

**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-7  
**Date of Request:** 3.2.18  
**Response Due Date:** 3.23.18 (rolling by agreement)  
**Subject/Panel:** Book 12—Gorman—COSS

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1. Reference p. 14, ll. 16-18. Please provide details on the types of costs actually included in accounts 901-910.

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

2. Reference p. 15, ll. 7-8.
  - a. Please explain and provided details of the costs associated with “maintain[ing] customer-related distribution assets.”
  - b. Please explain how these costs vary and why they are classified as customer costs.
  - c. Please provide the authority supporting that decision.

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

3. Reference p. 15, ll. 8-10. Please provide authority for the proposition that "Customer-related costs are primarily a function of the number of customers served, and the Company incurs such costs whether or not a particular customer uses any electricity." Please describe and provide citations to authoritative rate making literature and/or treatises supporting this definition of customer-related costs.

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

4. Reference p. 15, ll. 8-10.
  - a. Please explain how the Company uses the standard or definition that “customer-related costs are primarily a function of the number of customers served” to classify costs.
  - b. Please confirm whether the Company’s method is similar or different from “minimum-system,” “zero-load,” or other similar methods to apply its definition of “customer-related.”
  - c. Please provide a detailed list of all costs that do not vary with the number of

customers served.

**Response can be found on Bates page(s) 4-5.**

5. Reference p. 15, ll. 10-11. Please confirm that none of the costs that the Company has classified as customer-related are costs that do not vary with usage or load profile. If this is not true, please explain.

**Response can be found on Bates page(s) 6.**

6. Reference p. 15, ll. 12-13. Please confirm that none of the costs classified as customer-related and characterized as "customer service, field service, billing, and accounting" vary solely or primarily as a function of the number of customers served and not level of use. If this is not true, please explain. Please provide data and detailed descriptions to support these assertions.

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

7. Reference p. 16, ll. 2-3. For each category of assets and costs, please explain why "all assets and costs in the Billing function are classified as Customer-related." Please cite authority for this classification.

**Response can be found on Bates page(s) 8.**

8. Reference p. 16, ll. 9-10.
  - a. Please provide details on the extent to which "services and meters" costs are not primarily related to the number of customers.
  - b. Please explain why services and meters not primarily related to the number of customers are classified as customer-related.

**Response can be found on Bates page(s) 9.**

9. Reference p. 17. Please explain the extent to which non-coincident peak demands, in contrast to coincident peak demands, drive system costs at the sub-transmission, primary, and secondary system levels.

**Response can be found on Bates page(s) 10.**

10. Reference p. 18, ll. 17-19.
  - a. Please confirm that the method used in Schedule HSG-2 for allocating transformer costs results in allocating costs to customers from each class regardless of the coincidence of class loads on types of transformers.
  - b. Please confirm whether or not transformers are sized according to the sum of class NCPs, regardless of the coincidence of those NCPs with each other.

**Response can be found on Bates page(s) 11.**

11. Reference p. 27, ll. 1-3.

- a. Please list and provide copies of or citations to publicly-available and no-cost sources for all authorities relied upon in making the assertion that “it is appropriate to include some portion of demand-related costs in the monthly charge, in order to align the utility’s revenue and costs more closely, and to help stabilize the utility’s revenue and customers’ costs.”
- b. Please explain what is meant by alignment of the utility’s revenues and costs more closely.
- c. Please confirm whether the Company’s position is that this alignment of costs and revenues advances economic efficiency and the setting of just and reasonable rates.
- d. Please cite authorities for any positions on these issues held by the witness or the Company.

**Response can be found on Bates page(s) 12-13.**

12. Reference p. 28, ll. 4-7. Please cite any authority for and examples of use of the witness’ proposed method for determining the amount of demand costs to be included in the proposed fixed customer charge.

**Response can be found on Bates page(s) 14.**

13. Reference p. 28, ll. 4-7. Please explain how the witness’ proposed method relates to the actual usage and level of demand by individual customers.

**Response can be found on Bates page(s) 15.**

14. Reference p. 28, ll. 9-14. Please explain how the witness and the Company believe that the Commission’s work in Docket 4600 and the Power Sector Transformation process relate to the witness’ recommendation that the Commission adopt an agenda of systematically increasing the amount of demand-related costs through the fixed customer charge.

**Response can be found on Bates page(s) 16.**

15. Reference p. 28, ll. 16-22. Please provide a bill impacts analysis that groups customers by income level and usage level (kWh increments as per HSG-5, and number of low-income customers in each bin), and shows the impacts of the proposed changes in A-16 and A-60 rates. If the data is not available, please explain why it is not available.

**Response can be found on Bates page(s) 17.**

NERI 7-1

Request:

Reference p. 14, ll. 16-18. Please provide details on the types of costs actually included in accounts 901-910.

Response:

The costs included in Federal Energy Regulatory Commission (FERC) accounts 901 through 910 follow the FERC account definitions as stated in the Code of Federal Regulations applicable to utility accounting. Accounts 901-905 are Customer Records and Accounting and Collection costs, including the cost for uncollectible accounts, and Account 907-910 are Customer Service and Assistance costs. The amounts in each account are shown in Exhibit HSG-1B, lines 90-101 (page 3).

NERI 7-2

Request:

Subject: Book 12—Gorman—COSS

Reference p. 15, ll. 7-8.

- a. Please explain and provided details of the costs associated with “maintain[ing] customer-related distribution assets.”
- b. Please explain how these costs vary and why they are classified as customer costs.
- c. Please provide the authority supporting that decision.

Response:

- a. The Company incurs costs of maintaining meters and the service to the customer's service location. These expenses are incurred to maintain these customer-related distribution assets and are recorded in FERC Account 586, Operation of Meter Expenses; Account 587, Operation of Customer Installation Expenses; and Account 597, Maintenance of Meters.
- b. Meters and services are classified as customer-related and, accordingly, the costs of operating and maintaining meters and services are customer-related. These costs vary with the number of meters and services installed, which is a function of the number of customers connected to a utility's distribution system.
- c. Classifying the costs of operating an asset in the same manner as the asset is classified is acceptable practice in every jurisdiction with which Mr. Gorman is familiar. In particular, classifying Operation of Meter Expenses, Account 586, and Maintenance of Meters, Account 597, as customer-related is endorsed in the NARUC Manual, January 1992 edition, page 88.

NERI 7-3

Request:

Subject: Book 12-Gorman-COSS

Reference p. 15, ll. 8-10. Please provide authority for the proposition that “Customer-related costs are primarily a function of the number of customers served, and the Company incurs such costs whether or not a particular customer uses any electricity.” Please describe and provide citations to authoritative rate making literature and/or treatises supporting this definition of customer-related costs.

Response:

The NARUC Manual, January 1992 edition, page 90, states: “The customer component of distribution facilities is that portion of costs which varies with the number of customers.” In addition, the widely accepted book Principles of Public Utility Rates, by Bonbright et al, Second edition, states on page 401: “Customer costs are invariant with respect to consumption. They are the costs incurred to serve a customer even if the customer does not use the service at all.”

NERI 7-4

Request:

Subject: Book 12—Gorman—COSS

Reference p. 15, ll. 8-10.

- a. Please explain how the Company uses the standard or definition that “customer-related costs are primarily a function of the number of customers served” to classify costs.
- b. Please confirm whether the Company’s method is similar or different from “minimum-system,” “zero-load,” or other similar methods to apply its definition of “customer-related.”
- c. Please provide a detailed list of all costs that do not vary with the number of customers served.

Response:

- a. The costs that the Company has classified as customer-related are service drops and meters and related operation and maintenance (O&M) costs (discussed in the Company’s response to NERI 7-2), and Customer Records, Accounting, and Collection costs and Customer Service Costs (discussed in the Company’s response to NERI 7-1). The Company also classified allocated portions of General Plant and Administrative and General (A&G) costs as customer-related. Plainly, these assets and costs are primarily a function of the number of customers served, and bear no relation to demand or usage.
- b. The studies listed in part b. to this data request are used to determine the customer-component of assets such as conductors and transformers. The Company did not perform any of those studies and did not classify any portion of conductors or transformers as customer-related.
- c. The Company classified costs as either demand-related or customer-related, as described in the pre-filed direct testimony of Mr. Gorman. The costs that vary with the number of customers and bear no relation to demand or usage, as identified in the Company’s responses to NERI 7-1 and NERI 7-2, were classified as customer-related. All other costs were classified as demand-related. Please see Schedule HSG-1D, the results of the Company’s functionalization study, where the last column on the right labeled Billing is customer-related, and Schedule HSG-1E for the classification of the amounts functionalized as Primary Dist and Secondary Dist columns from Schedule HSG-1D between demand-related and customer-related. These schedules indicate the types of

costs by FERC Account that are functionalized and classified as demand-related and customer-related.

NERI 7-5

Request:

Subject: Book 12—Gorman—COSS

Reference p. 15, ll. 10-11. Please confirm that none of the costs that the Company has classified as customer-related are costs that do not vary with usage or load profile. If this is not true, please explain.

Response:

The question as written is not clear. The costs that the Company classified as customer-related do not vary with usage or load profile.

NERI 7-6

Request:

Subject: Book 12-Gorman-COSS

Reference p. 15, ll. 12-13. Please confirm that none of the costs classified as customer-related and characterized as "customer service, field service, billing, and accounting" vary solely or primarily as a function of the number of customers served and not level of use. If this is not true, please explain. Please provide data and detailed descriptions to support these assertions.

Response:

The costs classified for "customer service, field service, billing, and accounting" are classified as customer-related. These costs are primarily related to the number of customers served. The costs are sometimes incurred as a step-function; for example, although it is not necessary to add a customer service representative for each new customer, as the number of customers increases, customer service representatives must be added. Similarly, some of the costs to design and program the billing system are fixed, but, as the number of customers increases, it may be necessary to increase capacity.

These costs are clearly not related to the level of usage or to peak usage.

NERI 7-7

Request:

Subject: Book 12-Gorman-COSS

Reference p. 16, ll. 2-3. For each category of assets and costs, please explain why “all assets and costs in the Billing function are classified as Customer-related.” Please cite authority for this classification.

Response:

As discussed in the Company's response to NERI 7-6, these costs are primarily related to the number of customers served, and these costs are clearly not related at all to the level of usage or to peak usage.

The NARUC Manual, January 1992 edition, page 102 states: “Customer-related costs (Accounts 901-917) include the costs of billing and collection, providing service information, and advertising and promotion of utility services.”

In addition, the widely accepted book Principles of Public Utility Rates, by Bonbright et al, Second edition, states on page 401: “Customer costs are invariant with respect to consumption. They are the costs incurred to serve a customer even if the customer does not use the service at all.”

NERI 7-8

Request:

Subject: Book 12-Gorman-COSS

Reference p. 16, ll. 9-10.

- a. Please provide details on the extent to which “services and meters” costs are not primarily related to the number of customers.
- b. Please explain why services and meters not primarily related to the number of customers are classified as customer-related.

Response:

- a. This question is not clear. Mr. Gorman’s pre-filed direct testimony states that the investment in services and meters is primarily related to the number of customers. Although the service or meter is sized based on the peak demand of the customer, this is reflected in the allocation step of the allocated cost of service study, as shown on Exhibit HSG-2G and Exhibit HSG-2H.
- b. See the response to part a. above.

NERI 7-9

Request:

Subject: Book 12-Gorman-COSS

Reference p. 17. Please explain the extent to which non-coincident peak demands, in contrast to coincident peak demands, drive system costs at the sub-transmission, primary, and secondary system levels.

Response:

Transmission assets are designed to meet the system peak demand, or 1CP. On the other hand, sub-transmission, primary distribution, and secondary distribution system assets are designed to meet local area demands, or non-coincident peak (NCP) demands. In fact, the share of each class' contribution to 1CP and NCP at 115 was very similar:

<b>Class</b>	<b>Share of 1CP</b>	<b>Share of NCP at 115</b>
Residential	48.04%	48.38%
Small C&I	9.68%	9.66%
General C&I	16.91%	16.32%
200 kW Demand	21.12%	19.88%
5000 kW Demand	3.94%	4.40%
Lighting	0.01%	0.79%
Propulsion	0.30%	0.57%
<b>Total</b>	<b>100.00%</b>	<b>100.00%</b>

NERI 7-10

Request:

Subject: Book 12-Gorman-COSS

Reference p. 18, ll. 17-19.

- a. Please confirm that the method used in Schedule HSG-2 for allocating transformer costs results in allocating costs to customers from each class regardless of the coincidence of class loads on types of transformers.
- b. Please confirm whether or not transformers are sized according to the sum of class NCPs, regardless of the coincidence of those NCPs with each other.

Response:

- a. It is not correct to say that the transformer costs are allocated “regardless of the coincidence of class loads on types of transformers.”

The allocation of transformer costs is based on a special study of the customers served by each transformer. Among customers who used the same type of transformer (e.g., OH 1 phase 50 kVA), the costs were allocated based on individual customer contributions to the class peak. Transformers are installed to meet loads for local areas, and this method closely aligns the transformer costs with the demands placed on the system by the customers.

- b. Transformers are sized to meet local area loads. See the response to part a. above.

NERI 7-11

Request:

Subject: Book 12—Gorman—COSS

Reference p. 27, ll. 1-3.

- a. Please list and provide copies of or citations to publicly-available and no-cost sources for all authorities relied upon in making the assertion that “it is appropriate to include some portion of demand-related costs in the monthly charge, in order to align the utility’s revenue and costs more closely, and to help stabilize the utility’s revenue and customers’ costs.”
- b. Please explain what is meant by alignment of the utility’s revenues and costs more closely.
- c. Please confirm whether the Company’s position is that this alignment of costs and revenues advances economic efficiency and the setting of just and reasonable rates.
- d. Please cite authorities for any positions on these issues held by the witness or the Company.

Response:

- a. The rationale for Mr. Gorman’s assertion is provided on Page 26 (Bates Page 30) in his pre-filed direct testimony. First, little to none of Narragansett Electric’s costs are affected by kWh usage; however, for the residential and small commercial and industrial (C&I) rate classes, all costs not recovered in the customer charge are recovered on a kWh basis. This includes all demand-related costs as well as the portion of customer-related costs not recovered by the customer charge. Second, most customers use a minimum level of demand each month; the study results presented on Page 27 (Bates Page 31) of Mr. Gorman’s testimony show that for Narragansett Electric, over 93 percent of residential customers’ monthly bills had at least 0.50 kW usage, and 100 percent had 0.50 kW at least once during the year. This data strongly support including some level of demand-related costs in the fixed monthly charge.
- b. This means that fixed costs that are not incurred based on the kWh deliveries over the distribution system should be recovered through a fixed charge, which promotes sound economics (i.e., the utility does not have to worry that it will install assets that will be

used too infrequently to recover its costs; the customer does not have to worry that it is paying more than the cost incurred by the utility for an asset).

- c. Yes.
- d. This position is supported by those utilities and commissions that have implemented either revenue decoupling or straight fixed variable rates. Edison Electric Institute identifies 12 jurisdictions with some form of electric revenue decoupling and 22 jurisdictions with some form of gas revenue decoupling.

In addition, the American Water Works Association supports including a portion of capacity as a readiness charge, because the utilities invest in facilities to provide capacity, and the costs must be recovered regardless of the amount of water used during a given period.

NERI 7-12

Request:

Subject: Book 12-Gorman-COSS

Reference p. 28, ll. 4-7. Please cite any authority for and examples of use of the witness' proposed method for determining the amount of demand costs to be included in the proposed fixed customer charge.

Response:

The inclusion of demand costs in the analyses used to develop the proposed Rate A-16 customer charge is supported by those utilities and regulatory commissions that have implemented either revenue decoupling or straight fixed variable rates. As discussed in the Company's response to NERI 7-13, based on the sample reviewed, the amount of demand costs considered in the proposed fixed monthly charge reflects a level of demand that is reached in 93 percent of customer-months, and by every residential customer at least once per year. Therefore, it reflects costs actually incurred based on demands by customers.

However, as stated on Page 26 (Bates Page 30) or Mr. Gorman's pre-filed direct testimony, although the customer-related costs of \$9.61 per month plus the cost associated with 0.50 kW of \$5.78 per month totals \$15.39 per month, the Company is proposing a Rate A-16 customer charge of \$8.50 per month, which is not only less than the total of \$15.39 per month, but also less than the \$9.61 per month of customer-related costs.

NERI 7-13

Request:

Subject: Book 12-Gorman-COSS

Reference p. 28, ll. 4-7. Please explain how the witness' proposed method relates to the actual usage and level of demand by individual customers.

Response:

The costs considered for the Rate A-16 fixed customer charge include customer-related costs plus demand-related costs equal to 0.50 kW of demand per customer-month. Based on the sample reviewed, that level of demand is reached in 93 percent of customer-months, and by every residential customer at least once per year. Therefore, the proposed Rate A-16 customer charge of \$8.50 per month is intended to recover the cost for a demand level actually reached by the customers but is not proposed at the full level of \$15.39 per month, as the current Rate A-16 customer charge is \$5.00 per month. Therefore, the Company is proposing to gradually increase the customer charge to a level that will eventually recover both customer-related and a portion of demand-related costs.

NERI 7-14

Request:

Reference p. 28, ll. 9-14. Please explain how the witness and the Company believe that the Commission's work in Docket 4600 and the Power Sector Transformation process relate to the witness' recommendation that the Commission adopt an agenda of systematically increasing the amount of demand-related costs through the fixed customer charge.

Response:

To be clear, the fixed monthly charge that is recommended would comprise both a customer component and a demand component; this is referenced as the fixed monthly charge, not simply the fixed customer charge.

The proposal to include demand-related costs in the fixed charge promotes alignment of revenues and costs more closely, which advances economic efficiency and the setting of just and reasonable rates, as discussed in the Company's response to NERI 7-12.

As discussed in the Docket 4600 Stakeholder Working Group Process Report to the Rhode Island Public Utilities Commission dated April 5, 2017, Section 3.6, at page 16: "Therefore, the Commission should investigate long-term rate design options that will provide price signals to consumers, promote a more efficient use of the electric system, and compensate the utility and others for services to customers. The members of the Working Group all agree with the application of TVR (time varying rates) over the long term.....In addition, changes to customer charges and consideration of demand charges (e.g., specific time blocks where demand would be measured) for both small and large customers warrant consideration."

The following point was also included in Section 3.6 at page 17: "When retail rates for generation and delivery appropriately reflect the underlying cost of the system, it will be possible to accurately charge and credit consumers for the grid services they use and provide in a technology-neutral manner." The Company's proposal is to move its rate design to more appropriately reflect the underlying fixed cost of the system by recovering those costs through a fixed monthly charge.

NERI 7-15

Request:

Subject: Book 12-Gorman-COSS

Reference p. 28, ll. 16-22. Please provide a bill impacts analysis that groups customers by income level and usage level (kWh increments as per HSG-5, and number of low-income customers in each bin), and shows the impacts of the proposed changes in A-16 and A-60 rates. If the data is not available, please explain why it is not available.

Response:

As discussed in the Company's responses to Division 14-34 and Division 14-35, the Company obtains and maintains personal historical income data for residential customers only for the purpose of determining their eligibility for protection from termination of service due to non-payment of their utility bills or for determining payment plans for arrears on their utility accounts. Therefore, Narragansett Electric does not have the income information for its residential customers to prepare the requested bill impacts requested in this data request.