

Mr. O. D'Alora

# Northeast Energy Efficiency Partnerships, Inc.



ENERGY  
RESOURCES  
AND THE  
ENVIRONMENT

April 15, 2005

Jaclyn A. Brillling, Secretary  
New York State Public Service Commission  
3 Empire State Plaza  
Albany, New York 12223-1350

Re: Comments on the New York Public Service Commission Case 05-M-0090 in the Matter of the System Benefits Charge III.

Dear Ms. Brillling,

Northeast Energy Efficiency Partnerships, Inc. (NEEP) appreciates the opportunity to provide comments in regard to Case 05-M-0090 concerning system benefits charge (SBC) funding in New York and the role of NYSERDA in administrating these funds.

NEEP is a nonprofit organization founded in 1996 whose mission is to promote energy efficiency in homes, buildings and industry in New England, New York and the Mid-Atlantic states through regionally coordinated programs and policies that increase the use of energy efficient products, services and practices, and that help achieve a cleaner environment and a more reliable and affordable energy system. NEEP supports government policies, offers three acclaimed training programs and coordinates six regional initiatives that promote and build market adoption of quality, energy efficient products and services. Working in partnership with environmental and consumer groups, state and federal agencies, businesses, utilities and other non-profits, NEEP serves as a strategist, planner, facilitator, information and training resource, and project manager to help develop and implement regional programs and policies for energy efficiency (more information is available at <http://www.neep.org/>).

Our responses to the Commission's questions are as follows:

**1. To what extent have the goals and objectives established by the Commission been achieved?**

As put forth in the most recent New York Energy Smart Program Evaluation and Status Report (September 2004), the program has made significant strides in achieving its various goals and objectives. As a result of program investments since 1998 through September 30, 2004, the New York Energy Smart programs are saving over 1 billion kWh per year and reduced peak demand through installed energy efficiency measures by 365 MW (not including curtailable program

impacts which provide additional demand savings of 770 MW). These savings have reduced annual energy costs for participating New York Energy \$mart customers by \$185 million and added nearly 4,000 new jobs to the state. In addition, the program is helping the state meet important environmental goals, including reducing nitrogen oxide (NO<sub>x</sub>) emissions by 1,265 tons per year, sulfur dioxide (SO<sub>2</sub>) emissions by 2,175 tons per year, and carbon dioxide (CO<sub>2</sub>) emissions by 1,004,000 tons per year. In addition, the New York State Energy Research and Development Authority's (NYSERDA) SBC funded programs have created and retained nearly 4,000 jobs.

The program has successfully reached out to residential, low-income and commercial and industrial customers through ENERGY STAR<sup>®</sup> promotions, more than 140 research and development projects and through the New Construction Program (NCP) that has increased knowledge about energy efficiency options for nearly 100 percent of the building owners and 92 percent of the architects and engineers that participated in the program.<sup>1</sup>

As a facilitator of partnerships to advance energy efficiency programs and policies across the Northeast, NEEP works with all of the administrators of ratepayer-funded energy efficiency programs in New England, New York and New Jersey. Our experiences with NYSERDA staff have shown them to be highly effective as administrators of some of the most successful energy efficiency programs in the country.

## **2. Should the SBC program continue beyond its current expiration date of June 30, 2006? If so, for what duration should the SBC be extended and at what funding level?**

NEEP strongly supports the continuation of the SBC program. Based on the evaluation results mentioned above, the program would continue to provide significant savings to customers, lower peak demand, and reduce greenhouse gas emissions to help the state meet its climate change action goals. There also remains a significant amount of untapped energy savings that can be captured through SBC programs, especially in the long term. NYSERDA commissioned a study to analyze the long-range potential for energy efficiency and renewable energy technologies to displace fossil-fueled electricity generation in New York State. The study found that efficiency and renewable energy could reduce the state's annual electricity generation requirements by more than 19,939 GWh by 2012 and by more than 27,244 GWh by 2022. In addition, through maintaining currently planned initiatives the state can expect to provide 13,675 GWh and 3,456 summer-peak MW annually by 2022.<sup>2</sup>

While the program has progressed in transforming the energy efficiency market, the existence of persistent market barriers will require the continuation of such programs in order to achieve this full long-range potential. Barriers such as misplaced or split incentives, current corporate structures, and inadequate financing and information require government programs in order to target and remove those barriers and provide consumers greater access to energy efficiency.

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<sup>1</sup> New York Energy \$mart Program Evaluation and Status Report, Quarterly Report to the Department of Public Service, Quarter Ending September 30, 2004.

<sup>2</sup> Energy *Efficiency* and Renewable Energy Resource Development Potential in New York State, Final Report, Volume 1: Summary Report, August 2003. Prepared for NYSERDA by Optimal Energy, Inc., the American Council for an Energy-Efficient Economy, Vermont Energy Investment Corporation, and Christine T. Donovan Associates.

NEEP recommends that the program be continued for at least five more years with an increase in funding levels. NYSERDA's current funding rate (1.02 mills/kWh) is the lowest level in the region (see table below), and New York is the only state where energy efficiency funding represents less than 1 percent of electric utility revenues. Given the amount of cost-effective achievable energy efficiency potential available in the state, the current mill rate should be increased to more than 2.0 mills/kWh – consistent with levels in other Northeast states – so as to capture the continued cost-effective savings in the state as a means of meeting multiple state policy goals.

State	2004 Energy Efficiency Funding Levels In Northeast States		
	\$ (MM)	mills/kWh	% of Revenues
Connecticut	49.0	3.00	3.0
Massachusetts	120.0	2.50	2.5
Vermont	17.5	2.50	2.6
Rhode Island	15.3	2.10	2.1
New Jersey	89.5	1.30	1.35
Maine	8.3	1.50	1.5
<b>New York (NYSERDA)</b>	<b>87.0</b>	<b>1.02</b>	<b>0.75</b>
New Hampshire	15.0	1.80	1.52

Note: In some cases, the mill charges and funds collected may vary depending on legislative and administrative actions.

### 3. Have conditions changed since the establishment of the SBC that would necessitate a change in the overall goals and objectives of the SBC? If so, what changes are recommended?

Yes, conditions have changed to the point that there is now an even greater need for the SBC program than there was at the program's onset. Since the program's implementation, the cost of fossil fuel has continued to rise, and along with it, the subsequent cost in electricity generated by oil and natural gas, as well as the primary costs of natural gas and heating oil themselves. In a recent natural gas outlook study, the American Council for an Energy-Efficient Economy (ACEEE) highlighted energy efficiency and renewable energy as the only near-term solution to mitigate the increased cost and price volatility of natural gas markets.<sup>3</sup> In addition, NEEP recently commissioned a study on the *Remaining Economically Achievable Energy Efficiency Potential in New England*, where the study finds that electric energy efficiency can reduce natural gas demand for electricity generation by 7 to 45 percent by year 2013 depending on how much energy efficiency potential can be captured.<sup>4</sup>

Also, with rising energy costs, congested transmission and distribution continue to worsen in highly populated regions of the state. In addition, through its Energy Plan and participation in the

<sup>3</sup> ACEEE Fall 2004 Update on Natural Gas Markets, November 3, 2004, prepared by R. Neal Elliott, Ph.D., P.E.

<sup>4</sup> *Economically Achievable Energy Efficiency Potential in New England*, November 17, 2004, prepared by Optimal Energy, Inc. for Northeast Energy Efficiency Partnerships, Inc. See [www.neep.org](http://www.neep.org).

Regional Greenhouse Gas Initiative (RGGI), the state has set the goal of reducing greenhouse gas emissions by 5 percent below 1990 levels by 2010, and 10 percent below 1990 levels by 2020. Lastly, global political instability and other socioeconomic have made it apparent that continuing to rely on the importation of fossil fuels for our electricity puts our nation and New York at greater risk. All of these matters call for the continuation of NYSERDA's successful energy efficiency programs funded through the SBC.

**4. If assuming continuation of the SBC, how should programs be prioritized to meet those goals and objectives?**

While prioritizing SBC programs, it is important to establish a balance between shorter-term low-cost options, such as "lost opportunities" to capture energy savings, and longer-term market transformation programs to reduce costs to consumers over time. According to the *Energy Efficiency and Renewable Energy Resource Development Potential in New York State* study commissioned by NYSERDA, the greatest achievable energy savings potential is found in the commercial sector with the residential sector also offering significant savings potential.<sup>5</sup> The NEEP commissioned study on the *Remaining Economically Achievable Energy Efficiency Potential in New England* is consistent with these findings, including that greatest energy efficiency opportunities exist in the lighting and cooling end-use markets for both residential and commercial sectors.<sup>6</sup> Program prioritization consistent with these findings will ensure the greatest impact.

**5. How might the SBC programs be adjusted given the Commission's order, issued September 24, 2004, regarding a Renewable Portfolio Standard (Case No. 03-E-0188)?**

NEEP does not work in the area of renewable energy, making the issue of a renewable portfolio standard outside the scope of our expertise.

**6. In what ways might the current SBC fund collection and allocation process be improved?**

NEEP has no comment on the collection and allocation process.

**7. What specific program(s) should be eliminated, expanded or created?**

NEEP recommends that NYSERDA continue all current programs with possible expansion to those programs that address areas with the largest market barriers exist and where there is the greatest achievable energy efficiency potential (i.e., lighting and cooling end-use markets for both residential and commercial sectors) in order to help achieve the state's climate change goals, and reduce energy costs through both energy (kWh) and demand (summer and winter peak kW) savings. Further, we encourage NYSERDA's continued efforts to transform markets by increasing consumer awareness of energy efficiency opportunities and benefits.

<sup>5</sup> *Energy Efficiency and Renewable Energy Resource Development Potential in New York State*, Final Report, Volume 1: Summary Report, August 2003. Prepared for NYSERDA by Optimal Energy, Inc., the American Council for an Energy-Efficient Economy, Vermont Energy Investment Corporation, and Christine T. Donovan Associates.

<sup>6</sup> *Economically Achievable Energy Efficiency Potential in New England*, November 17, 2004, prepared by Optimal Energy, Inc. for Northeast Energy Efficiency Partnerships, Inc.

We also recommend the creation of an SBC funded natural gas program (detailed in response to question 13). With forecasts for increasingly tight natural gas markets and growing costs to consumers and growing concern over the proposed increase in or expansion of Liquefied Natural Gas (LNG) facilities there is a rising need for gas efficiency programs. ACEEE recently completed studies ([www.aceee.org/energy/natlgas.htm](http://www.aceee.org/energy/natlgas.htm)) showing that small gains in energy efficiency - both electric and gas - can have significant impacts on natural gas supplies and prices, and thus offset the need for LNG imports. NEEP also recently conducted a study examining the role energy-efficiency programs can have in mitigating increased natural gas demand in New England ([www.neep.org/files/Full\\_Report.pdf](http://www.neep.org/files/Full_Report.pdf)). NEEP's study found that cost-effective energy efficiency can reduce forecasted natural gas demand by 7 to 45 percent, depending on how much of the economically achievable energy efficiency is captured by 2013. This considers only what electric energy efficiency can do to reduce gas demand for power generation, and does not take into consideration how much further demand can be lowered by pursuing cost-effective natural gas energy efficiency programs. While the NEEP study focused on New England, New York State, with similar energy needs and climate, can expect similar savings from gas efficiency. Therefore, in addition to minimizing the need for new LNG facilities, natural gas efficiency programs can successfully decrease consumer demand, thus leading to lower costs and price volatility.

Within the Northeast there is a wide breadth of information available to NYSERDA to create and implement gas efficiency programs. Massachusetts, New Hampshire, Vermont and New Jersey all have successful natural gas efficiency programs. We recommend that NYSERDA work with these states to model successful programs and explore opportunities for regional coordination in order to leverage greater program effectiveness.

**8. How can future SBC funded programs be more responsive to the needs of New York's energy consumers?**

NEEP's experience is that NYSERDA is responsive to its customers, and we can offer no more information regarding future programs.

**9. How can SBC funded programs be marketed more effectively?**

Again, NEEP's experience is that NYSERDA has been as effective as possible given current funding levels in the area of marketing, and can offer no further information on the topic.

**10. In what ways can NYSERDA improve its administration of the SBC?**

No response.

**11. Is the current NYSERDA program evaluation process adequate? How might it be improved?**

NEEP recommends that all aspects of the NYSERDA evaluation process be continued. If possible, we recommend that resources be allocated to allow NYSERDA to include additional baseline research and to participate in and leverage other national and regional or multi-state

studies where appropriate, as these would increase the ability of NYSERDA to measure and demonstrate the performance of its programs.

NYSERDA has a unique approach to evaluation of its energy efficiency activities. Instead of evaluating programs vertically, i.e. program by program, it has adopted a horizontal approach in which evaluations are done by specialty (quantifying impacts, assessing market effects, investigating process issues) across all programs. While this approach required significant investments of time and effort by the evaluators initially so that they are acquainted with all NYSERDA activities, it is beginning to fulfill its promise. NYSERDA is able to integrate results and insights across programs and by sector in ways that would be difficult for other organizations. The value of this approach is realized when there is long-term (multi-year) commitment to funding.

From a percentage perspective, NYSERDA's evaluation budget is lower than many other organizations that administer efficiency programs. As a result of limited resources, some evaluation opportunities are shortchanged, for example, baseline studies that could enhance the accuracy of impact estimates. Furthermore, one of the best ways to see how NYSERDA programs are performing is to compare results with other areas. NYSERDA evaluations would also benefit from either increasing its involvement in or taking advantage of efforts that cross state and regional boundaries.

**12. Should SBC funds be extended to programs that encompass research and development into retail and/or wholesale electric market competitiveness issues, or transmission and/or distribution of the State's energy resources?**

While NEEP supports research and development programs, a separate funding mechanism should be established to create and administer these programs. With several Northeast states experiencing raids on or diversion of their SBC funds for other purposes, it is important for New York State to set the precedent to protect funding for energy efficiency programs. Since NYSERDA's SBC funds are already below others in the region, the focus should be on increasing funds for energy efficiency programs, and not spreading existing funding to new areas.

**13. Should the scope of the SBC program be expanded to include programs for natural gas customers? YES If so:**

**a. What kinds of programs would benefit New York's gas consumers?**

We recommend that New York borrow from a recent survey by ACEEE of gas efficiency programs across the nation, which highlights best programs offered in states with gas efficiency programs.<sup>7</sup> Successful residential programs typically address space heating and water heating, including rebate programs for energy efficient furnaces and boilers, weatherization through the installation of energy-efficient windows and duct sealing, and efficient heating controls such as setback thermostats. Water heating programs typically promote the installation of energy

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<sup>7</sup> Kushler, Martin, Ph.D., Dan York, Ph.D, and Patti Witte, M.A. *Responding to the Natural Gas Crisis: America's Best Natural Gas Energy Efficiency Programs*, Report Number U035, December 2003.

efficient water heaters, clothes washers and dishwashers, low-flow showerheads and pipe insulation. Commercial programs, while targeting the same uses, focus more on the installation of energy-efficient boilers and HVAC systems.

b. Which classes of customers would be served most effectively by a natural gas SBC program?

Given that about 75 percent of the natural gas end-use demand in New York is by the residential and commercial sectors, these sectors should be the primary target of a natural gas SBC program. We refer to ACEEE's comments in this docket on the list of specific end-use measures for these sectors where savings opportunities exist.

c. How should a natural gas SBC program be funded and what annual level of funding might be considered reasonable? How might a natural gas SBC affect current electric SBC funding levels?

A systems benefit charge (SBC) fund should be established to promote energy efficient gas programs similar to the natural gas efficiency programs already established in Massachusetts, New Hampshire and Vermont. A similar fund should be established for programs to increase end-use efficiency of fuel oil. All such programs should be coordinated for statewide consistency including joint delivery in areas of overlap. As an example, the Massachusetts' programs are coordinated with electric efficiency programs including joint implementation of the ENERGY STAR' Homes program and electric efficiency rebates for high efficiency furnace fans as an add-on to the high efficiency gas furnace program.

The funding for a gas SBC program should be *above and beyond* funding for the electric SBC program currently administered by NYSERDA, although allowing for coordination between the two programs so as to leverage greater program cost-effectiveness for both the electric and gas programs.

d. What should be the initial duration of a natural gas SBC, and should that term coincide with the extension of an electric SBC, if the electric SBC is extended?

Since there is inherently overlap between natural gas and electric efficiency programs (e.g., ENERGY STAR' Homes program) it would be ideal to have the natural gas SBC program follow the same funding schedule and length of commitment as the electric SBC program.

e. How might a natural gas SBC be administered and evaluated and how should it differ from the administration of the electric SBC?

Given NYSERDA's expertise, staff and resources, we recommend using the same administrative model as the electric SBC funded programs.

14. Do you have any other suggestions for improving the overall SBC program that are not addressed by the above questions?

Energy efficiency has been shown to be the most cost-effective means to reduce CO<sub>2</sub> emissions. As such, SBC funded energy efficiency is a key strategy for New York state as part of its climate change activities. As a leading member of the Regional Greenhouse Gas Initiative (RGGI), the state is currently working with other states in the region to develop a carbon cap and trade model rule. With a desire to keep cost of such a system down, one idea currently under discussion is to give carbon allowances to program administrators like NYSERDA. NYSERDA could then sell allowances and use the acquired funds to expand and implement energy efficiency programs. Therefore, it is important that NYSERDA maintain its SBC funded programs and its role as administrator to help achieve the goals of RGGI.

Sincerely,

A handwritten signature in black ink that reads "James J. O'Reilly". The signature is written in a cursive style with a large, prominent "J" and "R".

James J. O'Reilly  
Director of Policy, Outreach and Communications