

Comments to FCC docket 03-104

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When looking into space from Washington or Boston the intensity of background illumination from city lights masks the stars. Astronomers continuously fight a battle with encroaching civilizations surrounding their once isolated observatories. We should verify that the worldwide deployment of BPL/PLC technology would not result in similar spectrum pollution by raising background noise levels to a disruptive level.

The responsible approach for a leading nation is to know with certainty what will be the impact on worldwide background radiation from the deployment of millions of BPL/PLC broadband systems/repeaters. The country should also act with full awareness that letting this unlicensed "cat out of the bag" might permit no means of turning back. BPL/PLC impact needs to be evaluated by objective organizations not affiliated with profiting utilities or government. I read this at the ARRL website: "ARRL recently petitioned the FCC for a tiny amateur LF allocation in the vicinity of 136 kHz. The electric utility industry claimed in comments on the ARRL's petition that its PLC devices--operating on an unlicensed basis on frequencies below 490 kHz--would suffer harmful interference from 1 W effective isotropically radiated power (EIRP) amateur stations. The FCC agreed and chose not to grant Amateur Radio the LF allocation it sought. Yet the same utility industry, in consortium with BPL manufacturers, is making the claim that on HF and low-VHF--frequencies where power lines make better antennas than they do on LF--BPL signals can coexist with amateur stations that may be running more than 10,000 W EIRP. "

If one BPL segment radiates a watt of RF will it interfere with Licensed HF users? A system with BPL segments every 2000 feet or so will radiate with significant gain in some random directions. Now consider several thousand radiators over many hundreds of miles of powerline/home wiring and they might also radiate over 10,000 W EIRP. This is equally unspecific as industry manufacturers and utilities comments and testimony. Amateurs and short wave listeners want to know where the truth lies.

It is true that the electrical system in this country was not designed for BPL service, and never will be. At HF it is a lossy system that does radiate as an antenna. BPL's large-scale impact needs independent study.