

## PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE  
SAN FRANCISCO, CA 94102-3298



July 1, 2016

EA2016-005

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

Subject: Audit of SCE's Tehachapi District

Dear Mr. Stark:

On behalf of the Electric Safety and Reliability Branch of the California Public Utilities Commission (CPUC), Richard Kyo of my staff conducted an audit of SCE's Tehachapi District from April 4, 2016 to April 8, 2016. 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 August 1, 2016, 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, please contact Richard Kyo at (213) 576-7081 or [richard.kyo@cpuc.ca.gov](mailto: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  
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.
- Diagnostic testing records for oil insulated equipment.

### 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.*

General Order 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 2013 to 2016, three work orders were completed past their scheduled date of corrective action.

### III. Field Inspections

My staff inspected the following facilities during the field inspection:

<b>Structure Number</b>	<b>Type of Structure</b>	<b>Location</b>
1184268E	Pole	Tehachapi
1184267E	Pole	Tehachapi
4180093E	Pole	Tehachapi
4277877E	Pole	Tehachapi
4180092E	Pole	Tehachapi
991992E	Pole	Tehachapi
991991E	Pole	Tehachapi
4388950E	Pole	Tehachapi
4388936E	Pole	Tehachapi
1184269E	Pole	Tehachapi
2038231E	Pole	Tehachapi
4410417E	Pole	Tehachapi
313975S	Pole	Tehachapi
313976E	Pole	Tehachapi
313977E	Pole	Tehachapi
313978E	Pole	Tehachapi
4671511E	Pole	Tehachapi
2370318E	Pole	Tehachapi
313980E	Pole	Tehachapi
4073266E	Pole	Tehachapi
4267035E	Pole	Stallion Springs
4136843E	Pole	Stallion Springs
4136842E	Pole	Stallion Springs
4202766E	Pole	Stallion Springs
2058850E	Pole	Stallion Springs
2038833E	Pole	Stallion Springs
2038647E	Pole	Stallion Springs
2038648E	Pole	Stallion Springs
20572T	Pole	Stallion Springs
2038649E	Pole	Stallion Springs
4136647E	Pole	Stallion Springs
4136648E	Pole	Stallion Springs
2164209E	Pole	Stallion Springs
4420587E	Pole	Stallion Springs
2164207E	Pole	Stallion Springs
2164248E	Pole	Stallion Springs
2003356E	Pole	Stallion Springs
2003357E	Pole	Stallion Springs
2338788E	Pole	Stallion Springs

4589171E	Pole	Stallion Springs
2338789E	Pole	Stallion Springs
2226777E	Pole	Stallion Springs
2135119E	Pole	Stallion Springs
2135117E	Pole	Stallion Springs
2135118E	Pole	Stallion Springs
4333037E	Pole	Stallion Springs
2135121E	Pole	Stallion Springs
2227446E	Pole	Stallion Springs
4011587E	Pole	Stallion Springs
4011588E	Pole	Stallion Springs
4011589E	Pole	Stallion Springs
4011590E	Pole	Stallion Springs
313989E	Pole	Tehachapi
313990E	Pole	Tehachapi
313991E	Pole	Tehachapi
313992E	Pole	Tehachapi
313993E	Pole	Tehachapi
313994E	Pole	Tehachapi
9455T	Pole	Tehachapi
313996E	Pole	Tehachapi
313997E	Pole	Tehachapi
2089840E	Pole	Tehachapi
2089847E	Pole	Tehachapi
2089848E	Pole	Tehachapi
2093501E	Pole	Tehachapi
2093502E	Pole	Tehachapi
2100727E	Pole	Tehachapi
2093503E	Pole	Tehachapi
4418104E	Pole	Tehachapi
5152237	BURD Switch	Tehachapi
5157556	CST	Tehachapi
P5473315	Padmount Transformer	Tehachapi
P5557796	Padmount Transformer	Tehachapi
5157493	BURD Switch	Tehachapi
P5564326	Mini-Pad Transformer	Tehachapi
P5564328	Mini-Pad Transformer	Tehachapi
5158340	Mini-Pad Transformer	Tehachapi

#### **IV. Field Inspection – Undocumented Violations List**

My staff observed the following violations during the field inspection. None of these violations were documented and/or addressed by SCE during its last inspections.

**GO 95, Rule 18-B, Notification of Safety Hazards**, states in part:

*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 company and/or facility owner of such safety hazard(s) no later than 10 business days after the discovery.*

SCE did not notify other companies of safety hazards involving their facilities on the following poles:

- Pole 313977E (low communications cable clearance)
- Pole 2089840E (CIP trunk line touching ground)

**GO 95, Rule 56.4-I**, states in part:

*Protective covering shall be attached to poles, structures, crossarms, and other supports by means of corrosion-resistant materials (straps, plumbers tape, lags, nails, staples, screws, bolts, etc.) which are adequate to maintain such covering in a fixed position.*

*Where such covering consists of wood moulding, rigid plastic moulding, or other suitable protective moulding, the distance between the attachment materials (straps, plumbers tape, lags, nails, staples, screws, bolts, etc.) shall not exceed 36 inches on either side of the moulding*

The ground moulding on Pole number 2227446E was loose and not attached every 36 inches.

## V. Field Inspection – Documented Violations List

My staff observed the following violations during the field inspection that were documented and/or addressed by SCE during its last inspections.

**GO 95, Rule 51.6-A, Marking and Guarding**, 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”*

The High Voltage sign on the following poles was either damaged or missing:

- Pole 1184268E
- Pole 1184267E
- Pole 4277877E
- Pole 991992E
- Pole 991991E
- Pole 4388950E
- Pole 1184269E
- Pole 2038231E
- Pole 2058850E
- Pole 2038647E
- Pole 2038649E
- Pole 4136647E
- Pole 2164209E
- Pole 2135119E
- Pole 2135117E
- Pole 2227446E
- Pole 2089840E
- Pole 2089847E
- Pole 2093501E
- Pole 2038469E

**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 the following SCE poles was damaged:

- Pole 4180092E
- Pole 2038649E

- Pole 4136647E
- Pole 2135119E
- Pole 2135117E

**GO 95, Rule 56.4-I**, states in part:

*Protective covering shall be attached to poles, structures, crossarms, and other supports by means of corrosion-resistant materials (straps, plumbers tape, lags, nails, staples, screws, bolts, etc.) which are adequate to maintain such covering in a fixed position.*

*Where such covering consists of wood moulding, rigid plastic moulding, or other suitable protective moulding, the distance between the attachment materials (straps, plumbers tape, lags, nails, staples, screws, bolts, etc.) shall not exceed 36 inches on either side of the moulding*

The ground moulding on Pole number 2038648E was loose and not attached every 36 inches. Additionally, the conduit strap on Pole number 2038649E was loose.