

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
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October 25, 2016

EA2016-010

Heide Caswell
Director-T&D Asset Performance
825 NE Multnomah, Suite 1500
Portland, OR 97232

Subject: Updated Audit Findings of PacifiCorp's Crescent City District

Ms. Caswell:

On behalf of the Electric Safety and Reliability Branch of the California Public Utilities Commission (CPUC), Raymond Cho of my staff conducted an audit of PacifiCorp's Crescent City District from June 27, 2016 to June 30, 2016. The audit included a review of PacifiCorp's records and field inspections of PacifiCorp's facilities.

During the audit, my staff identified violations of one or more General Orders (GOs). On August 11, 2016, we sent you an audit report listing our findings. However, on September 12, 2016, we became aware that the records we reviewed during our audit were incomplete and did not fully reflect PacifiCorp's maintenance program. After reviewing the newly submitted records, we have revised our findings which are shown in this audit report.

Please advise me no later than November 29, 2016, by electronic or hard copy, of all corrective measures taken by PacifiCorp to remedy and prevent such violations. 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
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 patrols and inspections records
- Completed, late, and cancelled work orders
- Pole loading calculations
- Overhead and underground inspection and maintenance procedures
- New construction job packages

II. Records Review – Violations List

My staff observed the following violation(s) 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, Record Keeping, 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.

PacifiCorp's records indicated that work orders for facilities numbered 556163125 and 266258630 were completed past the scheduled date of corrective action.

III. Field Inspections

My staff inspected the following facilities during the field inspection:

Facility ID	Type of Structure	Location
162401	Pole	Crescent City
162400	Pole	Crescent City
099102	Pole	Crescent City
099101	Pole	Crescent City
142502	Pole	Crescent City
142501	Pole	Crescent City
142500	Pole	Crescent City
141502	Pole	Crescent City
141501	Pole	Crescent City
141500	Pole	Crescent City
141401	Pole	Crescent City
141402	Pole	Crescent City
142404	Pole	Crescent City
142405	Pole	Crescent City
142403	Pole	Crescent City
143404	Pole	Crescent City
143403	Pole	Crescent City
143402	Pole	Crescent City
144406	Pole	Crescent City
144407	Pole	Crescent City
144404	Pole	Crescent City
144401	Pole	Crescent City
145402	Pole	Crescent City
145401	Pole	Crescent City
145400	Pole	Crescent City
146404	Pole	Crescent City
146402	Pole	Crescent City
146401	Pole	Crescent City
146403	Pole	Crescent City
07218001.0260700	Pole	Smith River
07217001.0120900	Pole	Smith River
07217001.0114400	Pole	Smith River
07217001.0163600	Pole	Smith River
07217001.0146404	Pole	Smith River
07217001.0344700	Pole	Smith River
07218001.0260700	Pole	Smith River
07217001.0120900	Pole	Smith River
07217001.0114400	Pole	Smith River
07217001.0163600	Pole	Smith River

Facility ID	Type of Structure	Location
07113002.0071101	Pole	Klamath
07113002.0032300	Pole	Klamath
07113002.0044904	Pole	Klamath
07114001.0284306	Pole	Klamath
07114001.0277603	Pole	Klamath
07216001.0264101	Pole	Crescent City
07216001.0289602	Pole	Crescent City
07216001.0299400	Pole	Crescent City
07216001.0294407	Pole	Crescent City
07216001.0295708	Pole	Crescent City
07216001.0205103	Pole	Crescent City
07216001.0203206	Pole	Crescent City
07216001.0172005	Pole	Crescent City
07216001.0085008	Pole	Crescent City
07216001.0102902	Pole	Crescent City
07216001.0030005	Pole	Crescent City
07216001.0032204	Pole	Crescent City
07216001.0031203	Pole	Crescent City
07216001.0030200	Pole	Crescent City

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 PacifiCorp during its last inspections.

GO 95, Rule 35, requires conductors to have 18 inches minimum clearance from vegetation.

PacifiCorp supply conductors on pole number 142500 were less than 18 inches away from vegetation.

GO 95, Rule 38, Case 19-D, requires service drops to have 3 inches minimum clearance from guy wires supported on the same pole.

A PacifiCorp service drop was in contact with a down guy wire on pole number 143404.

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).

Ground mouldings on the following poles were damaged or were missing a section:

- 07216001.0299400 (damaged)
- 07216001.0295708 (missing)
- 07216001.0085008 (exposed at ground)

V. Field Inspection – Documented Violations List

My staff observed the following violations during the field inspection that were documented by PacifiCorp during its last inspections.

GO 95, Rule 31.6, Abandoned Lines, states in part:

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.

An abandoned ground wire was still attached to pole number 142403.

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 pole number 146404 was damaged.

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 poles was damaged or missing a section:

- 141501 (damaged)
- 142500 (missing)

GO 95, Rule 38, Table 2, Case 3-F, requires 72 inches minimum clearance between primary supply conductors and communication conductors.

A primary conductor on pole number 144406 was less than 72 inches away from a communication conductor.