Via electronic submission



September 28, 2015

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

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

Dear Secretary Burgess,

On behalf of Northeast Energy Efficiency Partnerships (NEEP)<sup>1</sup>, please accept our comments regarding the Utility ETIPS and Budget and Metric Plans, submitted to the Commission on July 15, 2015. NEEP is a regional non-profit organization that works to accelerate energy efficiency 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 and program administrators to support the adoption and implementation of public policies and programs that advance energy efficiency.

Our comments before you today focus on a single area of interest within the Utility ETIPS: LED Street Lighting.

# NYSERDA LED Street Lighting Potential Study

These comments build upon the conclusions of a recent NYSERDA report entitled "<u>Street Lighting in New York</u> <u>State: Opportunities and Challenges.</u>"<sup>2</sup> This report estimates that there are approximately 1.4 million street lights in New York State, and that conversion of these inventories from incumbent High Pressure Sodium and Metal Halide technologies to recently matured LED technologies could save approximately 524 GWh annually. The report also estimates that such a conversion could save municipalities approximately \$95 million annually.

### **Supporting Local Industries**

It is also worth noting that at least one prominent manufacturer of LED street lighting fixtures is currently considering New York State as a possible location for its new global headquarters, and already has a substantial economic presence in the state.<sup>3</sup>

# LED Street Lighting in Utility ETIPS

One New York State utility, Niagara Mohawk, has outlined LED Street Lighting as an explicit line item within its energy efficiency transition implementation plan moving forward, and expressed its intention to file a rate case

<sup>&</sup>lt;sup>1</sup> These comments are offered by NEEP staff and do not necessarily represent the view of the NEEP Board of Directors, sponsors or partners.

<sup>&</sup>lt;sup>2</sup> NYSERDA. Street Lighting in New York State: Opportunities and Challenges. (January 2015) Available at: <u>https://www.nyserda.ny.gov/-</u> /media/Files/Publications/Research/Energy-Efficiency-Services/Street-Lighting-in-NYS.pdf

<sup>&</sup>lt;sup>3</sup> Wall Street Journal. GE Nears Decision on Relocating Its Headquarters. (September 2015) Available at: <u>http://www.wsj.com/articles/ge-nears-decision-on-relocating-its-headquarters-1441931084</u>



NEEP COMMENTS- Utility Energy Efficiency Transition Implementation Plan

9/28/15

PAGE 2 OF 4

offering LED street lighting conversion opportunities to municipalities in the near future.<sup>4</sup> Although the program's overall cost-effectiveness at first appears low, it's important to note that prices of LED fixtures have seen precipitous drops in recent months, and may continue to drop even further throughout the term of the ETIPs.<sup>5</sup> Additionally, it's notable that as the program scales up between 2017 and 2018, further efficiencies are gained, meaning that a scaled-up program may achieve a benefit-cost ratio exceeding 1:1 in the near future. Furthermore, conversion to LED street lighting provides benefits to municipalities outside the domain of traditional cost-benefit analysis, including reduced taxpayer burdens realized through both energy and labor (maintenance) savings. Therefore, NEEP respectfully suggests that the Commission consider directing other utilities that have filed ETIPs to include specific plans for LED Street Lighting conversions within their revised ETIPs.

## Successful Conversion Approaches from Throughout the Region

Other utilities within the state have also begun to file rate cases embracing LED Street lighting through both customer-owned and utility-owned fixture offerings, but a coordinated effort would benefit all parties involved. In Vermont, a statewide effort coordinated by Efficiency Vermont achieved positive results for municipalities, which saw their energy bills reduced; for utilities, which were compensated for any stranded investments tied up in incumbent street lighting technologies; and for an efficiency program administrator, which is able to claim substantial savings toward its annual program goals.<sup>6</sup>

New York is well-positioned to replicate this scenario. LED street lighting can provide immense benefits to municipalities in the form of bill savings, and to utility program administrators in the form of claimed MWh savings. However, a mechanism for attributing such savings has not yet been clearly defined in New York. NEEP suggests that as a first step toward embracing such a mechanism, the Commission consider directing the utilities that have filed ETIPs to follow Niagara Mohawk's lead and include a subset for LED Street Lighting Conversion budgets and savings within their revised ETIPS.

NYSERDA has already expressed an interest in supporting a street lighting conversion program, noting within its Clean Energy Fund Information Supplement that "future activities might utilize community solar networks or best practices to build consortiums of communities to aggregate municipal streetlight purchases for LED retrofits."<sup>7</sup> NYSERDA might play a role similar to that of Efficiency Vermont within the scenario proposed above, a role that would fit especially well within the Sustainable and Resilient Communities program outlined on pages 84-92 of the 2015 New York State Energy Plan.<sup>8</sup>

<sup>&</sup>lt;sup>4</sup> Niagara Mohawk Energy Efficiency Transition Implementation Plan (ETIP). (page 13,15, 26, 46) Available at: <u>http://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId=%7b2B19CBEA-A19C-4270-9677-F3FE739FEA46%7d</u>

<sup>&</sup>lt;sup>5</sup> Niagara Mohawk Cost Benefit Analysis Spreadsheet. Available at: <u>http://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId={6FC8F4A3-643C-46F4-AF0A-01982637AC91}</u>

<sup>&</sup>lt;sup>6</sup> See Generally, ACEEE. A Win-Win-Win for Municipal Street Lighting: Converting Two-Thirds of Vermont's Street Lights to LED by 2014. (July 2012) Available at: <u>http://aceee.org/files/proceedings/2012/data/papers/0193-000144.pdf</u>

<sup>&</sup>lt;sup>7</sup> NYSERDA Clean Energy Fund Information Supplement. (June 2015) Page 123. Available at:

http://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId=%7b91A4D238-6896-472E-A33D-F2234AFE8921%7d

<sup>&</sup>lt;sup>8</sup> 2015 New York State Energy Plan. (September 2015) Page 84-92. Available at: <u>http://energyplan.ny.gov/-/media/nysenergyplan/2015-state-energy-plan.pdf</u>



NEEP COMMENTS- Utility Energy Efficiency Transition Implementation Plan

9/28/15

PAGE 3 OF 4

Stakeholders may also benefit from review of resources provided by the Department of Energy and Municipal Solid-State Street Lighting Consortium on LED Street Lighting Options.<sup>9</sup> Both provide resources that can aid stakeholders in planning for conversion, and case studies demonstrating the reliability and cost-effectiveness of the latest LED street lighting technologies.

## **Alignment with REV Objectives**

Policies supporting conversion of street lights to LED would provide an immediate boon to the state economy, and would align with other objectives of the Reforming the Energy Vision proceeding. For example, conversion to LED street lighting technologies would enable the use of advanced lighting controls, which would allow a number of opportunities for municipalities and utilities - one of the most intriguing of these being the use of street lighting controls as a point of input in the broader smart cities programs. Around the country, cities and utilities are beginning to contract with vendors to embrace LED street lighting and advanced controls, opening up alternative revenue streams for utilities and cities seeking to collect and process information about CO2 levels, traffic patterns, and decibel levels.<sup>10</sup> Such public-private partnerships, revenue streams, alternative business models correspond well with the objectives of the Reforming the Energy Vision proceeding. In short, LED street lighting is increasingly being seen as a vital component of the "smart grid" of the future.

### Conclusion

LED street lighting can provide immense benefits to municipalities in the form of bill savings, and to utility program administrators in the form of MWh of claimed savings. However, a mechanism for attributing such savings has not yet been clearly defined in New York. We suggest the Commission consider directing the utilities who have filed ETIPs to follow Niagara Mohawk's lead and include a subset for LED Street Lighting Conversion budgets and savings within their revised ETIPS.

NEEP commends the utilities, staff, and the Commission for continuing to support energy efficiency in the Empire State. In particular, we would like to commend Niagara Mohawk for its support of LED street lighting opportunities, in conjunction with NYSERDA's municipal-level outreach programs. It is our belief that continued coordination between staff, the utilities, and NYSERDA can help grow the economic engine that is energy efficiency and provide savings for ratepayers for decades to come.

Please accept these comments in the spirit they are intended: to aid the Commission, the Utilities, and, ultimately, the people of New York, in securing a more affordable, reliable, cleaner and sustainable energy future.

<sup>&</sup>lt;sup>9</sup> See Generally, United States Department of Energy Better Buildings Challenge Presidential Challenge for Advanced Outdoor Lighting. Available at: <u>http://www1.eere.energy.gov/buildings/betterbuildings/accelerators/lighting.html</u>; See also, United State Department of Energy Municipal Solid-State Street Lighting Consortium. Available at: <u>http://energy.gov/eere/ssl/doe-municipal-solid-state-street-lighting-consortium</u>

<sup>&</sup>lt;sup>10</sup> See generally, New York Time. At Newark Airport, The Lights are on and they're Watching You. (February 2014) Available at: <a href="http://www.nytimes.com/2014/02/18/business/at-newark-airport-the-lights-are-on-and-theyre-watching-you.html?r=0">http://www.nytimes.com/2014/02/18/business/at-newark-airport-the-lights-are-on-and-theyre-watching-you.html?r=0</a>; See also, New York Times Copenhagen Lighting the Way to Greener, More Efficient Cities. (December 2014) Available at: <a href="http://www.nytimes.com/2014/12/09/business/energy-environment/copenhagen-lighting-the-way-to-greener-more-efficient-cities.html">http://www.nytimes.com/2014/12/09/business/energy-environment/copenhagen-lighting-the-way-to-greener-more-efficient-cities.html</a>; See also, News4Jax. High-tech GE Street Lights coming to Jacksonville. (Noting advanced lighting control technologies that can detect gunshots, car accidents, and other high decibel public safety concerns) Available at: <a href="http://www.news4jax.com/news/hightech-ge-street-lights-coming-to-jacksonville/32404784">http://www.news4jax.com/news/hightech-ge-street-lights-coming-to-jacksonville/32404784</a>



NEEP COMMENTS- Utility Energy Efficiency Transition Implementation Plan

9/28/15

PAGE 4 OF 4

Contact information:

Brian D. Buckley

Brian D. Buckley Policy Research and Analysis Associate Northeast Energy Efficiency Partnerships (NEEP) 91 Hartwell Avenue Lexington, Mass. 02421 Tel: 781-860-9177, ext. 152 E-mail: <u>BBuckley@NEEP.org</u>