

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)
)
Amendment of Part 15 Regarding New) ET Docket No. 04-37
Requirements and Measurement Guidelines)
For Access Broadband over Power Line Systems)

To The Commission

**REPLY COMMENTS from David A. Lewis to the
Comments Submitted by Progress Energy, Inc.**

The following are reply comments from David A. Lewis, an amateur radio operator (Extra Class licensee - call sign N1OL), who has been closely involved on both a professional and hobby basis with radio technology since 1970 and the Internet since 1994.

My comments are a reply to the comments submitted by Progress Energy, Inc. (Progress).

Progress in their comment refers to using BPL technology *“for internal benefits, such as automated meter reading, outage detection and system monitoring”*. As BPL will be deployed under Part 15 rules that could result in notification by the FCC that the BPL system has to cease operation the proposal to use BPL for any task that requires a guaranteed level of service could be considered both dangerous and reckless, in addition it demonstrates a fundamental failure to understand the provisions of the Part 15 rules. I ask that the FCC impose a requirement on all BPL systems that they are only used for functions that can be interrupted at any time and any interruption will not result in any additional costs to customers and that this condition is in turn placed on any business transaction that involves the provision of BPL services.

Progress makes the comment *“Once a system has been installed and is operating within the limits and requirements in place when it was installed, that system should be allowed to remain in operation as long as it remains in compliance with the original requirements in place when it was first installed.”* The existing BPL systems were installed under experimental licenses and Progress was fully aware of the license status and chose to proceed so accepted the risk that changes would be required to eliminate interference to licensed services. I therefore request that the Commission makes any rule changes retroactive to all the installed BPL systems.

Progress makes the comments; *“The unintended effects of establishing a centralized database would be to allow access to proprietary information by entities that either do not need it, would want it for competitive reasons, or to facilitate specious harmful interference complaints. We are not aware of any other requirements to publish information about other unlicensed radiation sources that conform to FCC Part 15 Rules. Why should BPL be any different?”* All licensed users of the radio spectrum in the United States are listed together with their locations in the public FCC database. There can be no justification to treat unlicensed Part 15 transmissions differently from licensed services. In addition all licensed services are required to ID so that any problems can be rapidly addressed. The requirement to ID transmissions should also be extended to BPL. Any restriction on data availability will result in additional costs for the victims of interference. It should also be pointed out that DSL and Cable broadband providers as part of their marketing effort maintain on-line systems where address/phone number information will confirm/deny availability of service. It would seem likely that BPL providers will do the same otherwise how will they find customers? Should a “data vacuum” be allowed to occur it is possible that independent databases based on

hearsay will be created to fill the vacuum, this will inevitably give rise to more uncertainty and confusion which will not be helpful to the expeditious elimination of interference problems.

Progress makes the comment *“If it is suspected that an Access BPL system may be a cause of this reported harmful interference then the operating entity could investigate this further and develop remedies as required.”* From the comments already filed by victims of interference from the Progress BRL trial the *“further remedies as required”* would seem to consist of arbitrary deciding that interference was not harmful even though it clearly met the FCC definition as harmful and ignoring the complaint, in particular I would draw the Commission to the filings by Gary Pearce;

http://gullfoss2.fcc.gov/prod/ecfs/retrieve.cgi?native_or_pdf=pdf&id_document=6516182
[988](#)

and Tomas Brown;

http://gullfoss2.fcc.gov/prod/ecfs/retrieve.cgi?native_or_pdf=pdf&id_document=6516185
[665](#)

These filing clearly document how the interference elimination process has failed as the FCC has been unable to address the issue in an expeditious manner. Clearly that the interference resolution process needs to be revised to ensure that it is expeditious, fair and provides encouragement for all parties to pro-actively address interference issues and avoid FCC intervention. My proposal to the FCC is detailed below;

- 1) To eliminate any uncertainty over the source of interference I would like to propose that all BPL devices ID continuously using 5 word per minute morse code.
- 2) The ID to consist of a call sign assigned to the BPL device by the FCC and a 4 character PIN that is assigned by the operator. The PIN being

changeable by the BPL operator at will and known only to the operator and the maintainer of the database.

- 3) In the event that the device call sign and the PIN are correctly reported to the maintainer of the database to confirm interference, the database maintainer will notify the BPL provider of the complainant so that both parties can work to resolve the matter.
- 4) The BPL operator should have 2 working days to eliminate the interference and set a new PIN for the BPL device.
- 5) If the complainant reports the same device with the new PIN within 5 days of the original complaint the BPL operator will have 24 hours to turn off the transmission capability of the BPL device except for interference testing until the complainant confirms that the interference has been eliminated.

This proposal will protect the BPL provider from spurious complaints and will encourage pro-active approaches to interference mitigation and further encourage BPL providers to work with licensed services to ensure that problems do not occur.

Progress makes the comments *“This leads to four factors Progress Energy believes the FCC should consider when addressing the issue of “harmful interference”.* *First, the interference should have to occur in the normal course of the complainant’s operations, rather than be the result of the complainant seeking out the interference. Secondly, the interference should have to be more than momentary. That is, for example, if driving another 30 yards will virtually eliminate the interference, then it is not harmful. Thirdly, the interference should have to be proven to so greatly interfere with operations such that communications are practically unintelligible. Finally, the sensitivity of the measuring equipment must be standardized.”* The current definition of harmful

interference is clear, only many occasions the operators of BPL systems have made public statements that their systems will not interfere with licensed users, as a consequence I ask that the commission makes no changes to the definition of harmful interference.

Respectfully submitted,
David A. Lewis
Amateur Radio Extra Class Operator N1OL
2701 Mira Bella Circle
Morgan Hill
CA 95037

n1ol_ham@hotmail.com
May 26, 2004