PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE SAN FRANCISCO, CA 94102-3298



July 28, 2010

FILE NO. EA-2010-15

Ali Nourmohamadian, P.E. Engineering Manager City of Vernon, Light and Power Department 4305 Santa Fe Avenue Vernon, CA 90058

SUBJECT: Electric Audit of Vernon Light and Power overhead and underground facilities

Dear Mr. Nourmohamadian:

On behalf of the Utilities Safety and Reliability Branch of the California Public Utilities Commission, I conducted an electric audit of Vernon Light and Power's facilities on July 5-9, 2010.

As part of the audit, I conducted inspections in areas where Vernon Light and Power recently performed detailed inspections of overhead and underground facilities. I found that Vernon Light and Power's personnel did not document all of the General Order (GO) 95 violations at the time of inspections and did not assign a date of corrective action for each violation discovered during the inspections. Furthermore, Vernon Light and Power did not have a maintenance program that include procedures for inspection interval, rejection criteria, and corrective action, to minimize deterioration of underground equipment as required by General Order 128, Rule 12.2A. Attached to this letter is a list of the violations I observed during the audit.

Within 30 days from the date of this letter, please advise me of the corrective measures your company will take to ensure that GOs 95 and 128 violations are documented and addressed in your inspection records.

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

Sincerely,

Mahmoud (Steve) Intably, P.E.

Utilities Engineer

Utilities Safety and Reliability Branch Consumer Protection and Safety Division

Enclosure: Inspection Report

Inspection Report

List of General Orders (GOs) 95 and 128 violations observed during the audit of Vernon Light and Power overhead facilities and were not documented in the inspection records:

GO 95, Rule 18B Notification of Safety Hazards

Rule 18B states:

"If a company, while inspecting its facilities, discovers a safety hazard on or near a communications facility, electric transmission or distribution facility involving another company, the inspecting company shall notify the other company and/or facility owner of such safety hazard no later than 10 business days after the discovery..."

Poles number 8039EV had broken lashing wires belonging to a communication company and Vernon Light and Power did not notify the communication company of the broken lashing wire

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.

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 [the] communication or supply lines and equipment.

All work performed on public streets and highways shall be done in such a manner that the operations of other utilities and the convenience of the public will be interfered with as little as possible and no conditions unusually dangerous to workmen, pedestrians or others shall be established at any time."

Poles numbered 2505VP and 2507VP had open casings.

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

8050EV

1874VP

6919EV

8081EV

5918EV

Each of the following poles had a down guy wire-tail exposed to traffic causing an unsafe condition:

1490VP

2609EV

Pole number 5918EV had a damaged riser's support.

Pole number 8081EV had a damaged riser.

Pole number 2569VP had a pole-mounted switch that was not locked.

Pole number 10271EV had a loose bonding-wire under a primary corssarm.

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 number 1850VP had an abandoned ground wire. Pole number 7340EV had an abandoned casing.

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."

The following poles support line conductors of more than 750 volts and were not marked with high voltage signs:

•	7916EV	•	8034EV	•	8083EV
•	7913EV	•	8024EV	•	8087EV
•	8047EV	•	8681EV	•	8088EV
•	8045EV	•	2569VP	•	1490VP
•	8043EV	•	8078EV	•	1995VP
•	8042EV	•	10271EV	•	1991VP
•	8039EV	•	8082EV		

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)."

The following poles had broken ground moldings:

•	7916EV	•	8025EV	•	2024VP
•	8047EV	•	2564EV	•	1106VP
•	8043EV	•	2608VP	•	8088EV
•	8042EV	•	8079EV	•	2157VP
•	8038EV	•	8081EV	•	1837VP
•	8035EV	•	8083EV		

GO 95, Rule 54.7A Climbing Space (Wood Crossarm Construction)

Rule 57.7A states:

"The climbing space shall be maintained in the same position for a distance of not less than 4 feet vertically both above and below each conductor level through which it passes. To comply with this requirement, the position of the climbing space shall not be changed through conductor levels which are less than 4 feet apart. Where the vertical distance between consecutive conductor levels is 4 feet or more, and less than 8 feet, the position of the climbing space through such consecutive level may be shifted not more than one-quarter (90 degrees) of the distance around the pole.

Where a single level of circuitry is installed at the top of a pole, the climbing space shall extend up to the level of such pole top circuitry and need not be provided through and above such level. Where a conductor is installed at the top of a pole under the provisions of Rule 54.4–D8, the climbing space shall extend up to the level of such pole top conductor but need not be provided through and above such level...".

The following pole had climbing space obstructions caused by communication companies:

1060VP-telephone riser

8050EV-telephone drop

Pole number 1106VP had a street light's riser in climbing space. Pole number 1946VP had a riser in climbing space.

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 3036EV had an anchor guy exposed to traffic and did not have a guy marker

GO 95, Rule 38, Table 2, Case D8

GO 95, Rule 38, Table 2, Case D8 requires a 36 inches vertical clearance at midspan between communication cables and triplex cables.

Pole number 2048VP had a triplex cable with less than 36 inches of vertical clearance from a communication cable.

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."

GO 128, Rule 22.4 A Maintenance Program

Rule 22.4A states:

"Maintenance Program means a written policy that shall include the following key elements:

- 1) Inspection intervals
- 2) Rejection criteria
- 3) Corrective actions"

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

GO 165, Section IV Standards for Inspection, Record-keeping, and Reporting, paragraph five

GO165, Section IV, 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.

During the audit, I discovered that Vernon Light and Power did not document all General Order 95 violations found during its inspections, and it did not assign a date of corrective action for each violation. Furthermore, Vernon Light and Power did not rate the condition of its inspected facilities.