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April 12, 2018

**Via Electronic Mail and First Class Mail**

Luly E. Massaro, Commission Clerk  
Rhode Island Public Utilities Commission  
89 Jefferson Boulevard  
Warwick, Rhode Island 02888


**Re: Docket 4770 – Application of The Narragansett Electric Company d/b/a National Grid for Approval of a Change in Electric and Gas Base Distribution Rates**

Dear Ms. Massaro:

Enclosed for filing in the above-referenced matter are three (3) copies of The Narragansett Electric Company d/b/a National Grid's Second Set of Data Requests to the Division of Public Utilities and Carriers. Please note that these data requests are identical to the data requests from The Narragansett Electric Company d/b/a National Grid's Second Set of Data Requests to the Division of Public Utilities and Carriers in Docket 4780.

Thank you for your attention to this matter.

Very truly yours,



Adam M. Ramos

AMR:cw  
Enclosures

cc: Docket No. 4770 Service List (electronically only)

57621416 (57972.174791)

▶ ALBANY ▶ BOSTON ▶ CONCORD ▶ HARTFORD ▶ NEW YORK ▶ PROVIDENCE

HINCKLEY, ALLEN & SNYDER LLP, ATTORNEYS AT LAW

**Docket No. 4770 - National Grid – Rate Application**  
**Service list updated 3/20/2018**

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**STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS  
BEFORE THE PUBLIC UTILITIES COMMISSION**

IN RE: THE NARRAGANSETT ELECTRIC COMPANY ) d/b/a NATIONAL GRID – ELECTRIC AND GAS ) DISTRIBUTION RATE FILING )	Docket No. 4770  <b>ISSUED APRIL 12, 2018</b>
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**THE NARRAGANSETT ELECTRIC COMPANY D/B/A NATIONAL GRID’S  
SECOND SET OF DATA REQUESTS TO  
THE DIVISION OF PUBLIC UTILITIES AND CARRIERS**

**TESTIMONY OF WITNESSES TIM WOOLF AND MELISSA WHITED**

**A. Performance Incentive Mechanisms**

- 2-1. For the Rhode Island Division of Public Utilities and Carriers’ (the Division) proposed weather-normalized transmission peak demand forecast discussed on pages 32 and 33, and as supported in Division Exhibit 4 in Docket No. 4770:
- a. Please provide the functional form and variables included in the Division’s model.
  - b. Please provide the underlying model input data used to produce the Division’s forecast. For any data that was derived from other data, for example actual and weather-normalized HDDs and CDDs, please provide the calculation of those values.
  - c. Please provide the model outputs for the Division’s forecast. Please include the predicted values for all historical and future observations, as well as the residuals for each historical observation.
  - d. For each model, please provide all estimated coefficients, standard errors, and goodness-of-fit statistics (such as adjusted R-squared values). Please provide the results of any tests performed to validate the statistical strength of the included explanatory variables, such as T-stats and/or p-values, for each.
  - e. For each observation in each model, please provide any diagnostic statistical test outputs performed (such as R-Student, Cook’s D, leverage, etc.). Discuss how any outliers and other influential observations were addressed. Finally, please provide the results of any additional diagnostic tests, such as those for multicollinearity.
  - f. Did the Division test any alternative models. If so, please provide items a, b, c, d and e above for all such models.

- 2-2. Referencing Table 16 on page 45 of the Testimony of Tim Woolf and Melissa Whited, the Total Incentive amount for 2020 (high) and 2021 (high) does not match the backup that was provided. Please provide the correct values. If Table 16 represents the correct values, provide updated calculations. Please also update the summary Table 26 on page 63 of the Testimony of Tim Woolf and Melissa Whited, if applicable.
- 2-3. Please provide the following in support of assumptions discussed in Exhibit TW/MW-3.
- a. Documentation for Daymark's capacity model, including explanation of all calculations relevant to avoided capacity costs and any underlying assumptions. Please provide any additional relevant model output and calculations in Excel format with formulae intact.
  - b. All underlying data, assumptions and calculations in support of the estimated avoided transmission capacity costs from Daymark. Please provide calculations in Excel format with formulae intact.
  - c. Documentation for Daymark's energy model, including explanation of all calculations relevant to avoided peak hour energy costs and any underlying assumptions. Please provide any additional relevant model output and calculations in Excel format with formulae intact.
  - d. For each PIM, documentation in support of the assumptions for FCM, transmission, and distribution peak coincidence factors in Table 2.
  - e. For each PIM other than transmission and FCM peak demand reduction, documentation in support of the assumptions for assumed costs to customer as a percentage of benefits in Table 3.

#### **TESTIMONY OF WITNESS GREGORY BOOTH**

##### **A. Grid Modernization – System Data Portal**

- 2-4. Please provide all supporting data to support Witness Gregory Booth's estimate that the Company's proposed annual rate allowance of \$700,000 should be reduced by at least 30% (page 19- 20).