

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE

SAN FRANCISCO, CA 94102-3298



June 15, 2016

CA2016-004

Ross Johnson
Area Manager, Regulatory
AT&T Mobility
430 Bush Street,
1st Floor, #3
San Francisco, CA 94018

Subject: Audit of AT&T Mobility's Northern California Region

Dear Mr. Johnson:

On behalf of the Electric Safety and Reliability Branch of the California Public Utilities Commission, Jamie Lau of my staff conducted a Communication Infrastructure Provider (CIP) audit of AT&T Mobility's Northern California Region (San Francisco Bay Area) from May 2, 2016 to May 5, 2016. The audit included a review of AT&T Mobility's maintenance records and field inspections of the Northern California region's facilities.

During audit, we 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 July 15, 2016, by electronic or hard copy, of all corrective measures taken by AT&T Mobility to remedy and prevent such violations.

If you have any questions concerning this audit, please contact Jamie Lau at (415) 703-2233 or jamie.lau@cpuc.ca.gov.

Sincerely,

A handwritten signature in blue ink that reads "Fadi Daye".

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

Enclosures: CPUC Audit Findings

Cc: Elizaveta Malashenko, Director, Safety and Enforcement Division, CPUC
Charlotte TerKeurst, Program Manager, Electric Safety and Reliability Branch, CPUC
Jamie Lau, P.E., Utilities Engineer, CPUC

AUDIT FINDINGS

I. Records Review

During the audit, my staff reviewed AT&T Mobility's records for the period between September 1, 2009 and March 30, 2016. The following records were reviewed:

- AT&T Mobility's detailed inspection records for facilities located in Northern California Region.
- AT&T Mobility's outgoing and incoming third-party notifications.
- AT&T Mobility's construction records for antenna installation projects located in Northern California Region (only Mountain View records were provided to my staff).

II. Records Review – Violations List

GO 95, Rule 42, Grades of Construction, states in part:

Supply and communication lines, where involved in crossings, conflicts or on poles jointly used, shall be constructed and maintained so as to conform with grades of construction not less than as specified in [Table 3](#).

AT&T Mobility's used Grade "C" Construction criteria for the following Grade "A" poles to calculate safety factors:

- Pole at 1063 Solana Dive, Mountain View (Project #P3N5A)
- Pole at 2115 University Avenue, Mountain View (Project #P3N14A)
- Pole at 2348 Gabriel Avenue, Mountain View (Project #P3N15A)
- Pole at 1802 Villa Street, Mountain View (Project #P3N21A)
- Pole at 113 Sierra Vista Avenue, Mountain View (Project #P3N22A)
- Pole at 2054 Montecito Avenue, Mountain View (Project #P3N23A)
- Pole at 1681 Hackett Avenue, Mountain View (Project #P3N24A)
- Pole at 1464 San Luis Avenue, Mountain View (Project #P3N25A)
- Pole at 2312 Central Expressway, Mountain View (Project #P3N27A)
- Pole at 1895 San Ramon Avenue, Mountain View (Project #P3N28A)
- Pole at 1245 Terra Bella Avenue, Mountain View (Project #P3N33B)
- Pole at 2040 Jardin Drive, Mountain View (Project #P3N38A)

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

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.

The entity responsible for performing the loading calculation(s) for an installation or reconstruction shall maintain records of these calculations for the service life of the pole or other structure for which the a loading calculation was made and shall provide such information to authorized joint use occupants and the Commission upon request.

- During a joint pole replacement, AT&T Mobility installed an antenna on a newly installed pole at 1895 San Ramon Avenue, Mountain View (project #P3N28A). The newly installed Grade “A” pole had a safety factor of 2.5. GO 95 requires a wood pole with Grade “A” Construction to have at least a safety factor of 4 at the time of installation.
- During the audit, my staff requested AT&T Mobility to provide loading calculations for newly installed poles supporting antennas in the cities of Oakland and San Francisco. AT&T Mobility failed to produce such records indicating that it performed the required pole loading calculation.

GO 95, Rule 44.2, Additional Construction, states:

Any entity planning the addition of facilities that materially increases loads on a structure shall perform a loading calculation to ensure that the addition of the facilities will not reduce the safety factors below the values specified by [Rule 44.3](#). Such loading calculations shall be based on existing condition and proposed configuration, information provided under [Rule 44.4](#), conservative values of relevant parameters, industry recognized values of relevant parameters, or any combination thereof. For wood structures more than 15 years old, the loading calculation shall incorporate the results of intrusive inspections performed within the previous five years. Such entity shall maintain these loading calculations for the service life of the pole or other structure for which a loading calculation was made and shall provide such information to authorized joint use occupants and the Commission upon request.

- AT&T Mobility installed various antennas on the following joint poles without performing loading calculation based on existing condition or proposed configuration, thus, the loading calculation resulted in a higher safety factor on record than the actual value:
 - Pole at 1063 Solana Dive, Mountain View (Project #P3N5A),
 - Pole at 2054 Montecito Avenue, Mountain View (Project #P3N23A), Pole at 1464 San Luis Avenue, Mountain View (Project #P3N25A),
 - Pole at 760 San Clemente Way, Mountain View (Project #P3N29A).
- During the audit, my staff requested AT&T Mobility to provide loading calculations for newly antenna installations on existing joint poles in the cities of Oakland and San Francisco. AT&T

Mobility failed to produce evidence indicating that it performed the required pole loading calculation.

GO 128, Rule 17.2, Inspection, states:

Systems shall be inspected by the operator frequently and thoroughly for the purpose of ensuring [sic] that they are in good condition and in conformance with all applicable requirements of these rules.

AT&T Mobility does not frequently and thoroughly inspect its facilities and address all GO 128 violations, and does not perform inspections that encompass all of its underground facilities. AT&T Mobility inspects only nearby underground facilities when reporting to a troubled location. AT&T Mobility's current inspection program does not meet the requirements of GO 128, Rule 17.2.

III. Field Inspection

The following are the facilities we inspected during the field inspection:

Structure Number	Type of Structure	Approximate Address
PGE Pole# 110332687	Joint Pole	648 Chiquita Ave, Mt. View
N/A (Not Available)	Joint Pole	2098 El Camino Real, Mt. View
N/A	Joint Pole	1063 Solana Dr, Mt. View
N/A	Joint Pole	2348 Gabriel Ave, Mt. View
N/A	Joint Pole	2085 Crisanto Ave, Mt. View
PGE Pole# 110332681	Joint Pole	2054 Montecito Ave, Mt. View
N/A	Joint Pole	1681 Hackett Ave, Mt. View
N/A	Joint Pole	1464 San Luis Ave, Mt. View
N/A	Joint Pole	2312 Central Exp, Mt. View
PGE Pole# 110140025	Joint Pole	7380 Claremont Ave, Oakland
PGE Pole# 110140235	Joint Pole	7541 Claremont Ave, Oakland
PGE Pole# 110487177	Joint Pole	8071 Claremont Ave, Oakland
PGE Pole# 110106993	Joint Pole	5462 Masonic Ave, Oakland
PGE Pole# 110138282	Joint Pole	5651 Moraga Ave, Oakland
N/A	Pad-mounted BTS (Base Transceiver Station)	5651 Moraga Ave, Oakland
PGE Pole# 110107787	Joint Pole	5621 Merriewood Dr, Oakland
PGE Pole# 110395901	Joint Pole	10 El Patio St, Oakland
N/A	Pad-mounted BTS	1658 Lower Grand Ave, Piedmont
PGE Pole# 110310306	Joint Pole	Corner of Lake St and 5 th Ave, SF
PGE Pole# 110369540	Joint Pole	Corner of Broderick St and Jackson St, SF
PGE Pole# 110325242	Joint Pole	2201 Divisadero St, SF
N/A	Joint Pole	2515 Larkin St, SF
N/A	Joint Pole	2310 Leavenworth St, SF
N/A	Joint Pole	2366 Leavenworth St, SF
N/A	Joint Pole	Corner of Taylor St and Union St, SF
PGE Pole# 110033553	Joint Pole	1535 Leavenworth St, SF

IV. Field Inspection – Undocumented Violations List

We observed the following violations during the field inspection. None of the violations were documented and/or addressed by AT&T Mobility during its last inspections:

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.

- The climbing space on Pole #110487177 at 8071 Claremont Avenue, Oakland, was obstructed by a third-party communication cable. AT&T Mobility did not create a third-party safety hazard notification for this condition.
- Pole #110106993 at 5462 Masonic Avenue, Oakland, had a split pole top. AT&T Mobility did not create a third-party safety hazard notification for this condition.
- Pole at 2310 Leavenworth Street, San Francisco, had a split pole top. AT&T Mobility did not create a third-party safety hazard notification for this condition.

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.

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 communication or supply lines and equipment.

AT&T Mobility's construction practice requires a joint pole to have detachable pole step mountings no less than 26 inches above the ground. Pole #110310306 at the corner of Lake Street and 5th Ave, San Francisco, did not have a detachable pole step mounting.

GO 95, Rule 31.6, Abandoned Lines, states in part:

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 #110106993 at 5462 Masonic Avenue, Oakland, had abandoned AT&T Mobility terminal boxes and cables.

GO 95, Rule 84.7-A, Climbing Space, states in part:

Climbing space shall be maintained on one side or quadrant of all poles or structures supporting communications conductors excepting at the level of the one pair of conductors attached to the pole below the lowest crossarm (Rules [84.4-C1c](#), [84.4-D1](#) and [87.4-C3](#)) and the top 3 feet of poles carrying communication conductors only which are attached directly to pole in accordance with the provisions of [Rule 84.4-C1c](#).

The climbing space on Pole #110106993 at 5462 Masonic Avenue, Oakland, was obstructed by AT&T Mobility's abandoned cables.

GO 95, Rule 84.7-F, Protective Covering, states in part:

Protective covering shall be attached to poles, crossarms and structures by means of corrosion-resistant straps, lags or staples which are adequate to maintain such covering in a fixed position.

A riser on a pole located at 2085 Crisanto Avenue, Mountain View was exposed within 8 feet above the ground.

GO 95, Rule 87.7D-1, Risers, 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.*

A riser on a pole at 2085 Crisanto Avenue, Mountain View, had inadequate covering that exposed the cable.

GO 95, Rule 91.3A-1, Use of Steps, states in part:

Poles with Vertical Runs or Risers: All jointly used poles which support supply conductors shall be provided with pole steps if vertical runs or risers are attached to the surface of such poles.....

The following jointly used poles with vertical runs did not have pole steps:

- Pole at 2098 El Camino Real, Mountain View
- Pole #110325242 at 2201 Divisadero Street, San Francisco
- Pole at 2515 Larkin Street, San Francisco
- Pole at 2366 Leavenworth Street, San Francisco
- Pole at corner of Taylor Street and Union Street, San Francisco

GO 95, Rule 94.5A, Marking, states:

No antenna owner or operator shall install an antenna on a joint use pole unless such installation is subject to an agreement with the pole owner(s) that includes marking requirements that are substantially similar to and achieve at least the same safety standards as those set forth in [Appendix H to GO 95](#).

Appendix H requires AT&T Mobility to place warning signs on poles no less than 9 feet above ground. Warning signs on the following poles with antennas were placed less than 9 feet above the ground line:

- Pole at 2085 Cristano Avenue, Mountain View
- Pole #110106993 at 5462 Masonic Avenue, Oakland

GO 128, Rule 17.8, Identification of Manholes, Handholes, Subsurface and Self-contained Surface-mounted Equipment Enclosures, states:

Manholes, handholes , subsurface and self-contained surface-mounted equipment enclosures shall be marked as to ownership to facilitate identification by persons authorized to work therein and by other persons performing work in their vicinity.

A pad-mounted BTS at 5651 Moraga Avenue, Oakland, did not have ownership marking.