PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE SAN FRANCISCO, CA 94102-3298



May 24, 2016 CA2016-005

Mr. John Gutierrez Senior Director – Government Affairs Comcast Cable 3055 Comcast Place Livermore, CA 94551

SUBJECT: Audit of Comcast North Bay Region

Dear Mr. Gutierrez:

On behalf of the Electric Safety and Reliability Branch (ESRB) of the California Public Utilities Commission, Wilson Tsai of my staff conducted a Communication Infrastructure Provider (CIP) audit of Comcast's North Bay Region from May 9, 2016 to May 12, 2016. The audit included a review of Comcast's records and field inspections of Comcast'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 June 24, 2016, by electronic or hard copy, of all corrective measures taken by Comcast to remedy and prevent such violations.

If you have any questions concerning this audit please contact Wilson Tsai at (415) 703-1359 or wilson.tsai@cpuc.ca.gov.

Sincerely,

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: Elizaveta Malashenko, Director, Safety and Enforcement Division, CPUC

Charlotte TerKeurst, Program Manager, Electric Safety and Reliability Branch, CPUC

AUDIT FINDINGS

I. Records Review

My staff reviewed the following records during the audit:

- a. Comcast's GO 95/128 inspection program
- b. Completed jobs in Petaluma, Rohnert Park, and Santa Rosa
- c. Inspection Drive Out Maps
- d. Service Area Map for the North Bay region
- e. Service Request Orders for jobs in Petaluma
- f. Comcast's U-Safe report for jobs in the last six months for Petaluma, Rohnert Park, Santa Rosa, and Sebastopol
- g. Pole loading calculations for New Construction job #ROH-203138-P-NEW

II. Records Review - Violations

GO 95, Rule 44.1, Installation and Reconstruction, states in part:

Lines and elements of lines, upon installation or reconstruction, shall provide as a minimum the safety factors specified in Table 4. The design shall consider all supply and communication facilities planned to occupy the structure. For purposes of this rule, the term "planned" applies to the facilities intended to occupy the structure that are actually known to the constructing company at the time of design.

Pole loading calculations for the following pole were inconsistent with what was observed in the field and should be redone:

 Pole 6 – Between 7173 & 7175 Petaluma Hill Rd – The pole was listed as a Class 4, 30 foot pole but verified in the field to be a Class 5, 35 foot pole.

III. Field Inspection

My staff inspected the following facilities in the North Bay region:

Type of Structure	Location	City
Underground Vault	1509 Mauro Pietro Dr	Petaluma
Underground Vault	1510 Mauro Pietro Dr	Petaluma
Underground Vault	1524 Mauro Pietro Dr	Petaluma
Underground Vault	1525 Mauro Pietro Dr	Petaluma
Underground Vault	1528 Mauro Pietro Dr	Petaluma
Underground Vault	1529 Mauro Pietro Dr	Petaluma
Underground Vault	1532 Mauro Pietro Dr	Petaluma
Underground Vault	1537 Mauro Pietro Dr	Petaluma
Underground Vault	1539 Mauro Pietro Dr	Petaluma
Underground Vault	1545 Mauro Pietro Dr	Petaluma
Underground Vault	1550 Mauro Pietro Dr	Petaluma
Underground Vault	1554 Mauro Pietro Dr	Petaluma
Underground Vault	1557 Mauro Pietro Dr	Petaluma
Underground Vault	1558 Mauro Pietro Dr	Petaluma
Underground Vault	1304 Southpoint Blvd	Petaluma
Underground Vault	737 Southpoint Blvd	Petaluma
Underground Vault	1803 Carneros Cir	Petaluma
Underground Vault	1806 Carneros Cir	Petaluma
Underground Vault	1817 Carneros Cir	Petaluma
Underground Vault	1819 Carneros Cir	Petaluma
Underground Vault	1821 Carneros Cir	Petaluma
Underground Vault	1823 Carneros Cir	Petaluma
Underground Vault	1827 Carneros Cir	Petaluma
Underground Vault	1829 Carneros Cir	Petaluma
Underground Vault	1831 Carneros Cir	Petaluma
Underground Vault	1833 Carneros Cir	Petaluma
Underground Vault	1834 Carneros Cir	Petaluma
Underground Vault	1835 Carneros Cir	Petaluma
Underground Vault	1838 Carneros Cir	Petaluma
Underground Vault	1839 Carneros Cir	Petaluma
Underground Vault	1841 Carneros Cir	Petaluma
Underground Vault	1843 Carneros Cir	Petaluma
Underground Vault	1848 Carneros Cir	Petaluma
Underground Vault	1605 Andover Way	Petaluma
Underground Vault	1609 Andover Way	Petaluma
Underground Vault	1613 Andover Way	Petaluma
Underground Vault	1644 Andover Way	Petaluma
Underground Vault	1648 Andover Way	Petaluma
Underground Vault	1652 Andover Way	Petaluma

Type of Structure	Location	City
Underground Vault	1656 Andover Way	Petaluma
Underground Vault	1657 Andover Way	Petaluma
Underground Vault	1673 Andover Way	Petaluma
Underground Vault	1677 Andover Way	Petaluma
Underground Vault	1681 Andover Way	Petaluma
Underground Vault	1685 Andover Way	Petaluma
Underground Vault	1689 Andover Way	Petaluma
Underground Vault	1701 Andover Way	Petaluma
Underground Vault	1718 Andover Way	Petaluma
Underground Vault	1721 Andover Way	Petaluma
Underground Vault	1726 Andover Way	Petaluma
Underground Vault	1616 Madeira Cir	Petaluma
Underground Vault	1617 Madeira Cir	Petaluma
Underground Vault	1620 Madeira Cir	Petaluma
Underground Vault	1621 Madeira Cir	Petaluma
Underground Vault	1628 Madeira Cir	Petaluma
Underground Vault	1632 Madeira Cir	Petaluma
Underground Vault	1633 Madeira Cir	Petaluma
Underground Vault	1636 Madeira Cir	Petaluma
Underground Vault	1637 Madeira Cir	Petaluma
Underground Vault	1653 Madeira Cir	Petaluma
Underground Vault	1657 Madeira Cir	Petaluma
Underground Vault	1661 Madeira Cir	Petaluma
Underground Vault	1669 Madeira Cir	Petaluma
Underground Vault	1673 Madeira Cir	Petaluma
Underground Vault	1677 Madeira Cir	Petaluma
Underground Vault	1680 Madeira Cir	Petaluma
Underground Vault	1684 Madeira Cir	Petaluma
Underground Vault	1688 Madeira Cir	Petaluma
Underground Vault	1689 Madeira Cir	Petaluma
Underground Vault	802 Wine Ct	Petaluma
Underground Vault	805 Wine Ct	Petaluma
Underground Vault	806 Wine Ct	Petaluma
Underground Vault	810 Wine Ct	Petaluma
Underground Vault	813 Wine Ct	Petaluma
Underground Vault	814 Wine Ct	Petaluma
Underground Vault	817 Wine Ct	Petaluma
Underground Vault	818 Wine Ct	Petaluma
Pole	NE Corner of Roberts Rd & Petaluma Hill Rd	Rohnert Park
Pole	SE Corner of Roberts Rd & Petaluma Hill Rd	Rohnert Park
Pole	Across From Alice Dr & Petaluma Hill Rd	Rohnert Park

Type of Structure	Location	City
Pole	Across From 7173 Petaluma Hill Rd	Rohnert Park
Pole	7173 Petaluma Hill Rd	Rohnert Park
Pole	Between 7173 & 7175 Petaluma Hill Rd	Rohnert Park
Pole	7175 Petaluma Hill Rd	Rohnert Park
Pole	2010 Siesta Ln	Santa Rosa
Service Drop	2031 Siesta Ln	Santa Rosa
Service Drop	2034 Siesta Ln	Santa Rosa
Pole	2107 Siesta Ln	Santa Rosa
Pole	2149 Siesta Ln	Santa Rosa
Pole	2199 Siesta Ln	Santa Rosa
Pole	2204 ½ Siesta Ln	Santa Rosa
Pole	1937 Siesta Ln	Santa Rosa
Service Drop	1940 Siesta Ln	Santa Rosa
Service Drop	1941 Siesta Ln	Santa Rosa
Pole	1946 Siesta Ln	Santa Rosa
Pole	1919 Siesta Ln	Santa Rosa
Pole	1945 Rogers Way	Santa Rosa
Pole	1949 Rogers Way	Santa Rosa
Pole	1955 Rogers Way	Santa Rosa
Pole	2007 Rogers Way	Santa Rosa
Pole	2100 Rogers Way	Santa Rosa
Pole	2201 E Haven Dr	Santa Rosa
Pole	2217 E Haven Dr	Santa Rosa
Pole	2233 E Haven Dr	Santa Rosa
Pole	2136 E Haven Dr	Santa Rosa
Pole	1944 Grosse Ave	Santa Rosa
Service Drop	1949 Grosse Ave	Santa Rosa
Pole	2337 Fourth St	Santa Rosa
Pole	2234 Oakview Ct	Santa Rosa
Pole	365 Major Dr	Santa Rosa
Pole	378 Young Dr	Santa Rosa
Pole	2350 Lillie Dr	Santa Rosa
Pole	2379 Lillie Dr	Santa Rosa
Pole	2226 Nordyke Ave	Santa Rosa
Pole	2234 Nordyke Ave	Santa Rosa
Pole	2252 Nordyke Ave	Santa Rosa
Pole	2309 Nordyke Ave	Santa Rosa
Pole	2320 Nordyke Ave	Santa Rosa
Pole	2368 Nordyke Ave	Santa Rosa
Pole	2387 Nordyke Ave	Santa Rosa

IV. Field Inspection – Undocumented Violations List

We observed the following violations during our field inspection. None of these violations were documented and/or addressed by Comcast during its last inspection:

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

Poles at the following locations had an exposed ground wire:

- 2010 Siesta Ln
- 2337 Fourth St
- 2100 Rogers Way

GO 95, Rule 56.4-D.2, Clearances From Guys or Span Wires Passing and Attached to Same Pole, states in part:

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.

The down guy wire on the pole located at 2226 Nordyke Ave was in contact with a PG&E's down guy above the insulator.

GO 95, Table 2, Case 19-C requires a minimum 3 inch radial clearance between a down guy and communication conductor supported on the same pole.

The pole located at 1919 Siesta Ln had a primary down guy in contact with a Comcast conductor.

<u>GO 95, Table 2, Case 8-C</u> requires a minimum 12 inch vertical separation between a communication and cable service drops on the same pole.

The pole located at 365 Major Dr. had a Comcast service drop in contact with an AT&T service drop.

GO 95, Rule 84.8-C.1 Exception, Clearances Above Public Thoroughfares, states in part:

Not more than 12 feet horizontally from the curb line, the 18 foot clearance may be gradually reduced to not less than 16 feet at the curb line. In no case shall the clearance at the center line be less than 18 feet. Where there are no curbs, the foregoing provisions shall apply using the outer limits of normal longitudinal vehicular movement in lieu of a curb line.

The service drop at 2031 Siesta Ln had vertical clearances of 15'-9" at the centerline and 13'-2" at one foot from the curb.

The service drop at 2014 Siesta Ln had a vertical clearance of 15'-6" measured one foot from the curb.

GO 95, Rule 86.2, 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 located at 2368 Nordyke Ave had considerable slack.

The down guy located at 378 Young Dr. was severed at the base and no longer functional.

GO 95, Rule 18-B, Notification of Safety Hazards, states in part:

If a company, while performing inspections of its facilities, discovers a safety hazard(s) on or near a communications facility or electric facility involving another company, the inspecting company shall notify the other company and/or facility owner of such safety hazard(s) no later than 10 business days after the discovery. To the extent the inspecting company cannot determine the facility owner/operator, it shall contact the pole owner(s), who shall be responsible for promptly notifying the company owning/operating the facility with the safety hazard(s), normally not to exceed five business days after being notified of the safety hazard. The notification shall be documented and such documentation must be preserved by all parties for at least ten years.

Comcast did not notify AT&T of the following violations when it performed inspections:

- 2029 Siesta Ln an AT&T service drop had a low vertical clearance
- 1945 Rogers Way an AT&T service drop had a low vertical clearance
- 2387 Nordyke Ave an AT&T squirrel guard was destroyed and dangling from conductor

GO 128, Rule 32.7, Covers, states in part:

Manholes, handholes, and subsurface equipment enclosures while not being worked in, shall be securely closed by covers of sufficient strength to sustain such loads as may reasonably be imposed upon them and arrangements shall be such that a tool or appliance shall be required for their opening and cover removal.

The underground vault at 818 Wine Ct had a damaged enclosure lid.

V. Field Inspection – Documented Violations List

We observed the following violations during our field inspection. These violations were documented and/or addressed by Comcast during its last inspection:

GO 128, Rule 32.7, Covers, states in part:

Manholes, handholes, and subsurface equipment enclosures while not being worked in, shall be securely closed by covers of sufficient strength to sustain such loads as may reasonably be imposed upon them and arrangements shall be such that a tool or appliance shall be required for their opening and cover removal.

The underground vault at 1644 Andover Way had a damaged enclosure lid.