nationalgrid

Jennifer Brooks Hutchinson
Senior Counsel

April 25, 2013

VIA HAND DELIVERY & ELECTRONIC MAIL

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

RE: Docket 4397 - Review of Energy Efficiency and Advanced Gas Technology Incentives For 12.5 MW Combined Heat and Power System
Responses to Division Data Requests – Set 2

Dear Ms. Massaro:

On behalf of National Grid[1] attached are the Company's responses to the Division's Second Set of Data Requests issued in the above-captioned proceeding.

Thank you for your attention to this filing. If you have any questions concerning this transmittal, please feel free to contact me at (401) 784-7288.

Very truly yours,

Jennifer Brooks Hutchinson

Enclosures

cc: Docket 4397 Service List
Leo Wold, Esq.
Steve Scialabba, Division

[1] The Narragansett Electric Company d/b/a National Grid (hereinafter referred to as "National Grid" or the "Company").

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Certificate of Service

I hereby certify that a copy of the cover letter and/or any materials accompanying this certificate were electronically transmitted to the individuals listed below. Paper copies of this filing were hand delivered to the Rhode Island Public Utilities Commission.

___________________________________ April 26, 2013

Joanne M. Scanlon Date

Docket No. 4397 - National Grid - Energy Efficiency and Advanced Gas Technology Incentives for 12.5 MW CHP System Package to Toray
Service list updated 3/11/13

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Division 2-1

Request:

Will National Grid need to increase the sizing of any of its facilities, such as metering equipment, regulating equipment, service lines or pipeline/gate station capacity to serve the added Toray load? If so, will National Grid incur any additional cost to serve the added load?

Response:

Gas:

The Company's existing gas service, which serves the various natural gas accounts at Toray's Lumirror Division, has enough capacity to serve Toray's new 12.5 MW Combined Heat and Power System. The Company plans to provide gas service to this new cogeneration system through its existing gas meter station that serves Toray's existing gas cogeneration system. No modifications to this existing gas meter station are necessary in order to provide gas service to Toray's new cogeneration system.

However, the Company will need to install a minimum of 2,495 feet of 12-inch gas main, parallel to its existing 12-inch high-pressure gas main in Quaker Lane in order to ensure the reliability of the Company's gas distribution system in the southern part of Rhode Island as a result of the installation of this new cogeneration project. The cost to do so has been estimated at $886,010, which will be adopted into the Company's annual gas growth budget and processed through the Company's Contribution In Aid of Construction ("CIAC") policy.

Electric:

The Interconnection Study for this project is one of the critical milestones set forth in the Minimum Requirements Document and is scheduled for completion by March 14, 2014. See the Company's response to DIV 1-8. Part of the process of developing that study will address the changes that will be required to Toray's electric facilities in order to serve their new equipment.

Prepared by or under the supervision of: Mark DiPetrillo

Division 2-2

Request:

Do the estimates of gas use with and without the CHP facilities account for any allowances for down time for scheduled maintenance or forced outages of the CHP facilities?

Response:

Yes. Toray's facility is operational 24 hours a day/365 days a year. The energy model, developed by Waldron Engineering, has been designed to take into account the hourly energy needs of the facility. The baseline model uses the existing equipment and existing loads. The CHP model takes into account the existing cogeneration unit, the existing boilers, and the two new gas fired engines. It also adjusts both the electric and gas loads for scheduled and forced outages.

Toray's existing gas fired turbine was modeled to be offline (both forced outages and scheduled maintenance) 6.6% of the time - (93.4% availability). The new 5.0 MW reciprocating engine was modeled to be offline 7.2% (92.8% availability) of the time. The new 7.5 MW reciprocating engine was modeled to be offline 7.4% (92.6% availability) of the year.

Prepared by or under the supervision of: Mark DiPetrillo

Division 2-3

Request:

If the answer to 2-2 is negative, would such allowances reduce the amount of gas consumption and the associated incremental margins? Please provide an estimate of the effect on incremental margins.

Response:

Please see the Company's response to DIV 2-2.

Prepared by or under the supervision of: Mark DiPetrillo

Division 2-4

Request:

Attachment 2, page 3 of 9, to the January 28, 2013 Offer Letter provides a Financial Summary of the CHP project. The Summary lists the existing and proposed natural gas costs, and is footnoted that the data is based on Toray's projected natural gas commodity price. Please provide the detail for the natural gas cost in the Financial Summary.

Response:

The natural gas cost used in the Toray study and set forth in the Financial Summary was comprised of three major components: Commodity, Basis, and National Grid's current Firm Distribution Service Rate. The Commodity unit cost is derived from the NYMEX (Henry Hub delivery point) Wholesale Charge for Futures Contracts. At the time of the Technical Assessment Study (i.e., trade date of February 8, 2012), the traded unit price for Commodity was $4.092/MMBtu for a January 1, 2014 delivery date (i.e., initially estimated CHP availability). The Basis price was supplied by Toray along with a copy of their current contract terms. With this Basis Price, the total gas cost to Toray is estimated to be approximately $5.092 per MMBtu on January 1, 2014. The distribution service rate was based upon the Company's Extra Large, High Load Firm Service Rate 24.

Prepared by or under the supervision of: Mark DiPetrillo

Division 2-5

Request:

National Grid's financial analysis indicates that it will receive $475,261 of incremental gas distribution margin annually. This compares to the $500,000 annual AGT incentive payments to Toray for the first three years of the incentive payments. Based on NGrid's analysis, after three years the Toray incentive payments will exceed the incremental margins by at least $75,000. Could the incentive payments be restructured so that the payments to Toray do not exceed the projected annual incremental margins to firm ratepayers, such as $450,000 for 4 years, to arrive at the $1.8 million incentive?

Response:

The annual AGT incentive payment is not directly dependent upon a project's annual margin contribution. Rather, the calculation is based, in part, on the project's lifetime margin contribution.

The present offer was based upon meeting the customer's financial return requirements for the project while still allowing funds for other AGT projects. Any extension of payment terms could potentially drive Toray's internal rate of return for the project under their corporate requirements.

Prepared by or under the supervision of: Mark DiPetrillo and Ian Springsteel

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Division 2-6

Request:

The filing does not specify when the first annual AGT Incentive payment, or subsequent incentive payments, will be made. Please provide the payment schedule and any threshold requirements associated with the payments of the AGT incentive.

Response:

The payment schedule and threshold requirements are as follows:

- The first payment of $500,000 will be made after the commissioning of the system is complete.
- The second and third payments of $500,000 will be subsequently made in twelve-month increments.
- The final payment of $300,000 will be made thirty-six (36) months after the commissioning is completed.

Prepared by or under the supervision of: Mark DiPetrillo

Division 2-7

Request:

Is there any form of guarantee or assurance from Toray regarding the estimated incremental margin revenue? Is there a gas service agreement between National Grid and Toray that addresses the incremental gas service requirements and/ or revenue margin guarantees over any time period? If there is a gas service contract between Toray and National Grid for the supply of increased gas service volumes, please provide a copy to the Division, as well as a copy of any existing gas service contracts between National Grid and Toray for the affected service.

Response:

The Company does not have a form of guarantee or assurance from Toray regarding the estimated incremental margin revenue. The Company has prepared a draft gas service agreement for Toray pursuant to its standard gas tariff (Extra Large, High Load Factor Rate (Rate #24) (FT #1 Service)) for the provision of firm gas service to Toray's new 12.5 MW Combined Heat and Power System. This draft agreement provides that the new cogeneration system and Toray's existing cogeneration system will consume approximately 1,432,000 decatherms of natural gas per year on a firm, non-interruptible basis, and that, over a 5 year period, these two gas fired cogeneration systems will consume approximately 7,160,000 decatherms of natural gas on a firm, non-interruptible basis. The agreement will be finalized and executed pending the Commission's approval of the incentive package for the CHP project.

Prepared by or under the supervision of: Mark DiPetrillo

Division 2-8

Request:

Please provide the basis for the discount rate (0.1005) used in National Grid's computation of its present value of incremental revenue margins over the estimated 20 year life of the installed facilities.

Response:

Please see the Company's response to COMM 1-1.

Prepared by or under the supervision of: Ian Springsteel

Division 2-9

Request:

Please explain the use of a 20 year period for computing the present value of incremental margin revenue when the Energy Efficiency Incentives, as discussed on page 4 of attachment A to the March 5, 2013 CHP Petition only requires Toray to commit to operation of the cogeneration equipment for a period of 10 years.

Response:

Please see the Company's response to COMM 1-3.

Prepared by or under the supervision of: Ian Springsteel

Division 2-10

Request:

Please confirm National Grid's understanding of the approved Settlement in Docket No. 4323, that 50 percent of any incremental revenues received by Narragansett Gas from the Toray CHP project will be credited to firm customers through the Distribution Adjustment Clause until the next base rate proceeding for Narragansett Gas. (Reference Docket 4323, Amended Final Settlement Agreement, page 19, Item 4 Firm Revenues.)

Response:

In accordance with the approved Settlement in Docket No. 4323, page 19, Item 4 Firm Revenues, the Company will credit back each year to firm customers through its Annual Distribution Adjustment Clause ("DAC") Filing 50 percent of the incremental revenues resulting from the installation of the CHP project at Toray Plastics.

Prepared by or under the supervision of: Ian Springsteel