BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC

In the Matter of	**)**	
	)	
Amendment of Part 15 Regarding New	**)**	**ET Docket No. 04-37**
Requirements and Measurement	**)**	
Guidelines for Access Broadband over	**)**	
Power Line Systems	**)**	

To: The Commission

JOINT COMMENTS OF
THE NATIONAL RURAL TELECOMMUNICATIONS COOPERATIVE
AND THE NATIONAL RURAL ELECTRIC COOPERATIVE ASSOCIATION

The National Rural Telecommunications Cooperative ("NRTC") and the National Rural Electric Cooperative Association ("NRECA") submit these Joint Comments in response to the Federal Communications Commission's ("FCC" or "Commission") above-captioned *Notice of Proposed Rulemaking*.[1] NRTC and NRECA strongly support the Commission's goal of bringing Internet and high-speed broadband access to rural and underserved areas.

As not-for-profit organizations representing hundreds of rural entities providing a full range of telecommunications services to rural America, NRTC and NRECA support the Commission's approach to the deployment of Access broadband over power line ("BPL") as another promising technology to bring broadband to consumers. We also urge the Commission to continue to exercise prudent caution in its approach to protecting licensed spectrum users from harmful interference while encouraging exploration of BPL technology. Specifically, the Commission should refrain from relaxing Part 15 of its

rules, or establishing new rules until it is determined with reasonable certainty that interference can be limited to acceptable levels. Finally, certainty about the policy implications presented by BPL are every bit as critical to its success as the need for regulatory certainty. Therefore it is imperative that the Commission explore policy implications presented by BPL simultaneously with its technical inquiries.

INTRODUCTION AND BACKGROUND

NRTC is a not-for-profit cooperative comprised of 750 rural electric cooperatives, 128 rural telephone cooperatives and 189 independent rural telephone companies located throughout 46 States. Since its founding in 1986, NRTC's mission has been to provide advanced technologies and telecommunications services to rural America.

NRECA is the not-for-profit national service organization representing 930 rural electric systems that provide electric service to 36 million customers, or approximately 12 percent of the U.S. population. Rural electric cooperatives are found in 47 states and in 2,500 of the nation's 3,128 counties. Many NRECA members are, as are other electric utilities, providing a full range of telecommunications services to consumers.

NRTC and NRECA submitted Joint Reply Comments in response to the Commission's *Notice of Inquiry* on BPL technologies and systems in the predecessor docket regarding BPL.[2] Because of the importance of high-speed broadband Internet service in the quality of life and business productivity, promoting its deployment in rural and underserved America is one of the primary goals of both organizations. In its Joint

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[1] *Amendment of Part 15 Regarding New Requirements and Measurement Guidelines for Access Broadband over Power Line Systems*, Notice of Proposed Rulemaking, FCC 04-29, Feb. 23, 2004, ET Dkt. No. 04-37, ("NPRM").

[2] *See* Joint Reply Comments of the National Rural Telecommunications Cooperative and the National Rural Electric Cooperatives Association, ET Dkt No. 03-104, filed Aug. 20, 2003. ("Joint Reply

Reply Comments, NRTC and NRECA highlighted the importance of broadband to rural America and noted that the two major broadband platforms -- DSL and cable modem – do not reach significant portions of rural America nor will they arrive there anytime soon.[3]

NRTC and NRECA , with their member rural electric cooperatives remain interested in BPL as an emerging technology, and have monitored BPL technology developments since 1997. Despite our desire for rapid BPL rollout, we caution that our research leads us to conclude that BPL technology will not be a viable solution in the near term for rural America.

Although we urge the Commission to continue to foster the development of new technologies, such as BPL, NRTC and NRECA continue to oppose relaxing Part 15 of the Commission's rules, or establishing new rules for signal interference, until the Commission has sufficient data that persuasively proves that interference or other adverse effects can be maintained at acceptable levels. We also commend the Commission for its prudent requirement that BPL devices employ adaptive interference mitigation techniques and remote shutdown in the event of harmful interference. Because of the concerns noted above, NRTC and NRECA support the Commission's continued encouragement for the development of satellite broadband and fixed wireless in addition to its support for the development of BPL technology.

I. THE COMMISSION SHOULD CONTINUE TO SUPPORT MULTIPLE PLATFORMS THAT DEPLOY BROADBAND TO RURAL CONSUMERS.

> [B]roadband is no longer a luxury: it's a necessity. . . . One of the most critical issues facing this country is the increasing economic and

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Comments"). NRTC and NRECA are submitting its comments to the newly established docket as requested by the FCC's Mar. 23, 2004 Public Notice, DA 04-760.

[3] Joint Reply Comments at ¶6.

> cultural isolation of rural communities - the abandonment and the ultimate re-democratization of the landscape. No business would settle in a town that lacked electricity, and we are now at the point where no business will settle in a town that lacks broadband access."[4]

The New York Times succinctly characterizes the importance of broadband access and competition for rural and underserved areas. Unfortunately, NRECA, NRTC and their Members know all too well that the economics of lower consumer density continues to forestall the deployment of the primary broadband platforms of DSL and cable modem. And as Chairman Powell acknowledges in the instant NPRM, "[d]espite increasing access to broadband services, significant areas of the country still lack any type of broadband access or competition among broadband service providers."[5]

As we noted in our Joint Reply Comments, loop length, high deployment costs, low consumer demand, and the lack of cost-effective equipment scaled for smaller companies contribute to the paucity of offerings for deployment of advanced services to rural areas.[6] The reality is that, however promising broadband technologies may be, the market dynamics of entering the rural broadband Internet business mean a single technology will not serve all customers.

Accordingly, NRTC and NRECA recommend that the Commission continue to encourage combinations of technologies including BPL, satellite, fixed wireless, and fiber optic technologies for rural broadband deployment. NRTC and NRECA maintain that the Commission is rightfully attempting to support and expedite the availability of rural broadband Internet service over multiple delivery platforms. The organizations share the desire for rapid BPL rollout, and at the same time caution the FCC that BPL

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[4] Verlyn Klinkenborg, *Taking Broadband Internet Access to the Last Mile: To Rural America*, N.Y. TIMES, March 24, 2004, at A20.
[5] Statement of Chairman Michael K. Powell, NPRM at p.34.

deployment is years from economic feasibility in rural areas. Technical concerns such as signal distance and shared bandwidth combined with economic realities of low density continue to create concerns about the deployment of BPL to rural areas.

II. RESPONSES TO THE COMMISSION'S PROPOSED RULES AND QUESTIONS.

A. The Commission Should Specify That BPL Transmissions Include Broadband Internet Services.

In its proposed Definition of Access BPL, the Commission should specify that it is high-speed broadband Internet that is permitted to be transmitted over carrier current systems.[7] The Commission should clarify its definition at 47 C.F.R. § 15.3 in order to eliminate any confusion as to what broadband services are eligible for transmission.

NRTC and NRECA propose that the Commission modify its language as follows:

§15.3 Definitions.

(ff) Access Broadband over power line (Access BPL): A carrier current system that transmits broadband Internet services through radio frequency energy by conduction over electric power lines owned, operated, or controlled by an electric service provider. The electric lines may be aerial (overhead) or underground.

B. Entities That Are Not Electrical Power Providers Or Subsidiaries Of the Incumbent Electric Power Provider May Transmit BPL.

The FCC seeks information as to whether there are entities that plan to own/operate BPL over the electric power lines but would not be electrical power providers or a subsidiary of the incumbent electric power provider.[8] The NRECA Cooperative Research Network ("CRN") discovered during its comprehensive investigation of BPL in 2003 that some business arrangements proposed by BPL vendors will involve the electric service provider being involved only as a "landlord" with the

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[6] Joint Reply Comments at ¶ 6.
[7] 47 C.F.R. § 15.3 (ff).

BPL owner/operator providing all of the ISP services while others will involve business partnerships in which entities other than the electric service provider may own or operate portions of the Access BPL system.

C. The Commission Should Specify Requirements For An Industry-Operated Entity To Be Designated As The Repository For Operator Submitted Information.

NRTC and NRECA support the Commission's proposal to track BPL carriers and coordinate their unintentional emissions through an industry-operated entity sanctioned by the Commission and NTIA. However, the Commission's proposal lacks essential details to insure an independent and unbiased entity is selected and that potential BPL operators have an advance understanding of data requirements, confidentiality, and actual role of the industry-operated entity in resolving conflicts.

The Commission should adopt clear and specific rules to ensure that a neutral third-party administrator with the ability to recognize the needs of the varied players is selected. The Commission also needs to specify how this impartial third-party administrator must collect information and with whom it must share this information.

D. Notification And Database Requirements Should Not Present A Paperwork Burden To BPL System Operators And Information Collected Must Be Available to All Parties.

NRTC and NRECA agree that the Commission's proposed notification requirements establishing a publicly accessible database for BPL information are essential to ensure that should harmful interference occur, it will be possible to identify the location of BPL systems and their operating characteristics and to facilitate interference mitigation and avoidance measures. In requiring BPL operators to provide

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[8] NPRM at ¶ 32.

this information to an impartial industry-operated entity, NRTC and NRECA request that the Commission select the least burdensome method of data collection to the BPL operators, whether through a centralized database or requiring each BPL operator to maintain its own database. The more important aspect of the FCC's proposed notification requirements is that all parties retain access to data and information collected.

III. THE COMMISSION SHOULD ADDRESS POLICY ISSUES RAISED BY DEPLOYMENT OF BPL AS IT CONSIDERS TECHNICAL CHANGES TO ITS RULES.

Although the Commission focuses on the technical aspects of BPL deployment in its NPRM, NRTC and NRECA urge the Commission to address simultaneously the policy implications BPL presents, especially as these policies impact legal and regulatory concerns for rural entities. Because of the experience of NRTC and NRECA members with other broadband systems, it makes little sense for the FCC to continue to encourage the deployment of BPL without addressing the considerable regulatory risk and resulting legal uncertainties for rural utilities.

Some of the major policy decisions that need to be addressed for possible federal solutions include easements, rights-of-way, pole attachment rules, State enabling acts, E911 requirements, and definitions of telecommunications and information services. Discussion of these policy concerns can elicit the federal interest in affirmatively resolving some of the problems presented by advanced technologies such as BPL.

Cooperatives have seen the policy implications of other services involving matters as routine as easements. For example, although an electric cooperative may allow a provider of telephone, cable television, telecommunications, or similar services to use the cooperative's poles, ducts, conduits, or rights-of-way, the easements authorizing the

cooperative to use property may, or may not, authorize using the property to provide these services. Increasingly, property owners have challenged the authority, if any, of providers of these services to use their property and are demanding compensation for use of their property to provide these services.

Other examples of important policy issues include whether BPL is considered as a telecommunications or information service, how that characterization might impact on what a cooperative is chartered to do, and whether there are other statutory impediments or solutions needed to account for the new technology.

The time and cost of litigating these types of issues might be forestalled by a greater appreciation of policy concerns before further investments are made and protocols entrenched.

CONCLUSION

NRTC and NRECA share the desire for a rapid, interference-free deployment of BPL, while urging the FCC to continue its cautious approach to amending its rules. Because of the unresolved technical and economic issues for deployment of BPL in rural and underserved areas, the Commission should not presume to stop its exploration and support for other broadband platforms including satellite, wireless, and fiber optic technologies. We offer our services to provide the FCC with any additional information regarding BPL or other technologies with the potential to bring broadband to rural and underserved America.

NATIONAL RURAL ELECTRIC COOPERATIVE ASSOCIATION
4301 Wilson Boulevard
Arlington, VA 22203-1860

/s/ Wallace F. Tillman
Wallace F. Tillman
Vice President, Energy Policy & General Counsel

/s/ Sheryl J. Lincoln
Corporate Counsel
4301 Wilson Boulevard
Arlington, VA 22203-1860
(703) 907-5847

NATIONAL RURAL TELECOMMUNICATIONS COOPERATIVE
2121 Cooperative Way, Suite 500
Herndon, VA 20171

/s/ Adam Schwartz, Vice President External Affairs

Certificate of Service

I, Kevin G. Rupy, hereby certify that a copy of the foregoing Joint Comments of The National Rural Telecommunications Cooperative and The National Rural Electric Cooperative Association has been served this 3rd day of May 2004 on the following:

Served via Electronic Mail
The Honorable Michael K. Powell
Chairman
Federal Communications Commission
445 Twelfth Street, S.W., Room 8-B201
Washington, D.C. 20554

The Honorable Kathleen Q. Abernathy
Commissioner
Federal Communications Commission
445 Twelfth Street, S.W., Room 8-A302
Washington, D.C. 20554

The Honorable Michael J. Copps
Commissioner
Federal Communications Commission
445 Twelfth Street, S.W., Room 8-B115
Washington, D.C. 20554

The Honorable Kevin J. Martin
Commissioner
Federal Communications Commission
445 Twelfth Street, S.W., Room 8-A302
Washington, D.C. 20554

The Honorable Jonathan S. Adelstein
Commissioner
Federal Communications Commission
445 Twelfth Street, S.W., Room 8-A302
Washington, D.C. 20554

Served via Electronic Mail
Susan Eid
Legal Advisor to Chairman Powell
Federal Communications Commission
445 Twelfth Street, S.W.
Washington, D.C. 20554

Bryan Tramont
Senior Legal Advisor to Chairman Powell
Federal Communications Commission
445 Twelfth Street, S.W.
Washington, D.C. 2055

Matthew Brill
Senior Legal Advisor to Commissioner Abernathy
Federal Communications Commission
445 Twelfth Street, S.W., Room 8-A302
Washington, D.C. 20554

Stacy Robinson
Legal Advisor to Commissioner Abernathy
Federal Communications Commission
445 Twelfth Street, S.W., Room 8-A302
Washington, D.C. 20554

Jordan Goldstein
Senior Legal Advisor to Commissioner Copps
Federal Communications Commission
445 Twelfth Street, S.W.
Washington, D.C. 20554

Served via Electronic Mail
Sam Feder
Senior Legal Advisor to Commissioner Martin
Federal Communications Commission
445 Twelfth Street, S.W.
Washington, D.C. 20554

Daniel Gonzalez
Senior Legal Advisor to Commissioner Martin
Federal Communications Commission
445 Twelfth Street, S.W., Room 8-A302
Washington, D.C. 20554

Barry Ohlson
Legal Advisor to Commissioner Adelstein for Spectrum and International Issues
Federal Communications Commission
445 Twelfth Street, S.W., Room 8-A302
Washington, D.C. 20554

Lisa Zaina
Senior Legal Advisor to Commissioner Adelstein
Federal Communications Commission
445 Twelfth Street, S.W., Room 8-A302
Washington, D.C. 20554

Edmond J. Thomas
Chief, Office of Engineering and Technology
Federal Communications Commission
445 Twelfth Street, S.W.
Washington, D.C. 20554

Served via Electronic Mail
Julius P. Knapp
Deputy Chief, Office of Engineering and Technology
Federal Communications Commission
445 Twelfth Street, S.W.
Washington, D.C. 20554

Bruce A. Franca
Deputy Chief, Office of Engineering and Technology
Federal Communications Commission
445 Twelfth Street, S.W.
Washington, D.C. 20554

Alan J. Scrime
Chief, Policy and Rules Division, Office of Engineering and Technology
Federal Communications Commission
445 Twelfth Street, S.W.
Washington, D.C. 20554

Qualex International
Portals II
445 12th Street, S.W.
Room CY-B402
Washington, D.C. 20554
qualexint@aol.com

/s/ Kevin G. Rupy
Kevin G. Rupy