

December 17, 2013

VIA HAND DELIVERY & ELECTRONIC MAIL

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

**RE: Docket 4451 – The Narragansett Electric Company, d/b/a National Grid
2014 Energy Efficiency Program Plan
Responses to Record Requests**

Dear Ms. Massaro:

Enclosed are ten (10) copies of National Grid's¹ responses to Record Requests that were issued at the Commission's evidentiary hearing on December 11, 2013.

Please be advised that the Company's response to Record Request 5 will be forthcoming shortly.

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

Very truly yours,



Jennifer Brooks Hutchinson

cc: Docket 4451 Service List
Karen Lyons, Esq.
Jon Hagopian, Esq.
Steve Scialabba, Division

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

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. Copies of this filing were hand delivered to the RI Public Utilities Commission and the RI Division of Public Utilities and Carriers.



Joanne M. Scanlon

December 17, 2013

Date

Docket No. 4451 - National Grid - 2014 Energy Efficiency Program Plan
Service list updated 11/5/13

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Record Request 1

Request:

Please provide the details for the Citizens Bank job, as shown in the video clip during the Company's December 11, 2013 presentation. Please include the costs, out of which program this job came, and the customer contribution.

Response:

The Citizens Bank facility on Atwood Avenue was shown in the video clip during the Company's December 11, 2013 presentation. This particular facility participated in the Company's Large Commercial and Industrial Retrofit program. This project involved replacement of older T-12 lamps with high performance T-8 and LED lamps, along with lighting controls. This will result in annual electric savings of 17,705 kWh to the customer. The total cost of the upgrade was \$11,236 of which the customer received \$4,540 as incentives; the customer was responsible for the balance of the cost, or \$6,696. Annual utility cost savings, as a result of these upgrades, are expected to be \$2,390 per year with a payback period of 4.7 years.

Record Request 2

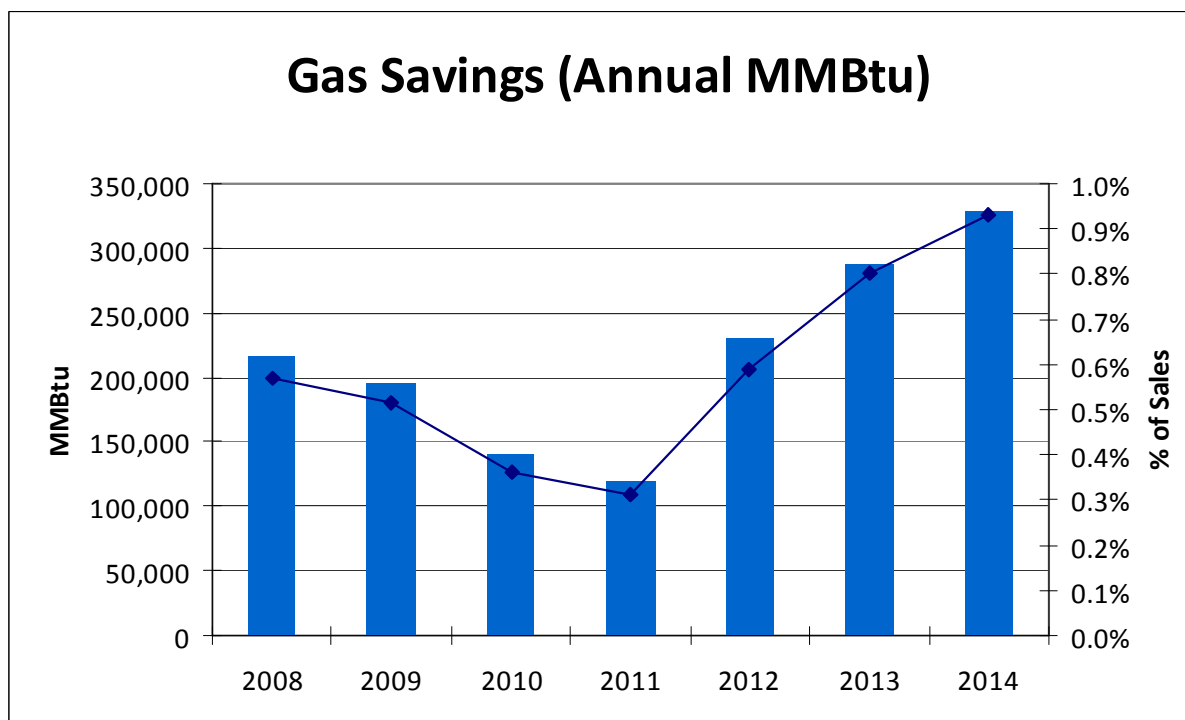
Request:

Please replicate the chart on page 5 of the Company's December 11, 2013 presentation showing general consumption vs. savings achieved from programs.

Response:

Please see Attachment RR-2

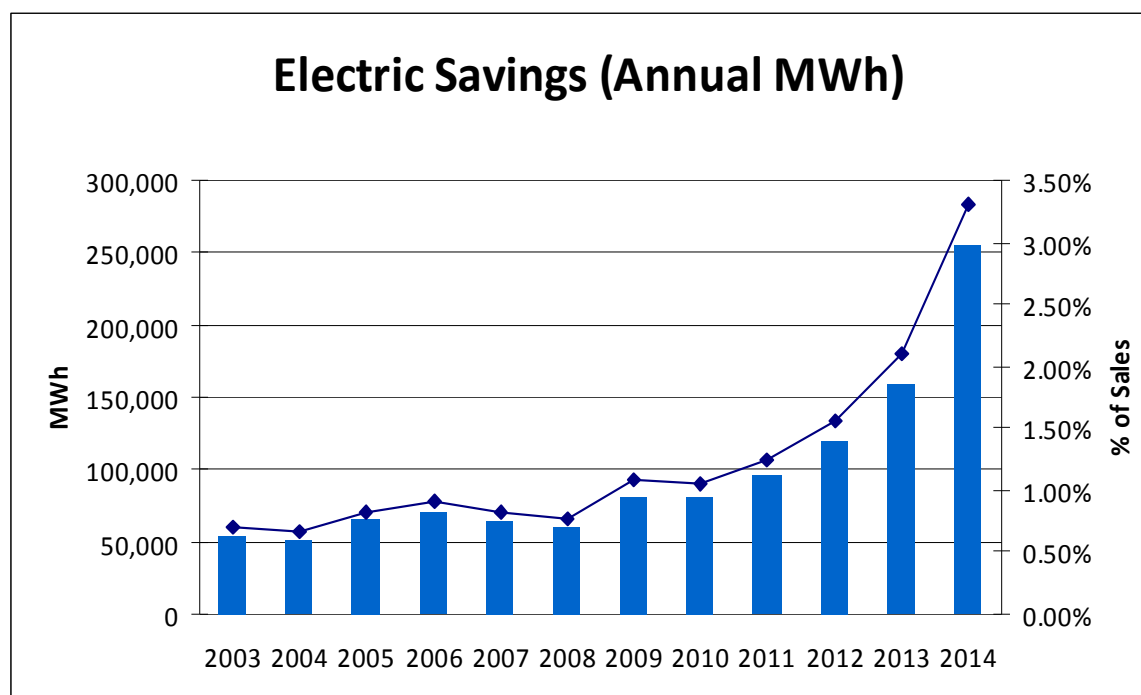
Impact of Least Cost Procurement nationalgrid



2008 savings combines 2007 and 2008, sales just for 2008

2013 and 2014 are planned values

Impact of Least Cost Procurement nationalgrid



2013 and 2014 are planned values

Record Request 3

Request:

Please provide additional details regarding the investment that led to \$160,000 in savings indicated on page 23 of the Company's December 11, 2013 presentation, including the cost of the additional measures.

Response:

Page 23 of the Company's December 11, 2013 presentation highlighted a new construction pharmacy building at a large Rhode Island University campus. Details of this building's participation in the Company's Large Commercial and Industrial New Construction program are as follows:

The initial design stage process with the customer began in 2008, followed by a Technical Assessment (TA) in 2010. The building analysis was done based on a comprehensive design with measures including high performance lighting and controls, efficient HVAC system, efficient motors and high performance envelope measures. The building got completed in 2012 and the application process closed in December 2012. Total incremental cost to the owner for upgrading to energy efficient measures (instead of those required just by the prevailing energy code) was \$427,419. Incentives paid through the program were \$182,087.20.

Record Request 4

Request:

Will any energy efficiency incentives be available to municipalities regardless of whether such municipalities own or the Company owns the streetlights?

Response:

Currently, the Company only offers energy efficiency incentives for customer-owned street lighting. For the installation of municipally-owned LED streetlights, the Company offers incentives if: (1) the measure is cost effective and (2) if the proposed street light fixtures are listed by the Design Lights Consortium Qualified Products List.

The Company supports the idea of LED street lighting. However, at this time the Company does not have a tariff for unmetered Company owned LED street lights. In the absence of a Company-owned street lighting tariff, it is premature for the Company to provide any details on whether there will be energy efficiency incentives available to municipalities or not.

Record Request 6

Request:

Please provide the number of participants for 2012 narrowed down to the extent possible to limit any double counting. Please provide these numbers by program and sector and include all assumptions.

Response:

The accounting of program participation has not, historically, removed double counting across programs. A customer who receives a home energy audit and a rebate for a boiler would, therefore, count as a participant in the EnergyWise and EnergyStar® Products programs. Within most programs, however, the Company is able to remove double counting because it can filter by unique billing account numbers. A customer who buys a furnace and a boiler, for example, is only recorded as one participant in the EnergyStar® HVAC program.

As part of an analysis on energy efficiency's impacts on customers' bills, an internal estimation of 2012 electric program participation that removed overlap was developed for the commercial, income-eligible residential, and non income-eligible custom classes. Using the available unique billing account information, double counting was removed from the programs in which each customer group participated.

Three residential programs -- EnergyWise Multifamily, EnergyStar® Products and EnergyStar® Lighting -- do not capture the account information for all customers who receive incentives for their purchases because of how these programs are delivered.

- Past reporting of Products participation has counted the number of rebates processed, though customers do not include their account information on all rebates. To estimate the total number of unique accounts associated with 2012 products rebates, the number of unique accounts from the available sample was extrapolated to the total number of rebates.
- EnergyWise multifamily projects occasionally do not collect billing account numbers for all units in a building. To estimate the number of unique accounts and their overlap with other programs, the unique portion of the known population was scaled to the total population of units.
- The residential lighting program reduces the price of bulbs at the distribution level, before any transaction between a customer and a store occurs. While the Company knows the number of bulbs purchased, the Company cannot collect information about what bulbs and how many bulbs an individual buys. This requires an estimation of the

Record Request 6, page 2

number of bulbs per person. A study completed in 2011 by Nexus Market Research¹, concluded that an average participant would purchase four bulbs. Their conclusion was based on site visits and phone interviews with Rhode Island customers. The use of five bulbs per participant² in planning and reporting stems from National Grid's assumption of an incremental increase in the proportion of efficient bulbs to inefficient bulbs that customers purchase each year. In the analysis for bill impacts, lighting participation, incorporating the five bulbs per person assumption, was split into the two residential sectors, income-eligible and non income-eligible, based on the ratio of accounts on their respective rate classes, A-16 and A-60, in 2012.

Each energy efficiency measure within a program has an associated net-to-gross factor that accounts for the following: free-ridership, the possibility that the measure would have been purchased without the incentive; spill-over, which means the possibility that a participant will install additional measures outside of the program; and non-participant spillover, which means the possibility that someone not receiving an incentive will install a measure after being influenced by the program. The factor is used so that the savings the Company claims are those that are directly attributable to the energy efficiency services the Company offers. Similarly, a program-level net-to-gross factor, weighted by the quantity of each measure tracked within a program in 2012, was then applied to each program's participation count. The number of participants, then, became an estimate of the number of customers whose savings the Company can track.

The unique account information was then used to remove overlap for all possible programs. Overlap with the residential lighting program was accounted for by assuming that any participant had a 23% chance of being a lighting participant since lighting participants represented 23% of Rhode Island residential customers.

The commercial programs contained account information for all participants, making the analysis of overlap far simpler. Net-to-gross ratios were applied just as they were for residential participants. Large Commercial customers are defined as those with a peak monthly demand of more than 200kW. Small Commercial customers have a smaller monthly peak demand.

¹ NMR (2011). *Results of the Multistate Modeling Effort*

² This clarifies statements made on therecord at the December 11, 2013, hearing on the 2014 Energy Efficiency Program Plan about the number of lamps per participant.

Record Request 6, page 3

The follow table summarizes the estimation of unique participants within each electric customer class in 2012.

Customer Class	Number of 2012 Participants
Residential	121,182
Residential – Income Eligible	16,781
Large Commercial	1,548
Small Commercial	1,376
Total	140,887

The following table summarizes the 2012 participation for the Company's electric programs, as reported in its 2012 Annual Report. Please note that participation in this table does not account for double counting across programs, only within programs.

Program	Participants
Large Commercial New Construction	1,410
Large Commercial Retrofit	529
Small Business Direct Install	1,707
Commercial Subtotal	3,646
Single Family Income Eligible Services	2,654
Income Eligible Subtotal	2,654
Residential New Construction	406
Electric HVAC	1,397
EnergyWise	12,871
EnergyStar® Lighting	153,879
EnergyStar® Products	26,498
Residential Subtotal	195,051
Total	201,351

The following table summarizes the 2012 participation for the Company's gas programs, as reported in its 2012 Annual Report. Please note that participation in this table does not account for double counting across programs, only within programs. The Company believes there is limited double counting of participation within the sectors, but has not yet undertaken an analysis of its magnitude. The Company suspects that it would be much less than the overlap in the electric programs, because there is no gas program comparable to the scale of the Residential Lighting program.

The Narragansett Electric Company
d/b/a National Grid
R.I.P.U.C. Docket No. 4451
2014 Energy Efficiency Program Plan
Responses to Record Requests
Issued at the Commission's Evidentiary Hearing
On December 11, 2013

Record Request 6, page 4

Program	Participants
Large Commercial New Construction	120
Large Commercial Retrofit	436
Small Business Direct Install	160
Commercial Subtotal	716
Single Family Income Eligible Services	388
Income Eligible Subtotal	388
EnergyStar® HVAC	6,553
EnergyWise	4,024
Residential Subtotal	10,577
Total	11,681