

I am concerned that the potential for interference to licensed radio services has not been fully addressed and will not be addressed if the FCC allows implementation of BPL systems. I do not believe it is wise to modify the Part 15 rules and do not feel that the issue of how interference complaints will be handled has been addressed.

I have read information from both sides of the BPL discussion. The BPL supporters seem to feel that interference to existing, licensed services will be negligible and the BPL should be pushed forward. The ARRL and other organizations are making their case that BPL will considerably pollute the HF spectrum.

Since I am not in an area with BPL trials and can't haul a spectrum analyzer outside to see the results for myself, I have to rely on the information coming from these parties to make my own determination of whether BPL is a good thing.

There are several things that lead me to believe that BPL will result in significant interference to licensed services in the HF spectrum:

- The ARRL's material includes information indicating that equipment manufacturers using the *HomePlug* specification have made modifications to their Part 15 devices by adding notch filters to protect the spectrum allocated to amateur radio. I do not believe the manufacturers would have gone to this expense unless there was a demonstrated potential for interference to amateur operations.
- I have seen information indicating that amateur radio operators in Europe have documented interference problems.
- I recently moved from a neighborhood that bordered an Interstate highway. There was a high-voltage transmission line that ran along the edge of the neighborhood parallel to the highway. Driving along or underneath this transmission line caused localized interference to the AM radio band to the point that I was unable to listen to a 50KW medium-wave transmitter located less than 100 miles away.
- There is a fair amount of evidence that the existing power infrastructure can and does cause interference to licensed services. In some cases, these problems can be resolved with the utility directly. In other cases, they have required intervention by the FCC. A brief search led me to information on the following incidents:
  - Cumberland Electric Membership Cooperative had a long-standing (over two years) problem that caused interference to the amateur and satellite bands
  - El Paso Electric Company had lines in Las Cruces, NM, that were rebuilt to resolve interference complaints
  - Duke Power Company had a long-standing ("several years") problem that was only fixed after a letter from the ARRL that had been copied to the FCC
  - Pacific Gas & Electric had several long-standing complaints that were resolved only after a letter from the FCC reminding them of their responsibility to correct the problem or cease operation of the equipment causing harmful interference
  - Cinergy Corp. in Cincinnati had a problem that resulted in spurious emissions of WLW-AM's signals over a wide area and frequency range

Based on this information, I feel that it is a reasonable assumption that BPL implementation will result in harmful interference to licensed radio services. The existing infrastructure has its share of problems and the addition of a broadband signal to the power grid will only increase the likelihood of such events occurring, be they intentional or otherwise.

Once the interference starts occurring, the issues involved will make resolving these complaints much more complicated. Part 15 rules require that "the operator of a radio frequency device shall be required to cease operating the device upon notification by a Commission representative that the device is causing harmful interference." (47 CFR 15.5 c) According to the rules, a BPL system causing interference must be shut down until the interference is resolved.

For many people, broadband is evolving into something they consider a necessity. I expect that most BPL customers would become very upset if they called their BPL provider and received an explanation like this: "We had to shut down your connection because there is an interference problem with other radio services. FCC rules require that we shut the system down until the problem is corrected."

Regardless of where the blame lies, the customer is going to expect their BPL service to be restored and most likely won't care who is bothered by it. This same customer reasonably expects their broadcast TV, satellite, or cable service to be protected from harmful interference. Users of other services should be afforded the same protection. The existing BPL proposals do not provide an assurance that users of other services will receive that protection.

The "last mile" issues for broadband service are significant. There are many areas where cable, DSL, and other services are not an option. I have lived in some of those areas and recognize the frustration that many people feel at their limited options.

Although BPL provides an option for service in those areas, I believe it is ill-advised in light of the potential interference problems. There are proven options that provide the same benefits without the potential problems.

Even though BPL could be approved to operate under Part 15 rules, I do not believe that it is in the Commission's or the public's best interest to approve wide-scale deployment. The potential for interference has not been adequately addressed and the issues that would arise as a result of potential interference are not being considered.

A handwritten signature in black ink, appearing to read "Steven C. Gallafent". The signature is fluid and cursive, with a long horizontal stroke at the end.

Steven C. Gallafent