

## PUBLIC UTILITIES COMMISSION

15 VAN NESS AVENUE  
SAN FRANCISCO, CA 94102-3298



June 15, 2011

FILE NO. EA2011-008

Bradley A. Recker  
Burbank Water and Power  
Electric Superintendent  
164 W. Magnolia Blvd. P.O. Box 631  
Burbank, CA 91503-0631

**SUBJECT:** Electric Audit of the city of Burbank Water and Power

Dear Mr. Recker:

On behalf of the Utilities Safety and Reliability Branch of the California Public Utilities Commission, I conducted an electric Audit of City of Burbank Water and Power (BWP) on May 31 through June 2, 2011.

I found that BWP's personnel did not document all General Order (GO) 128 violations at the time of inspections. In addition, BWP did not have an inspection and maintenance program for its facilities as required by GO 95 and GO 165. Attached to this letter is a list of the violations I observed during the audit.

Within 30 days from the date of this letter, provide us with a written response indicating the corrective measures taken by BWP regarding the violations noted, and the dates they were or will be corrected.

If you have any questions, you may contact me at (213) 576-7016.

Sincerely,

A handwritten signature in black ink, appearing to read "Mahmoud Intably".

Mahmoud (Steve) Intably, P.E.  
Utilities Engineer  
Utilities Safety and Reliability Branch  
Consumer Protection and Safety Division

Enclosure: Violations List

## Violations List

### **GO 165, Section IV, Paragraph 1: Standards for Inspection, Record-keeping, and Reporting**

Paragraph 1 states:

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

BWP inspection records showed that its distribution facilities were not inspected periodically as specified in the table mentioned in the above rule.

### **GO 165, Section IV, Paragraph 3: Standards for Inspection, Record-keeping, and Reporting**

Paragraph 3 states:

*“Each utility subject to this General Order shall submit an annual report detailing its compliance with this General Order under penalty of perjury. The first report required under this section shall be filed with the Commission by no later than July 1, 1998. Each utility shall file subsequent annual reports for every following year by no later than July 1....”*

BWP failed to submit to the Commission an annual report detailing its compliance with this General Order.

### **GO 165, Section IV, Paragraph 5: Standards for Inspection, Record-keeping, and Reporting**

Paragraph 5 states:

*“For all inspections, within a reasonable period, company records shall specify the circuit, area, or equipment inspected, the name of the inspector, the date of the inspection, and any problems identified during each inspection, as well as the scheduled date of corrective action. For detailed and intrusive inspections, companies shall also rate the condition of inspected equipment. Upon completion of corrective action, company records will show the nature of the work, the date, and the identity of persons performing the work”*

BWP personnel don't include the schedule date for corrective action of deficiencies they find during inspections. In addition, BWP don't document all GO 128 violations at the time of inspections as required.

**List of General Order (GO) 95 violations that were observed during the audit:**

**GO 95, Rule 31.1 Design, Construction and Maintenance**

Rule 31.1 states:

*“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.”*

Each of the following poles had a loose riser casing support:

- 22174B
- 23983B
- 23786B
- 20591B

Each of the following poles had a bent or a turned step:

- 24399B
- 22968B
- 320 Riverside Dr.
- 22174B
- 20607B
- 22421B
- 20590B
- Pole located at alley w/o Pass Ave. N/o Alameda Street
- 20739B
- 22660B
- 20606B
- 806325H
- 22996B
- 22997B

Each of poles numbered 25848B and 22175B had an uncapped riser casing.

Pole number 26560B had a riser casing with a damaged coupling.

Poles number 22968B supported a crossarm that had loose conduit straps.

Pole number 21971B had loose conduit straps.

Pole number 20602B supported a street light that had a loose PVC conduit.

Guy wire attached to pole number 22703B had tree limbs that were exerting strain on the guy wire.

Pole number 22175B had a palm tree exerting strain on the pole.

Pole number 22994B had damaged visibility strips.

Pole number 23321B had a loose guy guard.

Each of poles numbered 20588B and 21971B had a damaged conduit.

Each of poles numbered 7362B and 7365B had a sunken insulator.

Each of poles numbered 26492B and 21870B had a damaged neutral wire on a triplex service drop.

Each of poles numbered 22172B and 22660B had a damaged ground wire.

### **GO 95, Rule 31.2 Inspection of Lines**

Rule 32.2 states:

*“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.”*

BWP does not have an inspection and a maintenance program, and does not inspect its facilities “frequently and thoroughly for the purpose of insuring that they are in good condition so as to conform with these rules”.

### **GO 95, Rule 31.6 Abandoned Lines**

Rule 31.6 states:

*“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...”*

Pole located at alley w/o Pass Ave. and N/o Alameda Street had an abandoned insulator.

### **GO 95, Rule 51.6A High Voltage Marking**

Rule 51.6A states:

*“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. Such signs shall be of weather and corrosion-resisting material, solid or with letters cut out therefrom and clearly legible.”*

Each of the following poles supported line conductors of more than 750 volts and were not marked with high voltage signs:

- 22703B
- 24398B
- 24399B
- 25347B
- 25848B
- 25350B
- 320 Riverside Dr.
- 26487B
- 26226B
- 26225B
- 26224B
- 26223B
- 26222B
- 26221B
- 26220B
- 26219B
- 26218B
- 24385B
- 23983B
- 22970B
- 22172B
- 22168B
- 22166B
- 22165B
- 22163B
- 20739B
- 23787B
- 24548B
- 22653B
- 22655B
- 22656B
- 22657B
- 22660B
- 22662B
- 23018B
- 23019B
- 23020B
- 22029B
- 22027B
- 20589B
- 205099
- 20608B
- 20602B
- 22985B
- S/o 21971B
- 21971B
- 22986B
- 22987B
- 22988B
- 22990B
- N/o 22990B
- 22992B
- 22993B
- 22994B
- 22995B
- 806325H
- 22996B
- 22997B
- N/o 22997B
- 22999B
- 23000B
- N/o23000B
- 22753B
- 22754B
- 7359B
- 23486B
- 23485B
- Alley s/o Riverside Dr. and w/o Fairview Ave

**GO 95, Rule 54.6B Ground Wires**

Rule 54.6B states:

*“..That portion of the ground wire 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)...”*

Each of the following poles had a broken ground molding:

- 25347B
- 26475B
- 26492B
- 26225B
- 26221B
- 21249B
- 22177B
- 22173B
- 22172B
- 22171B
- 22170B
- 22169B
- 22167B
- 22164B
- 26561B
- 26563B
- 20739B
- 23925B
- 702044H
- 3911 Riverside Dr.
- 22657B
- 22660B
- 22662B
- 20589B
- 20591B
- 20592B

- 205097
- 20607B
- S/o21971B
- 21971B
- 22987B
- 2290B
- 22993B
- 22995B
- 26730B
- 22996B
- 7365B
- Pole located at alley w/o Pass Ave. N/o Alameda Street

**GO 95, Rule 54.8B(4)(a) Vertical Clearances**

Rule 54.8B(4)(a) states:

*“Service drop vertical clearances shall be maintained over all portions of buildings and structures as required by Table 10.”*

Pole located at 320 Riverside Dr. supported a triplex service drop with less than two feet of vertical clearance from a roof of a house on the same premises.

**GO 95, Rule 54.8C4 Clearances between Supply Service Drops, 0 – 750 Volt and Communication Service Drops**

Rule 54.8C4 states:

*“The radial clearance between supply service drop conductors and communication service drop conductors may be less than 48 inches as specified in Table 2, Column C, Cases 4 and 9; Column D, Cases 3 and 8, but shall be not less than 24 inches. Where within 15 feet of the point of attachment of either service drop on a building, this clearance may be further reduced but shall be not less than 12 inches.”*

Each of poles numbered 22028B and 205098 supported a service drop with less than 12 inches of radial clearance from communication service drops within 15 ft from the point of attachment.

Each of poles numbered 27780B and 20606B supported a service drop with less than 24 inches of radial clearance from communication service drops.

**GO 95, Rule 54.9C1 Conductor Material, Urban Districts**

Rule 54.9C1 states:

*“Conductors in rack construction in urban districts shall have a covering not less than the equivalent of weather-resistant covering.”*

Each of poles numbered 22992B, 22993B, and pole located north of pole number 22990B, had conductors in rack construction with damaged weather-resistant covering.

## **GO 95, Rule 56.9 Guy Marker (Guy Guard)**

Rule 56.9 states:

*“A substantial marker of suitable material, including but not limited to metal or plastic, not less than 8 feet in length, shall be securely attached to all anchor guys. Where more than one guy is attached to an anchor rod, only the outermost guy is required to have a marker.”*

Pole number 23991B, 22177B, and 20588B had an anchor guy exposed to traffic and did not have a guy marker.

## **GO 95, Rule 56.2 Overhead Guys, Anchor Guys and Span Wires**

Rule 56.2 states:

*“Where mechanical loads imposed on poles, towers, or structures are greater than can be supported with safety factors as specified in Rule 44, additional strength shall be provided by the use of guys or other suitable construction. Where guys are used with poles or similar structures capable of considerable deflection before failure, the guys shall be able to support the entire load, the pole below the point of guy attachment acting merely as a strut.*

*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.”*

Each of the following poles had a loose guy wire:

- 26475B
- 24787B
- 11583B
- 24548B

**GO 95, Rule 38, Table 2, Case 19C requires a minimum of three-inch radial clearance between guy wires and communication conductors.**

Each of the following poles had a guy wire passing communication conductors with less than three-inch radial separation:

- 26216B
- 702044H
- 22029B
- 23018B
- 20608B

**GO 95, Rule 38, Table 2, Case 8D requires a minimum of three feet radial clearance between triplex service drops and communication conductors.**

Each of poles numbered 25347B, 22661B, and 22662B had a triplex cable with less than 3 feet radial clearance from a communication cable.

**GO 95, Rule 38, Table 2, Case 19D requires a minimum of three-inch radial clearance between triplex service drops and guy wires.**

Pole number 22653B had a triplex service drop touching a guy wire.

**List of General Order (GO) 128 violations that were observed during the field part of the audit and were not documented in BWP's inspection records:**

### **GO 128, Rule 12.2 Maintenance**

Rule 12.2 states:

*"Systems shall be maintained in such condition as to secure safety to workmen and the public in general."*

The following structures contained transformers that were corroded:

- P-1164
- P-36
- P-152
- P-1325
- P-174

Structures numbered MH-BV and MH-240 had cracks on precast concrete.

Structure number P1130 contained equipment that was leaking oil.

### **GO 128, Rule 12.2 Maintenance**

Rule 12.2 states:

*"Systems shall be maintained in such condition as to secure safety to workmen and the public in general. Systems and portions thereof constructed, reconstructed, or replaced on or after the effective date of these rules shall be kept in conformity with the requirement of these rules."*

*A Electric Supply System - An Auditable and consistent maintenance program, see Rule 22.4, shall be in place to minimize deterioration of underground equipment."*



During the audit, I discovered that BWP did not have a maintenance program that includes procedures for inspection interval, rejection criteria, and corrective action, to minimize deterioration of underground equipment.

### **Rule 34.3B Guarding live parts**

Rule 34.3B states:

*“Compartments and enclosures which will, during normal operation, contain exposed live parts shall be designed and installed to prevent a person from passing a wire or other conducting material into such compartment from the outside when it is closed. This requirement is not intended to prevent normal work operations such as fishing ducts and installing cable.”*

Aboveground structures numbered P-152 and P-12 had openings at the bottom that would allow passing of a wire or other conducting material.