

I believe there are several shortcomings in this proposed rulemaking, particularly with regard to tracking specific interference sources and remedying interference when it does occur.

First, some background comments.

With the release April 27 of the NTIA Phase 1 study, ARRL's preliminary interference data have now been corroborated. BPL does indeed cause harmful interference to licensed users of the radio spectrum. This is now well documented by studies from multiple sources. No longer does the FCC have to rely solely on anecdotal evidence. In addition, the power-line industry can no longer rely simply on assertions. There are published data that need to be countered if we are to accept their contention that their systems do not interfere with radio communications. The FCC needs to take the NTIA study seriously before they act on this rulemaking. You are about to let the genie out of the bottle, never to be put back.

In paragraph 35 of the February 23, 2004 NPRM, the FCC states "In considering this interference potential, we note that ARRL acknowledges that noise from power lines, absent any Access BPL signals, already presents a significant problem for amateur communications. We therefore would expect that, in practice, many amateurs already orient their antennas to minimize the reception of emissions from nearby electric power lines." This would appear to stand Part 15 on its head. First, existing power lines create a serious problem for amateur communications simply because the same utilities who want to implement BPL systems cannot be trusted or relied upon to comply with the law. Power companies do not deal with interference complaints unless forced to by the FCC. Second, the licensed service, in this case amateur radio, does not bear the burden under Part 15 to "reorient its antennas" in the event that an unlicensed scofflaw industry causes illegal harmful interference. It is the years of experience with power company unwillingness to deal with interference that colors my comments below, and probably the comments of many other licensed spectrum users.

Particularly troublesome in light of NTIA's data was Progress Energy's ex parte e-mail communication to the FCC seeking to unilaterally interpret and define what constitutes harmful interference. Any radiation from a BPL installation that disrupts licensed radio communications is harmful interference. Harmful interference is an unambiguous concept, not subject to interpretation or, worse yet, redefinition in private outside the scope of this proceeding.

With that background, I offer some specific comments on the provisions of this NPRM.

Paragraph 40 requires BPL operators to incorporate adaptive interference-mitigation measures into their systems. However, the NPRM does not define how mitigation measures are to be triggered. If a BPL system is interfering with a licensed user of the spectrum, how does that licensed user seek a remedy? Does the utility get to wait 2 or 3 years until the FCC issues a Warning Notice, then get to spend months contesting the notice? What triggers interference mitigation? This needs to be defined, and the steps and timeline need to be satisfactory to the services being interfered with, not the other way around.

Paragraph 42 requires BPL systems to have a shutdown feature. What will trigger its use? The regulations need to specify the conditions under which this feature is to be activated, and need to specify a timeline between reports of interference and shutdown of offending systems.

Paragraph 43 spells out a "notification requirement", suggests that a database of BPL installations be run by industry rather than the FCC, and seeks comments on whether a central database or individual (presumably location-specific or company-specific) databases would be more useful. First, industry notifying industry is not a "notification requirement" at all. If there is no requirement to submit data to the FCC, there is no requirement. Second, the database needs to be central so that data can be used to study national or regional impacts. Third, the database needs to be publicly accessible. Under the provisions of the NPRM, there is no requirement for access by the public. Licensed users need to be able to quickly and expediently identify interference sources in their geographic areas.

Paragraph 46 solicits comments on the height of antennas used to measure BPL emissions. I agree with NTIA that this should be done as close as possible to the height of the device being measured.

In conclusion, this NPRM discusses interference and interference potential at great length, yet does not provide any "teeth" to deal with interference when it occurs. Furthermore, without a publicly accessible database, spectrum users will not even know that it is a BPL installation that is causing the interference. While that arrangement might allow BPL operators to continue to assert that their systems do not cause interference because they get no complaints, that is simply a game of "hide and seek" that has no place in regulation. NTIA's data are quite conclusive. BPL does cause harmful interference; the regulations need to deal with the interference itself, no longer just its "potential".