

Federal Communications Commission  
To Whom It May Concern:

In addition to holding Amateur Extra License AG4RQ, I have a background in electronics and radio communications. I received a diploma in Electronics Technology from an accredited technical school in 1982. Although I let the license lapse, I held an FCC Second Class Radiotelephone Operator License with Radar Endorsement (No. P2-7-15540). In addition, I worked as a radio technician in the early eighties for the Florida Department of Transportation. FL DOT used 6m Business Band for their radio communications. I know very well about the properties of HF and low-band VHF radio signals, and their ability to bounce off the ionosphere and propagate hundreds to thousands of miles.

I am very concerned about the deployment of BPL. Widespread deployment of BPL will not only interfere locally with radio in the 1.8 MHz through 80 MHz spectrum, but will propagate all over the world. The American power grid will serve as a very efficient "long wire" antenna to propagate broadband interference throughout the world. If that isn't bad enough, harmonics from BPL have the potential to cause interference to high-band VHF and UHF as well. In its comments to NOI No. 03-104, Cingular Wireless expressed concern that harmonics from BPL could possibly affect cellular service on 800 MHz. If so, that would be the 10th harmonic of 80 MHz. Considering the spectrum that BPL wishes to use along with harmonics, we're talking about potential interference to all services between the top of the AM Broadcast Band all the way up to the 800 MHz or maybe higher. BPL has the potential to interfere with police, fire, medical, air traffic control, business band, telemetry, sensitive medical and life-support equipment, and much else.

At present, BPL is being tested in limited areas on the downside of a relatively weak solar cycle. Once BPL is widely deployed, and once the next solar cycle peaks, we will see BPL interference that no study in a limited setting during a solar minimum could possibly reveal. American BPL may be causing harmful interference to countries on the other side of the world. Radio waves, like the air in our atmosphere know no national boundaries.

Regarding BPL's potential to render the HF and low-band VHF Amateur spectrum useless, it would be a smack in the face to our American freedoms if Amateurs in the United States had no use of the HF and low-band VHF spectrum due to interference from BPL, whereas Amateurs in oppressed countries and dictatorships continued to have unabated use of this spectrum. It would also be a smack in the face to our American freedoms if we here in the United States were unable to receive worldwide shortwave broadcasts, while those in oppressed countries and dictatorships still had access to receive such broadcasts.

BPL is not only a harmful technology that could cause interference to a broad swath of radio spectrum, it is also an obsolete technology. The future in broadband Internet access is not in access from electrical outlets. The future in broadband Internet access is in wireless 802.11 and fiber optics. These technologies don't cause the harmful interference that BPL causes, and they are also more efficient and useful. With wireless broadband access (802.11), one can have a broadband connection with a laptop outdoors in a park, at the beach, on board a bus, a train or a boat, whereas BPL limits you to an electrical outlet. I refer to BPL as the Great White Elephant of the 21st Century. It will go the way of the 8-Track and the Beta Video Cassette, once wireless broadband and fiber optic broadband take hold.

The Commission issued this NPRM as a basis for laying the groundwork and establishing rules and regulations for the deployment for BPL. BPL shouldn't be deployed unless its providers can guarantee that it will not interfere with licensed services. The most important thing the Commission needs to do in regulating BPL is to continue enforcing Part 15 regulations and not relax Part 15 regulations in any way. Part 15 devices must accept interference from licensed services and must not interfere with licensed services. If they cause interference to licensed services, they must cease operation until they can resolve the interference problem. Equally important is to follow NTIA's recommendations regarding protection of essential governmental and military frequencies from interference, and extend these recommendations to all the licensed services including Public Service and Amateur Radio. BPL providers need to understand that they must cease operation if they cause interference, and not start up operation until and unless the interference problem is eliminated.

Respectfully Submitted,

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