Resolution Accepting Discussion Paper on Accounting and Costing Issues Related to Broadband Over Power Lines

WHEREAS, In December 2003, the National Association of Regulatory Utility Commissioners (NARUC) announced the creation of a Task Force charged with exploring the potential for deployment of Broadband Over Power Lines (BPL) and the potential role that State public utility commissions may have in advancing the use of BPL; *and*

WHEREAS, In early 2005, the BPL Task Force released its first report and the report noted the unclear regulatory climate that existed at that time; *and*

WHEREAS, In February 2006, the BPL Task Force released its second report describing a number of regulatory and industry activities that had occurred in 2005 and early 2006; and

WHEREAS, In response to the on going regulatory discussions and industry trials involving BPL, the Staff Subcommittee on Accounting and Finance was encouraged by the Committee on Telecommunications and the Committee on Electricity to begin an examination of accounting matters related to BPL implementation; *and*

WHEREAS, At its November 2006 Annual Convention in Miami, Florida, NARUC adopted a resolution encouraging States to adopt competitively neutral policies and rules that facilitate deployment of BPL, provide assurances for protecting the electric distribution system and interconnections, ensure appropriate protection of ratepayers economic interests, and avoid harmful radio interference; *and*

WHEREAS, The Staff Subcommittee on Accounting and Finance has prepared a Discussion Paper on BPL Accounting and Costing issues that offers a description of affiliate transaction issues, cost and revenue allocation issues, and examples of ways various jurisdictions have addressed these issues; *and*

WHEREAS, This Discussion Paper may be useful to regulators in assisting the identification of alternative means of addressing any concerns that arise about cross subsidization and accounting for new trials; *now, therefore, be it*

RESOLVED, That the Board of Directors of the National Association of Regulatory Utility Commissioners, convened in its July 2007 Summer Meetings in New York, New York, accepts for information the BPL Discussion Paper; *and be it further*

RESOLVED, That members of the Staff Subcommittee on Accounting and Finance be commended for their work in producing this document.

Sponsored by the Committees on Electricity and Telecommunications Adopted by the NARUC Board of Directors July 18, 2007

Addendum

BROADBAND OVER POWER LINES: ACCOUNTING AND COSTING ISSUES A DISCUSSION PAPER

PREPARED BY:

The Staff Subcommittee on Accounting and Finance of The National Association of Regulatory Utility Commissioners

June 2007

INTRODUCTION

For the past three years, the National Association of Regulatory Utility Commissioners (NARUC) has been actively involved in studying and discussing the role that Broadband over Power Lines (BPL) has as a new communications medium. Early in the discussion, a series of questions arose regarding the role that public utility commissioners should have regarding the regulation and oversight of this technology. Many of these questions regarding the role of the regulators did not deal with the issue of rates, but instead, focused on concerns about its relationship to the regulated electric utility. Specifically, the questions were about accounting, costing, reporting, and potential cross-subsidizations.

At the request of the leadership of the NARUC Committees on Telecommunications and Electricity, the Staff Subcommittee on Accounting and Finance (the Subcommittee) offers its collective voice to the national discussion on Broadband over Power Lines. We offer these thoughts on this one piece of the debate primarily from the vantage point of regulators of electric utility distribution services, and not in an attempt to regulate the broadband service itself.

AFFILIATE TRANSACTIONS

Corporate Structure

Regulatory concerns regarding the structure used for the provision of BPL and related affiliate transactions include the following:

- (1) Utilities' ratepayers paying for activities that do not benefit them or payments being disproportionate to benefits received.
- (2) Profits being shifted from regulated to unregulated subsidiaries either by shifting costs to the utilities or by keeping the utilities out of potentially profitable market segments.
- (3) Transactions between the utilities and a separate affiliate or affiliates where the utilities either pay excessive charges for services received or the utilities are insufficiently compensated for services provided.

Attempts to eliminate cost shifting, cross-subsidization, and anticompetitive behavior, and, therefore, protect ratepayers, are not new. There are two basic methods, structural separation and nonstructural separation. Structural separation requires that specified activities be carried out by fully separate subsidiaries that do not share facilities, assets, or personnel with the regulated operating company. Although most structural separation envisions separate subsidiaries or affiliates of the utility as producing certain separable services, the ultimate form of structural separation or safeguard is divestiture or

On December 16, 2003, NARUC announced the creation of a Task Force charged with exploring the potential for deployment of Broadband over Power Lines and the potential role that State public utility commissions may have in advancing the use of this technology. See NARUC's *Report of the Broadband over Power Lines Task Force*, dated February 2006.

spin-off under which ownership is separated from the utility so that former affiliates become completely independent. Nonstructural separation allows multiple services to be provided by a unified and integrated organization and relies on accounting rules and procedures to accomplish the tasks.

When discussing the provision of BPL, therefore, the question naturally arises as to whether the service is best provided as an offshoot of the electric utility operations, whether it is better to separate this service from the regulated operations of the utility, or whether BPL should be provided by a non-affiliated third party. The follow-up question is whether the form of corporate structure should simply be left to the provider or should be directed by the regulator.

Thus far, there is only limited experience with the provision of BPL by electric utilities, and a limited amount of direction by regulators relative to the appropriate corporate structure for providing the service. It appears, thus far, that regulators are favoring the use of affiliates for providing commercial BPL and that regulators are distinguishing commercial services from the use of BPL in the provision of electric utility services. Yet, there is not one unanimous voice on these issues. Examples of various schools of thought are illustrated below.

On January 25, 2006, the New York Public Service Commission conveyed its initial thoughts in a proceeding that was opened to examine issues related to the deployment of BPL. Relative to issues of corporate structures and affiliate transactions the Commission expressed that "self-dealing issues, the exercise of market power, and other potential abuses that may arise when competitive operations are affiliated with rate-regulated utility monopolies" were best avoided through structural separation of regulated and unregulated operations.² After receiving significant comment on the issues, New York issued its Statement of Policy on BPL³ and at page 6 states:

The commenting parties have not entirely dissuaded us from our conclusion that BPL deployments to support electric system applications and communications services are best provided through third parties. We continue to believe that regulated electric utilities should not be directly involved in competitive businesses...

New York, however, chose not to mandate structural separation. Instead, it left the door open to a variety of corporate structures, placing the burden on the electric utility if it chose to get into the BPL business. It also recognized that BPL is a fledgling business that may not be able to withstand one-size-fits-all treatment.

Order Initiating Proceeding and Inviting Comments in Case 06-M-0043, *Proceeding on Motion of the Commission to Examine Issues Related to the Deployment of Broadband over Power Line Technologies*, Issued and Effective January 25, 2006, page 3.

New York PSC Case 06-M-0043, Statement of Policy on Deployment of Broadband over Power Line Technologies, Issued and Effective October 18, 2006.

We recognize, however, that the use of that structural approach could have a chilling effect on the development and deployment of a technology in its nascent stage. A structurally separate affiliate of the electric company could be a suitable third party, provided that appropriate affiliate transaction, cost allocation and general business relationship rules are in place to assure that the incumbent utility and its customers do not directly or indirectly subsidize or provide support for the BPL affiliate, and that competition is not harmed. Utilities seeking to provide BPL services through an affiliate should be prepared to demonstrate to the Commission that qualified independent providers were unwilling to enter in to a comparable arrangement with the utility. We also recognize that affiliates of the utility could become involved in BPL through alternative arrangements such as joint venture or similar partnership arrangements... ⁴

Finally, New York distinguished between the use of BPL to provide communications services to the public and the use of BPL <u>solely</u> to support electric system operations. In the later instance, it was recognized that concerns about cross-subsidization would not occur and thus, there is no need for cost allocations.

The issue of utilization of BPL for electric utility operations is the focus of a decision of the Michigan Public Service Commission.⁵ In addressing whether costs expended for a preliminary investigation of the feasibility of transmitting broadband communications over its power lines should be allowed in rates, the Commission found that "the integration of BPL potentially presents considerable prospects for electric utilities to provide better and more reliable service for the benefit of customers." The order further finds that "BPL may allow utilities to significantly improve their ability to monitor and control lines and may allow utilities to achieve more network automation thereby lowering the cost of system maintenance for ratepayers." Again, this decision makes a clear distinction between BPL as a tool for more efficient electric utility operations and BPL as a new line of business, allowing the exploratory costs to be included in utility rates.

In its rulemaking, the California Public Utilities Commission also did not ban utilities from getting into the commercial BPL business, but ordered that it be provided through utility affiliates with proper affiliate transaction rules.⁷ Yet, it too made an exception of investments that can be justified on the basis of utility benefits. Specifically, California found:

⁵ Case No. U-14347, In the matter of the application of Consumers Energy Company for authority to increase its rates for the generation and distribution of electricity and other relief, Opinion and Order, dated December 22, 2005.

⁴ Ibid.

Ibid, page 63.

Opinion Implementing Policy on Broadband Over Power Lines, Rulemaking 05-09-006, Decision 06-04-070, dated April 27, 2006, Section III(F).

- Any electric utility regulated by the California Public Utilities Commission (CPUC) is authorized to enter into contracts that would allow an unaffiliated third party to own and operate a BPL system on its electric delivery system.
- Any electric utility regulated by the CPUC is authorized to enter into contracts that would allow an affiliated company to own and operate a BPL system on its electric delivery system.
- Electric utilities are prohibited from making rate base investments in BPL if the BPL will be used for commercial broadband deployment. A utility may invest in assets that make use of a BPL system provided that the investments can be justified on the basis of utility benefits. A utility may purchase services from a BPL company provided that the costs can be justified by utility benefits.

These decisions are all in contrast to the majority view of the Nebraska Broadband Services Task Force.⁸ The Task Force was created by a 2005 law to examine a wide variety of BPL issues, including the implications of Nebraska's vast array of public power providers offering broadband services. The majority view of the Task Force was that "public power suppliers should be prohibited from offering wholesale infrastructure access or wholesale broadband services, Internet services, telecommunications services, and video services." But, in an even stricter view, the majority of the Task Force believes that public power providers should not be permitted to provide wholesale infrastructure access or wholesale services "independently or through partnerships with private providers." The minority opined that since Nebraska's public power infrastructure is pervasive and is paid for by rate payers, it should be considered for the wholesale deployment of broadband services.

The Subcommittee supports the distinction between deployment of BPL for purposes of offering communications services and its use for purposes of enhancing the operations of the electric utility. We agree that these two different uses of BPL may warrant different corporate structures. Furthermore, we support the early trend that appears to be developing of allowing the provision of commercial BPL services through a subsidiary or third party, rather than having the costs of its operations mixed in with the costs of the regulated utility operations. However, the use of a separate subsidiary does not negate the need for appropriate codes of conduct and properly documented cost allocations. In this regard, we offer a reminder of two earlier NARUC reference documents: (1) Codes of Conduct Governing Competitive Market Developments in the Energy Industry: An Analysis of Regulatory Actions, dated November 2000; and (2) Guidelines for Cost Allocations and Affiliate Transactions, dated July 1999. The matter of costs allocations and affiliate transactions is further discussed in other sections of this white paper.

Cross Subsidization

The Broadband Services Task Force, Final Report, dated November 2, 2006.

Broadband over Power Lines is a service that utilizes existing electric power lines to provide high speed internet services to businesses and residences. There is a cost associated with the use of the electric power lines, and the question arises, who should, and who is, paying that cost?

When the broadband over power lines is provided by an entity unrelated to the affiliate, there is a reasonable likelihood that the cost will be identified and billed to the unrelated party. That would, after all, be the normal business practice. This would be equivalent to an unrelated party (e.g., a cable television company) who uses the electric utility's poles and is billed for the privilege of doing so. However, the answer is not so obvious when it comes to the service being offered by a related party. When two services are offered by one entity, and one of the services is regulated and one is not, there is a greater risk of cross-subsidization than if the transaction is arm's-length or if both transactions are regulated.

There are, however, ways to mitigate the risk that captive electric distribution customers will pay a larger proportionate share of the costs than is appropriate for facilities used by both electric distribution and broadband over power line services. One of these ways is facilitated by the type of language found at the Texas Utility Code which specifies at Section 43.053:

An electric utility that allows an affiliate or an unaffiliated entity to own a BPL system on the electric utility's electric delivery system shall charge the owner of the BPL system for the use of the electric utility's electric delivery system.

The cost to be charged in Texas is then defined in a manner that attempts to keep all BPL offerings competitively neutral:

An electric utility may not charge an affiliate under this section an amount less than the electric utility would charge an unaffiliated entity for the same class or item.

An electric utility may not pay an affiliate under this section an amount more than the affiliate would charge an unaffiliated entity for the same item or class of items.⁹

In Wisconsin such costs are defined as follows:

Appropriate affiliated transaction pricing should ensure that regulated utility customers are not disadvantaged. Using the lower of cost or market when the regulated utility is purchasing from the affiliate and the higher of

Texas Statutes, Section 43.053(d)(1) and (2).

cost or market when the affiliate is purchasing from the utility will accomplish this goal. $^{10}\,$

This revenue could then be used to offset the cost of the portion of the system being used for BPL. As long as the revenues equaled or exceeded the costs associated with broadband over power lines service, electric distribution customers would be kept whole.

As discussed previously, another means to address this issue is through appropriate recordkeeping and separation of costs (nonstructural separations). This is the approach taken by the New York PSC where, in its October 2006 Statement on Policy, it determined that in general, commercial BPL operations should not be offered by electric utilities. But, it anticipates that there may be circumstances when "work related to the BPL system must be performed by utility employees or utility approved contractors." In these cases, "utilities should have procedures in place to assure that no direct or indirect costs associated with this work, other than costs associated with the support of electric operations, shall be collected from ratepayers or charged to utility operations." Thus, a regulator could choose to require a specific accounting for the costs such that the costs associated with the non-distribution electric service could be separated from the cost of the regulated service.

South Carolina offers another way to address the cross-subsidization problem. At Section 58-9-2620 of its statutes, South Carolina prohibits the subsidization of telecommunications services from any other non-telecommunications service, operation, or other revenue source. While the statute specifically addresses government-owned telecommunications service providers, and not BPL, the way the concern about subsidies is addressed is easily transferable to the BPL issue. The statute not only prohibits subsidies but specifies steps to be taken to eliminate the risk of subsidies. These steps include: (a) increasing the price of the service if a determination is made that a subsidy has occurred; (b) imputing certain costs in the rates to be charged, including the cost of capital and taxes and fees; (c) keeping separate books and separately accounting for the revenues, expenses, property and source of investment dollars; and (d) publishing an annual audit that reflects the full cost of providing the service, including all direct and indirect costs.

Tennessee statutes also require an audit of internet services (including BPL) offered by municipalities who also offer electric services.¹³ Additionally, Tennessee statutes require the comptroller of the treasury to develop "guidelines or procedures to

Public Service Commission of Wisconsin, Audit Report on Wisconsin Energy Corporation, 2001-2002, page 10, dated November 18, 2004.

State of New York Public Service Commission, Case 06-M-00453, Statement on Policy of Deployment of Broadband over Powerline Technologies, issued October 18, 2006, page 7.

¹² Ibid

Tennessee Statutes, Section 7-52-604(b).

establish appropriate accounting principles applicable to the division's affiliated transactions and cost allocation." ¹⁴

As described in this section, there are a number of different methods utilized to address cross-subsidization concerns. The Subcommittee does not favor one over another. We do, however, emphasize the importance of recognizing the risk of cross-subsidization relative to BPL. Once regulators are cognizant of the increased risk of cross-subsidization associated with BPL, decisions can be made on a case-by-case basis of how best to address these risks.

Economies of Scope and Scale

Additional questions are likely to arise relative to affiliate transactions and cost sharing arrangements between electric utilities and Broadband over Power Line providers. These questions will include issues such as: what compensation should BPL providers pay for sharing a bill or a billing envelope with the electric utility? Should the electric utility or its customers be compensated for the shared use of a utility's name, trademark, or good will?

Most of these questions have been addressed by utility regulators in other contexts, and the solutions are portable to the BPL arena. Many jurisdictions have implemented affiliate transactions rules or guidelines. As California directed in its policy statement¹⁵, those same affiliate guidelines will apply to the BPL activities of utility affiliates. As to shared costs between utilities and unrelated third parties, many of these issues have also been addressed by regulators – such as the issue of whether third parties should be able to put advertising stuffers in utility billing envelopes, or whether there may be a sharing of customer information. These earlier decisions should be applied, as appropriate, to the BPL concerns.

COST AND REVENUE ALLOCATION

Accounting and Reporting for the Costs of BPL

Broadband over Power Lines is a technology that is only starting to be utilized in broad commercial applications, and then only in specific concentrated areas. It has not yet reached widespread use throughout the nation. In this regard, it is a service whose costs and revenues have not yet been separately recognized or distinguished within the context of regulatory accounting and reporting. Regulators have begun asking whether there should be a special recognition of these costs and revenues, and if so, in what manner should that identification take place.

¹⁵ California PUC Opinion Implementing Policy on Broadband over Power Lines, issued in Rulemaking 05-09-006.

Tennessee Statutes, Section 7-52-604(a).

This question is not just one of theory but also has practical implications, as was discovered by Consumers Energy Company before the Michigan Public Service Commission. In this rate case, there was controversy over its inclusion of expenses for a pilot Broadband over Power Line program, and the controversy was exacerbated by concerns that the costs had not been segregated from the other costs of the utility. In its Opinion and Order, dated December 22, 2005, the Michigan Commission found, at page 64:

That being said, Consumers should have done a better job on this record of supporting and justifying their deployment of employees and resources. The Staff cannot do its job under the strict deadlines of a rate case unless it obtains the information necessary to evaluate the costs. Consumers is advised that obtaining favorable ratemaking treatment for BPL expenditures and other resources invested in innovative concepts and technologies in future cases will hinge on providing a timely and adequate accounting of the costs...

Thus, all parties involved in the regulatory process will be better off if proper accounting and reporting of BPL costs are established. This will allow for the development of cost-benefit determinations and eliminate inadvertent cross-subsidization. However, that does not answer the question of what form of accounting and reporting would be most reasonable and appropriate.

In some instances, such as BPL experimental operations or start-up trials, it may be appropriate to simply use distinct subaccounts or subsidiary records to track the costs, revenues and investments of BPL and keep them separate from the costs of regulated utility operations. This would permit the identification of the regulated utility service's cost separate from the BPL cost. Regulators would then have the option of determining the appropriate treatment of each of those two sets of costs within their regulatory environments. Yet, the addition of subaccounts or subsidiary records could be done at a relatively minimal administrative cost, and without significant disruption of long-established accounting systems. An example of this type of subsidiary record requirement is found in the Federal Communication Commission's Uniform System of Accounts, at Account 5280, Nonregulated Operating Revenue. The account description requires the maintenance of two specified "separate subsidiary record categories." A similar concept of subsidiary records could be built into the electric uniform system of accounts to differentiate various activities of the utility.

In other instances, where the electric utility may be adding the offering of fully-developed commercial BPL without the benefit of a separate corporate entity, a more detailed set of accounting requirements may be desirable. Additional accounts may need to be added to the uniform system of accounts and/or the reporting forms for annual

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⁴⁷ CFR 32.5280 (c): "Separate subsidiary record categories shall be maintained for two groups of nonregulated revenue as follows: one subsidiary record for all revenues derived from regulated services treated as nonregulated for federal accounting purposes pursuant to Commission order and the second for all other revenues derived from a nonregulated activity as set forth in paragraph (a) of this section."

reports¹⁷. This would be similar to the major changes that were recently made to the federal electric uniform system of accounts to incorporate regional transmission organizations.¹⁸

Cost Methodologies

The above discussion on accounting and reporting infers that the appropriate costs to track are actual, historical embedded costs. Embedded costs are the costs in which regulators or legislators have expressed the most interest. Yet, there may be instances in which incremental costs are the more appropriate costs to examine relative to BPL services. With this discussion, we recount some of the early regulatory and legislative direction on which costs are most appropriate in varying circumstances.

The Tennessee statutes at 7-52-603 discuss the provision of cable television, internet, and related services by municipalities who also provide electricity services. The municipalities are permitted to provide these additional services when certain conditions are met. Among the detailed list of conditions are some costing and allocation requirements, including:

- A municipal electric system providing any of the services authorized by this part shall fully allocate any costs associated with the services provided under this part to the rates for those services.
- A municipal electric system providing any of the services authorized by this part shall establish and charge rates that cover all costs related to the provision of such services.
- A municipal electric system shall charge or allocate as costs to the division the same pole rate attachment fee as it charges any other franchise holder providing the same service.
- Any fee imposed by the municipality on a provider of cable services, shall also be allocated to the division.

This directive requires not only that all costs incurred on behalf of the service be assigned to it, but also requires the imputation of the types of costs that a competitor might incur if the same service were to be provided outside of the municipal utility setting (e.g., municipal fees and pole attachments).

South Carolina goes a step further in requiring that a government owned telecommunications service's costs include not only all direct costs but also include indirect costs including "amounts for rights-of-way franchise, consent, or administrative

Since many state regulators use the Federal Energy Regulatory Commission's (FERC's) uniform system of accounts (USOA), it may not be practical to assume that the need for the additional information by state regulators will coincide with authorized changes by FERC to the USOA. Thus, state regulators could continue to use the established USOA and receive the additional information by simply changing its own jurisdiction's annual reporting form or reporting requirements.

For example, new accounts 380, 381, 382, 383, 384, 385, 386, and 389 were added to separately identify the plant associated with Regional Transmission and Market Monitoring.

fees, regulatory fees, occupation taxes, pole attachment fees, and ad valorem taxes." The New York Commission has also directed that both direct and indirect costs associated with BPL unrelated to the regulated electric service be removed from the costs assigned to the utility operations.

California takes a different approach to the cost issue. Since California generally prohibits the provision of commercial BPL service by an electric utility unless it is through a separate affiliate, the same issues of separating the utility's costs to regulated and unregulated services is not a significant issue. Rather, the question is how to assure that the costs associated with the unregulated service are not paid by regulated customers. On this issue, California regulators have developed a policy of requiring the BPL company to pay a pole attachment fee and potentially an access fee. The access or lease fees are then subject to a 50/50 shareholder/ratepayer after-tax net revenue sharing mechanism.²⁰ However, it is notable that the fees are not strictly based on embedded costs. As noted in ordering paragraph 5 of the California Commission's order,

Transactions between an electric utility and BPL affiliate, other than a BPL affiliate's payment of pole attachment fees, are subject to a standard of fair market value. When reporting affiliate transactions pursuant to D.93-02-019, utilities shall report the methodology used to calculate fair market value.

Finally, a brief study of the New York Commission's proceeding investigating the issues related to the deployment of BPL technologies provides a great deal of insight into various arguments related to the question of which costs of the electric utility should be attributed to the BPL operations. In its October 18, 2006 Policy Statement, the New York Commission determined that pole attachment tariffs will apply and that BPL providers should pay a fee for the ability to access the electric system. It also determines that such a fee could be based on a sharing of revenues or profits, and that the fee should eventually be based on prevailing market conditions. This statement is consistent with the New York Commission's earlier statement, found in its order initiating the same proceeding at page 12:

A key element of BPL technology is its interface with the electric system's poles and wires. We believe that there may be intrinsic value to BPL providers in gaining access to and using electric utility assets and that this value is dependent on the economies of BPL technology, rather than a formulaic allocation of sunk utility costs to the BPL provider.

Looking at some of the interested parties' comments in the New York proceeding provides additional viewpoints on the cost issue. For example, Current Communications

²⁰ California PUC Order Implementing Policy on Broadband Over Power Lines, issued April 27, 2006 in Rulemaking 05-09-006.

Tennessee Statutes, Section 58-9-2620(6).

Group, LLC's comments are summarized in an attachment to the New York Commission's policy statement, and include:

- Charges to the BPL providers should be based on incremental costs.
- Utility employees and facilities may be used to support a BPL company. The BPL company should pay fully allocated costs for these items.
- Commission zero cost determinations in certain telephone company situations involving third party use of the local loop to provide DSL service is analogous to the question about whether an excess fee should exist and suggest that an access charge is not required.

The International Brothers of Electric Workers had yet another perspective:

- Existing tariffs should be used to set the price for BPL providers to use utility assets. However, if access rights were auctioned off, then the proceeds could be used to reduce the cost of the transmission and distribution system for electric ratepayers.
- Utility personnel should be used to deploy BPL technology and the costs of these employees eliminated from rates.

The Subcommittee suggests that, at a minimum, the direct, out of pocket costs incurred by the electric utility to allow the provision of BPL be identified in all relevant regulatory settings. Beyond the directly attributable costs, common ratemaking practices suggest that fully allocated embedded costs would be the next most useful in regulatory settings. Regulators then must decide which additional types of costs are appropriate to identify and present within distinct proceedings or reports.

CONCLUDING REMARKS

The Subcommittee expects that the accounting and costing issues related to BPL will expand into more regulatory proceedings as more BPL trials are run and as BPL moves from an experimental to a commercial service. As this occurs, regulators are anticipated to find the appropriate solution based on their unique circumstances. However, the basic concepts of cost allocations, recordkeeping, and the prevention of inappropriate cross-subsidization are unlikely to change. These are issues that have been part of the regulatory environment for many years, but continue to reemerge relative to new services and situations. We recommend that regulators first look to established solutions, such as those recommended in this discussion paper, to address problems that appear to be new, but turn out to be familiar issues cloaked in new costumes.