

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, DC. 20554**

**In the Matter of** )  
 )  
**Carrier Current Systems,** ) **ET Docket No. 03-104**  
**including Broadband over** )  
**Power Line Systems** )  
 )  
**Amendment of Part 15 regarding** ) **ET Docket No. 04-37**  
**new requirements and** )  
**measurement guidelines for Access** )  
**Broadband over Power Line** )  
**Systems** )

**To: The Commission**

I applaud the Commission’s commitment to ensuring that any interference to licensed services caused by Broadband over Power Lines (BPL) will be eliminated. The Commission has made this “bedrock position” of non-interference clear by reiterating in at least six separate paragraphs (6, 31, 33, 34, 37 and 39 of NPRM 04-37) that BPL would operate under Part 15 non-interference conditions. As an example, paragraph 39 states in part:

*“BPL would also operate under our Part 15 non-interference conditions. Thus, operations must cease if harmful interference to licensed services is caused.”*

I further commend the Commission for employing additional steps to eliminate interference issues including:

- *Requiring that 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 (paragraph 40).*
- *Requiring that Access BPL devices incorporate a shut-down feature that would deactivate units found to cause harmful interference (paragraph 42).*
- *Subjecting Access BPL systems to a notification requirement similar to the notification requirements in [the Commissions] rules for power line carrier (PLC) systems (paragraph 43).*

These steps are an excellent beginning, but are not sufficient to address the needs of the Amateur Radio Service. In paragraph 37 of the NPRM the Commission states in part:

*“With regard to potential interference to the non-amateur radio services, such as public safety, maritime and other operations, we believe that the risk of harmful interference from Access BPL operations is low.”*

Amateur Radio’s specific exclusion from this list communicates the Commission’s recognition that Amateur Radio is more likely to experience harmful interference than other services.

Further, in paragraph 35 of the NPRM the Commission states in part:

*“We recognize that amateur operations are likely to present a difficult challenge in the deployment of Access BPL in cases where amateurs use high gain outdoor antennas that are located near power lines”.*

The Commission clearly recognizes that the Amateur Radio Service is more subject to harmful interference than other services. Therefore, additional protection must be provided for the Amateur Service.

**In addition to the steps already proposed by the Commission, I strongly request that the Commission require BPL providers to eliminate frequencies allocated to the Amateur Radio Service from BPL use. If the Commission does not see fit to notch Amateur Radio frequencies entirely, they should at a minimum further reduce the allowed BPL emission limits in all frequencies allocated to the Amateur Radio Service to a level that precludes any possibility of interference to the licensed service.**

By adding the above requirement, the Commission will fully protect the licensed users of the Amateur Radio spectrum and eliminate the burden of resolving the lion's share of likely complaints. Given the Commission's recognition of the need for additional protection for the Amateur Radio Service and the more than ½ million users of this spectrum, this requirement is both reasonable and prudent. It is clear from the more than 5,000 respondents to the NOI that Radio Amateurs will most likely generate the largest volume of complaints. Further, enacting this ruling decreases the likelihood that BPL providers will be required to shut down and/or perform expensive modification to their equipment after deployment. Finally, this eliminates the unreasonable burden of identifying and eliminating interference generated from an unlicensed service on a licensed service.

If the Commission chooses not to eliminate or significantly reduce emissions in the frequencies allocated to the Amateur Radio Service, the following additional issues must be addressed:

**- Interference and mitigation must be further defined. If BPL signals are received on ANY frequency allocated to the Amateur Radio Service, then interference exists. In addition, the word mitigate means to lessen while eliminate means to completely remove. The word mitigate should be replaced by the word eliminate throughout the ruling so that the responsibility of the interfering service is clear.**

If an Amateur Radio operator is tuning through the 20 Meter allocation, hears interference and requests elimination of the interference, only to discover that the interference has been moved to the 40 Meter band, the interference must not be considered eliminated. Amateur Radio operators must be able to tune through any of the frequencies allocated to them at any time without receiving interference from BPL.

**- Performance standards for interference elimination must be detailed. Remedies to interference must be available 24 hours a day, 7 days a week via phone, e-mail and website, and must be immediate upon receipt of a complaint.**

**- The BPL database must be readily accessible to the public and kept up to date.**

**- A method of identifying transmissions by BPL equipment must be implemented so those interference sources can be quickly identified.**

- **A method of eliminating interference for mobile operators must be developed. Because eliminating interference is impractical in the case of mobile stations, a radiated emission limit sufficient to protect mobiles must be established and enforced.**
- **BPL systems must be tested for rules compliance by an independent laboratory prior to initiation of service.**
- **To ensure an informed marketplace, marketers of BPL services must give clear notice to consumers that licensed radio services have priority, and that the delivery of BPL services therefore cannot be guaranteed. Receipt of this notice must be acknowledged in writing prior to the signing of any contract for service.**
- **There must be severe penalties for non-compliance with these rules and a record of assessed penalties must be part of the public database.**

On July 28, 2003, General Counsel Richard B. Geltman stated on behalf of the American Public Power Association:

*“Further, to the extent that interference is demonstrated, there should be an attempt to accommodate BPL, even if it means that existing communications providers may have to share or transfer bandwidth.”*

Source:

[http://svartifoss2.fcc.gov/prod/ecfs/retrieve.cgi?native\\_or\\_pdf=pdf&id\\_document=6514287496](http://svartifoss2.fcc.gov/prod/ecfs/retrieve.cgi?native_or_pdf=pdf&id_document=6514287496)

Given the “get out of our way” mindset of leadership demonstrated by the American Public Power Association, the Amateur Service cannot expect interference to be eliminated timely without clear guidelines and specific penalties when the elimination of the interference does not occur. Expectations of “sharing bandwidth” when interference is occurring is obviously unacceptable.

It is the Commission’s charge to protect licensed users. The non-interference references made by the Commission in the NPRM communicate that this charge is taken seriously; however, the NPRM does not provide adequate protection to the licensed Amateur Radio Service. Eliminating frequencies from BPL transmissions allocated to the Amateur Radio Service is the most effective remedy for both the Amateur Radio Service and BPL providers.

Thank you for your consideration in this matter.

Sincerely,  
G. Scott Davis

Extra Class Amateur Radio Operator - N3FJP