

The proposed Broadband over Power Line (BPL) digital communication systems have the potential to increase noise levels throughout the HF radio spectrum, and thus adversely affect current users of these frequencies. This follows from the basic BPL concept of using unshielded power lines that are many wavelength long at the frequencies being transmitted. The smallest imbalance in BPL currents in these lines will cause radiation over large areas. Some imbalance seems unavoidable given the nature of power distribution wiring, with varying wire spacings, circuit lengths, and load distributions. Particularly in urban areas with a high density of power lines, the cumulative effect of low level RF radiation from these lines could be significant. The Commission should keep in mind that HF frequencies are normally used for long distance radio communications where received signal levels can be very low. The introduction of BPL systems should not be approved until realistic field tests have determined that the resulting increase in background noise will not affect current users of the HF spectrum.