

Illinois Repeater Association

Newsletter

Volume 19

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Fred Seibold W9FWS, Editor

We Must Use Our Repeaters To Fight The BPL Threat

Broadband (data over) Power Lines is the biggest threat to ham radio frequencies since the end of World War I. A powerful consortium of electric utilities is lobbying the FCC to permit broadband data transmission over electric power lines. Although electric power lines are "transmission lines" at the 60-Hertz power frequency, these same lines are **long-wire antennas at AM Broadcast and MF-VHF ham frequencies.** Unfortunately no FCC Commissioner is an engineer, and the FCC engineering staff is much smaller than it was. So when Commissioner Kathleen Abernathy gushed about the bright future of BPL at a slick presentation by its proponents (no opposing views allowed), the grim spectre of this well-financed assault on our frequencies became starkly clear.

If you think the only noisy band is 160 meters in summer, wait 'til BPL is deployed. All frequencies from below the AM broadcast band to the VHF range will be jammed with the broadband noise of data signals radiated by power line antennas everywhere there is a power line.

You can help fight this well-financed assault on our spectrum. There are about 700,000 active ham licenses in the country but only about 170,000 members in the American Radio Relay League (ARRL). Please keep this issue of the IRA Newsletter handy so whenever you are on the air you can recruit hams to help oppose BPL. **With 76% of licensed hams not getting the word on BPL** because they don't belong to ARRL, the 76% will not be joining the fight we must all support with letters to our Congressmen and Senators and protests to the FCC which you can file electronically by e-mail. ---W9FWS

Every Time You Are On the Air, Talk About The Threat Of B P L

Look At The Mailing Label On This Newsletter

In response to several requests we have attempted to upgrade the mailing labels. You should find a number or letter as the fourth line of the label. This is an indication of your membership. As an example, an N indicates that you are not a member of the Illinois Repeater Association Inc. and 04 shows that your dues are paid for 2004.

This is our first attempt to upgrade all of the labels and since the labels are manually typed I may have made some errors. If you find what you believe to be an error, please notify the Secretary/Treasurer for corrections.

R.J. Koch KA9FCF
Secretary/Treasurer
Illinois Repeater Assoc. Inc.

BPL FCC Websites:

Read and download the FCC's NPRM on BPL in Microsoft Word format at:
http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-04-29A1.doc

Read and download the FCC's NPRM on BPL in Adobe Acrobat (PDF) format at:
http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-04-29A1.pdf

File your detailed Comments via the FCC's Electronic Comment Filing System (ECFS) at:
<http://www.fcc.gov/cgb/ecfs/>

File your brief Comments on the ECFS Express page at:
<http://gullfoss2.fcc.gov/ecfs/Upload/>

Notes From the Coordinator

There seems to be some misinterpretation of the terms used in application for coordinations. The term "Trustee" is one of them. The trustee must be the person whose callsign is broadcast by the repeater in the case of an individually owned repeater. Club stations may have a different person designated as trustee if the club does have a valid club station licensed callsign issued by the FCC. That callsign must be the one listed in the FCC data base as the trustee. **If a club sponsors a repeater but carries the callsign of an individually licensed person, that person must be the trustee.** The contact for the repeater may be any licensed amateur that has an affiliation with the Individual or club and will receive and must respond to all IRA correspondence, including annual update form returns. All individuals and clubs must notify the coordinator when there is a change in the contact person or their street address, telephone number or email address. The Holder of Coordination is the only one, in case of an individual who can authorize a change in operational profile, relinquish a frequency for reuse. For a club station an elected officer must be the authorization authority with full knowledge of the trustee, if not the same individual. I find there may be links that do not appear in the IRA data base, i.e., are not coordinated. Such deficiencies must be corrected by applying for coordination of these links, so that proper attention to their protection can be given during the ongoing coordination tasks.

There is a section in the ARRL Repeater Directory for Internet Relay Link Protocol equipped repeaters. I will include this feature and any other special ones such as APCO25 if I get the information by mail or on the annual update form returns. These features will show on our website www.ilra.net, but the ARRL Repeater Directory does not yet have a format for inclusion in the repeater listings. Please send me the full name and mailing address of all clubs, whether merely sponsors or have a repeater with a FCC recognized callsign, e-mail cberg@svs.com or include on your annual update form when you return it. ---K9VXW

April 2004 IRA Annual Meeting Notice

The annual meeting of the Illinois Repeater Association will be held on **Saturday, April 17, 2004** at the Best Western Eastland Suites Lodge and Conference Center, 1801 Eastland Drive, Bloomington, IL. The Best Western is located at Eastland Drive and Prospect just off Veterans Parkway (Business 55). Exit Veterans Parkway at Route #9, which is also Empire Street. Proceed east approximately one block to Prospect then south to Eastland. IRA Delegate check-ins and any dues payments will start at 0900 local, with the meeting starting at 1000 sharp. When dues are paid in advance the check-in process is quicker and eliminates much of the delay. As in the past we anticipate the meeting to conclude around 1300 to 1400. An IRA "Membership Information" form on file listing the delegates (max of two) and signed by the president and/or trustee and showing paid up dues for 2004 are all that are needed to vote at the meeting.

Please take time to attend and give your input to your Association.

Have you submitted your annual update???

Are all your operating parameters (power, antenna height, gain, geographic coordinates, etc.) all current???

Your coordination is at risk if this info is not up to date at the IRA.

Will you have CTCSS on your repeater in time to meet the deadline of December 31, 2005???

Floods of e-mails can get past corporate clout at the FCC ---W9FWS

The biggest issue at the FCC in 2003 was the revision of the broadcast ownership rules to permit more stations to be owned by a single corporation. There were over a million opposition e-mail Comments filed in this proceeding, which I suspect is more Comments than have been filed in all the previous Rulemakings in the history of the FCC put together. Suddenly Chairman Powell learned to spell "localism" and scheduled hearings all over the country about "localism", which is notably absent from most mega-corporate broadcasting operation. Congress quickly noted voter's views in this election year, and even a Philadelphia Federal Court jumped in (most appeals of FCC actions are heard in the DC Court).

The FCC has issued 8 experimental licenses for BPL/PLC. Not all of these locations have ongoing field trials, but these are certainly areas to watch. Some of these specify that the station location will be within 20 km of the listed city. Some of these field trials are rather small.

Ambient Corp WB9XQT
Westchester County, NY

Ameren WC2XXK
IL, MO, unspecified locations

Amperion WD2XCN
Dublin, OH

City of Manassas WD2XCZ
Manassas, VA

Current Technologies WC2XUV
IN, OH, MD, unspecified locations

PPL Utilities WC2ZZQ
Allentown, PA

Progress Energy WD2XCA
Raleigh, NC

Southern Telecom WC2XZG
AL FL, GA, MS, unspecified locations

The best Filing (yes, you can do it) has solid information, with rant mode turned off. Here is some information to help you formulate intelligent comments in opposition to BPL:

<http://www.arrl.org/tis/info/html/plc/>

...plc as in Power Line Communications.

This web page tells how BPL/PLC works, gives the regulatory history thus far at the FCC, lets you review Part 15, and learn about tests that have already been done in England, Holland, Japan, and other places. You can read FEMA's opposition to BPL which they filed with the FCC. You can read about Commissioner Abernathy's "broadband nirvana" remarks which she later modified in an attempt to evade the flack she received over them. This part of the ARRL website is open to anyone, whether or not they are an ARRL member.

Please tell your fellow hams, emergency services folks, and local AM broadcasters to visit this web page, study it, and file a comment with the FCC using the URLs on the front page of this newsletter.

If your computer has a sound card, you can hear BPL interference at: http://www.qsl.net/rsgb_emc/MN_1.wav Recorded about 3m from the house on the 7MHz amateur band. This is described as a spread spectrum system. Interference depends on the density of traffic. Recording starts with light traffic increasing as the recording proceeds.

The Ascom system #1 http://www.qsl.net/rsgb_emc/delivery.wav Recorded about 4m from the house in one of the "delivery" frequency bands. This system uses three discrete frequency bands, below 10MHz, to deliver signals to the house. The bands are about 1MHz wide.

The Ascom system #2 http://www.qsl.net/rsgb_emc/inhouse.wav Recorded about 4m from the house, in one of the "in-house frequency" bands. This system uses three discrete frequency bands above 10MHz to distribute signals in the house.

The .wav files are from the Radio Society of Great Britain (RSGB).

BPL Proposal Enters Second Phase FCC Rushes Out NPRM On BPL

by Dick Iseley, W9GIG, ARRL Director

After reading the FCC's Notice Of Inquiry (NOI) on Carrier Current Systems including Broadband over Power Lines (ET Docket 03-104) filed last April, I was convinced the Commission was going to approve rules governing the operation of what is now referred to as BPL. What I did not expect was the Commissioners' almost total disregard of hundreds of well-reasoned scientific and economic arguments against their proposal and their rush to put these rules into place. This NOI drew over 5000 comment filings. The FCC could not even wait for the National Telecommunications & Information Administration's (NTIA) study of potential interference problems, which should be completed within the next month or so, before it issued its Notice of Proposed Rule Making (NPRM) on Carrier Current Systems including Broadband over Power Lines (ET Docket 03-104) and Amendment of Part 15 regarding new requirements and measurement guidelines for Access Broadband over Power Line Systems (ET Docket 04-37) on February 23, 2004.

Thus ends what can be called Phase One of the struggle to keep a usable HF spectrum for licensed users.

Phase Two of this struggle is, of course, the Comment and Reply Comment filing periods for this NPRM. This time period is 45 days from the date the NPRM is published in the Federal Register for comments, and 75 days for reply comments.

At the time of writing this newsletter, this NPRM had not yet been published in the register. However, comments may now be filed and the filing format and procedures are exactly the same as it was for last year's NOI on this proposal.

Major reasons for prohibiting BPL are:

1. BPL will interfere with most licensed users of the affected RF spectrum. How much and where depends on several variables, but there will be interference.

2. BPL will interfere with itself. Different RF signals propagating on parallel unshielded power lines will cross modulate each other and disrupt data integrity.

3. Licensed users of the affected RF spectrum will interfere with BPL signals. Unshielded power lines receive as well as transmit RF signals.

4. BPL will not be cheaper than other high-speed broadband transmission systems. BPL RF signals must be re-injected onto the power line about every 7000 ft. in order to compensate for attenuation. This will require constructing a coaxial cable distribution system very similar to a cable TV network.

Therefore, there is no cost advantage and BPL will not be offered in rural areas at below market rates.

5. The RF interference BPL will generate will make it difficult, if not impossible in many areas, for government agencies (police, fire, emergency services, etc.), the military, and the Broadcast and Amateur Radio Services to provide vital services. **Homeland Defense will be crippled, not improved as claimed in the FCC's NPRM.**

Don't expect the FCC to have a change of heart about Broadband over Power Lines at this stage of the process. However, your comments on the commission's NPRM are needed to document growing concern and opposition. Your comments will help prepare the ground for the third phase of this struggle: a campaign to get our federal representatives to overrule the FCC. Congress has recently overruled the FCC on a different issue and it's possible it will do so again when all the problems and short-comings are documented and tens of thousands of voters ask their federal representatives to stop BPL.

Phase Three will require a massive Grass Roots Initiative (GRI) to get tens of thousands of hams and others who support and value the Amateur Radio Service to contact their federal representatives. You can, of course, do this anytime. But I believe it would be far more effective if this GRI is coordinated as to what is to be said, how its to be said, and when it is to be said. This coordination is coming from the ARRL.

Meanwhile, get your Comments on the FCC's NPRM filed as soon as you can. **Get your ham friends, local public safety and emergency service agencies, and your local AM broadcasters to file comments.**

---W9GIG

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Is your Trustee the right person? Details on Page 1

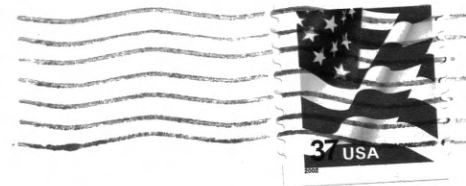
Broadband Over Power Line (BPL) is a major threat to our frequencies, MF to VHF.... learn about the threat.... learn how you can help fight it....

most importantly... **every time you are on the air
talk about the threat of BPL**

**Illinois Repeater Association
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**Annual Meeting Notice
April 17, 2004**

First Class Mail



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