

Jack Brindle
1290 South Clover Avenue
San Jose, CA 95128

Re: FCC Docket 04-37

Sirs,

I would like to submit a comment in response to NPRM 04-37. The widespread implementation of Access Broadband over Power Line will have detrimental effects for all current services using the HF and lower VHF frequencies, including the Amateur Radio Service. It will also greatly affect current Part 15 users of this spectrum, notably users of remote controlled devices operating in the 27 MHz and 49 MHz bands.

Explaining to a child that his remotely control toy no longer works because of interference from Access BPL is not something I would like to do.

Indeed, if Access BPL is implemented in as proposed in docket 04-37, there should be constraints and requirements placed on the implementers which will require them to eliminate or mitigate interference in a timely manner. At a minimum, the requirements suggested in NTIA report 04-413 "Potential interference from Broadband Over Power Line (BPL) Systems to Federal Government RadioCommunications at 1.7 to 80 MHz, Phase 1 Study," should be adopted. These place specific requirements on the service providers for mitigating and reducing interference.

The NTIA report does have some shortcomings in its recommendations, however. NTIA testing at HF used vertical antennas, which are appropriate for mobile HF installations. Most HF licensees use horizontal antennas, which will be greater affected by the horizontal orientation of the power lines due to the polarization of each type of (incidental) antenna. **Thus testing requirements should also require the use of both vertical and horizontal antennas.**

The NTIA also recommends testing be conducted at a height of 10 meters, approximately the same height as the power lines themselves, at a distance of 10 meters from the power lines. The typical suburban house lot is approximately 72 feet by 120 feet, with power lines running across one end of the lot. With normal setbacks, the licensee's HF antennas will be well within the 10-meter distance from the power lines, and thus more highly susceptible to receiving incidental radiation (and thus interference) from the power lines. I would suggest adding an additional test closer to the power lines, perhaps at a distance of 5 meters, in order to approximate real-world conditions.

Testing for these conditions will almost always occur in fresh installations, with no problems due to corrosion or oxidation of the power lines. As you may know, power lines are typically not insulated, and thus are highly susceptible to aging and oxidation during their life. As oxidation occurs, resistances between connected wires will increase, and thus will the opportunity for an increase in incidental radiation. This effect is commonly seen in existing RF installations, causing unintentional mixing of RF signals producing

radiation, and thus interference, on unintended frequencies. Power companies are already required to perform periodic maintenance on their lines to mitigate the effects of vegetation growth. **I strongly suggest that they also be required to periodically repeat the incidental radiation tests so as to assure that the lines are maintained within Part 15 (or better) regulations.**

Most commenters are noting the necessity for verification and testing of the BPL signals and power lines so that band licensees can co-exist with BPL providers. As is the case in international affairs, it is the verification of compliance that is called for here. Without verification and meaningful enforcement, current services will not be able to exist with BPL, causing severe problems for all concerned. As an amateur radio licensee (callsign WA4FIB), I am greatly concerned as to the effects of Access BPL to my own ability to operate within the terms of my license. **I call on the Commission to assure that the implementation of Access BPL does not adversely affect my abilities to operate in the amateur HF bands, providing normal as well as emergency communications.**

Thank you for your concern.

Sincerely,

Jack Brindle