STATE OF CALIFORNIA EDMUND G. BROWN JR., *Governor*

PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

September 28, 2015

CA2015-007

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

Subject: Audit of AT&T's South Bay Region

Dear Mr. Johnson:

On behalf of the Electric Safety and Reliability Branch of the California Public Utilities Commission (CPUC), Jamie Lau of my staff conducted a Communication Infrastructure Provider (CIP) audit of AT&T's South Bay region from August 10, 2015 to August 13, 2015. The audit included a review of AT&T's maintenance records and field inspections of the South Bay 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 October 29, 2015, by electronic or hard copy, of all corrective measures taken by AT&T California 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,

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
Alok Kumar, P.E., Senior Utilities Engineer, Supervisor CPUC
Jamie Lau, P.E., Utilities Engineer, CPUC

AUDIT FINDINGS

I. Records Review

During the audit, my staff reviewed the following records:

- AT&T's 2015 detailed inspection records for facilities located in San Mateo County.
- AT&T's 2015 open and completed work orders resulting from third-party notifications and AT&T technicians' field inspections[1] in San Mateo County.
- Construction records and pole loading calculations for two cable installation projects located in San Mateo County, completed in 2014 and 2015.

II. Records Review – Violations List

GO 95, Rule 31.1, Design, Construction and Maintenance, states in part:

> *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.*

My staff sampled 55 work orders for facilities located in San Mateo County with scheduled completion due dates in 2015. Out of the 55 work orders, 27 work orders were open past their completion due date, and 6 work orders were completed past their due date.

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 does not frequently and thoroughly inspect its facilities and address all GO 128 violations, and does not perform inspections that encompass all underground facilities. AT&T only inspected nearby underground facilities when reporting to a troubled location. AT&T's current inspection program does not meet the GO 128, Rule17.2.

GO 95, Rule 44.2, Additional Construction, states in part:

> *...Such loading calculations shall be based on existing condition and proposed configuration, information provided under Rule 44.4, conservative values of relevant*

[1] When reporting to a troubled location, an AT&T technician is required to perform a visual inspection of the troubled location and its nearby facilities, as known as a "T-zone" inspection.

parameters, industry recognized values of relevant parameters, or any combination thereof...

While performing safety factor calculations for a construction project, AT&T misidentified two poles as being "class 2" poles instead of "class 4" poles (class 2 being stronger than class 4). AT&T did not perform safety factor calculations based on existing conditions as required by the above rule; instead, AT&T performed safety factor calculations with incorrect information and yielded safety factors that were greater than they should have been. The two poles with the incorrect safety factor calculations were:

- Pole at 82 E. 39th Ave., San Mateo
- Pole at 94 E. 39th Ave., San Mateo

III. Field Inspection

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

Structure Number	Type of Structure	Approximate Address
PGE Pole# 110055294	Joint Pole	Parking lot of 285 E. Grand Ave., SSF
PGE Pole# 110055295	Joint Pole	Parking lot of 285 E. Grand Ave., SSF
PGE Pole# 110055296	Joint Pole	Parking lot of 285 E. Grand Ave., SSF
PGE Pole# 110055297	Joint Pole	Parking lot of 285 E. Grand Ave., SSF
PGE Pole# 110055298	Joint Pole	Parking lot of 285 E. Grand Ave., SSF
PGE Pole# 110055306	Joint Pole	Parking lot of 285 E. Grand Ave., SSF
PGE Pole# 110055446	Joint Pole	R/O* (Rear of) 444 Allterton Ave., SSF
PGE Pole# 110055445	Joint Pole	R/O 405 Allterton Ave., SSF
PGE Pole# 110055464	Joint Pole	R/O 405 Allterton Ave., SSF
PGE Pole# 110055444	Joint Pole	R/O 405 Allterton Ave., SSF
PGE Pole# 110055443	Joint Pole	R/O 405 Allterton Ave., SSF
PGE Pole# 110014398	Joint Pole	570 Eccles Ave., SSF
PGE Pole# 110014399	Joint Pole	570 Eccles Ave., SSF
PGE Pole# 110014400	Joint Pole	570 Eccles Ave., SSF
PGE Pole# 110014397	Joint Pole	Along Eccles Ave.(between Oyster Pt. Blvd and Rozzi Pl.), SSF
PGE Pole# 110014149	Joint Pole	Along Eccles Ave.(between Oyster Pt. Blvd and Rozzi Pl.), SSF
PGE Pole# 110172795	Joint Pole	Along Eccles Ave.(between Oyster Pt. Blvd and Rozzi Pl.), SSF
PGE Pole# 110014148	Joint Pole	Along Eccles Ave.(between Oyster Pt. Blvd and Rozzi Pl.), SSF
PGE Pole# 110014395	Joint Pole	Along Eccles Ave.(between Oyster Pt. Blvd and Rozzi Pl.), SSF
PGE Pole# 110014394	Joint Pole	Along Eccles Ave.(between Oyster Pt. Blvd and Rozzi Pl.), SSF
PGE Pole# 110014393	Joint Pole	Along Eccles Ave.(between Oyster Pt. Blvd and Rozzi Pl.), SSF
PGE Pole# 110014392	Joint Pole	Along Eccles Ave.(between Oyster Pt. Blvd and Rozzi Pl.), SSF
PGE Pole# 110014391	Joint Pole	Along Eccles Ave.(between Oyster Pt. Blvd and Rozzi Pl.), SSF
PGE Pole# 110014389	Joint Pole	518 Eccles Ave., SSF
N/A (Not Available)	Joint Pole	500 Eccles Ave., SSF
PGE Pole# 110014387	Joint Pole	Corner of Rozzi Pl. and Eccles Ave., SSF
PGE Pole# 110014385	Joint Pole	490 Eccles Ave., SSF
N/A	Joint Pole	472 Eccles Ave., SSF
PGE Pole# 110014146	Joint Pole	472 Eccles Ave., SSF
PGE Pole# 110014142	Joint Pole	451 Eccles Ave., SSF
PGE Pole# 110014141	Joint Pole	439 Eccles Ave., SSF
PGE Pole# 110014145	Joint Pole	R/O 490 Carlton Ct., SSF
N/A	Joint Pole	R/O 459 Carlton Ct., SSF
PGE Pole# 110014144	Joint Pole	R/O 459 Carlton Ct., SSF

Structure Number	Type of Structure	Approximate Address
Box #3601-R454	Surface-Mounted Enclosure	R/O 459 Carlton Ct., SSF
PGE Pole# 110014451	Joint Pole	430 Rozzi Pl., SSF
PGE Pole# 110014452	Joint Pole	434 Rozzi Pl., SSF
PGE Pole# 110055468	Joint Pole	R/O 444 Allterton Ave., SSF
PGE Pole# 110055469	Joint Pole	R/O 444 Allterton Ave., SSF
PGE Pole# 110292925	Joint Pole	R/O 444 Allterton Ave., SSF
PGE Pole# 110055471	Joint Pole	R/O 444 Allterton Ave., SSF
PGE Pole# 110055472	Joint Pole	R/O 444 Allterton Ave., SSF
PGE Pole# 110055473	Joint Pole	R/O 444 Allterton Ave., SSF
PGE Pole# 110055474	Joint Pole	R/O 444 Allterton Ave., SSF
N/A	Joint Pole	2 E39th Ave., San Mateo
N/A	Joint Pole	22 E39th Ave., San Mateo
N/A	Joint Pole	46 E39th Ave., San Mateo
N/A	Joint Pole	54 E39th Ave., San Mateo
N/A	Joint Pole	62 E39th Ave., San Mateo
N/A	Joint Pole	66 E39th Ave., San Mateo
N/A	Joint Pole	82 E39th Ave., San Mateo
N/A	Joint Pole	94 E39th Ave., San Mateo
N/A	Joint Pole	98 E39th Ave., San Mateo
N/A	Joint Pole	Casanova Park, San Mateo
Pole Tag #25	Joint Pole	Corner of Walsh Rd. and Knoll Vista, Atherton
Pole Tag #25-1	Joint Pole	403 Walsh Rd., Atherton
Pole Tag #26	CIP Pole	413 Walsh Rd., Atherton
Pole Tag #27	Joint Pole	425 Walsh Rd., Atherton
PGE Pole# 110508753	Joint Pole	441 Walsh Rd., Atherton
Pole Tag #5353	Joint Pole	450 Walsh Rd., Atherton
N/A	Joint Pole	460 Walsh Rd., Atherton
N/A	Surface-Mounted Enclosure	470 Walsh Rd., Atherton
N/A	Surface-Mounted Enclosure	470 Walsh Rd., Atherton
N/A	Subsurface-Enclosure	470 Walsh Rd., Atherton
PGE Pole# 110068868	Joint Pole	1713 Valley View Ave., Belmont
PGE Pole# 110068867	Joint Pole	1713 Valley View Ave., Belmont
N/A	Joint Pole	1880 Caremlita Dr., San Carlos
N/A	Joint Pole	1865 Caremlita Dr., San Carlos
N/A	Joint Pole	Corner of Carmelita Dr. and Cordillers Ave., San Carlos
N/A	Surface-Mounted Enclosure	1208 Hull St., San Carlos
N/A	Joint Pole	1211 Hull St., San Carlos
N/A	Subsurface-Enclosure	1106 Royal Ln., San Carlos
N/A	Joint Pole	519 Madera Dr., San Mateo
N/A	Surface-Mounted Enclosure	350 Broadview Ct., San Mateo

IV. Field Inspection – Violations List

We observed the following violations during the field inspection. None of the violations were documented and/or addressed by AT&T during its last inspections, dated between May 2012 and August 2015:

GO 95, Rule 37, Table 1, Column B, Case 6a, requires the minimum vertical clearance of communications cables above a non-walkable surface on buildings or other structures which do not support the cable, whether attached or unattached, to be 8 feet.

- An AT&T cable had 1 feet of vertical clearance crossing over a structural wall. The wall was part of an open-top storage structure from a commercial building. The cable was attached to pole #110055297 at 285 East Grand Ave., South San Francisco.

GO 95, Rule 37, Table 1, Column B, Case 3, requires the minimum ground clearance of communication conductors crossing thoroughfares in a rural district to be 18 feet.

- The vertical clearance of an AT&T cable above a residential driveway in Atherton, which is a private thoroughfare in a rural district (Pole #110508753 at 441 Walsh Rd., Atherton) was 13 feet and 7 inches.

GO 95, Rule 38, Table 2, Column C, Case 1, requires the minimum separation between a communications cable and a guy wire to be 24 inches. The following poles supported an AT&T cable that was in contact with a guy wire:

- Pole #110055296 at a parking lot at 285 East Grand Avenue, South San Francisco.
- Pole #110055445 at R/O 405 Allerton Avenue, South San Francisco.

GO 95, Rule 38, Table 2, Column C, Case 17, requires the minimum separation between communications conductors of the same circuit attached on the same pole to be 3 inches. The following poles supported AT&T cables that were in contact with each other:

- Pole #110014145 at R/O 490 Carlton Court, South San Francisco.
- Pole #110055469 at R/O 444 Allerton Avenue, South San Francisco.

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....*

The following poles had abandoned AT&T cables:

- Pole #110055306 at a parking lot at 285 East Grand Avenue, South San Francisco.
- Pole #110055446 at R/O 444 Allterton Avenue, South San Francisco.

GO 95, Rule 84.7A, 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 following poles had abandoned AT&T cables wrapped around the pole and impeding the climbing space:

- Pole #110055306 at a parking lot at 285 East Grand Avenue, South San Francisco.
- Pole #110055446 at R/O 444 Allterton Avenue, South San Francisco.

GO 95, Rule 86.2, Guys, 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 .*

Guy wires supported on the following poles were not taut:

- Pole #110055446 at R/O 444 Allterton Avenue, South San Francisco.
- Pole #110014145 at R/O 490 Carlton Court, South San Francisco.

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.*

- An AT&T cable had a broken lashing wire (pole #110055446 at R/O 444 Allerton Avenue, South San Francisco).

- An abandoned AT&T riser conduit was not properly concealed, which may cause water intrusion to its connected facilities (pole #110014394 on Eccles Avenue, South San Francisco).

- An AT&T anchor and part of its down guy wire were covered by concrete, therefore preventing visual inspection of the anchor and down guy wire (pole #110014145 at R/O 490 Carlton Ct., South San Francisco).

GO 95, Rule 87.7D-1, Risers, states:

> *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 AT&T risers on the following poles had either broken riser covers or inadequate covering that exposed the risers.

- Pole #110055445 at R/O 405 Allerton Avenue, South San Francisco
- Pole #110014141 at 439 Eccles Avenue, South San Francisco
- Pole #110014146 at 472 Eccles Avenue, South San Francisco
- Pole #25 at 425 Walsh Road, Atherton
- Pole #5353 at 450 Walsh Road, Atherton
- Pole at 460 Walsh Rd., Atherton
- Pole at 1211 Hull St., San Carlos

GO 95, Rule 86.4D-2, From Span Wires or Other Guys, states in part:

Passing and Attached to Same Pole: Where a guy of a communication system and a guy of a supply system pass each other and are attached to the same pole, a separation of not less than 3 inches shall be maintained between such guys.....

The AT&T guy wires attached to the following poles were in contact with a guy wire of a different company:

- Pole #110055444 at R/O 405 Allerton Ave., South San Francisco
- Pole #110014142 at 451 Eccles Ave., South San Francisco

GO 95, Rule 84.4D-4, From Poles and Crossarms, states:

> *Conductors Passing Supply Poles and Unattached Thereto: The center line clearance between poles supporting supply conductors and any communication conductors which pass such poles unattached shall be not less than 22 1/2 inches (1 1/2 times the clearance specified in Table 1, Case 8), except where the supply pole is within 10 feet of the pole on which the communication conductors are supported. Where poles of the two lines are less than 10 feet apart, clearances not less than as specified in Table 1, Case 8, shall be maintained.*

The following poles supported AT&T cables that passed and contacted supply poles to which they were unattached (i.e. AT&T should complete the pole transfer):

- Pole #110014399 at 570 Eccles Avenue, South San Francisco
- Pole #110292925 at R/O 444 Allerton Avenue, South San Francisco

GO 128, Rule 34.3C, Self–contained Surface–mounted Equipment, states in part:

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

GO 128, Rule 17.1, Design, Construction, and Maintenance, states in part:

> *Electrical supply and communication systems shall be designed, constructed, and maintained for their intended use...*

An AT&T pad-mounted "B-box" was not securely closed. Furthermore, the door detached from the padmount upon opening. (Box #3601-R454 at R/O 459 Carlton Ct., South San Francisco).