

JUL 1 9 2003

1024 Green Lane  
La Canada, CA 91011

3 July, 2003

Gentlemen,

The following is my response to the Federal Communications Commission ET Docket 03-104 entitled *Inquiry Regarding Carrier Current Systems, including Broadband over Power Line Systems*.

First, let me state that I am responding from three different perspectives: 1. First, as an amateur radio operator who enjoys making contacts with far distant stations whose signals often arrive at my station at or near the noise level. 2. Second, as a radio amateur who volunteers to assist with emergency communications in times when normal communications are either saturated or non-existent, again with received signal levels which can be close to threshold. 3. Third, as a communications support person enabling emergency communications of traffic between NASA Centers in times when normal communications are either saturated or non-existent. NASA has many frequencies allocated for such traffic between the 80 meter and 10 meter amateur radio frequency allocations. The same comments previously stated about signals possibly being close to threshold levels apply here also.

My inputs are primarily associated with Sections 18, 19, and 20 of the subject NOI. In summary, my concerns with going forward with the BPL idea in the United States is that there will be so much hash generated by unintentional radiation from the power grid that the noise floor will be raised to the level that the three types of communication stated in the previous paragraph will be severely compromised or made for the most part impossible. Increasing power levels such as desired by the Utilities would of course make matters even worse.

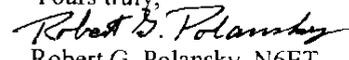
I have over the years been plagued by power line noise problems as well as interference communicated to my home via the power lines. I have found the power utility providers to be slow in addressing these problems, even when there has been ample proof that the problems were associated with their hardware. The addition of bypass devices permitting the broadband signals to bypass transformers as well as filters to keep the broadband signals from encroaching on other services sharing the same frequencies will make the power grid incredibly more difficult to maintain. It is questionable in my mind that the Utilities can get enough qualified people on their staffs to maintain the BPL hardware in a state where the current RF bandwidth users will not be severely interfered with.

From the perspective of a user of the NASA frequencies, filters would have to protect all the specific frequencies allocated to NASA in the range from 80 meters through 10 meters. It is safe to state that other organizations probably have specific frequencies in that range that they would also expect to be protected. The bottom line, is that the entire set of frequencies between those two limits would probably have to be filtered out, making BLP virtually impossible.

I can only hope that my inputs are helpful in guiding the FCC to "do the right thing" with regard to BPL. Before it is deployed, significant testing involving participation by other users of the spectrum must be mandated, must occur, and the Utilities who need to maintain the BPL system must show their ability and willingness to rapidly address the interference problems which I'm certain will occur.

Summarizing my thoughts, perhaps there is a future for BPL; however, extensive testing must be performed prior to its being deployed. Further, the Utilities need to demonstrate their ability to maintain the more complex power grid and quickly respond to the inevitable problems that BPL will cause. Let's go very slowly in deploying BPL, since it will be difficult if not impossible to "undeploy" once the inevitable interference problems occur.

Yours truly,

  
Robert G. Polansky, N6ET  
Trustee for W6VIO & KHA920

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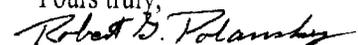
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