PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

September 10, 2024 EA2024-1234

Thomas Wilke
Manager of Electric Distribution
Burbank Water and Power
164 W. Magnolia Blvd
Burbank, CA 91502

Subject: Audit of Burbank Water and Power

Mr. Wilke:

On behalf of the Electric Safety and Reliability Branch (ESRB) of the California Public Utilities Commission (CPUC), Kyle King of my staff conducted an electric distribution audit of Burbank Water and Power (BWP) service territory from July 29 – August 2, 2024. The audit included a review of BWP's inspection and maintenance records and a field inspection of BWP'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 October 11, 2024, by electronic or hard copy, of all corrective measures taken by BWP to remedy 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 Stacey Ocampo at (213) 222-3260 or Kyle.King@cpuc.ca.gov .

Sincerely,

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, SED, CPUC
Kyle King, Utilities Engineer, ESRB, SED, CPUC

## Audit Findings

## I. Records Review

During the audit, my staff reviewed the following records:

- Overhead and underground detailed inspection records
- Patrol records
- Completed and pending corrective action work orders
- Pole load calculations
- Intrusive test records
- Safety hazard notifications
- BWP's documented inspection program.
- Vegetation Management Records

## II. Records Review – Violations List

We observed the following violations during the records review portion of the audit.

**GO 95, Rule 18-A1: Resolution of Potential Violations of General Order 95 and Safety Hazards**, states in part:

> *Upon completion of the corrective action, the company's records shall show, with sufficient detail, the nature of the work, the date, and the identity of persons performing the work. These records shall be preserved by the company for at least ten (10) years.*

**GO 165, Section III-C: Record Keeping**, states:

> *The utility shall maintain records for (1) at least ten (10) years of patrol and detailed inspection activities, and (2) the life of the pole for intrusive inspection activities. Such records shall be made available to parties or pursuant to Commission rules upon 30 days notice. Commission staff shall be permitted to inspect such records consistent with Public Utilities Code Section 314 (a).*
>
> *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.*

BWP does not have formal repair work order records associated with its inspections. BWP's inspectors and maintenance crews communicate informally, e.g. via e-mail, to resolve discovered issues. The communications that take the place of formal work order records do not always contain a scheduled date of corrective action, as required by the above rule.

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

> *The auditable maintenance program must include, at a minimum, records that show the date of the inspection, type of equipment/facility inspected, findings, and a timeline for corrective actions to be taken following the identification of a potential violation of GO 95 or a Safety Hazard on the company's facilities.*

BWP has priority levels in its inspection manual for issues discovered during inspections, however, BWP does not consistently document and track timeline for corrective action based on its priority system.

## III. Field Inspection

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

| No. | Structure ID | Type of Structure | City |
|---|---|---|---|
| 1 | 31804B | Pole | Burbank |
| 2 | 31803B | Pole | Burbank |
| 3 | 31802B | Pole | Burbank |
| 4 | 31801B | Pole | Burbank |
| 5 | 31800B | Pole | Burbank |
| 6 | 31491B | Pole | Burbank |
| 7 | 31799B | Pole | Burbank |
| 8 | 31798B | Pole | Burbank |
| 9 | 31877B | Pole | Burbank |
| 10 | 30895B | Pole | Burbank |
| 11 | 25657B | Pole | Burbank |
| 12 | 25656B | Pole | Burbank |
| 13 | 31957B | Pole | Burbank |
| 14 | 25654B | Pole | Burbank |
| 15 | 25653B | Pole | Burbank |
| 16 | 25652B | Pole | Burbank |
| 17 | 25651B | Pole | Burbank |
| 18 | 25650B | Pole | Burbank |
| 19 | 31805B | Pole | Burbank |
| 20 | 31806B | Pole | Burbank |
| 21 | 31878B | Pole | Burbank |
| 22 | 31163B | Pole | Burbank |
| 23 | 31867B | Pole | Burbank |
| 24 | 31868B | Pole | Burbank |
| 25 | 26524B | Pole | Burbank |
| 26 | 31884B | Pole | Burbank |
| 27 | 28630B | Pole | Burbank |
| 28 | 31162B | Pole | Burbank |
| 29 | 31161B | Pole | Burbank |
| 30 | 31912B | Pole | Burbank |
| 31 | 31925B | Pole | Burbank |
| 32 | 31926B | Pole | Burbank |
| 33 | 31927B | Pole | Burbank |
| 34 | 22189B | Pole | Burbank |
| 35 | 32079B | Pole | Burbank |
| 36 | 32087B | Pole | Burbank |
| 37 | 32088B | Pole | Burbank |
| 38 | 22187B | Pole | Burbank |
| 39 | 32100B | Pole | Burbank |
| 40 | 30732B | Pole | Burbank |

| | | | |
|---|---|---|---|
| 41 | 26228B | Pole | Burbank |
| 42 | 27970B | Pole | Burbank |
| 43 | 27969B | Pole | Burbank |
| 44 | 27968B | Pole | Burbank |
| 45 | 27967B | Pole | Burbank |
| 46 | 27966B | Pole | Burbank |
| 47 | 27965B | Pole | Burbank |
| 48 | 27964B | Pole | Burbank |
| 49 | 27962B | Pole | Burbank |
| 50 | 27960B | Pole | Burbank |
| 51 | 27959B | Pole | Burbank |
| 52 | 21895B | Pole | Burbank |
| 53 | 27958B | Pole | Burbank |
| 54 | 27957B | Pole | Burbank |
| 55 | 23322B | Pole | Burbank |
| 56 | 27932B | Pole | Burbank |
| 57 | 27956B | Pole | Burbank |
| 58 | 22681B | Pole | Burbank |
| 59 | 27955B | Pole | Burbank |
| 60 | 27954B | Pole | Burbank |
| 61 | 27953B | Pole | Burbank |
| 62 | 27933B | Pole | Burbank |
| 63 | 28529B | Pole | Burbank |
| 64 | 27963B | Pole | Burbank |
| 65 | 23754B | Pole | Burbank |
| 66 | 27952B | Pole | Burbank |
| 67 | 27951B | Pole | Burbank |
| 68 | 27950B | Pole | Burbank |
| 69 | 27949B | Pole | Burbank |
| 70 | 27948B | Pole | Burbank |
| 71 | 27947B | Pole | Burbank |
| 72 | 28561B | Pole | Burbank |
| 73 | 27946B | Pole | Burbank |
| 74 | 27945B | Pole | Burbank |
| 75 | 27944B | Pole | Burbank |
| 76 | 27943B | Pole | Burbank |
| 77 | 27942B | Pole | Burbank |
| 78 | 27941B | Pole | Burbank |
| 79 | 27940B | Pole | Burbank |
| 80 | 27939B | Pole | Burbank |
| 81 | 20462B | Pole | Burbank |
| 82 | 19553B | Pole | Burbank |
| 83 | 19554B | Pole | Burbank |
| 84 | 19555B | Pole | Burbank |
| 85 | 27806B | Pole | Burbank |

| | | | |
|---|---|---|---|
| 86 | 19297B | Pole | Burbank |
| 87 | 23916B | Pole | Burbank |
| 88 | 29336B | Pole | Burbank |
| 89 | 29338B | Pole | Burbank |
| 90 | 23411B | Pole | Burbank |
| 91 | 16441B | Pole | Burbank |
| 92 | 16440B | Pole | Burbank |
| 93 | 29747B | Pole | Burbank |
| 94 | 16437B | Pole | Burbank |
| 95 | 25253B | Pole | Burbank |
| 96 | 16435B | Pole | Burbank |
| 97 | 28098B | Pole | Burbank |
| 98 | 28099B | Pole | Burbank |
| 99 | 28100B | Pole | Burbank |
| 100 | 14282B | Pole | Burbank |
| 101 | 20170B | Pole | Burbank |
| 102 | 21718B | Pole | Burbank |
| 103 | 24749B | Pole | Burbank |
| 104 | 29000B | Pole | Burbank |
| 105 | 18951B | Pole | Burbank |
| 106 | 18887B | Pole | Burbank |
| 107 | 21115B | Pole | Burbank |
| 108 | 23498B | Pole | Burbank |
| 109 | 24402B | Pole | Burbank |
| 110 | 10070B | Pole | Burbank |
| 111 | 10071B | Pole | Burbank |
| 112 | 21114B | Pole | Burbank |
| 113 | 24642B | Pole | Burbank |
| 114 | 30755B | Pole | Burbank |
| 115 | 23413B | Pole | Burbank |
| 116 | P-1186 | Pad-mounted Transformer | Burbank |
| 117 | PB-558 | Pull Box | Burbank |
| 118 | P-1194 | Pad-mounted Transformer | Burbank |
| 119 | P-1193 | Pad-mounted Transformer | Burbank |
| 120 | PB-575 | Pull Box | Burbank |
| 121 | PMS-109 | Pad-mounted Switch | Burbank |
| 122 | P-1268 | Pad-mounted Transformer | Burbank |
| 123 | P-1269 | Pad-mounted Transformer | Burbank |
| 124 | PMS-133 | Pad-mounted Switch | Burbank |
| 125 | PB-550 | Pull Box | Burbank |
| 126 | P-1173 | Pad-mounted Transformer | Burbank |
| 127 | PMS-101 | Pad-mounted Switch | Burbank |
| 128 | PMS-99 | Pad-mounted Switch | Burbank |
| 129 | P-1166 | Pad-mounted Transformer | Burbank |
| 130 | P-1172 | Pad-mounted Transformer | Burbank |

## IV. Field Inspection – Violations List

My staff observed the following violations during the field inspections portion of the audit:

**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.*

BWP facilities on the following poles required maintenance:

- 27962B: the visibility strip was damaged.
- 27958B: the visibility strip was damaged.
- 23322B: the visibility strip was damaged.
- 27944B: the visibility strip was damaged.
- 27959B: a conduit riser was damaged.
- 27942B: a conduit riser was damaged.
- 27941B: a conduit riser was damaged.

**GO 95, Rule 56.2, Overhead Guys, Anchor Guys and Span Wire Use**, 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.*

The down guy wire supporting each of the following poles was not maintained taut:

- 27939B
- 27970B

**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 attached to each of the following poles was damaged:

- 25653B
- 27943B

**GO 95, Rule 38 - Minimum Clearances of Wires from Other Wires, Table 2, Column C, Case 19** requires the minimum radial clearance between guys and span wires passing communication conductors supported on the same poles to be 3 inches.

BWP facilities on the following poles did not have the minimum clearance of 3 inches:

- Pole 27939B: a BWP fiber optic communications conductor was contacting a down guy wire attached to the same pole.
- Pole 29000B: a BWP down guy wire was contacting a third-party communications conductor attached to the same pole.

**GO 95, Rule 56.4-D2: From Guys or Span Wires**, states:

> *Passing and Attached to Same Pole: The radial clearance between different guys, different span wires, or different guys and span wires, attached to the same pole shall not be less than 3 inches.*

A BWP span guy wire attached to Pole 29000B was contacting a down guy wire attached to the same pole.

**GO 95, Rule 51.6, 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.*

The high voltage signs on each of the following BWP poles were damaged:

- 16440B
- 16437B
- 16435B
- 28099B
- 28100B
- 14282B
- 20462B
- 19553B
- 19554B
- 23916B
- 23411B
- 23413B
- 24749B
- 18951B
- 23498B
- 24402B
- 10070B
- 10071B

**GO 95, Rule 58.5-B3b, Conductors Not Supported by Messengers, states in part:**

> *All parts of street light drop wires, street lamps, and their supporting fixtures (including rods, braces and guys) shall not be less than 1 foot radially from all unprotected conductors not supported on messengers (including lead wires and taps) except the lead wires supplying the street lamps within 24 inches of their points of entrance to the street lighting equipment.*

A BWP secondary conductor on BWP pole number 31799B was touching a BWP street light fixture on the same pole.

**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 P-1166 had vegetation blocking the front door and had corrosion on the back of the padmount.