

BEFORE THE STATE OF NEW YORK  
PUBLIC SERVICE COMMISSION

Proceeding on Motion of the Commission to Examine )  
Issues Related to the Deployment of ) Case 06-M-0043  
Broadband over Power Line Technologies )

**Comments of International Brotherhood of Electrical Workers (“IBEW”),  
Locals 83, 249, 966 and 1143 (“System Council U-7”) & IBEW Local 97,  
Pursuant to Order Initiating Proceeding and Inviting Comments Issued January 25, 2006**

**Introduction**

International Brotherhood of Electrical Workers (“IBEW”), Locals 83, 249, 966 and 1143 (“System Council U-7”) and IBEW Local 97 (collectively referred to as “Local Unions”) offer the following comments on the deployment of Broadband over Power Line (“BPL”) technologies. If the reliability of the electric grid is to be adequately maintained, given the economic pressures on the grid owners and the emphasis being placed by the Commission on fostering a competitive environment in New York, the standards regarding the manner in which BPL technologies are employed should be an important component of that effort.

Based on its members’ considerable working knowledge and operational skills regarding the electric transmission and distribution system in New York, the Local Unions contend that maintaining the electric utility workers as the predominant workforce to implement the deployment of any BPL technologies will be beneficial to the providers of BPL service, the utilities over whose lines the service is provided and to the users of both BPL and energy services in terms of both cost and quality of the work performed in New York.

## **Background**

The State of New York Public Service Commission (“Commission”) issued an Order Initiating Proceeding and Inviting Comments, Issued and Effective January 25, 2006 to consider new and unique issues pertaining to the potential use of BPL technology in New York, to identify the key regulatory issues posed by BPL, and begin to develop the appropriate regulatory response to these issues.<sup>1</sup> The Commission is presently addressing competitive telecommunications marketplace service choices (many of which use various and differing technological platforms) and their implications in Case 05-C-0616.<sup>2</sup> With regard to broadband services, customers may already have the ability to receive such services through a variety of service providers using various technologies. Telephone companies provide Digital Subscriber Line service (“DSL”) using unshielded twisted pair copper wire. Cable television companies provide cable modem service, using fiber optic and coaxial copper cables. Broadband services are available from cellular, Personal Communications Service (“PCS”), WiFi hotspot and satellite providers using radio technologies. These services reach approximately 95 percent of New Yorkers.<sup>3</sup> Therefore, a vast majority of New Yorkers have the opportunity to use broadband services. Given this fact, it behooves the Commission to approve practices which do not impair the network or stakeholders present conditions.

The Commission has also expressed its preference to adhere to its historic regulatory principles that (a) competition is the most efficient way of ensuring the provision of quality utility services at reasonable prices; and (b) structural separation of regulated and unregulated operations by electric and gas utilities or divestiture of unregulated assets are the most effective way of preventing self-

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<sup>1</sup> Case 06-M-0043 – Proceeding on Motion of the Commission to Examine Issues Related to the Deployment of Broadband over Power Line Technologies: ORDER INITIATING PROCEEDING AND INVITING COMMENTS (Issued January 25, 2006) at 3.

<sup>2</sup> Case 05-C-0616 – Proceeding on Motion of the Commission to Examine Issues Related to the Transition to Intermodal Competition in the Provision of Telecommunications Services: ORDER INITIATING PROCEEDING AND INVITING COMMENTS (Issued June 29, 2005)

dealing issues, the exercise of market power, and other potential abuses that may arise when competitive operations are affiliated with rate-regulated utility monopolies. Given the above, the Commission established the following tentative conclusions:

1. Economically viable BPL services will benefit New Yorkers through the provision of broadband services from a new facilities-based platform; and,
2. Electric utilities should not directly provide BPL services to the public. Rather, they should explore ways of granting unaffiliated BPL providers appropriate access to the electric system at market determined prices.

Given the above and the myriad of technological and regulatory challenges posed by BPL, the Commission proposes to focus on four avenues of inquiry:

1. Status and Development of BPL technology
2. Safety and Reliability of Service
3. Business Model
  - a. Structural Considerations
  - b. Roles and Relationships
4. Regulatory Framework and Issues

In addition, the Commission encourages parties to raise other issues that they believe are relevant to its overall inquiry.<sup>4</sup>

There are a variety of elements of BPL technology that the Commission should consider when adopting parameters to be used to deploy BPL technologies in New York. The Local Unions wish to offer the following comments on what they deem to be important issues in this proceeding.

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<sup>3</sup> *ibid.* at 7.

<sup>4</sup> Case 06-M-0043 – Proceeding on Motion of the Commission to Examine Issues Related to the Deployment of Broadband over Power Line Technologies: ORDER INITIATING PROCEEDING AND INVITING COMMENTS (Issued January 25, 2006) at 4.

## Discussion

### Status and Development of BPL Technology

Power lines over which BPL signals would be sent are neither shielded nor well-balanced to prevent radio frequency (“RF”) energy from being radiated and which can become harmful interference, if not carefully managed. To address this condition, Access BPL systems incorporate adaptive interference mitigation techniques to remotely reduce power and adjust operating frequencies to avoid site specific, local use of the same spectrum by licensed services. Such mitigation techniques include “notch” filtering, or the complete avoidance of frequencies or bands of frequencies used by licensed services. With the knowledge of potential problems that would arise from interference, the Federal Communications Commission (“FCC”) adopted changes to its Part 15 rules and required Access BPL operators to provide notification to parties listed as Federal Government contact points for the area in which their systems will operate, at least 30 days prior to the initiation of service.<sup>5</sup> And, although certain regulation of BPL service falls under the jurisdiction of the FCC, it is likely that the New York Commission will receive complaints by parties negatively impacted by BPL deployment in New York. It is possible that levels of unwanted RF radiation interference will vary over several orders of magnitude, and it is likely that the BPL environment of affected licensed services using the frequencies BPL providers wish to share can change rapidly, particularly the nature and location of the antennas of licensed services affected by unintended interference.

Given the above, the Local Unions believe that the Commission should utilize Section 15.615 General administrative requirements information pertaining to the New York jurisdiction in the

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<sup>5</sup> FCC Report and Order 04-245, Adopted October 14, 2004, Released October 28, 2004 in ET Docket Nos. 04-37 and 03-104 at ¶ 25 and ¶ 50.

Access BPL notification data base to aid this Commission in effectively identifying and resolving any interference or grid operations problems related to BPL technology deployment in New York.<sup>6</sup>

### Safety and Reliability of Service

The Local Unions believe that the second category of inquiry noted above is the most important category related to the deployment of BPL technologies. The safety and reliability characteristics of all quality utility services should be first in the minds of the Commissioners when they evaluate proposals and recommendations in this proceeding.

The Local Unions, as they have done in prior proceedings, continue to express their concern for the safety of their membership. There is strong opposition to any operating practice, be it characterized as “least cost”, “competitively neutral” or otherwise, which places labor at risk of serious injury. The Local Unions firmly believe that the overriding ground rule or policy regarding any type of work affecting overhead electric lines and underground electric conduit must be that safety comes first. Whether an alternative is “the least expensive” should clearly be far below that of safety (1<sup>st</sup>) and reliability (2<sup>nd</sup>) in assessing which alternative is the best to use when dealing with electric plant. Safety should be the primary consideration of the Commission regarding BPL deployment, followed by system reliability, with cost issues being considered only after the safety and reliability of the system is assured.

The Local Unions believe that any obstruction to the climbing path or working area of the electric workers dealing with overhead or underground facilities, be it the result of extension arms, power supplies, etc. to deploy BPL technologies, is dangerous, unacceptable and should not be considered for adoption by the Commission.

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<sup>6</sup> *ibid.* at ¶ 84-86.

Regarding the issue of interference, to the degree that any interference is created by BPL within a power line, that interference should be mitigated by the BPL provider to whatever level that does not impair the safety and reliability of the grid, preferably to a level that was present before the BPL signal was introduced into the power line. The utility or its ratepayers should not have to shoulder the burden of correcting this potential problem.

#### Regulatory Framework and Issues

With regard to the deployment and operation of BPL technology the Local Unions recommend that utility personnel be used to ensure that safe, adequate and quality electric services are maintained. Given this recommendation, it is appropriate that these costs be adjusted out of the electric utilities' rates and be reflected in the rates charged to users of the BPL services, to the extent that the costs are directly related to BPL and not to utility transmission and distribution service.

Although the Local Unions do not recommend that BPL provider personnel be used to deploy BPL technologies in New York, to the degree that a BPL provider might use some of its personnel and/or resources that would benefit the electric utility, the electric ratepayers should pick up those costs in their rates. It should be noted that the Local Unions have Collective Bargaining Agreements with at least two of the utilities in New York State which deal with the use of contract labor by the utilities. The Local Unions object to, and oppose, any authorization by the Commission regarding the use of contract labor by the relevant utilities or by BPL providers for make-ready work or other BPL related work in the franchise jurisdiction of the relevant utilities without following all of the terms, conditions and requirements of the Collective Bargaining Agreements in effect, including the guidelines for the use of contract labor and conducting good-faith discussions with the applicable Local Unions.

The Local Unions continue to believe that, if the Commission is consistent with its prior Orders, it would not collaterally attack the Local Unions' Collective Bargaining Agreements by authorizing the use of contract labor in violation of the Collective Bargaining Agreements. Any use of contract labor by the relevant utilities or BPL providers without compliance with the applicable Collective Bargaining Agreements would be considered a violation of the Collective Bargaining Agreements between the Local Unions and the utilities and would trigger responsive action by the Local Unions.

With regards to fees pertaining to the access and use of various components of the electric utility system, the Local Unions would recommend the use of cost of service tariffs for BPL access and use. To the extent that such fees do not cover the cost of service, they should be raised to make the utilities whole. If the Commission wishes to capture the value of such access from BPL providers and establish a system which uses other than cost-based rates, such a system would argue for a change in how all pole attachment or access rates are determined. For example, if the Commission were to decide to auction off access to the power lines of an electric utility (similar to the FCC's spectrum auctions), it could be argued that all access to utility rights-of-way, poles or other property used to provide regulated electric utility service in New York should be auctioned with the proceeds used to reduce the costs of the transmission and distribution system to electric ratepayers. It is the Local Unions' belief that such a radical change in policy should be debated in a generic proceeding, dealing specifically with the issue of access to utility property, before such an approach is adopted by the Commission. Therefore, the Local Unions conclude that, at present, cost of service tariffs should be used for BPL access.

**Conclusion**

For the all of the reasons cited above, the Local Unions recommend that the Commission (1) adopt a policy of safety first in its consideration of BPL deployment; (2) require BPL providers to mitigate any interference generated by their service to levels which do not impair the safety and reliability of the grid; (3) use the Access BPL database to aid in identifying and resolving any interference or grid operation problems related to BPL deployment; (4) mandate the use of utility personnel to ensure that safe, adequate and quality electric services are maintained; and, (5) utilize cost of service tariffs for BPL access and use.

The Local Unions appreciate their opportunity to comment on the important issues regarding BPL technologies and their deployment.

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Ridgefield, Connecticut

Respectfully Submitted,



Richard J. Koda, Principal  
KODA CONSULTING, Inc.  
409 Main Street  
Ridgefield, Connecticut 06877-4511  
(203) 438-9045  
Consultant to International Brotherhood of  
Electrical Workers, System Council U-7 and  
Local, 97

To: Honorable Jaclyn A. Brillling, Secretary  
cc: Parties in Case 06-M-0043 electronically  
Danny E. Addy, President/Business Manager/Financial Secretary, IBEW, Local 83  
David Falletta, President/Business Manager/Financial Secretary, IBEW, Local 97