

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

In the Matter of )  
 )  
Carrier Current Systems, including Broadband )  
over Power Line Systems )

Amendment of Part 15 regarding new requirements )  
And measurement guidelines for Access Broadband )  
over Power Line Systems )

ET Docket No. 04-37

REPLY COMMENTS OF  
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Dated 10-04-2004

The writer received a BSEE and MSEE from UCLA, 1977 and has been employed as an electrical engineer involved in the power electronics and industrial electronics industries for 30 years, mainly in product development. This experience includes numerous encounters with FCC emission requirements including designing, building and testing equipment for compliance. The writer has also been issued 9 patents and currently holds the call sign N0JCG as a member of the Amateur Radio Service.

On October 1, 2004, the Power Line Communication Association filed addition additional comments in ET Docket 04-37. In these comments the PLCA is asking the FCC to completely change Part 15 from a set of rules with the purpose of protecting licensed services to a set of rules granting BPL exclusive rights that have the effect of making BPL the primary user of the HF spectrum.

To quote the PLCA, "The Commission's challenge is to balance the rights of its existing licensees with the practicality and economic incentive (i.e. the business case) for commercial BPL operators to deploy the technology and provide cost effective solutions to consumers". However, section .5 of Part 15 clearly states "Persons operating intentional or unintentional radiators shall not be deemed to have any vested or recognizable right to continued use of any given frequency by virtue of prior registration or certification of equipment, or, for power line carrier systems, on the basis of prior notification of use pursuant to 90.639g0 of this chapter". There is nothing in the NPRM that would change this defining clause of part 15. Clearly, the Commission's first and, indeed only, responsibility in this matter is to preserve the line between licensed and unlicensed services. It is solely the BPL industry's responsibility to develop their product to meet the obligation of no interference to licensed services. Their cost of doing so is neither the Commissions responsibility, nor concern.

The PLCA then goes on to propose a mechanism of interference mitigation that imposes a substantial burden on licensed services.

“Complaints must include sufficient information necessary to successfully identify and resolve the incident:

- a. Location (e.g. street address, Nearest major road intersection, latitude/longitude, utility pole number or other description) where the incident was experienced.
- b. Time and date of the incident.
- c. Approximate duration of the incident (e.g. 20 seconds, 5 minutes, 4hours, continuous) and repetitiveness (e.g. one-time, daily, once a week, constant)
- d. Spectrum frequency and frequency band(s) affected by the incident (wherever known).
- e. The approximate number of hours per year the complainant operates on the affected frequency(ies) within 50 meters of the Location.”

Identifying the location of the receiver is reasonable, as well as time stamping the incident. Any detail about duration, character, and frequency would perhaps be useful to the team tasked to solving the problem, but may not all be possible to collect from less experienced users like short wave listeners or newly licensed users. Thus these elements should be optional.

Collecting operating habits of the plaintiff however are completely irrelevant. The implication is that the BPL operator would consider themselves empowered to judge that a particular complaint need not be resolved because the licensed user is not a frequent user. In fact, the very nature of HF propagation is such that entire bands may not be used for years and then see heavy use. Collecting information of the operating habits of the victim exposes the slippery slope of blaming the victim for the problem and exposes the victim to harassment at the hands of the utility or BPL provider.

The PLCA goes on to establish something of a timeline for acting on a complaint, “The BPL operator must investigate the complaint and respond in writing not later than 30 days from the receipt of the complaint, and provide supporting details.” While the 30 day number has been the norm for part 15 complaints, the standard has been that the interference must be fixed within 30 days, not just a response. Part 15 interference has always been defined with respect to the victim service, especially power line interference. Unlike power line interference from decaying grid components, BPL is readily identified by simple turning it off. There is no reason identification should take more than 24 hours. Furthermore, the BPL industry has become quite fond of insisting they have to tools to resolve any interference, remotely, although they have yet to demonstrate this in the field. Thus, resolving the interference should be possible at the time of identification or shortly thereafter. Adopting the PLCA approach creates an interminable waiting game, and since the interference isn’t affecting the operation of the BPL system, it gives the advantage to BPL. By simply continuing the state of denial that the BPL industry has been in for the

last 18 months, BPL providers will have the green light to assume dominance of the HF bands within 1km of every power line, thus becoming the dominant service in that spectrum.

The PLCA then goes on to gut yet another cornerstone of Part 15, the obligation that resolution of a Part 15 complaint rests solely with the user of the Part 15 device. They state, "It is absolutely essential that the manufacturer, not the BPL operator or the electric utility whose wires support the BPL service, be responsible for obtaining FCC equipment authorization and for otherwise being the responsible entity for compliance with FCC equipment requirements." The obligation of power utilities to not cause interference is rooted in both Part 15 and international treaty. There is absolutely no difference whether RF on a power line comes from BPL or a rotting insulator, it is still the obligation of the utility.

Clearly the additional comments from the PLCA are intended to coerce the Commission into changing Part 15 from a protection to licensed services to a green light for them to dominate the HF bands as a byproduct of a poorly engineered system.

BPL is simply not ready for deployment.

Respectfully submitted;

Gary W. Box