

September 25, 2015

Hon. Kathleen H. Burgess Secretary to the Commission New York State Public Service Commission Agency Building 3 Albany, NY 12223-1350

Re: Matter 15-01945, In the Matter of 2016-2018 Utility BAM Plan and ETIP Workpapers

Dear Secretary Burgess,

I am writing to provide comments from the American Council for an Energy-Efficient Economy (ACEEE) on recent filings regarding Utility Energy Efficiency Programs. ACEEE is a nonprofit research organization that works on programs and policies to promote energy efficiency. ACEEE is one of the leading groups working on energy efficiency issues in the United States at the national, state, and local levels. We have been active on energy efficiency issues for more than three decades and have worked extensively in New York State. We have conducted energy efficiency studies on the state, worked as a consultant to the PSC and provided comments to the PSC in several dockets.

We have reviewed the Budget and Metrics proposals and the Energy Efficiency Transition Implementation Plans submitted by the different utilities on July 15, 2015 and for the most part found the utility proposals and plans to be underwhelming. With one exception, the utilities have essentially proposed to continue current goals and efforts and have not followed the Commission's direction that "[I]onger term goals should exceed existing targets" and that "beginning in 2016, utilities will begin designing new energy efficiency programs using market based approaches to drive greater value for customers."

We recognize that a major objective of REV is to stimulate significantly greater levels of private sector investment in energy efficiency. If successful, this activity would presumably replace and indeed increase the level of savings previously assigned to

<sup>&</sup>lt;sup>1</sup> Feb. 26, 2015 order in Reforming the Energy Vision case, pages 73 and 75.

NYSERDA's efficiency programs under EPPs. But even under the most optimistic view of market "animation", it will realistically take years for these markets to emerge on the scale necessary to achieve REV's goals. With NYSERDA largely out of the business of efficiency deployment programs, the utilities' roles become much more critical. The tepid response largely reflected in the current proposed ETIPs falls far short of the level of commitment essential to stimulate greater private sector investment in efficiency, much less the level necessary to realize REV's vision.

To address this problem, we recommend that the Commission establish specific higher energy-saving targets for the utilities for 2017 and 2018, and that the Commission direct the utilities to resubmit plans for 2017-2018 that show how they will implement these higher targets, including how they will consider new energy efficiency measures that leverage markets and provide value for customers. We also are also concerned that the transition plans largely ignore programs that NYSERDA has been running in the past and that will end soon. In particular, NYSERDA has run major programs for commercial new construction and for retrofits to existing single-family and multifamily residences. We recommend that the Commission direct the utilities to specifically discuss their plans to serve these markets and to transition from current NYSERDA programs.

In the remainder of these comments we first discuss the utility goals and then discuss their proposed transition plans.

## Goals

Under REV, the role of utilities in implementing energy efficiency efforts increases as programs operated by the New York State Energy Research and Development Authority (NYSERDA) transition largely to an upstream focus on market transformation and improving the functioning of markets for clean energy. The PSC decision early this year set 2016 energy saving goals for utilities at the same level as their 2015 goals, but stated that "longer-term goals should exceed existing targets" (p. 73) and also that "we are committed to not only achieving current energy reduction goals, but accomplishing higher goals consistent with State energy policy and, potentially, federal carbon reduction rules" (p. 81). In our opinion, higher utility targets are needed, because in recent years (e.g., 2014) NYSERDA programs have saved more energy than the utility

programs. With NYSERDA changing its focus, at a minimum expanded utility programs should include the savings that NYSERDA programs previously achieved. In addition, in past years even the combination of NYSERDA and utility programs fell significantly short of the state's goal of 15% savings by 2015, which worked out to about 1.8% incremental savings each year.

Overall, the various plans are a mixed bag. On the positive side, National Grid proposed a plan that will achieve electric efficiency savings of about 0.9% of their distribution sales in their first year and ramp up to 1.2% of sales in the third year (these calculations are ACEEE's as described below). National Grid's New York savings are substantially greater than the other New York utilities, but still fall short of the greater-than-2.0%-per-year savings that National Grid is achieving in Massachusetts and Rhode Island.

The plans of the state's other utilities are more modest. Con Ed's and NYSEG's plans call for energy efficiency savings of about 0.4% of distribution sales in all three years. In between, with savings of 0.5-0.8% of distribution sales, are the state's other investor-owned utilities. These percentage savings calculations are shown in the table below for all of New York's investor-owned utilities.

Incremental Annual Electricity Efficiency Savings of N.Y. Utilities as a Percent of 2013 Distribution Sales

Utility	2016	2017	2018
Con Edison	0.4%	0.4%	0.4%
National Grid (NY only)	0.9%	1.1%	1.2%
NYSEG	0.4%	0.4%	0.4%
Central Hudson Electric & Gas	0.8%	0.8%	0.8%
Rochester Gas & Electric	0.5%	0.5%	0.5%
Orange & Rockland	0.6%	0.6%	0.6%

Source: ACEEE calculations of percentage savings targets using planned savings in individual utility plans and calculating these as a percent of 2013 electricity sales by utility as reported by the US Energy Information Administration (http://www.eia.gov/electricity/data/eia861/). Our electricity sales numbers include both bundled sales (utility procures power) and delivery sales (customer procures power and utility delivers it), but for each utility we deduct a pro rata share of sales by the New York Power Authority (NYPA) since NYPA offers its own energy efficiency

programs to its customers and therefore NYPA customers are not served by the other utility programs.

By contrast, energy efficiency programs in leading states are achieving incremental annual savings ranging from 1.25% of sales to more than 3% of sales as shown in the table below.

Incremental Annual Electricity Efficiency Savings of Leading States in 2014 as a Percent of Distribution Sales

State	Savings as % of Sales
Rhode Island	3.51
Massachusetts	2.50
Vermont	1.85
Arizona	1.74
Hawaii	1.67
California	1.58
Hawaii	1.53
Michigan	1.35
Connecticut	1.32
Maryland	1.29
Oregon	1.27

Source: ACEEE 2015 State Energy Efficiency Scorecard (forthcoming).

In 2014, NYS as a whole saved 0.92% incremental savings, including the efforts of the investor-owned utilities, NYSERDA, LIPA and NYPA. But with savings from NYSERDA programs likely to decline as they emphasize market conditioning, savings from utility programs should ramp up to at least fill the gap and preferably much higher, in line with leading states. It should be noted that many of the leading states are ramping up their goals. Rhode Island has a goal of 2.5-2.6% incremental annual savings (varying by year), Massachusetts' utilities and other stakeholders have proposed a new goal of 2.93% incremental annual savings (three year average), and Vermont's goal is also over 2% per year. And recently the Maryland Public Service Commission set new utility goals that ramp up to 2.0% annual incremental savings.<sup>2</sup>

\_

 $<sup>^2</sup>$  See <u>http://aceee.org/blog/2015/07/three-cheers-maryland</u> .

Based on ACEEE's review, only National Grid is following the PSC's desire to increase their energy saving targets over time. We recommend that the other utilities also follow this guidance and plan a steady expansion of their energy efficiency programs. To make sure this happens, the Commission will need to be more explicit in setting new targets and not just letting the utilities base their energy savings targets on past achievements. We recommend that the commission establish a savings target of 1.5% of sales for each of the utilities in 2018, with a target for 2017 midway between the 2015 and 2018 targets. Our 1.5% suggestion is consistent with what leading states are achieving as shown above but still less than NY's old goal of "15% by 2015." In the REV2 proceeding, Staff have proposed that utilities continue to receive financial incentives for achieving goals, but the goals the utilities propose are too low a bar. The Commission needs to raise the bar by setting explicit higher goals for earning substantial incentives.

## **Transition Plans**

As noted above, in its Feb. 2015 order, the Commission stated (p. 75) that "beginning in 2016, utilities will begin designing new energy efficiency programs using market based approaches to drive greater value for customers." Furthermore, the Commission noted that "[u]tility direct resource acquisition and rebate programs must be coordinated with NYSERDA programs" (p. 78) and that "[e]fficiency programs and measures may be selected on the basis of targeted system needs and program effectiveness, with consideration given to changes in NYSERDA's programs" (p. 81).

The utility ETIP plans by and large just continue existing programs, most of which are tried and true. There appears to be only limited effort to drive greater value for customers. Major programs by utility are summarized in the table below.

Con Ed	National Grid	NYSEG/RG&E	Central Hudson	Orange & Rockland
C&I equipment replacement	Electric C&I (tech assistance & incentives) [also a gas program]	Non-residential prescriptive & custom rebates	C&I solutions (prescriptive)	Residential electric (appliances, HVAC, thermostats)
Large power user self-direct	Electric C&I new construction & major retrofit [also a gas program]	Small customer direct install	C&I solutions (direct install lighting)	Residential gas (heating and water heating)

Small business direct install	Electric small business services	Refrigerator & freezer recycling	C&I solutions (custom)	Small business direct install
Residential rebates	Electric small business engagement & efficiency platform [also a gas program]	Residential natural gas HVAC rebates	C&I solutions (online lighting portal)	C&I electric (prescriptive & custom rebates)
Smart kids energy education program	LED street lighting	Multifamily direct installation	Residential electric HVAC	
Retailer incentive program for plug loads & appliances	Electric residential engagement program [also a gas program]		Residential appliance recycling	
Multifamily prescriptive rebates and direct install	Electric residential efficiency platform [also a gas program]		Residential online lighting portal	
	Electric multifamily program [also a gas program]		Residential lighting (point of sale)	
			Residential whole home	
			Behavioral modification	

We recognize that the utilities are beginning to implement a variety of REV demonstration programs that may add some savings, but even if all the REV demonstrations are successful, the level of savings generated would likely be much lower than New York State's Energy Plan goals as well as the successful efforts of leading states. Much more is needed.

Two weeks ago ACEEE released a new study entitled *New Horizons for Energy Efficiency: Reaching Higher Electricity Savings By 2030 By Addressing Large Opportunities.*<sup>3</sup> In this study we profiled 18 energy-efficiency opportunities that collectively can reduce US electricity use by about 22% by 2030, using new technologies and services that provide value to customers and that are not being widely promoted today. Most of these measures are ones that should be promoted through a long-term market transformation approach and most ultimately rely on market mechanisms. These measures are:

 High-efficiency residential appliances (refrigerators, clothes washers and clothes dryers)

<sup>&</sup>lt;sup>3</sup> http://aceee.org/blog/2015/09/next-generation-energy-efficiency.

- 2. Residential LEDs targeted at current incandescent applications
- 3. Providing customers with energy use information in real time to aid conservation behaviors
- 4. Residential smart (learning) thermostats
- 5. Advanced residential air-conditioners and heat pumps
- 6. Heat pump water heaters and other advanced water heating systems
- 7. Residential comprehensive retrofits
- 8. New construction programs targeting future model and state building codes
- 9. Large reductions in key targeted plug loads (miscellaneous energy loads)
- 10. Advanced commercial lighting design and controls
- 11. Advanced commercial roof-top units
- 12. Smart commercial buildings
- 13. Comprehensive commercial retrofits
- 14. Strategic energy management for large commercial and industrial customers
- 15. Energy performance labels for commercial and industrial equipment
- 16. Smart manufacturing
- 17. Conservation voltage reduction
- 18. Combined heat and power systems

Some of the utilities included some of these measures in their ETIP plans. NYSERDA also will be promoting some of these measures, emphasizing very high levels of efficiency that represent long-term targets while often leaving more modest efficiency levels for utilities to promote. We recommend that the Commission direct the utilities to consider each of these measures.

In addition, our review of the utility plans indicates that transition plans are needed for some important NYSERDA programs that will be ending as NYSERDA shifts focus. In particular, NYSERDA has important programs to promote energy-efficient new construction for the C&I sectors and comprehensive retrofits for homes, both single- and multifamily. National Grid is proposing a new construction program, but such programs are not mentioned by the other utilities. New construction programs are particularly important because it is generally much less expensive to build efficiency into new construction than to build an inefficient building and have to retrofit it later. All of the utilities mention multifamily programs, but these are rebates and direct installation and

appear not to include comprehensive retrofit services. Central Hudson will offer a whole home retrofit program and National Grid appears to be planning a single-family program. As noted above, we recommend that the Commission specifically require the utilities to consider how they will promote efficient new construction and comprehensive single-and multifamily rebates as NYSERDA transitions out of these areas.

## Conclusion

New York has been a leader on energy efficiency for decades, finishing as high as third in ACEEE state energy efficiency scorecards over the past nine years. The Commission in its February 2015 REV order directed utilities to set higher goals in the longer term, develop new programs to provide value for customers, and work with NYSERDA. The Commission needs to follow through on these provisions by setting higher goals and directing the utilities to develop new programs that provide customer value and transition from current NYSERDA programs in key areas. Both the PSC and the utilities will need to step up their energy efficiency efforts, complementing efforts by NYSERDA, NYPA and LIPA, in order for New York as a whole to continue being a leader in capturing large amounts of energy efficiency value for its residents.

We would be happy to answer any questions you might have. We look forward to the next step in this important proceeding.

Sincerely,

Steven M. Nadel Executive Director

even M. Nade