

June 7, 2010

VIA HAND DELIVERY & ELECTRONIC MAIL

Luly E. Massaro, Commission Clerk
Rhode Island Public Utilities Commission
89 Jefferson Boulevard
Warwick, RI 02889

RE: Docket 4149
2011 Standard Offer Service Procurement Plan
2011 Renewable Energy Standard Procurement Plan
Responses to Division Data Requests – Set 4

Dear Ms. Massaro:

Enclosed please find ten (10) copies of National Grid's ¹ responses to the Division's Fourth Set of Data Requests issued on May 17, 2010, in the above-referenced proceeding.

Thank you for your attention to this transmittal. If you have any questions, please feel free to contact me at (401) 784-7667.

Sincerely,



Thomas R. Teehan

Enclosure

cc: Docket 4149 Service List
Leo Wold, Esq.
Steve Scialabba, Division

¹ The Narragansett Electric Company d/b/a National Grid ("National Grid" or "Company")

The Narragansett Electric Company
d/b/a National Grid
Docket No. 4149
2011 Standard Offer Service Procurement Plan and
2011 Renewable Energy Service Procurement Plan
Responses to Division Data Requests – Set 4
Issued May 17, 2010

Division Data Request 4-1

Request:

The following questions pertain to the responses to the Division’s second set of data requests to National GRID, including DVD provided by Northbridge.

In the folder on the DVD labeled “2-5”, there are three Excel files that appear to contain summary outputs from the Northbridge model. The following table is an excerpt from the worksheet tab labeled “(1)” in the file named “Model Outputs.xls”.

Approach definitions in this file correspond with those on page 22.

Ten Year Block Energy to 100% (Annual Rates)									
Average	\$92.37	0.00	0.00	0.0%	\$9.4	1.79%	2.01%	15.63%	-\$31.3
90th Percentile	\$100.51	16.33	5.02	5.4%	\$29.1	6.33%	3.15%	42.85%	\$166.1
Ave of Top Decile	\$105.89	28.94	10.51	11.8%	\$51.5	8.77%	3.54%	57.39%	\$213.2
10th Percentile	\$85.57	-11.46	-3.34	-3.7%	-\$0.7	-2.22%	0.00%	0.48%	-\$272.3
Ave of Bottom Decile	\$84.06	-14.09	-4.03	-4.5%	-\$1.4	-3.74%	0.00%	0.16%	-\$420.6

Scenario	Average Rate Level (\$ / MWh)	Cost Surprise (\$MM)	Cost Surprise (\$ / MWh)	Cost Surprise (%)	Deferral Balance (\$MM)	Ann. Rate Movement (%)	Coefficient of Variance (%)	Customer Switching (%)	Mark-to-Market Exp. (\$MM)
1	\$88.90	13.41	2.79	3.4%	\$14.8	-1.88%	2.33%	11.78%	-\$205.4
2	\$90.73	-5.87	-2.01	-2.2%	\$0.3	-0.45%	2.06%	13.67%	-\$113.0
3	\$87.70	-10.14	-2.72	-3.0%	-\$1.7	-2.63%	3.52%	10.32%	\$149.1
4	\$91.20	41.21	18.93	21.7%	\$39.0	-2.59%	3.05%	41.53%	\$254.0
5	\$86.14	-10.20	-2.80	-3.1%	-\$4.8	0.23%	4.41%	16.01%	\$129.1
6	\$88.61	-2.25	-1.19	-1.2%	\$0.3	1.35%	2.01%	28.22%	\$25.5
7	\$89.96	-7.69	-2.62	-2.9%	\$0.1	-1.29%	2.36%	13.46%	\$41.2
8	\$88.33	-7.18	-2.46	-2.7%	\$0.8	-0.48%	1.58%	13.60%	\$137.5
9	\$89.21	-3.91	-1.55	-1.7%	\$7.9	-1.19%	2.27%	14.43%	\$2.6
10	\$87.36	-9.01	-2.48	-2.8%	\$3.6	-2.75%	2.81%	7.19%	\$10.0
11	\$85.65	-11.11	-3.18	-3.6%	-\$0.2	-1.71%	2.27%	4.68%	\$154.3
12	\$92.90	-5.46	-1.60	-1.8%	\$1.1	0.46%	1.27%	0.20%	-\$216.0
13	\$84.70	-10.43	-2.92	-3.3%	-\$0.8	-0.93%	1.00%	7.36%	\$18.8
14	\$90.88	-12.99	-3.42	-3.8%	-\$1.1	0.64%	1.58%	10.50%	\$17.0
15	\$104.36	6.66	4.33	4.0%	\$60.2	10.35%	0.00%	70.49%	\$122.3

- a) Do the figures in the column labeled “Ann. Rate Movement (%)” represent the SOS rates for the year 2014 expressed as a percent change from 2013 rates? For example, in scenario 1, are the SOS rates in 2014 1.88% less than the SOS rate in 2013? If not, please explain what these figures do represent.
- b) Do the figures in the column labeled “Customer Switching %” represent the percentage of customers in this class that have switched from SOS rates to a competitive supplier during the first six months year 2014? For example, in scenario 15, does the Northbridge model project that 70% of the customers will switch to a competitive supplier during the first six months of 2014, leaving only 30% of the class load taking SOS service from NGRID? If not, please explain what these figures do represent.

Division Data Request 4-1

Response:

- a) Each value in the column labeled “Ann. Rate Movement (%)” pertains to one of 2,000 scenarios. Each value represents the difference, expressed as a percent, between the average SOS rate for the year 2014 and the average SOS rate for the year 2013. For the Scenario #1 value referred to in the question, the -1.88% value indicates that, in this scenario and for the respective procurement approach, the average SOS rate for the year 2014 is 1.88% lower than the average SOS rate for the year 2013. The tab referred to in the question pertains to a procurement approach that would involve contracting for 100% of the expected SOS supply requirement in the form of block contracts spanning ten years.
- b) No, the values in the column labeled “Customer Switching (%)” do not represent the percentage of customers in this class that have switched from SOS rates to a competitive supplier during the first six months of 2014. The values in the column labeled “Customer Switching (%)” represent the percentage of load that is attributable to customers taking supply service from competitive retail suppliers during the first six months of 2014. The values in the column are a result of customer switching decisions made before 2014, or at the beginning of 2014, and are not entirely due to customers that switch from SOS to competitive retail suppliers during the first six months of 2014. The specific value referred to in the question pertains to one of 2,000 scenarios under a procurement approach that would involve contracting for 100% of the expected SOS supply requirement in the form of block contracts spanning ten years.

Prepared by or under the supervision of: The NorthBridge Group

Division Data Request 4-2

Request:

In the folder on the DVD labeled “2-4”, there is an Excel file named “Model Inputs Values.xls”. The following table is an excerpt from the worksheet tab labeled “sheet1”.

		FR >=1yr	FR <1yr	Block >=1yr	Block <1yr
Residual Comp	Calculated Directly from Solicitation Analyses' Values	11%	6%	4%	
Adjustment				-1%	
Residual Comp Value In Use		11%	6%	3%	1.5%

- a) Please provide the source of these figures and explain the basis for them and how they were calculated. If these figures were calculated in other spreadsheets or files provided in response to Division data requests, please provide specific cell references.
- b) Do the figures in this table indicate that FRS contracts with a term equal to or greater than one year are assumed in the Northbridge model to be priced at 11% above what the sum of the costs of its components are?
- c) Do the figures in this table indicate that Block Products with a term equal to or greater than one year are assumed in the Northbridge model to be priced at 3% above what the sum of the costs of its components are?
- d) Do the figures in this table indicate FRS contracts are expected to cost 8% more than Block Products in the Northbridge model? Please explain why or why not.

Response:

- a) The source of these figures is the study of bid prices and component costs for SOS products recently solicited by different utilities, as described on pages 7 and 14 of Exhibit A of National Grid’s January 22, 2010 filing with the Rhode Island Public Utilities Commission. The basis for these residual compensation values, which are used in the NorthBridge analysis, are residual compensation values pertaining to the pricing of actual SOS supply products as measured using actual market information.

These values were calculated by netting values for various (more observable) cost components (at the time of the supply product solicitation) from the actual supply product prices. These cost components do not represent all of the costs to the supplier. The calculations can be found in the formulae in the cells referred to in the data request, and in

Division Data Request 4-2 (cont.)

other spreadsheets that were provided as part of the response to Division Data Request 2-4. Furthermore, the 1.5% “Residual Comp Value In Use” value for “Block <1yr” is set to be half of the 3% value for “Block >=1yr,” which is roughly the same proportional relationship between the values for “FR <1yr” and “FR >=1yr.” Finally, in the Excel file named “Model Inputs Values.xls” that was provided in the response to Division Data Request 2-4, an explanation of the -1% “Adjustment” value for “Block >=1yr” is provided in the comment in the cell pertaining to that value.

Please refer to the attached Excel file (transmitted electronically via e-mail), which provides the specific cell references to other spreadsheets which contain calculations supporting the values to which the data request refers. The attached file is the same as the file named “Model Inputs Values.xls” to which the data request refers, except that for each value (shown in the table provided in the data request) that relies on calculations from other spreadsheets, the specific cell references to the other spreadsheets have been identified in the comments in the cell pertaining to the value.

- b) No. It would be incorrect to interpret the 11% value as representative of the product supplier’s expected profit margin.
- c) No. It would be incorrect to interpret the 3% value as representative of the product supplier’s expected profit margin.
- d) No.

To the extent that the question is asking whether the price of a FRS (i.e., full requirements) contract is expected to be 8% higher than the price of a block product, the answer is no because full requirements products involve different obligations regarding cost components other than those covered by residual compensation, and this is reflected in product pricing. For example, a full requirements product obligates the supplier to provide varying amounts of energy (unlike a block product), and also to provide capacity, ancillary services, etc., so the difference in the product prices is not simply the difference in the residual compensation values.

To the extent that the question is asking whether the cost to customers under a fixed-price full requirements product procurement approach is expected to be 8% higher than the cost to customers under a block product procurement approach, the answer is no because differences in residual compensation values, especially across different types of supply

Division Data Request 4-2 (cont.)

products (e.g., fixed-price full requirements products vs. block products) are driven by differences in the costs and risks that the products cover for customers, so the differences in supply product residual compensation values do not correspond to the expected differences in procurement approach costs. This is further explained on page 13 of Exhibit A of National Grid's January 22, 2010 filing with the Rhode Island Public Utilities Commission.

Prepared by or under the supervision of: The NorthBridge Group

Division Data Request 4-3

Request:

In the folder on the DVD labeled “2-4”, there is an Excel file named “Model Inputs Values.xls”. Please explain the inputs labeled “On-peak Gross-up (%)” and “Wrap Gross-up (%)”, including but not limited to the source of these figures and how they are used in the calculations in the Northbridge model.

Response:

The figures “On-Peak Gross-Up (%)” and “Wrap Gross-Up (%)” refer to the expected degree to which the load-weighted price by month and by on-peak/wrap period differs from the simple average (i.e., not load-weighted) price during the same period. These values reflect the load-weighting of hourly prices, and are used within the NorthBridge analysis as a component in the calculation of the cost to serve customers for the load that is not served through full requirements contracts, as a component of the calculation of full requirements contract pricing, and in any calculation that requires quantification of the cost to serve customers. The source of these figures, which includes their complete derivation from historical data, has been provided in the response to Division Data Request 2-4.

The following is one example of the use of these values: if the simple average price during August On-Peak were \$76.78 and the On-Peak Gross-Up were 7.48%, the load-weighted average price would be \$82.52 (i.e., $\$76.78 * [1+7.48\%]$).

Prepared by or under the supervision of: The NorthBridge Group

Division Data Request 4-4

Request:

In the folder on the DVD labeled “2-4”, there is an Excel file named “Model Inputs Values.xls”. Please explain the input labeled “Administrative Adder”, including but not limited to the source of these figures and how they are used in the calculations in the Northbridge model.

Response:

The “Administrative Adder” referred to in the question is only used in the modeling of customer migration to and from competitive retail suppliers. This value was developed in a way that, when integrated with the other values in the NorthBridge analysis pertaining to customer migration, is designed to provide distributions of modeled customer migration levels that are consistent with market evidence pertaining to customer migration. Please refer to the response to Division Data Request 2-8 for an explanation of how this value is used in the calculations in the NorthBridge analysis, as well as the formulae which apply this value.