



STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

Rhode Island Division of  
Public Utilities and Carriers  
89 Jefferson Blvd.  
Warwick RI 02888  
(401) 941-4500

December 8, 2017

Luly Massaro, Commission Clerk  
Rhode Island Public Utilities Commission  
89 Jefferson Blvd.  
Warwick, R.I. 02888

**In Re:** The Narragansett Electric Company D/B/A National Grid  
2018 System Reliability Procurement Report—Docket 4756

Dear Luly,

Please find for filing with the Commission, an original and nine (9) copies of the State of Rhode Island Division of Public Utilities and Carriers, (the "Division") responses to the Commission's First Set of Data Requests to the Division in the above captioned docket.

I appreciate your anticipated cooperation in this matter.

Very truly yours,

A handwritten signature in black ink, appearing to read "Jon G. Hagopian".

Jon G. Hagopian, Esq.  
Deputy Chief Legal Counsel

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS  
PUBLIC UTILITIES COMMISSION

IN RE: THE NARRAGANSETT ELECTRIC :  
 COMPANY d/b/a NATIONAL GRID : DOCKET NO. 4756  
 2018 SYSTEM RELIABILITY :  
 PROCUREMENT REPORT :

RESPONSES OF THE DIVISION OF PUBLIC UTILITIES AND CARRIERS TO THE  
COMMISSION’S FIRST SET OF DATA REQUESTS

1-1. Please calculate the following: add the cumulative deferral benefits in Table S-2 (Bates 41) and the projected benefits in the proposed 2018 SRP, divide this amount by the sum of cumulative costs of the pilot (\$1.9 million) plus the total projected costs of the battery storage project. Is this the appropriate benefit-cost analysis for the proposed battery storage project? Why or why not?

Response:

The requested calculation is provided in the table below. According to these calculations, the benefit-cost ratio of this project would be 0.58.

	<b>Cost or Benefit (\$000)</b>	<b>Value</b>	<b>Source</b>
Benefits	Cumulative SRP pilot deferral benefits (2012-2017)	\$653	Table S-2
	Projected benefits of the battery project (2018-2021)	\$721	Table 8
	Total benefits	\$1,375	sum of benefits
Costs	Cumulative SRP pilot costs (2012-2017)	\$1,952	Table S-2
	Projected costs of the battery project (2018-2021)	\$438	Table 8
	Total costs	\$2,390	sum of costs
Cost-effectiveness	Net benefits	-\$1,015	benefits minus costs
	Benefit-cost ratio	0.6	benefits divided by costs

No, this is not the appropriate benefit-cost analysis for the proposed battery storage project.

The decision about whether to proceed with the battery storage project should be based on an analysis of incremental, future costs.<sup>1</sup> The analysis should not include historical, sunk costs. The cumulative deferral benefits and the cumulative costs of the SRP pilot are historical costs incurred from 2012 from 2017, which should not be included for this purpose. The benefit-cost analysis provided by the Company in Table 8 appropriately includes only incremental, future costs.

<sup>1</sup> See: National Efficiency Screening Project, *National Standard Practice Manual*, May 2017, page viii, Table ES-1.

It is sometimes appropriate to conduct a retrospective benefit-cost analysis of an entire project or program, for the purposes of determining after-the-fact whether the project or program was cost-effective. In such a case, it is appropriate to include all the costs and all the benefits over the project or program life, regardless of whether they are historical or future costs. However, even in this context the benefit-cost analysis in the table above is not appropriate for the full Tiverton/Little Compton pilot/battery project for 2012-2021. That analysis does not include the benefits of the historic Tiverton/Little Compton pilot activities, including the focused energy efficiency costs and benefits, the SRP energy efficiency benefits, or the demand reduction benefits.

Prepared by or under the supervision of: Tim Woolf, Synapse Energy Economics

1-2. Referring to Table 9 (Bates 27) please provide based metrics that hold the Company accountable to the demonstrated benefits of these actions.

Response:

The DPUC assumes that this request contains a typographical error, and that the Commission intended to ask the DPUC to provide “*performance-based* metrics that hold the Company accountable...”

The DPUC believes that the SRP incentive metrics included in Table 9 are performance-based metrics. We see action-based incentives as a subset of performance-based incentives. The Company will have to perform certain actions in order to earn the associated incentives. In particular, National Grid will be able to collect incentives only after it has demonstrated to the Commission that it has completed the loading map, completed the DG-focused map, completed the avoided cost stakeholder review process, implemented its marketing and engagement plan, or issued its NWA RFPs.

Action-based incentives are sometimes preferable to outcome-based or program-based incentives, particularly in instances when the desired outcome is beyond the utility’s control, hard to define, hard to quantify, or hard to measure and verify. In this case, the desired outcomes include (a) better information for regulators and other stakeholders, to help inform policy and planning decisions; (b) better information for National Grid, to help inform NWA and conventional distribution system planning decisions; (c) better information for customers, to help inform distributed energy resources installation and operation decisions; and (d) better information for third-party vendors who might install or operate distributed energy resources, either on their own or through the Company’s NWA RFP process.

In general, over the long-term, action-based incentives may be less desirable than program-based or outcome-based incentives because they are not as closely linked to desired outcomes. Action-based incentives are best used to enable programs and initiatives that will achieve the desired outcomes. They are also best used as a transitional approach where they can evolve over time to be more program- or outcome-based. In this case, the actions included in the SRP incentive are designed to help transform the Rhode Island electricity industry in the direction indicated in the recent Power Sector Transformation report to Governor Raimondo.

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1-3. Why did the Division sign onto the 2018 System Reliability Procurement (SRP) Report? Please address in the response, the OER's and Division's November 20, 2018 joint comments filed with the PUC concerning potential refinements to the 2018 SRP Report.

Response:

Response:

The 2018 SRP Report was prepared by National Grid, with input from the Division and other parties. The Division signed on to the 2018 SRP Report because the Division generally supports the elements of the 2018 SRP Report, which represent a first step toward the evolution of SRP from a project-based to an information-based approach. Also, see response to 1-4, below.

The Division's views on the 2018 SRP Report are described in the OER and Division's November 20, 2018 joint comments, which provides overall comments, potential refinements to the 2018 SRP Report, future work, and key future milestones. The potential refinements to the 2018 SRP Report include:

- a) The 2018 SRP Report does not provide sufficient information to fully assess the Company's benefit-cost analysis of the Battery Storage Project.
- b) The 2018 SRP Report does not provide sufficient information to assess if the illustrative incentive calculation for the Battery Storage Project is consistent with the proposed savings-based SRP incentives described in the 2018 SRP Report.

The Company recently provided the Division with information addressing both of these potential refinements. The new information supports the Company's findings that the Battery Storage Project is cost-effective. The new information also indicates that the illustrative incentive calculation is generally consistent with the proposed savings-based SRP incentives

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1-4. Why is the 2018 SRP Report in the public interest?

Response:

According to the 2017 SRP Standards, “SRP is interpreted to mean an ongoing distribution company practice to maximize the prudent, reliable, and environmentally responsible use of NWAs to meet electric distribution system needs and optimize grid performance, subject to a system whereby wires solutions and NWA solutions can be properly compared for both benefits and costs. NWA, including partial NWA, may be procured to meet distribution system needs of both load and generation.”

Furthermore, SRP “seek[s] to enable the deployment of cost-effective NWAs to achieve state policy goals, optimize grid performance, enhance reliability and resiliency, and encourage optimal investment by the distribution company.”

The 2018 SRP Report is consistent with the substance and spirit of these Standards, as it identifies opportunities to implement NWA solutions that avoid the need to deploy conventional capital investment solutions. The Company’s proposals in the 2018 SRP report are likely to be in the public interest because they represent important steps in the process of transforming the Rhode Island electricity industry in the direction indicated in the recent Power Sector Transformation report to Governor Raimondo. The data portal, the loading map, the DG-focused map, the updated avoided costs, and the marketing and engagement plan will provide information that is essential for encouraging customers and third-parties to plan for and implement distributed energy resources. The NWA RFPs represent a potentially powerful tool for identifying and implementing cost-effective NWA opportunities, beyond those that the Company is able to identify.

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1-5. Is the Division working with the Company regarding the OER's and Division's November 20, 2018 joint comments concerning potential refinements to the 2018 SRP Report? Does the Division anticipate filing with the PUC amendments to the 2018 SRP Report?

Response:

The Division is open to working collaboratively with the Company and other relevant parties to make potential refinements to the 2018 SRP Report. The Division is open to filing with the PUC amendments to the 2018 SRP Report, if such amendments are warranted.

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State of Rhode Island  
Division of Public Utilities and  
Carriers

By his attorney,



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Dated: December 8, 2017

**CERTIFICATE OF SERVICE**

I hereby certify that on the 8th day of December, 2017, that I transmitted an electronic copy of the within Responses to Data Requests to the attached service list and to Luly Massaro, Commission Clerk via electronic mail and regular mail.



**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 11/27/17**

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