

I wish to urge the FCC from proceeding with BPL implementation. Its impacts will be a threat to government, civil, and emergency services, and to the amateur radio service support to these agencies' work during disasters, etc. Amateur radio will be reduced to users with high-power amplifiers and large antennas. Several up-and-coming technologies will almost certainly make BPL less efficient and perhaps unnecessary.

While interest in extending the benefits of Internet is commendable, a decision to employ the existing electrical power distribution system infrastructure for Broadband access (i.e., BPL) would be erroneous and ill-conceived. It will assuredly result in increased interference for other spectrum users (government as well as private and commercial) and possibly even to BPL users themselves. The resulting conflicts and demands for protection and for accommodation will surely add immensely to the FCC's workloads.

Interference to innumerable government and public health and safety services will surely result if BPL is permitted to expand in scope, and particularly if allowable BPL signal levels are increased beyond current levels. At a time when National Defense and Homeland Security are paramount issues in both political and public discourse, risks of interference to the radio communications key to successful accomplishment of these services should be deemed unacceptable. Benefits to the general public of yet one more gateway to the Internet, beyond those already provided by the several wireless, cable, satellite, and both dialup and highspeed telephone lines, are unlikely to outweigh the risks to public safety and security. It is readily apparent these vital services do not generally have access to funds necessary to relocate spectrum to avoid BPL interference. Nor is it apparent that taxpayers should be burdened to pay for such relocations so that BPL businesses may turn a profit.

The power distribution infrastructure is imperfect, in some cases nearly archaic, and certainly not engineered to properly carry radio frequencies. Whereas telephone and cable services are reasonably balanced or well-shielded for radio frequency signals (due to good engineering practices and to regulations) the power lines are not shielded or balanced at all with respect to such signals. Further, power lines are routinely subject to corrosion and deterioration from weather, etc. Corroded or loose power line connections will rectify BPL signals, creating harmonics and intermodulated frequencies well-removed from those intended. Unwanted radio frequency energy so generated will radiate easily from power lines since their design was never balanced or shielded for RF. The potential for widespread and difficult to diagnose radio interference is evident.

Beyond power lines themselves, there exist a wide variety and innumerable quantity of consumer devices attached to the power lines in homes, shops and offices. These were not been designed and manufactured with consideration for power lines with broadband signals on them. The kinds of interference problems they will produce is mind-boggling. And there are also a plethora of probably effects that BPL signals may have on consumer devices, with resulting barrages of complaints to manufacturers, power companies, and the FCC.

The FCC has issued hundreds of thousands of licenses to services in the HF spectrum which are served on a "primary" basis. This essentially assures those services will be protected from interference by other services. The FCC has stated that it will protect these services. However, in all probability the radio frequency cacophony of wideband RF over power lines will overwhelm FCC

resources, forcing it to abandon licensees to their own solutions. The credibility of the FCC as a competent regulatory agency, and perhaps the careers of FCC personnel, then will be at risk.

BPL is a technology in search of an application. It attempts to force power lines into a use which is not necessary and for which they are ill-suited. In light of the many existing and developing means of accessing Internet and other wideband services, BPL does not appear to make good engineering sense. We do not have an Internet connectivity emergency to justify poor solutions.

Please consider requiring services to employ the technologies that are appropriate, and in good engineering practice, to the services they render. Power distribution should remain the domain of the power companies and their equipment. Broadband distribution services should be allocated to those with the proper facilities.

Respectfully Submitted,

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