



Via electronic submission

August 31, 2015

Brinda Westbrook-Sedgwick
Secretary to the Commission
District of Columbia Public Service Commission
1325 G Street, N.W. Suite 800,
Washington, DC 20005

Re: Case No. 1130, Order Opening Investigation into Modernizing the Energy Delivery System for Increased Sustainability

Dear Secretary Westbrook-Sedgwick,

On behalf of Northeast Energy Efficiency Partnerships (NEEP),¹ please accept our comments regarding the scope of Formal Case No. 1130, In the Matter of the Investigation into Modernizing the Energy Delivery System for Increased Sustainability, opened on June 12, 2015.² NEEP is a regional non-profit 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, program administrators, and others to support the adoption and implementation of public policies and programs that advance energy efficiency.

We offer the below comments in response to the Commission's Order No. 17912 seeking "to identify technologies and policies that can modernize our energy delivery system for increased sustainability and [...] make our system more reliable, efficient, cost-effective and interactive."³

The Order identifies the preliminary proceeding scope as including:

- An initial overview of the current energy distribution system in the District and current plans to modernize the system;
- An examination of new technologies that will impact the delivery of energy in the District including but not limited to:
 - Energy storage,
 - Distributed energy resources (DERs),
 - Electric vehicles,
 - Microgrids, and
 - the integration of identified enabling technologies; and

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 District of Columbia Public Service Commission. Order No. 17912. Order Opening Investigation into Modernizing the Energy Delivery System for Increased Sustainability. Page 2. Available at: http://dcpsc.org/edocket/docketsheets_pdf_FS.asp?caseno=FC1130&docketno=1&flag=C&show_result=Y

³ *id.* at page 2.

- An identification of regulations and other policies that will enable or inhibit the modernization of the District's energy delivery system for increased sustainability, reliability, efficiency and interactivity.⁴

We are encouraged by the current scope of the Commission's investigation. To further inform the scope of the Commission's proceeding, we summarize three other grid modernization-relevant proceedings taking place in the region below.

Massachusetts

Massachusetts has one of the most clearly defined grid modernization proceeding within the region. The Massachusetts Department of Public Utilities began their investigation into grid modernization opportunities in October 2012 by soliciting comment on several different areas of inquiry including: (1) Current status of electric grid infrastructure as it related to grid modernization; (2) Grid facing technologies; (3) Customer facing technologies; (4) Time-varying rate design; (5) Costs and benefits of grid modernization; (6) Grid Modernization policies; (7) The pace of grid modernization implementation; and (8) Health, interoperability, cybersecurity, and privacy.⁵

Initial efforts resulting from the preliminary Order included months of working groups, workshops, stakeholder outreach events, and several public comment periods. Building upon these efforts, Massachusetts' major utilities—Eversource,⁶ Unitil,⁷ and National Grid—recently filed their proposed ten year grid modernization plans. The utilities proposed plans that cover: (1) facilitation of planning around the impact of DER rollout; (2) System reliability improvements; (3) Distribution automation; (4) Customer engagement and empowerment; (5) Time varying rates; (6) Advanced metering functionality; (7) Volt/VAR optimization; (8) Cybersecurity; (9) Research and development; (10) Advanced analytics; (11) cost effectiveness; and (12) targeted cost recovery.⁸

While the Massachusetts plans focus heavily on system reliability, they also place great emphasis on customer empowerment and the integration of distributed energy resources such as energy efficiency and demand response. In fact, the Department of Public Utilities notes that grid modernization holds great potential to “[E]nhance the success of the Massachusetts energy efficiency initiatives, through the use of marketing campaigns and the advancement of technologies that both reduce peak demand and save energy.”⁹ Such marketing and customer empowerment campaigns dovetail with time varying rates and associated pricing signals, which are a common consideration in most discussions around grid modernization.

⁴ *id.* at page 3.

⁵ Massachusetts Department of Public Utilities. Motion into Modernization of the Electric Grid. (October 2012) Page 7-17. Available at: <http://web1.env.state.ma.us/DPU/FileRoomAPI/api/Attachments/Get/?path=12-76%2f10212dpuvtord.pdf>

⁶ Eversource Massachusetts Grid Modernization Plan. Available at: http://web1.env.state.ma.us/DPU/FileRoomAPI/api/Attachments/Get/?path=15-122%2fInitial_Filing_Petition.pdf

⁷ Unitil Massachusetts Grid Modernization Plan Proposal. Available at: http://web1.env.state.ma.us/DPU/FileRoomAPI/api/Attachments/Get/?path=15-121%2fUnitil_GMP_Report2015819.pdf

⁸ Rather than being complete, this list summarizes some of the broader grid modernization strategies the Commission might consider within their own proceeding, including customer engagement and time varying rates.

⁹ Massachusetts Department of Public Utilities. Motion into Modernization of the Electric Grid. (October 2012) Page 5. Available at: <http://web1.env.state.ma.us/DPU/FileRoomAPI/api/Attachments/Get/?path=12-76%2f10212dpuvtord.pdf>

New Hampshire

Within their recent Order Opening an Investigation into Grid Modernization,¹⁰ the New Hampshire Public Utility Commission identifies Grid modernization as “[A] broad topic that encompasses many elements, including replacement of aging infrastructure, outage management, the integration of distributed generation, and education of customers on how to manage their energy use for the benefit of the electric delivery system and to minimize energy costs.” While the New Hampshire proceeding is still in its infancy, the language above indicates a scope that bears many similarities to the District’s present investigation with an added emphasis on customer empowerment and efficient use of energy on the customer-side of the meter.

New York

New York is exploring new regulatory frameworks related to issues of grid modernization within their Reforming the Energy Vision proceeding.¹¹ While the scope of the New York proceeding may extend far beyond the topics to be considered in the District of Columbia,¹² two related documents may be worth Commission review as they continue discussions around grid modernization: (1) the Public Service Commission’s Order Adopting Dynamic Load Management Filings (“DLM Order”);¹³ and (2) NYSEDA’s Report on Microgrids for Critical Facility Resiliency in New York State (“Microgrid Report”).¹⁴ The DLM Order prescribes methods for integrating distribution level demand response programs into utility business models to fulfill system needs. The Microgrid report describes public policy levers and regulatory reforms which could help shepherd widespread adoption of microgrids.

Perhaps the most unique aspect of the New York proceeding is its focus on opportunities associated with performance-based ratemaking, as identified within the Staff Whitepaper on Ratemaking and Utility Business Models.¹⁵ The Order covers issues related to rate design and compensation for distributed energy resources,

¹⁰ New Hampshire Public Utilities Commission. IR 15-296. Investigation into Grid Modernization. Available at:

<http://www.puc.state.nh.us/Regulatory/Orders%20of%20Notice/073015onIR%2015-296OON%20on%20Grid%20modernization2.pdf>

¹¹ New York Public Service Commission. Reforming the Energy Vision: About the Initiative. Available at:

[http://www3.dps.ny.gov/W/PSCWeb.nsf/a8333dccc1f8dfec0852579bf005600b1/26be8a93967e604785257cc40066b91a/\\$FILE/REV%20factsheet%208%20%2014%20\(2\).pdf](http://www3.dps.ny.gov/W/PSCWeb.nsf/a8333dccc1f8dfec0852579bf005600b1/26be8a93967e604785257cc40066b91a/$FILE/REV%20factsheet%208%20%2014%20(2).pdf)

¹² NEEP. Reforming the Energy Vision Resource Directory. Available here:

http://www.neep.org/sites/default/files/resources/New%20York%20REV%20Document%20Links%20Table_0.pdf

¹³ New York Public Service Commission. Order Adopting Dynamic Load Management Filings with Modifications. Available at:

<https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=ria&uact=8&ved=OCB4QFjAAahUKFwiD0pbH5pLHAhWLIB4KHWWIDFQ&url=http%3A%2F%2Fdocuments.dps.ny.gov%2Fpublic%2FCommon%2FViewDoc.aspx%3FDocRefId%3D%257B2570EDCA-FE13-402F-8F32-C7E61881AEDB%257D&ei=rnTCVcPDBoupeuWQsqAF&usq=AFQjCNH6r49ovQeXVzk7WaihJHJ2ko8YuQ&sig2=NPagFmbQgMsFB9PQDz9ilg&bvm=bv.99556055.d.dmo>

¹⁴ See Generally, NYSEDA. Microgrids for Critical Facility Resiliency in New York State. December 2014. Available at:

<https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&cad=ria&uact=8&ved=OCCUQFjABahUKFwiao-qd8tPHAhUFriAKHcz4CK8&url=http%3A%2F%2Fwww.nyserda.ny.gov%2F-%2Fmedia%2FFiles%2FFPublications%2FFResearch%2FElectic-Power-Delivery%2FMicrogrids-for-Critical-Facility-NYS.pdf&ei=E5XkVdrNJYXggTM8aP4Cg&usq=AFQjCNGbk9lq55tbleHF060VfbP8gJH4Qw&sig2=ivdBJNwTCXit6WCwXS2RmA>

¹⁵ New York Public Service Commission. Staff White Paper on Ratemaking and Utility Business models. (July 2015) Available at:

<http://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId=%7b48954621-2BE8-40A8-903E-41D2AD268798%7d>

time varying rates, and standby service tariffs. Some of these issues—particularly those that pertain to rate design and reliability metrics—may be of value for the Commission to consider within their own investigation.

Conclusion

We applaud the Commission for exploring new policy frameworks, new rate structures, and investments in the tools and technologies that will help modernize the electric grid, thereby continuing to grow and develop the kind of cleaner, more efficient, resilient energy system that our economy requires. The future that lies ahead can be one where people have greater understanding of and control over their energy use, where energy efficiency and clean, distributed resources comprise a growing share of our energy mix, and where less energy is wasted and more of our energy dollars stay in the region growing local jobs instead of exporting earnings to foreign fuel suppliers.

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

Contact information:



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: BBuckley@NEEP.org