Re: ET Docket No. 03-104

If I may, I would like to voice the following questions and concerns about BPL:

1. How would one more provider more or less make much difference?
2. Would this service really be deployed in underserved areas or end up concentrated in markets with ample wireline and wireless service? What financial incentive would the providers have to target areas currently without service? It would be reasonable to assume that areas needing service are that way because there are too few potential customers to justify the expense. How would this change?
3. The capacity of this system (11mbit?) seems a little low to be able to satisfy large numbers of users. Would the system be broken onto segments? How would this work? How would coupling between segments be detected/avoided?
4. The demonstrations seem to consist of very small installations. A general deployment might be several orders of magnitude more complex with tens of thousands of elements to be modeled. How do these demonstrations relate to the reality of a large deployment?
5. As a practical matter, it is up to the consumer to identify and track down sources of interference. Those responsible for the interference have compelling financial reasons to ignore complaints or try to shift the responsibility. Consumers are poorly equipped for this task. How would BPL be any different?
6. Many are already talking about very high noise levels. When does the 'noise floor' become unreasonable? Who is to set that threshold? How would it be monitored in various areas?
7. The NOI notes that field measurements are impractical. Yet conditions vary greatly from area to area. How can any general statement/rule apply to even a majority of urban areas? How will areas unsuitable for BPL be identified and protected?
8. Many areas of Houston have so much 'RF smog' that receivers are overloaded to the point of being badly degraded. How can any increase be justified? Would this 'smog' also drown out BPL service?
9. In Houston, we seem to have a lot of issues with combinations of services interacting to cause a lot of interference. Will there be anything done to identify and avoid this kind of interaction?
10. The NOI does make a start in looking at the potential for BPL causing interference. What about transmitters being operated very close to the power lines? I my case, for example, I operate an antenna within a few meters of the same lines that would be used for BPL. Wouldn't the BPL equipment be overloaded? Why not?
11. What if I do experience or cause BPL interference and the best technical solution is to relocate the antenna? Many areas pose restrictions on where antennas can be located and leave very little room for relocation. Some areas have outright bans on visible antennas. What then?
12. I greatly dislike being a source of interference to my neighbor's equipment, even the fault is really in their equipment. How can I be assured I will not cause any interference or degradation?
13. If I suspect interference from BPL, what am I supposed to do? Given that BPL energy can travel long distances, how would I identify the source?

14. A power distribution grid would look like a huge, incredibly complex antenna system with tens of thousands of ‘elements’. There would be enormous random factors (trees limbs swaying nearby, for example) with elements constantly being added, removed, and relocated. Add in additional RF from nearby transmitters operating in the very same frequency ranges interacting with the RF from BPL. How could the behavior of such a beast be reasonably predicted and controlled?