

ARRL Expresses Disappointment with Administration over BPL Report and Order



ARRL President Jim Haynie, W5JBP

NEWINGTON, CT, Nov 1, 2004--The ARRL has expressed its disappointment with the current administration's failure "to prevent radio spectrum pollution by BPL systems." In a [letter](#) today to Secretary of Commerce Donald L. Evans copied to President George W. Bush, ARRL President Jim Haynie, W5JBP, recalled Evans' assurances on the administration's behalf earlier this year "that we are responsible and sensitive to valuable incumbent [radiocommunication] systems." Haynie told Evans the FCC's *BPL Report and Order* ([R&O](#)) in ET Docket 04-37--adopted October 14 and released two weeks later--suggests otherwise.

"Despite excellent work conducted by the technical staff of your National Telecommunications and Information Administration ([NTIA](#)) to document the extensive harmful interference that will occur if BPL systems are deployed at the radiated emission limits presently permitted by the FCC rules," Haynie said, "it appears that the NTIA concurred in the FCC's decision not to tighten those limits."

The FCC maintained in the *R&O* that BPL emissions are localized and at low enough levels to preclude harmful interference in the first place, and it left the door open to possibly upping the limit in the future.

Haynie pointed out that both international treaty and US law entitle licensed radiocommunication services to protection from harmful interference that unlicensed systems like BPL might generate. "Despite this," he continued, "the FCC has shifted the burden for initiating interference mitigation from the BPL system operator to the radio licensee." The NTIA's September 13 submission to the FCC shows that even at FCC Part 15 limits, the probability of harmful interference is essentially 100 percent within 200 to 400 meters (approximately 660 to 1300 feet) of a power line carrying BPL signals--depending on the operating frequency.

"Amateur Radio stations are typically located in residential areas, nearly always well within such distances," Haynie noted. "The FCC's *Report and Order* provides no assurance that when interference occurs--as it unquestionably will--it will be promptly eliminated."

Haynie said the League was "not at all satisfied" with the FCC's *R&O* "and will continue to work to improve it." Calling the HF spectrum "a unique and priceless resource," he expressed regret that the administration "is willing to squander such a unique natural resource in order to provide a short-range broadband connection that can easily be provided by several other non-polluting means."

As part of the Commerce Department, the NTIA not only administers radio spectrum allocated to federal government users but advises the White House on telecommunications policy. On June 24, President Bush extolled BPL during a speech on technological innovation even while acknowledging interference concerns.

"And one of the problems we've got here is that the Commerce Department has had to develop technical standards that will make sure that our broadband can go across power lines without unnecessary interference," Bush said. "It's a technological issue. It turns out that sometimes the competition of broadband and electricity just doesn't go too good across one line. And so--if I could put it in simple vernacular--and so, therefore, the Commerce Department is helping to sort through these issues so that broadband access will be available through . . . by our power companies."



ARRL CEO David Sumner, K1ZZ

ARRL CEO David Sumner, K1ZZ, echoed Haynie's concerns. The FCC *R&O*, he said, "shifts the burden to licensed operators to *react* to interference rather than adopting rules to prevent interference from occurring." The *R&O* advises locating "sensitive receiver antennas" as far as practically possible from power lines. Additionally, the FCC admonished ARRL that in cases where its members experience RF noise, "such noise can often be avoided by carefully locating their antennas."

Reacted Sumner: "If a BPL system operator wants to meet its obligation by picking up all of the costs of relocating a licensee's antenna, it's free to make the offer."

If interference occurs, the new Part 15 rules will require BPL system operators to employ "interference avoidance techniques" such as "frequency band selection, notching, or judicious device placement." Notches would have to be at least 20 dB--slightly more than 3 S units--below applicable Part 15 limits on HF and at least 10 dB below Part 15 limits on VHF--not much protection for weaker signals common in HF work.

Beyond the issue of interference to radio amateurs, Sumner said BPL deployment holds the potential to simply degrade and pollute the radio spectrum for *all* radio users in exchange for "a short-term commercial benefit."

"We might be more optimistic if there had, to date, been a single instance when the FCC had ordered a BPL system to terminate operation for causing harmful interference," Sumner said. "The Commission continues to be in denial, despite hundreds of pages of documentation of ongoing interference."

Sumner said the ARRL was gratified that the FCC *R&O* recognizes that BPL devices have significantly greater interference potential than other Part 15 devices and that the Commission will require certification of BPL systems rather than the less-stringent verification.

Additionally, Sumner said the League was pleased that the FCC-mandated public BPL system database will require systems to be listed several weeks ahead of actual implementation so that amateurs and others have advance notice.

ARRL officials continue to mull possible formal responses to the *R&O*. The ARRL Executive Committee already has authorized the filing of a *Petition for Reconsideration*. It further authorized ARRL General Counsel Chris Imlay, W3KD, to "prepare to pursue other available remedies as to procedural and substantive defects" in the BPL proceeding.

For more information on BPL, visit the [Broadband Over Power Line \(BPL\) and Amateur Radio](#) page on the ARRL Web site.