

Frankly, I don't think this broadband over power line (BPL) has even a remote chance of coexisting with existing radio services in the spectrum below 80MHz. That judgement comes from some 40 odd years of experience analyzing, designing and testing radio communication equipment.

What you are dealing with here is not transmission but radiation. At the frequencies in question, above-ground power lines are going to work far better as antennas than transmission lines. Granted, a small fraction (very small, indeed, I suspect) of the energy will be transmitted. The rest will be radiated as interference.

However, you don't need to take my word for it. You don't even need to conduct any full scale testing. There are plenty of analytical tools available to permit simulation and highly accurate analysis of such a system on your typical personal computer. If FCC is unaware of and/or inexperienced with such tools, drop me a line and I will try to help.

Furthermore, if my experience with our local power distribution network is any indication, the electrical utilities have more than they can handle just to control radio frequency interference from their existing equipment. Let's at least see them meet their commitments under current rules and regulations before giving them an avenue to cause problems of monumental proportion.

-jv