



STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

Rhode Island Division of
Public Utilities and Carriers
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December 5, 2016

Luly E. Massaro, Commission Clerk
State of Rhode Island
Public Utilities Commission
89 Jefferson Boulevard
Warwick, RI 02888

**Re: Docket 4654/4655-National Grid – 2017 Energy Efficiency and System Reliability
Procurement Plans**

Dear Ms. Massaro,

Please find attached for filing the Joint Comments of the Rhode Island Division of Public Utilities and Carriers and the Rhode Island Office of Energy Resources with respect to the 2017 Energy Efficiency and System Reliability Procurement Plans that National Grid filed with the Rhode Island Public Utilities Commission on October 14, 2016.

The Division and OER support the 2017 electric and gas savings and the program charges to achieve the savings, and we find that the programs are cost-effective.

If you should have any questions please feel free to contact me.

Very truly yours,

Jon G. Hagopian
Senior Counsel
State of Rhode Island
Division of Public
Utilities & Carriers

cc: Macky McCleary, Administrator DPUC
Carol J. Grant, Commissioner of Energy OER
Jonathan E. Schrag, Deputy Administrator DPUC
Steve Scialabba, Chief Accountant DPUC
Nicholas S. Ucci, Deputy Commissioner of Energy OER



State of Rhode Island and Providence Plantations
Division of Public Utilities and Carriers

Joint Comments of the Rhode Island Office of Energy Resources and the Rhode Island Division of Public Utilities & Carriers in Dockets #4654 & #4655 re: National Grid's 2017 Energy Efficiency and System Reliability Procurement Plans

The Rhode Island Office of Energy Resources (OER) and the Rhode Island Division of Public Utilities & Carriers (DPUC) jointly submit these comments in regards to the 2017 Energy Efficiency and System Reliability Procurement Plans (collectively referred to as “the Plans”) filed by National Grid on October 14, 2016. In doing so, OER and DPUC have thoroughly considered compliance with the state’s system reliability and least-cost procurement mandate, the State Energy Plan, and broader state energy policy goals; associated customer and bill impacts; customer equity and accessibility to cost-effective energy efficiency programs and incentives; and opportunities to leverage ratepayer-supported efficiency initiatives with other sources of capital to further stretch every consumer dollar. Based upon our participation in the development of these Plans, working in collaboration with National Grid and the Settlement Parties, OER and DPUC urge the Rhode Island Public Utilities Commission to approve the Plans filed in Dockets #4654 and #4655.

OER and DPUC take seriously the cost-effective mandate central to the General Assembly’s charge under Rhode Island’s system reliability and least-cost procurement law that strives to develop plans and programs that are “optimally cost-effective, reliable, prudent and environmentally responsible.”¹ OER and DPUC concur with National Grid that there was “a significant amount of collaboration and input from the parties regarding funding levels for the 2017 Plan” and that concerns were addressed “in a balanced way while maintaining a stable delivery of energy efficiency services to its customers.”² Additional comments regarding cost-effectiveness and customer impacts are provided below. Moreover, the 2017 Energy Efficiency Plan increases the leveraging of external sources of capital to further the achievement of energy savings targets in a least-cost manner, while stretching system benefit charge (SBC) dollars collected from utility ratepayers. For example, OER has allocated \$2.009 million of state Regional Greenhouse Gas Initiative (RGGI) auction proceeds to support Plan investments, thereby reducing the need to collect those funds through the SBC. Also, \$5 million of Plan funds have been earmarked to leverage an estimated \$25 million in public sector efficiency projects through the Rhode Island Infrastructure Bank’s (RIIB) Efficient Buildings Fund (EBF). The cost-effective investments enabled by municipal participation in the EBF will contribute an estimated 11,000 MWhs and 5,000 MMBtus³ of annual energy savings³ toward the achievement of 2017 Energy Efficiency Plan targets and goals.

Importantly, these Plans reflect the strengths of Rhode Island’s collaborative approach to energy efficiency and system reliability – an approach that synthesizes and leverages the viewpoints of numerous stakeholder groups, both through the Energy Efficiency & Resource Management Council (EERMC) and the Demand Collaborative. In doing so, the Plans not only meet the foundational principles of the state’s least-cost procurement mandate, but do so in a way that accounts for the needs of various customer segments while promoting equity and accessibility to comprehensive efficiency programs and incentives.

¹ RIGL 39-1-27.7.

² National Grid cover letter to the 2017 Energy Efficiency Program Plan, page 2.

³ Attachment 2, page 94 of the 2017 Plan.



State of Rhode Island and Providence Plantations
Division of Public Utilities and Carriers

The comments below highlight two examples of this approach as it relates to delivered fuels and municipal customers.

OER and DPUC also wish to note that adoption of the 2017 Plans is aligned with the objectives and strategies embedded within the State Energy Plan (formally, Energy 2035)⁴ and broader state energy policy goals. Energy 2035 states that, “Energy efficiency is the single most cost-effective method for improving energy security and sustainability. The Least-Cost Procurement model maximizes economic and environmental benefits to consumers and the broader economy by ensuring that cheap energy efficiency measures are used before more expensive energy supply”.⁵ The State Energy Plan also calls for “extending the Least-Cost Procurement mandate and its associated provisions,” which has since been acted on by the General Assembly, highlighting the importance and foundational nature of energy efficiency within Rhode Island’s larger energy portfolio. Furthermore, the 2017 Plans will help advance other important policy goals, such as those incorporated in the Resilient Rhode Island Act, as well as growth in Rhode Island’s clean energy economy. These synergies exemplify how smart and cost-effective energy strategies can drive broader positive economic and environmental results for our state.⁶

OER and DPUC also find the following:

Cost-Effectiveness

The 2017 Energy Efficiency Plan is cost-effective with benefit cost ratios of 2.00 for the electric efficiency programs and 1.63 for the natural gas efficiency programs.⁷ Stated another way, the benefits of this Plan are double the costs for electric ratepayers (200%) and more than 150% of the costs for natural gas ratepayers.

Rate and Bill Impacts

The rate and bill impacts analysis complements the cost-effectiveness analysis, providing different information on the energy efficiency costs, participation and savings of the 2017 Plan relative to a scenario absent energy efficiency programs. First, it provides additional context on the depth of participation among customers and the proportion of customers projected to participate in programs. Second, it presents estimated bill impacts for a range of customer responses to programs, from deep participation to non-participation.

The results of the rate and bill impact analysis support approval of this Plan. Bills for average electric customers are projected to be up to 3.5% lower (and up to 1.5% lower for average gas customers), indicating both a high degree of participation among customers and deep participation among participants that is offsetting the bill impacts of non-participants. Rhode Islanders who participate in electric efficiency programs supported by the 2017 Plan are projected to see their bills reduced by up to 35% (the bill savings varies depending on the customer segment). While non-participants typically experience bill

⁴ The State Energy Plan is available at: <http://www.planning.ri.gov/documents/LU/energy/energy15.pdf>.

⁵ Energy 2035, 87.

⁶ For additional information on economic impacts related to the 2017 EE Plan, please see section III(F). For an indication of carbon reduction potential, please see Section I, page 2.

⁷ See tables E-5 in Attachment 5 and G-5 in Attachment 6, respectively.



State of Rhode Island and Providence Plantations
Division of Public Utilities and Carriers

increases as they do not experience energy savings that offset rate increases, “the decreased average customer bills demonstrate that the scale and savings of program participation outweighs non-participant costs.”⁸

Collaboration

This year, Rhode Island was the only state in the country to receive a perfect score on utility programs and policies in the American Council for an Energy Efficient Economy’s (ACEEE) State Scorecard. This achievement can be attributed, in large part, to a highly collaborative Plan development process, which includes monthly meetings of the Demand Collaborative; working group sessions on the technical reference manual and evaluation; incorporation of evaluation, measurement and verification results; monthly strategy meetings with National Grid’s residential and commercial teams; input from EERMC’s Consultant Team and energy efficiency financing expert; detailed edits and comments from many stakeholder groups; and detailed analysis of the benefit cost model. This process has once again successfully produced cost-effective and cost-efficient Plans that include a variety of new initiatives and investments that will meet the evolving needs of Rhode Island’s various customer segments and markets, while continuing existing programs that have proven to help Rhode Island achieve the goals of least-cost procurement.

Financing

OER and DPUC strongly support the proposed \$5 million allocation to support energy efficiency projects financed through the Efficient Buildings Fund (EBF), administered by the Rhode Island Infrastructure Bank (RIIB).^{9,10} These SBC-derived dollars will be leveraged with private capital to achieve an estimated \$25 million in cost-effective energy efficiency projects throughout the municipal sector. EBF funds will be used to leverage private financing with terms of up to fifteen (15) years. The public sector efficiency projects financed through EBF will contribute to the achievement of energy savings objectives embedded within the Plan.

To provide context as to the leveraging power of these funds, Round 1 of the EBF used \$1.8 million in SBC-derived dollars to help finance \$9.8 million of energy efficiency projects with an average energy reduction of 35% including 5,988 annual MWh and 3,147 annual MMBtu. Comprehensive efficiency projects were implemented in four communities and one school district. Measures included LED streetlights with controls, boilers and furnaces, energy management systems, insulation and air sealing, hot water heaters, Wi-Fi programmable thermostats, motors and drives, and indoor LED lighting.

⁸ Attachment 7, page 200 of the 2017 EE Plan.

⁹ Please note that the EBF does not receive any other capitalization support from the state beyond this proposed SBC-derived allocation and support provided through RGGI auction proceed allocation plans. Moreover, any SBC-derived funds allocated through the Plan will be used efficiently as they will be solely programmed for lending support, and will not be used by RIIB to cover operational expenses.

¹⁰ OER is required by statute to develop project priority lists for the Efficient Buildings Fund. In addition, OER coordinates outreach to potential borrowers and project origination, administers the EBF application intake and review process, and reviews and scores all complete applications with the assistance of an outside technical consultant. Scored applications are then ranked to create a project priority list; RIIB finances projects based on priority list ranking. During project implementation, an outside consultant is retained to verify project progress. In addition to financial reporting for the life of the loan, for at least 5 years following project completion, borrowers must report on: actual FTEs and job types, entity-wide energy consumption compared to baseline, and actual vs. estimated energy saved (for EE projects), and actual energy production (for RE projects)



State of Rhode Island and Providence Plantations
Division of Public Utilities and Carriers

Bundling short-, medium- and long-term payback measures allowed for deeper savings while maintaining positive cash-flows and competitive interest rates for all borrowers. For example, a comprehensive suite of measures implemented at Cranston's Edgewood Elementary School will reduce the school's energy consumption by 44% and save \$56,000 annually. These projects, particularly in communities with low credit ratings, would have been difficult to move forward without the low-cost, long-term financing and hands-on technical assistance offered through the EBF.

While the EBF supports public buildings, there exists a significant opportunity to support clean energy investment financing for broader segments of Rhode Island's customer base. OER and DPUC commend National Grid for its willingness to work closely with RIIB to support Property Assessed Clean Energy (PACE) programs in the commercial (C-PACE, now operational)¹¹ and residential (R-PACE, in development) sectors. PACE offerings are financed through private capital and leverage program incentives to provide one-stop shopping in support of cost-effective energy efficiency and renewable energy improvements.

These programs also complement existing finance offerings made available by National Grid, such as its Commercial and Industrial (C&I) revolving loan fund with on-bill repayment. The totality of these offerings present the Rhode Island marketplace with a suite of viable financing tools and range of loan terms that enable residential, C&I, and public sector customers to go broader and deeper with their efficiency investments. Together, these programs will enable customers to "choose to complete [energy efficiency] projects that they might not have considered viable prior to this point in time"¹² and expand pathways for engagement by those customers who have not previously taken advantage of existing energy efficiency programs and initiatives.

Delivered Fuels Weatherization

OER and DPUC strongly support the allocation of \$1.8 million of funding and services for delivered fuels customers through the EnergyWise programs (\$1.3 million for the EnergyWise Single-Family program, and \$0.5 million for the EnergyWise Multifamily program). As noted in the State Energy Plan, Rhode Island's delivered fuels sector is a key area of need and opportunity for energy, cost, and emissions savings:

Nearly 40 percent of Rhode Island homes heat with petroleum-based delivered fuels such as home heating oil and propane. However, no dedicated energy efficiency program funding yet exists to serve these customers. Current funding for the efficiency programs under Least-Cost Procurement derives solely from electric and natural gas demand-side management charges, leaving unregulated fuel users with historically limited access to the program offerings.¹³

OER and DPUC concur with National Grid that a long-term solution to support the delivery of comprehensive, cost-effective efficiency services in the delivered fuels sector is critical. OER and DPUC are committed to continuing their work on this issue with partner stakeholders in 2017. In the meantime,

¹¹ Please see Attachment 2 of the 2017 Plan for more information on C-PACE.

¹² Attachment 2, page 95 of the 2017 Plan.

¹³ Energy 2035, 89.



State of Rhode Island and Providence Plantations
Division of Public Utilities and Carriers

it is critical that existing service levels be maintained to support weatherization activities across this important customer segment. The 2017 Energy Efficiency Plan will achieve this short-term goal.

Other Administration-Supported Initiatives

OER and DPUC would like to note that there are numerous Administration-supported initiatives now underway that complement utility-administered efficiency offerings and further the achievement of savings goals. Several examples are provided below:

- *Lead by Example Executive Order (LBE EO)*: In December 2015, Governor Gina M. Raimondo signed Executive Order 15-17: "State Agencies to Lead by Example in Energy Efficiency and Clean Energy" establishing a "Lead by Example" program within OER "to oversee and coordinate efforts at State agencies to reduce energy consumption and greenhouse gas emissions." The Governor's findings note that the State's transition to a cleaner, low-carbon energy economy presents "unprecedented challenges, as well as opportunities to strengthen the State's economic competitiveness, create thousands of well-paying jobs, foster new clean energy industry opportunities, improve public health, protect the environment, and enhance the quality of life." Moreover, Governor Raimondo identifies the State as "one of the largest energy consumers in Rhode Island, with energy expenses of nearly \$35 million in fiscal year 2014." Relative to energy efficiency, the Governor has established goals to: reduce overall State agency energy consumption by at least 10 percent below FY14 levels by the end of FY19; achieve a high standard of green building operations and maintenance at all State facilities; establish a voluntary stretch building code available for use in all State construction and renovation projects, as well as those in the private sector; and make State energy usage data more transparent.

As noted in the 2017 Energy Efficiency Plan, the State has executed a Strategic Energy Management Plan (SEMP) with National Grid to integrate strategic energy planning across State facilities and to leverage utility-administered efficiency programs and best practices to help achieve LBE EO goals.¹⁴ OER has also allocated approximately \$4.7 million in RGGI funds to support clean energy investments across State facilities. Where appropriate, these dollars will be leveraged with utility-administered incentives to drive energy and cost reductions throughout State facilities in 2017 and beyond. On this and other lead by example initiatives, National Grid continues to be a vital partner, and the proposed 2017 Energy Efficiency Plan successfully extends this collaboration.

- *Support for Municipalities*: Consistent with State-level efforts to "lead by example," OER and DPUC are pleased to see the strong financial and programmatic support provided to municipal customers in the 2017 Energy Efficiency Plan. As evidenced by initiatives such as OER's Rhode Island Public Energy Partnership (RIPEP), the municipal sector faces numerous barriers to implementing and maintaining comprehensive energy efficiency investments across their facilities. Through its support for the EBF and other efficiency offerings, the 2017 Energy Efficiency Plan will continue to enable robust investment in energy cost-reducing investments across our cities and towns, thereby easing local energy burdens and shrinking local carbon footprints.

¹⁴ Attachment 2, page 84 of the 2017 Plan.



State of Rhode Island and Providence Plantations
Division of Public Utilities and Carriers

In particular, OER and DPUC want to acknowledge National Grid's efforts to drive the conversion of municipal streetlights to LEDs with controls. Street light conversions are a significant savings opportunity for customers in municipalities across the state, including those that decide to purchase their lights, as well as those that continue to lease their lights from National Grid. With updates to the Company's streetlighting tariffs to add LEDs in process, along with the addition of incentives for streetlights and controls and financing to cover the incremental costs of these conversions, we look forward to strong interest from municipalities in 2017.

In 2017, the Administration will continue supporting the achievement of energy savings throughout this important market sector in two significant ways. First, OER's Municipal LED Streetlight Energy Efficiency Incentives Program has made \$1.525 million available to further enable municipal streetlight conversions to energy efficient LEDs and controls.¹⁵ Second, as noted above, OER will continue to support the successful implementation of EBF, and has allocated \$2 million of state RGGI auction proceeds to support EBF project lending in 2017.

- *Support for Residents:* In an effort to support long-term market transformation, EnergyWise is piloting the use of DOE's Home Energy Score through the EnergyWise program in 2017. OER commends this effort to test the additional savings generated by providing homeowners with accurate building asset information. Such information is likely to improve the awareness and understanding of a building's energy consumption during a sale or lease. In addition, OER views the Company's support of Zero Energy Buildings and code official trainings as essential to spurring the market for more energy efficient buildings.

System Reliability Procurement

OER and DPUC support the 2017 System Reliability Procurement (SRP) Plan, which proposes to continue the Tiverton/Little Compton DemandLink pilot. The 2017 effort contains some new innovative program features, including conducting a technology-agnostic, market-based solicitation (RFP) for load reductions, and a pilot testing of eCoder receiver transmitter (ERT)-equipped residential meters that could potentially enable verification of time-of-use rates. OER and DPUC look forward to seeing the evaluation results of the SRP pilot at the end of this upcoming year, which represents the final year of the four-year deferral effort. Furthermore, the OER and DPUC look forward to the consideration of innovative new changes to SRP planning in the upcoming submittal of the revised SRP standards, which were developed with input from a variety of stakeholders, including the Systems Integration Rhode Island (SIRI) group, under the coordination of OER.

In summary, OER and DPUC offer their strong support for the 2017 Plans because they:

- Acquire energy savings at a cost to ratepayers that is lower than the cost of supply, consistent with the state's Least-Cost Procurement mandate;
- Produce rate and bill impacts that are reasonable with lower bills for the average customer across all sectors;

¹⁵ Please visit: <http://www.energy.ri.gov/efficiency/streetlights/>.



State of Rhode Island and Providence Plantations
Division of Public Utilities and Carriers

- Provide a range of programs and measures that will result in broad participation across a multitude of Rhode Island customer segments;
- Contain comprehensive programs and funding specifically designed to help income-eligible customers reduce their energy burdens;
- Support growth in Rhode Island's clean energy economy, while reducing energy consumption and emissions; and
- Leverage ratepayer-derived system benefit charge dollars with other sources of capital to drive comprehensive energy savings and achieve least-cost procurement targets.

On behalf of OER and DPUC, we thank the Commission for their continued support and leadership in helping to make Rhode Island a national energy efficiency leader. We also wish to acknowledge the tremendous collaboration that has taken place between National Grid, the Energy Efficiency & Resource Management Council, and settlement parties to develop the 2017 Plans. Their collective commitment to ensuring that Rhode Island residents and businesses have access to cost-effective and equitable efficiency programs is a key ingredient to our state's continued clean energy success.

In the weeks and months to come, we look forward to continuing our work with you and the state's network of committed energy stakeholders to drive innovation and enhance Rhode Island's portfolio of dynamic clean energy initiatives.

Sincerely,

A handwritten signature in black ink, appearing to read "Carol J. Grant". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Carol J. Grant
Commissioner
Office of Energy Resources

A handwritten signature in black ink, appearing to read "Macky McCleary". The signature is stylized and cursive, with a prominent loop at the end.

Macky McCleary
Administrator
Division of Public Utilities & Carriers