

Comment on docket No. 04-37

Having read the notice of proposed rule making, I am concerned about several described in the proposal.

In paragraph (1), I agree that “Access BPL could play an important role in ... bringing Internet and high-speed broadband access to rural and underserved areas.” I live in one of those areas and while my home is less than 1 mile from a town with digital cable my location is apparently not economically suitable for the cable company to provide services in this area. Based on the economies involved with Access BPL, I doubt that I will see any development in my location any time soon. Unfortunately, I am also an amateur radio operator and I suspect the local utility in this same community will likely want to provide these services. Based on the information I am getting from the trials that are currently ongoing I suspect I too will experience interference from these services. Perhaps other technologies, such as microwave based broadband will finally reach my area and I can participate in this high-speed access. Perhaps too, this is where the FCC should focus its attention and incentives, rather than the problem prone Access BPL.

Thankfully you also mentioned in paragraph (1) that “we must protect licensed radio services from any harmful interference that might occur.” To this I am grateful and I certainly hope the contracts that are written for Access BPL customers are written in a way that they understand that I, as an amateur radio operator, have primary or secondary rights to the spectrum where they may be causing interference. I don't want these same customers getting upset with me when I am forced to file a complaint with the FCC and their high-speed access fails to work. What physical protection will you offer me and my family?

In paragraph (35) I take exception to the statement, “We therefore would expect that, in practice, many amateurs already orient their antennas to minimize the reception of emissions from nearby electric power lines.” I live on a couple of acres of land, more than many of my city dwelling colleagues. I do not presently own a directional antenna. My HF antenna is a well mounted vertical on the best location I could find on my lot. This antenna is omni-directional. If I had a directional antenna I would point it wherever needed to make the contact. We as amateurs do not just talk to folks in one direction away from us but rather to people all over the world, and this means we need antennas that may point in any direction.

Again I congratulate the FCC on its stance as stated in paragraph (39) that, “operation must cease if harmful interference to licensed services is caused.” You continue with what I fear may be faulty logic, however. Your logic suggests that “Given there is significant investment in the deployment of the service, we agree with several commenters that Access BPL providers would have a strong incentive to exercise the utmost caution in installing their systems to avoid harmful interference and ensure uninterrupted service to their customers.” I suspect that real life may provide the real answer to this logic problem. The real answer is I believe coming from Progress Energy Corp (PEC) in the Raleigh, North Carolina trial. The reports I have suggest that PEC no

longer believes it is contributing harmful interference and I quote from the ARRL source, "It is PEC's position and interpretation of the FCC's rules with regard to 'harmful interference' that any interference that may still exist is not 'harmful' as that term is defined by the FCC's rules," Len Anthony, PEC's attorney for regulatory affairs, told James Burtle, chief of the FCC's Experimental License Branch. "This level of interference does not seriously degrade ham radio operation or transmissions or cause repeated interruptions." The source goes on to state that "ARRL North Carolina Public Information Officer Gary Pearce, KN4AQ, suggested this week that PEC has a bit more work to do. He is among local amateurs closely monitoring BPL deployment in the test zones and cooperating with PEC and Amperion to work out any interference issues. Pearce says interference remains on the top end of 20 meters in an overhead-line field trial neighborhood where PEC recently had tweaked its system, but it has not been mitigated at all in neighborhoods with underground power lines. When he visited the neighborhood in the wake of Anthony's e-mail, Pearce said he at least expected to find that PEC had eliminated the 20-meter interference. 'Nothing had changed,' he told ARRL. 'They were still covering up the top end of the 20-meter band.' Interference to 17 and 12 meters had been notched out, but beyond that, BPL interference persisted from 14.290 to nearly 17 MHz, he said, and 'fringe' carriers still encroached some 100 kHz into the bottom of 15 meters. 'The signals on the underground lines have not changed at all,' Pearce continued. 'They were still full-strength across virtually every ham band if you look across the whole neighborhood.' The definition of harmful interference I have from the FCC is any interference that "seriously degrades, obstructs or repeatedly interrupts a radio communication service operating in accordance with the *Radio Regulations*." By that definition and the description above I think that PEC is still causing harmful interference in Raleigh. Thus it seems the answer to the logic problem is that it is in the best interest of the investors and Access BPL providers to redefine harmful interference in order to claim the system is clean.

I further appreciate the thoughts proposed about the benefits of requiring "Access BPL systems and devices incorporate capabilities that would allow the operator to modify system performance to mitigate or avoid harmful interference to radio services," in paragraph (40). Again, however, Progress Energy Corp in the Raleigh trial seems not able to mitigate all the interference, thus requiring the use of their definition of harmful interference.

In paragraph (42) you would require a "shut-down feature" for eliminating harmful interference. This may be a very good feature to incorporate. I submit that you may want to implement rules that would require all Access BPL systems in a declared emergency area to be shut down for the duration of the emergency. This procedure would allow communications to take place at least during emergencies when at other times these licensed frequencies are unusable due to the interference the providers claim are not harmful. This emergency communication would include mobile communication which by Progress Energy Corp's (PEC) description must not matter. PEC has stated "the only impact of any kind upon ham operations is upon mobile operators." PEC concluded that since BPL interference to mobiles would be "very short lived," the company is not causing harmful interference and is in "full compliance" with FCC Part 15 rules. It is

these mobile communications that provide essential information in times of emergencies. Mobile operators provide information about the location of tornadoes, flooding, ice storms, other weather events, forest fires and traffic accidents just to name a few. According to PEC this information is inconsequential. Tell this to the Access BPL customer the next time he does not get that tornado alert in time to get into a shelter. If mobile operations can not reliably occur then tests of these very same systems can not occur and our level of national security declines.

Finally, in paragraph (43) you provide for a “publicly accessible database.” This database must be user friendly and always relevant to those who need to use the database. It must be continuously updated as to the status of systems and power line locations. The penalty for non-compliance with the system must be high, because there is a lot of money on the provider end and very little power on the end of those hearing interference.

Thank you for allowing me to comment on this matter of grave importance.

Respectfully submitted:
Michael Emerson Bowman
(KC8VYD)
2716 Mount Zion Road
Jackson, Ohio 45640