

Comments on why BPL should not be implemented:

Several things about the BPL proposal do not seem to align well with present FCC rules. BPL will only serve to aggravate communications problems that are already at a record high.

1. It is curious as to why Part 15 rules have very stringent limitations on power levels and antenna size, while BPL is would basically allow "unlimited power" (no limit to the number of repeaters) and essentially undefined, and hence unlimited, antenna size. Beyond any shadow of a doubt, there will be cases where the majority of the energy "transmitted" on a BPL system will be radiated. In fact, that is the main reason that repeaters are required.

2. BPL seems to be targeted for rural users. However, those are the same people who have learned, through experience, that their power lines tend to exhibit large transients and other unpleasant characteristics. That is why smart rural users on long power lines implement transient protectors, and EMI/RFI filters locally. Such devices are at odds with BPL signals, and will severely attenuate such signals. It is not possible to have "clean power" that also allows BPL signals to propagate past the filtering.

3. Many VHF and UHF communications users are complaining about interference and noise. In particular, police organizations have been complaining about interference causing inability to maintain reliable communication with officers in the field. High frequency harmonics of BPL will aggravate the problem. No matter how well filtered the original BPL signals, galvanic effects, rectifiers, bad connections, etc. will generate harmonics. It is not theory, it's been tested.

4. BPL is an interesting concept, but it is a very bad idea from virtually all practical perspectives. It is at odds with all forms of power line filtering and surge protection devices. It is at odds with every notion of minimizing interference to existing forms of HF and VHF communication. It is at odds with all existing FCC rules intended to minimize interference from "conducted emissions" with desired radiated emissions (RFI). The proposal seems to contradict the normal FCC logic.

Based on many considerations, it is my hope that BPL will be viewed as an a potential problem to HF, VHF, and UHF communication. It is not the best answer, and is associated with numerous potential problem that will result in complaints from police and other emergency organizations all over the USA. If lives are lost due to BPL, the resulting mail will not be pleasant, and the media will, no doubt, show great interest.

Regards,
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