

July 5, 2003

From: Al Gulseth  
Amateur Radio Station WB5JNC  
Assistant Emergency Coordinator, Crawford County Arkansas ARES/RACES  
FCC Lifetime General Class Radiotelephone License

To: Federal Communications Commission  
Re: Comments on Broadband over Power Line proposal

As an amateur radio operator heavily involved in emergency preparedness communications I am very concerned about the proposed Broadband over Power Line service. I realize that in theory this service might appear to be viable; however, my experience with interference from part 15 devices has been that what looks good on paper frequently does not work as well in practice. (In addition to being a ham operator, I also was employed for a number of years as an operating and maintenance engineer in the broadcast industry and have seen how many times things don't work as expected. I think the sage advice of Murphy ["If something can go wrong, it will"] should be heeded in the case of BPL.) Furthermore, it is my understanding that Japan and other countries have considered and then dropped the idea of BPL. This should also tell us something.

I have two main concerns with BPL. The first is that even if the proposed BPL devices met appropriate technical standards when they were new, they might no longer meet those standards later on due to component aging or failure. This could result in unwanted emissions and cause interference to other services – not only amateur but also the many other communication and broadcasting services within the proposed frequency range.

My second concern is based on my own experiences with Part 15 devices (mainly computer equipment). In an environment where the dollar is king, compliance with technical standards in consumer equipment frequently becomes a secondary concern for manufacturers or is not even considered at all. As an example, I am currently working with a neighbor concerning interference which is apparently coming from their college age son's "white box" clone computer system. Their residence is approximately 150 feet behind mine, and we are on the same power distribution transformer. From what I have been able to track down so far, when his system is operating it produces bands of interference 6 to 10 KHz wide at approximately 138 KHz intervals across the AM broadcast band and extending up into the lower HF ham bands. This interference is apparently coming into my residence over the power line. How far would this interference travel if it were on a BPL enabled power distribution system? Fortunately, the neighbor has been very cooperative in tracking down the problem, but I shudder at the thought of what could have happened had I needed to use the amateur frequencies in question for emergency services.

The bottom line is that at least in this area local officials rely heavily on amateur radio emergency service groups for communications related to emergency situations (especially the frequent severe weather we receive). It has also been made clear to us that we would very likely be called upon in the event of a homeland security issue in this area. Are the emergency services communications needs of the local community worth jeopardizing simply to implement a system that essentially duplicates services which are already there?

Cordially,

Al Gulseth WB5JNC