

July 9, 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 4755 – 2018 Energy Efficiency Program Plan  
Responses to PUC Data Requests – Set 1**

Dear Ms. Massaro:

I have enclosed ten copies of National Grid's<sup>1</sup> responses to the first set of data requests issued by the Rhode Island Public Utilities Commission 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: Docket 4755 Service List  
Jon Hagopian, Esq.  
John Bell, Division

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<sup>1</sup> The Narragansett Electric Company d/b/a National Grid (National Grid or Company).

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.



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Joanne M. Scanlon

July 9, 2018

Date

**Docket No. 4755 - National Grid – Energy Efficiency Program Plan for 2018**  
**Docket No. 4756 - National Grid – 2018 System Reliability Procurement**  
**Report (SRP)**  
**Service list updated 6/22/18**

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The Narragansett Electric Company  
d/b/a National Grid  
RIPUC Docket No. 4755  
In Re: 2018 Energy Efficiency Plan  
Notification of an Energy Efficiency Incentive Greater Than \$3,000,000  
Responses to the Commission's First Set of Data Requests  
Issued on June 29, 2018

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PUC 1-1

Request:

What was the basis for the \$7.2 million incentive? What was the basis for offering the incentive in three stages? In your answer, please explain the basis for each stage.

Response:

The basis for the incentive is the 2018 CHP incentive levels, which are described in detail in the 2018 EEPP, Attachment 2, Bates pages 164-173. There are two components to the incentive – the energy efficiency installation and the performance based incentive. CHP energy efficiency incentive levels range from \$900 per kW to \$1,250 per kW. The incentive is a negotiated amount based on the unique elements of the Navy project; it was planned as \$1,000 per kW for a 7 MW system, equal to \$7 million. The incentive will be delivered in stages, described below.

For systems larger than 1 MW, additional performance based incentives are available with a maximum of \$20/kW. This portion of the incentive may vary and the maximum is \$242,000, as long as the CHP system delivers the expected performance over a period of up to 10 years. This portion of the incentive will not be made until the unit is in operation and provides demonstrated load reduction. It will then be paid semi-annually based on actual metered load reduction.

Together, the two components of the incentive are estimated as \$7.2 million.

As described in the Company's May 30 Notification letter to the Commission, the incentive stages are intended to facilitate project development, while still requiring delivered performance from the CHP system before receiving full payment. The stages are also described in EEPP Attachment 2, Bates pages 169-171 and are defined and agreed to with project developers and customers in the project's Minimum Requirements Document.

Explanation of the three stages:

1. **Demonstration of Operability of the CHP system.** Given the large dollar sums and long project development cycles involved in complex project implementation, the Company typically pays 80% of the expected incentive once the EE hardware is in place and operational, so that customers and project developers do not have to carry full project costs through the commissioning phase, which can be lengthy for complex projects.

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PUC 1-1, page 2

2. Completion of Commissioning. The Company retains 20% of the incentive until commissioning is completed to ensure that projects meet expected savings criteria, and/or to correct the estimated savings claim to match the in-situ performance.
3. Performance-based energy efficiency incentives for delivering annual kW savings, up to 10 years. The performance component of the incentive is intended to encourage the customer to continue to operate the CHP system as described in the energy efficiency application. It will be paid semi-annually based on actual metered load reduction.

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PUC 1-2

Request:

Please provide the levelized cost of energy efficiency for this project using:

- a. the program cost, and
- b. both the program cost and the participant cost. Please include the annual Operation & Maintenance (O&M) costs.

Response:

<b>Navy CHP Levelized Cost of savings</b>		
Annual net CHP savings	36,156,000	kWh/yr
Lifetime net Electricity Savings	723,120,000	kWh/20 yrs
<b>a) Program cost levelized</b>		
Customer Incentive	\$ 7,242,000	
Lifetime Savings	723,120,000	kWh/20 yrs
Levelized cost/kWh	\$ 0.0100	/lifetime kWh: Program costs
<b>b) Total cost levelized (NPV at 20 yr measure life)</b>		
Project cost	\$ 20,000,000	One time (circa 2018)
O&M costs	\$ 13,210,589	Annual cost of \$687,500/yr
Lifetime oil savings	\$ (15,368,094)	AESC energy cost only
Lifetime gas cost	\$ 55,466,371	AESC energy cost only
Total project costs	\$ 73,308,866	
Lifetime Savings	723,120,000	kWh/20 yrs
Levelized cost/kWh	\$ 0.1014	/lifetime kWh: Total project costs

For the purposes of this analysis, the customer incentive is considered the program cost. Other program costs associated with the Navy CHP project, such as administrative and Technical Assistance vendor costs are not fully known at this time. In addition, such administrative and Technical Assistance vendor costs are marginal relative to the above primary project costs, and, therefore, were excluded from this analysis.

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Please note that the levelized costs for lifetime oil and gas savings above vary from the benefit totals that were previously provided in the Company's response to Division 1-3. This is because the benefits values include embedded CO2 values.