



September 28, 2015

VIA ELECTRONIC FILING

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

Re: Case 15-M-0252 In the Matter of Utility Energy Efficiency Programs

Dear Secretary Burgess:

The Advanced Energy Economy Institute (AEEI), on behalf of Advanced Energy Economy (AEE), the Alliance for Clean Energy New York (ACE NY), the New England Clean Energy Council (NECEC), and their joint and respective member companies, submit for filing these Initial Comments on the utilities' Energy Efficiency Transition Implementation Plans in the above-referenced proceeding in response to the Commission's Notice Soliciting Comments, issued on August 5, 2015.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read "Ryan Katofsky", with a long horizontal flourish extending to the right.

Ryan Katofsky
Senior Director, Industry Analysis
Advanced Energy Economy Institute

Initial Comments on Utility Energy Efficiency Transition Implementation Plans (Case 15-M-0252)

**Advanced Energy Economy Institute
The Alliance for Clean Energy New York
New England Clean Energy Council**

Introduction

The mission of Advanced Energy Economy Institute (AEEI), the charitable and educational organization affiliated with Advanced Energy Economy (AEE), is to raise awareness of the public benefits and opportunities of advanced energy. As such, AEEI applauds the New York Commission for opening this proceeding on Reforming the Energy Vision (REV), which seeks to unlock the value of advanced energy so as to meet important state policy objectives and empower customers to make informed choices on energy use, for their own benefit and to help meet these policy objectives.

In order to participate generally in the REV proceeding and respond specifically to the utility Energy Efficiency Transition Implementation Plans (ETIPs), AEEI is working with AEE and two of its state/regional partners, the Alliance for Clean Energy New York (ACE NY) and the New England Clean Energy Council (NECEC), and the three organizations' joint and respective member companies to craft the Initial Comments below. These organizations and companies are referred to collectively as the "advanced energy community," "advanced energy companies," "we," or "our."

We appreciate and support the Commission's vision of increasing the penetration of energy efficiency (EE) in New York. Energy efficiency plays an important role in the economic vitality of New York, ensuring that we get the most from our resources, and providing cost savings and societal benefits to millions of New Yorkers. While EE has proven to be cost effective even without valuing externalities, it has also been shown that in nearly all markets, pure economics is insufficient to motivate customers to invest in anything close to optimal levels

of EE. As a result, many jurisdictions around the country, including New York, have developed programs aimed at overcoming these market failures. While these programs have improved uptake, EE deployment still falls short of its potential. We welcome that the Commission wants to achieve greater levels of EE in New York, and we support testing new approaches to make this happen.

We understand that the Commission wants to move to more market-based approaches to EE. However, in the United States, past experience with market-based EE has led to mixed results at best.¹ Nevertheless, much has changed since those attempts were made. There are new tools that can be leveraged, such as advanced metering and software analytics to measure the impact of EE, and the ability to more finely tune the reach and impact of communications to different customer groups via new and varied types of media. The Commission is justified in exploring how new business models can leverage these capabilities to achieve the goal of making EE a sizeable, self-sustaining market.

Nevertheless, while the Commission has expressed a general aim to move toward market-based energy efficiency, it has provided few details about how that market would operate and how to transition to it in a cost-effective way. The advanced energy community remains concerned about engaging in a transition to such markets (and away from existing programs) without greater clarity and direction from the Commission on where that transition is heading. This concern is reinforced by our review of the ETIP filings, which at best support a level of EE similar to current levels, without providing plans for how investment in EE will increase and for how markets will work beyond 2018. These ETIPs are more or less business as usual for existing utility EE programs, which is not surprising given the limited guidance utilities have received to date.

To support a dialogue on a viable transition for EE programs, we have outlined a framework later in these comments that provides more detail on how the future market might operate, including steps for a workable transition. We welcome the opportunity to discuss this further with the Commission and other interested parties. We would also ask the Commission

¹ American Council for an Energy-Efficient Economy, “Can we Just ‘Rely on the Market’ to Provide Energy Efficiency,” Martin Kushler and Patti Witte, September 2001. Available at: <http://aceee.org/sites/default/files/publications/researchreports/u011.pdf>

and Staff to direct more time and resources to developing the future vision for EE in New York. Considering the many changes that are taking place in parallel -- the REV proceeding, NYSERDA's shift in focus via the Clean Energy Fund (CEF), the move to fund EE programs as part of utilities' basic operations, and the desire to move toward market-based programs -- energy efficiency policy is in a state of flux, and needs direction, more stakeholder involvement, and a clearer path forward.

We therefore ask the Commission or Staff to hold a seminar or conference to which experts are invited to share potential market approaches and structures and where stakeholders can ask questions about the Commission's vision for the future of energy efficiency in New York State. The advanced energy community is committed to supporting and contributing to the development of a successful transition framework for energy efficiency and requests that the Commission institute a stakeholder engagement to facilitate this process. This could take the form of a series of meetings where stakeholders are at liberty to discuss new models for energy efficiency in an informal setting. These stakeholder meetings could culminate in a technical conference where the results of the stakeholder meetings are shared with the Commission.

Comment Highlights

In summary, we present the following comments on the utilities' ETIPs and the broader transition for energy efficiency:

- We support the Commission in its goal of increasing energy efficiency and its efforts to find more cost-effective market structures for delivering EE.
- While the Commission has initiated a transition and has ordered the utilities to begin implementing it, the Commission has not provided sufficient detail on how this transition is supposed to take place or the end state for energy efficiency in New York. As a result, the utilities had the difficult task of developing their ETIPs in the face of significant uncertainty.
- Only National Grid proposed targets that increase over time. The remaining utilities proposed targets that are flat or slightly declining.
- Apart from moving funding to utilities' core operations, the ETIPs present primarily a business-as-usual continuation of utility programs.

- We remain concerned about the potential for near-term backsliding in energy efficiency savings given the gap that is developing between NYSERDA and utility programs, as NYSERDA shifts its focus from direct investment to market building activities and the utilities plan for largely flat energy efficiency targets.
- Given the importance of energy efficiency to the economic vitality of the state, as reflected in the State Energy Plan, advanced energy companies have devoted substantial thought toward developing a potential framework for a transition to a more market-based model for energy efficiency.
- We ask that the Commission and Staff devote more time and resources to developing a plan for the future of energy efficiency in New York. The advanced energy community is committed to supporting the Commission in developing a workable transition to more market-based energy efficiency and we propose a stakeholder engagement process to help facilitate this.

Comments on the Utility ETIPs

We note that it is difficult, without greater insight into the final desired “end state” of energy efficiency in New York (e.g., in the year 2020), to evaluate the adequacy of the programs described in the ETIPs. The utilities likely faced similar uncertainty and concerns about the overall goals of the intended regulatory reform when they drafted these plans. We appreciate that some utilities have proposed new incentive mechanisms, asked for new methods for modernizing Evaluation, Measurement and Verification (EM&V), and have provided linkages to REV demonstrations. We applaud this and would like to see more thinking along these lines from the utilities.

As we have noted above, it is understandable that the utilities appear reluctant to take many risks in EE program design, given the array of uncertainties and the fact that the ETIPs are by definition transitional. If the goal of the ETIPs is to transition EE program funding into the basic operations of utilities, then they generally appear to accomplish their purpose. However, they do not ensure continuity in EE programs, and they do not appear to move energy efficiency delivery closer to a market-based system. Based on the extensive experience of AEE members

working with utility commissions and utilities across dozens of other states, we raise, for the Commission’s consideration, the following concerns about the ETIPs.

1. Proposed energy efficiency targets are mostly flat or declining

As discussed from multiple angles in these comments, aside from National Grid’s ETIP filing, which propose growth in both funding and energy savings levels, the levels of energy efficiency proposed in the remaining ETIPs (as shown in Table 1 below) will not ensure that New Yorkers continue to benefit from effective, top-tier policies that will save them money. On the contrary, given the reduction in direct EE investment by NYSERDA as it shifts its focus toward market-building activities, the ETIPs will likely leave a gap between the savings achieved through utility EE programs, and the savings needed to meet the Commission’s policy objectives and New York State’s Energy Plan. The Commission should establish clear, higher, cost-effective savings goals for utilities, and require those utilities that have lower funding and savings levels to submit revised ETIPs that meet increasing goals.

Table 1: Energy Efficiency Savings as a Percent of 2013 Distribution Sales

Utility	2016	2017	2018
ConEdison	0.4%	0.4%	0.4%
National Grid	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. See blog for calculation details. <http://aceee.org/blog/2015/08/new-york-s-rev-recent-filings-show>

2. The ETIPs lack cohesiveness

With little guidance from the Commission regarding utility coordination, the ETIPs contain few linkages to one another or to other REV initiatives. This raises several issues. First,

without an analysis of how the ETIPs relate to the other investments in energy efficiency market transformation (e.g., NYSERDA's CEF, the NY REV demonstration projects, the EIMs), it is impossible to develop a full picture of just *how much energy efficiency* the Commission's various policy programs will yield in aggregate. There is also no clear picture of how utilities will use the ETIP budgets, as envisioned, to transition to a more market-based model desired by the Commission. In fact, while the ETIPs discuss REV demonstration projects notionally, they do not substantively discuss how they will overlap or interact with the ETIPs.

Second, the lack of integration among the ETIPs means that customers will fail to realize the benefits of shared learning and program accountability that is present in other states where utilities undertake joint program planning. For example, in Massachusetts the utilities jointly administer the Mass Save program and follow mostly uniform rules and protocols across the state. Targets and budgets are harmonized, shared program elements capture the best thinking being done by the state's EE experts, and the utilities are able to share some program marketing and overhead costs. From the customer's point of view, the program has a single brand, portal, phone number, and harmonized application processes. This greatly simplifies program delivery, particularly where multiple utilities serve a single customer (e.g., it is common to have one utility for electricity and another for natural gas). To preserve their customer relationships, utilities can co-brand their online presence with Mass Save. Lacking such unifying features, the ETIPs run the risk of leading utilities down separate paths and toward the launch of multiple different customer offerings and engagement platforms. This could lead to customer confusion, channel conflict, market barriers, and inefficiencies for EE companies. Worse, if EE markets fail to deliver as hoped, utilities will have to rein in multiple discordant programs in effort to restart a strong statewide ratepayer-funded program capable of meeting policy goals, having lost time and resources. From the outset, the Commission should require greater alignment among ETIPs and between ETIPs and other REV initiatives.

3. The ETIPs lack many elements found in state-of-the-art EE programs

Overall, the ETIPs collectively lack some of the vision and innovative aspects of the utility program portfolios in other leading states. Some ETIP programs incorporate current thinking, approaches and program elements -- National Grid is one example with its emphasis on

improving customer awareness and education to manage energy consumption. However, most ETIPs contain few new program ideas or noteworthy features. In most cases, the ETIPs represent a continuation of the status quo, though with helpful clarity that they now represent EE programs being centralized with the utilities, as opposed to being shared between them and NYSERDA. By and large, the lack of clarity on the utilities' plans is due to a lack of detail. Whereas many state commissions require utilities to specify their strategies and budgets down to the sub-program level (e.g., commercial sector retro-commissioning, residential demand response), several ETIPs include only general descriptions of intended approaches at the sector level (e.g., commercial, residential). We note that this gap may be due to a lack of guidance from the Commission, and that greater flexibility may be desirable compared to micromanagement by the Commission. To balance these competing needs, we recommend that utilities be required to compile more definitive strategies and take bolder steps within the transition period. We are confident that the utilities have the capacity to innovate and pursue more aggressive EE programs than those outlined in the ETIPs thus far.

We note that ConEd was the only utility to include demand response in their ETIP. The lack of emphasis on the part of the others is not consistent with the Commission's Order issued on June 17, 2015, in Case 14-E-0423, Proceeding on Motion of the Commission to Develop Dynamic Load Management Programs, which spoke of "transitioning the electric system to a new paradigm focused on harnessing new technology and markets in a customer-centered manner..." (Order, p.1) and stated the objective that "...DLM strategies, including Demand Response (DR), can provide a number of system and public policy benefits consistent with the REV objectives..." (Order, p.2). If the intent of the ETIPS is to transition to a new market model, then the ETIPs should take advantage of opportunities to integrate energy efficiency and demand response to create better overall value for NY customers consistent with the intent of the REV Proceeding.

4. There are Gaps between the Utility ETIPs and the Clean Energy Fund

We remain concerned about the role of energy efficiency across the REV-related proceedings as a whole – including the CEF and ETIPs. As NYSERDA ramps down existing direct investment in energy efficiency, the utilities' plans for the 2016-2018 cycle of energy

efficiency programs, with the exception of National Grid, appear to reflect a flat rate of energy savings. This will result in a decline in total energy savings, at least in the short term, until new initiatives ramp up and are proven effective. Such backsliding on energy efficiency savings will hurt New York's progress toward the goals of its State Energy Plan (SEP) – including the 23% reduction in building energy consumption by 2030. We do not see any recommendations in either the ETIPs or the CEF to ensure that this gap is addressed. Adding to this concern is the proposal by Iberdrola to lower energy savings goals in its recently filed ETIP by 10% in 2016. While such a move might be justified from an operational standpoint, it could lead to an even further loss of momentum toward the state's energy savings goals.

While we understand that the CEF pertains to NYSERDA's future role, it is clear from looking at the whole picture provided by the twin efforts of the CEF and ETIPs that the shortfall in energy efficiency savings identified here will need to be addressed if the state is to reach its 2030 goals. It will also be important to resolve this issue without re-establishing the long-standing competition between NYSERDA and utility programs for kWh savings and customers that has hampered progress toward energy savings and carbon emission reduction goals in New York in recent years.

Pursuing All Cost-Effective Energy Efficiency

In order to unlock the greatest cost saving benefits to customers and deliver the demand reductions necessary to support the goals of REV and the State Energy Plan, the Commission should implement policies that strive to achieve all cost-effective energy efficiency. In other states, regulators use technical and economic potential studies to estimate the level of all cost effective energy efficiency. In New York, the ongoing work in developing the Benefit Cost Analysis (BCA) and the framework for determining LMP+D could yield alternative methods for creating the incentive to pursue all cost-effective energy efficiency and the appropriate price signals to do so. This would have the advantage of applying the same measurements and analyses to energy efficiency that are used for other types of distributed energy resources (DER) in determining which resources will best meet system needs. As we have commented

previously,² such methods also need to account for the full range of societal, locational, and non-energy benefits and should use a societal discount rate. Because the methods to be developed under REV will be new and untested, a separate economic potential study for all cost effective energy efficiency should be conducted to establish a benchmark against which the new methods can be evaluated at any given time.

A Framework for a Transition to Market-Based Energy Efficiency

Context

Achieving REV objectives will mean increasing the use of energy efficiency, both in terms of the amount of efficiency that is pursued and how that EE is used as a resource for both planning and operation of the grid at both the bulk system and distribution system levels. We understand the Commission’s intent to transition away from traditional “resource acquisition” programs to a system that relies on more market-based approaches to drive EE investment.

As part of a transition to a more market-based delivery model for energy efficiency, we propose the following provisional framework that is aimed at beginning a discussion on how a transition might take place. This framework is intentionally crafted as a multi-year plan. Developing a market for energy efficiency is a difficult endeavor that will require new technologies, education of customers, and regulatory changes for utilities. As we noted in the Introduction, previous attempts to create market-based programs have not fared well, but that there is potential to overcome some of the problems that plagued previous attempts with new tools and technologies. New Yorkers will be best served by an incremental process that builds on the tradition of clean energy leadership in the state. We first articulated elements of this framework in response to the Commission’s Notice of Proposed Rulemaking on natural gas energy efficiency programs in this proceeding, but this transition plan is equally applicable to electric energy efficiency programs.

² Comments of Advanced Energy Economy Institute, the Alliance for Clean Energy New York, and the New England Clean Energy Council on the Staff White Paper on Benefit-Cost Analysis in Reforming the Energy Vision, Submitted on August 21, 2015 in case14-M-0101.

The ideas presented below are aimed at defining elements of a market-based approach to energy efficiency, an approach that could take shape in various ways. Our intention is to begin a dialogue among EE providers, utilities, and customers about achieving the common goal of increasing the amount of energy efficiency delivered to New Yorkers in the years to come. This framework could serve to kick off the meetings that we have asked for at the Commission to begin exploring different models with stakeholders and Staff.

We do not propose to eliminate the role of utilities in delivering energy efficiency to customers or acting as trusted energy advisors, nor do we assume that the only way to expand energy efficiency in New York is through utilities and NYSERDA. The future of efficiency in New York will necessarily be a combination of the most successful market elements in New York to date and new ideas from both New York and elsewhere around the country.

Basic Considerations

Any plan will need to include the necessary regulatory structures to implement the new programs, while providing the continuity necessary to maintain delivery of efficiency products and services during the transition. For market-based programs to work, it is imperative that energy efficiency companies maintain and grow their presence in New York State. This may mean that during the transition, some customers/customer classes will remain on existing programs, as others are “switched over” to new ones. As such, customer confusion is a real risk. Because utilities have been the traditional source of energy advice for utility customers, a transition toward a market-based approach to energy efficiency does not necessarily exclude the utilities from being an important communication channel for energy efficiency information and offerings. The effectiveness of this transition will only be improved by a utility that is motivated to connect customers with energy efficiency solutions through use of the customer portal and digital marketplace.

Regardless of the structure of the market, EE requires a transparent market driver to encourage its adoption. Even though the underlying economics of EE are generally very favorable, market failures prevent it from being deployed at scale consistent with its economic potential and in a timely manner, without some type of market intervention. For REV to be successful, there will need to be a clear, sustained market driver to achieve the desired levels of

EE deployment. We presume that for a market-based program, the driver will take the form of some explicit market price for achieved energy savings.

Options for energy efficiency markets

The central driver of a market-based system needs to be the ability utilities to profit from energy efficiency. Currently, incentive payments are used to motivate utilities to invest in energy efficiency, as these investments have the effect of offsetting future capital investments, the main profit driver for utilities. The modified clawback mechanism proposed by Staff in the Track Two White Paper, if it works as envisioned, has the potential for changing this dynamic by allowing utilities to earn Return on Equity (RoE) on energy efficiency if those investments can replace expenditures in their capital budgets.³ And because a utility will continue to earn RoE off of the cost of an avoided, business-as-usual capital investment, substituting a less costly energy efficiency investment will not be punitive to the utility's profits and may even provide a short-term boost.⁴ If good performance on efficiency EIMs provides enough long-term incentives, the utility may be sufficiently motivated by the combination of these mechanisms to meet system needs with energy efficiency as a first option before it turns to traditional capital investments. Getting this mechanism to operate correctly is foundational to this endeavor, or else there will not be a sufficient market driver to make this system work.

One basic option is to establish a "pay-for-performance" model, whereby EE companies commit to delivering energy savings. This would effectively apply a structured project finance model to the delivery of EE, where cash flows from the pay-for-performance contract would pay for the deployment of the measures. This is similar to how renewable energy power purchase agreements work today and to how energy savings performance contracts work.

³ We reference the clawback mechanism here only in the context of presenting a potential market driver for EE in a market-based EE framework. We will discuss the mechanism at greater length when we file our comments on the Staff Whitepaper on Ratemaking and Utility Business Models.

⁴ Reducing the size of an actual investment in the capital budget while keeping the amount of RoE pegged to a larger, avoided amount will have the effect of reducing the denominator while keep the numerator the same, resulting in an higher effective RoE.

Reinforcing this market driver will be the BCA and the LMP+D frameworks to assist utilities in setting appropriate price levels. Resource valuation will need to capture the full range of societal, system-wide, and locational benefits in order to establish an appropriate price signal in the market for energy efficiency.

We present here two methods for applying this price signal to energy efficiency procurement, but there could be others. One approach would be an “efficiency PPA” (or perhaps more appropriately termed a Load Management Purchase Agreement)⁵ where the utility buys load reductions via long-term contracts. The energy efficiency provider would be obligated to provide a set amount of load reduction, but would have operational flexibility in the way that it achieves the reduction. This would also have the advantage of being an easily financeable contract with the utility as a counterparty.

Another approach is for the Commission to set up a price per avoided kWh, paid out through the utility or another entity, that EE providers would earn by helping customers save energy, similar to a feed-in tariff model used for renewable energy generation. This payment, however, would not be an incentive; it would be linked to the full value of EE as determined by the BCA and LMP+D frameworks. In this type of market, where EE providers compete for customers and customers are able to choose their own EE providers, a robust qualification and review system would be needed to protect customers. Additionally, there would need to be some system to provide customers with sufficient information (and possibly reviews from other customers) so that they can select EE providers in a transparent way that minimizes transaction costs. And the utility would have both a continuing role and motivation for encouraging its customers to seek out EE providers. This efficiency feed-in-tariff system would be a more distant option that takes more time to implement than the Load Reduction Power Agreement.

This price signal could vary by different customer segments to prevent “cream skimming”, i.e., providing service to only the easiest to serve or most lucrative customers, and to reflect the higher costs involved with more difficult to serve customers. More efficient EE companies would earn higher profits by achieving cost savings efficiently. In order to ensure

⁵ A Load Management Purchase Agreement could involve reduced consumption at any time of the day or at specific times of the day, i.e., there could be multiple products sold associated with EE and meeting specific needs of the DSP. Some might be consumption driven and others demand driven consistent with the EE and peak reduction EIMs.

broad participation, a key goal of REV, the Commission could also consider designating a minimum number of projects from each customer class per each year.

Apart from compliance with necessary measurement standards and other qualifications, EE providers would be free to implement their programs in the way that achieves the load reductions in the most efficient manner. The goal is to achieve better performance that can be measured consistently across all EE providers with advanced EM&V 2.0 methods (implemented through new measurement devices and software) to allow for continuous innovation and operational flexibility. Energy efficiency achievements should be based on measured performance rather than counting inputs, such as deployments of pre-approved measures. This would have the benefit of freeing the DPS from determining the right incentive level necessary to motivate customers to invest in specific measures. It would be up to the energy efficiency providers to determine what methods best motivate customers and to divide the income stream from a Load Management Purchase Agreement or an efficiency feed in tariff between incentives for customers and its own revenues in the way it sees fit.

As with investments in any new business model or technology, the risk associated with engaging in this new market structure may dissuade some companies from participating. Therefore, for the initial rollout, the Commission should consider amplifying the price signal beyond what it believes is needed so that it compensates for risk and the initial costs of providing service under this new structure. The higher price will also provide incentive for companies to overcome barriers of entry to the market, helping the market scale more quickly and increase competition. The adder to the value of energy efficiency should be reassessed after certain milestones are reached and decreased or eliminated to reflect improvements in delivery efficiency, economies of scale, and technological innovations.

With a greater reliance on market forces comes an increased need to be vigilant and guard against unintended consequences, such as detrimental interactions between existing programs and new market-based programs and gaming of the market. Implementation of the framework proposed here should include a robust stakeholder process to monitor implementation and to provide early identification of problems and unintended consequences that would result in a clear, quick response to address the inevitable challenges revealed during the ramp-up phase. Experience with competitive markets at the wholesale level has shown that markets take

years to develop and that there is a need for constant attention to detail, transparent market rules, and ongoing policy adjustments to create a smooth launch and provide for ongoing maintenance.

The reasons behind the phased timeline proposed below are numerous, but at the core they attempt to tackle the persistent market failures associated with the delivery of energy efficiency. These failures include:

- A lack of financial resources and/or motivation to engage in EE, especially in hard-to-reach customer segments
- Delivering energy savings to all customer classes across the state
- A lack of knowledge and ease of participation by all consumer segments
- Ensuring that all customers receive quality service and that all cost effective energy efficiency is pursued via the market solution
- The uncertainty presented to the energy efficiency industry supply chain without the commitments to some kind of sustained market driver.
- A lack of financial market interest in participating in energy efficiency markets due to uncertainty.

It is also important to note that a market-based approach may not be effective at addressing energy efficiency opportunities with customers that are hard to reach and engage, such as low-income customers, households in multi-family dwellings and small businesses, especially in low income, distressed or empowerment zone communities. The Commission should consider continuing to assign the utilities budgets and goals to reach these customers and phase them into market-based programs in stages.

As noted above, the Commission will also need to be mindful of creating a system where consumers could become confused by multiple competing offers, which could lead to inaction. NYSERDA could play a role in helping to establish statewide protocols and standards for practitioners and create some form of branding or certification that indicated quality and reliability. A portal that presents this information to customers alongside customer reviews could also help customers make less risky and better-informed decisions. As mentioned earlier, the utilities have generally served the role of a trusted energy advisor, so in the early transition stages they should have the ability to continue in this role with customers by supporting development of customer portals and digital marketplaces to deliver reliable and trustworthy information about EE programs.

Potential Transition Steps and Timeline

While we continue to develop our thinking around this transition, we offer the following concepts and examples as possible ways to move toward programs that rely on the forces of the market. This transition framework would be implemented in parallel with existing incentive and resource acquisition programs to prevent backsliding on energy efficiency goals. Following a review, the Commission can decide which existing programs can be phased out once there is evidence that the market-based programs will perform better. As part of this, it will also be important to differentiate among market segments, which will develop at different paces.

Stage 1: Building the Foundation

The transition would begin by establishing continuous EM&V through standards and technology so that efficiency can be delivered as a resource on a level playing field with other forms of DER. For example, a randomized control trial (RCT) is a proven methodology for accurately measuring savings from energy efficiency programs such as behavior-based programs.⁶ Similarly, savings measurement software entering the marketplace today can quantify EE savings in near real time and also meter energy efficiency so that the savings can be valued in the market.⁷ The accuracy of EM&V for this type of approach is higher than for traditional EE programs, such that the utilities can actually rely on EE resources as part of their system planning.

During the initial phase, the process of designing and building the market infrastructure would also begin, for example, by creating a process to identify and qualify market-based energy efficiency providers who will deliver savings outside of existing programs. This would allow

⁶ “Chapter 17: Residential Behavior Protocol” in *The Uniform Methods Project, Methods for Determining Energy Efficiency Savings for Specific Measures*, James Steward and Annika Todd, National Renewable Energy Laboratory, January 2015, Available at <http://energy.gov/sites/prod/files/2015/02/f19/UMPCChapter17-residential-behavior.pdf>; see also “EM&V of Residential Behavior-Based Energy Efficiency Programs,” Department of Energy, May 16, 2012. Available at: <https://www4.eere.energy.gov/seeaction/publication/evaluation-measurement-and-verification-emv-residential-behavior-based-energy-efficiency>

⁷ “EM&V 2.0 – New Tools for Measuring Energy Efficiency Program Savings,” Tom Eckman and Mark Sylvia, Electric Light & Power, December 2, 2014, Available at: <http://www.elp.com/Electric-Light-Power-Newsletter/articles/2014/02/em-v-2-0-new-tools-for-measuring-energy-efficiency-program-savings.html>

market-based providers to begin to prepare for the new structure, while preventing existing activities from stalling during the transition.

It will also be necessary to establish a system whereby EE resources could be aggregated for bidding and sale into the market. For example, this would include protocols to address the likelihood that multiple EE providers could be serving the same customer, since we presume it will be desirable for a single aggregator to roll up EE resources from a single customer even if they are derived from the work of several contractors. In such a system, there could be an initial payment to the various EE contractors for their work, followed by ongoing payments for performance of those resources to the aggregator.

As this phase concludes, it will be important to evaluate market transformation effects across all market sectors to ascertain readiness for the next phase. The program should borrow from the ‘test, measure, adjust’ methodology used by NYSERDA and the utility-proposed demonstration projects.

Stage 2: Develop Compensation Mechanisms

A core element of the program will be to establish a mechanism that offsets the current pricing policy, which shields consumers from the true societal cost of energy use and the market volatility of energy prices. While there may be reasons to do so, continuing this “averaged” pricing structure obscures price signals to customers and creates the unintended consequence of under-investment in cost-effective efficiency, clean energy, and other services because this “averaged” pricing structure eliminates much of the value proposition. Possibilities include:

- Educating customers about the true costs of energy use and providing them with incentives to change their behavior
- Addressing the market failure that is created by continuing to structure energy prices to shield customers from the real costs by:
 - Putting the right policies in place so that it is truly in the utilities’ best interest to invest in EE as a first resource, provide a firm market driver, and encourage their customers to adopt EE as part of their ongoing business model.
 - Implementing an efficiency feed-in tariff policy or Load Reduction Purchase Agreements that create a market driver for efficiency without the pitfalls of incentives and rebates.

Initially, we assume that the level of compensation for EE resources would be set at a level consistent with its value but high enough to attract participation. Over time, as the market develops, the Commission could transition to a system whereby the value is set by market forces, with appropriate policy structures to ensure that the market is including and fairly valuing all components of value (i.e., via the BCA and LMP+D frameworks), including avoided costs, as this would provide additional value to EE in T&D constrained areas. Because EE can be used to achieve multiple objectives, the revenue streams should reflect this. Utilities could be compensated through EIMs and avoided T&D investments through the proposed modified clawback mechanism. A critical piece to all of this will be the establishment of a suitable benefit-cost framework that considers portfolios of projects instead of individual measures. For example, if EE can deliver reliability or resiliency benefits, these should be counted. EE's carbon emission reduction benefits, along with other non-energy benefits, should also be considered. The advanced energy community filed detailed comments on the Staff BCA White Paper, which included a report prepared by Synapse Energy Economics on system for comprehensively valuing DER, including EE.⁸

Again, at the conclusion of this phase, it will be necessary to evaluate market transformation effects across all market sectors to ascertain readiness for the next phase, using 'test, measure, adjust' methodology.

Stage 3: Complete Market Development

In this stage, the Commission, working with other parties, would continue to build the market infrastructure to support the choices made in the policy development stage. We recommend that the Commission conduct a study of market-based energy efficiency programs to compare their performance with existing programs and project their likelihood of performance. Based on the study, the Commission should decide whether to adjust or proceed with the transition as planned.

⁸ Comments of Advanced Energy Economy Institute, the Alliance for Clean Energy New York, and the New England Clean Energy Council on the Staff White Paper on Benefit-Cost Analysis in Reforming the Energy Vision, Submitted on August 21, 2015 in case14-M-0101.

Such a decision needs to recognize that even when a full market-based program is implemented, the funding for procuring EE resources are ultimately ratepayer funds. This is consistent with our view that EE should be part of basic utility service. As such, the Commission will have an ongoing obligation to ensure that the market is functioning fairly, efficiently, and that it is benefitting all ratepayers.

Stage 4: Begin the Transition

Once the market design is set, the Commission would commit to goals for utilities (e.g., via EIMs), establish a profit mechanism that will incentivize utilities to meet those goals, and begin to implement the transition. The transition could be gradual, for example, by maintaining existing programs for smaller customers while moving larger customers over to the market-based systems. As experience is gained and confidence grows in the new structure, more customers could be moved off of existing programs and into the new ones. We believe this approach is consistent with the general direction articulated in the Staff Track 2 White Paper, where the state will transition gradually to new utility revenue models and rate structures.

Other types of market segmentation are also possible. For example, the market-based programs could begin in geographic areas where EE has greater value, such as T&D constrained areas. This would serve to draw in more participation by EE companies and build experience with the functioning of the market and to provide an appropriate risk/reward profile for participating companies and customers. As experience is gained and companies move down the learning curve, the program could be expanded to additional market segments. We believe this is consistent with how Consolidated Edison is pursuing the acquisition of DER resources in the BQDM program. Another similar example is in California, where Southern California Edison and San Diego Gas & Electric are planning to procure “preferred resources” as part of their plan to replace the capacity from the San Onofre Nuclear Generating Station.

Also, similar to the proposed “smart home rate” in the Track 2 White Paper, the program could include an opt-in component, whereby customers choose to participate, but then would no longer be eligible for participation in legacy programs.

As the program is implemented, the Commission should carefully track performance, in particular on the amount of savings that are being realized. The Commission should be prepared to intervene if the level of savings being realized and the level of investment in EE are falling

below expectations. The Commission should also be evaluating benefits to the system and to ratepayers compared to costs. The Commission should also ensure that all ratepayers are receiving equitable access to market based EE proposals.

Comments on Individual Utility ETIPs

Consolidated Edison

We are disappointed that Con Edison proposed budgets and savings targets that are flat and do not increase over time. However, we applaud Con Edison for proposing performance incentives for achieving energy savings, allowing for achievement of up to 120% of performance goals in its portfolio. In this way, the company acknowledges that with the right formula of incentives, it could increase targets – an indication that higher targets are within reach of the utilities when combined with the right policies.⁹

We support ConEd’s proposal to adopt much needed modernization in the field of EM&V. While other ETIP proposals ignored the encouragement from REV for utilities to use “technology to challenge and enhance our traditional approach to EM&V”, ConEd’s ETIP embraced this challenge to transition toward EM&V 2.0 and emerging industry tools, such as savings measurement software.

ConEd’s proposal pinpoints many of the benefits that are provided from the use of EM&V 2.0. Using “EM&V [2.0] results in a real-time environment” that can improve program performance and inform program administrators of leading indicators of increasing or decreasing savings. Also, EM&V 2.0 can assist in the development and updating of the Technical Resource Manuals (TRMs), as well as analyze the impact of specific measures or technologies.

We encourage ConEd and the Commission to consider additional benefits that were not included in the proposed ETIP. EM&V 2.0 and savings measurement software can provide project-level measurement that can support an improved approach to QA/QC practices and

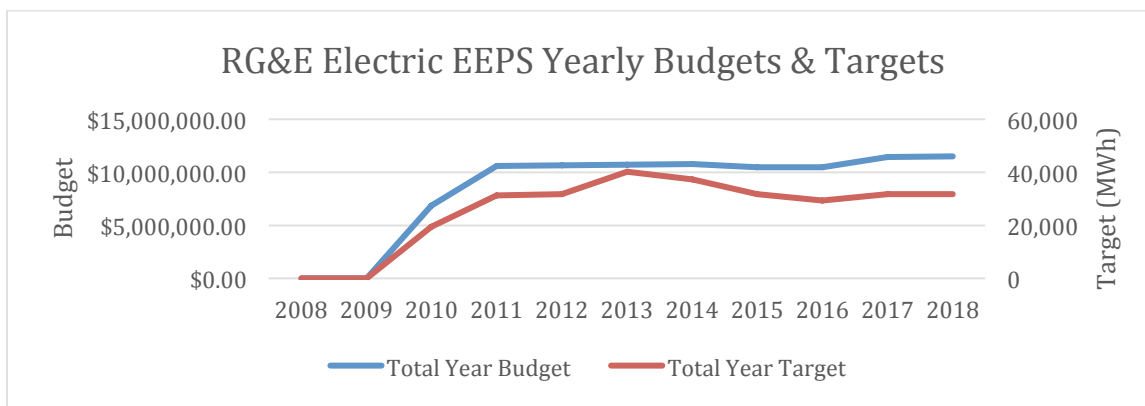
⁹ *Draft Energy Efficiency Transition Implementation Plan (ETIP) 2016-18*, Con Edison Company of New York Inc., July 15, 2015, Case 15-M-0252

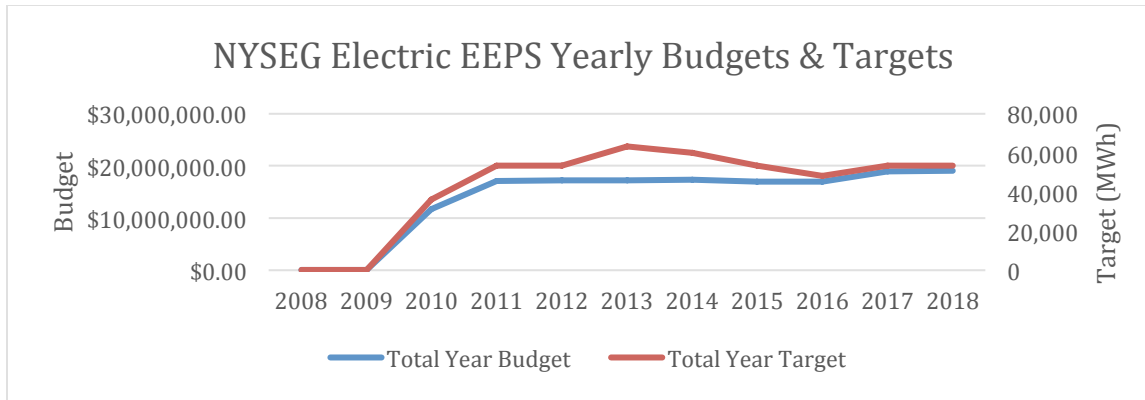
provide data to inform customers of project performance. Savings measurement software can also support the use of a robust comparison group to estimate net-to-gross savings (NTG). ConEd proposes the use of a questionnaire to measure NTG. They should consider using data-driven NTG measurement tools instead as part of this transition.

ConEd’s proposal is an important step forward for energy efficiency to advance under the REV model. The Commission should note that while REV is driving innovation in EM&V, the Commission guidelines for EM&V are out of date and may hinder technological advances in EM&V and innovation in the field. The Commission needs to work with stakeholders, evaluation firms, and companies leading in the EM&V 2.0 field to update the EM&V guidance to meet the needs of the REV model. At the same time, the Commission should encourage other program administrators to embrace forward-thinking approaches to EM&V.

Iberdrola

We note that the Iberdrola utilities’ ETIPs will result in a reduction in EE savings targets for 2016, and in the case of NYSEG, this is a 10% reduction from 2015 levels (see figure below). Compared to NYSEG’s 2013 targets, the utility’s 2016 targets amount to a nearly 24% reduction. While funding levels increase slightly by 2018, the savings targets only manage to recover to a level even with 2015. While Iberdrola cites operational reasons, such as a decrease in deemed savings for some measures, the end result of flat targets in 2018 is unreasonable in the face of a budget that increases by nearly 11 percent. The budget supports an increased level of savings targets, and the Commission should require this.





Source: Pace Energy and Climate Center

Despite these shortcomings in the overall goals, we do recognize that Iberdrola has already deployed EE in an effort to relieve constrained circuits in its successful 2014 Silver Creek Initiative, noting an increase in customer participation and demand reduction, and better results from linking EE and DR. Iberdrola expects to continue to rely on EE in relief strategies for constrained circuits going forward. In addition, Iberdrola is integrating EE into a REV demonstration project, the RG&E Energy Market.

National Grid

We commend National Grid for proposing a significant increase in their yearly savings targets and budgets, which rise by over 100,000 MWh from 2015 to 2018. All other utilities have flat or declining targets with budgets that are either unchanged or increasing slightly. National Grid's aggressive goals are the entire reason that the utilities' ETIPs, when taken as a whole, show modest increases in targets and budgets. We also commend National Grid's focus on improving customer awareness and education so that customers are better able to manage their energy usage and are better prepared for a transition toward REV.

We would like to see National Grid continue to improve energy efficiency outcomes for their small business customers. In the proposed ETIP, funds have been reduced for small business customers despite the fact that there remains plenty of cost effective energy efficiency to be achieved in this segment. While targeting low cost per kWh hour savings is important, it should be considered in the greater context of achieving EE improvements across the range of

the utility's customers and the need to keep all customer segments engaged to lay the groundwork for REV.

Conclusion

The advanced energy community strongly supports the efforts of the Commission in this proceeding, and is committed to playing its part to create a high-performing electricity system in New York State. We appreciate the opportunity to provide Initial Comments on the ETIPs and look forward to working with the Commission and other parties to accelerate the deployment of energy efficiency in New York State.

With the exception of National Grid, the utilities' ETIPs do not provide sufficient budgets or targets to support the state's energy goals. Only National Grid has followed the Commission's directive to increase savings over time. We would like to see the utilities fully embrace the goals of REV and propose revised ETIPs that employ more creative solutions, explore new methods for delivering higher levels of energy efficiency more cost effectively, and provide new profit opportunities for utilities that encourage them to increase energy efficiency beyond minimum targets.

At the same time, we are cognizant of the fact that utilities had to develop their ETIPs in the midst of a changing regulatory landscape that exhibits a lack of clear direction from the Commission in terms of the end state for energy efficiency and how a transition is supposed to take place. We appreciate that the Staff's Track Two White Paper includes goals and Earnings Impact Mechanisms for energy efficiency, and we recognize this as a signal that energy efficiency remains a priority for the Commission. However, without greater attention to near-term energy efficiency policy and a clearer path forward, EE companies may begin to reconsider whether New York is the right place to invest or whether other states with a clearer trajectory are more attractive.

To prevent pessimism from taking hold over the future market for energy efficiency in New York State, the Commission should take immediate steps to reassure the companies and market participants that there is a clear and workable plan for the transformation of the market. We therefore ask the Commission or Staff to hold a seminar where stakeholders can ask questions about the Commission's vision for the future of energy efficiency in NYS. The advanced energy community would like to support and contribute to the development of a

successful transition framework for market-based energy efficiency and requests that the Commission institute a stakeholder process where this can take place. This could take the form of a series of meetings where national experts are invited to present new models for energy efficiency and stakeholders are at liberty to explore them in an informal setting. These stakeholder meetings could culminate in a technical conference where the results of the stakeholder meetings are shared with the Commission and public at large.