

**The Narragansett Electric Co. d/b/a National Grid's Proposed
Power Sector Transformation (PST) Vision and Implementation Plan**

Docket 4780

Request for Information

Requesting Party: New Energy Rhode Island (NERI)
To: National Grid
Request No.: NERI-1
Date of Request: February 27, 2018
Response Due Date: March 20, 2018
Subject/Panel: Modern Grid (Book 1, Chapters 3 and 10; Technical Conference 01/26/18;
Pre-filed testimony; Work Papers)

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.

Response can be found on Bates page(s) 1.

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.

Response can be found on Bates page(s) 2.

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.

Response can be found on Bates page(s) 3.

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?

Response can be found on Bates page(s) 4.

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?

Response can be found on Bates page(s) 5-7.

NERI 1-1

Request:

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.

Response:

- a. The Power Sector Transformation (PST) projects are broad reaching and require the support of many departments within National Grid. If approved, the Company will implement appropriate governance to ensure the PST Plan is implemented in a holistic manner.
- b. Regarding the implementation of the PST Plan as well as similar proposals in other jurisdictions, the Company, and its affiliates, has initiated a planning effort focused on coordinating our various grid modernization efforts, including PST Plan implementation. Through this effort, National Grid plans to develop a strategy that is aligned and coordinated across our jurisdictions, identifies areas of synergistic value, seeks optimization of the collective investments required, and is enabled within our internal processes. In addition, a cross functional governance structure will be created for the PST Plan to ensure the implementation of an approved portfolio of work is progressed in an efficient manner throughout the Company and with cost recovery through the PST mechanism proposed in Schedule PST-1, Chapter 10 – Funding the Transformation. Specific project accounting for the PST Plan activities will be created to capture costs to avoid double counting for recovery through any other mechanism.

(This response is identical to the Company's response to NERI 18-1 in Docket No. 4770)

NERI 1-2

Request:

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.

Response:

- a. The Company has a history of aligning the System Reliability Procurement (SRP) and Energy Efficiency (EE) processes and has worked with the Energy Efficiency Resources Management Council (EERMC) since 2009 on this effort. Going forward, the Company will add alignment of the plans presented in the Power Sector Transformation (PST) and Infrastructure, Safety, and Reliability (ISR) to the SRP and EE alignment process, so the Company will ensure that all of the plans complement each other without replication.
- b. Appropriate Company personnel familiar with each of these filings reviews the content of each filing to ensure alignment.
- c. As described in the response to part a. above, the Company has a history of aligning processes and will expand this effort to include future PST and ISR plans. The Company foresees an effort similar to the one currently in place with the EERMC. As the statutory requirement for the EERMC never contemplated capital work (that is instead covered in the ISR plan), a similar process still needs to be developed. To be engaged in the process, a stakeholder should be required to have sufficient technical knowledge of utility planning and construction practices to make the process constructive for all parties.

(This response is identical to the Company's response to NERI 18-2 in Docket No. 4770)

NERI 1-3

Request:

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.

Response:

For the response below, the Company assumes the question is referring to the Grid Modernization section of the Power Sector Transformation (PST) plan.

The technical needs for each Grid Modernization project would be available for stakeholder review, but the Company would make the final decisions as it needs to be assured that any project meets the technical requirements imposed upon it. For some projects, like the System Data Portal project, the Company would seek significant stakeholder engagement, while others, like Cybersecurity, the Company would not seek significant stakeholder engagement because of security or other concerns.

(This response is identical to the Company's response to NERI 18-3 in Docket No. 4770)

NERI 1-4

Request:

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?

Response:

On March 9, 2018, the Company filed an objection to this data request because it is beyond the scope of the Docket No. 4780 proceeding. The Company's objection is currently pending before the Public Utilities Commission.

(This response is identical to the Company's response to NERI 18-4 in Docket No. 4770)

NERI 1-5

Request:

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?

Response:

The Company has and will be considering third-party provided services as an alternative to the deployment of Company-owned assets in a number of areas of its Grid Modernization plans. For example, the Company is considering third-party services in the areas of telecommunications and information services (IS), such as cloud computing and software-as-a-service for various advanced meter functionality back-office applications. There could be additional IS infrastructure components that could be sourced as well. The decision with respect to sourcing these components will be addressed in Fiscal Year 2019 as part of the detailed planning and procurement phase of the project. For additional details, please see the Company's responses to Division 2-37 and Division 2-39 in this docket, which are included here as Attachment NERI 1-5-1 and Attachment NERI 1-5-2, respectively.

- a. The Company based its initial proposals on experience with similar projects and did not conduct analyses, or rely on existing analyses directly associated with the Rhode Island Power Sector Transformation (PST) projects.
- c. No. The Grid Modernization plans proposed in the PST Plan are foundational enabling technologies that are intended to create an integrated platform to provide access to the distribution system for distributed energy resource providers. Although, in the future, the platform may enable more market-based services, the Company has not identified that any of its currently proposed investments should be provided by others through market-based services. These foundational investments should be controlled by the utility to ensure safe and reliable service to customers.

(This response is identical to the Company's response to NERI 18-5 in Docket No. 4770)

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4780
Responses to Division's Second Set of Data Requests
Issued January 8, 2018

Division 2-37

Request:

Please explain the rationale behind contracting an outside service vendor to host the MDMS rather than the Company hosting the MDMS.

Response:

National Grid assumed a hosted solution to estimate the cost of this function for the AMF component of its Power Sector Transformation Plan filing. The Company has not made a final decision to contract an outside vendor to host the MDMS. A review and comparison of external versus internal hosting solutions must first be performed before a final determination can be made. National Grid will evaluate all potential alternatives as part of the Detailed Planning and Procurement phase in Fiscal Year 2019. This process will include a review of the costs and benefits for each of the viable alternatives with the results being captured in a sanction paper that will be brought forward to the US Sanctioning Committee for approval.

In the event an outside vendor is selected to host the MDMS, the Company believes several benefits could be realized, including faster implementation and enhancement adoption, fewer upgrades to legacy infrastructure, easier upgrades when needed, reduced risk of obsolescence in the future, and the opportunity to enhance security. A Software as a Service (SaaS) solution also provides strategic advantages by facilitating external interfaces with third party partners and can be more easily scaled for additional capacity when required to enable growth.

(This response is identical to the Company's response to Division 8-37 in Docket No. 4770.)

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4780
Responses to Division's Second Set of Data Requests
Issued January 8, 2018

Division 2-39

Request:

Please refer to page 14 of Appendix 4.1 – AMF Technology & BCA, which states: “Cloud Computing & Data Lake – Rather than hosting these data management capabilities on servers within National Grid data centers, greater efficiency, redundancies, and security regimes can be cost effectively procured by outsourcing this function.” Please provide all workpapers, workbooks, and calculations used to make this assessment.

Response:

The Company assumed a hosted solution to estimate the cost of this function for its Power Sector Transformation Plan filing (Docket No. 4780). National Grid hired Accenture to develop cost estimates for the each of the Company's Information Service (IS) grid modernization projects. Accenture assumed that the Company would pursue a hosted solution based on their experiences working with other utility clients and National Grid's IS Service Strategy and Architecture functions indicating that Cloud Computing was an integral part of the Company's strategic direction. Although National Grid believes there are potentially significant benefits in outsourcing the function, a review of each of the alternatives still needs to be performed before a final decision can be made.

As part of the sanctioning and governance process, National Grid's IS team will evaluate all potential alternatives, beginning mid-Fiscal Year 2019. This process will include a review of the costs and benefits for each of the viable alternatives, with the results being captured in a sanction paper that will be presented to the US Sanctioning Committee for approval. To the extent that additional vendor information is required, IS will issue requests for proposals and engage in competitive and strategic negotiations with vendors to determine which alternative provides the best value for customers.

For copies of the IS work books for each of the grid modernization projects including the Cloud Computing and Data Lake project, please refer to Attachment DIV 2-4-2.

(This response is identical to the Company's response to Division 8-39 in Docket No. 4770.)

Prepared by or under the supervision of: John Leana