



via electronic submission

May 29, 2014

Mr. John Rhodes, Chair of the Energy Planning Board
President of NYSERDA
New York State Energy Research and Development Authority
17 Columbia Circle
Albany, New York 12203-6399

Chairman Rhodes and Members of the Board,

On behalf of Northeast Energy Efficiency Partnerships (NEEP)¹, please accept our comments regarding the draft State Energy Plan for New York.² NEEP is a regional non-profit that works to accelerate energy efficiency (EE) in homes, buildings and industry across the Northeast and Mid-Atlantic states. Our Policy Outreach and Analysis group serves as an information resource for policymakers, advocates and program administrators to support the adoption and implementation of public policies and programs that advance energy efficiency.

Due to the high-level nature of the plan, NEEP's comments will be fairly broad as well. However, we will delve into areas where our organization has particular expertise, namely: calling out regional best practices in energy efficiency programs and policies; the need to account for all benefits when evaluating energy efficiency; and support for coordinated regional market strategies, building energy codes, high performance building standards, and building energy rating and disclosure, and appliance efficiency standards as key tools in the pursuit of all cost-effective energy efficiency. We have included at the end of these comments a list of resources that we hope will be useful to the Energy Planning Board and your associates.

ENERGY EFFICIENCY AS A TOOL TO MEET GHG REDUCTION TARGETS

While we applaud Governor Cuomo's long-term target of reducing greenhouse gas (GHG) emissions by 80 percent by 2050, we see a best practice among states that envision intermediate benchmarks of progress. As such benchmarks are set, it is important that the state and program administrators retain a flexible and agile framework to allow for responses to changing markets, technology advances and economic factors.

NEEP supports the two pronged approach of resource acquisition and market transformation that has been the basis of energy efficiency programming in New York for several years. The market transformation approach has allowed NYSERDA to focus many of its resources upstream and engage those actors (retailers, distributors, etc.) more effectively than strict resource acquisition style programs could accomplish. We are encouraged to see that under the E2 and Clean Energy Fund

¹ These comments are offered by NEEP staff and do not necessarily represent the view of the NEEP Board of Directors, sponsors or partners.

² Shaping the Future: 2014 DRAFT New York State Energy Plan, January 2014.



framework, the Department of Public Service, NYSERDA and the utilities are working to develop clearer roles and responsibilities to improve coordination between program administrators who each play a role in these respective program approaches.

The Draft Plan includes “a state commitment through 2020”³ to energy efficiency programs, which are currently set to expire in 2015. While this time horizon is essential to provide certainty for utilities, building owners, and market actors to invest in energy efficiency, this commitment should be coupled with targets and dollar budgets to capture all cost-effective energy efficiency across all sectors. Based on what has been proven attainable in recent state efficiency program goals, we believe that maintaining a baseline savings goal of 2 percent a year for electric programs and at least 1 percent a year for natural gas programs would be advisable. Additional benchmarks to track market transformation, including program participation levels by sector, changes to building stock and major product categories, and participation in lending and financing programs, can help provide additional information about program performance.

COMPLEMENTARY POLICIES: CODES AND STANDARDS

Consistent with its leadership on energy issues, state policymakers should commit to updates to building energy codes and appliance efficiency standards on a more frequent basis. While updating and enforcing codes and standards take effort and may not illustrate benefits that are as directly visible to consumers, they play an essential role in setting base efficiency levels and cost-effectively driving markets to advance as new products and technologies become available. We urge New York to put more attention, funding and political will to follow through on stated commitments on codes and standards. Buildings account for about 64 percent of the state’s total energy consumption, including about 89 percent of electricity demand (based on 2012 data). Strengthening codes and standards will both spur economic growth and reduce emissions.

Building Codes

We applaud the state’s efforts to update its energy codes to 2012 IECC / ASHRAE 90.1-2010 levels. After the completion of this process, we encourage state officials to also consider adopting the recently-finalized 2015 IECC / ASHRAE 90.1-2013 as the basis for the State Energy Conservation Construction Code, as it features commercial lighting and HVAC efficiency gains as well as residential and commercial changes designed to increase code compliance. The Final Plan should include specific action to advance code compliance, such as the implementation of targets for the use of third party energy specialists and the development of an optional stretch code energy code appendix to the state code. We remind the Board that NEEP is the organization designated by the U.S. Department of Energy (DOE) to provide support to Northeast states on building energy code development, adoption and compliance. We are pleased to work with NYSERDA, the Department of State, the utilities or other parties to facilitate progress in this area.

³ 2014 DRAFT New York State Energy Plan, Vol. 1, pg. 31.



Appliance Efficiency Standards

New York State has placed significant emphasis on appliance efficiency standards as a policy priority to help lock-in cost effective energy savings while maintaining customer choice, and we hope that trend continues. Despite these written commitments, however, the level of actual activity on establishing new standards has been slow, and we urge all stakeholders, including the Department of State and NYSERDA, to recommit to appliance efficiency standards as a complementary policy to the systems benefit charge (SBC) and energy efficiency portfolio standard programs. There are ongoing opportunities to impact federal rulemakings are not being taken advantage of, as well. We remind NYSERDA of the regional Appliance Standards Working Group, facilitated by NEEP, as an avenue to stay abreast of and engage in this work. California is in the process of developing a package of new state-based standards this year for a range of product categories that New York can and should consider adopting in 2015 and 2016 after those product rulemakings are completed.⁴

HIGH PERFORMANCE BUILDINGS

Building Energy Labeling and Reporting

The development of a voluntary time-of-sale energy labeling program for homes and commercial buildings is critically important to help to drive energy efficiency retrofits in the state. Because homes and buildings right now come with very little information to inform potential buyers of their energy use, the relative efficiency of a home is rarely considered as part of a homebuyer's or property buyer's decision-making process, and, thus, is not valued by the real estate market. By providing basic information on home and building energy characteristics, markets will come to attach a value to energy use, and, thus, prompt owners to take advantage of opportunities to make their homes and buildings more energy efficient.

Thermal Efficiency and Unregulated Fuels

More than a quarter⁵ of homes in New York are heated with oil, and many more businesses and public buildings are heated similarly. While funding for efficiency in these buildings remains a challenge, there is a sizable opportunity to reduce oil and emissions through weatherization and equipment upgrades. NEEP has long advocated a whole-building, all-fuel approach to efficiency. In prior comments and conversations with NYSERDA and the Department of Public Service, we have strongly supported the effort to move towards fuel neutral programs. We look forward to providing further comment on this issue as NYSERDA works with stakeholders to develop the new Clean Energy Fund.⁶

⁴ More about the California 2013-2014 appliance efficiency standards rulemakings can be found at <http://www.energy.ca.gov/appliances/>.

⁵ U.S. Census Bureau, American Community Survey, 2012 1-Year Estimates, accessed October 18, 2013. Available at <http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>.

⁶ See New York Public Service Commission, Case 14-M-0094, "Order Commencing Proceeding," May 8, 2014, p. 8.



NEEP recommends that a fuel neutral funding mechanism should be designed to include benefits from customers who heat with fuel oil and allow for their participation in building envelope improvement and equipment replacement programs to the greatest extent possible. The economic and environmental benefits of oil heat efficiency programs more than justify the investment and would ensure that this important segment can participate in the efficiency programs.

Multifamily Energy Efficiency Programs

In May NEEP released a white paper: "Increasing Energy Efficiency in Small Multifamily Properties: Recommendations for Policy Action."⁷ The paper contains valuable information on market characterization and data analysis, market barriers, current policy and recommendations addressing small, 5-20 unit, multi-family buildings, and we hope it will be a programmatic and policy resource for all involved in addressing energy efficiency in the multi-family sector in New York.

The Path towards Zero Net Energy Buildings

NEEP has long advocated for thoughtful state energy policies that value energy efficiency in market transactions, encourage holistic building design, commissioning and maintenance for the health and well-being of occupants as well as reduced energy usage, and setting long-term goals of zero net energy for public buildings. We offer the following bulleted guidance in these areas, and remind the Energy Planning Board that NEEP has a number of resources available to states and communities.

- **Update the New York Collaborative for High Performance Schools (NY-CHPS)** protocol for new school construction and substantial renovation, which would serve as a foundation to put all schools on the pathway to Zero Net Energy.
- **Advance energy efficiency in public buildings:** Establish a performance based stretch energy code for publically funded projects.
- **Improve awareness of energy use and costs** through the use of energy benchmarking and disclosure requirement. Implement statewide policies and practices such as building commissioning, benchmarking and asset ratings.
- **Training to ensure energy savings:** Promote training of building operators and education for occupants regarding energy use. Training building operators on the new systems in buildings is critically important to the performance of public facilities. Effective training translates into dollars and energy saved.

ENERGY EFFICIENT PRODUCTS/ MARKET STRATEGIES

While the Draft Energy Plan does not delve into specific product recommendations, we remind the Planning Board that NEEP works closely with efficiency program administrators, manufacturers,

⁷ http://www.neep.org/Assets/uploads/files/public-policy/multifamily-retrofit/NEEP%20Multifamily%20Report_April%202014.pdf



retailers and industry consultants to conduct in-depth regional analyses and develop market strategies for business and consumer products. Working regionally helps to leverage program dollars in a region of the country where states share similar climate and market characteristics, helping to extend budgets and strategic engagement with key market actors all along the product delivery channel. Some of those regional market opportunities that we hope NYSERDA and the utilities in New York will avail themselves of on behalf of their customers include:

Top Tier Product Incentives

- NEEP encourages New York to continue efforts in the area of “top tier” or most efficient product promotions, structuring retail product incentives accordingly. ENERGY STAR Most Efficient and the Consortium for Energy Efficiency’s tiers should be utilized, as should new online tools are being developed to assist consumers in identifying the most efficient products available on the market.⁸

Heat Pump Water Heaters

- As markets develop, we encourage the programs to continue strong marketing promotion as well as more contractor education on how and where to install heat pump water heaters.
- We emphasize the need for additional research on installation location conditions and how the performance and efficiency of various water heaters are affected by varying conditions. It is important at this early stage of market development that we identify and promote only products that perform up to consumer expectations, including those installations that might not be performed under ideal conditions.

Air Source Heat Pumps

- This is an exciting technology gaining greater customer awareness and market penetration, as heat pumps for heating and cooling can cost half as much to operate as a conventional HVAC systems, while generating 60 percent less CO₂.
- As with heat pump water heaters, ENERGY STAR alone may not be enough to differentiate products that perform well during New York’s heating season.
- If consumer expectations are to be met, it is important that specifications do a better job of recognizing the challenges of installing this technology in cold climates. We encourage program planners to review NEEP’s Air Source Heat Pump working group recommendations on this topic.⁹

Clothes Dryers

- The next generation clothes dryer technology is coming to the North American market and ENERGY STAR will have two specifications in 2015 for clothes dryers. We encourage New York

⁸ Enverve, for example, is developing an online tool in partnership with TopTen USA. More information can be found at <http://enverve.com/>

⁹ <http://www.neep.org/efficient-products/emerging-technologies/Air-Source-Heat-Pumps/index>



to work with NEEP and the Super-Efficient Dryer Initiative (SEDI) initiative to explore new dryer programs.

- As this will be the first opportunity for programs to achieve savings through dryers, it is important for New York's program administrators to work with others in the region and nationally to leverage common opportunities and learn from each other.

Residential Lighting

- We commend New York's commitment to transitioning the market from CFLs to LEDs. Efforts to work through cost-effectiveness challenges will benefit consumers as well as state savings goals.
- This is a critical time to promote LEDs as the prices are dropping quickly and many products are becoming ENERGY STAR certified. New York's commitment to promoting LEDs now will help ensure high quality, high performance, high consumer-acceptance, and more cost effective products moving forward.
- New York can benefit greatly from continued participation in NEEP's Residential Lighting Initiative,¹⁰ including helping to develop the 2014-2015 Residential Lighting Strategy Update.

Business and Consumer Electronics

- We commend New York for including Advanced Power Strips (APS) in its efficiency programs, both as a retail product and direct installation measure. We also would remind the program administrators of the many resources and tools NEEP can make available through its APS stakeholder working group to help (both for Tier 1 and Tier 2 APS).¹¹
- We encourage continued participation in NEEP's Home Energy Management Systems (HEMS) stakeholder working group, which started in 2014 out of program administrator interest in the potential of this measure.
- Looking ahead to the pipeline of retail products, now is a critical time for program administrators to provide input into new opportunities such as HEMS, and we hope that NYSERDA and the utilities will make participation in such collaborative efforts a priority.
- Additionally, some electronics savings exist from other measures (such as televisions and desktop computers) that we encourage New York to promote. NEEP's 2013 Business and Consumer Electronics Report¹² is a resource for these other programs.

EVALUATION, MEASUREMENT AND VERIFICATION (EM&V)

Along with its own EM&V efforts, New York participates in the Regional EM&V Forum hosted by NEEP. The Forum is a collaborative of state energy regulators, efficiency program administrators and expert consultants. Since 2009, the Forum has worked to develop and support state adoption and consistent use of common protocols/guidelines and data to estimate, verify, evaluate, track and report the

¹⁰ <http://www.neep.org/efficient-products/high-efficiency-lighting/residential-lighting-strategy/index>

¹¹ <http://neep.org/efficient-products/business-consumer-electronics/Products/Plug-LoadAdvanced-Powers-Strips>

¹² <http://www.neep.org/efficient-products/business-consumer-electronics/BCE-Strategy/index>



energy and capacity-related savings, costs and emission reductions resulting from investments in electric and gas energy efficiency resources in New England, New York and the Mid-Atlantic States. In 2012, the Forum released the Regional Energy Efficiency Database (REED),¹³ the first tool of its kind in the nation, helping states to increase transparency in reporting of energy savings data. The Forum will continue to support New York's energy efficiency goals by promoting appropriate policy and effective EM&V methods as well as regional projects and best practices.

CONCLUSION

New York is simultaneously conducting several related major proceedings with regards to the state's energy future, most notably "Reforming the Energy Vision." NEEP is following these dockets and participated in the Reforming the Energy Vision symposium on May 22. While these comments are limited to the subject areas which NEEP focuses on in relation to the State Energy Plan, we also pledge our continued support in assisting New York with the work that remains in making its vision for a better energy future a reality for the residents and businesses of New York.

Thank you for the opportunity to comment on the Draft New York State Energy Plan. Please consider NEEP a resource to provide advice and support to the state as you pursue clean, efficient energy solutions for New York's long-term future. I am happy to connect you with any of my colleagues at NEEP if you have questions on any of the policy or program strategies mentioned above.

A handwritten signature in blue ink that reads "Natalie Hildt Treat".

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¹³ <http://neep-reed.org/>



RESOURCES

NEEP has an abundance of resources that may be of use to the state's policymakers and program administrators. These are on our website: www.neep.org. Please let us know if you have questions.

Public Policy and EM&V

[Policy Brief](#), an overview of NEEP and key energy issues in the Northeast and Mid-Atlantic region

[Highlights](#), a bi-monthly policy news and analysis e-newsletter

[The Efficiency Policy Snapshot](#) - the states "by the numbers"

[The Regional Roundup](#), Annual comparison of states' progress on EE policies

[The Regional Evaluation, Measurement and Verification Forum](#)

[Regional Energy Efficiency Database](#)

Buildings

[Building Energy Codes](#)

[High Performance Buildings](#)

[Appliance Efficiency Standards](#)

Program Strategies

[2013-2014 Residential Lighting Strategy Update](#)

[Business & Consumer Electronics Strategy Report](#)

[Air-Source Heat Pump Strategy Report](#)

[Heat Pump Water Heaters Strategy Report](#)

[DesignLights Consortium](#)