

Subject : Comments on BPL Implementation 03-104

I am an amateur radio operator (WM7A) and retired electrical engineer. I am seriously concerned about the BPL proposal. Proponents of BPL have stated that there will be no interference because it is in compliance with Part 15. I have fought with a number Part 15 compliant devices causing serious interference with my shortwave listening and amateur radio activities. Compliance with part 15 does not guarantee that the device will not interfere with other authorized services. One pertinent example of this was my next door neighbors battery charger in his boat. Whenever he charged his battery, I would have an S9 +20 dB noise level that destroyed the reception on my HF radio every few KHz across the whole HF band and into the VHF bands. The reason that I mention this is because this noise was largely a result of the Part 15 compliant battery charging circuit coupling noise into the power lines and then the power lines acting as an antenna. Note that the power lines in my neighborhood are underground and that this radiation was mainly from the power lines inside the house and to external lightning around the house.

I have seen and heard the tests made by the WIRFI (ARRL) in July of this year and the results of this testing brings back very bad memories of fighting noise being radiated from power lines due to my neighbors part 15 compliant battery charger. There was S9 noise on all HF frequencies where the normal atmospheric noise was around S3, over a 1000 time less than the BPL induced noise. Implementing BPL is not a good idea. Here are a few reasons:

1. Ham Radio operators have played a large role in emergency communication including 9/11 as well as other emergencies. BPL, with S9 or greater noise as shown by the ARRL tests, would seriously impair our ability to use HF frequencies for emergency communication.
2. Shortwave broadcasters abroad and in this country use the frequencies with which BPL would interfere. This would prevent people in areas where BPL is implemented from listening to shortwave broadcasts from all but the very strongest stations. The National Bureau of Standards WWV in Colorado would be seriously impaired. As I write this I am listening to WWV on 10 MHz with a signal strength of S9 (this is with an outside antenna), the same signal strength as what may be generated if BPL were implemented. As you can see, the effectiveness of WWV would be seriously impaired. Products that already use WWV as a source for accurate time would be useless.
3. There was an attempt in Japan to implement BPL. It was a failure because of interference issues.
4. Interference from BPL is not the only issue. BPL signals can be corrupted by authorized services already using the same frequencies that BPL uses. Other authorized services including Amateur radio, shortwave broadcasters, CB radio to name only a few could well interfere with BPL. Power lines are not shielded like cable and would be very susceptible to interference making any services provided by BPL sporadic and therefore frustrating to customers and providers alike.

Thank you for taking my comments.

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