

From: "K4LOG" <k4log@comcast.net>
Subject:
Date: Tuesday, August 12, 2003 8:00 PM

I must join with many others in protesting the proposed power increases of the broadband over power line technology.. BPL / PLC. For the power companies to even file such a request is ridiculous at best, since this will have a severe effect on HF broadcasting of military, civilian, amateur and other Licensed services. For the sake of profit by large corporations.

A recurring theme in the lives of amateur radio operators, particularly those of us active on HF, is the problem of power line interference. The ARRL has documented hundreds of cases of RFI from cracked insulators, badly maintained equipment, and household devices that introduce conducted RFI into the power system. Frequently these interference sources are extremely hard to find, requiring extensive measurement, direction finding and testing to identify and locate. Unfortunately many power companies have less than stellar records of responding to amateur complaints of interference, sometimes requiring FCC intervention before they will take the complaints seriously. Introduction of BPL / PLC is likely to make this problem even worse.

These systems share a common problem, the unsuitability of the power transmission infrastructure to data transmission. The PLC literature is particularly full of studies of the unpredictable and varying characteristics of home power wiring. Force the power companies to comply with existing regulations, prohibit them from this power increase and protect the interests of the citizens of this country.

Many other services including government services would be adversely affected. It has also been shown that BPL has been disrupted by these services as well in other countries. I would also like to point out that BPL has been rejected in Japan and in Finland, precisely because the interference to radio communications was unacceptable. Also, amateur radio operators in Austria have documented serious interference problems with the BPL pilot program in that country.

Amateur operators are already familiar with the negative reactions that occur when poorly made or faulty consumer electronics interfere with, or worse still receive interference from their licensed operations. Many a ham has incurred the wrath of their neighbors as a result. How will a neighbor react if I have to tell them that their brand-new PLC broadband service must be discontinued because it interferes with my station? How will they deal with not being able to surf the web when I'm operating, because their PLC modem cannot handle the field strengths generated by my transmitter? I doubt very much that they will take any comfort from a reading of the relevant sections of Parts 15 and 97. If BPL / PLC is as widely deployed as the power companies claim it will be, hundreds of thousands of amateurs will face this issue.

An alternative communications infrastructure would be most desirable, but given that power lines share exactly the same physical infrastructure, (unreliable) PLC is certainly not an alternative in this instance. In fact, during weather or other natural emergencies power often fails when telephone and cable TV (and data) services are still available. Will we be able to offer emergency communication when needed if we have to deal with this interference

problem? Or should we hope that only in power failure, the interference from BPL / PLC would go away?

I strongly favor tightening the Part 15 rules to reduce the acceptable emissions limits for PLC systems, recognizing that the rules were written to apply to a radically different set of RF sources. If that is not possible, then maintaining the existing Part 15 rules as they stand will at least allow licensed spectrum users some recourse in resolving harmful interference. Testing of PLC equipment, particularly In-House systems, should be done in the most realistic conditions possible. Use of estimating techniques should not be a substitute for actual field strength measurements.

As a licensed amateur radio operator, I fully expect and plan on using my equipment to assist whenever there is an emergency requiring communications. Amateurs have assisted in many emergencies over the years, some of them requiring the long distance capability of HF. After all, if HF is all but unusable, there will eventually be fewer and fewer hams with the capability to assist in a wide area emergency. The technology of filtering and shielding is not in place to protect persons not desiring BPL from receiving harmful interference, both in their home and while in motor vehicles or operating personal electronic devices outdoors (including AM and FM broadcast receivers). Once again, I am opposed to the implementation of BPL in the United States.

Sincerely,

Richard L. Woodford Jr
Licensed Amateur K4LOG
205 Magnolia Road
Venice, Florida 34293

□