

December 4, 2018

BY HAND DELIVERY AND ELECTRONIC MAIL

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

**RE: Docket 4888 – The Narragansett Electric Company d/b/a National Grid
2019 Energy Efficiency Program Plan
Joint Pre-Filed Direct Testimony**

Dear Ms. Massaro:

On behalf of National Grid, I have enclosed eleven copies of the Joint Pre-filed Direct Testimony of Rachel Henschel and Courtney Lane in the above-referenced docket.

Thank you for your attention to this filing. If you have any questions, please contact me at 781-907-2121.

Sincerely,



Raquel J. Webster

cc: Dockets 4888/4889 Service Lists
Jon Hagopian, Esq.
John Bell, Division

Certificate of Service

I hereby certify that a copy of the cover letter and any materials accompanying this certificate was electronically transmitted to the individuals listed below.

The paper copies of this filing are being hand delivered to the Rhode Island Public Utilities Commission and to the Rhode Island Division of Public Utilities and Carriers.

Joanne M. Scanlon

December 4, 2018
Date

Docket No. 4888 - National Grid – 2019 Energy Efficiency Plan (EEP)
Docket No. 4889 - National Grid – 2019 System Reliability Procurement Report (SRP)
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**THE NARRAGANSETT ELECTRIC COMPANY
d/b/a NATIONAL GRID
RIPUC DOCKET NO. 4888
RE: ANNUAL ENERGY EFFICIENCY PLAN FOR 2019
WITNESSES: RACHEL HENSCHEL AND COURTNEY LANE
DECEMBER 4, 2018**

JOINT PRE-FILED DIRECT TESTIMONY

OF

RACHEL HENSCHEL

AND

COURTNEY LANE

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1 **I. INTRODUCTION**

2 **Q. Ms. Henschel, please state your name and business address.**

3 A. My name is Rachel Henschel. My business address is 40 Sylvan Road, Waltham,
4 Massachusetts 02451.

5

6 **Q. By whom are you employed and in what position?**

7 A. I am employed by National Grid USA Service Company, Inc. (the Service Company).
8 My current position is Manager of Rhode Island Customer Energy Management. My
9 responsibilities include managing the team of commercial, residential, and policy
10 strategists who develop the Annual and Three-Year Energy Efficiency Plans for The
11 Narragansett Electric Company d/b/a National Grid (the Company) and enhance,
12 innovate, and report on energy efficiency programs.

13

14 **Q. Please describe your educational background and professional experience.**

15 A. I received a Bachelor of Arts in Political Science from the University of North Carolina at
16 Chapel Hill in 2003, and a Master of City Planning from the Massachusetts Institute of
17 Technology in 2009. I have been in my current position since August 1, 2018. In previous
18 roles at the Service Company, I managed the team responsible for commercial and
19 residential energy efficiency evaluation in Rhode Island. I also have experience as a
20 residential evaluator, have led development of energy efficiency plans and reports, and
21 previously managed stakeholder collaborative processes. Prior to joining National Grid in

1 2009, I was an analyst with the Environmental Protection Agency in Washington D.C. and
2 a Rural Community Development Volunteer with the United States Peace Corps in Belize.

3
4 **Q. Have you previously testified before the Rhode Island Public Utilities Commission**
5 **(PUC)?**

6 A. Yes. I have testified before the PUC in many dockets, most recently in Docket No. 4755
7 (the Company's 2018 Annual Energy Efficiency Plan).

8
9 **Q. Ms. Lane, please state your name and business address.**

10 A. My name is Courtney Lane. My business address is 40 Sylvan Road, Waltham,
11 Massachusetts 02451.

12
13 **Q. By whom are you employed and in what position?**

14 A. I am employed by the Service Company as a Lead Analyst for Rhode Island Customer
15 Energy Management. My responsibilities include leading the development of the
16 Company's Annual and Three-Year Energy Efficiency Plans, leading the facilitation of
17 the Rhode Island Energy Efficiency Collaborative (Collaborative), and working to ensure
18 that the Company's Energy Efficiency Plans, Annual, and Quarterly Reports meet
19 statutory and regulatory guidelines.

20

1 **Q. Please describe your education and your professional experience.**

2 A. I received a Bachelor of Arts in Environmental Geography from Colgate University in
3 2000, and a Master of Arts in Environmental Policy and Planning from Tufts University
4 in 2004. I joined the Service Company in 2013 and have been in my current role since
5 January, 1 2017. In previous roles at the Service Company, I managed residential and
6 System Reliability Procurement evaluations and led the development of energy efficiency
7 quarterly and annual reporting requirements. Prior to joining National Grid, I worked on
8 regulatory and state policy issues pertaining to the development of demand-side and
9 renewable energy resources for seven years as a Senior Energy Analyst for Citizens for
10 Pennsylvania's Future (PennFuture). Prior to that, I worked for Northeast Energy
11 Efficiency Partnerships, Inc. where I promoted energy efficiency throughout the
12 Northeast.

13
14 **Q. Have you previously testified before the PUC?**

15 A. Yes. I have testified before the PUC in many dockets, most recently in Docket No. 4755
16 (the Company's 2018 Annual Energy Efficiency Plan) and Docket No. 4684 (the
17 Company's 2018-2020 Energy Efficiency and System Reliability Procurement Plan).

18

1 **II. PURPOSE OF JOINT TESTIMONY**

2 **Q. What is the purpose of this joint testimony?**

3 A. The purpose of our testimony is to highlight certain key aspects of the 2019 Annual
4 Energy Efficiency Plan (Plan).

5
6 **Q. Please describe the purpose of the Least Cost Procurement law.**

7 A. The purpose of Least Cost Procurement is to meet the “electrical and natural gas energy
8 needs in Rhode Island, in a manner that is optimally cost-effective, reliable, prudent, and
9 environmentally responsible.”¹

10

11 **Q. How does the Plan meet the statutory requirements for Least Cost Procurement?**

12 A. The Plan meets the statutory requirements for Least Cost Procurement in the following
13 ways:

14 • The Plan is cost-effective. The Plan meets the requirement of cost-effectiveness
15 according to the Rhode Island Benefit Cost Test (RI Test). The overall electric
16 portfolio RI Test ratio is 4.00, and the overall natural gas portfolio RI Test ratio is
17 2.70.

18 • The Plan is reliable. The Plan continues to offer current best-in-class programs
19 while introducing new measures and implementation strategies. For example, the
20 Plan includes new proposed measures such as radiator covers and automated

1 window shades for Commercial and Industrial (C&I) customers, and enhanced
2 strategies including a 100 percent incentive for landlords to address market
3 barriers to renters, expanded small C&I offerings, a new Strategic Energy
4 Management Initiative, and a demand response program for residential and
5 commercial customers.

- 6 • The Plan is prudent. The Plan seeks to achieve a level of energy savings in 2019
7 that is technically feasible, economically possible, and achievable. There are
8 several ways to determine the level of energy savings that should be procured in a
9 given year. There is technical potential, which includes savings from all feasible
10 energy efficiency measures. There is economic potential, which is the portion of
11 technical potential that is cost-effective. Finally, there is achievable potential,
12 which is the portion of economic potential that is achievable given customer
13 adoption, program, and market limitations. The Plan captures all achievable
14 potential for 2019 given projections for customer participation, the number of
15 skilled auditors and installation contractors, and staffing levels. In each Annual
16 Plan, the Company must plan for short-term gains that enable long-term market
17 transformation. This sustained growth provides market certainty for vendors,
18 manufacturers, contractors, and customers making longer-term comprehensive
19 energy design and investment decisions.

¹ R.I. Gen. Laws § 39-1-27.7.

- 1 • The Plan is environmentally responsible. The electric, gas, and oil energy
2 efficiency measures proposed in this Plan will avoid over 1.1 million tons of
3 carbon over the lifetime of the installed measures.² These reductions will provide
4 a meaningful contribution to the Resilient Rhode Island Act of 2014.³

5
6 **Q. Please describe the stakeholder engagement process for developing the Plan.**

7 A. For the past 27 years, the Company has facilitated the Energy Efficiency Collaborative
8 (Collaborative) as a means to create transparency and dialogue regarding the Company’s
9 energy efficiency programs and Plans. The Collaborative meets monthly and provides an
10 opportunity for the Company to update stakeholders on the progress of energy efficiency
11 programs and savings throughout the year. The Collaborative also serves as a venue for
12 the Company to obtain input, recommendations, and feedback from stakeholders on its
13 Plans to build consensus on the Annual Plan and reach settlement prior to the PUC
14 hearing. In 2019, the Company focused on building on the successful framework of the
15 Collaborative to provide more time for the Plan development process and obtain
16 additional stakeholder input, recommendations, and feedback.

² This includes the net impact of EE measures on carbon emissions. The marginal carbon emission rates are from “Avoided Energy Supply Components in New England: 2018 Report” Appendix K. pages 368-370.

³ R.I. Gen. Laws Chapter 42-6.2.

1 **Q. Please provide specific examples of how the above-described stakeholder**
2 **engagement process worked for the Plan.**

3 A. Beginning in March 2018, members of the Collaborative gave presentations on their
4 priorities for the 2019 Plan. Discussion of the Plan continued from March 2018 until the
5 final Plan was circulated to the Energy Efficiency Resource Management Council
6 (EERMC) in late September 2018. Over this period of time, Collaborative members
7 shared hundreds of comments and suggestions with the Company ranging from minor
8 edits and clarifications on the draft Plan to more comprehensive items such as the
9 following: the expansion of electrification of heating to income-eligible customers with
10 delivered fuels, adding test metrics on cost of saved energy and customer satisfaction,
11 providing incentive parity for delivered fuels customers, lowering costs while increasing
12 savings, and improving language and organization of the K-12 school offerings.

13
14 The Company also hosted a Customer Listening Forum on August 1, 2018 to obtain
15 feedback from residential customers, businesses, community representatives, and other
16 members of the public to help inform deployment of current programs and the 2019 Plan.
17 Additional feedback from public comment at the EERMC led to the Company changing
18 the definition of a customer that qualifies for the Small Business Direct Install Program to
19 C&I customers that consume less than 1,000,000 kWh per year to simplify eligibility
20 requirements and allow for more customers to qualify.

21

1 **Q. What is the Company’s strategy for growing strategic electrification of heating?**

2 A. The Company’s goal is to aid in the market transformation of the heating sector through
3 the promotion of electric heating. In its recent Northeast 80x50 Pathway paper, the
4 Company acknowledges that a dramatic shift is needed in the way in which customers
5 heat their homes and businesses to meet the challenging greenhouse gas (GHG) emission
6 reduction goals of the region, including Rhode Island.⁴ This includes a long-term goal of
7 converting nearly all of the state’s oil-heated buildings by 2030.

8
9 To reach the goal of a cleaner, more efficient, heating sector, the Company must ensure
10 that the deployment of Air Source Heat Pumps (ASHPs) is done in a manner that ensures
11 proper usage, energy savings, and customer satisfaction. Therefore, the Plan seeks to
12 address the following:

- 13 A. Installer/builder and customer awareness of, and confidence in, ASHP as a
14 primary heating source;
- 15 B. The potential for integration of advanced control technologies to allow automated
16 coordination among multiple heating systems;
- 17 C. The need for more accurate tools to predict energy, cost, and greenhouse gas
18 savings associated with ASHP installation through the collection and analysis of
19 real world performance data;

⁴ Clean Energy, Efficiency, and Electrification: National Grid’s Northeast 80x50 Pathway.
<http://news.nationalgridus.com/wp-content/uploads/2018/06/80x50-White-Paper-FINAL.pdf>;

- 1 D. Determination of appropriate incentive levels and program delivery models to
- 2 motivate customer adoption;
- 3 E. The high up-front costs and longer-term paybacks;
- 4 F. Creation of consistent installer requirements; and
- 5 G. Aesthetics.

6

7 The Plan also increases the number of ASHP heating projects offered to customers

8 heating with delivered fuels in its electric HVAC program and now includes the ASHP

9 heating offering to income-eligible and multifamily programs. The Company previously

10 included a proposal for an Electric Heat Initiative as part of the Company's Power Sector

11 Transformation proposal in Docket Nos. 4770/4780. At its August 3, 2018 Open

12 Meeting, the PUC disallowed funding for an Electric Heat Initiative in base distribution

13 rates; however, the PUC indicated its expectation that the heat pump rebates proposed in

14 Docket Nos. 4770/4780 would be funded through the Company's energy efficiency

15 program. Accordingly, the Company's proposal to increase the number of ASHPs in this

16 year's Plan is driven partly by the PUC's direction in Docket Nos. 4770/4780, projected

17 program growth, and the potential for increased customer adoption.

18

1 **Q. Why were definitions for demonstrations and assessments added to the Plan and**
2 **how are they critical to the success of the programs in the Plan?**

3 A. Demonstrations and assessments are enhancements to existing program offerings and are
4 critically linked to existing programs. The Company provided unique definitions for
5 demonstrations and assessments to highlight new and innovative aspects of a program in
6 a transparent manner and to differentiate them from pilots, as described in Section V of
7 the PUC's Docket No. 4600-A Guidance Document.⁵ Demonstrations and assessments
8 are critical to program success because they may increase or maintain customer
9 participation in existing programs, which is essential in meeting the energy savings
10 targets. Demonstrations are estimated to be cost-effective based on data from other
11 utility programs or technical estimates from market research. Savings from assessments
12 are unknown but the measures, bundle of measures, or technologies have the potential to
13 enhance existing programs. Assessments are small-scale, cannot stand alone in their
14 current form, and are, therefore, integrated into programs. For example, the behavior
15 change through education of small/medium plant personnel assessment within the
16 Commercial Retrofit program looks to engage with only three customer sites.

17

18 **Q. Are the energy savings resulting from the Plan verifiable and transparent?**

19 A. Yes. The Plan relies on verified savings. For example, the Plan incorporates findings
20 from more than 75 evaluations conducted by independent, third-party evaluation firms.

1 Twenty-seven of these evaluations were completed within the past year. Evaluations
2 adhere to evaluation protocols such as those established by the Department of Energy's
3 Uniform Methods Project (UMP). The UMP provides details on a national set of
4 consensus-based protocols for estimating savings from specific measures or programs.
5 The energy efficiency savings are transparent and documented in the Technical
6 Reference Manual, which includes methodologies and assumptions used by the Company to
7 estimate the savings. The reference manual provides methods, formulas, and default
8 assumptions for estimating energy, peak demand, and other resource and non-energy impacts
9 from efficiency measures. The manual is reviewed by the EERMC evaluation consultants
10 annually.

11
12 **III. CONCLUSION**

13 **Q. In your opinion, does the Plan fulfill the requirements of Least Cost Procurement**
14 **and provide net benefits to Rhode Island?**

15 A. Yes. The Plan is the least cost means to meet 194,677 MWh and 432,708 MMBtu of
16 energy load through the lifetime savings from the program offerings in the Plan.
17 Although the cost of energy efficiency makes up a small portion of a customer's overall
18 electric and natural gas bill (approximately five percent), it provides the benefit of giving
19 customers the tools to reduce their total energy bill. The analysis of bill impacts found in
20 Attachment 7 of the Plan finds that the average electric program participant will realize

⁵ Public Utilities Commission's Guidance on Goals, Principles and Values for Matters Involving The Narragansett

1 an annual bill reduction of 1.69 percent to 22.85 percent over the lifetime of installed
2 measures depending on rate class and the average gas program participant will realize a
3 bill reduction of 1.59 percent to 25.08 percent over the lifetime of installed measures
4 depending on rate class. Furthermore, the Plan provides a mix of offerings to provide all
5 customers with the chance to participate and achieve net energy bill reductions.

6

7 **Q. Does this conclude this joint testimony?**

8 A. Yes, it does.