

As a licensee of the Amateur Radio Service, I have serious reservations regarding PLC/BPL. Given the power companies' poor track record for keeping "power line noise" to a minimum, I foresee much interference to properly licensed services if BPL is ever implemented.

The power distribution grid was designed for just that; power distribution. There are technical concerns for data transmission that simply weren't addressed when the current grid was developed. Many of these items will cause "noise leakage", which raises the noise floor, which in turn, interferes with licensed communications.

As a practical example, the "X-10" system, which uses brief bursts of data on the electrical wiring for local (in-home) device control, is known to cause problems. Due to the short duration of this interference, it is generally ignored. A continuous stream of data, on the other hand, would be impossible to ignore.

Then there is the potential for interference to other equipment. Many consumer electronic items have little to no filtering built in. Taking the X-10 issue mentioned previously, I have two clocks in my home that gradually, over the course of weeks, gain time. I have traced this to the clocks misinterpreting some of the X-10 data packet as a proper voltage swing, which the clocks use as a time reference. Each time it misreads one of these pulses, it gains 1/60 of a second. While this may not sound like much, it can misread several pulses in one data burst, multiplied by a dozen bursts over the course of one evening.

I am very much against the use of the power distribution grid as a data transmission medium.

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