

PUBLIC UTILITIES COMMISSION

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SUBJECT: Audit of Verizon's Morgan Hill & Gilroy Districts

On behalf of the Utilities Safety and Reliability Branch (USRB) of the California Public Utilities Commission, Terrence Eng and I conducted an audit of Verizon's Morgan Hill & Gilroy Districts from October 19-21, 2009. The audit included a review of Verizon's maintenance for compliance with General Orders (GOs) 95 and 128.

During the inspection, we identified violations of one or more General Orders. A copy of the audit summary itemizing the violations is enclosed. Within 30 days, please advise me by electronic or hard copy of all the corrective measures taken, or planned to be taken by the Utility regarding the violation(s) and the date on which they were or will be corrected.

If you have any questions, please contact me at (415) 703-2192.

Sincerely,

A handwritten signature in black ink, appearing to read "Jadwindar Singh".

Jadwindar Singh, P.E.
Utilities Safety and Reliability Branch
Consumer Protection and Safety Division

Enclosure: Audit Summary

CC: Mr. David Larus, Construction Specialist ROS, Verizon
Mr. Terrence Eng, CPUC

Audit Summary

Violations

(1) General Order 95, Rule 31.2 Inspection of Lines

"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."

General Order 128, Rule 17.2 Inspection

"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."

To show compliance with General Order 95, Rule 31.2 and General Order 128, Rule 17.2, Verizon provided its "inspections" which are conducted when:

- a) Outside Plant Construction projects are done
- b) Joint Pole work is done
- c) Customer Operations personnel work on Trouble Tickets
- d) Contractors work on Trouble Tickets

Of the four types of "inspections" conducted by Verizon personnel, we were only able to unequivocally determine the locations of where these "inspections" took place during Outside Plant Construction and Joint Pole work. This is because both types of work include specific maps and drawings that show the actual location of all poles "inspected." However, for all Customer Operations and contractor Trouble Tickets, we were tasked with interpreting the unspecific comments left by the Customer Operations and contractor personnel, and were thus not able to ascertain the precise location(s) where "inspections" took place. We find that in order for Verizon to consider Customer Operations and Contractor Trouble Tickets as compliant "inspections," the unequivocal, precise location of each inspected unit must be documented. This documentation must include all pole numbers, B-Box locations, serving terminal locations, or other descriptions to accurately locate the facilities inspected.

During the audit, Verizon explained that a database to capture future inspections performed is in the works. We have the following comments related to the new database:

- 1) Please ensure that all "inspected" units and their locations are captured in the database. Location descriptions should include pole numbers, B-Box locations, serving terminal locations, or other descriptions to accurately locate the facilities inspected.
- 2) Please ensure that a means to enter contractor "inspections" into the database is included in this process.

(2) **10/20/09 – Field Location #2, Job ID: I7663920**
705 1st Street, Gilroy

While verifying the work completed at the above address we discovered the following violations. The violations are located on the riser pole where the aerial service drop originates. Since this location was "Quality Inspected" on 10/16/09, we did not expect to find any violations.

a) General Order 95, Rule 31.1 Design, Construction and Maintenance

"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."

The Verizon P-Clamp that holds the service to 705 1st Street was not attached to the pole.

b) General Order 95, Rule 87.7 Covering or Guarding

D. Risers

(1) Covered from Ground Level to 8 Feet above the Ground:

"Risers shall be protected from the ground level to a level not less than 8 feet above the ground by:

- a) *Securely or effectively grounded iron or steel pipe (or other covering at least of equal strength). When metallic sheathed cable rising from underground non-metallic conduit is protected by metallic pipe or moulding, such pipe or moulding shall be effectively grounded as specified in Rule 21.4-A , or*
- b) *Non-metallic conduit or rigid U-shaped moulding. Such conduit or moulding shall be of material as specified in Rule 22.8."*

The two-pair Verizon service drop was not covered up to 8 feet.

c) General Order 95, Rule 84.6 Vertical and Lateral Conductors

D. Vertical Runs

"Where bridled runs are not required to be covered by these rules, they shall be supported by bridle hooks or rings spaced at intervals of not more than 24 inches."

The Verizon riser was not attached at the communication level.

d) General Order 95, Rule 86.9 Guy Marker (Guy Guard)

"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."

The Verizon anchor guy did not have a guy marker attached.

**(3) 10/20/09 – Field Location #3, Job ID: 9P008JP, Pole #103480
Backyard of 849 3rd Street, Gilroy**

While verifying the work completed at the above address we discovered the following violation. The joint pole transfer was marked as "All Work Complete" on 1/27/09. We find that the violation should have been identified and corrected during the joint pole work.

General Order 95, Rule 38 Minimum Clearances of Wires from Other Wires

Table 2, Case 8, Column C

"Communication Conductors and Service Drops shall be separated by 12 inches."

An abandoned cable TV service drop was attached to Verizon's span about 15 feet out from the pole.

**(4) 10/20/09 – Field Location #8, Job ID: R0950130
947 Alta Oak, Gilroy**

While verifying the work completed at the above address we discovered the following violation. The violation is located at the underground serving terminal in the yard between 926 and 936 Alta Oak. Since this location was "Quality Inspected" on 10/17/09, we did not expect to find any violations.

General Order 128, Rule 41.6 Sealing Service Laterals

"Service conduits, by which water may enter buildings, shall be suitably plugged or sealed at the source of supply such as utilities' transformer or secondary handhole, and at the supply end of the conduit that enters the bottom of customer's terminating enclosure."

The service conduits located at the underground serving terminal were not sealed. This

indicates that all service conduits of this tract may not be sealed. Please inspect all conduits and seal them as necessary.

**(5) 10/21/09 – Field Location #3, Trouble Report #: CADW0105YR
16055 Oak Glen Ave, Morgan Hill**

While verifying the work completed at the above address we discovered the following violations. The violations are located at the pole where the service drop originates. This trouble ticket was addressed by a contractor.

a) General Order 95, Rule 84.4 Clearances

D. From Poles and Crossarms

(2) Conductors Not Supported on Crossarms:

“Communication conductors which are not supported on crossarms may be attached to poles by means of hooks, knobs, or brackets and thus are not required to be any specified distance from center line of poles provided the clearance between conductors complies with the requirements of Rule 84.4–C1c. The minimum clearance of such conductors from the surface of poles shall be such that suitable insulation is maintained.”

The Verizon service to the West was not attached to the surface of the pole.

b) General Order 95, Rule 84.6 Vertical and Lateral Conductors

D. Vertical Runs

“Where bridled runs are not required to be covered by these rules, they shall be supported by bridle hooks or rings spaced at intervals of not more than 24 inches.”

The Verizon ground wire was not attached at the communication level.

**(6) 10/21/09 – Field Location #4, Trouble Report #: CADW01087Z
17040 Piedmont Court, Morgan Hill**

While verifying the work completed at the above address we discovered the following violation. The violation is located at the pole behind the home.

General Order 95, Rule 31.1 Design, Construction and Maintenance

“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."

There was a loose wire hanging out from the serving terminal.

**(7) 10/21/09 – Field Location #7, Trouble Report #: CADW0108Z0
1 Deer Hill Road, Morgan Hill**

While verifying the work completed at the above address we discovered the following violation.

General Order 95, Rule 31.1 Design, Construction and Maintenance

"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."

The riser guard was not attached properly to the face of the pole.

Concerns and Recommendations

(1) **WorkTrax system**

While Verizon's Morgan Hill and Gilroy Districts do not utilize the WorkTrax system to record maintenance, there are others, including Novato, that continue to do so. We suggest discontinuing use of the WorkTrax system for all GO 95 and 128 related work so that there will not be any confusion as to the location of pending maintenance work in Verizon's databases.