

I have seen much material concerning near-field interference potential to licensed services from Access BPL, but to date have not seen any test results concerning the potential for interference caused by sky wave or ionospheric propagation of BPL signals. I have great concerns over this potential.

As a licensed amateur radio operator, I have successfully completed communications over distances ranging hundreds to thousands of miles, using signals in the hundreds of milliwatts range. This kind of weak signal operation, using Morse code sent by toggling a continuous wave carrier, is familiar to thousands of hams world wide. Even during times of poor ionospheric propagation, such communications are not only possible, but routine. Any increase in the noise floor of the shortwave bands will definitely reduce this capability.

As part of the NPRM, I noticed that BPL suppliers will be required to list themselves in a registry, to facilitate resolution of interference complaints. However, BPL signals that are propagated by sky wave may cause interference to licensed weak signal operations hundreds to thousands of miles from the actual source of the interference. It will be difficult to isolate the source of the interference under such conditions, to make interference complaints.

We are currently approaching the minimum of the 19 year solar cycle. At this point, the effects of sky wave propagation of BPL signals will be less than they will be at the next cycle peak, in about five years. This means that tests conducted at this time will underestimate the effects of sky wave propagation of BPL interference. I would like to suggest two steps that might be taken to mitigate the potential for sky wave propagation of BPL interference:

- 1) Organized tests be performed now to determine the actual potential for sky wave propagated interference. Possibly, volunteers for participation in reception tests at specific published times and dates could be organized among amateur radio operators and shortwave listeners in the US and worldwide.
- 2) Possibly, and I admit that I do not know the technical feasibility of such an approach, requiring BPL operators to include some kind of identifying electronic "signature" on their signals, so that in the case of sky wave propagated interference, the source could be identified from the interfering signal itself.

Low power operation is an important part of the capabilities that the amateur radio service can offer in times of emergency. Low power means more portability and longer operating time in the absence of mains power. I believe it is worth the effort necessary to protect this capability.