E
- 2377785E
- 4464195E
- 524099E
- 1901355E
- 1901356E
- 1937397E
- 4531671E
- 1937392E
- 1937391E
- 4206878E
- 1801327E
- 1901325E
- 4472700E

Please provide copy of the notification sent to the communication company of broken down guy wire at pole CTC81194.