Florida Power & Light (FPL), in it's comments regarding Broadband Over Power Line (BPL) wrote:

"FPL believes that BPL does not pose significant risks for unintended high frequency radiations that will interfere with consumer devices, amateur radio operators, or other forms of commercial communications (television, radio, mobile radio, etc.)"

On the contrary. According to tests that were conducted by the American Radio Relay League (ARRL), BPL IS disrupting RF communications over a broad segment of the spectrum which includes public safety agencies, businesses, amateur radio operators, TV stations, radio stations and other services.

FPL also writes:

"FCC Order 97-Section 157 essentially places the burden on BPL opponents to justify why a new entrant or technology that may provide more affordable telecommunications to a broader base of customers, should not be approved. FPL believes that arguments voiced by amateur radio forums do not meet this burden, and remain unsubstantiated and speculative without direct evidence that BPL vendors' technologies cause interference in excess of approved limitations established by FCC guidelines."

The ARRL has been measuring interference around power lines where test systems are installed (and operating according to current FCC guidelines) and the results are horrifying!

See http://www.arrl.org/news/stories/2003/08/08/2/ for more information and video for direct evidence of the result.

FPL's position is one that "places the burden on BPL opponents" to show that BPL causes interference to other spectrum users. ARRL Field Testing does, in fact, show this to be the case, and for this reason, I believe the ARRL has provided all the proof that is necessary.

FPL writes "BPL vendors have demonstrated sincere efforts to ensure that their technology, provisioned as an unintentional radiator, does not interfere with FCC-regulated radio bands and will indeed meet FCC Part 15 requirements."

BPL is a part 15 unintentional radiator. That means the radiating RF energy produced by BPL is not necessary for the function of the product in question. In other words, it is an undesired by-product. The result of this undesired by-product is a form of spectrum pollution.

Why do the BPL proponents request relaxing the Part 15 limits in order to generate even more spectrum pollution? Simple. Under current Part 15 radiation limits (which are already high enough to cause serious interference) the amount of power used by the BPL system is low enough that

(a) the effective bit rate is probably not competitive with DSL or cable modems, and/or

(b) BPL providers would need to install many, many signal amplifiers on the lines to keep the bit rate up, which is expensive.

This means that BPL operating under current limits, is not as fast as current DSL or cable modem systems as BPL proponents claim, nor as inexpensive as BPL proponents claim. In fact, at current Part 15 regulations, BPL is probably not a profitable venture.

By raising the Part 15 allowable radiation limits, and/or making BPL an exception to them, they can use more power, making the data signal travel farther on the lines with fewer errors. Of course, it will cause substantially more spectrum pollution for anyone using 2-80MHz.

FPL writes, "FPL owns a 69,000 mile interconnected power line network made-up of large and small power lines ... in all or part of thirty-five Florida counties." For argument sake, using their 69,000 miles of power lines as an average, that makes over 6 million miles of cable across the United States that could carry BPL signals. 6 million miles of cable makes for a very large antenna! Since RF signals generated by this 6 million mile long antenna know no international boundaries, what is to prevent BPL spectrum pollution being propagated beyond our borders and causing harmful interference to licensed RF users in other countries?

The FCC has already cited power companies for failing to address local interference issues using their current equipment. Who will ultimately be responsible for dealing with the international interference issues that will result if the Commissioners allow BPL to go forward? The FCC!

Keep in mind FPL's comments that "places the burden on BPL opponents" to address interference claims. Additionally, FPL states that those interference claims are "unsubstantiated and speculative without direct evidence". The data and information provided by the ARRL does contain substantiated evidence, that BPL does in fact, pose significant risks for unintended high frequency radiations that will interfere with consumer devices, amateur radio operators, or other forms of commercial communications (television, radio, mobile radio, etc.). The "burden" has been met, and therefore I urge the FCC to drop any proposal which allows BPL to become a functional operating system, much like Japan and other European countries have already done.

Thank you
Carl Herrera
Radio Amateur Operator Callsign WC4H