

## PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE  
SAN FRANCISCO, CA 94102-3298



June 21, 2019

CA2019-850

John Gutierrez  
Director, Government Affairs  
Comcast  
3055 Comcast Place  
Livermore, CA 94551

**SUBJECT:** CIP Audit of Comcast's Sacramento Metro

Dear Mr. Gutierrez:

On behalf of the Electric Safety and Reliability Branch (ESRB) of the California Public Utilities Commission (CPUC), Rick Tse, Ivan Garcia, Brandon Vazquez, and Stephen Lee of ESRB staff conducted a CIP audit of Comcast's Sacramento Metro from April 8, 2019 to April 12, 2019. The audit included a review of Comcast's procedures, records, and field inspections of its communication 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 provide a response no later than July 22, 2019, by electronic or hard copy of all corrective actions and preventive measures taken by Comcast to correct the identified violations and prevent the recurrence of such violations.

If you have any questions concerning this audit, please contact Ivan Garcia at (916) 928-5875 or [Ivan.Garcia@cpuc.ca.gov](mailto:Ivan.Garcia@cpuc.ca.gov).

Sincerely,

A handwritten signature in blue ink, appearing to read "Banu Acimis".

Banu Acimis, P.E.  
Program and Project Supervisor  
Electric Safety and Reliability Branch  
Safety and Enforcement Division  
California Public Utilities Commission

Enclosure: CPUC Audit Findings

Cc: Lee Palmer, Director, Safety and Enforcement Division (SED), CPUC  
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Ivan Garcia, Utilities Engineer, ESRB, SED, CPUC  
Brandon Vazquez, Utilities Engineer, ESRB, SED, CPUC  
Stephen Lee, Utilities Engineer, ESRB, SED, CPUC

## AUDIT FINDINGS

### I. Records Review

During the audit, ESRB staff reviewed the following records:

- Comcast's General Order 95 and General Order 128 inspection program
- Detailed inspection records for Tier 3 High Fire Threat Districts in El Dorado Hills and Cameron Park
- Work order records for overhead and underground Comcast facilities
- Third Party Safety Hazard notifications for the last five years
- Pole loading safety factor calculations completed in the last six months

### II. Records Violations

ESRB staff observed the following violations during the record review portion of the audit:

#### 1. GO 95, Rule 80.1A(2) Statewide Inspection Requirements states in part:

*“Each company’s procedures shall describe (i) the methodology used to ensure that all Communication Lines are subject to the required inspections, and (ii) the procedures used for specifying what problems should be identified by the inspections. The procedures used for specifying what problems should be identified by the inspections shall include a checklist for patrol inspections.”*

Comcast does not have procedures to ensure that all Communication Lines are subject to the required inspections. Comcast only conducts inspections when responding to service requests in which the inspection consists of poles one span in each direction from the service location.

#### 2. GO 95, Rule 80.1A(2) Statewide Inspection Requirements states in part:

*“Each company shall prepare, follow, and modify as necessary, procedures for conducting patrol or detailed inspections for all of its Communication Lines throughout the State. Consistent with Rule 31.2, the type, frequency and thoroughness of inspections shall be based upon the following factors:*

- *Fire threat*
- *Proximity to overhead power line facilities*
- *Terrain*
- *Accessibility*
- *Location, including whether the Communication Lines are located in the High Fire-Threat District*

Comcast did not inspect the pole located at 3381 Paloran Court in Cameron Park in the Tier 3 High Fire Threat District. This pole is located between Poles 6 and 7 on the Comcast map.

### III. Field Inspection

During the field inspection, ESRB staff inspected the following facilities:

Structure Type	Structure Number	Address	City
Pedestal		7460 Blackthorne Way	Citrus Heights
Pedestal		6521 Bitterbush Way	Citrus Heights
Pole		7828 Sunrise Blvd	Citrus Heights
Pedestal		7849 Sunrise Blvd	Citrus Heights
Pole		6108 32nd Street	North Highlands
Pole		6110 32nd Street	North Highlands
Pole		6148 32nd Street	North Highlands
Pole		6305 32nd Street	North Highlands
Pedestal		4121 W Point Lane	North Highlands
Pole		7453 Watt Ave	North Highlands
Pole		213 Ash Street	Roseville
Pole		221 Ash Street	Roseville
Pole		356 Circuit Drive	Roseville
Pedestal		2029 Dunbar Way	Roseville
Pole	"Pole 3"	766 Bonita Drive	El Dorado Hills
Pole	"Pole 2"	766 Bonita Drive	El Dorado Hills
Pole	"Pole 1"	766 Bonita Drive	El Dorado Hills
Pole	"Pole 8"	1220 Lakehills Court	El Dorado Hills
Pole	"Pole 10"	1220 Lakehills Court	El Dorado Hills
Pole	"Pole 9"	1220 Lakehills Court	El Dorado Hills
Pole	"Pole 7"	1220 Lakehills Court	El Dorado Hills
Pole	"Pole 14"	2215 Allegheny Road	El Dorado Hills
Pole	"Pole 13"	2215 Allegheny Road	El Dorado Hills
Pole	"Pole 15"	1101 Malcolm Dixon Road	El Dorado Hills
Pole	"Pole 20"	1110 Uplands Drive	El Dorado Hills
Pole	"Pole 8"	3395 Paloran Court	Cameron Park
Pole	"Pole 7"	3381 Paloran Court	Cameron Park
Pole		3381 Paloran Court	Cameron Park
Pole	"Pole 6"	3364 Paloran Court	Cameron Park
Pole	"Pole 9"	3402 Paloran Court	Cameron Park
Pole	"Pole 10"	3402 Paloran Court	Cameron Park
Pole	"Pole 12"	3440 Paloran Court	Cameron Park
Pole	"Pole 14"	3300 Paloran Road	Cameron Park
Pole	"Pole 5"	3440 Meder Road	Cameron Park
Pole	"Pole 4"	3404 Meder Road	Cameron Park
Pole	"Pole 27"	3050 Meder Road	Cameron Park
Pole	"Pole 26"	3049 Cayente Way	Cameron Park

Pole	"Pole 28"	3053 Cayente Way	Cameron Park
Pedestal		9756 Dynasty Way	Elk Grove
Pedestal		8774 El Toreador Way	Elk Grove
Pole		8979 Elk Grove Florin Road	Elk Grove
Pole	"Pole 5"	9131 W Stockton Blvd	Elk Grove
Pole	"Pole 4"	9131 W Stockton Blvd	Elk Grove
Pedestal		8151 Sheldon Road	Elk Grove
Pole	UD 065646	8995 Grove Street	Elk Grove
Pole	UD 065645	Corner of Grove and Walnut Ave	Elk Grove
Pole	UD 065644	9649 Walnut Ave	Elk Grove
Pole	UD 113892	9653 Walnut Ave	Elk Grove
Pole	UD 065643	9656 Walnut Ave	Elk Grove
Pole	UD 065642	9666 Walnut Ave	Elk Grove
Pole	UD 060978	9671 Walnut Ave	Elk Grove
Pole	UD 065641	9670 Walnut Ave	Elk Grove
Pole	UD 065519	Front of 9679 Walnut Ave	Elk Grove
Pole	UD 065520	56 Walnut Ave	Elk Grove
Pole	UD 065521	9685 Walnut Ave	Elk Grove
Pole	UD 076828	9655 Walnut Ave	Elk Grove
Pole	UD 076828	9008 Grove Street	Elk Grove
Pole	UD 054272	9020 Grove Street	Elk Grove
Pole	UD 054271	9035 Grove Street	Elk Grove
Pole	UD 054270	9600 La Nuez Dr	Elk Grove
Pole	UD 054269	9060 Grove Street	Elk Grove
Pole	UD 074715	9060 Grove Street (Closest to the Railroad)	Elk Grove
Pole	UD 074719	9045 Grove Street	Elk Grove
Pole	"Pole 2"	Walnut Street Railroad Street Alley	Elk Grove
Pole	"Pole 1" - UD 054266	Walnut Street Railroad Street Alley	Elk Grove
Pole	UD 054265	Walnut Street Railroad Street Alley	Elk Grove
Pole	UD 099693	Elk Grove Blvd Grove St Alley	Elk Grove
Pole	UD 054267	Elk Grove Blvd Grove St Alley	Elk Grove
Pole	UD 054268	Elk Grove Blvd Grove St Alley	Elk Grove
Pole	UD 174495	9616 Walnut Ave	Elk Grove
Pole	UD 065651	Elk Grove Blvd Grove Street Alley	Elk Grove
Pole	UD 065653	Behind 8996 Elk Grove Blvd	Elk Grove
Pole	UD 065650	Elk Grove Blvd Grove St Alley, Behind United Methodist Church	Elk Grove
Pole		Intersection of Eva Ave and Gage Street	Elk Grove
Pole	5084	9620 Gage Street	Elk Grove
Pole	UD 065648	9634 Gage Street	Elk Grove

Pole	UD 065647	Grove Street, in Front of the Holy Trinity Ethiopian Church	Elk Grove
Pole	UD 081306	Grove Street, Across from the Holy Trinity Ethiopian Church	Elk Grove
Pedestal		2081 Land End Loop	Roseville
Pole	"Pole 1"	500 Berry Street	Roseville
Pole	"Pole 2"	500 Berry Street	Roseville
Pole	"Pole 3"	500 Berry Street	Roseville
Pole	"Pole 1" – RE 2795	241 Sunrise Ave	Roseville
Pole	"Pole 2" - RE 2801	241 Sunrise Ave	Roseville
Pole	"Pole 3" - RE 2800	241 Sunrise Ave	Roseville
Pole	"Pole 4" - RE 2775	241 Sunrise Ave	Roseville
Pole	"Pole 1"	3585 Old Auburn Rd	Roseville
Pole	"Pole 2"	3585 Old Auburn Rd	Roseville
Pole	"Pole 3"	3585 Old Auburn Rd	Roseville

#### IV. Field Inspection Violations

ESRB staff observed the following violations during the field inspection:

**1. GO 128, Rule 34.3C Self-contained Surface-mounted Equipment, Locking** states:

*“Compartments and enclosures shall be made secure against entry by unauthorized persons by means of locks or other suitable means.”*

The pedestal at 6521 Bitterbush Way in Citrus Heights did not lock.

**2. GO 95, Rule 37, Minimum Clearances of Wires above Railroads, Thoroughfares, Buildings, Etc, Table 1, Case 5B** states in part:

*“The basic minimum allowable vertical clearance of a communication conductor supply service drop in an above ground area accessible to pedestrians only is 10 feet.”*

The communication service drop to 7828 Sunrise Blvd. in Citrus Heights was measured low at 8 feet, 3 inches.

**3. GO 95, Rule 35, Vegetation Management** states in part:

*“Communication and electric supply circuits, energized at 750 volts or less, including their service drops, should be kept clear of vegetation in new construction and when circuits are reconstructed or repaired, whenever practicable. When a supply or communication company has actual knowledge, obtained either through normal operating practices or notification to the company, that its circuit energized at 750 volts or less shows strain or evidences abrasion from vegetation contact, the condition shall be corrected by reducing conductor tension, rearranging or replacing the conductor, pruning the vegetation, or placing mechanical protection on the conductor(s). For the purpose of this rule, abrasion is defined as damage to the insulation resulting from the friction between the vegetation and conductor. Scuffing or polishing of the insulation or covering is not considered abrasion. Strain on a conductor is present when vegetation contact significantly compromises the structural integrity of supply or communication facilities. Contact between vegetation and conductors, in and of itself, does not constitute a nonconformance with the rule.”*

3.1 The Comcast conductor at 7828 Sunrise Blvd. in Citrus Heights is strained by the vegetation on the main service span.

3.2. The tree limb is suspended on Comcast's facilities between Poles 8 and 10 at 3395 Paloran Court in Cameron Park.

3.3 The tree limb is suspended on Comcast's facilities at 3402 Paloran Court in Cameron Park.

3.4 The Comcast conductor at Elk Grove Blvd. and Grove St. Alley (UD 054267) is strained by a tree limb on the main service span.

**4. GO 95, Rule 84.6B, Vertical and Lateral Conductors, Ground Wires** states:

*“Ground wires, other than lightning protection wires not attached to equipment or ground wires on grounded structures, shall be covered by metal pipe or suitable covering of wood or metal, or of plastic conduit material as specified in Rule 22.8–A , for a distance above ground sufficient to protect against mechanical injury, but in no case shall such distance be less than 7 feet. Such covering may be omitted providing the ground wire in this 7 foot section has a mechanical strength at least equal to the strength of No. 6 AWG medium–hard–drawn copper.*

*Portions of ground wires which are on the surface of wood poles and within 6 feet vertically of unprotected supply conductors supported on the same pole, shall be covered with a suitable protective covering (see Rule 22.8 ).”*

The ground molding along the pole at 7828 Sunrise Blvd. in Citrus Heights is broken and exposed.

**5. GO 95, Rule 38, Minimum Clearances of Wires from Other Wires, Table 2, Case 19C** states in part:

*“The minimum vertical, horizontal or radial clearances of guy wires passing communication conductors supported on the same pole is 3 inches.”*

5.1 AT&T's conductor is in contact with Comcast's down guy at 6108 32<sup>nd</sup> St. in North Highlands.

5.2 Comcast's conductor is in contact with AT&T's down guy at 766 Bonita Dr. in El Dorado Hills.

5.3 Comcast's conductor (loop) is less than 3 inches from the telecommunications conductor from the pole attachments at 1110 Uplands Dr. in El Dorado Hills.

5.4 Comcast's service drop is in contact with a telecommunications service drop at 3381 Paloran Ct. in Cameron Park.

5.5 Comcast's service drop is in contact with Frontier's service drop behind 8996 Elk Grove Blvd. in Elk Grove.

**6. GO 128, Rule 34.3A Self-contained Surface-mounted Equipment, Strength** states:

*"The equipment case or enclosure shall be secured in place and be of sufficient strength to resist entrance or damage to the equipment by unauthorized persons."*

The pedestal at 4121 W Point Lane in North Highlands is not secured to the ground.

**7. GO 95, 87.7 D. Risers (1) Covered from Ground Level to 8 Feet above the Ground** states in part:

*"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"*

7.1 The pole at 213 Ash St. in Roseville does not have a riser guard to cover Comcast's communication conductor from ground level to 8 feet above ground.

7.2 The pole at 1220 Lakehills Ct. in El Dorado Hills does not have a riser guard to cover Comcast's communication conductor from ground level to 8 feet above ground.

7.3 The pole at 3395 Paloran Court in Cameron Park does not have a riser guard to cover Comcast's communication conductor from ground level to 8 feet above ground.

7.4 The pole at 9671 Walnut Ave. in Elk Grove does not have a riser guard to cover Comcast's communication conductor from ground level to 8 feet above ground.



**8. GO 95, Rule 84.6D, Vertical and Lateral Conductors, Vertical Runs** states in part:

*“Runs of bridled conductors, attached to surface of pole, need not be covered provided such runs are below the guard arm and in the same quadrant as the longitudinal cable, or where such runs are below and on the same side of pole with a cable arm and are not in the climbing space, or are connected to service drops which are placed in accordance with the provisions of Rule 84.8-B2b. 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.”*

8.1 The pole at 213 Ash St. in Roseville is missing bridle hooks for Comcast’s vertical run.

8.2 The pole at 1220 Lakehills Ct. in El Dorado Hills is missing bridle hooks for Comcast’s vertical run.

8.3 The pole at 3395 Paloran Court in Cameron Park is missing bridle hooks for Comcast’s vertical run.

**9. GO 95, Rule 18A, Resolution of Potential Violations of General Order 95 and Safety Hazards** states in part:

*“(3) 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 entity of such Safety Hazard(s) no later than ten (10) business days after the discovery.*

*(4) To the extent a company that has a notification requirement under (2) or (3) above cannot determine the facility owner/operator, it shall contact the pole owner(s) within ten (10) business days if the subject of the notification is a Safety Hazard, or otherwise within a reasonable amount of time not to exceed 180 days after discovery. The notified pole owner(s) shall be responsible for promptly (normally not to exceed five business days) notifying the company owning/operating the facility if the subject of the notification is a Safety Hazard, or otherwise within a reasonable amount of time not to exceed 180 days, after being notified of the potential violation of GO95.*

*Note: Each pole owner must be able to determine all other pole owners on poles it owns. Each pole owner must be able to determine all authorized entities that attach equipment on its portion of a pole.”*

9.1 There is a tree stump suspended on the communication facilities span at 766 Bonita Drive in El Dorado Hills.

- 9.2 The AT&T span behind the home at 766 Bonita Drive in El Dorado Hills has a low vertical clearance.
- 9.3 The AT&T facilities on the abandoned pole at 1220 Lakehills Ct. in El Dorado Hills have not been transferred to the new joint pole.
- 9.4 The AT&T riser at 3381 Paloran Ct. in Cameron Park is less than 8 feet from the ground.
- 9.5 The AT&T down guy at 3364 Paloran Ct. in Cameron Park is loose.
- 9.6 A PG&E down guy at 3402 Paloran Ct. in Cameron Park is in contact with AT&T's communication conductor.
- 9.7 An AT&T phone service riser guard is missing at 3440 Paloran Ct. in Cameron Park.
- 9.8 The AT&T facilities on the abandoned pole at 3440 Meder Rd. in Cameron Park have not been transferred to the new joint pole.
- 9.9 The AT&T down guys are missing guy guards at 3440 Meder Rd. in Cameron Park.
- 9.10 The AT&T span at 3053 Cayente Way in Cameron Park has a low vertical clearance of 7 feet, 10 inches over the driveway.
- 9.11 An AT&T phone service riser guard is missing at 8151 Sheldon Rd. in Elk Grove.
- 9.12 An abandoned Frontier communication cable is on the ground at 8995 Grove St. in Elk Grove.
- 9.13 An exposed ground moulding for a communication cable company is at 9666 Walnut Ave. in Elk Grove.
- 9.14 A guy guard for the SMUD down guy is missing at 56 Walnut Ave. in Elk Grove.
- 9.15 The riser straps for SMUD are loose at 56 Walnut Ave. in Elk Grove.
- 9.16 The ground moulding for SMUD needs to be covered throughout the pole at 56 Walnut Ave. in Elk Grove.
- 9.17 The streetlight at 9008 Grove St. in Elk Grove is less than 4 feet from the closest communication facilities and needs a double guard arm.

9.18 Frontier has abandoned communication facilities hanging on the pole at 9020 Grove St. in Elk Grove.

9.19 The communication facilities on the abandoned pole (UD 099693) at the Elk Grove Blvd. and Grove St. alley in Elk Grove have not been transferred to the new joint pole.

9.20 An abandoned Frontier communication cable is on the ground behind 8996 Elk Grove Blvd. in Elk Grove.

9.21 A SMUD service drop to the home at 9634 Gage St. in Elk Grove is in contact with a SMUD down guy.

**10. GO 95, Rule 31.6, Abandoned Lines** 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. For the purposes of this rule, lines that are permanently abandoned shall be defined as those lines that are determined by their owner to have no foreseeable future use.”*

Comcast’s conductor at 3364 Paloran Ct. in Cameron Park is abandoned and is lying on the ground.

**11. GO 95, Rule 86.6B2, Sectionalizing and Grounding Requirements, Guys in Proximity** states:

*“Every overhead or anchor guy, any portion of which is in proximity to a wood pole and supply conductors of 0 - 35,500 volts (see Appendix G, Figures 45 , 48 and 49 ) shall be sectionalized by means of insulators as specified in Rule 86.7–A2 or Rule 86.7–B , and no portion in proximity to such supply conductors shall be grounded. Excepted from this requirement are anchor guys, and grounded overhead guys, which are attached to poles at a level less than 8 feet but not less than 6 feet below the level of supply conductors provided the level of the guy attachment is at or below the level of communication cable messenger attached to the same pole (see Appendix G, Figures 48a and 49f).*

*Also excepted from this requirement are anchor guys, and grounded overhead guys, which are attached to poles at a level less than 6 feet but not less than 4 feet below the level of supply conductors of 0 - 750 volts provided such guys are extensions of or attached to a cable messenger, are in the same vertical plane (or extension thereof) as the messenger, and are below the guard arms required by Rule 87.7–B for such a messenger (see Appendix G, Figure 48a ).”*

Comcast’s down guy at 9008 Grove St. in Elk Grove needs an insulator.

**12. GO 95, Rule 84.7A, Climbing Space and Working Space, Climbing Space** states in part:

*“The climbing space shall be kept free from obstructions excepting those obstructions permitted by Rule 84.7-E.”*

The tree at 9060 Grove St. in Elk Grove is in obstruction of the climbing space at this pole.

**13. 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.”*

13.1 The pole in the alley at Walnut St. and Railroad St. in Elk Grove (Pole #2) is in an area where there is vehicle access and barrier posts are needed.

13.2 The pole in the alley of Walnut St. and Railroad St. in Elk Grove (Pole #2) is missing visibility strips.

**14. GO 95, Rule 38, Minimum Clearances of Wires from Other Wires, Table 2 Case 8C** states in part:

*“Minimum allowable vertical separation between conductors and/or cables, on supports at different levels on the same pole and in adjoining midspans for communication conductors is 12 inches.”*

14.1 The Comcast equipment box is in contact with the lower communication cable span in the alley of Walnut St. and Railroad St. in Elk Grove. (Pole #1, UD 054266)

14.2 A Comcast conductor is in contact with another communication company cable box along the span at 9616 Walnut Ave in Elk Grove.