

Response to FCC OET Docket 03-104

As a degreed Electronic Engineer, a 28 year radio systems engineer with Motorola, and an Amateur Radio Extra Class licensee since 1969, I feel I am informed to provide you with comments on your BPL docket.

1. The FCC is misusing the Part 15 rules which were intended to be applied to point source devices that were intentional or unintentional radiators by proposing to allow both large bandwidths across the whole HF spectrum and very long antennas that will reach into residential, commercial, and government environments and cause harmful interference to Amateur, commercial, and government HF radio users.
2. In great contrast to the bandwidth available with fiber optic systems, the proposed BPL system will provide only a limited amount of bandwidth to prospective Internet users that will have a limited lifespan as user demands will out grow the capabilities of BPL.
3. Existing Amateur, Commercial, and Government HF transmissions will interfere with the BPL system. Although the Part 15 devices in BPL are not protected from interference from licensed transmitters, the loss of high speed Internet services that have been paid for will create a climate where demands would be made that the licensed operations should cease.
4. Commercial and Government HF operations generally have higher transmitter powers and stronger receiver signal strengths to provide consistent grade of service. The Amateur service provides emergency and backup communications when other services are not available. The Amateur received signal strengths are much lower and will be more damaged by the BPL systems.
5. The FCC recently ruled that Amateur allocations should not be made in the 135 KHz VLF range because there would be interference to PLC systems. If there is a revenue based BPL system on the same power lines, there will be even more interference because Amateurs have licensed allocations between 1.8-29.7 MHz which totally encompasses the proposed 2-25 MHz range.
6. European and Asian governments have already determined that BPL systems cause too much interference to incumbent licensed users of the HF spectrum. Implementations in the US will not be any different.
7. BPL systems will be inherently unsecure and affected by hackers.

In Summary, the proposed BPL system will provide few benefits over a small technology lifespan while at the same time causing extreme interference to Amateur, Commercial, and Government that provide beneficial and life saving medium to long range communications linkages. Although fiber optic systems would have a higher initial cost and be somewhat more difficult to install in residential settings, their extreme bandwidth will allow provide initial performance that far surpasses BPL, are immune to electromagnetic interference, and will have long technological lifespans than the short-sighted BPL.