

PUBLIC UTILITIES COMMISSION

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November 22, 2024

EA2024-1224

Jordi Burbano, P.E.
Electrical Engineering Associate
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

Mr. Burbano:

On behalf of the Electric Safety and Reliability Branch (ESRB) of the California Public Utilities Commission (CPUC), Eric Ujiiye of my staff conducted an electric distribution audit of LADWP's West Los Angeles District from September 9-13, 2024. The audit included a review of LADWP's inspection and maintenance records and a 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 December 23, 2024, by electronic or hard copy, of all corrective measures taken by LADWP to remediate and prevent such violations.

Please note that ESRB will be posting the audit report and your response to our audit on the CPUC website. If there is any information in your response that you would like us to consider as confidential, we request that in addition to your confidential response, you also provide us with a public or redacted version of your response that can be posted publicly on our website.

If you have any questions concerning this audit, you can contact Eric Ujiiye at (213) 620-2598 or eric.ujiiye@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: Lee Palmer, Director, Safety and Enforcement Division, CPUC
Nika Kjensli, Program Manager, ESRB, CPUC
Eric Ujiiye, Utilities Engineer, ESRB

Audit Findings

I. Records Review

During the audit, my staff reviewed the following records:

- Overhead and underground detailed inspection records.
- Completed and pending corrective action work orders.
- Pole loading calculations.
- Intrusive test records.
- LADWP's visual inspection program.
- ESRB's interview of LADWP inspectors.

II. Records Review – Violations List

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

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.

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.

LADWP's inspection records indicated that from January 1, 2021 to June 30, 2024, a total of 42,385 overhead patrol inspections and 22,795 overhead detailed inspections were completed or pending completion past LADWP's assigned due date.

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.

GO 128, Rule 17.2, Inspection, 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 of these rules.

LADWP inspection records indicated that from January 1, 2021 to June 30, 2024, a total of 14,593 underground patrol inspections and 6,691 underground detailed inspections were completed or pending completion past LADWP's assigned due date.

GO 95, Rule 18, Rule 18-B1, Maintenance Programs, states in part:

Companies shall undertake corrective actions within the time periods stated for each of the priority levels set forth below. Scheduling of corrective actions within the time periods below may be based on additional factors, including the following factors, as appropriate ...

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.

LADWP records indicated that from January 1, 2021 to June 30, 2024, a total of 4,912 overhead work orders were completed, pending completion, or cancelled after LADWP's assigned due date for corrective action.

GO 128, Rule 17.1, 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.

LADWP records indicated that from January 1, 2021 to June 30, 2024, a total of 1,459 underground work orders were completed, pending completion, or cancelled after LADWP's assigned due date for corrective action.

III. Field Inspection

My staff inspected the following facilities during the field inspection portion of the audit:

No.	Structure ID.	Type of Structure	Location
1	338014M	Pole	Brentwood
2	359991M	Pole	Brentwood
3	361101M	Pole	Brentwood
4	400605M	Pole	Brentwood
5	112725M	Pole	Brentwood
6	112724M	Pole	Brentwood
7	112723M	Pole	Brentwood
8	530468M	Pole	Los Angeles
9	530467M	Pole	Los Angeles
10	532129M	Pole	Los Angeles
11	532128M	Pole	Los Angeles
12	256870M	Pole	Los Angeles
13	530466M	Pole	Los Angeles
14	256856M	Pole	Los Angeles
15	530465M	Pole	Los Angeles
16	45917M	Pole	Century City
17	45916M	Pole	Century City
18	529361M	Pole	Century City
19	529360M	Pole	Century City
20	529359M	Pole	Century City
21	466839M	Pole	West LA - South
22	466838M	Pole	West LA - South
23	466837M	Pole	West LA - South
24	466836M	Pole	West LA - South
25	466835M	Pole	West LA - South
26	1994308M	Pole	West LA - South
27	466834M	Pole	West LA - South
28	466833M	Pole	West LA - South
29	466832M	Pole	West LA - South
30	466831M	Pole	West LA - South
31	378027M	Pole	West LA - South
32	378026M	Pole	West LA - South
33	391715M	Pole	West LA - South
34	391716M	Pole	West LA - South
35	376986M	Pole	West LA - South
36	1775223E	Pole	West LA - South
37	466841M	Pole	West LA - South
38	466842M	Pole	West LA - South
39	466843M	Pole	West LA - South

40	466844M	Pole	West LA - South
41	466845M	Pole	West LA - South
42	466846M	Pole	West LA - South
43	466847M	Pole	West LA - South
44	378025M	Pole	West LA - South
45	291038M	Pole	Playa Del Ray
46	291039M	Pole	Playa Del Ray
47	302851M	Pole	Playa Del Ray
48	299271M	Pole	Playa Del Ray
49	302852M	Pole	Playa Del Ray
50	358611M	Pole	Playa Del Ray
51	129192M	Pole	Playa Del Ray
52	129193M	Pole	Playa Del Ray
53	129194M	Pole	Playa Del Ray
54	129195M	Pole	Playa Del Ray
55	129196M	Pole	Playa Del Ray
56	129197M	Pole	Playa Del Ray
57	1334416	Maintenance Hole	Pacific Palisades
58	1334804	Pad Mounted Transform	Pacific Palisades
59	1334689	Pad Mounted Transform	Pacific Palisades
60	1334739	Vault	Pacific Palisades
61	1334713	Vault	Pacific Palisades
62	1519974	Pad Mounted Transform	Pacific Palisades
63	1416064	Pad Mounted Transform	Pacific Palisades
64	1416072	Pad Mounted Transform	Pacific Palisades

IV. Field Inspection – Violations List

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.

LADWP facilities on the following poles required maintenance:

- Pole 376986M - a ground wire was cut at two feet above ground.
- Pole 466843M - a ground wire was cut at two feet above ground.
- Pole 466847M - a ground wire was cut at two feet above ground.
- Pole 378025M - a ground wire was cut at three feet above ground.
- Pole 302851M - a 6-foot section of ground wire and ground moulding was missing at ground level.

General Order 95, Rule 38 - Minimum Clearances of Wires from Other Wires, Table 2, Column D, Case 8 requires the vertical clearance between “0-750 Volts (Including Service Drops) and Trolley Feeders” and “Communication Conductors and Service Drops” supported on the same pole to have a minimum clearance of 12 inches.

On Pole 529361M, an LADWP service drop supported on the pole was touching a communications conductor.

GO 95, Rule 51.6-A, Marking and Guarding, 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.

Each of the following LADWP poles supported “HIGH VOLTAGE” signs that were damaged or missing:

- Pole 122725M - the “HIGH VOLTAGE” sign was weathered, damaged, and illegible.
- Pole 378027M - the “HIGH VOLTAGE” sign was damaged with portions missing.
- Pole 378026M - the “HIGH VOLTAGE” sign was missing.
- Pole 376986M - the “HIGH VOLTAGE” sign was missing.
- Pole 291039M - the “HIGH VOLTAGE” sign was damaged with portions missing.
- Pole 129193M - the “HIGH VOLTAGE” sign was damaged with portions missing.
- Pole 129194M - the “HIGH VOLTAGE” sign was damaged with portions missing.

GO 95, Rule 54.6-E3, Covering Joints, states in part:

Where two sections of suitable protective covering join together (at joints) they shall be covered to prevent exposing the underground cables or other conductors by: (a) The extension of either or such coverings; or (b) A coupling of equal material or (c) A strap of equal material.

On Pole 400605M, two sections of a primary riser supported on the pole were separated at an uppermost joint, exposing the conductors contained inside.

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 wires on each of the following poles was not covered by a suitable protective covering:

- Pole 112724M – an 8-inch section and a 2-foot section of ground wire supported on the pole were exposed at 1 foot and 7 feet above the ground, respectively.
- Pole 302851M – an 8-foot section of ground wire supported on the pole was exposed at the communication level.
- Pole 299271M – a 4-inch section of ground wire supported on the pole was exposed at the public level.

GO 128, Rule 17.1, 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.

Padmounted transformer 1519974 was surrounded by vegetation, obstructing access by utility personnel.