

Comment ref par 21:

I recently had two HomePlug devices in my office for testing before I installed them at a client's site. It took me less than 5 minutes to find strong birdies in the amateur bands measuring S6 on a Yaesu FT1000-D transceiver with outside antennas at 50 feet. Birdies were noted in most HF amateur bands from 40 meters up through 10 meters at strengths varying from S2 up through S6. Several such signals were also observed on the 6 and 2 meter bands. I confirmed that they were caused by the HomePlug device because they disappeared when I unplugged the devices from the power lines.

Comment ref par 35:

I do not concur with your conclusion that amateurs will orient their antennas away from power lines as a matter of course to minimize interference. My antennas always point at the station I am trying to contact because that maximizes my received signal. Moving the antenna away from the contact reduces the received signal. I do this without regard to where the power lines are and often have no choice anyway because power lines are all around me. For the lower frequencies (160 and 80 meters) steer-able antennas are the exception rather than rule for most amateurs.

Comments ref par 42:

There should be no exemptions for existing BPL installations. BPL is BPL and since there were no regulations developed prior to this point, all existing installations should be brought into compliance with new requirements within 90 days, which would seem more than reasonable. Since both the industry and the regulations are all being developed on the fly, so to speak, any provider that rushes into full scale deployment knowing that this is the case does so at their own peril.

Comments ref par 43:

An industry representative entity would seem appropriate for maintaining a uniform database of operators providing BPL services, their location, contact information, and geographic areas covered, and other technical information as stated in 43. In any case the data must be publicly and readily available. The Internet provides an ideal medium for accessing the data. Operators responsible for adhering to Part 15 regulations should be assigned a uniform and unique identification code that would serve as a key for accessing the database. A centralized database is essential because there is no reasonable way to index and access a database distributed over a large number of providers. To minimize the maintenance on such a centralized database, it does not need to include the detailed technical characteristics of the system. Instead link pointers to individual providers' web pages containing the details would be acceptable. All the centralized database must provide is a means of contacting a provider found to be generating radiated interference.

BPL providers must be identifiable from their transmitted signal itself. It should not be too difficult for providers to be required to embed their unique identification code (the key used as the index into a central, publicly available database) in some kind of readily decipherable signal. For example, since the whole system is digital to start with, broadcasting an X.25 protocol packet containing the provider's ID code periodically would be sufficient

and not make any noticeable difference in the available bandwidth to their customers. In my opinion this is crucial to make this work and should be an FCC requirement if there really is interest in making sure that these Part 15 device/system providers are not radiating. The providers should welcome it as well since it could be the only way to discover whether or not it is they who are radiating RF. If no ID can be recovered by a receiver and decoder off the air, they are not radiating. If it can be decoded then it must have been radiated and furthermore the source of the interference will also be known. Requiring an identification scheme embedded in the BPL signal will also settle the issue once and for all as to whether or not atmospheric propagation is possible. All of the comments to date from the FCC and the BPL industry have stated non-radiation as an assumption. I and many other amateurs disagree with the assumption.

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