

The price of bringing a "third pipeline" of broadband network to every power plug in America is far too high: Devastation of a precious, irreplaceable natural resource. Such a development will be particularly tragic since BPL will not be able to expand much further beyond its current bandwidth capacity and will therefore cease to be competitive when the next generation of broader bandwidth services are introduced.

The Commission shows a profound and alarming lack of grasp of radio technology and practice in statements such as this one from paragraph 35 of the NPRM:

"We therefore would expect that, in practice, many amateurs already orient their antennas to minimize the reception of emissions from nearby electric power lines."

The actual case is that such interference sources are essentially in the near field to such antennas, being at most only a few wavelengths away, and provides harmful interference regardless of orientation. The amateur radio or other licensed operator is essentially out of luck in many of these cases as many utility providers are recalcitrant in resolving them. There appears to be no practical recourse. Who will be responsible for the resolution of the inevitable interference problems which Access BPL will spawn once it is highly deployed and subscribed? The electric utility? The BPL provider? An interference resolution that takes months of footwork and legal assistance to obtain is no resolution at all. To be in practical compliance, interference mitigation must occur within minutes if not faster, at any time of day or night, any day of the year.

Since the commercial and regulatory proponents of BPL are largely ignorant of the science and art of Radio, consider this analogous example. Suppose that the Commission was asked to approve some digital technology which, through its deployment, would make cellphone traffic impossible within a 200 foot radius of any power outlet in the country. Cellphones would be rendered useless within all houses and buildings. Entire neighborhoods with high population density would be blacked out from wireless service. The very place where you need such service, where people are, would lose it. Commissioners and Commission personnel routinely use this technology and presumably understand its potential, and its foibles, well. They would quickly side with significant monied interests to squelch such an emergent technology immediately, even if it otherwise promised some progress towards one of their core goals, such as a "third pipeline" for already established services.

Licensed users of the radio spectrum to be impinged by Access BPL technologies are in exactly this situation. The Commission, therefore, is saying in essence that they do not know what all the fuss is about with high frequency radio operation, but even if there is some problem (which they doubt), it's not a big deal anyway since those services are, practically speaking, politically and economically unimportant. And anyway, can't you just turn some knob on that apparatus and make the problem go away?

The answer to this last question is, in this case, "no". If this is

not obvious to the reader, my point is made.

For most of a hundred years, practitioners of the radio arts have been promoted and protected by agencies such as the Federal Communications Commission. All radio operation depend on the relative and protected quiet of the natural media within which it occurs. Use of the "minimum power to perform the desired communication" is dependent on this fact.

We now enter the 21st century where the new mantra, apparently, is, "If you need to communicate, go use your wall plug." If we have to destroy a natural resource and disenfranchise all of its occupants in the process, this unfortunate consequence is of no real impact.

Be sure that this is the outcome that you want with this new technology, because it is the outcome that America will receive.