

TO: THE FEDERAL COMMUNICATIONS COMMISSION

FROM: JOHN N. BROW, AMATEUR RADIO STATION LICENSEE KD7QPY

SUBJECT: BROADBAND OVER POWER LINES (BPL) AND POWER LINE
COMMUNICATIONS (PLC) COMMENT ON FCC DOCKET 03-104

I would like to first thank the Federal Communications Commission for their opportunity to comment on this issue.

My background includes being a licensed radio amateur (General Class) and an IT professional. I also own a digital subscriber line (DSL) at my residence. I have been active using the Internet since approximately 1993 and first started connecting to computers using 300-baud acoustic modems over telephone lines since 1977.

The proposal and experiments to carry digital information over power lines as outlined in FCC Docket 03-104, in my opinion, is fundamentally flawed and attempts to solve the core issues of mass-access to the Internet by creating even more problems in another medium, namely radio communications. As an attempted "tradeoff," weighing the needs of one communications medium versus another, this is still quite disruptive in my opinion.

I would first present to the FCC the notion of "Radio Smog," which I would characterize as the buildup of radio energy, both in low levels and high levels, and existing on various frequencies. I am confident that the FCC is well aware of the limited resources of the radio spectrum and of its huge responsibilities to manage this spectrum on behalf of the United States Government. As new technologies such as Radio Frequency Identification (RFID) tags for inventory tracking, BPL/PLC (the issue discussed here for comment) and many other technologies including all forms of wireless communications such as cellular and the many Part 15 devices continue to be introduced into the United States--radio energy continues to blanket us at increasing rates. It is inevitable that interference between these many RF-based applications will exist. Taken together, the sum amount of this RF energy I present as "Radio Smog".

As presented in the FCC Docket 03-104, this new medium of carrying digital traffic across power lines contributes to the "Radio Smog" and carries with it the capability of being the most egregious offender of interference of all the other technologies. Safeguarding against interference to the high-frequency (HF) allocations that exist primarily between the eighty (80) meter and ten (10) meter bands could simply not be guaranteed without even more regulatory pressure from the FCC. In my opinion the responsibility for compliance would of course be the power-line companies. I truly doubt that such a burden of compliance would not be without tremendous cost--and I also doubt that compliance against "harmful interference" as traditionally defined by the FCC could be achieved at any cost. Hence my concerns that "Radio Smog" would only grow if BPL/PLC would be implemented.

I applaud the FCC for their consideration of this and other technological solutions to the issue of Internet access. My recommendation to the FCC is to reject BPL/PLC as stated in the Docket as (a) not feasible; (b) a potential source of "Radio Smog"; and (c)

an unacceptable alternative to Internet and other digital transmissions.