

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

July 11, 2014

Mr. Jon Crusey, City Manager
Tipp City Municipal Building
260 South Garber Drive
Tipp City, OH 45371

RE: EB- FIELDNER-13-00009203

Dear Mr. Crusey:

The Federal Communications Commission has previously notified you by letters dated June 10, 2013 and September 30, 2013 that it had received complaints of harmful radio interference possibly caused by equipment operated by your company. This interference has been reported by an operator in the Amateur Radio Service. The complainant is:

(Name withheld)
(Address withheld)
Tipp City, OH 45371
Tel: (Number withheld)

In response to these letters, Tipp City sent this office a letter detailing some of the repairs and actions taken by the utility to address Mr. (name withheld)'s complaint. The letter further notes that Tipp City hired an outside contractor to investigate the allegation of interference and made multiple repairs as a result of the consultant's findings. Finally, the letter concludes the City does not believe that "Tipp City Electric is the source of his current interference" but notes that it will contact the ARRL and seek their guidance on the issue.

As a result of that contact, the ARRL sent out a representative who was able to briefly investigate Mr. (name withheld)'s interference complaint on the morning of May 17, 2014. Using signature analysis, the ARRL confirms that the reported interference is consistent with power line noise. They were further able to investigate two general locations within walking distance of Mr. (name withheld)'s residence. Although unable to complete the investigation due to inclement weather, the ARRL investigators conclusively located one source on southwest edge of Woodlawn Park between Woodlawn Drive and Heath Wood Drive. During windy conditions, some pine trees are brushing against power lines on south side of the area where they "tee" off and run north along west edge of the Park. Trimming these trees would also seem to be a relatively simple and straightforward fix.

It should be emphasized that the ARRL investigators were unable to locate additional sources due to rain. Power line noise is often intermittent and weather related. It frequently goes away during rain and high humidity. In the case of the ARRL's investigation, the onset of rain caused the sources to go away while attempting to locate them. It is possible, therefore, for other sources to have started since this investigation. Additional sources may also become apparent once a primary source is repaired. **The ARRL's investigation is not intended as a complete**

and sole summary of noise sources that are presently affecting Mr. (name withheld)'s station. Once a repair of the known source is made, a more complete and technically competent RFI investigation will be required.

With regard to Tipp City's response dated November 12, 2013, the ARRL has provided this office with some comments, which you may find helpful in your continued investigation of Mr. (name withheld)'s issue of interference:

- 1) Statement: "He will typically identify specific poles and general areas where he feels the problem resonates from and we will send crews to tighten hardware in that area."

ARRL Guidance: Using specialized Radio Direction Finding (RDF) equipment, the specific pole with the noise source can quickly be identified. It is also generally not advisable to tighten all hardware in a general area in order to correct a power line noise source. Using an ultrasonic pinpointter or a hot stick sniffer, it is possible to quickly identify the bad hardware on a pole. Then, make the repairs to that source, and only that source, in order to correct the interference.

- 2) Statement: "We have multiple work orders dating back to June 2007 that document significant staff time tightening hardware and ground connections on multiple poles for the sole purpose of attempting to address Mr. (name withheld)'s concerns over the course of the years. We also have work orders noting replaced insulators and triplex and work efforts in areas over ½ miles from Mr. (name withheld)'s home specifically to attempt to address Mr. (name withheld)'s concerns."

ARRL Guidance: The FCC rules do not require that all noise sources be corrected, only those sources contributing to Mr. (name withheld)'s noise complaint. Furthermore, using state of the art locating techniques such as noise signature analysis, only those few sources can be identified and corrected. Unless a source has been determined to be contributing to a problem, correcting it will not help to alleviate the interference.

The Commission appreciates the considerable effort that Tipp City has expended in this matter. However, we are concerned about the lack of results. In most cases, a noise source can be located easily by trained personnel using the proper equipment. As previously noted, noise signature techniques in a well-conducted RFI investigation can also determine an offending noise source from the multitude of sources typically encountered during an interference investigation. This technique, for example, can reduce or eliminate confusion with regard to sources that are not power line related.

Please be advised that the noise being reported in this case is strong enough to disrupt neighborhood broadcast radio and television services in addition to the amateur service. Moreover given that the noise has been ongoing for a considerable period of time, the Commission directs Tipp City to revisit this case and update both the Commission and the complainant within 45 days of receiving this letter as to what progress is being made in locating and resolving this interference.

If you have any questions about this matter, please contact me in writing at 1270 Fairfield Road, Gettysburg, Pennsylvania 17325 or via telephone at 717-338-2577. Technical help is also

available by calling Michael Gruber at the ARRL. His number is (860) 594-0392.

Sincerely,

Laura L. Smith, Esq.
Special Counsel
Enforcement Bureau

cc: Detroit Field Office
Regional Director