nationalgrid

Jennifer Brooks Hutchinson
Senior Counsel

July 9, 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 Record Requests

Dear Ms. Massaro:

On behalf of National Grid[1] attached are the Company's responses to Record Requests that were issued at the Commission's Evidentiary Hearing on June 20, 2013 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").

280 Melrose Street, Providence, RI 02903
T: 401-784-7288 ■ jennifer.hutchinson@nationalgrid.com ■ www.nationalgrid.com

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.

Joanne M. Scanlon

July 9, 2013
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 4/10/13

Name/Address	E-mail Distribution List	Phone
Jennifer Brooks Hutchinson, Esq. National Grid 280 Melrose St. Providence, RI 02907	Jennifer.hutchinson@nationalgrid.com Celia.obrien@nationalgrid.com Thomas.teehan@nationalgrid.com Joanne.scanlon@nationalgrid.com	401-784-7288
Karen Lyons, Esq. Dept. of Attorney General 150 South Main St. Providence, RI 02903	klyons@riag.ri.gov dmacrae@riag.ri.gov jmunoz@riag.ri.gov	
Jon Hagopian, Esq. Division of Public Utilities and Carriers	Jhagopian@ripuc.state.ri.us Acontente@ripuc.state.ri.us Jspirito@ripuc.state.ri.us Jshilling@ripuc.state.ri.us Sscialabba@ripuc.state.ri.us	401-784-4775
William H. Ferguson, Executive Director	Bferguson2010@cox.net	401-722-7352
Shigeru Osada Toray Plastics (America), Inc.	shigeru.osada@toraytpa.com	
Tim Woof Synapse Energy Economics 22 Pearl Street Cambridge, MA 02139	twoolf@synapse-energy.com	
Original & 10 copies file w/: Luly E. Massaro, Commission Clerk Public Utilities Commission 89 Jefferson Blvd. Warwick, RI 02888	Lmassaro@puc.state.ri.us cwilson@puc.state.ri.us Anault@puc.state.ri.us Adalessandro@puc.state.ri.us Nucci@puc.state.ri.us Dshah@puc.state.ri.us	401-941-4500

Christopher Kearns, OER	Christopher.Kearns@energy.ri.gov	

The Narragansett Electric Company
d/b/a National Grid
Docket No. 4397
In Re: Review of Energy Efficiency and
Advanced Gas Technology Incentives for
Toray Plastics' 12.5 MW CHP Project
Responses to Record Requests
Issued at the Commission's Evidentiary Hearing
On June 20, 2013

Record Request No. 1

Request:

What will Toray be paying for electricity today versus what will they pay per kWh after the installation of the CHP facility?

Response:

Currently, Toray's annual delivery charges are approximately $3.1 million. This estimate is based upon rates effective July 1, 2013 and Toray's actual billing determinants for calendar year 2012.

Annual billings to Toray after installation of the new CHP facility will depend upon a number of factors, including the applicable rates and tariff provisions, as well as the actual operation of the CHP facility.

First, Toray's existing billing account will likely be split into two separate billing accounts, one account for each generator and connected facility served by the respective generator. Second, Toray will need to elect the rate class upon which each account will be billed. In accordance with the CHP provision of the general service rates approved in Docket No. 4366, the new CHP unit and connected facility load must be billed under either retail delivery service rate schedule G-32 or G-62, subject to the CHP provision, since Toray is receiving an incentive from the Energy Efficiency program to install the CHP facility. However, the existing 7.5MW generator and connected facility load will remain eligible for billing under the Company's back-up service rates. Currently, Toray receives service under Optional Large Demand Rate B-62; however, the availability provision of Rates B-62 and its full requirements equivalent, Rate G-62, approved in the most recent rate case, have been changed to make those tariffs optional, rather than mandatory. Therefore, Toray may choose either G-32 or G-62 for the account associated with the new CHP unit and may choose either B-32 or B-62 for its existing 7.5MW generator unit and connected facility load.[1]

Finally, the availability of each generator unit will affect monthly and annual charges billed. For example, unexpected unit outages will cause delivered load to Toray to increase, thus increasing billed charges.

---

[1] Toray could choose to maintain a single billing account and receive service under either Rate G-32 or G-62; however, all usage would be subject to the CHP provision of the general service tariff approved in Docket 4366 and any other applicable provisions of those general service rates.

Record Request No. 1, page 2

After installation of the new CHP facility, Toray's annual delivery charges[2] are estimated to be approximately $0.9 million, or an annual savings of approximately $2.2 million. The estimate of both current billing and billing after installation of the 12.5MW unit is based upon delivery rates in effect as of July 1, 2013. This simplifying assumption allows for a comparison of "before" and "after" billing based solely upon the change in expected demand (kW) and kWh deliveries to Toray. Estimated billing after installation of the CHP unit is further based upon these additional assumptions: 1) generation/delivered load associated with the existing 7.5MW unit are identical to kWh generated and delivered in 2012; 2) the new 12.5MW unit operates with no unscheduled outages and one ten-day maintenance outage during a shoulder month; 3) Toray chooses Rate B-32 for the account associated with the existing 7.5MW unit and Rate G-32 for the account associated with the new 12.5MW unit.[3] Using these assumptions, estimated current annual billings, annual billings after installation of the 12.5MW CHP unit, and annual savings by category are as follows:

	Current Billing Rate B-62	**Billing After Installation of 12.5 MW CHP**	**Savings**
Distribution	$702,417	$489,891	$212,526
Transmission	$1,253,920	$237,034	$1,016,887
Transition	$162,901	$23,229	$139,672
Energy Efficiency	$911,038	$129,911	$781,127
Renewable Dist Energy	$2,011	$287	$1,724
Gross Earnings Tax	$6,317	$1,834	$4,483
Total Delivery Charges	$3,038,605	$882,185	$2,156,420
kWh Deliveries	100.6 million	14.5 million	
Per kWh – delivered load only	$0.03021	$0.06152	
Per kWh – sum of delivered load & generation	$0.01875	$0.00544	

[2] Toray receives commodity service from a third party supplier. Estimated annual billings and savings do not include estimated commodity billings.
[3] Under the defined assumptions, Rates B/G-32 for each account would produce the lowest annual bills.

Record Request No. 1, page 3

As noted above, estimated billings are based upon rates currently in effect. Toray's 12.5 MW CHP facility is expected to begin operation during 2014, and rates effective at that time will likely be different than rates in effect today. In particular, costs recovered through the Long-term Contracting for Renewable Energy Recovery ("LTCRER") factor,[4] shown in the table above, are expected to increase substantially as distributed generation units that have executed long-term or distribution generation standard contracts with the Company begin commercial operation. For example, based upon currently executed contracts and current market price projections, the Company expects to incur only approximately $4.8 million of above market costs during 2013, but expects to incur approximately $10.0 million during 2014 and approximately $16.0 to $20.0 million each year from 2015 to 2020.[5] By generating approximately 87,000,000 kWh per year, Toray will likely reduce the LTCRER charges that they will pay by more than $200,000 per year during this period.

Prepared by or under the supervision of: Ian Springsteel and Jeanne Lloyd

[4] The LTCRER, along with the Net Metering Surcharge, are reflected in a separate line item on customers' bills labeled Renewable Distribution Energy Charge.
[5] Based upon information provided in Commission 3-1 in Docket No. 4371.

The Narragansett Electric Company
d/b/a National Grid
Docket No. 4397
In Re: Review of Energy Efficiency and
Advanced Gas Technology Incentives for
Toray Plastics' 12.5 MW CHP Project
Responses to Record Requests
Issued at the Commission's Evidentiary Hearing
On June 20, 2013

Record Request No. 2

Request:

Using 2012 as a basis for comparison, please provide a snapshot of the distribution revenue today versus what the Company anticipates it to be during the first year of operation of the CHP facility. Please also include the transmission component, the system benefit charge, and the renewable charge.

Response:

Please see the table in the Company's response to Record Request No. 1. As indicated in the response to Record Request No. 1, on an annual basis, Toray's estimated annual bill savings are approximately $2.2 million based upon a billing analysis using rates currently in effect. These bill savings represent reduction in total revenue in each of the delivery service categories that will be recovered from all other customers through the operation of the Revenue Decoupling Mechanism ("RDM") or various other reconciling adjustment mechanisms.

Based upon the estimated savings to Toray during the first year of the operation of the new 12.5MW CHP facility, recovery of the annual reduction in distribution revenue of $212,526 would be recovered from all other customers initially through the RDM annual reconciliation through a uniform per kWh factor. In the Company's first general rate case following installation of the 12.5 MW CHP facility, distribution rates will be re-set to reflect the cost to serve each rate class; thus, lost distribution revenue, which is collected from all other customers through a uniform per kWh factor through the RDM prior to a general rate case, will be re-allocated based on an allocated cost of service study and may result in more significant rate impacts for the large general service class.

The reduction to Toray in transition charge revenue of $139,672 would be recovered through the operation of the Non-bypassable Transition Cost Adjustment Provision through a uniform per kWh factor applicable to all other customers.

As explained in the response to Record Request No. 1, Toray could potentially reduce in excess of $200,000 per year in LTCRER charges. Recovery of this reduction in LTCRER charges and recovery of the annual reduction in Energy Efficiency charges of $781,127 would be recovered from all other customers through a uniform per kWh charge pursuant to each of those reconciling mechanisms.

Record Request No. 2, page 2

The estimated reduction in annual transmission revenue of $1,016,887 may be partially offset by a corresponding reduction in transmission charges from New England Power Company ("NEP") to The Narragansett Electric Company ("NECO"). NEP charges NECO for transmission costs based upon a monthly load ratio share basis. This means that NECO's share of NEP's total monthly cost is based upon NECO's demand at the time of NEP's monthly system peak. Therefore, to the extent that customer-sited-distributed generation is operational at the time of NEP's system peak, NECO's allocation of transmission costg will be reduced by the amount of load supplied by a customer's own generation.

Prepared by or under the supervision of: Ian Springsteel and Jeanne Lloyd

The Narragansett Electric Company
d/b/a National Grid
Docket No. 4397
In Re: Review of Energy Efficiency and
Advanced Gas Technology Incentives for
Toray Plastics' 12.5 MW CHP Project
Responses to Record Requests
Issued at the Commission's Evidentiary Hearing
On June 20, 2013

Record Request No. 3

Request:

What is the capacity rating of the facility?

Response:

National Grid serves Toray Plastics through two electric services. The site also has an existing gas fired cogeneration unit that is rated at 7.5 MW and two banks of solar photovoltaic panels. As described in the Waldron study, the site's highest total electric demand in 2011 was 21.36 MW during the month of July.

The individual capacities are listed below:

- Electric Service #1: (Summer rating/Winter rating 9.9 kVA/11.6 kVA)
- Electric Service #2: (Summer rating/Winter rating 9.8 kVA/11.1 kVA)
- Solar Banks capacity: 405 kW
- Cogen #1: 7.5 MW
- Future Cogen #2: (Unit #1 - 7.5 MW; Unit #2 - 5 MW)

Prepared by or under the supervision of: Mark DiPetrillo

The Narragansett Electric Company
d/b/a National Grid
Docket No. 4397
In Re: Review of Energy Efficiency and
Advanced Gas Technology Incentives for
Toray Plastics' 12.5 MW CHP Project
Responses to Record Requests
Issued at the Commission's Evidentiary Hearing
On June 20, 2013

Record Request No. 4

Request:

Please provide a forecast of the 2014 shareholder incentive taking into account the impact of the CHP project.

Response:

The projected shareholder incentive for electric energy efficiency in 2014, as identified in Docket 4284, "National Grid 2012-2014 Energy Efficiency and System Reliability Procurement Plan," Appendix A, was $3,594,417. This estimate was calculated based on the target shareholder incentive for achieving 100% of the energy savings targets being 4.4% of the spending budget, which was the shareholder incentive design feature in place at that time. For 2013, among other changes to the shareholder incentive mechanism, the target incentive was changed to 5% of the spending budget for achieving 100% of the savings target. All other things being equal, if the mechanism in place for 2013 is retained for 2014, the shareholder incentive target calculation for 2014 would be as follows: (5.0%/4.4%) x $3,594,417 = $4,084,564.

The Toray project does not change the target incentive for 2014. The project, if completed in 2014, will contribute to the Company reaching its energy savings target in that year and, therefore, the achievement of the shareholder incentive.

Prepared by or under the supervision of: Jeremy Newberger