

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of:

Inquiry Regarding Carrier Current Systems,)
including Broadband over Power Line) ET Docket 03-104
Systems)

Reply Comments of the Six Meter International Radio Klub

1. The Six Meter International Radio Klub (SMIRK), an organization of nearly 7,000 active users of the 6 meter band, wishes to submit these Reply Comments on the Subject Docket.
2. In reviewing the numerous comments submitted in response to the *NOI*, SMIRK notes that **well over a thousand radio amateurs went to the trouble to comment**. We hope the Commission will recognize and act according in the light such a large volume of concern surrounding this proceeding.
3. Soifer¹ and Paige² both observe that, to assume a distance of 30 meters (approximately 98 feet) between the BPL emitter and the amateur station's receiving antenna is frequently erroneous. Paige notes that, in his case, this distance is only about 10 feet (approx. 3 meters). SMIRK contends that this lessor figure is more typical of many residential neighborhoods and should be used in assessing the strength of BPL interference.

¹Comments submitted by Raphiel Soifer, W2RS.

²Comments submitted by Bruce Paige, KK5DO

4. The Central States VHF Society ("CSVHFS")³ points out that harmful interference from BPL would likely extend well above the actual frequencies employed by the devices, due to the generation and radiation of harmonics well into the VHF, UHF and even microwave bands. The Commission should note that some BPL advocates suggest that the devices might notch out the amateur HF allocations or move to other frequencies when a strong HF signal is detected. Such measures will have no effect on the harmful harmonics the devices are certain to generate. SMIRK is concerned about the effect of this interference on the very weak signals frequently encountered on the 50 MHz band as well as higher amateur bands. Similar concerns are expressed by the National Academy of Sciences⁴ in connection with radio astronomy bands. A like concern is expressed in the joint comments filed by The Association of Maximum Service Television Inc. (AMST and The National Association of Broadcasters (NAB)).⁵ **SMIRK finds it amazing that no one has commented on the distinct possibility of interference to aircraft communications**, certainly a significant safety issue which the Commission must thoroughly examine before taking any action on the Subject Docket.
5. SMIRK contends that the Commission must rigorously assess all of these concerns before proceeding further with BPL. Such assessments should include, not only analyses but exhaustive testing. This specific caution is eloquently stated by the National Telecommunications and Information Administration (NTIA).⁶ In particular, NTIA expresses concern over the location of many pole-mounted interface devices and their potential close proximity to public safety mobile and base stations operating in the 30 to 50 MHz region. If interference to public service communications which employ FM, a mode relatively immune to interference, what will the effect of BPL be on reception of weak single-sideband signals frequently encountered on the 50 MHz amateur band?
6. SMIRK wishes to especially commend ARRL for its very complete treatment of the subject of potential BPL interference.⁷ It is noted that ARRL does not merely cite concerns but backs up its contentions with exhaustive engineering analyses. It is this type of analyses, supported by the aforementioned testing, which must take place before the Commission should even consider turning BPL loose on the radio

³ Comments submitted by the Central States VHF Society

⁴ Comments submitted by the National Academy of Sciences

⁵ Joint comments filed by the National Association of Broadcasters and the Association of Maximum Service Television

⁶ Letter dtd July 1, 2003 from F.R. Wentlane, Associate Administrator Office of Spectrum Management, National Telecommunications and Information Administration, to Edmond J. Thomas, Chief FCC Office of Engineering and Technology

⁷ Comments submitted by the American Radio Relay League

spectrum. None of the proponents of the technology have furnished any such detailed analyses, much less submitted any test results of its interference potential. Some even appear to imply that the benefits the technology will bring, outweigh any inconvenience it might cause other services using the radio spectrum. SMIRK sees this as an outright admission that they expect significant interference to result from BPL deployment, and appears to display a “don’t care” attitude on their part.

7. Like ARRL and many others commenting on the Subject Docket, SMIRK believes that BPL represents a major threat to all users of the radio spectrum. Once deployed, consumers’ expectations will be such as to preclude its termination, no matter how much interference results, both to and from BPL. It will inevitably be both widespread and impossible, as a practical matter, to rectify. Indeed some BPL proponents state in their comments that **“it will improve as time passes.”** By this, they apparently mean that pressure will be exerted on the Commission to allow it even greater power levels and more spectrum, in order to provide even faster data rates and/or span greater distances. They are certain to contend that, by allowing such an extension of their already too great power and bandwidth, costs will be reduced still further and the public will enjoy even better service.

8. It isn’t as if BPL were the only, or even best, way to bring broadband into homes and offices. Other methods, such as fibre optics appear much more suitable from the security standpoint as well as not causing, interference to other communications services or suffering interference from them. SMIRK believes that, actions, which are within the Commission’s power to take, can open the way to extensive deployment of fibre to households and businesses. This will not only bring more bandwidth than BPL can ever provide, but also provide competition to the cable television industry. Yes, this approach will be more expensive to install than will BPL. But BPL’s supposed low cost must be evaluated against the economic damage it will do to some 600,000 licensed radio amateurs, plus numerous other communications services certain to be harmed by its raucous presence. **Once the gene is out of the bottle, the Commission will not be able to put it back.** SMIRK firmly believes that allowing the deployment of BPL will be a **mistake of a far greater magnitude than that made by the Commission in the mid-1950s when it authorized the Citizens Band at 27 MHz.** How far-reaching has that decision been in terms of enforcement costs, both in this Country and throughout the world? Almost 50 years after that fateful decision, which seemed so innocent and logical at the time, so-called “free-banders” continue to roam unchecked both within the limits of the CB assignment and up and down the spectrum on either side of it. **Please, let’s not commit another similar blunder with BPL.**

9. For the reasons cited, SMIRK joins ARRL, AMSAT hundreds of individual amateurs plus NTIA, the National Academy of Sciences, NAB and AMST, in respectfully urging the Commission not to take any steps to permit BPL access to HF or VHF frequencies.

Respectfully submitted,

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