

Broadband Over Power Lines (BPL) poses a threat to a number of communications mediums including but not limited to Amateur Radio, Military Affiliate Radio Services (MARS), Amateur Radio Emergency Service (ARES), US Military communications, Ship to Shore communications and Shortwave Broadcast communications. BPL generates a level of interference on High Frequency radio bands (HF) that reduces the usability of any communication used on these frequencies totally unusable.

A number of devices have been authorized to operate on some of the same frequencies with limited power and cause little to no interference with normal communications on or near the operating frequency of the device. This is due to the fact that these devices use a very narrow frequency spectrum or channel and the range is limited to 100 feet or less from the device. Even with the same limitations, BPL will cause a serious interference problem. First of all its bandwidth is larger than any single amateur radio or broadcast band spectrum and usually, if not always, it covers multiple bands all at the single time. There is no escaping the interference by changing frequency. Secondly, most other devices are in use only for a short period of time. BPL will be on 24/7 as long as any customer is on the internet. Additionally, the transmission area of common part 15 devices is restricted to a specific geographic location such as in one home. Because BPL transmits through open-wire, specifically power lines, it radiates a signal all along the way of its transmission. This interference is difficult at best to escape in an automobile and impossible in a base location. An automobile may travel for many miles and not escape the area of effect. This will ever get more and more difficult to do as BPL is distributed to more and more rural areas. Power lines mostly run along highways and roads so an automobile would have to go off-road or many miles away from civilization in order to operate outside the area affected by BPL radiation.

Radio propagation will ultimately cause BPL to be heard in foreign countries as well. It is a well known fact that amateur radio operators (Hams) have been known to communicate to foreign countries in Europe, Africa and Asia and elsewhere with very low levels of power even under one watt. As the signal travels in the atmosphere, BPL will also follow radio propagation and may cause interference with people in foreign countries trying to listen to their favorite shortwave broadcast or even to their ham radios.

Emergency HF communications is sure to be interrupted as well. While one might suggest that BPL be disabled in a disaster area, doing so will not begin to solve the problem. I operated emergency communications with the Emergency Management Agency (EMA) from Charleston, South Carolina a few days after Hurricane Hugo crippled a number of South Carolina counties. HF communications were responsible for requesting or directing desperately needed supplies, rescue workers were directed to the homes of many elderly and sick to see if they were ok. At least one elderly man was rescued from his home because a ham over 1000 miles away was able to communicate to me with my weak signal. BPL in his area would have made that communication impossible.

Amateur Radio Operators (Hams) are not the only ones affected or opposed to BPL radiation. Shortwave Broadcasters are concerned as their signals will also be covered by the BPL radiation. Even the Federal Emergency Management Agency (FEMA) which is part of Homeland Security has opposed the approval of BPL because of its radiation. They believe that BPL radiation is a threat to national security.

I have been reading discussions about BPL and viewed the Amateur Radio Relay League's video on it's test in the BPL test areas. It is available at the ARRL website (<http://www.arrl.org/news/stories/2003/08/08/2/?nc=1>). I have also experienced BPL interference first hand. On at least one day, my radio was rendered useless for a minimum of 4 hours either by a local BPL test or a propagation reception where the signal strength was 10 db over 9 on my S-meter. I was forced to turn off the radio as it was useless with that level of interference.

I am not opposed to any electric company as the loss of electricity would radically alter my lifestyle and quality of life. I am not opposed to broadband Internet technology. I use it daily and, while not to the same level, my lifestyle would be radically altered at the loss of it as well. I am opposed to BPL technology as it has been tested and demonstrated. If power companies would like to offer broadband internet services, they really should seek to find a way to do so without causing interference to its customers, it neighbors and to those in foreign countries.

Please reject BPL technology until a different technology can demonstrate an interference free method of transmission.

Thank you,

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