

It is widely known that balanced open-wire transmission lines will radiate significantly if the conductor spacing becomes greater than 1% of a wavelength (this criterion applies to TV twinlead an/or ladder line). Typical local power distribution employs line separation of about 3 feet; therefore, spectral components of the BPL signal above about 3.3MHz will violate the criterion. At frequencies above 30MHz the typical power lines may act more as antennas than transmission lines. As an antenna engineer in the military and aerospace industries, and as an amateur radio enthusiast for nearly 50 years, I am gravely concerned about the interference potential that BPL poses.