



101 Tremont Street
Suite 401
Boston, MA 02108
(617) 742-0054
fax: (617) 542-0054
www.env-ne.org

Via Electronic Delivery

October 24, 2014

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

Rockport, ME
Boston, MA
Providence, RI
Hartford, CT
Ottawa, ON
Canada

Re: Case No. 14-M-0101, Proceeding on Motion of the Commission in Regard to Reforming the Energy Vision

Dear Secretary Burgess:

Enclosed for filing in the above-referenced matter are joint reply comments submitted by ENE and VEIC regarding other party comments on the draft DPS Staff Straw Proposal on Track One Issues released on August 22, 2014.

If you have any questions at all regarding this filing, please do not hesitate to contact me and I would be happy to assist you.

Sincerely,

/s/ Mark LeBel

Mark LeBel
Staff Attorney
ENE
101 Tremont Street, Suite 401
Boston, MA 02108-5011
(617) 742-0054 ext. 104
mlebel@env-ne.org

Enc.

STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

Proceeding on Motion of the Commission
in Regard to Reforming the Energy Vision

CASE 14-M-0101

**JOINT REPLY COMMENTS OF ENE AND VEIC
REGARDING THE TRACK ONE STAFF STRAW PROPOSAL**

ENE and VEIC jointly submit the following reply comments regarding the Track One Staff Straw Proposal (“Straw Proposal”) issued on August 22, 2014 in the Public Service Commission’s Reforming the Energy Vision (“REV”) proceeding.¹ ENE and VEIC thank the Commission for the opportunity to provide additional comments on these important energy issues.

Our reply comments will focus on specific observations made by other commenters in their initial comment filings on the Straw Proposal. In particular, this reply:

- Supports the serious concern expressed by consumer advocates that the energy consumer perspective has not been sufficiently incorporated into the REV proceeding and then reiterates and expands upon ENE’s and VEIC’s recommendations to date for better centering REV’s distributed energy resource (“DER”) reforms on consumer needs.
- Expands on the energy efficiency recommendations made by other commenters (and also ENE and VEIC) that draw upon the successful track record of the flexible “all cost-effective” procurement approach used by energy efficiency programs in four nation-leading states – Massachusetts, Rhode Island, Vermont, and Connecticut.²
- Supports several energy storage recommendations made by different commenters and offers additional thoughts on how storage issues can be better addressed by REV.

Please note that these reply comments are not intended to supersede ENE’s and VEIC’s previous comment filings in the REV proceeding, but should be viewed as supplements to our initial recommendations.

¹ ENE is a non-profit organization that researches and advocates innovative policies that tackle our environmental challenges while promoting sustainable economies. ENE is at the forefront of efforts to combat global warming with solutions that promote clean energy, clean air and healthy forests. For more on ENE, please see: <http://www.env-ne.org/>. VEIC is a non-profit company with a mission to reduce the economic and environmental costs of energy use. VEIC’s sustainable energy work includes policy and advocacy; consulting for utilities, governments and other entities; and program implementation. For more on VEIC, please see: <https://www.veic.org/>.

² ENE sits on the stakeholder energy efficiency councils in Massachusetts, Rhode Island, and Connecticut and helps to oversee their energy efficiency program design, implementation, and cost-effectiveness. ENE is the Chair of the stakeholder councils in Rhode Island and Connecticut.

We would also like to express our general support for the three broad areas of agreement outlined in the reply comments filed by the Pace Energy and Climate Center on behalf of the Clean Energy Organizations Collaborative (“CEOC”): (1) the need to set greenhouse gas emissions reductions objectives; (2) the need to establish aggressive energy efficiency savings goals; and (3) the need to revise and update the benefit-cost analysis framework. ENE and VEIC see the entire body of their comments in the REV proceeding to date as generally consistent with these three broad policy directions. Section II, below, provides additional concrete policy recommendations regarding the set of energy efficiency policies and practices that the Public Service Commission should adopt in the REV proceeding to achieve nation-leading efficiency savings goals. We also support the section of the CEOC reply comment that reiterates the need for a fully-formed Independent DSP implementation plan, in the event that a utility DSP model fails to achieve specific performance metrics and benchmarks.

I. The Needs of the Modern Energy Consumer Should Be REV’s Top Priority

ENE and VEIC Reply Comments: Two consumer organizations, AARP and the Public Utility Law Project of New York, Inc., expressed strong concern in their joint initial comment with the evident lack of consumer representation in the REV proceeding, especially from the residential and low-income perspectives.³ They fear that this lack of representation will not help the Public Service Commission develop DER-related reforms that will tangibly benefit and empower individual energy consumers – a fundamental, if somewhat implicit, policy objective of REV.⁴

ENE and VEIC share this concern. While there has been some acknowledgment of the critical role of the consumer in the new distribution model proposed by REV, we still do not see consumer interests placed at the center of the REV process and its thinking. This consumer-centric approach is necessary if REV’s reforms are to be embraced by consumers, the most important constituent of our distribution system. Consumers want that system, however structured, to meet their full energy needs: to provide affordable and reliable energy for their homes and businesses, to give them real control over their energy use and costs, to help them enjoy the full benefits of the latest energy-related innovations, and to be protected and safeguarded in their interactions with any of the market players envisioned for the new DSP marketplace.

³ See *Comments of AARP and Public Utility Law Project of New York, Inc. on Developing the REV Market in New York: DPS Staff Straw Proposal on Track One Issues*, September 22, 2014, at pp. 1-3.

⁴ See *Reforming the Energy Vision*, NYS Department of Public Service Staff Report and Proposal, Case 14-M-0101 (April 24, 2014) (listing “[c]ustomer knowledge and tools that support effective management of their total energy bill” as one of the six policy objectives of REV).

ENE and VEIC define consumer interests perhaps more broadly than traditionally done in the energy context. We see those interests as having evolved to be more than just freedom from unreasonable electricity prices, although that remains an important and valid concern of energy consumers. Rather, we view consumer interests in the modern energy era as covering a broad span of energy-related issues, starting with the bedrock consumer concern of affordable energy costs, but then also folding in newer considerations like improved energy control, more sustainable energy, simple and accessible energy information, the opportunity to provide system services, degrees of energy independence (such as customer-sited back-up generation or storage), as well as a full range of non-energy benefits such as comfort and health. This is the new energy reality for consumers, and we encourage the Commission to view consumer interests as not only central to REV, but also as broader than typically viewed through the outdated lens of the centralized, one-way power grid of the past.⁵

To better address consumer interests in the REV proceeding, ENE and VEIC have offered specific recommendations in previous REV comments, such as the suggestion that REV focus on redesigning the format and content of the standard monthly electricity bill to satisfy the information needs of the modern energy consumer. We reiterate our previous consumer-related recommendations in this reply comment, and also offer an additional recommendation. The following list summarizes the consumer-related recommendations ENE and VEIC would like the REV process to adopt:

- Make “enhanced consumer energy control and management” an explicit policy priority of the REV process so that the consumer is placed at the center of REV’s thinking and reforms;⁶
- Mandate “the procurement of all cost-effective energy efficiency and other demand-side resources” to capture all economically-efficient cost reductions for energy consumers;⁷
- Require distribution utilities (or the proposed DSPs) to deploy DER as non-wire alternatives to defer or avoid more costly grid investments in traditional infrastructure and deliver real savings to consumers;⁸
- Adopt several consumer-friendly rate reforms through REV’s Track 2 process, including moving away from relying on fixed minimum monthly charges for distribution-level electricity pricing –

⁵ For more detail on how this might look conceptually, please see ENE’s recent report, *EnergyVision: A Pathway to a Modern, Sustainable, Low Carbon Economic and Environmental Future* (2014) (available online at: http://www.env-ne.org/public/resources/ENE_EnergyVision_Framework_FINAL.pdf).

⁶ See ENE’s Responses to Track 1 and Track 2 Questions, July 18, 2014, at pp. 3-4.

⁷ See *id.*, at pp. 5-6.

⁸ See *id.*, at pp. 9-13; see also *Joint Comments of ENE and VEIC on the Track One Staff Straw Proposal*, September 22, 2014, at pp. 9-10.

primarily because they have counterproductive effects on consumer energy control, as well as on pricing signals for cost-effective energy efficiency and distributed generation measures;⁹

- Clarify that the new DSP marketplace will minimize the barriers to entry that consumers face with respect to adopting efficiency, new technologies, or innovations;¹⁰
- Add a DSP market design principle of “customer convenience” that would help guide the development of simple and safe ways for consumers to interact with the DSP market (or other DSP market actors), if they choose to (this principle would also encompass the need to redesign billing and other forms of consumer engagement);¹¹
- Establish a stakeholder efficiency council (designed after successful models in Massachusetts, Rhode Island, and Connecticut) that would oversee and advise New York’s energy efficiency procurement efforts and provide a meaningful role for consumer advocates to participate in, and oversee, efficiency planning and programs;¹²
- Add bill redesign as a near-term, “no regrets” action for REV implementation;¹³
- Develop DSP performance standards that require a certain level of benefits for low and moderate income consumers;¹⁴ and
- Create a consumer advisory group for the REV proceeding that would exist to help guide the Public Service Commission on consumer issues while the REV process is pending.

This last recommendation is a new one and reflects our strong concern – as well as the concerns of other stakeholders, like AARP and the Public Utility Law Project of New York, Inc. – that the energy consumer perspective in REV needs to be significantly strengthened if REV is to be effective. The establishment of an explicit advisory body should help resolve that concern.

II. REV Should Adopt the All Cost-Effective Energy Efficiency Procurement Model

ENE and VEIC Reply Comments: Several commenters, including the Natural Resources Defense Council, the American Council for an Energy-Efficient Economy, and Northeast Energy Efficiency Partnerships, recommended in their initial comments on the Track One Straw Proposal that the Public Service Commission should look to the nation-leading energy efficiency programs in several

⁹ See *ENE’s Responses to Track 1 and Track 2 Questions*, July 18, 2014, at pp. 14-16; see also a recent op-ed drafted by ENE and published in *The Day* on October 12, 2014 (<http://www.theday.com/article/20141012/OP05/310129987>) with additional information and analysis regarding a fixed charge increase recently proposed in Connecticut by the largest electric distribution utility.

¹⁰ See *Joint Comments of ENE and VEIC on the Track One Staff Straw Proposal*, September 22, 2014, at p. 2.

¹¹ See *id.*

¹² See *id.*, at p. 3.

¹³ See *id.*, at p. 4.

¹⁴ See *id.*, at p. 4-5.

New England states – specifically Massachusetts, Rhode Island, Connecticut, and Vermont – for valuable insight into the best policies and practices for procuring aggressive cost-effective energy efficiency savings for consumers. Like ENE’s cautionary observations in its previous joint filing with VEIC, these recommendations grow out of serious and widely-shared concerns with the suggestions in the Straw Proposal that New York’s ratepayer-funded efficiency programs may be too costly and that an energy efficiency expansion could only occur through a finance-only (or largely market-based) approach.

ENE and VEIC strongly agree with the concerns raised by the other commenters and also agree that the energy efficiency programs in New England should serve as models for REV’s efficiency-related reforms. All four of the states noted above are in the top six of the 2014 efficiency rankings of ACEEE, just released this week.¹⁵ Massachusetts is first, Rhode Island and Vermont are tied for third, Connecticut is sixth, while New York is seventh.¹⁶ For the subranking that is focused exclusively on energy efficiency policies and program performance, the four New England states are also stellar performers, with Massachusetts and Rhode Island tied for first place, with Vermont in third, and Connecticut tied for fifth.¹⁷ ENE has been heavily involved in the recent energy efficiency expansions in Massachusetts, Rhode Island, and Connecticut, both as a leading advocate and as a longstanding member of the stakeholder energy efficiency councils in each state.¹⁸ Likewise, VEIC has been heavily involved in ensuring that Vermont and Rhode Island’s cost-effective efficiency procurements are performing well.

These leading New England states have all developed comprehensive energy efficiency programs for energy consumers in all sectors – residential, commercial and industrial, and municipal. These programs are designed to provide consumers with three specific types of assistance that they need to overcome the numerous market failures that impede the implementation of cost-saving efficiency investments.¹⁹ First, they provide *technical assistance and information*, including energy audits and accompanying efficiency recommendations, so customers can fully understand the efficiency opportunities that exist and their associated costs and benefits.²⁰ Second, these programs provide *financial incentives and rebates* to reduce the upfront cost of efficiency investments and entice consumers to adopt the efficiency recommendation identified by the program.²¹ Third, these comprehensive programs

¹⁵ See ACEEE, *The 2014 State Energy Efficiency Scorecard*, October 2014, at p. 8, Table 2.

¹⁶ See *id.*

¹⁷ See *id.*, at p. 23, Table 8.

¹⁸ For more information on how these stakeholder efficiency councils work, please see Sosland, et al., *Collaboration that Counts: The Role of State Energy Efficiency Stakeholder Councils*, 2012 (available through ENE’s website at: http://www.env-ne.org/public/resources/CollaborationthatCountsRoleofStateEnergyEfficiencyStakeholderCouncils_2012.pdf).

¹⁹ See ENE, *Best Practices for Advancing State Energy Efficiency Programs: Policy Options & Suggestions*, February 2012, at p. 5, http://www.env-ne.org/public/resources/pdf/ENE_StatePolicyOptions_BestPracticesWhitepaper_February2012.pdf.

²⁰ See *id.*

²¹ See *id.*

provide *project financing* to help consumer pay over time for the portion of the efficiency investments that are not covered by program incentives and rebates.²²

There are many well-documented market failures that explain why consumers fail to adopt cost-saving efficiency measures that are in their own economic best interest. Ten of the most notable are:

- (1) **Split Incentives:** Landlords often do not want to invest in efficiency upgrades because tenants are responsible for paying energy bills. Building owners are often uncertain whether they will capture the full value of the efficiency measures they install if they were to sell the building;
- (2) **Lack of Individual Cost Information:** By looking at a typical energy bill it is nearly impossible to identify inefficiencies. Customers, for example, cannot easily pinpoint what appliance to replace with a more efficient model or what building efficiency improvement to make to lower their energy costs;
- (3) **Uncertainty of Savings:** It is hard for customers to calculate, and to be relatively certain, that making an efficiency investment will save money by reducing their energy bills over time;
- (4) **Inadequate Information Regarding Efficient Options:** There are so many choices for refrigerators, washers, dryers, lighting, heating systems, air conditioning, insulation, air sealing, and other energy improvements that it is difficult for consumers to know which is the most efficient, cost-effective, dependable, and worthwhile investment;
- (5) **Bounded Rationality:** The complexity of many efficiency decisions are beyond the ability of a consumer to make an economically optimal choice. The difficulty and complexity of so many technical decisions often gets in the way of consumer action;
- (6) **Elevated Hurdle Rates:** Energy consumers, especially businesses, typically want a two- to three-year payback for an efficiency project, but are happy with an eight-year or even longer payback for other investment choices. Consumers tend to repeat ingrained spending and investment habits, neglecting cost-saving efficiency upgrades;
- (7) **Liquidity Constraints:** Consumers and business often lack access to the capital they need to purchase efficient equipment or improve building energy performance, even if they are certain it will save them money over time;
- (8) **Transaction Costs:** The time and effort required to research an efficient upgrade, fill out a loan application, find a contractor and get quotes, and supervise workers in their home or business can, in consumers' minds, outweigh the expected returns in energy savings;
- (9) **Availability and Quality Control Issues:** Problems with efficiency product and service availability, adverse bundling and gold-plating, and fear of improper installation and maintenance

²² See *id.*

impede efficiency adoption. Often efficiency products are not readily available in a state or region without the intervention of a comprehensive efficiency program;

(10) Low Priority of Energy Issues: Business and residential energy consumers tend to focus on their core business and life concerns respectively and neglect to pursue cost-saving efficiency measures and upgrades.²³

To overcome most of these ten impediments to efficiency investments it is necessary to deploy more than one of the three different types of customer assistance. Since all market barriers must be overcome to achieve investment in all cost-effective efficiency, leading efficiency states and programs continuously and simultaneously deploy the three primary tools – (1) technical assistance and information, (2) financial incentives and rebates, and (3) efficiency financing – to overcome market failures and impediments to efficiency investments.²⁴

Massachusetts, Rhode Island, and Connecticut have not only designed comprehensive energy efficiency programs to better serve consumers, but they have also engaged in aggressive expansions of those programs in recent years. They have done so by implementing “all cost effective” energy efficiency policy mandates, which require energy efficiency to be procured as a strategic economic and energy resource.²⁵ This mandate has a simple economic goal – to invest in all energy efficiency resources that are cost-effective and less expensive than supply. These states, in other words, have chosen to make efficiency investment decisions on an economic basis, rather than by placing an arbitrary cap on investments due to political or other factors.²⁶

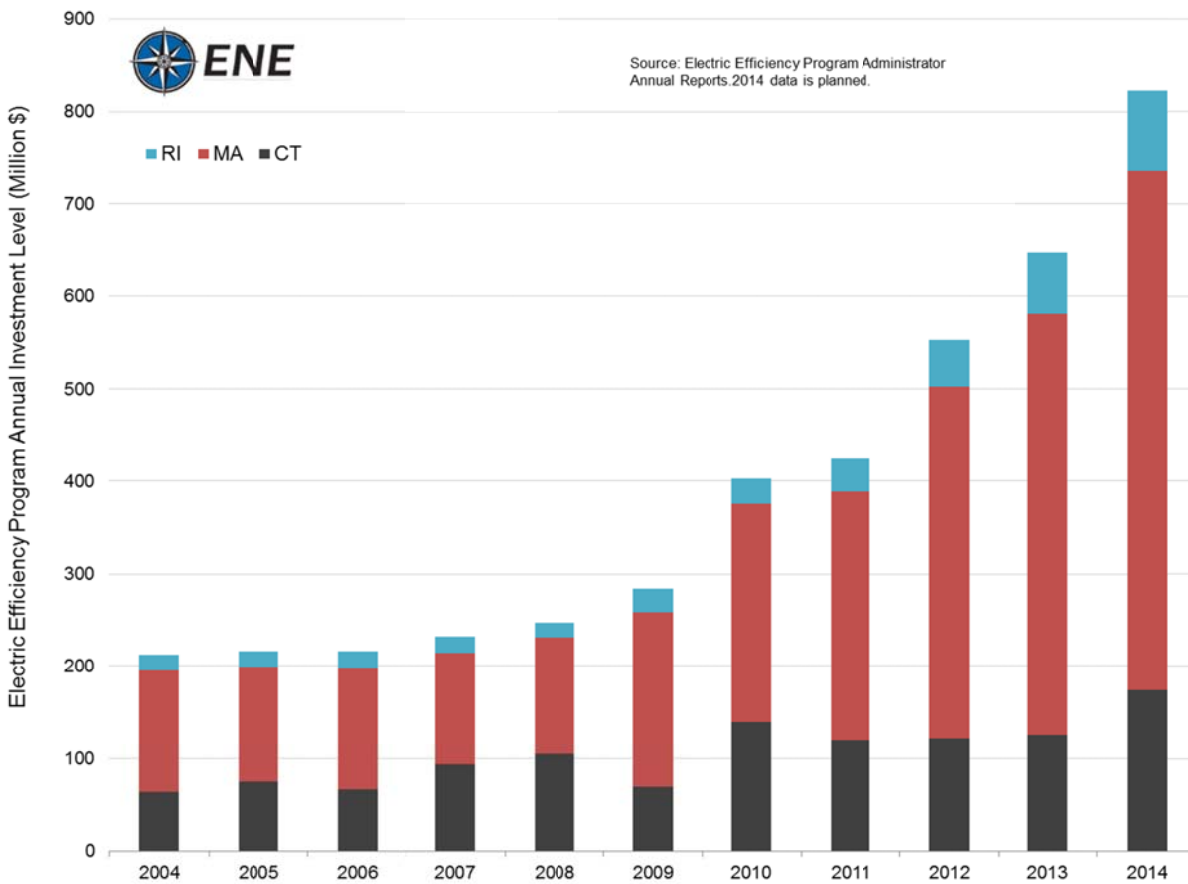
²³ *See id.*, at pp. 5-6.

²⁴ *See id.*, at p. 6.

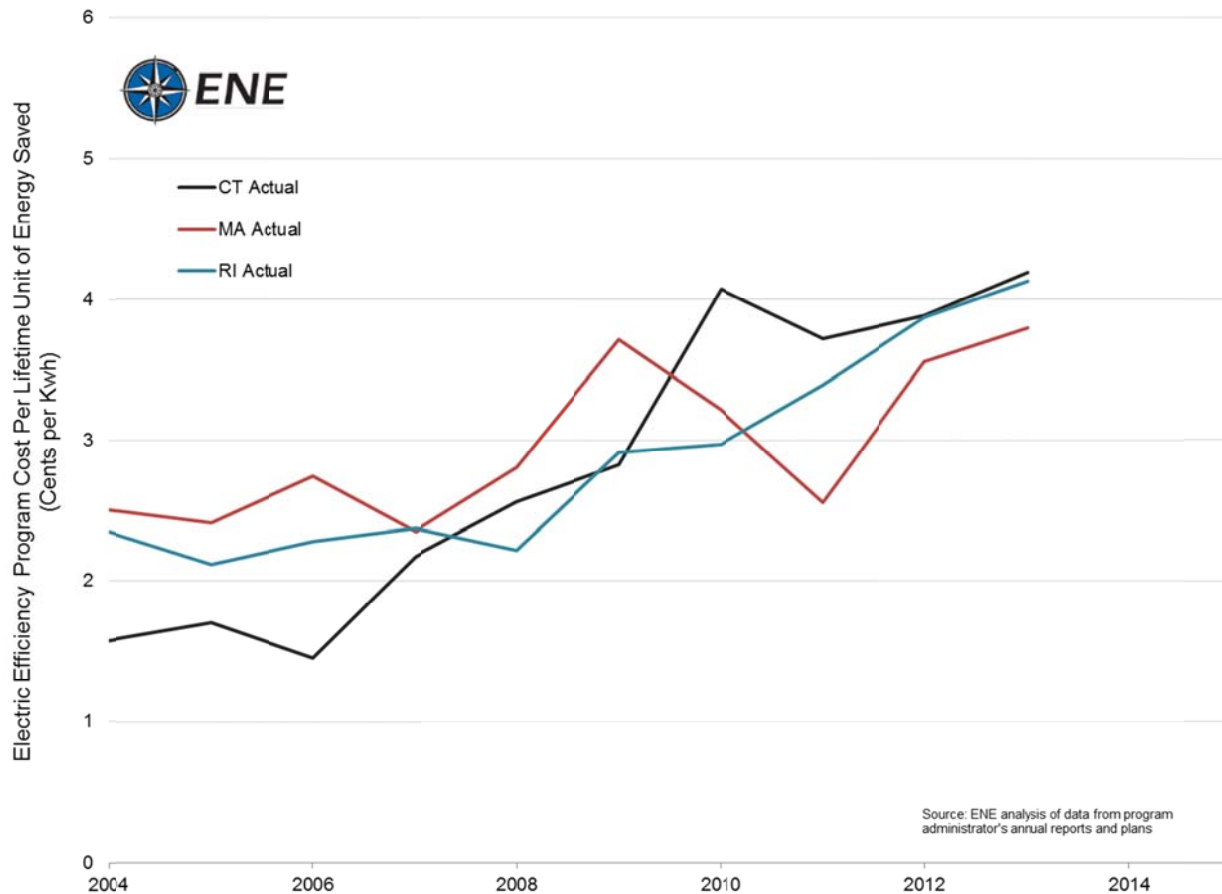
²⁵ *See id.*, at p. 16.

²⁶ *See id.*

The results of the ramped up efficiency investments by these three states has been profound. For instance, cost-effective electric efficiency investment levels are rising rapidly, as shown in this chart.



And despite these significant investment increases, costs per kilowatt hour saved remain reasonable and well below the costs of supply in each state. In Connecticut, for example, electric supply now costs between eight to ten cents per kilowatt hour (depending on the utility and the rate class) and these prices are likely to increase as the winter peak demand problem influences the distribution utilities' standard service procurements. The next chart shows that costs for efficiency savings have essentially leveled off at about four cents per kilowatt hour in each of the three states.

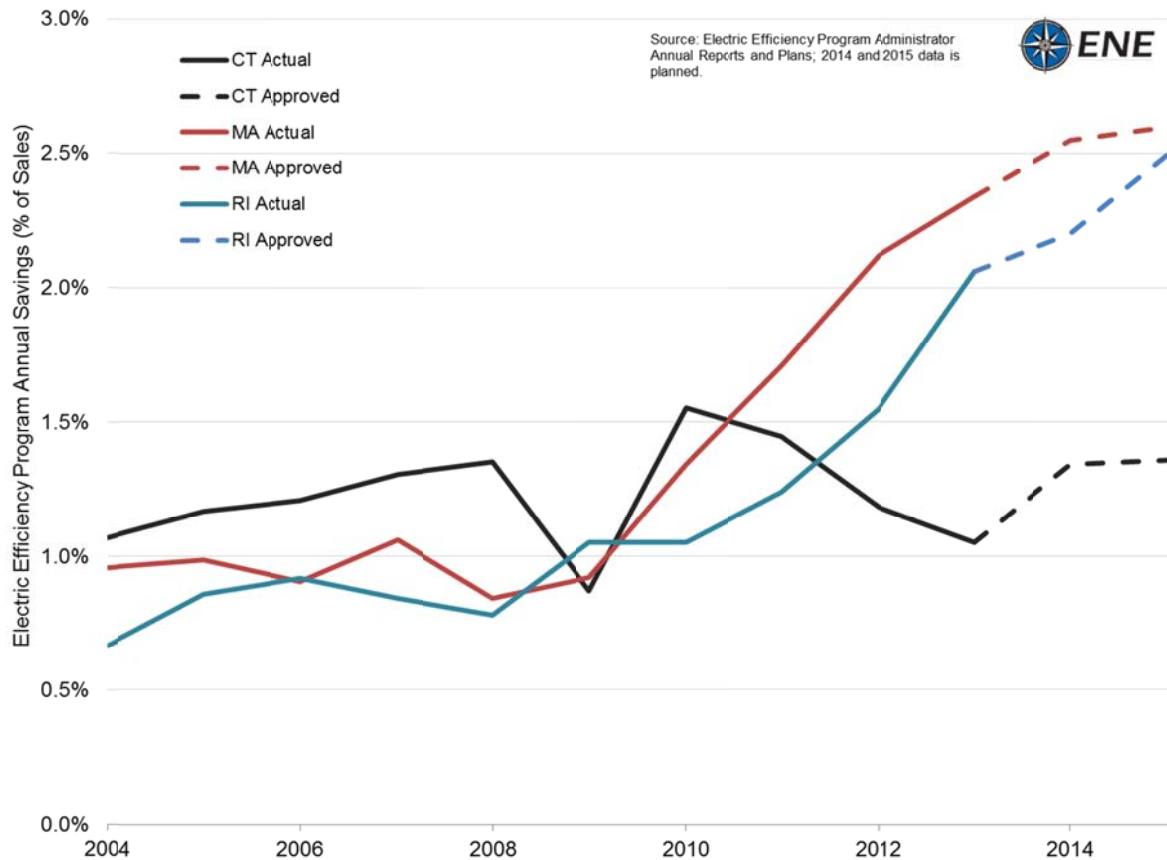


With the ramped up investments and the exceptionally low costs have also come aggressive annual savings targets – especially for Rhode Island, Massachusetts, and Vermont, which literally led the nation in 2013 on this key procurement metric for electric efficiency. According to ACEEE’s most recent analysis, Rhode Island achieved 2.09% in net incremental electric savings, Massachusetts achieved 2.05%, and Vermont, 1.78%.²⁷ Those are, respectively, the first, second, and third place electric savings achieved among all fifty states in 2013.²⁸

And Massachusetts and Rhode Island are set to achieve even higher savings targets in 2014 if they perform to plan, as the next chart illustrates.

²⁷ See ACEEE, *The 2014 State Energy Efficiency Scorecard*, October 2014, at p. 33, Table 14. These are savings percentages based on retail electric sales in each state in 2013.

²⁸ See *id.*



It is worth reviewing how these stellar performers arrived at this place of high cost-effective efficiency procurement. Massachusetts began its rapid efficiency expansion when it passed the *Green Communities Act of 2008*, which contained a new, widely-supported requirement that the electric and natural gas utilities invest in all cost-effective electric and natural gas efficiency that is lower cost than supply through a series of three-year efficiency investment plans.²⁹ With a common recognition that ending an era of massive underinvestment in low-cost efficiency programs would generate large economic and environment benefits for the state, the new least-cost efficiency procurement law passed in a bi-partisan manner and was universally supported by a diverse group of business, consumer, environmental, and low-income stakeholders.³⁰

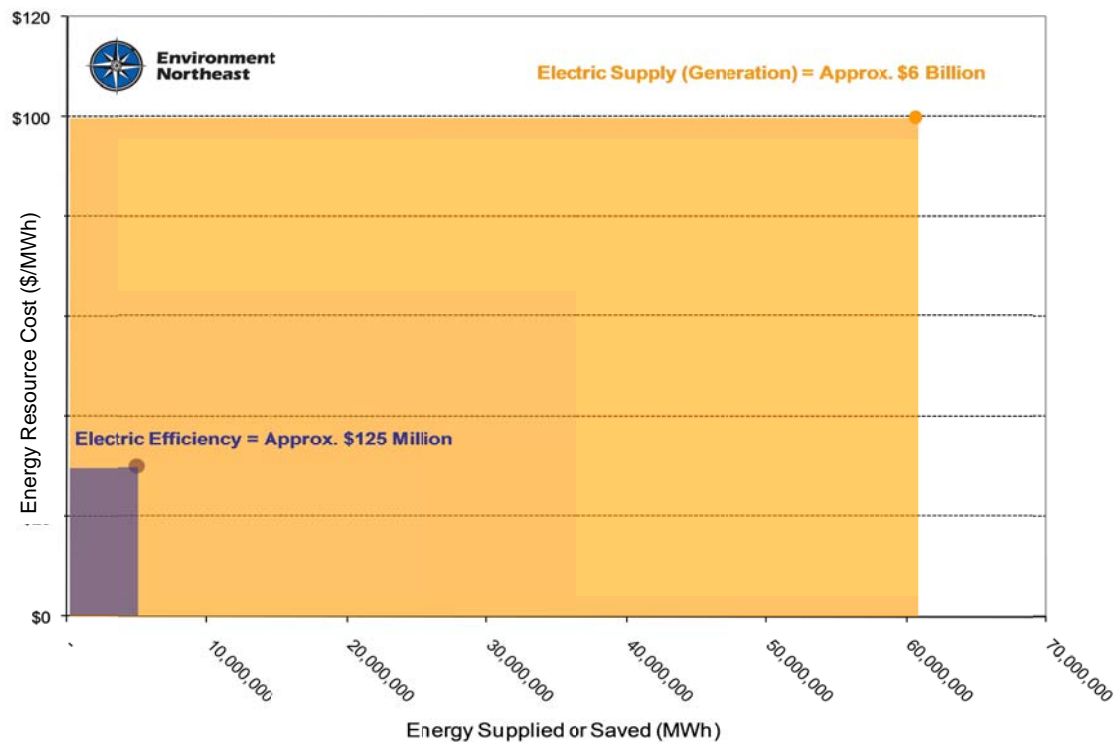
As the figure below illustrates, at the time of the passage of Massachusetts' *Green Communities Act*, energy consumers in the state spent roughly \$6 billion on electric supply at a price of ten cents per

²⁹ See ENE, *Best Practices for Advancing State Energy Efficiency Programs: Policy Options & Suggestions*, February 2012, at p. 18. A summary of the *Green Communities Act of 2008*'s efficiency-related provisions is available at <http://www.env-ne.org/resources/detail/ma-green-communities-act-summary/24>. The actual legislative text is available at <http://www.malegislature.gov/Laws/SessionLaws/Acts/2008/Chapter169>.

³⁰ See ENE, *Best Practices for Advancing State Energy Efficiency Programs: Policy Options & Suggestions*, February 2012, at p. 18.

kilowatt hour and yet only invested \$125 million in efficiency programs that delivered electric savings at a price of three cents per lifetime kilowatt hour.

Massachusetts' Expenditures on Electric Efficiency Programs vs. Electric Supply (2008) ³¹



As with Massachusetts, widely-supported legislative efforts led to the passage of energy efficiency procurement laws in Rhode Island in 2006 and 2010,³² in Vermont in 2005 and 2006,³³ and in Connecticut in 2007 and 2013.³⁴ Each of these situations underscores the bi-partisan and diverse

³¹ See *id.*, at p. 19, Figure 13.

³² *The Comprehensive Energy Conservation, Efficiency, & Affordability Act of 2006* and *An Act Relating to Public Utilities and Carriers – Revenue Decoupling* (2010). For a summary of Rhode Island’s 2010 efficiency legislation and how it builds on the original 2006 Efficiency Procurement law, please see <http://www.env-ne.org/resources/detail/ri-decoupling-and-efficiency-bill-2010-summary/12>.

³³ Act 61 of 2005 removed an arbitrary funding cap for efficiency and requires the Vermont Public Service Board (PSB) to identify unrealized efficiency potential and adjust the Energy Efficiency Utility’s (Efficiency Vermont) budget to invest in all cost-effective efficiency savings. Additional legislation in 2006 requires the Vermont PSB to give particular emphasis to four objectives as it ensures investment in all cost effective efficiency: “reducing the size of future power purchases; reducing greenhouse gases; limiting the need for transmission and distribution upgrades; and minimizing the cost of electricity.” Subsequently, the statute was updated to also include particular emphasis on “providing efficiency and conservation as a part of a comprehensive resource supply strategy; providing the opportunity for all Vermonters to participate in efficiency and conservation programs; and the value of targeting efficiency and conservation efforts to locations, markets or customers where they may provide the greatest value.” See 30 V.S.A. § 209(d)(4).

³⁴ For a summary of Public Act 07-242, (formerly H.B. 7432), *An Act Concerning Electricity and Energy Efficiency*, please see <http://www.env-ne.org/resources/detail/ct-aac-energy-and-energy-efficiency-2007/28>. For a summary of the 2013 legislation, Public Act 13-298, *An Act Concerning Implementation of Connecticut’s Comprehensive Energy Strategy and Various Revisions to the Energy Statutes*, see <http://www.env-ne.org/resources/detail/ene-summary-of-ct-energy-act-pa-13-298>.

stakeholder appeal of reform legislation requiring investment in all cost-effective efficiency that is cheaper than supply.³⁵ Rhode Island's 2006 efficiency procurement law passed a Democratic-majority state Senate and House *unanimously* and was signed at a joint press event with the sitting Republican Governor a few days later.³⁶ Similarly, Connecticut's 2007 Efficiency Procurement legislation was passed overwhelmingly by a Democratic-majority state legislature and signed by a Republican Governor; the 2013 legislation passed with strong bi-partisan support.³⁷

By requiring their distribution utilities to procure all cost-effective energy efficiency, these nation-leading efficiency states – Massachusetts Rhode Island, Vermont, and Connecticut – have begun to rebalance their energy investment choices. The benefits that flow from this rebalancing are significant: more economic growth, in-state job creation, increased energy independence, and reduced air pollution and greenhouse gas emissions. Massachusetts for example, is in the process of implementing a \$2.2 billion, three-year cost-effective efficiency investment plan that will generate electric and natural gas total economic benefits of \$8.9 billion, save 40 million MWh of electricity, save over 937 million therms of natural gas,³⁸ and in the process yield 98,811 job-years of employment and increase Gross State Product by roughly \$15 billion.³⁹ Similarly, since 2008, Rhode Island has invested \$558 million in cost-effective energy efficiency, generating consumer benefits of \$1.99 billion, creating over 25,000 job-years of employment, and boosting Gross State Product by \$2.34 billion. By 2014, Rhode Island was meeting 12-13% of its electric demand through energy efficiency, and now estimates that by the end of 2017 the state will meet 17% of its electric consumption with the lowest cost efficiency resource.

The *Green Communities Act of 2008* represented a dramatic new policy framework for Massachusetts.⁴⁰ It replaced an old policy of a statutorily-mandated, arbitrarily-capped amount of efficiency investment with a new efficiency approach based on economics, flexible to changing market conditions, and designed to maximize consumer savings.⁴¹ This new least-cost approach requires utilities

³⁵ See ENE, *Best Practices for Advancing State Energy Efficiency Programs: Policy Options & Suggestions*, February 2012, at p. 19.

³⁶ See *id.*

³⁷ See *id.*

³⁸ A detailed summary of Massachusetts' ambitious three-year efficiency procurement plan is available at <http://ma-eeac.org/wordpress/wp-content/uploads/2013-2015-Three-Year-Efficiency-Plans-Order-1-31-131.pdf>. See also, January 29, 2010 *New York Times* article by Leslie Kaufman titled, "Massachusetts Sets Ambitious Energy Standards," available at <http://www.nytimes.com/2010/01/30/science/earth/30energy.html>.

³⁹ ENE's "Energy Efficiency: An Engine of Economic Growth" report found efficiency program investments reduce consumers' energy bills and enable them to spend more money in the local economy and therefore yield direct, indirect, and induced employment growth. In Massachusetts, this results in more than 46 job-years per million dollars of program spending and increased Gross State Product of more than \$5.90 for every \$1 of program investment. The report is available at <http://www.env-ne.org/resources/open/p/id/964>.

⁴⁰ See ENE, *Best Practices for Advancing State Energy Efficiency Programs: Policy Options & Suggestions*, February 2012, at p. 20.

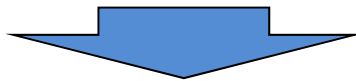
⁴¹ See *id.*

to procure all cost-effective electric and natural efficiency resources before more expensive supply with specific statutory steps to ensure this occurs.⁴² How this approach for efficiency procurement works in practice in Massachusetts – including legislative requirements, public utility commission approval, program delivery, and carefully structured stakeholder oversight – is summarized in the diagram below.⁴³

All Cost-Effective Efficiency Procurement in Massachusetts and Rhode Island

The model for energy efficiency procurement is very similar in Massachusetts and Rhode Island and is generating substantial positive economic results in both states:

- **First, state law established a new economic model for efficiency investment** – an energy efficiency procurement requirement for electric and natural gas utilities in these states requires them to invest in all cost-effective energy efficiency resources that are cheaper than supply;



- **Second, the states established new appointed stakeholder efficiency councils** – the efficiency councils have a designated statutory role to oversee utility efficiency programs, guide program planning and budgeting for all cost-effective efficiency investments, and conduct EM&V. The memberships of the efficiency councils are comprised of representatives of large businesses, small businesses, consumer and low-income advocates, the environmental community, state agencies, and energy efficiency experts, and are appointed by the Governor.



- **Third, utilities are required to submit successive three-year efficiency procurement plans** – these plans provide the detail regarding how the utilities will invest in all cost-effective energy efficiency that is cheaper than supply, including how to fully fund the planned efficiency program investments. The three-year efficiency procurement plans go first for review, input, and approval by the efficiency councils and then for final approval by the PUC.



- **Fourth, utilities' financial incentives are aligned with consumers' interests** – these states have removed utilities' disincentive to invest in all cost-effective efficiency by implementing revenue decoupling to make utilities neutral to sales volume and established performance incentives that reward the utilities for delivering successful efficiency programs that lower consumers' energy bills.

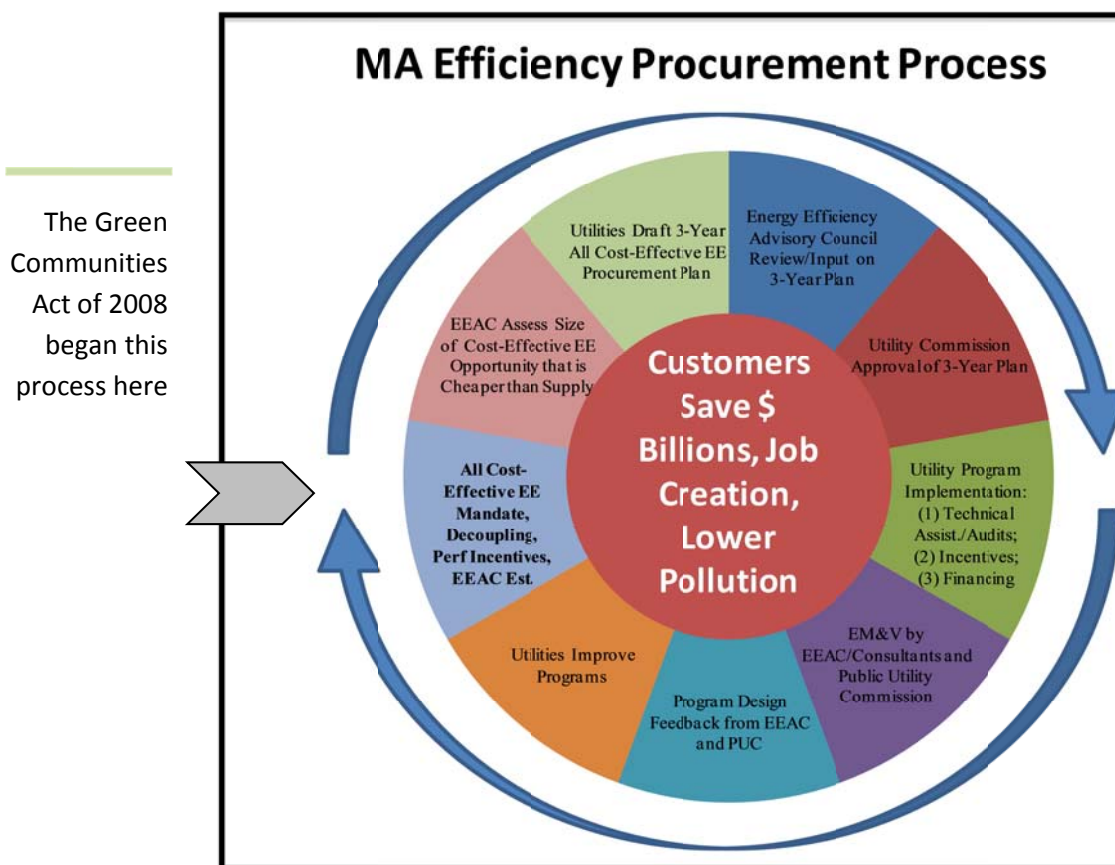
The implementation of an all cost-effective efficiency procurement requirement is a process that entails: (1) continuously assessing the amount of cost-effective efficiency potential available in the state; (2) developing multi-year plans for how to deliver and pay for comprehensive efficiency programs available to all consumer sectors; (3) evaluating, measuring, and verifying program implementation; and

⁴² See *id.*

⁴³ See *id.*, at p. 21.

(4) continuously making changes necessary to improve program delivery as technologies and opportunities evolve.⁴⁴ This process cycles over several years in order to maximize savings for consumers. The following chart shows how this process works in Massachusetts.

MA Efficiency Procurement Process – Flow Chart⁴⁵



Since the passage of the *Green Communities Act*, annual investments in electric programs in Massachusetts have almost quadrupled from \$125 million in 2008 to \$561 million in 2014.⁴⁶ Similar increases have occurred in Vermont, where approved electric efficiency program investments have increased from \$16 million in 2005 to \$46 million in 2014.⁴⁷ In Rhode Island, utility investments in

⁴⁴ See *id.*, at p. 22.

⁴⁵ See *id.*, at p. 23, Figure 14.

⁴⁶ Taken together, electric and gas efficiency program investments have increased from \$155 million in 2008 to nearly \$736 million in 2014.

⁴⁷ See Vermont PSB’s “Order re: Energy Efficiency Utility Electric Budgets for Demand Resources Plan” (August 1, 2011), at p. 4. Note also page 5, concluding “additional cost-effective electric energy efficiency is reasonably available, and therefore we are increasing the electric EEU budget. This additional investment in cost-effective energy efficiency will result in *total electric costs to Vermont that are lower than they would otherwise be* by providing savings to consumers who

consumer electric energy efficiency have increased five-fold from \$16 million in 2007 to \$81 million in 2014, resulting in \$1.1 billion in benefits to ratepayers.

New York could reap benefits at similarly impressive levels if the Public Service Commission adopts an all cost-effective approach to energy efficiency procurement through the REV proceeding. This approach has numerous, proven advantages from a policy and programmatic standpoint. It is flexible, economically efficient, responsive to market conditions and innovations in efficiency technology, maximizes consumer benefits and control over energy consumption, boosts economic growth and in-state job creation, and is usually the most effective GHG mitigation policy at the state level. The model should work well in New York, which already has a core community of experienced and motivated efficiency stakeholders, and can be implemented administratively by the Commission. The least-cost procurement requirement itself can be imposed on the distribution utilities (or DSPs) by the Commission through a REV policy determination and the related Energy Efficiency Transition Implementation Plans,⁴⁸ an efficiency stakeholder council could also be created by the Commission (as a standing advisory body to it⁴⁹), and the Commission could also require three-year efficiency procurement plans from the relevant efficiency program administrators, whether that is NYSEERDA, the distribution utilities, or the DSPs, or some combination of all three. The all cost-effective approach becomes even more necessary to adopt in light of the NYSEERDA funding limitations laid out in the new Clean Energy Fund proposal.

Given the overwhelming success of the least-cost approach to efficiency procurement in New England, ENE strongly recommends that the Public Service Commission adopt the same model in this proceeding to ensure that New York's cost-effective efficiency resource is fully utilized to the great and lasting benefit of the state's residents and businesses.

III. REV Should Adopt Select Recommendations Regarding Energy Storage

ENE Reply Comments: ENE would also like to take this opportunity to reply to comments regarding energy storage. The comments submitted by AES Energy Storage, LLC ("AES"), the Energy Storage Association ("ESA"), and the New York Battery and Energy Storage Technology Consortium

install electric efficiency measures as well as savings to all ratepayers through reduced need for power purchases by utilities, deferred need for system upgrades such as new transmission facilities, and other statewide savings." [italics added]. Available at <http://aceee.org/files/EEU-2010-06%20DRP.pdf>.

⁴⁸ The all cost-effective energy efficiency procurement mandate could be used in combination with any required "floor" of minimum efficiency savings goals that may already exist under New York law; the two policy approaches are not necessarily mutually exclusive.

⁴⁹ This external advisory designation to the public utility commission was how the Connecticut energy efficiency stakeholder council was originally constructed.

(“NY-BEST”) offer valuable recommendations that the Public Service Commission should incorporate in the forthcoming NY REV draft.

AES, ESA and NY-BEST all provided comments that include concerns with the market structure outlined in the Straw Proposal, and offer suggestions for how that proposed market structure could be reformed to operate more equitably and efficiently. Chief among those concerns is that the proposed market structure does not provide adequate opportunities for participation or compensation for energy storage and other DERs. ENE supports the following related suggestions from the energy storage community:

- **Providers of DER and DER aggregators should be allowed to sell their services directly to NYISO or to customers, as opposed to being limited to selling services exclusively to the distributed system platform (DSP).**

This suggestion, which was included in comments from AES, ESA and NY-BEST, addresses the concern that the DSPs, as currently envisioned by the Commission’s Staff, would have complete control over DER revenue streams. Allowing DER providers to sell services directly to either the NYISO or to customers would alleviate this concern and create a market capable of providing more accurate price signals for grid services. AES goes on to propose that the DSP could serve as a clearinghouse for these contracts between DER providers and consumers, thereby facilitating a more transparent and efficient marketplace for DER products.

- **The Commission should evaluate how new entrants—such as ESCOs, microgrids or co-ops—could form DSPs to compete with existing DSPs in certain territories.**

In order to foster greater competition, innovation, and cost-effectiveness, the Commission should develop a process allowing new DSPs to enter the market, as recommended by AES and NY-BEST. So long as these new DSPs meet the Commission’s standards for tariff design, interconnection, benefit-cost analysis, etc., permitting the creation of new DSPs should meet REV’s goals by facilitating a transition to a more reliable, cost-effective and cleaner electric system.

- **The Commission should require DSPs to offer flat incentives for strategically sited energy storage in the short term, while working to develop a more complex tariff structure that can accurately account for the many services that energy storage is capable of providing.**

In proposing this stepwise incentive approach, NY-BEST recognizes that designing a tariff to comprehensively address the many benefits of energy storage could be a complex and time-consuming undertaking. While the Commission works to develop such a tariff, DSPs should be required to offer

incentives for energy storage and other DERs that provide immediate value to the system. Con Edison's Indian Point Contingency Plan provides a simple example of how such an offering could be achieved.

- **Steps should be taken to accelerate DER projects that are currently under consideration, and to promote the consideration of future DER projects as alternatives to utility capital investments.**

ESA voiced a justified concern that the REV process could delay the initiation of DER projects that are already under consideration. In order to ensure that this does not happen, the Commission should include these projects among the Near-Term “No Regrets” Actions described in the Straw Proposal. Doing so will help New York achieve its REV goals expeditiously. NY-BEST further recommends that the Commission require utilities to evaluate DERs as alternatives to all capital projects meeting a certain threshold (with that threshold to be determined through a public process), rather than only requiring the utilities to consider DER alternatives for “the most significant capital projects”, as suggested in the Straw Proposal. ENE agrees; the ability of DERs to defer or avoid utility investments should be evaluated for all proposed projects meeting the threshold.

Thank you for your consideration of these reply comments.

Respectfully submitted,

/s/ Abigail Anthony

Abigail W. Anthony, Ph.D.
Director, Utility and Grid Modernization Project

/s/ Bill Dornbos

William E. Dornbos, Esq.
ENE Senior Attorney

/s/ George Twigg

Director, Public Affairs, VEIC