

Dear FCC;

I have severe concerns over the possible use of Broadband over Power Lines as has been proposed by the Federal Communications Commission. Both my career in Broadcast Television and my Amateur radio hobby has exposed me to numerous reasons that indicate that the concept of BPL is technically unworkable in ways that have yet to be discovered. These are my stories.

I was first licensed as a Radio Amateur in 1964 at the age of 15. I have held the Amateur call signs WN2OEU, WB2OEU, and currently K2TR. My amateur license is Extra class and I hold a General Radiotelephone license. I have been employed in the broadcast business for 33 years and am currently the Director of Engineering for WRGB. I have built transmitters for amateur bands from 160 meters through 2 meters. Early on I spent more time operating and experimenting on the VHF bands. I tried operation on the 6 meter band, but at the time my location in a TV market with a channel 2 assignment caused significant interference. It taught me that consumer equipment is often incapable of doing the job for which it is designed. I had the right to operate on 50 MHz, but consideration for my neighbors kept my operating times to late night hours. In those days many hams went to the effort of filtering their neighbors TV sets in order to utilize their hobby. It wasn't their legal responsibility, but it was a moral one. The current proceeding proposes to allow BPL systems to operate within our ham bands. Most investigation of the technology has been the interference from BPL to Amateur Radio. I have been unable to learn much about the interference from legal Amateur radio operation into BPL systems. Such interference could occur into the home modem, or in the pole mounted node modem. Should such interference occur, how is an amateur expected to filter his neighbors power line node? It cannot be done safely while the power is on. I don't believe that Amateurs should be expected to prove that interference will occur, rather BPL proponents must prove that hams will not interfere with BPL. In the event that interference from legal Amateur operations into BPL does occur, the Licensed Amateur should not be held accountable. My current Amateur operations include the ability to operate at full legal power levels on several Amateur bands simultaneously. While some adaptive filtering techniques may be suitable for elimination of a single frequency, the nature of the proposed modulation techniques may preclude the filtering of multiple simultaneous transmitters. The essence of this problem is that while BPL may be possible in many environments, it will fail in others, likely causing unnecessary disputes between neighbors. This possibility indicates that BPL operators should be required to warn their customers that interference from amateur radio operation cannot be prevented.

I'd like to tell you that the power industry currently causes significant interference to over the air television reception as well as to amateur operation. My own amateur station is located in a rural location in order to minimize the problem of line noise. I have located noisy power lines for many hams and even more TV viewers. Once the technical problem is identified, then the real problem begins. There is no good mechanism within the industry to solve these problems.

I can tell you about a TV viewer in Stephentown, NY who could not see channel 6 because of line noise. She called her power company, New York State Gas and Electric. NYSEG went to her house and told her that the problem could not be solved by them because the noise started in another line owned by Niagara Mohawk and was coupled into their line to her house. It should not be the homeowners responsibility to chase down the problem to a second company party, but that's the position that she was put in.

I have received numerous phone calls from Adelphia Cable and their customers in Glens Falls, NY because there is noise on the cable reception of channel 6. Adelphia has begged Niagara Mohawk to fix the problem. Yes, they have responded and attempted repairs, but the problem persists. I visited the site myself and counted 12 distinct sources of line noise within ½ mile of the headend using nothing more than my car radio tuned to the low end of the AM band. How is BPL supposed to work properly in that environment?

The cable system in Catskill, NY was once able to receive Television signals from New York City using off air antennas. After a High Voltage line was built nearby, line noise caused the TV signals to become unusable. Numerous complaints up to and including the New York State Public Service Commission were ineffective in even getting the line shut down for a simple test. A cooperative power industry would have

made sure that the test was done. This is the same sector that proposes BPL. Where is the trust that is necessary to allow for cooperation among frequency sharing?

My affinity for Amateur operation on 50 MHz still continues. Twice a year I operate that band from the top of Mount Greylock in Western Massachusetts. I often hear line noise at a strength of S5 or more while the antenna is aimed at Pittsfield, MA, 8 miles away, with the nearest power line in that direction at 6 miles distant. Is this the same industry that desires to cause even more interference with the use of BPL?

When I have a problem with my telephone, I call my phone company, there is a person on the end of the line. When my cable wire falls down, again I get a two-way conversation. When my power goes out, sorry, no person there, just a recording....."there's a problem in Altamont". BPL interference cannot be dealt with using an auto-attendant.

I feel that the FCC and investors were being misled into the viability of BPL in the real world. I suspect that BPL tests have intentionally avoided active amateur radio areas. IF BPL interference issues can be solved, BPL would have wanted to be co-located with multiple Amateur Radio stations.

I understand that some BPL proponents have proposed filters to avoid ham radio frequencies. I often listen to non-ham frequencies such as WWV on 2.5, 5, 10, 15, and 20 Mhz. I follow the Buffalo Bills Football Team whenever I can. When my own employer, WRGB, the Albany CBS affiliate, chooses to air the Jets instead, I use a beverage antenna to pick up WIBX, 950 kHz, in Utica NY, to hear the play by play. The retired announcer, Van Miller, was better than any TV announcer. I've even listened to the radio while watching the same game on TV. The AM band daytime signal is not strong and would likely be buried under BPL interference. I have searched for a FM station on the Bills network that I could receive from my hilltop location, but none is possible. Am I expected to pay for Sunday Ticket on DirecTV to allow for unproven BPL technology?

I wish that I understood the FCC's reasoning when they proposed the expanded use of BPL beyond part 15 limits. The Communication act of 1934 that created the FCC was enacted to eliminate conflicts among users of the spectrum. In my opinion, the Commission is acting outside of its original charter by proposing the expanded use of BPL.

Sincerely,

Frederick E. Lass