

To the Commission:

These informal comments respond to your Notice of Inquiry concerning Broadband over the Powerline concept. As an amateur radio operator, school teacher, and concerned citizen, I consider any advancement of the State of the Art a positive development insofar as it is well-conceived and thought-out. For reasons I shall explain, I have some cautions to make regarding the transmission of anything over powerlines, but especially broadband transmissions.

For starters, most powerlines I have seen are unshielded. Whatever radiates from a powerline can be transmitted over long distances, except under very controlled circumstances. Some such controlled powerline transmissions are described in Part 15, which governs unlicensed broadcasting using powerlines. However, such transmissions in the past have traditionally been narrowband and confined to frequencies which are incompatible with long-range transmission using low powers. In order for any broadband concept to be practically valid, it could not be constrained by these low-frequency limitations, and thus, a risk must be created to sensitive operations on higher frequencies.

For all of these reasons, and those incidental thereto, I recommend the Commission consider the potential for excessive radio-frequency interference if this proposal is carried forward under anything less than strict limitations on power and modulation characteristics. Secondly, most household appliances and AC-power dependent equipment could be damaged by the introduction of higher-frequency radio-frequencies on AC-power lines. Finally, the introduction of greater potential for interference by Part 15 devices in preference to licensed services is, in this author's opinion, intolerable. In the United States, should Part 15 devices continue to exploit spectrum used by licensed services, those in the licensed services may see their future potential to develop the State of the Art in telecommunications diminished or destroyed altogether. It is crucial that the Federal Communications Commission be judicious not to overwhelm licensed services with Part 15 device interference cases that the Commission itself is not capable of dealing with through appropriate enforcement strategies, otherwise the Commission is creating an unlicensed service with de facto equal standing with licensed services. For all these reasons, I urge the utmost caution against expanding the broadband over powerline proposals into reality without tough, enforceable, and strictly monitored standards, and to these ends, I am....

Most respectfully yours,

/s./ James E. Whedbee
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