

To the Commissioners of the FCC:

I respectfully request that the Commission withhold its approval for access and/or in-building BPL systems at this time (ref. Docket ET 03-104). I am concerned with this matter because I am a lifelong amateur radio operator (W8RU) and an electrical engineer with work experience in the electrical power industry.

In its comments filed with the Commission, the American Radio Relay League (ARRL) presents well-researched arguments against BPL approval. I strongly concur with these comments.

It is easy to see why the power industry and the Commission are so interested in BPL technology. Nearly every home in America is connected to the electrical power grid. BPL could allow more widespread delivery of internet and other services at what could be a reasonable cost. This means more competition in the broadband industry, more access for consumers, and increased profits for the power companies.

We cannot, however, ignore the fact that overhead power lines are a completely unshielded transmission medium (as opposed to CATV or fiber optics). The lines will act as antennas at frequencies between 2 and 70 MHz. This means that BPL signals on the power lines will be radiated and -- despite being low-power signals -- will interfere with licensed users of the same spectrum. Also, signals from licensed users will be picked up and carried by the same lines, "causing" interference to BPL services. Because of MF and HF propagation phenomena, some of the signals may even come from other parts of the world.

The ARRL has sent its RFI experts to communities where BPL is being tested. The results are sobering and incontrovertible. BPL causes broadband interference across its spectrum and over widespread geographic areas. I see no plans for reducing this interference or even how it will be dealt with in the field.

I feel that the BPL proposal is analogous to strip mining. Strip mining is an extremely cost effective way to extract desired minerals from the ground. Unfortunately, strip mining devastates the environment, both immediately surrounding and well-removed from the mining activity. So it will be with BPL. BPL may in fact be a cost-effective way to provide widespread high-speed internet and communications services. However, the environmental price that licensed users of the spectrum will have to pay is a 30-60 dB increase in wideband noise and the inevitability of ongoing interference.

It is true that the Commission's objectives are to enable technologies that bring new services to consumers, to stimulate economic activity, to improve national productivity, and to advance economic opportunity for the American public. I feel that it is also true the Commission has the responsibility to shepherd the finite electromagnetic spectrum in such a manner as to preserve its utility for all licensed users. Economics cannot be the overriding consideration.

I believe that Commission approval of ET 03-104 at this time would be counter to existing FCC rules concerning non-interference and would be contrary to the best interest of the public.

Thank you for your consideration and best regards,

Ronald M. Majewski