

INTRODUCTION

The follow are my personal comments relevant to ET Docket N. 04-37.

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My Qualifications:

General Radio Telephone Licensee, formerly First Class Radio Telephone

Amateur Radio Service Amateur Extra Class Licensee, AE1X

BS in Electronic Engineering Technology Wentworth Institute of Technology, 1990

Employed by M.I.T. Lincoln Laboratory from 1972 until 2000. Worked on multiple aspects of military and civilian communications systems and electronics.

I represent myself in this matter and would like to present my position as that of an interested party as indicated by my qualifications. I am an Amateur Radio Licensee and engaging communications with the bands authorized for license class utilize very low levels of signals within this allocated spectrum. This use of spectrum by an unlicensed secondary user is in direct conflict with my use of this spectrum. Any regulations that would loosen restrictions BPL will have an additional negative impact on my activities.

GENERAL SUMMARY

The tone of the proceeding indicates to this commenter that this Commission is declaring a new direction in the allocation of spectrum and the regulation of the services using the allocated spectrum. It appears that short range users and other non-licensed services will be considered in favor of longer range users and those licensed unless the licensee represents a critical application of communications technology. This said, it appears that the Amateur Radio Service will not be one of the protected services and my in fact be forced to yield primary use of HF spectrum to the otherwise secondary user in this case. The present regulations contained in Part 15 represent the minimum regulation necessary to enable this technology and strict enforcement of them will be required to protect all the licensed spectrum users.

The real issue that must be addressed in the NPRM is what modifications to existing regulations must be enacted to achieve the stated goals of this administration to encourage the successfully deployment of BPL. This is bit of problem because of the potential for serious mutual interference between BPL and licensed services. In the case of my personal interests, Part 97 will have to be modified to either exclude amateurs from amateur spectrum in the frequency range of interest to BPL between 1.8Mhz and 130Mhz or severely limit our access to this spectrum. I do not believe the present regulations will be enforced. It will represent a far too large of a problem for the Commission and its

limited resources.

SPECIFIC COMMENTS

Radiation limits - The present radiation limits represent the minimum that will be required for proper deployment of BPL. It is my personal opinion that these limits are too high as written for the type of service being deployed. Should a system of this nature be implemented in my immediate area, I would not be able to hear stations in which I am interested in working and my low signal levels will be rendered unreadable whenever propagation is supported between my general area and the distant stations in which I am interested in establishing contact.

Priority - Part 15 regulations suppose that BPL will be secondary user to licensed services. The Commission proposes to require BPL to implement interference mitigating technologies to encourage spectrum sharing. This is a nice sounding propose, but the real world implementation of these technologies are in the early stages of development.

One system under development has already attempt to comply with the non-interference regulations in this Part and has decided on its own what constitutes compliance. The Commission in cooperation with the effected licensee should be the final judge of compliance not the BPL provider. This amounts to the Fox minding the Chicken Coop.

Under what circumstances will this Commission order a BPL system to shutdown? Part 15 must contain regulations that clear define this general statement. I do not believe this can be enforced and that local courts will be engaged to remedy this situation and result in the licensed user having to foot a hefty legal bill for the ensuing battle.

Should non-essential licensees have any protection at all despite the fact that they are licensed service and have exclusive allocations of the spectrum in question under international treaty? I believe the Amateur Radio Service should, but this goes against the stated goals of the political forces in power. It appears this Commission intends to develop BPL get it fielded and then approach the world body for exclusive allocation of this HF spectrum to this service.

To achieve the stated political goals, this Commission my entertain modifications to Part 97 in this NPRM in addition to Part 15 to permit protection of BPL from interference from the Amateur Radio Service. This will be the only way to insure that BPL will not be harmed by this radio service. This Commission will certainly not be able to enforce Part 15 so the only alternative is to eliminate the interference by severely restricting the Amateur Radio Service through appropriate regulation.

Technical Merits - The technical assumptions on which BPL is based are faulty. This service has been proposed and specified by people that have no knowledge of the propagation characteristics of the spectrum that they propose to use for their service. How will the Commission protect BPL from strong signals not originating in the area of coverage? There will be times when strong interference

will exist from signals propagated into the coverage area of a BPL system from systems far removed from the BPL site and some of them will be international in origin.

What about security? This system will propagate and a hacker will be able to gain remote access to a BPL system either by direct connection through a BPL modem or just by a wide band transceiver system for this purpose. The BPL users will have all their critical data readily available for hackers to view and there can be no effective protection.

Radio Amateur Users - It could be that in some cases Radio Amateurs could employ CSMA type system that can co-exist with BPL, should the BPL ISP be using this type of access for their system. The amateur signal would just be another user sensed by the system otherwise the traditional users of the spectrum will be left without usable spectrum in their own allocated bands.

SUMMARY

BPL has been identified as a priority communications system by the political forces in power here. The present regulations in Part 15 represent the minimum regulation necessary to insure deployment of this important system. The NTIA study of the affects of BPL on licensed users supports this contention and points out many of the problems with BPL reported to the Commission by this commenter and others. The present rules do not represent a burden in anyway to the deployment of BPL. Relaxed enforcement of the priority regulations will serve to enable deployment with a minimum of problems to the providers. The Commission will have to address the interference issue later or relegate the enforcement to the local courts.