

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298



October 25, 2016

TA2016-004

Jason Harston
South District Manager
73233 State Route 70
Portola, CA 96122

Subject: Audit of Plumas-Sierra Rural Electric Co-op

Mr. Harston:

On behalf of the Electric Safety and Reliability Branch of the California Public Utilities Commission (CPUC), Raymond Cho of my staff conducted a transmission audit of Plumas-Sierra Rural Electric Co-op (PSREC) from August 1, 2016 to August 3, 2016. The audit included a review of PSREC's records and field inspections of PSREC'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 November 29, 2016, by electronic or hard copy, of all corrective measures taken by PSREC to remedy and prevent such violations. Also, provide pole loading calculations for the poles numbered G391, K155, K204, and K214.

If you have any questions concerning this audit, please contact Raymond Cho at (415) 703-2236 or raymond.cho@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: Audit Findings

Cc: Elizaveta Malashenko, Director, Safety and Enforcement Division, CPUC
Lee Palmer, Deputy Director, Office of Utility Safety, SED, 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 inspection records – January 2014 through December 2015
- List of Transmission Circuits
- List of Intrusive Pole Inspections

II. Records Review – Violations List

My staff observed the following violations during the records review portion of the audit:

General Order 95, Rule 31.2, Inspection of Lines, states in part:

Lines shall be inspected frequently and thoroughly for the purpose of insuring 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.

General Order 165, Section IV, Transmission Facilities, states:

Each utility shall prepare and follow procedures for conducting inspections and maintenance activities for transmission lines.

PSREC did not prepare procedures for conducting inspections and maintenance for transmission lines as required by GO 165.

III. Field Inspections

My staff inspected the following facilities during the field inspection:

Facility ID	Type of Structure	Location
G439	Pole	Plumas-Sierra
G438	Pole	Plumas-Sierra
G437	Pole	Plumas-Sierra
G423	Pole	Plumas-Sierra
G412	Pole	Plumas-Sierra
G391	Pole	Plumas-Sierra
G390	Pole	Plumas-Sierra
G379	Pole	Plumas-Sierra
G380	Pole	Plumas-Sierra
G356	Pole	Plumas-Sierra
G355	Pole	Plumas-Sierra
G309	Pole	Plumas-Sierra
G279	Pole	Plumas-Sierra
G215	Pole	Plumas-Sierra
G169	Pole	Plumas-Sierra
G145	Pole	Plumas-Sierra
G144	Pole	Plumas-Sierra
G143	Pole	Plumas-Sierra
G86	Pole	Plumas-Sierra
K154	Pole	Plumas-Sierra
K155	Pole	Plumas-Sierra
K170	Pole	Plumas-Sierra
K169	Pole	Plumas-Sierra
K182	Pole	Plumas-Sierra
K183	Pole	Plumas-Sierra
K184	Pole	Plumas-Sierra
K204	Pole	Plumas-Sierra
K214	Pole	Plumas-Sierra
K213	Pole	Plumas-Sierra

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 PSREC during its last inspections.

GO 95, Rule 38, requires a minimum clearance of 24 inches between communications conductors and guys.

A PSREC distribution down guy was in contact with a communication conductor at facilities numbered G215 and G86.

GO 95, Rule 51.6-A, 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 PSREC poles were not marked with “HIGH VOLTAGE” signs:

- G439
- G438
- G437
- G423
- G412
- G391
- G390
- G379
- G380
- G356
- G355
- G309
- G279
- G215
- G169
- G145
- G144
- G143
- G86
- K154
- K155
- K170
- K169
- K182
- K183
- K184
- K204
- K214
- K213

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 PSREC poles was damaged or was missing a section:

- G391 (missing)
- G380 (exposed at ground)
- G279 (missing)
- G144 (missing)

GO 95, Rule 59.4-A2c, Ground Rods (Ground Electrodes), states in part:

Ground rods shall be driven into the ground so that one end of the ground rod is at a minimum depth of 8 feet below the surface of the ground.

A PSREC ground rod at pole #G309 was exposed above the ground line.