

Dear FCC,

Regarding the Notice of Inquiry in ET Docket 03-104, I am extremely opposed to the implementation of BPL "Broadband over Power Line" technology. This alone would cause severe damage to the existing amateur radio service, especially in the HF-VHF regions of the spectrum, not to mention to several existing commercial services. I being a licensed extra class amateur radio operator callsign W2CO, as well as a commercially licensed GROL# PG-GB-029372 with ship radar endorsement, am strongly against this proposal.

Here are some of my arguments:

- *Amateur Radio is a valuable resource that must be protected, especially in the HF bands. Other services like Police VHF, Fire VHF, Marine HF/VHF, aeronautical HF/VHF not to mention military MARS and many other services the list of users is endless, are also in danger of harmful interference directly from this proposed technology.
- *BPL systems that radiate on wide swaths of spectrum and that occupy entire neighborhoods have far greater interference potential to existing services than localized systems, such as switching power supplies, electric motors, spread spectrum telephones, etc. Just the 2.4Ghz spread spectrum phones and wireless cameras that are in use today cause havoc with some satellite frequencies already in use, and these are well above the HF spectrum. What about RFID devices in the UHF bands? Now you want to destroy the HF spectrum with BPL?
- *With proposed BPL, the HF spectrum will be rendered useless, and the harmonics thereof would reach up into the VHF, UHF, and even microwave spectrum assuming the proposed higher power levels and the unpredictable lossy power grid system today. The HF spectrum has the very special quality of having ionospheric skip zone capabilities, and this region of spectrum (3-30Mhz) is the only region that exhibits this rare quality. Just this fact would promote possible uncontrolled interference to other countries to which the ITU has imposed strict rules governing interference standards. We would essentially be bringing back the "Russian Woodpecker" to these countries via skip zone. With the increased power levels and the thousands of miles of wire in the nation's power system, there would be unacceptable levels of interference in far away countries due to random addition of the radiated wideband signals. Especially during sun spot high times. We are currently in the downswing of the 11 year cycle, and maybe it is by the power company's design that deployment should be now (in the low) times of ionospheric propagation.
- *The FCC has promised to protect licensed users of this spectrum. They must execute this responsibility.
- *If you have had any experience with the power companies, you will know that they cannot handle even the most simple problems with noise, if at all respond. If they start to provide BPL technology, they will be way over their heads as far as being able to cope with the interference complaints. And will probably not even respond, not to mention the interference hams and other services will introduce into this system. The companies said that an HF station transmitting only 1-10W EIRP anywhere from 1-30MHZ would cause harmful interference to this system. It's a vicious two way street here. HF-VHF bands would be ruined as far as hams using them, and the harmonics of the BPL system would reach all the way up into the GHZ

ranges because of the increased power levels they propose. Power lines were not designed to carry HF-VHF frequencies, they were designed to carry 60hz AC! And they can hardly do that very well with all the lossy insulators etc etc. Imagine the noise levels this lossy system of wires all over the country would cause. Lets face it, Broadband Over Power Lines is a very bad idea for ham radio and many other services as we know them. Japan has already BANNED any use of this system, even with low power levels. They have tested it along with some european countries now, and all have had very bad results for ham radio's HF-VHF bands! This same result would of course be noticed by many other users of the HF/VHF spectrum. Why should we let HF radio be ruined just because some money hungry companies say it's great for business?

I hereby propose that BPL technology be barred from operating freely on any power lines. Any harmful interference caused by licensed services to said service should be allowed, and any harmful interference to licensed services caused by part 15 devices be barred, as per part 15 of the FCC rules. Part 15 should have no changes except for tightening of the emmission levels allowed for part 15 devices today. But since BPL will not really be a "point source" emmission, but a wide area radiator, perhaps new rules should be written to inform future engineers of this technology that it just will not co-exist with other spectrum users as long as they use open wires.

Regards,
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