



August 22, 2011

Hon. Jaclyn A. Brillling, Secretary  
Public Service Commission of the State of New York  
Three Empire State Plaza, 14<sup>th</sup> Floor  
Albany, New York 12223-1350

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

Dear Secretary Brillling:

Attached for filing in the above-entitled proceeding are Comments of the New York Independent System Operator, Inc. on the Proposed Rule Making Notice in the above captioned proceeding that was published in the July 6, 2011 New York State Register.

The NYISO is serving its comments on all parties, via electronic mail, to the Active Party List established for this proceeding. A certificate of service by electronic mail is enclosed. Should you have any questions, please contact me by phone at (518) 356-6220 or by e-mail at [cpatka@nyiso.com](mailto:cpatka@nyiso.com).

Very truly yours,

/s/ Carl F. Patka  
Carl F. Patka  
Assistant General Counsel

**STATE OF NEW YORK  
PUBLIC SERVICE COMMISSION**

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

**COMMENTS OF  
THE NEW YORK INDEPENDENT SYSTEM OPERATOR, INC.  
ON THE ENERGY EFFICIENCY PORTFOLIO STANDARD  
PROGRAM REVIEW WHITE PAPER**

**I.     Introduction**

The New York Independent System Operator, Inc. (“NYISO”) respectfully offers these comments in response to the New York State Public Service Commission’s (“PSC” or “Commission”) Proposed Rule Making Notice in the above-captioned proceeding that was published in the July 6, 2011 New York State Register.<sup>1</sup> The comments herein address the June 6, 2011 Energy Efficiency Portfolio Standard Program Review White Paper (“White Paper”).

The NYISO is the independent body responsible for providing open access transmission service, maintaining and planning for bulk power system reliability, and administering competitive wholesale markets for energy, capacity, and ancillary services in New York State. Among its duties is the reliable forecasting of peak demand, energy requirements, energy efficiency, and emergency demand response for the New York Control Area (“NYCA”). Accordingly, the NYISO has a strong interest in the accurate calculation of energy savings that are realized by New York’s energy efficiency programs.

The NYISO has supported, and continues to support the Commission’s Energy Efficiency Portfolio Standard (“EEPS”) proceeding. The NYISO applauds the achievements realized

---

<sup>1</sup> These comments were prepared with analysis by Arthur Maniaci, Supervisor, Load Forecasting & Energy Efficiency, NYISO System & Resource Planning.

through the ongoing cooperation and exchange of information between NYISO, NYSERDA, NYSDPS, and the state's utilities and power authorities working together as the Commission envisioned in its original EEPS order ("June 2008 Order").<sup>2</sup> It also commends the Evaluation Advisory Group, which has played a key role in providing the NYISO with the data necessary to inform its planners and market participants on the progress of the EEPS.

The June 6 White Paper is inclusive and forward looking and reflects the NYDPS Staff's dedication to, and optimism for the success of the EEPS programs. In its comments below, the NYISO provides its perspective on several of the issues addressed in the White Paper.

## **II. NYISO's Comments in Response to the June 6 White Paper**

### **A. NYISO Bulk Power System Planning**

In its White Paper at page 17, the NYDPS Staff ("Staff") acknowledges that the NYISO must take into account the many factors that contribute to uncertainty in the actual achievements of efficiency programs. NYISO agrees with this point of view and adds that energy efficiency forecasts must be realistic in order to properly plan New York's bulk power system. To illustrate this point, if the EEPS forecast is too high, then NYISO's net forecasted load will be too low. This could result in deficiencies in the design of the bulk power system. Conversely, if the EEPS forecast is too low, then NYISO's net forecasted load will be high. This could result in premature investment in the bulk power system. It is therefore important that the forecast be consistent with the actual development of the EEPS programs.

---

<sup>2</sup> *Order Establishing Energy Efficiency Portfolio Standard and Approving Programs*, Case 07-M-0548, Energy Efficiency Portfolio Standard (EEPS), (issued June 23, 2008).

## **B. Extension of Authorizations**

Staff's recommendation (also on page 17 of the White Paper) not to extend the achievement date for energy efficiency program authorizations to 2018 is unrealistic. The EEPS goals for the next three years are, as yet, undefined and, accordingly, are difficult to address. Nevertheless, at this time it appears to the NYISO that full achievement of the program goals by 2015 is not feasible. By way of explanation why the NYISO does not think the goal can be achieved by 2015, it provides the following analysis of costs and annual budgets from the 2008 Optimal Study,<sup>3</sup> and an explanation of their relation to the current EEPS performance.

In order to achieve the entire EEPS goal of 8,400 GWh between 2009 and 2015, the Optimal study results indicate that it would be necessary to spend about \$370 million per year, at an average cost of \$300 per MWh. The Commission's June 2008 Order cited a cost of \$305 per MWh and annual expenditures of about \$318 million per year.<sup>4</sup>

There is now a sufficient record of practical experience with the EEPS programs to review program performance against these initial planning estimates. Experience has shown that total annual EEPS expenditures have yet to exceed \$250 million per year. Average costs for non-CFL programs through the end of 2010 were \$391 per MWh for the state's utilities and were in excess of \$335 per MWh for NYSERDA. In the period of January through June 2011, average costs for non-CFL programs are at \$300 per MWh for the first time.<sup>5</sup> However, attention only to average costs for 2011 obscures the fact that many programs have had costs far in excess of this amount over the past 18 months. Assuming a benefit-cost ratio of 2.0 for

---

<sup>3</sup> *Achievable Electric Energy Efficiency Potential in New York State*. Optimal Energy, Inc. November 2008.

<sup>4</sup> *Order Establishing Energy Efficiency Portfolio Standard and Approving Programs*, at page 12.

<sup>5</sup> Scorecard Reports filed by Program Administrators with DPS through June 2011.

programs that cost \$305 per MWh , then program costs in excess of \$600 per MWh would have benefit-cost ratios of less than 1. Indeed, NYSERDA's Q1 2011 report noted that some programs were not cost-effective.<sup>6</sup>

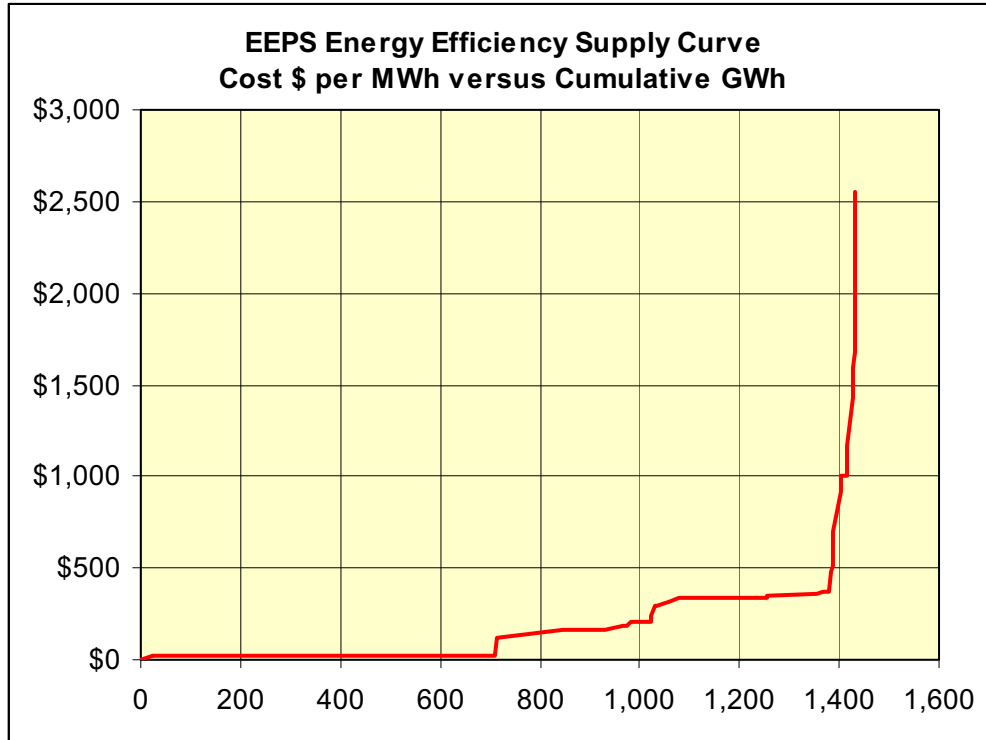
Using Scorecard Reports filed by program administrators with DPS through June 2011, the NYISO has tabulated program impacts and expenditures for all electric programs. The results are displayed below in Table 1. Using this information, the NYISO constructed a supply curve of all program costs (Figure 1). Using a cut-off of \$600 per MWh, we see in Table 1, row 29 that cumulative impacts of 1,387 GWh can be obtained for a total cost of \$195 million. The remaining 48 GWh are obtained at an average cost of \$1,488 per MWh, including \$12 million in spending for virtually no impacts whatsoever. The average cost of programs in rows 30 to 43 is \$1,211 per MWh.

---

<sup>6</sup> *New York's System Benefits Charge Programs Evaluation and Status Report*. Quarterly Report to the Public Service Commission Quarter Ending March 31, 2011. NYSERDA. May 2011.

**Table 1. EEPS Comprehensive Program Results Through June 2011**

Rank	Program Administrator	Program	Program Impacts MWh	Program Expenditures	Dollars per MWh	Cumulative Impacts - GWh	Cumulative Expenditures \$
1	New York State Electric & Gas	Empower Utility Referred Savings	119	\$0	\$0	0	\$0
2	Rochester Gas & Electric	Empower Utility Referred Savings	12	\$0	\$0	0	\$0
3	Niagara Mohawk	Building Practices Demo	23,400	\$428,725	\$18	24	\$428,725
4	NYSERDA	Statewide Residential CFL Lighting	687,247	\$13,510,404	\$20	711	\$13,939,129
5	New York State Electric & Gas	Refrigeration Removal and Rebate	1,711	\$199,553	\$117	712	\$14,138,682
6	Rochester Gas & Electric	Refrigeration Removal and Rebate	1,007	\$124,126	\$123	713	\$14,262,808
7	NYSERDA	Industrial and Process Efficiency Program	134,589	\$21,706,681	\$161	848	\$35,969,489
8	NYSERDA	Existing Facilities - Electric	71,092	\$11,481,906	\$162	919	\$47,451,395
9	Niagara Mohawk	Residential Energy Star	10,878	\$1,781,086	\$164	930	\$49,232,481
10	NYSERDA	Flexible Technical Assistance Program	37,038	\$6,962,944	\$188	967	\$56,195,425
11	Rochester Gas & Electric	Multi-Family Direct Install	5,899	\$1,110,865	\$188	973	\$57,306,290
12	Rochester Gas & Electric	Non-Residential Block Bidding	5,869	\$1,177,144	\$201	979	\$58,483,434
13	Central Hudson	Residential Appliance Recycling	4,416	\$923,682	\$209	983	\$59,407,116
14	Niagara Mohawk	Midsize Commercial Retrofit	37,636	\$7,967,333	\$212	1,021	\$67,374,449
15	New York State Electric & Gas	Non-Residential Block Bidding	1,098	\$257,853	\$235	1,022	\$67,632,302
16	Central Hudson	Mid-Size Commercial Electric	8,752	\$2,559,006	\$292	1,031	\$70,191,308
17	Orange & Rockland	C&I Existing Buildings	883	\$259,041	\$294	1,032	\$70,450,349
18	Niagara Mohawk	Multi-Family Retrofit	3,971	\$1,175,074	\$296	1,036	\$71,625,423
19	Niagara Mohawk	Large Industrial Retrofit	10,795	\$3,351,737	\$310	1,046	\$74,977,160
20	Orange & Rockland	Small Business Direct Install	10,878	\$3,384,831	\$311	1,057	\$78,361,991
21	Central Hudson	Small Business Electric Program	21,598	\$7,334,805	\$340	1,079	\$85,696,796
22	Niagara Mohawk	Small Business Retrofit	176,691	\$60,615,729	\$343	1,256	\$146,312,526
23	New York State Electric & Gas	Multi-Family Direct Install	1,498	\$519,913	\$347	1,257	\$146,832,439
24	Consolidated Edison	Small Business Direct Install	99,359	\$36,180,849	\$364	1,356	\$183,013,288
25	Rochester Gas & Electric	Non-Residential Direct Install	9,120	\$3,344,664	\$367	1,366	\$186,357,952
26	New York State Electric & Gas	C&I Prescriptive Rebate	752	\$276,489	\$367	1,366	\$186,634,441
27	New York State Electric & Gas	Non-Residential Direct Install	13,367	\$4,998,473	\$374	1,380	\$191,632,914
28	Consolidated Edison	C&I Custom Efficiency Electric Program	4,912	\$2,359,957	\$480	1,385	\$193,992,871
29	Consolidated Edison	Appliance Bounty Electric	1,935	\$995,543	\$514	1,387	\$194,988,414
30	NYSERDA	Low-Income Multifamily Performance Program	1,514	\$1,060,103	\$700	1,388	\$196,048,517
31	NYSERDA	New Commercial Buildings Program	13,591	\$12,520,214	\$921	1,402	\$208,568,731
32	Consolidated Edison	Refrigerator Replacement Plus Electric Program	2,207	\$2,206,046	\$999	1,404	\$210,774,777
33	Consolidated Edison	C&I Equip Rebate Electric Program	11,954	\$12,041,109	\$1,007	1,416	\$222,815,886
34	Orange & Rockland	Efficient Products	10	\$11,033	\$1,079	1,416	\$222,826,919
35	Rochester Gas & Electric	C&I Prescriptive Rebate	170	\$198,207	\$1,166	1,416	\$223,025,126
36	NYSERDA	EmPower New York-Low Income	11,320	\$16,160,744	\$1,428	1,427	\$239,185,870
37	NYSERDA	Multifamily Performance Program	358	\$544,540	\$1,523	1,428	\$239,730,410
38	Consolidated Edison	Residential Room AC Electric	879	\$1,358,096	\$1,545	1,429	\$241,088,506
39	New York State Electric & Gas	C&I Custom Rebate	354	\$565,589	\$1,598	1,429	\$241,654,095
40	Niagara Mohawk	Residential AC	1,345	\$2,257,279	\$1,678	1,430	\$243,911,373
41	Central Hudson	Residential Electric HVAC	824	\$1,729,337	\$2,100	1,431	\$245,640,710
42	Consolidated Edison	Residential Direct Install Electric	795	\$2,029,088	\$2,551	1,432	\$247,669,798
43	Consolidated Edison	Residential HVAC Electric Program	1,167	\$3,605,659	\$3,089	1,433	\$251,275,457
44	Niagara Mohawk	Residential Home Sealing	8	\$548,177	\$67,872	1,433	\$251,823,634
45	NYSERDA	Benchmarking and Operations Efficiency	0	\$95,362	Undefined	1,433	\$251,918,996
46	Rochester Gas & Electric	C&I Custom Rebate	0	\$230,778	Undefined	1,433	\$252,149,774
47	NYSERDA	Agriculture	0	\$331,028	Undefined	1,433	\$252,480,802
48	NYSERDA	Geothermal Heat Pump Systems Program	0	\$361,115	Undefined	1,433	\$252,841,917
49	Central Hudson	Home Energy Reports	0	\$630,344	Undefined	1,433	\$253,472,261
50	NYSERDA	Master-Metered Multifamily Buildings Program	0	\$1,253,242	Undefined	1,433	\$254,725,503
51	NYSERDA	Workforce Development Pgm	0	\$2,407,061	Undefined	1,433	\$257,132,564
52	NYSERDA	Statewide Customer Outreach and Education	0	\$6,316,509	Undefined	1,433	\$263,449,073



**Figure 1. EEPS Energy Efficiency Supply Curve Cost \$ per MWh Versus Cumulative GWh**

Based on Scorecard Reports from January 2011 through June 2011, Table 2 below shows that we can expect about \$230 million in annual expenditures for the year, with an expected impact by year end of 1,150 GWh (as compared to the PSC's 2011 goal of about 1,500 GWh). For non-CFL programs, the spending would be about \$225 million, with impacts of about 750 GWh.

**Table 2. EEPS Program Impacts - January to June 2011**

<b>Program Administrator</b>	<b>Cum MWh</b>	<b>Cum \$M</b>	<b>\$/MWh</b>
Central Hudson	24,639	\$8.617	\$350
Con-Ed	60,760	\$33.774	\$556
NIMO	114,142	\$24.181	\$212
NYSEG	14,189	\$4.469	\$315
O&R	4,757	\$1.789	\$376
RG&E	16,660	\$4.336	\$260
NYSERDA	133,789	\$34.896	\$261
EEPS Non-CFL Subtotal	368,936	\$112.062	\$304
CFL	200,264	\$3.511	\$18
<b>Total EEPS Program</b>	<b>569,200</b>	<b>\$115.573</b>	<b>\$203</b>

The NYISO understands that, for various reasons, there are certain lower performing programs that the PSC believes are important to maintain for public policy reasons. However, the Commission must account for the fact that these programs reduce overall timely achievement of goals and increase average program costs. The Commission should accept that maintaining these programs on any level will mean that the 15x15 goal will likely not be achieved in the prescribed timeframe. Even with the transfer of funds from certain lower performing programs to stronger ones, annual program goals would be reduced because certain segments of the market are simply not cost-effective. The energy efficiency potential from the multi-family sector, for example, cannot be transferred to the residential or commercial sector.

Using the supply curve above, we see that, aside from the CFL program, programs totaling 699 GWh can be obtained for a cost of \$181,478,000 at an average program cost of \$260 per MWh. Based on current experience we expect that, going forward, program administrators can spend \$200 to \$250 million per year, with annual program impacts in the range of 770 GWh to 960 GWh per year at average program costs of \$260 per MWh (plus CFL impacts and costs).

The NYISO submits that while the overall goals and budgets should remain in place for programs that remain cost effective, it is unlikely that the entire goal can be attained on the original timetable, or at the original spending trajectory. Accordingly, the NYISO recommends that annual goals on the order of \$200 to \$250 million per year should be set until such time as program administrators have demonstrated the ability to achieve higher rates of spending and lower costs.

The NYISO notes that its proposal to extend performance time frames until 2018 in no way interferes with, or restricts the ultimate levels of spending and goals the programs will



eventually achieve. By the end of 2011, the EEPS impacts should total about 2,000 GWh at a cost of just under \$400 million. At an annual rate of about 1,000 GWh and \$250 million, the current EEPS goal would be achieved by 2017, at an approximate cost of \$1.9 billion.

**C. Ineffective Programs Should Be Redesigned or Eliminated**

In the White Paper at page 13, Staff points out that “...some programs are negative outliers that warrant redesign or outright termination. Others may be found to be positive outliers worthy of expansion or replication by other program administrators.” The NYISO agrees that ineffective programs should be redesigned or eliminated but disagrees with Staff’s statement, on page 16, that the original 15x15 goal may be met by “...adding funding to existing programs that are performing well and have the potential for expansion.” The goal percentage attributed to ineffective programs should be subtracted from the overall goal. As the NYISO explains in Section II.B. above, even if funds from eliminated programs should become available for other uses, the technical or market potential from discontinued programs does not transfer to other programs. If additional program potential exists in certain programs, or new programs could be developed, perhaps at a higher cost per MWh, such potential needs to be researched and demonstrated before those energy savings are added to the energy efficiency portfolio.

**D. TRC Benefit-Cost Ratios Need to be Adjusted on a Periodic Basis**

From the White Paper at page 30: “Continuity is an important goal. It is disruptive to start up programs that are deemed cost effective in year one, discontinue them in year three due to a drop in natural gas price forecasts that lower their cost effectiveness scores, and then restart them in year five as gas price forecasts bounce back up again.” Staff uses this argument in support of its recommendation that existing programs not be re-evaluated at this time for their cost effectiveness. The NYISO agrees that to discontinue programs and then restart them would

impede continuity. The NYISO asserts, however, that frequent reviews of cost effectiveness of all programs will actually assist continuity by providing a consistent “curve shaped” set of data that will enable periodic adjustments in distribution of program funds. Such adjustments would enable more accurate decision making regarding increasing funds to higher-achieving programs and limiting funds to lower achievers. Accordingly, benefit-cost ratios should be updated annually to guide policy makers and program administrators in optimizing overall program performance.

### **III. Conclusion**

In submitting these comments, the NYISO respectfully offers its perspective that continuing to strive toward an ambitious goal, while at the same time accepting that all conditions may not lend themselves to reaching the goal on the appointed day, is an honorable and responsible approach. The NYISO continues its support of the efforts of Staff and the Commission and all stakeholders in the EEPS proceeding.

Respectfully submitted,

/s/ Carl F. Patka

Carl F. Patka

Assistant General Counsel

Joy A. Zimmerlin

Regulatory Affairs Specialist

New York Independent System Operator, Inc.

10 Krey Blvd.

Rensselaer, New York 12144

(518) 356-6207

August 22, 2011

STATE OF NEW YORK  
PUBLIC SERVICE COMMISSION

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

**CERTIFICATE OF SERVICE**

I hereby certify that I am over the age of eighteen years and that, pursuant to the rules for service in the above captioned proceeding established by the Secretary to the Commission, I served on August 22, 2011, by electronic mail, a copy of the Comments of the New York Independent System Operator, Inc. upon the parties on the Active Party List established for the above-captioned proceeding.

/s/ Joy Zimmerman  
Joy Zimmerman  
New York Independent System Operator, Inc.  
10 Krey Blvd.  
Rensselaer, NY 12144  
518-356-6207  
jzimmerlin@nyiso.com