



Submitted electronically to NewEfficiencyNY@nyscrda.ny.gov

July 16, 2018

Ms. Kathleen Burgess, Secretary
New York State Public Service Commission
Three Empire State Plaza
Albany, NY 12223-1350

Re: CASE 18-M-0084 - In the Matter of a Comprehensive Energy Efficiency Initiative.

Dear Secretary Burgess,

On behalf of Northeast Energy Efficiency Partnerships (NEEP)¹, I am pleased to submit comments relative to the New Efficiency: New York publication (the whitepaper), which outline various strategies for the state to achieve its recently announced energy efficiency goals. NEEP is a non-profit with a mission to accelerate regional collaboration to promote advanced energy efficiency and related solutions in homes, buildings, industry, and communities. With the goal to assist the region's leaders to reduce building sector energy consumption three percent per year and carbon emissions 40 percent by 2030, our vision is that the region's homes, buildings, and communities will be transformed into efficient affordable, low-carbon, resilient places to live, work, and play.

We thank the Department of Public Service (DPS) and New York State Energy Research & Development Authority (NYSERDA) for the opportunity to provide input on the whitepaper. The energy efficiency target announced by the state and included in the whitepaper signal New York's re-emergence as a national leader on energy efficiency. To help New York fulfill this leadership role and bring energy efficiency to the cornerstone of the state's strategy to reduce carbon emissions, NEEP offers the following comments on the strategies discussed in the whitepaper.

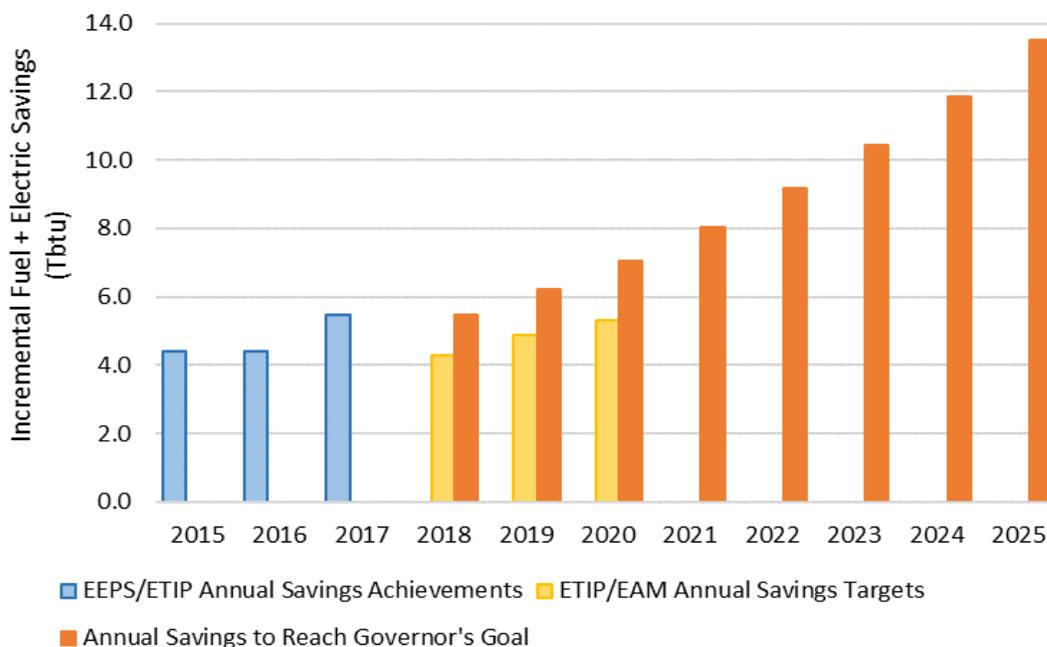
Introduction

Energy efficiency is an essential mechanism that will help New York achieve significant carbon reduction. The whitepaper calls on New York to reduce its energy consumption by 185 trillion BTUs by 2025 compared to forecasts. It's an increase of about 50 percent over current goals where in 2016, New York achieved energy savings equal to 1.09 percent of annual utility electricity sales. Introducing a fuel-neutral target, instead of an electric-specific target, brings strategies such as comprehensive energy

¹ These comments are offered by NEEP staff and do not necessarily represent the view of the NEEP Board of Directors, sponsors or partners. NEEP is a 501 (c)(3) non-profit organization that does not lobby or litigate.



retrofit and weatherization programs to the forefront of New York energy efficiency strategies. The graph below shows a possible trajectory for annual savings to meet the Governor’s goal.



Source: From the comments of the Energy Efficiency Advocates

To successfully achieve New York State’s carbon emission reduction goals of eighty percent by 2050 and forty percent by 2030, building decarbonization with comprehensive efficiency must be a focus of New York’s energy efficiency effort going forward. With a majority of the buildings in New York built before buildings codes and relying on imported fuels, New York buildings need to go through deep energy efficiency retrofits with a focus on improving thermal efficiency and integrity. In addition to comprehensive efficiency, building decarbonization includes renewable heating and cooling systems supported by electrification (e.g., heat pumps), and technology that enables homes and buildings to be grid interactive to respond to both customer needs as well as grid needs to avoid creating new peak demand.

Utility-Leveraged & Market Enabling Actions

Under Reforming the Energy Vision (REV), ratepayer-supported energy efficiency programs are moving toward more market-based approaches. The successes of New York’s experience with non-wires alternative (NWA) solicitations (e.g., Con-Ed’s Brooklyn-Queen’s Demand Management Project) can be instructive in considering how to advance market-based approaches to achieve New York’s aggressive energy efficiency goals. NWA solicitations provide clear price signals for the value of demand side resources (DSR) at specific times and in specific locations, and provide for an orderly acquisition process



for DSR – including efficiency, encourage integrated solutions (e.g., efficiency, energy storage and clean distributed generation), and support the development of market capacities to deliver qualified solutions. In 2017, the Joint Utilities filed supplemental information on the NWA Identification and Sourcing Process and Notification Practices to elaborate on the how the Suitability Criteria for NWA will be “incorporated into utility planning procedures, and how and when the Suitability Criteria will be applied to projects in their current capital plans.”² This comprehensive and consistent statewide policy and planning approach provides market certainty while allowing flexibility to address specific needs across the state. New York should replicate this framework.

The most successful efficiency programs in the country (Rhode Island and Massachusetts) have achieved aggressive energy savings goals by creating market certainty with flexibility through three-year statewide energy efficiency plans. New York would do well to use utility and State resources to enable market activities by building on all of these successes, i.e., three-year statewide efficiency plans to achieve specific goals, consistent market development and messaging to market participants and consumers. Clear indicators as to how the utilities will ramp up energy savings to achieve the 2025 target can be set in two three-year energy efficiency plans by establishing mandatory interim energy savings targets.

In addition, to take market enabling actions, the state needs to sort through access to customer information and provide a clear protocol and methodology that would allow service providers to respond to insights from customer data. By providing transparency, consistency and predictability with a clear policy framework for soliciting innovative market approaches, New York will be able to expand beyond traditional energy efficiency approaches to more integrated strategies. With clear examples in other states in the region, NYSERDA and DPS should consider building on other states efforts and engage in regional collaboration.

For example, the whitepaper recommends developing a multi-year market strategy for the deployment of air source heat pumps (ASHP), beyond NYSERDA’s temporary incentive programs, based on the principles of driving long-term cost reduction through utility engagement strategies including non-pipe and non-wires alternatives. We support this and encourage the DPS to align this work with [NEEP’s Regional Cold Climate ASHP Market Transformation Strategy](#) that provides a consistent technical specification³ for high performing, quality and efficient ASHPs relevant to New York’s range of climate zones, as well as best practices for the sizing and installation of these systems in existing homes. Aligning with this regional effort expands the market impact of New York’s effort by leveraging the program impacts of other states also addressing this evolving technology and market. Such regional collaboration reduces the barriers for equipment providers to scale up their efforts in New York. New

² <http://jointutilitiesofny.org/wp-content/uploads/2017/11/5DA604B3-9CDA-45D3-8642-92A4C4171787.pdf>

³ NEEP, Cold Climate Air Source Heat Pump Specification, available at: <http://www.neep.org/initiatives/high-efficiency-products/emerging-technologies/ashp/cold-climate-air-source-heat-pump>



York's work should also build on NYSERDA's excellent Clean Energy Fund initiative to build market capacities to provide [Efficient, Renewable Heating and Cooling Solutions for homes and buildings](#).

Drive Deeper Savings

As the state recognizes in the whitepaper, building energy rating and benchmarking are critical tools for scaling up energy efficiency in New York's buildings to achieve deeper energy savings. Access to information through benchmarking increases the adoption of efficiency investments and results in benefits for key stakeholders. DPS and NYSERDA need to bring comprehensive, home and building energy rating and benchmarking to the forefront of its strategy because in order to drive market-based investment in buildings, we need to distinguish between efficiency and inefficiency buildings in the market place. New York City is a national leader in this space, with a local law requiring benchmarking of buildings over 25,000 square feet.⁴ Properties in New York City reporting in all years from 2011 to 2013 – covering over 650 million square feet – showed significant performance improvements, with Total Source Energy Use dropping by 6 percent over two years.⁵

Benchmarking increases demand for energy efficiency programs and provides utilities with useful information to prioritize program design and identify and engage potential program participants. It also provides building owners with an energy performance baseline, helps them to target their efficiency investments, and allows them to verify savings.

Building energy rating should be a part of the programs utilities offer and those ratings should be made available in the real estate market place. Market capacity should be developed at scale for rating and retrofits and then made a standard across the state. This provides an opportunity to develop buildings as grid assets as they are being made more efficient through deep energy retrofits with the inclusion of assets such as solar and energy storage.

The whitepaper recommends that, "NYSERDA, potentially with utilities, shall study small building energy disclosure strategies/policies, including disclosure upon sale/lease, and test strategies with localities and/or portfolios." By benchmarking and rating both residential and commercial buildings and putting that information in a real estate listings, buyers and sellers will have access to the energy usage of buildings, enabling them to make better informed decisions. It is also important to educate real estate professionals about the value of energy efficiency in the market place.

⁴ See NYC Benchmarking Law Frequently Asked Questions (available at: http://www.nyc.gov/html/gbee/downloads/pdf/NYC%20Benchmarking%20Law%20One%20Pager_final.pdf)

⁵ Calculations based on publicly available data from NYC Open Data (available at http://www.nyc.gov/html/gbee/html/plan/ll84_scores.shtml). The results in New York are in line with results from evaluations of benchmarking with EPA's Energy Star Portfolio Manager, which showed a 7% reduction in energy use from 2008 to 2011 in a study of over 35,000 benchmarked buildings. See "Benchmarking and Energy Savings," (available at https://www.energystar.gov/sites/default/files/buildings/tools/DataTrends_Savings_20121002.pdf).



Currently, on the residential side, NEEP is piloting the Home Energy Labeling Information eXchange (HELIX). HELIX allows for more accurate valuation of a home based on its energy efficient and renewable attributes. This database houses information on RETS-compliant third-party verified fields, marketing/green search fields, and technical fields. HELIX then automatically populates MLS listings with this energy information. HELIX is available to New York as a tool that NYSERDA could use for its energy disclosure policies. This process will provide transparency, which creates a demand-driven market signal for energy efficiency in buildings that encourages consumers to value and invest in energy efficiency. It also increases buyer confidence, and informs buyers of the long-term operational costs of the home.

Accessing Health Benefits of Energy Efficiency

Energy efficiency can deliver long-term affordability impacts to low and moderate income (LMI) customers, as well as improve health and safety outcomes. NEEP is encouraged by the whitepaper's acknowledgement of the health benefits of energy efficiency and the facilitation of adopting energy efficiency improvements using Medicaid to fund healthy homes. NYSERDA should consider expanding this to all customers in the residential and public sector. While the LMI sector is disproportionately affected by unhealthy homes, it is important that non-energy benefits of energy efficiency are valued for all customers. In addition, NYSERDA should consider a healthy schools program as a unique opportunity to deliver these values, not only to students, but also faculty, staff, and the community at large. NEEP's Regional Operations and Maintenance (O&M) Guide⁶ can help state and local jurisdictions reduce building operating costs, as well as lead to healthier indoor air, improved student and staff comfort, reduced water consumption, improved environmental stewardship, and overall improvements in the learning environment.

Building Codes and Product and Appliance Standards

Building codes are an important factor in helping achieve the state's carbon reduction goal, in addition to establishing a building's quality, safety and energy performance for years to come. The initial design and construction decisions determine operational and maintenance costs for the life of the building. The state should consider adding measures to the base code that align with carbon goals, such as electric vehicle charging stations, additional building envelope insulation, air source heat pumps, or solar PV.

The whitepaper acknowledges stretch codes as a mechanism that can be used under deeper, carbon-focused metrics can be integrated into future New York energy codes. New York should work towards the development and implementation of a zero energy stretch code. New York should learn from best practices in Rhode Island, where the state has adopted DOE's zero energy ready homes program as a residential stretch code. Washington D.C. is also introducing a zero energy appendix in the 2018/2019

⁶ NEEP, Regional Operations and Maintenance Guide, Available at: <http://www.neep.org/regional-operations-maintenance-guide-high-performance-schools-and-public-buildings-northeast-and>



code cycle that will become mandatory district wide for all building types by 2027. Introducing the appendix now allows time for the market to prepare to meet the mandatory code.

Appliance standards also present an opportunity to drive New York towards its carbon reduction goals. In 2018, the New York Governor's office made several statements of intent to enact new standards, but a standards bill was not introduced in the 2018 legislative session. While other states in the region, including Vermont who passed new standards in 2018 with [H410](#), are hoping to pass standards, in 2018 or 2019, New York has the opportunity to work with other state stakeholders to advance efficiency standards. Massachusetts and Rhode Island both introduced legislation in 2018 and active conversations continue with Connecticut, New Jersey, and the District of Columbia. This provides ample opportunity for New York to engage with and learn from other states in the region. In order for New York to achieve the state climate goals and establish appliance efficiency standards, this effort should be prioritized and supported through legislation in 2019.

Align Cost-Effectiveness with Public Policy Goals

To achieve the goals outlined in the whitepaper, New York should align its cost effectiveness testing with public policy goals. It is clear the intent of the strategies in the whitepaper are intended to achieve deep carbon reduction, in line with the 80 percent carbon reduction goal by 2050. To ensure the recommendations are implemented, DPS should consider using the National Standard Practice Manual⁷ to ensure the cost effectiveness testing can be assessed relative to the scope and evolution of jurisdiction-specific policy goals. The manual will improve the way utility customer-funded energy efficiency programs are evaluated by providing best practices for incorporating NEIs in cost-effectiveness testing. This manual improves upon the California Standard Practice Manual (CaSPM) since the CaSPM may limit jurisdictions to these tests, which may not reflect the mix of perspectives reflected in relevant policies and lacks guidance on accounting for policies and goals. The NSPM provides regulatory perspectives and recommends accounting for hard-to-quantify impacts with symmetry across all costs and benefits.⁸

New York may benefit from going through a similar process that Rhode Island went through by opening a stakeholder process⁹ to develop a cost-effectiveness test specific to the state's policies and goals. Since the stakeholder process began in Rhode Island, the state has developed a guidance document for

⁷ NESP, National Standard Practice Manual, EDITION 1 Spring 2017, https://nationalefficiencyscreening.org/wp-content/uploads/2017/05/NSPM_May-2017_final.pdf

⁸ NEEP, Non-Energy Impacts Approaches and Values: an Examination of the Northeast, Mid-Atlantic, and Beyond, (June 2017), available at: <http://www.neep.org/sites/default/files/resources/NEI%20Final%20Report%20for%20NH%20updated%2010.4.17.pdf>

⁹ Docket 4600: Stakeholder Working Group Process: Report to the RI PUC, (April 2017), available at: <http://www.raabassociates.org/Articles/RI%204600%20Final%20WG%20Report%204-5-17.pdf>



using the state test that helps with the transition from the previously used method. The NSPM provides an overview of how to go through such a process.

In addition, we encourage New York to build on the work of other states to quantify and use relevant non-energy benefits in cost-effectiveness analyses aligned with New York's public policy goals. See for example [NEEP's 2017 Study on Non-Energy Impacts](#), which provides an overview of cost-effectiveness testing across the country and the different types of NEIs included by state.

Conclusion

NEEP applauds New York's commitment to energy efficiency as a resource to achieve deep carbon reduction and the strategies outlined in the New Efficiency New York whitepaper. Thank you for the opportunity to comment on the contents of the whitepaper. Please consider NEEP a resource to provide technical assistance as DPS and NYSERDA continue to pursue clean, efficient energy solutions for New York's long-term future.

Sincerely,

A handwritten signature in black ink that reads "Samantha Caputo". The signature is written in a cursive, flowing style.

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