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October 17, 2008

Secretary Jaclyn Brillling
NYS Public Service Commission
Three Empire State Plaza
Albany, New York 12223-1350

Re: Case 07-M-0548- Proceeding on Motion of the Commission
Regarding an Energy Efficiency Portfolio

Dear Secretary Brillling:

Enclosed please find an original and five copies of the Interim Report on On-Bill Financing submitted on behalf of Working Group VI in the above captioned case.

An electronic copy has also been broadcast via the EPS ListServ.

Sincerely,

Ashley Priscott
Assistant Counsel

Enclosure

cc: ListServ

2008 OCT 17 PM 4:28

Energy Efficiency Portfolio Standard (EEPS) – Working Group VI
On-Bill Financing Interim Report

Case 07-M-0548 – Proceeding on Motion of the Commission
Regarding an Energy Efficiency Portfolio Standard

Working Group VI – On-Bill Financing

Interim Working Group Report
October 17, 2008

Energy Efficiency Portfolio Standard (EEPS) – Working Group VI
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Energy Efficiency Portfolio Standard (EEPS) – Working Group VI On-Bill Financing Interim Report

Introduction:

The Commission's June 23, 2008 Order Establishing Energy Efficiency Portfolio Standard and Approving Programs recognized the importance of on-bill financing, stating ¹

“There is great potential value in on-bill financing. It can eliminate a major barrier to participation in efficiency programs for customers that lack ready access to capital; and it can, in the long run, reduce reliance on ratepayer-funded programs to achieve the State's efficiency goals, thereby mitigating any disparities between total bills of participants and non-participants.”

The Commission emphasized the importance of on-bill financing when it stated that on-bill financing issues “are an important part of our policy rationale for utility involvement as program administrators.” ²

The goal of Working Group VI has been to study the appropriateness and ability of public utilities to implement and administer On-Bill Financing (OBF) to support the goals of New York State's Energy Efficiency Portfolio Standard (EEPS) as defined in Case 07-M-0548. OBF is a mechanism that allows customers to finance energy efficiency measures through payments on their utility bills.

This Interim Report describes the working group's approach, accomplishments to date, examples of potential models the working group is evaluating, and the work that remains. The Final Report will provide recommendations regarding the implementation of OBF in New York State, recommendations for parameters that should be common in OBF programs, and a recommendation of elements that should be left to the discretion of individual utilities.

Approach

The scope of the Working Group's activities was defined by a list of eight “building blocks” describing fundamental questions that must be addressed before OBF programs are implemented.

1. Does the Commission have the authority to order utility OBF of EE measures? Are there Banking and Regulatory responsibilities and obligations that would be imposed on utilities offering OBF?
2. Would projects be consistent statewide or customized by service territory? Would utility-specific pilot programs and/or full scale programs be best? Should there be a goal of standardized statewide rules or “best practices” for OBF?
3. Which customer classes would be eligible to participate in OBF of EE measures?
4. Should there be specific OBF programs for low-income customers?
5. Do existing laws, regulations, and utility tariffs permit the utility to disconnect service to a customer for failure to pay the OBF portion of the bill? Should the Commission approve a type of OBF program that provides for the disconnection of customers for failure to pay OBF amounts? If so, would legislative, regulatory or tariff changes be necessary?
6. Should OBF implementation and administrative costs and the underlying EE programs be funded from SBC, utility ratepayers, third party capital providers, and/or efficiency vendor sources?

¹ Order at 50

² Id

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7. What are the Total Resource Costs (TRC) for the OBF models? When are these programs economically justified?
8. What are the advantages and disadvantages of specific fundamental model design elements of various OBF alternatives? For example:
 - a. To what extent should participants be required to bear the costs of EE measures in an OBF program?
 - b. Should the Commission approve a form of OBF program in which the OBF charge runs with the meter as opposed to being an individual customer's debt obligation?

To better organize working group discussions that could lead to conclusions on building block questions, the work group developed a list of fourteen key program elements. These elements are: Program Objectives; Target Customer Groups; Sources of Funding; Creditworthiness; Loan Obligation; Payment Terms; Default Consequences; Partial Payment Allocation; Interest Charges; Administrative Charges; Fuel-Blind Potentials; Certification; Recourse in the event of Savings Failure; and Customer Service. Other potential elements were considered, but the Working Group concluded that they fall outside of its scope.

Accomplishments To-Date

The working group has made considerable progress in analyzing the key program elements and building blocks listed above. A summary of our progress to date on banking and regulatory issues, disconnection for non-payment, total resource cost (TRC) and funding source issues is included in this report as they have been researched by focus teams within the working group. Potential funding sources, one of the most critical of the key elements, has been partially researched through presentations and material from banking and other financial institutions.

The working group has also included a review of financing options that do not make use of OBF (for example NYSERDA's Energy Smart Loan). This review has been useful in understanding how effective such programs are without OBF and whether or not OBF could further improve their effectiveness.

The working group has not reached consensus on a particular form of OBF. This report includes in its appendix potential models reflecting different approaches that are being evaluated by the working group. Presentations of two different approaches to OBF were provided during the Working Group's meetings. Harlan Lachman, a co-creator of the Pay As You Save[®] or PAYS[®] system (sometimes referred to as a tariffed installation program), walked the Working Group through a model in which the obligation to pay for energy efficiency measures is assigned to the customer's meter. Mark Siegal, of National Grid, described National Grid's implementation of an OBF program targeting small commercial and industrial customers in Massachusetts using the approach of assigning repayment responsibility to the customer. The working group has assembled and is continuing to research current OBF programs throughout the United States. We are studying how these programs address the building blocks and program elements and the extent to which these programs have reached their independent goals.

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Work Remaining

The working group plans to complete its research and discussion of the key program elements and building blocks. It will continue to evaluate OBF program elements and funding sources for those programs.

This interim report makes no recommendation on implementation of OBF. Implementation methods, however, were discussed by the participants and will continue to be studied as the collaborative proceeds. At this juncture, the discussion has focused on implementation of either a uniform, statewide OBF program, with little or no material variation between service territories, or utility-specific OBF programs as an initial step or long-term. Both implementation methods have their advantages and disadvantages that will be discussed in the working group's final report.

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Legal Issues Related to the Extension of Credit or Debt Collection

The Working Group addressed the implementation issue of whether utilities would be required to comply with federal or state laws related to the extension of credit or debt collection under any of the various scenarios involving on-bill financing. For purposes of this legal analysis, the Working Group assumes that any OBF charge would be a “debt” or “loan” and that offering an OBF type of program would be “an extension of credit.” However, it is unclear whether an obligation assigned to a meter, with no personal liability to a customer other than for the time the customer receives service, constitutes a debt.³

Public Service Law § 65(6) prohibits the imposition of a “service charge” on gas customer. This report does not address the implications of that statute for OBF. All the following scenarios assume that the Public Service Law and the Commission’s regulations allow charges for energy efficiency projects, regardless of the source of funding for such projects, to be shown on the utility’s bill and included in the total charges due from the customer and that the utility has obtained Commission approval for a tariffed charge for the repayment installments. These scenarios also assume that no utility’s funds are at risk⁴ and that the utility puts the installment amounts on its bill and remits payment to the third-party lender or other funding source⁵ as received.

The first issue is whether the utility would be required to comply with laws governing lending and debt collection.

Scenario 1. Third-party lender does its own credit evaluation and undertakes its own debt collection activities⁶.

The utility would not be required to comply with federal, state or local laws with respect to the extension of credit or debt collection for another. If the lender contracted with the utility for debt collection, the analysis would be the same as in the second scenario.

Scenario 2. Third-party lender relying on utility credit evaluation and debt collection activities.

The utility may not be required to comply with the federal Truth in Lending Act. The utility would be required to comply with federal, state or local laws with respect to debt collection for another if the funds were loaned for residential household purposes. The Equal Credit Opportunity Act may apply to loans made for either business or commercial purposes (12 CFR §202.3, Supplement 1, Official Staff Interpretation).

³ It should be noted that if the Commission were to construe an OBF type of program to be the provision of an essential service, collection of OBF charges would be similar to collection of revenues to pay for any other costs of doing service and “debt collection” would not be an issue.

⁴ For the purpose of this analysis, ratepayer funds collected by the utility and used to purchase energy efficiency measures using on-bill financing for customer payment are treated like System Benefits Charge (SBC) monies.

⁵ The “funding source” may be SBC monies or monies from another source collected in a pool for the upfront costs of energy efficiency projects that will be paid for through on-bill charges. For instance, legislation pending in the New York legislature would authorize NYSERDA to issue bonds to fund residential weatherization projects (S.8756 filed Sept. 3, 2008).

⁶ *Debt collection activities* are those activities undertaken by an entity in the pursuit of amounts due and owing the creditor that are in arrears. It does not relate to the billing of an OBF amount on a customer’s bill or the receipt of that amount when due.

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These laws do not apply to loans for non-residential purposes. Therefore, a utility offering OBF to non-residential customers would not have to comply with these laws with respect to the extension of credit or debt collection.

Scenario 3. SBC or other funding source funds used to provide funding for energy efficiency measure. As a general comment, it is not clear who is the “owner” of such funds and therefore who can be identified as the creditor on the loan. This is relevant to the identification of the entity on whose behalf collection activities are undertaken, particularly if suit must be instituted.

a) utility collection activities⁷ for non-payment of repayment installments:

If the utility is construed to be the creditor, then the utility would be obligated to comply with federal laws on the extension of credit but not with respect to debt collection if it makes collection in its own name.⁸ The utility would be obligated to comply with state debt collection law.

b) write-off against other funding source:

If the utility were construed to be the creditor, the utility would be obligated to comply with federal laws on the extension of credit. If the utility were authorized to charge unpaid amounts to the other funding source without undertaking collection activities, the utility would not be obligated to comply with debt collection laws.

c) treatment as uncollectible debt due utility:

If the utility were construed to be the creditor, the utility would be obligated to comply with federal laws on the extension of credit. Assuming that the utility had to write off any unpaid amounts as uncollectible, the utility would undertake the same kinds of collection activities that it would otherwise take for utility service debts. If the utility is construed to be the creditor, then the utility would not be obligated to comply with federal laws on debt collection⁹ but would be obligated to comply with state debt collection law.

A possible workaround would be to establish a legal entity authorized to hold and lend third-party funds, SBC funds, or funds from another source together or separately and to engage in any necessary collection work, including authority to sue in its own name.

The second issue is whether a utility would be obligated to be licensed in connection with activities related to the extension of credit or debt collection.

Summary Answer:

A utility would not be required to be licensed as a lender under State law if the loans were “isolated, incidental or occasional transactions,” loans were to be secured by real estate, and the amounts exceeded \$25,000 for household purposes or \$50,000 for business purposes. If utility lending for energy efficiency were considered to involve more than isolated, incidental, or occasional transactions, licensing would be required for loans under \$25,000 or \$50,000, as applicable.

⁷ Such collection activities would include disconnection of service if authorized.

⁸ 15 USC §1692a.

⁹ Id.

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A utility would be required to be licensed as a debt collector in New York City unless the debt collection activities were conducted on the utility's behalf.

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Relevant laws

Lending and Debt Collection

Federal Law

- Truth In Lending Act (TILA) 15 USC §§ 1601, *et seq.* sets out formal disclosure requirements of loan terms, particularly how the interest rate is computed (must display APR computed by statutory method in “Schumer Box”). While the TILA does not apply to utility service generally, it does apply to the financing of durable goods and home improvements. 12 CFR §226.3(c).
- Equal Credit Opportunity Act, 15 USC §1691 *et seq.* bars discrimination in the provision of credit on the basis of race, color, religion, national origin, sex or marital status or receipt of public assistance. The application of state laws on creditworthiness does not constitute discrimination.
- Fair Debt Collection Practices Act (FDCPA) 15 USC §1692 *et seq.* regulates collection practices of a “debt collector,” which is a business whose principal purpose is debt collection or who regularly collects debts. The “debts” covered by the law are those created when credit is extended to a natural person (a “consumer”) for “consumer” purposes (personal, family or household). The Federal FDCPA exempts original creditors, so long as they collect debts in their own name (15 USC § 1692a). The law does not apply to any person collecting a debt owed another if the activity is incidental to a bona fide fiduciary obligation or concerns a debt that was originated by such person.
- Federal Fair Credit Reporting Act 15 USC §§ 1681, *et seq.* establishes requirements for lenders who make use of credit reporting agencies like TransUnion, Equifax, etc. to screen loan applicants. Where a credit application is denied or terms offered other than requested by the consumer (“adverse action”), the lender must provide a disclosure stating that the consumer’s credit report was considered in making the loan decision, and inform the applicant that he/she has a right to request a free copy of the report and dispute/correct errors, with contact info of the credit reporting agency.

State Law

- General Business Law §600 *et seq.* – This is the state equivalent of the FDCPA. It only applies to loans for personal, family or household purposes and applies to the “principal creditor,” which is any entity to whom money is owed. Thus, it governs the actions of those who collect debts for others as well as creditors themselves.

Licensing of Lenders and Debt Collectors

- New York State Banking Law Article 9 establishes a licensure requirement for lenders to individuals for personal, family, household, or investment purposes up to \$25,000 and business and commercial loans up to \$50,000. A licensed lender cannot obtain a lien on real estate as security except in connection with the recording of a judgment. Also, the loan business has to be conducted in premises separate from any other business except certain other types of business governed by the Banking Law. However, licensing is not required if

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the loans are "isolated, incidental, or occasional transactions." This sounds like the kind of threshold that applies in California, for which SDG&E received an interpretation from its state banking authority that so long as there are no complaints, SDG&E would not be required to be licensed.

- NYC Administrative Code §20-488 *et seq.* establishes a licensing obligation for debt collection agencies. It regulates debt collection with exceptions similar to the federal law exceptions and adds an exception for any person employed by a utility regulated under provisions of the Public Service Law acting for the utility.

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Possible Funding Sources

Viable sources of funding need to be identified to put OBF into effect. Funding is a critical issue since either the expansion of funding for energy efficiency projects beyond the funding currently available through SBC or limitation of funding will affect the contribution that OBF can make towards the achievement of energy efficiency goals. The Working Group is in the process of evaluating the appropriateness and availability of funding sources discussed below. A critical factor in this consideration is to ensure that funding dedicated to OBF does not impact funding needed for other energy efficiency initiatives and projects.

OBF may serve as a means of expanding monies available for energy efficiency projects and increasing the number of projects undertaken. It may serve as a means to:

- More effectively use SBC type funding.
- Attract third party financing.
- Provide funding for projects that otherwise could or would not be undertaken.

The Working Group was able to identify three potential sources of funding. Some sources of funding seem more applicable to utility specific pilots where others could more easily support statewide initiatives.

SBC Funding

Currently SBC funds are utilized by NYSERDA to assist customers in performing energy efficiency projects. NYSERDA utilizes SBC funds to provide incentives to customers performing energy efficiency projects. NYSERDA also uses SBC funding in conjunction with a network of participating lenders to buy down interest rates of loans for energy efficiency projects.

Utilizing SBC funds to finance an on-bill repayment alternative would further expand funding available under SBC for energy efficiency projects by providing a means for SBC funds to be replaced as they are spent. In addition to the SBC funding being used to buy down the interest rate on a third party loan for an energy efficiency project, it could also be used to guarantee third party loans and/or be set up on-bill to be used as a revolving loan fund, where the monies provided under the On-Bill loan would be re-paid to the SBC fund. As the SBC fund is restored, the SBC monies may be used to fund additional projects.

SBC funding could also independently be used to fund the one-time setup and/or administrative costs of any OBF program.

Such use of the SBC fund could be applied statewide.

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Third Party Funding

Third party funding may include traditional lending sources (i.e., banks and leasing companies) or non-traditional sources, such as retailers and other private entities. Local vendors or retail establishments may be interested in developing financing programs in conjunction with individual utilities. While some interest from retailers has been suggested, this type of third party funding has not been fully vetted at this point. It will be discussed in more detail in the Working Group's final report.

Under a number of programs, a lender and borrower are brought together by an energy efficiency program administrator to effect a loan for an energy efficiency project. It is uncertain whether OBF, in any of its forms, will attract third party financing or make lenders more likely to extend financing. The Working Group has met with a limited number of third party lenders operating within and outside of the state. The lenders have indicated that a creditworthiness check is a critical component in their assessment of the loan. The lenders also indicated that a positive cash flow resulting from the installation of an energy efficiency measure that reduces energy charges would not serve to remove or reduce the need for a customer to meet creditworthiness criteria. The lenders expressed some interest in further exploring the use of SBC funds to guarantee loans of non qualified borrowers. The lenders have indicated that other risk mitigation measures proposed, such as disconnection to correct payment defaults or assignment of the loan obligation to a meter rather than to a customer, would not replace their creditworthiness standard or justify a lower interest rate. In addition the lenders indicated that they prefer that their loans for energy efficiency be repaid directly to the lender as opposed to through the utility bill. The lenders did not see the need for or any benefit accruing from having the loan installment paid via the utility bill from their perspective. If a guarantee mechanism was established, the risk to third-party investors would essentially disappear with full recovery of all related bad debt.

Should third party lending be utilized in OBF, infrastructure would have to be developed by both the utility and lender to maintain information about and manage the receivable and communicate information to each other regarding the receivable and payments made on it. Electronic data interchange (EDI) transactions would need to be customized and implemented for: communication by the lender to establish the receivable in the utility system; communication from the utility to the lender to remit payment; communication from the utility to the lender regarding default on the loan; etc.

Public Agency Bonding

The potential may exist for raising capital from investors through the sale of tax exempt bonds by the state or public benefit corporations authorized to issue debt. Bonding authority is available for certain customers under current statute. In order to include additional customers, this alternative would likely require the enactment of State legislation. Such legislation would allow for the state or public benefit corporations to issue revenue bonds secured by an On-Bill financing tariff charge payable by the customer who benefits from the financed energy efficiency improvements.

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Disconnection

In its discussions of the program “building block”, the Working Group explored whether “existing laws, regulations, and utility tariffs permit the utility to disconnect service to a customer for failure to pay the OBF portion of the bill.” The question is relevant to the design of an OBF program. As was learned during Working Group meetings there are OBF programs currently in effect in other jurisdictions that authorize the utility to treat OBF charges no differently than other utility charges for purposes of collection and disconnection. There are also OBF programs currently in effect that do not authorize disconnection for non-payment of OBF charges.

Residential Service

For New York residential customers, it would appear that disconnection is not likely to be an option for non-payment of OBF charges, as it may not be permitted under the Home Energy Fair Practices Act (“HEFPA”) (Pub. Serv. L. §§30 et seq.) and the Commission’s HEFPA regulations (16 NYCRR Part 11). More particularly, §32 of HEFPA provides that “utility service” . . . “may be terminated . . . if any person supplied with electric or gas service to a residence:

- (a) fails to pay charges for any service rendered . . .
- (b) fails to pay amounts due under a deferred payment plan; or
- (c) fails to pay or agree in writing to pay equipment and installation charges relating to initiation of service; and
- (d) is sent a final notice of termination . . .

The Commission’s termination regulations largely mirror the statutory text. 16 NYCRR §11.4.

It is unlikely that the Commission or a reviewing court would construe “service” or “utility service” under §32 so broadly as to include OBF, regardless of the source of funding. For the purposes of this analysis, OBF charges are assumed to be loan repayment charges, and not utility service charges. Inasmuch as “[a]ny termination of residential utility service . . . shall be in accordance with all relevant portions of [HEFPA],” Pub. Serv. L. §32(1), termination of utility service for any reason *other than* those identified in the statute would be prohibited. The Commission, itself, has applied a similar interpretation to §32 in matters involving non-utility charges, as reflected in the treatment of ESCO charges on consolidated bills prior to HEFPA amendments adopted in 2003.¹⁰ However, if OBF charges are determined to be essential utility services, disconnection may not be inconsistent with HEFPA. The Working Group makes no recommendation regarding disconnection of residential utility service for non-payment of OBF charges.

¹⁰ The HEFPA amendments also expressly broadened the definition of “utility” to include ESCOs, for purposes of Article 2, suggesting further that the term “utility service” would be narrowly defined to exclude charges not specifically authorized.

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Non-Residential Service

HEFPA applies only to residential service. Termination procedure for nonresidential service is governed by Title 13 of the Commission’s regulations, 16 NYCRR Part 13.¹¹ In relevant part, the regulation provides that a “utility may only terminate service to a customer if it provides advance final notice of the termination and fulfills all other requirements of this section when the customer (i) fails to pay any tariff charge due on the customer’s account for which a written bill itemizing the charge has been sent . . .; or (v) fails to comply with a provisions of the utility’s tariff which permits the utility to refuse to supply or terminate service.” However, §13.11 of the Commission’s regulations defines the approved contents of a non-residential customer bill. Section 13.11(a) provides that “[o]nly service(s) performed, materials furnished or **other charges made by the utility**, in accordance with its filed tariff, may be included . . .” (emphasis added) It is unclear whether the term “made by the utility” might disallow the inclusion of OBF charges of an entity other than the utility (e.g. a third-party lender). Being a regulation and not a law, however, §13.11 can be clarified or amended by the Commission if necessary.

¹¹ Disconnection of non-residential gas or electric service rendered by Transportation Corporations is also addressed in the Transportation Corporations Law, Trans. Corp. L. §15. The TCL procedure is similar to, and augmented by, the procedure under the Commission’s regulations.

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Assignment of Obligation

The obligation to pay for an energy efficiency measure financed through an OBF mechanism can be assigned to either the customer or the meter at the location where the measure is installed. Assignment of the obligation has important impacts on program implementation.

Customer Obligation

Assignment of the obligation to the customer is the traditional approach used to obtain repayment of funds provided to customers to pay for energy efficiency measures. Using the traditional approach provides for relatively easy program implementation, since loan instruments have existed for years. The approach generally considers the credit-worthiness of the customer and usually results in a debt obligation. Considering credit-worthiness decreases the likelihood of non-payment, but limits the availability of the energy efficiency program to those with good credit.

Using loan instruments permits use of traditional credit and collection mechanisms such as assessing late payment charges, issuing late notices, and application of judicial remedies including reducing debts to judgments and enforcing the judgments.

Meter Obligation

Assignment of the obligation to the meter¹² is an alternative approach. This approach anticipates that when a customer moves and the measure remains in place and operational, the successor customer will pay the obligation and continue to receive the benefits of the measure. Some parties anticipate that this approach would support the financing of more costly energy efficiency measures than the customer responsibility model because cost recovery could be spread over the life of the measure.

Assignment of an obligation to the meter may be viewed by customers as an “off balance sheet” investment rather than a debt obligation. This can appeal to businesses and institutions which may otherwise require votes or budget approvals, and customers concerned about preserving their debt capacity. However, the customer is, in fact, responsible for the obligation while at the premises.

The meter obligation approach addresses a split-incentive issue where a renter pays the monthly utility bill but does not own the premise. It allows renters and others uncertain about the duration of their occupancy to participate without concern that they may pay for measures before they realize the full benefit.

¹² The term “meter” is used to convey that the project cost is associated with a specific location where the measure is installed. The utility may exchange the meter or the customer may substitute a competitively supplied meter without altering the application of this approach.

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Total Resource Cost Test

As one of its building blocks, the Working Group is evaluating the applicability of the Total Resource Cost Test in any On-Bill Financing program. The Working Group needs to gain a better sense of the potential implementation costs. Utility Company participants noted that it would be impossible to estimate such implementation costs until the actual scope(s) of individual OBF programs can be better defined.

In general, the discussion of On-Bill Financing (OBF) is focused on a strategy for financing and payment of energy efficiency investments rather than on the specific elements of any energy efficiency programs. Accordingly, at first glance it would appear difficult and potentially unnecessary to design a Total Resource Cost (TRC) Test to evaluate the cost-effectiveness of OBF without the context of specific program details.

Determinations of program-specific TRC Tests must consider the total costs of such programs, including both the total direct costs of the measures implemented and such indirect costs as program overhead and measurement, monitoring and validation expenses. In order to pass the TRC test, programs are required to demonstrate that the value of the measures funded exceeds the total cost. Some Resource Cost tests limit the value calculation to the direct benefit of the measure; other tests augment that value calculation by adding various indirect values, such as environmental and social value.

All program-specific expenses would also need to be included in calculating the TRC benefits of programs funded by OBF. In addition, it would appear that any billing system modifications incurred by the utility companies would also need to be added to the calculation, as well as the incremental costs of capital acquisition depending upon whether such capital is secured from public bonds, commercial finance instruments, public funds derived from Systems Benefits Charges, or other sources.

Accordingly, as Working Group VI proceeds with developing recommendations on the topic of OBF, we must identify and consider the costs of billing system modifications. Individual utility companies participating in this discussion should take the lead in identifying utility-company-specific estimates for such modifications. As we have agreed to consider the possibility of implementing OBF for all service classifications, as well as for implementing OBF for only some service classifications, we would likely need to know whether the system modification costs would be different if addressed for all customers or only for a subset of those customers. We will also need to understand the incremental expenses imposed by the costs of securing capital under various SBC scenarios.

Under some approaches to OBF, the costs of auditing and identifying savings opportunities are underwritten by the program and should also be included in the total costs of implementing OBF. Under OBF approaches where competitive markets fund contractors' efforts to audit and identify savings, those costs should likely not be included. In the latter cases, the growth of the energy efficiency provider sector represents a positive contribution to the economy, including job formation, and may more appropriately be counted as a program value rather than expense.

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After we have gained a better understanding of the incremental costs represented by OBF, we will need to evaluate the potential of OBF to generate energy efficiency savings – on a more program-specific basis. If the incremental costs of OBF represent a potentially significant drain on the potential incremental savings that could be secured by offering OBF, modification of the OBF program would likely be in order. For example, if the billing system modification expenses for one utility company are relatively the same whether they are undertaken for a small sample of customers or for all customer classes, that might compel our recommendation to embrace a program that were open for all service classifications. On the other hand, if a utility company could easily implement the necessary program modifications for one particular customer class but would incur significantly higher costs to implement those modifications on a system-wide basis, that would likely drive a recommendation toward implementing a program tailored toward that specific customer class – at least in that utility company’s OBF program.

Similarly, if a utility company advises that the minimum cost of billing system modifications would exceed \$100 million, and we can envision no more than \$90 million of net potential program value from the implementation of OBF, one might conclude that such an OBF program could not pass the TRC test.

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Appendix A – Potential On-Bill Models

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Private Investor

The Dormitory Authority of the State of New York (DASNY) is proposing two alternatives that would utilize on-bill financing to attract third-party financing for energy improvement projects undertaken by users who otherwise would be unwilling or unable to undertake these projects (especially financially weaker users). In the case of DASNY, the third-party financing would be raised from investors through the sale of tax-exempt bonds for the benefit of its not-for-profit clients (e.g. colleges, universities, hospital nursing homes and other not-for-profit entities specifically enumerated in DASNY's enabling statutes). These alternatives, however, would presumably work for other public benefit corporations authorized to issue debt.

Revolving Loan Fund

The Interim Report of Working Group VI currently proposes using SBC funds to establish a revolving loan fund. Loans from this fund would be repaid through the on-bill financing mechanism. As an alternative to this proposal, DASNY proposes a program under which SBC or other funds would be used to provide a source of credit enhancement for a pooled lending program. This revolving loan program would be similar to the Revolving Loan Programs currently administered by the New York State Environmental Facilities Corporation.

Under the DASNY proposal, the SBC moneys would be used to establish a reserve in an amount sufficient to cover some portion of potential defaults by borrowers but not all defaults. DASNY would raise money the necessary to fund the loans through sale of bonds or other obligations and the investors who purchase those bonds would assume the risk of defaults in excess of the reserve funded through the SBC. In this fashion, the SBC could be leveraged so that more money is available to be loaned for energy efficiency projects than under the direct lending proposal contained in the Interim Report. Although more detailed analysis would need to be undertaken, DASNY believes that, depending upon the strength and character of the pool of borrowers, the leveraging potential may be 2-4 times the initial deposit of SBC funds. This leveraging will increase as earnings on the initial deposit are earned and increase the amount of available reserves.

As loans from the pool are paid off, the freed up portion of the reserves could be used to secure loans to additional participants. In addition, earnings on the SBC funded reserve (to the extent not needed to cover defaults) could be used to secure additional loans or to provide an interest subsidy to participants in the pool. The interest subsidy could be used to encourage stronger borrowers to participate in the pool thereby decreasing the size of the SBC funded reserve required by investors for any given pool.

Tariff Revenue Bonds

This alternative, which would likely require the enactment of State legislation, would authorize DASNY or another public benefit corporation to issue revenue bonds secured by a specific tariff charge approved by the New York State Public Service Commission ("PSC") and payable by the customer who benefits from the financed energy efficiency improvements. Under such a customer-specific green bond program, utilities would be obligated to bill, collect and remit all

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revenues from the special tariff charge to the bond trustee and to perform other common servicing functions. In return, the utility would be permitted to withhold from the collections its costs of providing these services as approved by the PSC. It would seem that utilities could contract with others for the performance of some of the necessary functions. As the special tariff would be part of the charge for utility service, shut-off may be a remedy in the event of non-payment. To the extent that the special charges are not paid by the benefitted customers, the rates of all utility ratepayers (or class thereof) would be increased to cover the shortfall.

Bonds issued under this program should not constitute debt of the utilities that are responsible for collecting the special tariff. Also, to the extent that the special tariff is deemed to constitute a component of the price for the utility service, it likely would not be debt of the customer either.

Customer Obligation

The object of this proposal is to provide an on-bill installment payment mechanism. The straw proposal considers the issues of funding source, the role of the utility in an on-bill financing arrangement, and default remedies. It offers a practicable means for providing an OBF mechanism to customers to assist them in installing energy efficiency measures.

Financing –

The OBF mechanism proposed seeks to expand the numbers of customers that will undertake energy efficiency projects by facilitating funding of these projects and support the 15 by 15 energy efficiency goal of New York State. Under this proposal the utility, through a tariff, will administer an installment payment program for energy efficiency projects.

This proposal will provide customers with an easy alternative to initiating a loan through a third party lender and provide the added convenience of on-bill payment. This also provides for an “off-the-book” investment, rather than a debt obligation, which appeals to customers concerned about their debt capacity.

The OBF mechanism proposed would use SBC funds or other funds raised for this purpose to purchase energy efficiency measures. The fund used for these projects would be restored as customers make installment payments. In this way, an SBC revolving fund would be created for the funding for energy efficiency projects. Under this mechanism, interest charges would not be assessed and, no credit action, other than the issuance of notices of overdue installments, would be taken. This proposal does not make ratepayer funds available to cover customer defaults; in such instances, the fund would bear the cost of the default.

This approach overcomes a number of issues and will allow a quicker start-up of an OBF mechanism than other alternatives.

Issues resolved under this mechanism include:

- Concern with laws that would be applicable to the utility if the utility is construed to be a lender. Under this proposal the Utility would administer a tariff service to provide customers with energy efficiency measures that the customer would pay for in installments on their utility bill. The Utility is serving as an administrator of the SBC fund used for this purpose rather than a lender.
- Complexity that would be involved utilizing third party loans to individual customers. Third party funding would require the development of infrastructure by both the utility and the lender to maintain information about the loan, manage the installment payments, and communicate information to each other regarding the receivable and payments made on it. The use of a fund rather than individual loans would avoid this complexity. In discussions with the Working Group lenders had some concerns related to developing the infrastructure to support utility on-bill repayment of loans which the utilities also share. The lenders that

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spoke with the Working Group did not appear motivated by the prospects offered by utility on-bill OBF to undertake this effort.

Other funding sources that could be used under this proposal are funding from the issuance of bonds by governmental authorities or private entities. Capital raised in this way would contribute to the funding pool for energy efficiency projects undertaken under this OBF mechanism.

Eligible Customers –

The OBF mechanism proposed seeks to serve homeowners and small commercial customers who meet creditworthiness standards and undertake energy efficiency measures with a minimum cost of \$3,000 and a maximum cost of \$25,000.

Payment Installment Responsibility –

The customer that undertakes the energy efficiency project would agree to be responsible for all payment installments. Customer responsibility for the total cost addresses the reality that change of occupancy may result in removal of the energy efficiency measure through remodeling of the premises (such as total renovation). It also addresses the possibility that a long time vacancy may occur, and it removes the need to pass the obligation to the successor customer who may not wish to be burdened with the cost. Under this arrangement, the measure will be paid for even if the measure is left stranded by the customer, enabling the fund to be replenished and used for other projects.

Creditworthiness Standards –

Utilities would develop and apply creditworthiness standards that evaluate the customer's ability to make payments.

Loan Term –

The loan term would be determined by the individual utility taking into account the scope and cost of the project. In general, the project cost should be payable over no more than 36 months.

Installment Payment Default –

It is expected that payment installment defaults would be minimal due to creditworthiness standards that would be applied to customer applicants. Disconnection would not be utilized to cure installment payments defaults.

Administration and Development Costs –

Administration and development costs would be funded through the SBC rather than being added to the loan principal.

Applicability of TRC Test –

This straw proposal assumes that OBF is an alternative mechanism for administering energy efficiency programs that already pass the TRC test. Therefore, the TRC test would not be applicable specifically to OBF.

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National Grid

On August 22, 2008 and September 22, 2008, National Grid filed energy efficiency programs in Niagara Mohawk's upstate New York service territory that provide customers the opportunity to use on bill financing to assist with the implementation of energy efficient equipment.

- Small Business Program¹³: The Small Business Program as filed is estimated to have a 2.47 TRC and save an estimated 135,500 MWh in annual energy savings from 2009 through 2011.
- Large Business Retrofit (Energy Initiative) Program: On bill financing was proposed to encourage participation by cities and towns in National Grid's upstate New York service territory. On bill financing for this customer group has been implemented in Massachusetts as a pilot and National Grid believes it assists cities and towns by offering more attractive financing solutions where capital and operating budgets prohibit up-front investments.

More information on the Small Business Program and the Large Business Programs are provided in Attachment 2. In addition to on bill financing, National Grid's energy efficiency programs provide customers with:

- Financial Incentives: to reduce the cost barrier to investing in energy.
- Technical Assistance: to provide information and education to potential participants.
- Quality Control: Services such as commissioning for large projects and post inspections to ensure that the systems specified were installed and operate as intended.

In general, implementing on bill financing for the above filed programs requires resolution of the following issues:

- On Bill Financing Funding: National Grid uses systems benefit charge ("SBC") funds to "advance" participants their share of project costs. Participants then "repay" the money back in to the SBC funds for use by future program participants.

However, for some programs, using a 3rd party vendor may be more prudent than using SBC funds, particularly for customer segments where the financing amounts are large, equipment paybacks are long, customer turn over is high, or creditworthiness may be an issue.

- Allocation Rules for Partial Payment: Allocation rules for partial payments dictate that payments flow first to delivery and supply services and then other charges/adjustments such as on bill financing.

¹³ On bill financing has been utilized in National Grid's energy efficiency program in Massachusetts for close to 20 years. In 2007, approximately 900 energy efficiency projects were installed and customers' electric bills included their share of the energy efficiency project costs. Attachment 1 provides an electric bill with the on bill charge for the energy efficiency project.

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- **Disconnection:** Customers are not disconnected for failure to repay the energy efficiency amount on their electric bills. However, credit and collections efforts for customers failing to pay their bills would include the balance associated with the energy efficiency amount.
- **Billing System Changes:** A team is working on the CSS system enhancements required to implement on bill financing in upstate New York.

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New York Power Authority

The New York Power Authority currently operates an OBF program for its end use customers. As part of its program, the Authority and its customer identify a potential project, the Authority performs an engineering audit and define the scope of work. The Authority issues commercial paper financing for all project expenditures from initial audit through completion of the project.

In 1994, the Authority's Trustees authorized the use of commercial paper to finance the expenditures associated with the various energy services programs. Commercial paper is a short-term money market instrument issued by large banks, corporations, municipalities and non-profit entities. The Authority is authorized to issue tax-exempt and taxable commercial paper, although most energy services projects have qualified for tax-exempt financing. Financing charges are determined by the actual interest rate associated with the commercial paper issued to support the Authority programs. Monthly interest during construction rates are based on the weighted average cost of money associated with all outstanding commercial paper issuances for that month.

The annual interest rate used in the repayment of all costs for a completed projected is calculated in January of each year and is based on the weighted average outstanding commercial paper for the previous twelve months. The interest rate is applicable for the succeeding twelve month repayment period January through December.

The interest during construction rate and annual rate include any fees and surcharges to issue the commercial paper, for the line of credit backing up the commercial paper, and for an interest rate cap purchased in connection with the program. All fees and surcharges applied to the interest rate reflect actual costs incurred by the Authority to cover the costs associated with issuing and maintaining the commercial paper debt.

Program participants typically repay outstanding loan amounts based on an amortization schedule set at completion of the project (usually between 7 and 10 years) but also have the option of repaying the full outstanding principal at any time without penalty.

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Pay As You Save® (PAYS®)

PAYS® key elements include a tariff assigning the payment obligation to a meter location, not to an individual customer; billing and payment on the utility bill with disconnection for non-payment; and independent certification that products are appropriate and savings estimates exceed payments.

The following is an example of a TIP that contains the key elements of a PAYS® system. Utilities could name their own programs as they see fit. The TIP would:

- Allow customers who occupy municipal, university, school and hospital buildings to install all measures that save electricity, gas, oil or water and qualify for the tariff, providing the minimum project cost is \$3,000 or greater.
- Allow customers who occupy commercial and industrial buildings to install all measures that save electricity, gas, oil or water and qualify for the tariff providing the project cost equals or exceeds \$5,000. As part of the tariff design, the tariff may be limited to customers current with their utility accounts. In addition, the utility may opt to not offer the tariff to customers whose buildings are in economically distressed areas that may be prone to extended vacancy unless some form of economic development funding provides assurance of repayment. Prior to precluding participation by customers in economically distressed areas, the utility and the Commission would want to consider whether this would constitute an objectionable form of redlining.
- If the Commission is willing to consider disconnection for non-payment and making the tariff resource blind for residential customers in order to enable these customers to participate, then the tariff will be offered to customers who rent or own residential properties (including mixed use properties) to install all measures that save electricity, gas, oil or water that qualify for the tariff providing the minimum project cost is \$1,000. Residential customers will be allowed to install permanent and portable measures, however, the balance due for portable measures must be paid off upon the customer closing his or her account (unless the customer seeks to transfer the payment obligation to another location within the utility's service territory).
- The Commission will approve one or more non-utility Independent Certification Agents, to implement the tariffed installation program or programs, with the Commission to determine whether there should be one statewide or separate regional or utility territory-specific Independent Certification Agents. The Independent Certification Agent could be a state agency such as NYSERDA or such other non-utility entity that the Commission determines to be appropriate. Start-up costs for the Independent Certification Agent will be recovered from system benefit charge funds. The Commission will determine whether ongoing operational costs should be recovered from system benefit charge funds or recovered through tariffed installation program payments.
- Measures will be assumed to qualify for the tariff if the current value of the estimated annual savings to the customer (based on retail rates) exceeds 1.33 times the annual payments that will cover all measure costs, financing, and program fees (but not start-up costs). Additionally, the scheduled duration of payments may not be longer than 75 percent

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of the estimated life of installed measures or ten years, whichever is shorter. The Independent Certification Agent will determine whether the “1.33” and “75 percent” requirements are satisfied.

- Contractors will be permitted to market installations and assist customers with savings estimates and completion of all program forms. Projects with complete and accurate applications must be approved by the Independent Certification Agent within 30 days. After approving an application, the Independent Certification Agent will: 1) authorize the contractor to begin the approved project; 2) pay the contractor the agreed amount following satisfactory completion of the approved project; 3) request that the customer’s utility begin billing the customer according to the payment schedule included in the approved application; 4) if the customer is a renter, inform the building owner (or the manager of the building) of the existence of the tariffed installation program obligation; and 5) respond to and resolve any subsequent disputes between the contractor and the customer.
 - To minimize utility program costs and customer hassles, contractors must be bonded or provide irrevocable letters of credit which are valid for the duration of a customer’s payment stream and equal to an amount the Commission (perhaps based upon NYSERDA recommendation) determines to be sufficient and for purposes determined to be appropriate.
 - As a program cost saving measure, to avoid boom and bust cycles based on available program funding, and to ensure all customers receive the same rebate offer, rebates will be limited to the amount generally required to qualify a package of measures for the tariffed installation program, regardless of whether the customer chooses to finance its portion of measure costs through the tariff.
 - Disconnection for non-payment must be in accordance with Commission rules.
 - Tariffed installation program payment obligations must be fully disclosed to subsequent purchasers or renters of buildings or building units with payment obligations on the meter that will continue after the new purchaser or renter begins utility service. Sellers will have the obligation to disclose the payment obligation to purchasers on or before the sales transaction pursuant to disclosure requirements established by the Commission. For rental units, disclosure of the payment obligation will be the responsibility of the building owner who must provide signed proof of disclosure to the new occupant using a Commission approved disclosure form or be liable for costs incurred by the new occupant (including relocation if the new occupant refuses to accept the benefits of the installation and the payment obligation). Utilities will ensure disclosure by informing new customers within 30 days of their taking occupancy of premises with tariffed installation program measure payment obligations of their rights and responsibilities on a form approved by the Commission.
 - Third-party capital will be used to pay for the upfront costs of measures. Utilities will guarantee payment to the capital provider regardless of collections. Utilities will be permitted to treat any missed payments the same as all other missed payments, including the assurance of having them covered by all ratepayers after traditional collection efforts
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have failed. No separate booking of missed payments will be required.

- If possible, bonds from DASNY or NYSERDA will be used to provide the lowest possible cost capital. If bonds are not feasible, capital will be provided through an RFP process (managed by NYSERDA if NYSERDA agrees to accept the responsibility) to ensure the lowest possible capital.
- If any measures fail during the duration of a customers' payment obligation, a measure will be repaired within 28 days of notification or the payment obligation will cease until the measure is made to function. No increase in payment will be required of the participating customer, however, payment terms will be extended to recover repair costs for which the customer is responsible. The Commission will determine procedures, to be implemented by the Independent Certification Agent, to allocate financial responsibility for any repairs among the contractor, customer or building owner. The Independent Certification Agent will be responsible for ensuring that repairs are made and that payment obligations be extended as appropriate, or that the payment obligation ceases when measures are not made to function. The Independent Certification agent will contract with participating contractors to ensure that funds from the contractor's irrevocable bond are available to pay any repair costs for which the contractor is determined to be responsible or to repay the capital provider for any payments not made if repairs are not made and a customer's payment obligation ceases.
- Payment durations at a location may be extended if extended vacancy or missed payments increase costs associated with measure installation at the location until all costs have been collected from those benefiting from the installation unless the measure stops functioning.

Note: Except for residential customers, once changes to billing and information systems are made, renters, owners, those with debt issues, in fact all customers can install the most cost effective efficiency measures for zero program cost. If a more comprehensive program is desired, SBC funded rebates could be used to ensure installation of all TRC qualifying measures for the least possible cost.

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Hydro One affiliates Third Party Lender

This section memo summarizes a loan program offered by a number of Hydro One affiliates to electric distribution service customers in southern Ontario.

“Powerhouse” zero-interest loans¹⁴

- Interest-free loans designed “to overcome the upfront costs of converting to ‘renewable energy’”
- Qualified renewable energy applications include solar water heater, photovoltaic installations, geothermal technologies and wind.
- Program also offers rebates (up to \$6750) instead of loans, depending on customer’s preference.
- Financing amounts from \$2,000 up to \$50,000.
- Amortization periods of up to 120 months (depending on loan).
- Unsecured loans – no liens.
- No down payment required.
- Monthly payments as low as \$25.00.
- Loans can be repaid in full without penalty.
- Payment through direct debit from customers’ financial institution account.
- Program is available for equipment installed by February 15, 2009.
- Application process initiated by utility and completed by lender.
- Applications process is completed by lender.
- Financing is provided by (and through) “major financial institutions.”
- Program costs (presumably including interest buy-down) funded by participating provincial governments.
- Applicants are permitted to aggregate into “buying clubs” to purchase facilities (e.g. solar) suitable for common use.

¹⁴ See <http://www.powerhouseprogram.ca/loans/index.htm>

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Appendix D – Summary of existing U.S. OBF Models

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This section is being prepared by the Working Group and was not yet available for inclusion in this Interim Report.