

February 19, 2016

Cynthia Wilson-Frias
Deputy Chief of Legal Services
Rhode Island Public Utilities Commission
89 Jefferson Boulevard
Warwick, RI 02888

Re: Request for Comments on a Docket to Investigate the Changing Distribution System

Dear Ms. Wilson-Frias,

Thank you for the opportunity to provide comments in response to the Public Utilities Commission (PUC) *Request for Comments on a Docket to Investigate the Changing Distribution System* issued on February 5, 2016. The Northeast Clean Energy Council (NECEC) applauds the Rhode Island PUC's decision to further investigate how the distribution system will be changing as new technologies and deployment of increasing amounts of clean distributed energy resources (DER) create both new demands on the grid and new opportunities to unlock system-wide efficiencies.

NECEC is the lead voice for hundreds of clean energy companies across the Northeast. Our mission is to create a world-class clean energy hub in the Northeast delivering global impact with economic, energy and environmental solutions. NECEC is the only organization in the Northeast that covers all of the clean energy market segments, representing the business perspectives of investors and clean energy companies across every stage of development. NECEC members span the broad spectrum of the clean energy industry, including energy efficiency, demand response, renewable energy, combined heat and power, energy storage, fuel cells and advanced and "smart" technologies. Many of our members are operating and investing in Rhode Island, and more are interested in doing so.

NECEC supports the PUC's goal to harmonize and coordinate the variety of programs and policies guiding and governing distribution utility planning, practices and investment in the state. A myriad of policies and regulations means that interrelated issues – such as distribution system planning, energy efficiency programs, net metering, Renewable Energy Growth, and others - are often discussed serially in separate dockets instead of comprehensively together. Understanding how these separate processes affect each other and the types of investment they are intended to encourage is a foundational step toward guiding future planning and investment to "modernize" the grid and assure adherence to both fundamental principles of regulation and state policy objectives. A need for this type of comprehensive approach was the impetus for the creation of the Systems Integration Rhode Island (SIRI) collaboration, and we are also pleased to see that the PUC and Division of Public Utilities and Carriers are becoming involved in that effort.

The PUC memo notes that many programs and policies have overlapping objectives and recognizes that understanding how investments made and recovered under one regulatory mechanism, such as the Infrastructure, Safety and Reliability (ISR) program, can affect the value of investments made under another program, such as energy efficiency. Focusing on the

development of a comprehensive framework for evaluating benefits and costs is a key element in harmonizing the variety of programs and policies currently in place. NECEC recommends that the PUC begin such an effort by taking advantage of work that has been done on benefit-cost analysis in neighboring states. For example, in the New York Reforming the Energy Vision (REV) proceeding, Synapse Energy Economics prepared a report for the Advanced Energy Economy Institute, NECEC's national partner, on *Benefit-Cost Analysis for Distributed Energy Resources*. It presents a benefit-cost framework that addresses how to assess the usual benefit and cost categories while maintaining consistency with state policy goals.¹ A benefit-cost analysis framework was similarly addressed in the Massachusetts Grid Modernization proceeding.²

While these reports and others can help to answer the three questions asked in the PUC memo, NECEC suggests that it would be useful and necessary to situate them in a broader context that we think will be essential to their adequate consideration. We recommend that the PUC begin its investigation of the changing distribution system with a broader exploration of the issues surrounding the development of the 21st century electricity system.

In our August 2014 white paper *Leading the Next Era of Electricity Innovation: The Grid Modernization Challenge and Opportunity in the Northeast*³, we outline four key priorities or pillars that are essential to "grid modernization" or as the PUC has characterized it, "the changing distribution system." Briefly, they are

- 1) Planning for Grid Modernization, encompassing distribution system investment and business plans where the utility serves as a distributed platform system operator that integrates distributed energy resources, enables bidirectional flows of electricity and grid data and information, while continuing to provide the safe, reliable and affordable service customers expect.
- 2) A New Forward-Looking Outcomes-based Regulatory Framework, where regulators work with the utility and stakeholders to define objectives or the set of outcomes the utility is expected to deliver in the years ahead and align incentives accordingly.
- 3) Efficient and Fair Rates, or rate design that set fair prices for the range of services distribution utilities deliver and ensure recovery of allowed costs, compensate distributed energy resources and electricity users for the services they provide, and send market signals to network users to optimize system-wide efficiency. Rates should send accurate signals about the value of consuming or producing electricity at different times and locations and under different system conditions, enabling customers to optimize their use of the electricity system. They should also ensure utilities have a reasonable opportunity to recover all allowed costs in a fair and non-discriminatory manner. Finally, rates should be designed to further state and regional policy objectives, such as incentivizing energy efficiency or distributed energy adoption. Accomplishing these three objectives may require balancing among them so that policy goals are achieved in a way that preserves efficient price signals and maintains adequate cost recovery.

¹ The report can be found at <http://www.synapse-energy.com/sites/default/files/Final%20Report.pdf>

² Commonwealth of Massachusetts Department of Public Utilities. D.P.U. 12-76-C. *Investigation by the Department of Public Utilities on its own Motion into Modernization of the Electric Grid*. November 5, 2014. <http://www.mass.gov/eea/docs/dpu/electric/grid-mod/dpu-12-76-c-order-11-5-2014.pdf>

³ http://www.cleanenergycouncil.org/files/NECEC_Leading_Next_Era_Electricity_Innovation.pdf

- 4) Unlocking Innovation so that distribution utilities will be able to meet the changing needs and expectations of customers in the 21st century in a cost-effective manner. Regulators should support innovation that offers potential benefits to customers by allowing utilities to establish budgets for demonstration, testing, and integration and share accelerated learning about the performance, cost, and capabilities of these new technologies.

Rhode Island's regulatory framework already includes elements of these four pillars. NECEC respectfully suggests that they may assist the PUC in addressing the questions it asks in the memo to frame the scope of its investigation of the changing distribution system.

- “What are the benefit and cost categories that can be applied across programs,” including alignment with state policy? Answering this question will require identifying the objectives of the various programs and policies – from traditional ones like reliability, safety and affordability to newer objectives like resiliency and greenhouse gas reductions – and the objectives of distribution system planning. It will require consideration not only of benefits and costs to the distribution system, but also benefits and costs to the overall electricity grid, impacts on commodity energy costs and prices, environmental benefits and costs, and societal benefits and costs. While all of these categories may not be given equal weight, they should be accounted for and considered.
- At what level should benefits and costs be quantified? NECEC respectfully suggests that this question addresses two issues that should be considered separately.
 - “Where physically on the system” suggests looking at the level of granularity of benefits and costs. The ability to do this will depend on the answer to the third question the PUC asks – what level of visibility is required on the system and what kind and level of investment will be needed to accomplish that visibility. Answering this question will require exploration of distribution system planning and identifying the changes that will be needed to meet customer demands and expectations in the 21st century, including integration of increasing amounts of DER and new electric end uses such as heat pumps and electric vehicles.
 - “Where the benefits and costs should be treated in cost allocation and rates” gets to rate design. Having identified the type and level of investment needed to accommodate future system needs, the next step is determining how to design rates properly to allocate costs among customers, providing price signals reflective of current and future costs and consistent with state policy objectives such as those articulated in the Renewable Energy Growth program statute.
- “How can we best measure these costs and benefits at these levels” addresses not only the “visibility” that will be required but also the underlying incentives of different regulatory frameworks. It is equally if not more important to recognize that different programs or regulatory mechanisms provide different incentives to the distribution utility with respect to different types of investment. How the distribution utility recovers its costs affects the attractiveness of different investments. Understanding this

dynamic is part of a necessary and broader investigation of the regulatory framework under which utilities operate. “Measurement” suggests metrics and maybe a performance-based regulatory framework and highlights the need to evaluate solutions across categories of programs and policies – e.g., energy efficiency versus ISR investments versus DER – fairly and on a level playing field.

Finally, including ways to pursue opportunities for innovation and test new approaches and technologies through demonstration projects can help to identify and capture potential benefits for customers cost-effectively.

NECEC greatly appreciates the opportunity to comment on the PUC’s initial questions regarding the evaluation of benefits and costs in its broader framing of the investigation of the changing distribution grid, including the objectives of various programs and policies and the incentives inherent in the regulatory framework and rate design.

Thank you for your consideration.

Sincerely,



Janet Gail Besser
VP, Policy and Government Affairs



Sue AnderBois
Rhode Island State Coordinator

cc: Peter Rothstein, NECEC President