

Broadband Over Power Line (BPL) - Docket 03-104

I have had some experience in networking with various high speed internet service providers. I do not believe that Broadband Over Power Line (BPL) is sound technically for several reasons.

First, radiation from the BPL decimates allocated spectrum from 2 to 80 MHz, making it unusable in most situations. There is undoubtedly additional spectrum at both frequency extremes that will suffer a decline in usefulness, most particularly higher frequencies of the AM broadcast band.

Second, the bandwidth available is impressive for an open line of this construction, but the ultimate data rates for end customers would be vary slow as that available bandwidth is divided among "subscribers".

Third, the BPL service must always tie into the internet where truly high speed data is carried. There is an immediate decrease in bandwidth as soon as the data moves from the internet to a BPL distribution.

Fourth, a large number of "Bridges" to the internet required to service many customers at speeds greater than 1MB/second would force a distributed system. This raises the possibility of decoupling sections of the broadband power line if the system is going to truly support high bandwidths to many customers. This kills the cost effectiveness of such a system, and raise still further issues of radiation.

Lastly, while Part 15 devices must accept interference, the magnitude of devices that would no longer function would be catastrophic. This includes, but is not limited to: cordless phones, garage door operators, and wireless fences to name a few.

Respectfully,

Wayne Kramer