

BPL technologies have many potential advantages. They could bring high-speed internet access to many people who do not now have it. And they may bring the price down for those who already use other technologies like DSL and cable (I have been using DSL since 1999).

But by BPL's nature - radio frequency signals carried on open wires that generally act as antennas high in the air - they may also cause significant interference to users of the high frequency and very high frequency radio spectrum, including Amateur Radio operators. This could be an unprecedented type of interference, making large portions of the radio spectrum unusable over wide geographic areas.

Conversly, an Amateur Radio operator's transmitters may cause interference to their neighborhood BPL Internet users, even when those transmitters are completely legal and transmitting a "clean" signal. This would cause serious discord between Amateur Radio operators and their neighbors.

So far, no one knows for sure if interference this serious would occur with the proposed systems, although tests run in other countries have shown that it can with the BPL systems tested there. Engineers familiar with the technology have concerns.

I urge the Commission to thoroughly test the potential for interference before considering changing the rules to permit expanded BPL operation, and carefully consider the results.

The Commission may be under political and corporate pressure to permit expanded BPL, despite interference problems that may create. After all, may people could benefit, while it seems that a relative few would be inconvenienced.

But consider that Amateur Radio is much more than a small collection of hobbists. Amateurs are an important part of the nation's emergency communications system. Here in North Carolina, hurricanes, ice storms and tornados disrupt the communications infrastructure with alarming regularity. Amateur Radio operators step in to fill the gap for Emergency Management, the Red Cross, Salvation Army and other agencies whenever the need occurs.

With this in mind, compromised Amateur Radio frequencies create a two-fold problem. First, the emergency communication itself might be disrupted by interference. Second, if a significant number of Amateur Radio operators find that they can not enjoy routine communications from their homes due to interference from BPL systems, they will have no incentive to maintain their radio equipment in a state of readiness. Amateur Radio works in providing emergency communications because Amateurs are constantly using their equipment, testing it, improving it and learning about it as a regular part of the "hobby" of Amateur Radio, in addition to participating in drills and tests directly related to emergency communications. When the emergency need arises, Amateurs are trained and ready. But with no routine Amateur Radio, there is also no "emergency" Amateur Radio.

That is certainly the case for me, personally. I have HF and VHF equipment at home and in my car, and I regularly participate in routine communications, emergency tests, and actual emergency response. But if one day my receiver was filled with noise, blocking the reception of most signals, and there was no hope

of rectifying the situation and eliminating the interference, I don't think I'd have much enthusiasm for what little might be left.

Radio frequency "pollution" already exists and is sometimes a serious problem. Computers and other electronic devices radiate signals across the spectrum, and cause spot problems for hundreds of feet. If one of them is near a receiver and blocking a frequency that receiver is attempting to hear, it's a problem. Poorly maintained power lines already create broad-spectrum noise in many areas. As an Amateur Radio Operator, with sensitive receivers in my car, I encounter this kind of noise daily. There are areas where I must stop communicating until I move blocks away from the source of interference. At home, there are spot frequencies that I must avoid because devices, typically computers (mine and my neighbors), are generating signals there.

If BPL does cause significant interference, as many engineers expect, it will be difficult to explain to the public, hungry for cheaper, easier broadband access, that this technology must be restricted. But if it destroys the high frequency radio spectrum, the price of this convenience is too high. The FCC is charged with protecting the spectrum for all users, and has promised to do that for current HF/VHF occupants, including Amateur Radio. Please make sure that this technology conforms to that promise.