

## PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE  
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December 29, 2016

EA2016-012

Pjoy T. Chua, P.E.  
Manager of Regulatory Standards and Compliance  
Regulatory Standards and Compliance Section  
City of Los Angeles, Department of Water and Power (LADWP)  
111 North Hope Street, Room 1246  
Los Angeles, CA 90012

**SUBJECT:** Audit of LADWP's West Los Angeles District

Ms. Chua:

On behalf of the Electric Safety and Reliability Branch of the California Public Utilities Commission (CPUC), Zelalem Ewnetu of my staff conducted an electric distribution audit of LADWP's West Los Angeles District from October 11, 2016 to October 14, 2016. The audit included a review of LADWP's inspection and maintenance records and field inspection of LADWP'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 February 3, 2017, by electronic or hard copy, of all corrective measures taken by LADWP to remedy and prevent such violations.

If you have any questions concerning this audit, you can contact Zelalem Ewnetu at (213) 576-7042 or [zelalem.ewnetu@cpuc.ca.gov](mailto:zelalem.ewnetu@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

Enclosure: 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:

- Most recently completed pole loading records for new pole constructions and addition of facilities to existing poles.
- LADWP's diagnostic test programs for both overhead and underground facilities. These included inspections such as infrared thermography and oil insulation testing.
- LADWP's visual inspection program, including intervals of inspection, inspector qualifications, and priority systems for resolving GO nonconformance and safety hazards.
- Records review, and field visit of new underground and overhead facilities.

### II. Records Review – Violations List

The following list includes violations that we discovered during the records review:

**GO 95, Rule 31.1, Design, Construction, and Maintenance**, states in part:

*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.*

**GO 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.*

**GO 165, Section III-B, Standards for Inspection**, states:

*Each utility subject to this General Order shall conduct inspections of its distribution facilities, as necessary, to ensure reliable, high-quality, and safe operation, but in no case may the period between inspections (measured in years) exceed the time specified in Table 1.*

For the past five years (i.e. from the time of the previous CPUC electric audit to the current CPUC electric audit), LADWP records indicate the following: (1) approximately 500 repair work orders that were not completed by their scheduled due dates; (2) approximately 5,000 inspections that were not completed by their cycle due dates.

### III. Field Inspection

The following facilities were inspected during the audit:

Structure ID	Facility Type	City
206786M	Pole	Los Angeles
117001	Pole	Los Angeles
236666M	Pole	Los Angeles
193762M	Pole	Los Angeles
202645M	Pole	Los Angeles
202646M	Pole	Los Angeles
202647M	Pole	Los Angeles
202648M	Pole	Los Angeles
562570H	Pole	Los Angeles
204039M	Pole	Los Angeles
352609M	Pole	Los Angeles
204038M	Pole	Los Angeles
342609M	Pole	Los Angeles
204153M	Pole	Los Angeles
204038M	Pole	Los Angeles
204037M	Pole	Los Angeles
254876M	Pole	Los Angeles
93250M	Pole	Los Angeles
283635M	Pole	Los Angeles
13089Y	Pole	Los Angeles
47992	Pole	Los Angeles
907184	Pole	Los Angeles
388079M	Pole	Los Angeles
367447M	Pole	Los Angeles
GT8791	Pole	Los Angeles
421778M	Pole	Los Angeles
421777M	Pole	Los Angeles
421776M	Pole	Los Angeles
421775M	Pole	Los Angeles
48085G	Pole	Los Angeles
346716M	Pole	Los Angeles
346715M	Pole	Los Angeles
347358M	Pole	Los Angeles
383873M	Pole	Los Angeles
379230M	Pole	Los Angeles
153913M	Pole	Los Angeles

264853M	Pole	Los Angeles
330538M	Pole	Los Angeles
301726M	Pole	Los Angeles
290957M	Pole	Los Angeles
1308071	Pad-mounted Transformer	Los Angeles
1308162	Pad-mounted Switch	Los Angeles
2362	Vault	Los Angeles

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

We observed the following violations during the field inspection:

**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”*

**GO 95, Rule 31.1, Design, Construction, and Maintenance**, states in part:

*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.*

The High Voltage sign on Poles numbered 193762M and 48085G was missing. A High Voltage sign on Pole number 346715M was damaged and illegible. All three poles supported conductors of more than 750 volts.

**GO 95, Rule 56.2, Overhead Guys, Anchor Guys and Span Wires**, states in part:

*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.*

A span guy wire supported on Pole number 204038M was broken.

**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. For the purposes of this rule, lines that are permanently abandoned shall be defined as those lines that are determined by their owner to have no foreseeable future use.*

A secondary service cable supported on Pole number 346715M was abandoned and did not have any foreseeable use.