May 10, 2016

VIA HAND DELIVERY & ELECTRONIC MAIL

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

> **RE: Docket 4608 - Long-Range Gas Supply Plan**
> **Forecast Period 2015/16 to 2024/25**
> <u>**Responses to Division Data Requests – Set 1**</u>

Dear Ms. Massaro:

Enclosed are ten (10) copies of National Grid's[1] responses to the first set of data requests issued by the Division in the above-referenced docket.

In this transmittal, the Company is providing its responses to the following data requests: DIV 1-1, DIV 1-4, DIV 1-10, DIV 1-16, and DIV 1-19 through DIV 1-24.

This transmittal completes the Company's responses to the Division's first set of data requests in this docket.

Thank you for your attention to this transmittal. If you have any questions, please contact me at 401-784-7288.

Very truly yours,

Jennifer Brooks Hutchinson

Enclosure

cc: Docket 4608 Service List
Steve Scialabba, Division
Leo Wold, Esq.

---

[1] The Narragansett Electric Company d/b/a National Grid (the Company).

Certificate of Service

I hereby certify that a copy of the cover letter and any materials accompanying this certificate was electronically transmitted to the individuals listed below.

The paper copies of this filing are being hand delivered to the Rhode Island Public Utilities Commission and to the Rhode Island Division of Public Utilities and Carriers.

_____   May 10, 2016
Joanne M. Scanlon   Date

**Docket No. 4608 – National Grid – Gas Long-Range Resource Plan
Service List as of 3/16/16**

Name/Address	E-mail	Phone
Jennifer Brooks Hutchinson, Esq. National Grid 280 Melrose St. Providence, RI 02907	Jennifer.hutchinson@nationalgrid.com; Celia.obrien@nationalgrid.com; Joanne.scanlon@nationalgrid.com;	401-784-7288
Elizabeth D. Arangio Theodore Poe Nancy Culliford National Grid 40 Sylvan Road Waltham, MA 02541	Theodore.poe@nationalgrid.com; Elizabeth.Arangio@nationalgrid.com; Nancy.culliford@nationalgrid.com;	
Leo Wold, Esq. Dept. of Attorney General 150 South Main St. Providence RI 02903	Lwold@riag.ri.gov; Steve.scialabba@dpuc.ri.gov; dmacrae@riag.ri.gov; Jmunoz@riag.ri.gov ;	401-222-2424
Bruce Oliver Revilo Hill Associates 7103 Laketree Drive Fairfax Station, VA 22039	Boliver.rha@verizon.net;	703-569-6480
File an original & nine (9) copies w/: Luly E. Massaro, Commission Clerk Public Utilities Commission 89 Jefferson Blvd. Warwick RI 02888	Luly.massaro@puc.ri.gov; Patricia.lucarelli@puc.ri.gov; Sharon.ColbyCamara@puc.ri.gov; Todd.bianco@puc.ri.gov;	401-780-2107
Office of Energy Resources Christopher Kearns Nicholas Ucci	Christopher.Kearns@energy.ri.gov; Nicholas.ucci@energy.ri.gov;	

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4608
In Re: Gas Long-Range Resource and Requirements Plan
For Period 2015/16 to 2024/25
Responses to Division's First Set of Data Requests
Issued on April 12, 2016

Division 1-1

Request:

The second paragraph of the "Introduction" on page 3 of the Company's March 10, 2016 Long Range Plan ("LRP" or "the Plan") indicates "*the Company has expanded the instant Supply Plan to include a ten-year forecast period over which the Company has made decisions to enter into long-term arrangements in order to continue to provide a **least cost, reliable portfolio**.*" (Emphasis Added). Please indicate specifically where in the Company's filed March 10, 2016 LRP the "least cost" nature of the Company's plan is demonstrated.

Response:

As discussed in Section IV of the Company's March 10, 2016 Long Range Plan (LRP or the Plan), the Company uses the SENDOUT® model developed by New Energy Associates, now Ventyx, as its primary analytical tool in the portfolio design process. The SENDOUT® model is a linear-programming optimization software tool used to assist in evaluating, selecting and explaining long-term portfolio strategies. SENDOUT® has several advantages over previous models. For instance, there is no limit to the number of resources that can be defined. This allows the Company to model its resources more realistically and to receive more meaningful output. Second, the model allows the Company to examine the effect of various contracts on the total portfolio cost.

In that regard, the Company utilizes the SENDOUT® model to determine the best use of a given portfolio of supply, capacity and storage contracts to meet a specified demand. That is, it can solve for the dispatch of resources that minimizes the cost of serving the specified demand given the existing resource and system-operating constraints. The model dispatches resources based on the lowest variable cost to meet demand, assuming that demand charges are fixed.

For the purpose of preparing this Long-Range Plan filing, the Company analyzed its design year and a normal year demand under base-case and high-case growth scenarios as described in Section III. In addition, the Company analyzed a cold-snap scenario using the Company's existing resource portfolio. The examination of these various scenarios enables the Company to test the adequacy and flexibility of the resource portfolio.

To perform the analysis of these three scenarios, the Company incorporated several key assumptions. First, the Company assumed that, throughout the forecast period, there is no change in the Company's service obligation to plan for the capacity requirements of firm, non-grandfathered capacity-exempt customers. Therefore, for the purposes of this filing the Company has included both Firm Sales and Firm Transportation customers that utilize the

Prepared by or under the supervision of: Elizabeth D. Arangio

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4608
In Re: Gas Long-Range Resource and Requirements Plan
For Period 2015/16 to 2024/25
Responses to Division's First Set of Data Requests
Issued on April 12, 2016

Division 1-1, page 2

Company's firm capacity in the SENDOUT® model. Second, the Company's analysis assumes that all transportation and storage contracts expiring during the forecast period are renewed at the same cost, the same volume and with the same operating characteristics. Third, the Company assumed that its LNG supply contracts as well as its citygate supply arrangements expire on the contract termination date, and are therefore not assumed to be available after the respective date. This is a process that is continuously performed to provide a least cost, reliable portfolio.

Prepared by or under the supervision of: Elizabeth D. Arangio

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4608
In Re: Gas Long-Range Resource and Requirements Plan
For Period 2015/16 to 2024/25
Responses to Division's First Set of Data Requests
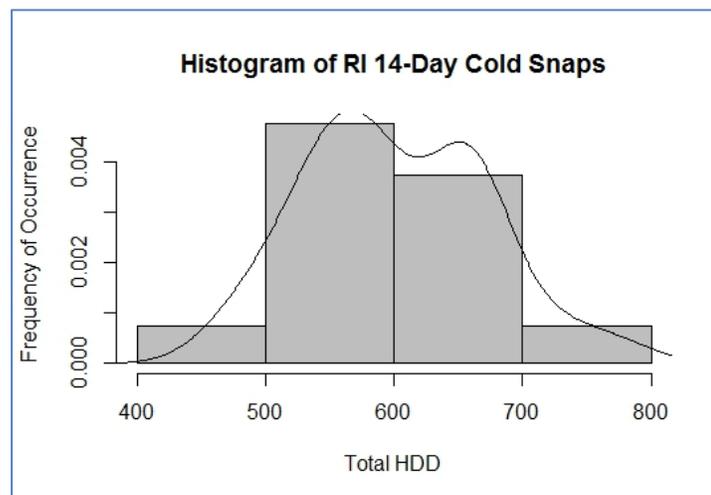Issued on April 12, 2016

Division 1-4

Request:

The March 10, 2016 LRP at page 38, Section IV.D.2., indicates the Company used a cold snap comprising 748 HDD that would be associated with its assessment of a once in 50 years cold snap event based on an examination of a 40-year period from 1976 to 2015. Please:

   a. Verify that the Company's assessment of a once-in-50-years event is premised on an assumption that HDDs for future cold snap events will reflect a normal distribution around the 40-year historic experience for Rhode Island;

   b. Explain why the Company's reliance on an assumed **normal distribution** is reasonable and appropriate in the context of climate change concerns.

Response:

   a. By relying on the mean of the total HDDs of the annual coldest 14-day period for each of the forty years 1975-76 through 2014-15, the standard deviation, and defining a once-in-50-year probability of occurrence as the mean plus 2.06 times the standard deviation (filing, at 38), the Company is basing its calculation on the assumption of normal distribution. The chart below shows normality to be a fairly good assumption for the size of the dataset.

Histogram of RI 14-Day Cold Snaps

Prepared by or under the supervision of: Theodore Poe, Jr.

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4608
In Re: Gas Long-Range Resource and Requirements Plan
For Period 2015/16 to 2024/25
Responses to Division's First Set of Data Requests
Issued on April 12, 2016

Division 1-4, page 2

b. While the Company cannot predict the true distribution of future 14-day period cold snaps, basing its calculation on the observations from the most recent 40 years and updating this analysis on a regular basis will allow the Company to determine if it remains a valid assumption.

Prepared by or under the supervision of: Theodore Poe, Jr.

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4608
In Re: Gas Long-Range Resource and Requirements Plan
For Period 2015/16 to 2024/25
Responses to Division's First Set of Data Requests
Issued on April 12, 2016

Division 1-10

Request:

Re: Section III.B.2., Final econometric models for the Company's demand forecast, please:

a. For each model used for the estimation of customer demands, verify that no price variable(s) for natural gas is included in the models the Company has used to estimate "gas use per customer" for each rate class and sub-classification of customers and customer usage the Company used in the development of its demand forecast;

b. Explain why a "gas price" is used to forecast the customer count for the Residential Heating class, and explain the basis for the modeled relationship between customer count for the residential heating class and changes in natural gas prices.

c. State the Company's understanding of the role of the price paid by consumers for natural gas in determining customer's consumption of natural gas. If the Company believes that natural gas use is totally inelastic with respect to the price of natural gas, explain the basis for that belief.

d. Provide the analyses the Company has relied upon to assess the impact that changes in natural gas prices have had on customers' natural gas demand in Rhode Island over the period for which historic demand data inputs were used as input in the Company's forecasting models.

Response:

a. None of the Company's selected meter count models relied on natural gas price economic variables. As discussed in Section III.B.2 of the Company's filing and as seen in Attachment DIV 1-9-1, the meter count models were driven by personal income, employment, GDP, or oil price.

b. As discussed in Section III.B.2.a of the Company's filing and as seen in Attachment DIV 1-9-1, the meter count models for the Residential Heating Class were driven by personal income. Neither Residential Heating rate code used "gas price" as its economic variable.

c. Price of natural gas is one of many factors that will affect a customer's consumption of natural gas. The Company's models of use-per-customer are models of net spaceheating, water heating, and cooking (among the primary uses of natural gas). This net requirement can be affected by customers' other choices such as energy efficiency

Prepared by or under the supervision of: Theodore Poe, Jr.

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4608
In Re: Gas Long-Range Resource and Requirements Plan
For Period 2015/16 to 2024/25
Responses to Division's First Set of Data Requests
Issued on April 12, 2016

Division 1-10, page 2

improvements, appliance replacement, fuel substitution as well as other economic factors such as personal income and GDP. The Company does not believe that natural gas use is totally inelastic with respect to the price of natural gas.

d. The Company has not performed any analyses to assess the impact that changes in natural gas prices have had on customers' natural gas demand in Rhode Island, outside of its annual gas load forecast.

Prepared by or under the supervision of: Theodore Poe, Jr.

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4608
In Re: Gas Long-Range Resource and Requirements Plan
For Period 2015/16 to 2024/25
Responses to Division's First Set of Data Requests
Issued on April 12, 2016

Division 1-16

Request:

Re: Section III.B.4, The Impact of Energy Efficiency Programs, at the top of page 13, please:

a. Provide the referenced analysis of "historical energy efficiency programs" which shows that historical data should have 75,332 MMBtu of embedded savings for residential customers and 105,262 MMBtu of embedded savings for commercial and industrial customers;

b. Provide the rationale for using savings over the historical average as opposed to savings for the most recent year;

c. Document by year for each year beyond 2014 the annual demand reductions for the effects of energy efficiency programs that were included in the Company's demand forecast:

    i.   For Residential service by rate classification
    ii. For Commercial and Industrial service by rate classification

d. Explain why, despite anticipated growth in numbers of customers and throughput volumes no growth in energy efficiency program load reductions is forecasted.

Response:

a. The reference to Section III.B.4, The Impact of Energy Efficiency Programs, at the top of page 13, appears to be a reference to the Company's 2014 Long-Range Plan. Please refer to the Excel file labeled "4608-DIV 1-16-Attachment-1.xlsx", which is identified as Attachment DIV 1-16-1, and being provided on CD-ROM, for the Company's analysis of its historical and forecasted energy efficiency impact on natural gas volumes in Rhode Island from its 2014 Long-Range Plan. In that Plan, the Company used the average of the years 2006-2012 actual energy efficiency penetration as the amount of annual energy efficiency reduction embedded within its historical retail sales data. These averages are:

- 753,321 therms/year (75,332 MMBtu/year) of embedded savings for residential customers; and,

- 1,052,618 therms/year (105,262 MMBtu/year) of embedded savings for commercial and industrial customers.

Prepared by or under the supervision of: Theodore Poe, Jr.

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4608
In Re: Gas Long-Range Resource and Requirements Plan
For Period 2015/16 to 2024/25
Responses to Division's First Set of Data Requests
Issued on April 12, 2016

Division 1-16, page 2

b. While the per-annum trend for energy efficiency penetration in Rhode Island has been increasing, the Company chose to use a three-year average in its 2016 Long-Range Plan to smooth out the year-to-year fluctuations that can be seen in the historical actual energy efficiency penetration data (See Attachment DIV 1-14). In its previous Long-Range Plan, the Company had used a longer time period for averaging (2006-2012), however by choosing to shorten the time period for averaging to three years the Company believes that it has adequately captured the current trend in energy efficiency penetration within the time series of its historical retail data.

c. Please refer to the Excel file labeled "4608-DIV 1-16-Attachment-2.xlsx", which is identified as Attachment DIV 1-16-2, and being provided on CD-ROM, for the monthly volumetric reductions (in therms) by rate code beginning in January 2015 in the Company's Base Case forecast. The Company allocated each of the residential and commercial & industrial total reductions to their appropriate rate codes on a volume-weighted basis.

d. In forecasting its energy efficiency penetration, the Company did not make any assumptions regarding future levels of its programs since, at the time of preparing the 2016 Long-Range Plan forecast, it has neither proposed nor had approved by the Commission any future levels beyond that which was approved by the PUC by written Order issued on December 24, 2013 in Docket No. 4451.

Prepared by or under the supervision of: Theodore Poe, Jr.

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4608
In Re: Gas Long-Range Resource and Requirements Plan
For Period 2015/16 to 2024/25
Responses to Division's First Set of Data Requests
Issued on April 12, 2016

Division 1-19

Request:

Section III.C.1., Regression Equation, at page 13, states, *"Through the use of the linear regression equation, the Company is able to normalize total daily sendout."* Please identify all factors other than weather for which the linear regression equation normalizes daily sendout.

Response:

As discussed on page 13, the regression equation used to normalize sendout uses heating degree days and day-of-week as independent variables.

Heating degree days (HDD) are specified as two separate variables: the daily HDD value corresponding to the daily sendout observation and the difference between the daily value and the average of the prior two days HDD (see page 14).

The day-of-week dummy variable is set to zero for Monday through Thursday, one on Friday and Sunday, and two on Saturday, based on the observed variations in sendout by day of the week (see page 14).

Prepared by or under the supervision of: Theodore Poe, Jr.

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4608
In Re: Gas Long-Range Resource and Requirements Plan
For Period 2015/16 to 2024/25
Responses to Division's First Set of Data Requests
Issued on April 12, 2016

Division 1-20

Request:

Re: Section III.C.1., Regression Equation. With respect to the 'Breakpoint HDD variable, please:

a. Provide any citations to the specific portions of any authoritative texts or other documents the Company has relied upon to justify the use of the specified "Breakpoint HDD".

b. If as stated at page 14 of the March 10, 2016 LRP, *"… the Company has not observed any non-linear characteristics at cold temperatures…"* Explain why use of the "Breakpoint HDD" is necessary and appropriate.

c. Identify the temperature measure from which HDDs are calculated for the Company's Rhode Island service territory, and provide the conceptual rationale for using the identified temperature measure as the base for computing HDDs.

d. Explain why the Company's use of "Breakpoint HDD" should not be considered conceptually inconsistent with:

   i. The Company's rationale for establishing the temperature measure from which HDDs are computed;

   ii. The Company's assertion that it has "*not observed any non-linear characteristics at cold temperatures.*"

Response:

a. The Company does not have any specific authoritative texts in the application of segmented regression analysis of natural gas sendout other than its own Long-Range Plan submissions. The Company chose to use segmented regression analysis based on its observed relationships between daily sendout and daily heating degree days. Please refer to the Company's response to DIV 1-17 and the corresponding Attachments.

b. As discussed in its response to DIV 1-17, the Company's statement pertains to the linearity in sendout versus heating degree days at high (coldest) heating degree day levels and supports its assumption of linearity out to its selected design day. The use of its

Prepared by or under the supervision of: Theodore Poe, Jr.

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4608
In Re: Gas Long-Range Resource and Requirements Plan
For Period 2015/16 to 2024/25
Responses to Division's First Set of Data Requests
Issued on April 12, 2016

Division 1-20, page 2

c. segmented regression analysis is both necessary and appropriate to capture its observed variations in sendout and heating degree days.

Heating degree day values used in the Company's analysis rely on the standard definition of daily average air temperature (in degrees F) minus the reference temperature of 65 degrees F. The standard definition of heating degree days (HDD) sets HDD to zero when it is zero or negative. The Company, however, permits negative HDD values in its analysis.

In its original definition, 65 degrees F was set as the base temperature to represent the average temperature at which buildings would begin to use its heating equipment. Over time, with changes in consumer behavior, building energy efficiency, as well as increased electrical appliances within buildings, 65 degrees F may no longer be the appropriate base temperature for the linear relationship between sendout and heating degree days. The Company's segmented regression analysis and its determination of the Breakpoint HDD support this position.

d.

   i. As noted in (c) above, the Company's analysis does not truncate HDD values but instead permits negative and positive HDD values. Hence, using HDDs with their assumed base temperature of 65 degrees F has absolutely no impact on the Company's analysis; its analysis merely adopts HDD as a linear transformation of daily average air temperature.

   ii. As previously stated in its responses to DIV 1-17 and subpart (b) above, the Company's statement pertains to the linearity in sendout versus heating degree days at high (coldest) heating degree day levels and supports its assumption of linearity out to its selected design day.

Prepared by or under the supervision of: Theodore Poe, Jr.

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4608
In Re: Gas Long-Range Resource and Requirements Plan
For Period 2015/16 to 2024/25
Responses to Division's First Set of Data Requests
Issued on April 12, 2016

Division 1-21

Request:

Re: The Company's **2016 LRP** at page 14, Section III.C. and Chart III-C-1 in the Company's **2016 LRP,** please:

a. Provide the data for each observation plotted in Chart III-C-1 clearly identifying the date of each observation and explaining the manner in which the data plotted were developed from the Company's records;

b. Provide plots of data similar to that presented in Chart III-C-1 for the Company's 2011-12, 2012-13, and 2013-14 planning years as well as the supporting data for those plots.

c. Verify that the system sendout plotted in Chart III-C-1 includes gas volumes delivered to:

    i.   Capacity Exempt (Zero-Capacity) customers;
    ii. Non-Firm service customers;
    iii. Non-Tariff gas-fired electric generation customers
    iv. Gas Heater volumes for the Dominion Manchester Street Station

Response:

a. Please refer to the Company's response to DIV 1-18 (a).

b. Please refer to the Company's response to DIV 1-17 (d) where the Company provided plots for April 2007 – March 2008 through April 2014 – March 2015.

c. Please refer to the Company's response to DIV 1-18 (c).

Prepared by or under the supervision of: Theodore Poe, Jr.

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4608
In Re: Gas Long-Range Resource and Requirements Plan
For Period 2015/16 to 2024/25
Responses to Division's First Set of Data Requests
Issued on April 12, 2016

Division 1-22

Request:

Re: The Company's **2016 LRP** at page 14, Section III.C., please:

a. Identify the start date and end date of each service interruption or curtailment for non-firm service customers that is embedded in the data inputs used to produce each set of regressions result shown in the tables on pages 15 and 16 of National Grid's **March 10, 2016 LRP**;

b. Identify the average temperature and the HDDs for each day included in the inputs used by the Company to produce each set of regressions results shown in the tables on pages 15 and 16 of the Company's 2016 LRP for which service to non-firm customers was interrupted or curtailed.

c. For each service interruption or curtailment requested of one or more non-firm customers during the years for which regression results are shown on pages 15 and 16 of National Grid's March 10, 2016 LRP; provide the number of affected customers and the Company's best estimate of the amount of interrupted or curtailed non-firm service for each effected day for:

    i. Providence
    ii. Westerly
    iii. Bristol & Warren
    iv. Valley

d. Explain in detail how the Company's use of piece wise linear-regression equations to "normalize total daily sendout" accounts for interruptions or curtailments of service to dual-fuel customers.

Response:

a. Please refer to the Company's response to DIV 1-18 (e)(i).

b. Please refer to the Company's response to DIV 1-18 (e).

Prepared by or under the supervision of: Theodore Poe, Jr.

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4608
In Re: Gas Long-Range Resource and Requirements Plan
For Period 2015/16 to 2024/25
Responses to Division's First Set of Data Requests
Issued on April 12, 2016

Division 1-22, page 2

c. For the April 2014 – March 2015 period, there were four customers who would have been interrupted, two in the Providence Gas service territory and two in the Valley Gas service territory. In its response to DIV 1-18 (e)(iii), the Company estimated the total daily interruption to have been approximately 2,000 Dth/day. While the Company does not know the level of interruption by customer since they were interrupted, the Company estimates that over half of the 2,000 Dth/day would have occurred in the Providence Gas service territory with the remainder occurring in the Valley Gas service territory. The Company does not have similar detailed information for the other requested years: 2007/08 through 2013/14.

d. The Company's regression analysis of natural gas sendout versus heating degree days is based on net natural gas requirement. The interruption of service to interruptible customers, as noted in the Company's response to DIV 1-18 (e)(iii) as approximately 2,000 Dth/day or less than 1 percent of daily sendout, is reflected in the Company's dependent variable: sendout. The Company's forecast would assume similar levels of interruption at similar temperatures.

Prepared by or under the supervision of: Theodore Poe, Jr.

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4608
In Re: Gas Long-Range Resource and Requirements Plan
For Period 2015/16 to 2024/25
Responses to Division's First Set of Data Requests
Issued on April 12, 2016

Division 1-23

Request:

Re: the "Segmented Regression Results shown in the tables on page 15, and the top of page 16 of the Company's **2016 LRP**, please:

a. Explain and justify the comparatively low "Intercept" value that is shown for Bristol & Warren for the year 2008/09, noting that the 2008/09 Intercept value shown is 122.5 where no other year for Bristol & Warren has a reported "Intercept" value of less than 848.8;

b. Explain the implications of the negative "Slope 1" coefficients that are estimated for **Valley** for the years 2007/08, 2009/10, 2010/11, and 2013/14;

c. Explain why no other portion of the Company's system (i.e., Providence, Westerly, or Bristol & Warren) has a negative "Slope 1" coefficient for any year.

Response:

a. The low intercept value for Bristol & Warren in 2008/09 would indicate low gas usage during warm temperature periods. Since the Company only relies on its most recent (2014/15) regression analysis as the basis of its instant Long-Range Plan, the 2008/09 Bristol & Warren equation has no bearing on the instant forecast. Prior years' regression values are provided for historical context.

b. A negative "Slope 1" coefficient indicates consumption rising as temperatures become warmer than the Breakpoint HDD. This can be observed in the actual historical data for the Valley division shown in Attachment DIV 1-17-4.

c. Based on the Company's historical data, its Valley division displayed characteristics showing consumption rising as temperatures become warmer than the Breakpoint HDD (negative "Slope 1") in 2007/08, 2009/10, 2010/11, and 2013/14 (See table on page 16 of the Company's filing). This did not occur in 2014/15, which served as the basis of its instant Long-Range Plan. Its other geographic divisions do not show this occurring (See tables on page 15 of the Company's filing).

Prepared by or under the supervision of: Theodore Poe, Jr.

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4608
In Re: Gas Long-Range Resource and Requirements Plan
For Period 2015/16 to 2024/25
Responses to Division's First Set of Data Requests
Issued on April 12, 2016

Division 1-24

Request:

Re: The Company's **2016 LRP** at page 14, Section III.C., states, "…the Company has not observed any non-linear characteristics in sendout at cold temperatures …", please:

    a. Indicate if that is still the Company's position;

    b. that the sensitivity of gas use to degree days for its Rhode Island system is the same for all months of the year, such that a one degree day variation in June, October, or April will produce approximately the same change in gas use as a comparable degree day change would evoke in the months of December, January or February; and if not, explain the manner in which the Company expects that the sensitivity of gas use to degree days varies over the months of a year.

Response:

    a. As previously stated in its responses to DIV 1-17, DIV 1-20(b), and DIV 1-20(d)(ii), the Company's statement pertains to the linearity in sendout versus heating degree days at high (coldest) heating degree day levels, and supports its assumption of linearity out to its selected design day. This is still the Company's position.

    b. Please refer to the Company's response to DIV 1-17(c).

Prepared by or under the supervision of: Theodore Poe, Jr.