September 11, 2003

Ms. Jody Noble, Esquire Duquesne Light Company Law Department 411 Seventh Avenue Pittsburgh, PA 15219

## **RE: Radio frequency interference**

Dear Ms. Noble:

This is in response to your March 21, 2003 letter to Mr. G. Robert Thacker concerning a case of radio interference that has been reported to the Commission. As you may recall, the Federal Communications Commission notified Mr. Victor Rogue, President of Duquesne Light by letter on December 17, 2002 that it received a complaint of harmful radio interference possibly caused by equipment operated by Duquesne Light. For your reference, the complainant reporting this interference is:

Mr. G. Robert Thacker, K3GT 4818 Toftrees Drive Allison Park, PA 15101

Based on your letter to Mr. Thacker, and a report from Michael Gruber at the ARRL concerning a discussion that you had with him on March 19, 2003, I understand that an interference technician determined the source of the noise to be signs at a nearby strip mall. More specifically, a Subway sandwich shop was determined to be the primary source. Your letter also states "no noise interference was caused by the DLC system."

After that DLC investigation, Mr. Thacker reported the noise continued after the signs in the strip mall were turned off, thereby suggesting the conclusion reached in the Duquesne RFI investigation may be incorrect. Furthermore, in order to assist in this matter, the ARRL conducted an independent assessment and partial investigation into the interference being reported by Mr. Thacker.

This independent assessment confirmed the presence of strong radio interference. The conclusions and findings of this investigation are as follows:

- 1) The source of this interference is not in Mr. Thacker's home.
- 2) The source is not the strip mall signage as concluded by the Duquesne Light interference investigator.
- 3) The following three poles were emitting high levels of noise at the time of the investigation:

- a) DLCO 267125
- b) DLCO 341630
- c) DLCO 331783

The noise from pole DLCO 331783 was reported to be particularly strong. That pole had a broken wood sheath at the base and a ground wire hanging loose. The ground connection was completely missing on the pole. Each of these three poles is in the same direction of the noise as received at Mr. Thacker's residence.

The equipment used in the ARRL investigation was insufficient to determine with certainty that this is the problem. It did, however, localize a source creating interference to communication in the area and uncovered apparent damaged or defective hardware. These findings suggest the Duquesne Light investigation apparently overlooked at least one obvious potential cause of the interference at Mr. Thacker's residence.

While we can certainly appreciate the considerable effort that Duquesne Light afforded in this matter, 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. Noise signature techniques in a well-conducted RFI investigation can also determine an offending noise source from the multitude of sources typically encountered during the investigation. This technique, for example, can reduce or eliminate confusion with regard to such sources as strip mall signs.

Please be advised 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, the noise has been ongoing for a considerable period of time, the source determined by the Duquesne interference investigator is obviously in error, and least one possible offending noise source on the DLC system remains unaddressed. We request that you revisit this case and update the Commission within 45 days of receiving this letter as to what progress is being made in locating and resolving this interference.

Thank you for your consideration in this matter. If you have any questions, please contact me at (717) 338-2502. Technical help is also available by calling Michael Gruber at the ARRL. His number is (860) 594-0392.

CC: Mr. Victor Rogue, President Duquesne Light Company 411 Seventh Avenue Pittsburgh, PA 15219 FCC Northeast Regional Director