

**Before the
Federal Communications Commission
Washington, D.C. 20554**

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

Reply Comments by Kenneth E. Stringham, Jr.

Background:

Graduate Wentworth Institute of Technology, 1990 BS Electronic Engineering
Technology.

Amateur Radio Service Extra Class Licensee, since 1978 (AE1X) originally Licensed
1972 (WA1PYZ).

General Radio Telephone Operator: PG-1-19901 (Originally First Class Radio Telephone
Operator).

Experience with satellite and satellite ground station electronics with M.I.T. Lincoln
Laboratory from 1972 until 1988.

Experience with ground station and satellite optical processors with M.I.T. Lincoln
Laboratory from 1988 until 1991.

I have been engaged in electronics and programming for my entire adult life and would
like file the following reply comments in general.

Notice of Proposed Rule Making

The proposed rules are not sufficient for the protection of those services with which I am
engaged in or interested in protecting. These rules clearly leave the solution to
interference up to the BPL providers with the understanding that the must attempt
mitigate the interference. Then only as a last resort should shutdown implemented.

Shutdown should be the first response on the part of the BPL operator and it should be
immediately implemented on notification of interference of any kind attributed to BPL.
Then mitigation can be scheduled to determine if the affected system can be restored to
operation without further interference. This is the only way to insure a timely response on

the part of the BPL providers. This will indicate that the Commission is serious about insuring that licensed services are protected.

The proposed rules do not address the issue of what is harmful interference. The proponents in general seem to have a complete lack of understanding of the normal operation of stations in the Amateur Radio Service or any other radio service that may be affected. They indicate that we are looking for interference and using highly sensitive receivers in this pursuit. They fail to grasp that we use highly sensitive receivers in our everyday operations and that we are looking for very weak signals with which to establish communication.

The proposed rules do not address what a timely response would be. The BPL providers will interpret this to mean that they can just ignore complaints until the Commission investigates. This could take months or even years before a resolution is achieved. This is unacceptable. Some proponents have even suggested that Amateur Radio Service complaints will be without merit and may be ignored. The rules must state specifically what the BPL provider response must be and there must be sufficient penalties for willful violations.

The proponents contend that they should be free of restrictive regulations so that their infant service can adjust to the competitive environment that they anticipate. They must be made to understand their position in within these regulations. The rules clearly state that operation under Part 15 provides no protection from the affects of signals from licensed users occupying the same spectrum. The rules should provide stronger language that will force providers of BPL to notify potential subscribers that this is the situation and must be tolerated.

Conclusion

This service proposes to operate as an unlicensed service, but expects a certain amount of protection for licensed users. These regulations are not suitable as a protection of licensed services and do not provide mechanisms for mitigation or enforcement. This goes against all previous regulatory efforts. Usually new technologies have laboratory proven records of complying with the regulations under which they propose to operate and have demonstrated proper operation under special temporary operating authority. In this case, the proponents contend that they cannot prove compliance in the laboratory and the small trials, clearly, are not of sufficient size to yield any true conclusions. In fact, the trials to date have been so small and conveniently placed that no true conclusions are possible because no potential interference victims live in the trial areas and the tests conducted to date by mobile stations appear to have no impact on the thinking of the Commission or the NTIA who have come out in favor of this service with the caveat that some of their services will require substantial protection by either exclusion zones or band notching. It is clear to this respondent that more research is needed into the true nature of the interference potential of this service and at least one significant trial must set up in area with potential victim services represented so conclusive measurements and mitigation tests can be run. This service should not be fast tracked for deployment.

Respectfully submitted,

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