

BEFORE THE STATE CORPORATION COMMISSION
OF THE STATE OF KANSAS

DEC 10 2012


by
State Corporation Commission
of Kansas

In the Matter of the Complaint Against AT&T)
by Gary Ferguson.) Docket No. 12-SWBT-746-COM

NOTICE OF STATUS UPDATE FILING

Staff hereby files a Status Update, attached hereto and made a part hereof by reference. The Status Update provides an update in regard to the Formal Complaint filed on April 13, 2012, by Gary Ferguson against Southwestern Bell Telephone Company d/b/a AT&T Kansas ("AT&T") regarding noise disruption on his telephone line since July 2008. AT&T and Westar continue to collaborate to resolve the issue for Mr. Ferguson. Staff will provide another update on this matter by January 14, 2012. No Commission action is required at this time.

Respectfully submitted,



Michael Neeley #25027
Attorney for Staff
Kansas Corporation Commission
1500 SW Arrowhead Rd.
Topeka, KS 66604-4027
(785) 271-3173

STATE OF KANSAS)
) ss.
COUNTY OF SHAWNEE)

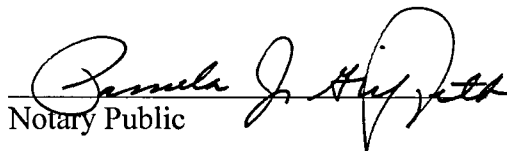
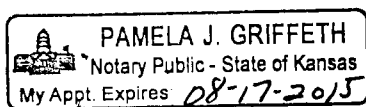
VERIFICATION

Michael Neeley, being duly sworn upon his oath deposes and states that he is Litigation Counsel for the State Corporation Commission of the State of Kansas, that he has read and is familiar with the foregoing *Notice of Status Update Filing*, and that the statements contained therein are true and correct to the best of his knowledge, information and belief.



Michael Neeley # 25027
Kansas Corporation Commission of the
State of Kansas

Subscribed and sworn to before me this 10th day of December, 2012.



Notary Public

My Appointment Expires: August 17, 2015

1500 SW Arrowhead Road
Topeka, KS 66604-4027



Phone: 785-271-3100
Fax: 785-271-3354
<http://kcc.ks.gov/>

Mark Sievers, Chairman
Thomas E. Wright, Commissioner

Sam Brownback, Governor

STATE CORPORATION
COMMISSION

**STATUS REPORT
UTILITIES DIVISION**

DEC 05 2012

PATRICE PETERSEN-KLEIN
EXECUTIVE DIRECTOR

TO: Chairman Mark Sievers
Commissioner Thomas E. Wright
Commissioner Shari Feist Albrecht

FROM: Kelly Mabon

DATE: November 28, 2012

DATE SUBMITTED TO EXECUTIVE DIRECTOR: 12/5/12

DATE SUBMITTED TO LEGAL: 12.10.12

DATE SUBMITTED TO COMMISSIONERS: 12-10-12

SUBJECT: Docket No. 12-SWBT-746-COM
Complaint Against Southwestern Bell Telephone Company d/b/a AT&T Kansas
by Gary Ferguson

STATUS UPDATE

The purpose of this Status Report is to provide an update in regard to the Formal Complaint filed on April 13, 2012, by Gary Ferguson of 27953 West 95th Street, Desoto, Kansas, against Southwestern Bell Telephone Company d/b/a AT&T Kansas (AT&T) regarding noise disruption that had been ongoing on his telephone line since July 2008. No Commission action is required at this time.

BACKGROUND:

On May 14, 2012, AT&T filed a Response to the Formal Complaint. In the response, AT&T stated the following:

- For the past several years, following the customer's complaint directly to AT&T, the respondent has undertaken to resolve alleged static or a "hum" on Complainant's access line to his home at 27935 West 95th St., DeSoto, Kansas.

- In the past 18 months alone, AT&T has incurred 112 man hours of work and approximately \$2,300 in contractor and other construction costs to resolve the "hum" on Complainant's line. AT&T has examined the cable shielding and every splice point along the cable route serving Complainant. AT&T has also replaced approximately 1,200 feet of cable and drop serving the Complainant that was previously damaged by road construction work.
- AT&T placed an ISOBAR in the Complainant's home to try and eliminate any issues possibly caused by the home's AC wiring. An ISOBAR is a power supply or power strip designed to isolate anything plugged into it from imbalances or defective shielding in the AC wiring of a house or business. The ISOBAR resulted in a reduction of audible noise, but marginal noise levels were still detectable on the actual cable and cable pair. Because the "noise" persisted, Multi Neutral Ground (MNG) bonds were placed in an effort to counteract current induced on the cable by the power grid in the area serving the Complainant.
- AT&T suspects the root cause of the problem is related to slot harmonics caused by the power grid in the area, together with the fact that Complainant uses cordless telephones, which can be adversely affected by high power influences. At this time, AT&T is presently working with Westar, the electric utility for Complainant's location, to study the power in the area and determine whether the grid is causing a high power influence on the Complainant's phones and AT&T's plant serving the Complainant.
- As a result of its investigation and work, AT&T does not believe the issues complained of are being caused solely by its network plant. AT&T is actively working with Westar to study and investigate any potential power issues associated with Complainant's location that may be affecting Complainant's cordless phones and AT&T's network.

Staff sent DR #1 to AT&T to further understand what steps have been taken and why the hum is still detected on the customer's line. AT&T's response to DR#1, which was provided on July 2, 2012, included issues related to Westar's power grid.

Staff has been receiving periodic updates from Westar regarding steps being taken to isolate the cause of the noise on the phone lines.

On September 27, 2012, Staff received the following update regarding items discussed between Westar and AT&T:

1. The Company will be putting the lines in the area back to normal feeds (circuit configuration). Westar will be scheduling this circuit re-configuration and will have a rep from AT&T on-site to measure changes in phone noise levels.
2. The Company needs to determine a better understanding of the harmonics in this area. This is a complex area wide system model that needs to be created to analyze the harmonic current transfer throughout the system (not just a local thing).
3. The Company spoke with the customer's wife and she hasn't noticed the phone line noise (possibly since the circuits have been temporarily configured).

After contacting the customer on October 5, 2012, Staff was told that although the noise level has been reduced, there is still a hum detected on the telephone line.

UPDATE:

Staff received the following update from AT&T on October 22, 2012:

AT&T continues working with Westar on the noise issue. Westar's Power Quality Engineer has been running tests and gathering data to determine the cause and a solution for the high Power Influence in the area. Westar is analyzing data from a power monitor that was placed at the Fergusons' residence for about a month and also has taken numerous readings on the power line feeding the area. Westar appears to have a pretty good idea on the cause of the problem and is looking for a solution at this time.

Staff received the following update on this complaint from Westar staff on November 6, 2012:

Mrs. Ferguson called Westar on Oct 29 in response to a call made to her on Oct 23. The Fergusons were on vacation when Westar was there on Oct 23. Mrs. Ferguson noted that the noise had started up again recently (before Oct 23). Westar staff could hear the noise on the line while talking to her.

Mrs. Ferguson stated that the noise initially started after a dig-in & repair of the phone line west of their residence (3-4 years ago).

Additional information was received from AT&T on November 21, 2012:

November 13 and 14, a Customer Services Technician and an Advanced Technical Support Manager from AT&T worked in the area of the Ferguson residence, checking the status of the AT&T cable shielding. They added bonds to the cable shield and performed some other temporary solutions and saw improvement in the current flow along Corliss Road. These changes, however, made no difference in the Power Influence level at the Ferguson residence. A recommendation was made by the AT&T team to replace the cable in a couple of areas due to open shielding and to check the bond at the Ferguson's house to make sure we are bonded to the power company neutral ground.

November 15, the AT&T Advanced Technical Support Manager met with a Westar Power Quality Engineer in the area of the Ferguson residence. They were able to drive out almost all of the power distribution fed from the substation serving the area while monitoring the harmonics with a mitigator test set. They found high power influence at 540Hz and 180Hz, frequencies that are affecting the phone service, along a large part of the route. Westar indicated they believe the problem to be the large power feed to the Cedar Creek housing addition at the

end of the route that parallels 95th Street. The Westar engineer will propose adding a Delta Capacitor Bank at the end of 95th Street to filter the harmonics/frequencies returning to the substation from the Cedar Creek addition as well as a Delta Capacitor Bank near the substation on 95th Street to filter the harmonics/frequencies that may be getting into the Power Feed from the substation.

Cable shielding protects telecom cable from power influence/circuit noise and AT&T believes that once the recommended cable replacements are complete and we check the bond at the Ferguson's house, we have accomplished all that we can to mitigate the noise the customer is hearing. With these changes, we know our cable shielding is good all the way from the remote terminal at 83rd Street to the customer's serving terminal on 95th Street and that the network interface at the Ferguson's house is also good. When we contacted the Fergusons to set up a premise visit to check their network interface, we learned they would not be available until Monday, November 26.

It is AT&T's belief that it will take both the completion of our cable replacements in a couple of areas as stated above and the changes that Westar plans to make in order to correct this customer's noise issue. AT&T technicians will be available to work with Westar when they make their changes and/or for further testing, if needed.

Additional information was received from Westar on November 27, 2012:

Westar staff discussed the possibility of a delta-connected capacitor on our system. After setting up this configuration in a computer model, it was found that this type of mitigation would not work here. Mitigation will (probably) require a harmonic filter tuned to the 9th harmonic. This is a non-traditional device for Westar & needs more study.

(note: Westar currently has only one harmonic filter on the 12kV; designed & installed by us & sold to Spartech in Wichita, has been in service for about 20 years.)

AT&T noted that they will be changing out cable in the customer's area with full shielded cable & confirm required grounding/bonding at the customer's premise. We couldn't do this on Nov 15 since the power & phone cables run into the customer's basement (no outside bonding point).

AT&T further reported that the AT&T engineer will design and issue the project by December 5, 2012. The work should be completed by January 1, 2013. The only possible hold-up noted by AT&T could be obtaining a permit from KDOT to close down K-10 for placement.

The complaint continues to involve both Westar and AT&T engineers and technicians who continue to collaborate to solve this problem for the customer. Staff will continue to monitor the activity and provide an update by January 14, 2012, to the Commission.

cc: Patrice Petersen-Klein, Executive Director
Jeff McClanahan, Utilities Director
Christine Aarnes, Chief of Telecommunications

CERTIFICATE OF SERVICE

12-SWBT-746-COM

I, the undersigned, hereby certify that a true and correct copy of the above and foregoing Notice of Status Update Filing was placed in the United States mail, postage prepaid, or hand-delivered this 10th day of December, 2012, to the following:

GARY FERGUSON
27935 WEST 95TH ST
DE SOTO, KS 66018
gary.ferguson@urs.com

MICHAEL NEELEY, LITIGATION COUNSEL
KANSAS CORPORATION COMMISSION
1500 SW ARROWHEAD ROAD
TOPEKA, KS 66604-4027
Fax: 785-271-3167
m.neeley@kcc.ks.gov
Hand Delivered

BRUCE A. NEY, GENERAL ATTORNEY
SOUTHWESTERN BELL TELEPHONE CO.
D/B/A AT&T KANSAS
220 SE 6TH AVE RM 515
TOPEKA, KS 66603-3596
Fax: 785-276-1948
bruce.ney@att.com



Pamela Griffeth
Administrative Specialist