

**RHODE ISLAND
PUBLIC UTILITIES COMMISSION**

The Narragansett Electric Co. d/b/a National Grid –)	
Application for Approval of a Change in Electric and)	
Gas Base Distribution Rates)	Docket 4770
(filed on November 27, 2017))	

**NEW ENERGY RHODE ISLAND
EIGHTEENTH SET OF DATA REQUESTS**

(NERI 18-1 through NERI 18-5)

1. Unless otherwise specified below, “the Company” and “Narragansett” refers to the Narragansett Electric Co. d/b/a/ National Grid.
2. Where work papers are requested, please provide work papers in Excel format.

The Narragansett Electric Co. d/b/a National Grid—Application for Approval of a Change in Electric and Gas Base Distribution Rates (filed on November 27, 2017)

Docket 4770

Request for Information

Requesting Party: New Energy Rhode Island (NERI)
To: National Grid
Request No.: NERI 18-1 through 18-5
Date of Request: March 12, 2018
Response Due Date: Rolling
Subject/Panel: Modern Grid (Docket 4780 Book 1, Chapters 3 and 10; Technical Conference 01/26/18; Pre-filed testimony; Work Papers)

- 18-1. Reference the Company's statement during the January 26, 2018 Technical Conference on the "Modern Grid" (the "01/26 Conference"), during which the Company stated that it does not plan to create a Power Sector Transformation ("PST") department within the Company.
- a. Please describe whether the Company intends to integrate the PST programs and investments into overall staffing, management, training, operations, and cost recovery in a holistic and forward-thinking way.
 - b. If the answer to 1(a) is "yes," please describe how the Company intends to do so.
- 18-2. Reference Chapter 3, p. 16, and the Company's statement during the January 26 Conference that the Company proposes to "align" various programs and filings going forward, but does not intend to "fully integrate" all of them into a single filing.
- a. Please provide a list of all of the various programs and filings that would be included in this process of alignment.
 - b. Please describe how the Company proposes to align the various interrelated programs and filings in the future.
 - c. Please describe the stakeholder process the Company proposes to use in soliciting feedback regarding aligning its programs and filings, including timelines and process stages.
- 18-3. Please provide a list of which components and programs of the PST would be open to stakeholder engagement, and which components and programs the Company would seek to develop without stakeholder input.
- 18-4. In the recent Docket 4774 (REG program), the record included a Company presentation where screening for locational incentives did not include consideration of any assets scheduled for upgrade due to their age or condition.
- a. Please explain why the Company did not include consideration of assets needing improvement / upgrade.
 - b. Is the Company's alternatives analysis only between non-wires alternatives and recently improved and high performing assets?

- 18-5. Has the Company conducted, or did the Company rely on any existing analyses to determine whether any components or programs of the Grid Modernization proposal could be provided by third-party providers? If yes:
- a. Please list and provide copies of those studies.
 - b. Did the Company identify any Grid Modernization components or programs that could be open to market competition to enhance value? If not, why not?

**RHODE ISLAND
PUBLIC UTILITIES COMMISSION**

**The Narragansett Electric Co. d/b/a National Grid –
Application for Approval of a Change in Electric and
Gas Base Distribution Rates
(filed on November 27, 2017)**

Docket 4770

**NEW ENERGY RHODE ISLAND
NINETEENTH SET OF DATA REQUESTS**

(NERI 19-1 through NERI 19-4)

1. Unless otherwise specified below, “the Company” and “Narragansett” refers to the Narragansett Electric Co. d/b/a/ National Grid.
2. Where work papers are requested, please provide work papers in Excel format.

The Narragansett Electric Co. d/b/a National Grid—Application for Approval of a Change in Electric and Gas Base Distribution Rates (filed on November 27, 2017)

Docket 4770

Request for Information

Requesting Party: New Energy Rhode Island (NERI)
To: National Grid
Request No.: NERI 19-1 through 19-4
Date of Request: March 12, 2018
Response Due Date: Rolling
Subject/Panel: 4600 Goals/Framework (Docket 4780 Book 1, Chapter 2; Technical Conference 01/26/18; Pre-filed testimony; Work Papers)

- 19-1. Please reference Chapter 2, p. 35. Please explain why the “best-fit/least-cost assessment is the most practical approach to evaluating traditional utility infrastructure and core platform investments.”
- 19-2. Please reference Chapter 2, p. 36. Please explain what is meant by the phrase “directly considered” in the following statement: “Where the benefits of DER deployment are being directly considered in the evaluation of project alternatives or other investments that integrate DERs into the power system, *a societal benefit-cost analysis* may be useful to evaluate the cost-effectiveness of certain grid investments in relation to the value potential from enabling customer DER integration and/or DER utilization.”
- 19-3. Please reference Chapter 2, p. 36 to 37.
- a. Did the Company solicit stakeholder engagement in developing the Rhode Island specific benefit cost assessment (BCA) methodology, including, but not limited to, stakeholders who participated in Docket 4600?
 - b. Why did the Company develop a new BCA methodology, rather than using the stakeholder developed Docket 4600 BCA Framework?
- 19-4. Please reference the statement on Chapter, 2, p. 36, that, “Proposals relating to AMF deployment, beneficial electrification programs in transportation and heating, and investments in storage and solar have more quantifiable benefits that can be assessed through a detailed benefit-cost analysis. For these investments, the Company has developed a Rhode Island specific benefit-cost analysis (BCA) methodology consistent with the state’s Docket 4600 guidance. Further details on the Rhode Island methodology are provided in the section that follows.”
- a. Does the Company consider the term “distributed energy resources” to include storage and solar? How does the Company define the term “distributed energy resources?”
 - b. If yes, what standard, test, or criteria does the Company use to distinguish which DER projects or proposals should be evaluated under the Category 3 (the societal benefit-cost analysis) versus the Rhode Island specific BCA methodology?

**RHODE ISLAND
PUBLIC UTILITIES COMMISSION**

**The Narragansett Electric Co. d/b/a National Grid –
Application for Approval of a Change in Electric and
Gas Base Distribution Rates
(filed on November 27, 2017)**

Docket 4770

**NEW ENERGY RHODE ISLAND
TWENTIETH SET OF DATA REQUESTS**

(NERI 20-1 through NERI 20-14)

1. Unless otherwise specified below, “the Company” and “Narragansett” refers to the Narragansett Electric Co. d/b/a/ National Grid.
2. Where work papers are requested, please provide work papers in Excel format.

The Narragansett Electric Co. d/b/a National Grid—Application for Approval of a Change in Electric and Gas Base Distribution Rates (filed on November 27, 2017)

Docket 4770

Request for Information

Requesting Party: New Energy Rhode Island (NERI)
To: National Grid
Request No.: NERI 20-1 through 20-14
Date of Request: March 12, 2018
Response Due Date: Rolling
Subject/Panel: AMF (Docket 4780 Book 1, Chapter 4; Technical Conference 02/08/18; Pre-filed testimony; Work Papers)

- 20-1. Explain the Company’s statement in Chapter 4, p. 2, that “Exploring the use of open integration standards and protocols and outsourcing key system components where it makes sense to minimize the risk of premature obsolescence and ensure maximum technology agility in the future.”
- 20-2. In relation to the frequency of reporting intervals (4 hours for electric, 8 hours for gas customers), has the Company undertaken an analysis of the added costs that would be incurred if the Rhode Island AMF stakeholder process concluded that a more frequent reporting interval is desirable in Rhode Island?
- 20-3. Is there any overlap between the Company’s proposed AMF, SCADA, ADMS, operational data management, and / or the 5G initiative that has been overseen by the Division? If yes, are there any duplicative functionalities or costs?
- 20-4. Reference Chapter 4, p. 23, Section 6.2.
 - a. How much will the Company charge customers who wish to opt out of the AMF program?
 - b. Please describe how the opt-out fee will be calculated.
- 20-5. Will the Company propose the same set of program evaluation metrics in Rhode Island as in New York and, potentially, Massachusetts?
- 20-6. Reference Chapter 4, p. 11-13. Will the Company develop program evaluation metrics to assess whether the AMF program is achieving the benefits the Company describes in Section 3.2?
- 20-7. As part of program evaluation metrics, will the Company measure customer satisfaction and engagement? If yes, will the Company identify and measure satisfaction and engagement for low-income, or “income-eligible,” customer participants as a distinct class?
- 20-8. How does the Company define “income-eligible customers” for purposes of the AMF program?
- 20-9. Reference Chapter 4, p. 5, describing the AMF program implementation and timeline, p. 24-25, regarding process design, and the Company’s statements during the 02/28 Tech Conference regarding stakeholder engagement in its Rhode Island and New York AMF

program development processes.

- a. Has the Company developed any proposed stakeholder engagement timelines and processes to engage Rhode Island stakeholders in its New York (Niagara Mohawk) AMI program development, and New York stakeholders in its Rhode Island AMF program development? If yes, please describe those proposed timelines and processes.
 - b. Does the Company plan to coordinate the New York and Rhode Island deployment processes? If so, please describe how.
- 20-10. Has the Company deployed AMF in its home territory in the United Kingdom? If yes, will the Company apply any lessons-learned or best-practices from its UK service territory in Rhode Island?
- 20-11. Reference the Company's statement in Chapter 4, p. 3, that "The results of the BCA tests show that full deployment of AMF can achieve net positive benefit-to-cost ratios in both scenarios." Did the BCA test anticipate any potential savings to the costs addressed in the Company's base rate case?
- 20-12. Reference the Company's statement in Chapter 4, p. 7, that "supply prices would increase further by time of day on a limited number of specific days (typically during high demands on the electrical system, where customers are notified in advance) designated as critical peak pricing events." Will the Company also consider time varying rates for storage and/or supply-side solutions?
- 20-13. Does the Company's AMI program, as proposed, include remote disconnect capability? If yes, does it also include remote re-connect capability?
- 20-14. Please describe in detail all of the expenditures and savings for the proposed AMI program deployment. Please list all of the FERC accounts against which the Company plans to track the program expenditures and savings.

**RHODE ISLAND
PUBLIC UTILITIES COMMISSION**

**The Narragansett Electric Co. d/b/a National Grid –
Application for Approval of a Change in Electric and
Gas Base Distribution Rates
(filed on November 27, 2017)**

Docket 4770

**NEW ENERGY RHODE ISLAND
TWENTY-FIRST SET OF DATA REQUESTS**

(NERI 21-1 through NERI 21-27)

1. Unless otherwise specified below, “the Company” and “Narragansett” refers to the Narragansett Electric Co. d/b/a/ National Grid.
2. Where work papers are requested, please provide work papers in Excel format.

The Narragansett Electric Co. d/b/a National Grid—Application for Approval of a Change in Electric and Gas Base Distribution Rates (filed on November 27, 2017)

Docket 4770

Request for Information

Requesting Party: New Energy Rhode Island (NERI)
To: National Grid
Request No.: NERI 21-1 through 21-27
Date of Request: March 12, 2018
Response Due Date: Rolling
Subject/Panel: Performance Incentives (Docket 4780 Book 1, Chapter 9; Technical Conference on 01/31/18; Pre-filed testimony; Work Papers)

- 21-1. For each performance incentive the Company proposes, please describe:
- a. How baseline conditions were calculated:
 - i. What data did the Company use?
 - ii. How many years of data did the Company use?
 - iii. Which categories of costs do baseline assumptions reflect?
 - b. How the proposed incentive levels were designed.
 - c. The net cost (*i.e.*, the costs of paying incentives) versus benefits (*i.e.*, reductions in revenue requirements and operating costs) for each incentive category?
- 21-2. For each performance incentive the Company proposes, please describe how the Company addressed temporal mismatches in the proposed incentives. In other words, do changes in the Company's practices and operations in response to the incentives result in ratepayer revenue requirements savings on a contemporaneous basis with the cost of incentive payments? What consideration or adjustments did the Company make, or does the Company propose, to address these issues?
- 21-3. For each performance incentive the Company proposes, please describe:
- a. What inter-class and intra-class issues the Company considered in the proposals.
 - b. How the Company addressed, or proposes to address, these issues.
 - c. To what extent demand-related savings accrue to customers that cause demand reductions.
 - d. How are the benefits created by the incentives tracked against cost of service elements in the development and updating of cost of service study and revenue requirements?
- 21-4. For each performance incentive the Company proposes, please describe the ultimate consumption, usage, bill, revenue requirement, or other outcomes that the incentive was

- designed to achieve.
- 21-5. For proposed incentives that do not include outcome-based metrics (and instead, for example, uses metrics with number of dollar spent, or systems installed), please explain why those incentives do not include outcome-based metrics.
 - 21-6. Reference Chapter 9, p.8. How does the Company account for the risk of double-incentivizing single outcomes? For example, reducing peak demand can also reduce carbon emissions.
 - 21-7. How does the Company match savings causers with program costs? For example, volt-var optimization, increased capacity for distributed generation, and demand-response will all contribute to peak reduction; even if baseline forecasts of other incentive programs have been included in peak reduction targets, how will the Company prevent a PBI that over-performs its baseline from also being counted toward peak reduction?
 - 21-8. Reference the Company's statement in Chapter 9, p. 8, that it "expects a number of programs and resources, including energy efficiency, energy storage, distributed generation, grid modernization efforts such as the deployment of volt-var optimization (VVO), and demand response to contribute to meeting these peak demand reduction targets." The Company also states that forecasts for these other incentivized programs are included in the peak forecasts. How were those forecasts determined, and are they below the maximum target for each program? Will above-forecast levels of attainment of incentivized programs be double-counted by peak reduction incentives?
 - 21-9. The Company proposes positive-only incentives in order to test the efficacy of performance-based programs. Please explain the Company's position about when incentives should be positive-only, or asymmetrical, and when they should be designed to be symmetrical, that is, containing both positive incentives and penalties.
 - 21-10. Has the Company's experience in other jurisdictions and in the gas utility business informed its incentive proposals? If yes, please describe that experience.
 - 21-11. For the Capital Efficiency Incentive, did the Company consider the risk that, as designed, it could have the effect of incentivizing over-budgeting in project planning?
 - 21-12. Did the Company evaluate the impact of the proposed incentives on the Company's overall risk profile as relates to earning and exceeding revenue requirements? If yes, what were the results of the evaluation?
 - 21-13. Did the Company evaluate any other efforts and/or outcomes for developing additional incentives? If yes, please describe those additional efforts and/or outcomes, and why they were not proposed as PBIs.
 - 21-14. Has the Company evaluated the value of "scorecard metrics" to begin tracking data on behaviors and outcomes that may not yet be ready for treatment with earnings incentives?
 - 21-15. For each performance incentive the Company proposes, please provide a list and description of the specific data and metrics that the Company will track and report.
 - 21-16. Did the Company consider developing a PBI to incentivize avoiding capital projects in the ISR, rather than reducing the cost of projects already proposed? Did the Company also consider a PBI for avoiding distribution line projects and maintenance, instead of an incentive for reducing cost-per-mile of completed projects?
 - 21-17. Reference Chapter 4, p. 9. How did the Company determine that the cap on retained savings should be \$2.5 million on expected yearly budgets of \$5-\$15 million? Does the Company have reason to believe it is overspending by 30% or more on Complex Capital Projects?
 - 21-18. Why are PBIs necessary for programs or policies currently underway or pending

- Commission approval? In particular, please reference the existing/pending programs described on Chapter 9, p. 14, regarding the incentive for the delivery of the VVO pilot, and Chapter 9, p. 10, regarding the DG substations incentive for the 3V0 program already submitted in an ISR filing. What incremental or additive actions by the Company will ratepayers be incentivizing through the PBIs proposed in the PST plan?
- 21-19. Reference Chapter 4, p. 10-11, regarding the DG-Friendly Substation Transformer.
- a. Please describe what actions by the Company will be incentivized by the DG-Friendly Substation Transformer PBI that are not incented by the suite of Interconnection PBIs or current Company practice.
 - b. Did the Company consider an outcome-based metric, such as the amount of increased DG installed by customers resulting from the work, rather than the amount of work completed by the Company?
- 21-20. Reference the Company's statement in Chapter 4, p. 20, that "The Company has proposed the largest incentive around the DG-Friendly Substation metric. The Company's proactive installation of 3V0 has the potential to expedite interconnection of large quantities of distributed generation, thereby expediting the achievement of the benefits described above. However, the Company has not quantified the net benefits to customers from these efforts, due to the assumptions that would have to be made about the timing of distributed generation installations absent these investments, the number and size of installations accelerated, and the specific technology being installed." Please explain why the DG-Friendly Substation Transformer metric is allocated a large number of potential basis points if the customer benefit has not been calculated.
- 21-21. For performance incentive programs that do not currently have set targets, how did the Company allocate basis points?
- 21-22. For each performance incentive the Company proposes, how did it calculate basis points in proportion to customer savings?
- 21-23. Reference Chapter 9, p. 13, regarding Behind-the-Meter Storage. Please describe:
- a. What action will the Company be incentivized to perform with regard to behind the meter storage?
 - b. What metrics will the Company use to track and evaluate the program?
 - c. Does the Company have any current or potential programs for promoting behind-the-meter storage independent of this PBI?
- 21-24. Reference Chapter 9, p. 12, regarding the Electric Heat Initiative. Will the Company's natural gas customers be eligible and targeted for beneficial heat electrification?
- 21-25. Please provide the program costs associated with the Electric Heat and Electric Vehicle Initiatives. Please confirm that those costs are incorporated in the Company's revenue requirement.
- 21-26. Reference Chapter 4, p. 16, regarding the Interconnection Support – Estimate versus Actual Cost. Please describe how the Company will develop the "sum of costs estimated by the Company for interconnection."
- 21-27. Has the Company accounted or controlled for the possibility that the DG-Friendly Substation Program and the suite of Interconnection incentives may result in double-incenting the same outcomes (*e.g.*, decreased costs and time required for interconnection)?