Docket 03-104 BPL Radiation Limits
Ladies & Gentlemen:

For a number of reasons, the short-wave spectrum is important to private citizens in the U.S. Any change in FCC policy allowing greater radiation from unlicensed Part 15 operation jeopardizes the spectrum usage of existing, licensed users. I fully support the filing from the Amateur Radio Relay League (ARRL) on this matter, and encourage your full consideration of their position.

As the ARRL has said, increasing interference on these frequencies will diminish the usability and therefore reduce the value of international broadcasts, Amateur Radio users, and other licensed users. I am one of many who obtain a more balanced perspective of global, newsworthy events through short-wave radio broadcasts. This is especially important during news coverage of a major local event in the U.S. that eclipses normal coverage in the regularly available news media of other important global events. News coverage of last week’s power outage in the Northeast is a good example. Additionally, hearing information from source countries validates the authenticity and enhances the rich understanding of the situation. Increasing short-wave interference by allowing higher radiation limits for BPL is a form of radio "jamming" of those international broadcasts and is effectively not too different from what Cuba has done with our VOA broadcasts. This jamming renders listening to a broadcast a painstaking effort. What will replace the real-time, inexpensive, yet rich view of the world through short-wave broadcasts?

I am also one who was attracted to radio, including Amateur Radio, at a young age. In fact, it was this interest and the exciting possibility of building a radio myself that could communicate with others around the world that led to my obtaining both bachelor and master degrees in Electrical Engineering. I have used this knowledge and experience directly in serving my country through military service and through providing communication support in statewide emergency response organizations. In this way and others, short-wave radio makes the U.S. stronger by encouraging study and achievement in related technical fields. Furthermore, it is an inexpensive way to maintain such nation-wide expertise for quick use during times of national emergency. Increasing interference on the short-wave spectrum would diminish this attractive motivation for guiding the technical education of future generations.

A third point is that the BPL over electrical transmission lines is already obsolete technology, both technically and economically. These services are best provided by other technology that does not demand such a substantial compromise from the current users of the short-wave spectrum. Satellite, cable TV, telephone lines and fiber optic media come immediately to mind. Even if the request to raise the radiation limits of BPL succeeds and demand for the service does not materialize, having these higher radiation limits is a temptation for other uses. I urge you to consider and include a “sunset” time limit on any authorization to increase the BPL Part 15 radiation limits. Ideally, this increase in radiation limits would be first granted on a temporary, pilot basis in a restricted

geographical area so that true interference potential may be determined and corrected. Certification of protocols that minimize interference would be the result of the pilot.

The susceptibility of the BPL from interference from licensed users has not been established. According to FCC regulations, Part 15 users must accept any interference from licensed users. So, if I transmit on Amateur Radio frequencies near BPL enabled lines, will I as a licensed user receive protection from the users of BPL so that I may continue my licensed service. How reasonable is it to believe that the Amateur Radio operator will be allowed to continue his activities amid complaints from BPL users?

Finally, mechanisms should be established that prevent and correct any interference to existing licensed services. These mechanisms must have enough force to motivate a prompt remedy for any interference. These mechanisms must also recognize and compensate for the political power mismatch of the private citizen pitted against the powerful electric utilities and their governmental lobby.

I urge your careful consideration of all aspects of the change in the Part 15 radiation limits as it is related to BPL. Please proceed with caution. Once significant infrastructure is purchased, it will be difficult for you as a regulatory agency to revert to the way things are now.

Thank you for this opportunity to share my comments to the ARRL filing. I hope that you will seriously consider my viewpoint in your deliberations.

Brian R. Murphy August 19, 2003