

April 2, 2015

**VIA HAND DELIVERY & ELECTRONIC MAIL**

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

**RE: Docket 4451 - National Grid Electric and Gas Energy Efficiency Programs  
2014 Quarterly Reports**

Dear Ms. Massaro:

Enclosed please find ten (10) copies of National Grid's<sup>1</sup> quarterly reports for 2014. These reports contain the preliminary quarterly results for natural gas and electric efficiency programs, as well as a summary of program progress and a status of the Commercial & Industrial revolving loan fund. Copies of these reports have also been provided to the parties in this docket.

Thank you for your attention to our filing. Please contact me if you have any questions regarding this matter at (401) 784-7288.

Very truly yours,



Jennifer Brooks Hutchinson

Enclosures

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

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<sup>1</sup> The Narragansett Electric Company d/b/a National Grid.

# Rhode Island Energy Efficiency

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First Quarter 2014 | National Grid

May 8, 2014

## Overview

National Grid is off to a great start for the first quarter of 2014. The Company focused on reaching new participants, including a mill projects in the Residential New Construction Program and creating new leads in the Commercial and Industrial (C&I) sector to develop a strong pipeline for 2014.

During the first quarter, National Grid launched new initiatives to create a strong foundation for reaching the 2014 energy savings targets. These included a focus on the Customer Directed Option (CDO) for the Small Business Direct Install program, where customers are able to use their own electricians and material vendors, and the launch of Upstream HVAC as part of the Large Commercial New Construction program.

National Grid also focused on improving the customer experience in the first quarter. In the EnergyWise program, full paperless invoicing was made available to all subcontractors to speed up processing time and an automated reminder call system was rolled out for customer appointments. In the Commercial and Industrial sector, the sales organization was restructured to create a 'channel sales' group to streamline the process and transaction experience for small and mid-sized customers.

Additionally, the 2013 Jobs Study was finalized in the first quarter. The study concluded that 544.73 full-time equivalent (FTE) employees had work in 2013 as a result of investments by National Grid in energy efficiency programs provided to its Rhode Island electricity and natural gas customers. The study also identified 814 companies and agencies involved in National Grid's 2013 energy efficiency programs, 78% of which were located in Rhode Island. The companies identified include those whose employees were counted in the FTE analysis, as well as additional companies who assisted customers to secure equipment rebates, for example through the New Construction or High Efficiency HVAC programs.

Based on the strong first quarter results, National Grid believes that 2014 will be a year full of innovation and success.

## 2014 Program & Initiative Updates

### Residential New Construction

- The program had a strong start during the first quarter. The program enrolled a mill building (142 units) in January that will be completed during the second quarter of 2014. The developer will enroll another mill building later in the year.
- A contractor that participated in extensive field trainings, including training HVAC contractors, framers and site supervisors will be enrolling approximately 200 market rate units into the program over the next several years.
- RI RNC was well represented at Journal of Light Construction (JLC) Live annual conference.
- Outreach meetings were scheduled with O'Hearn Architects and developers including, Neighborworks, Church Community Housing Corp, Housing Authority of Newport, and Brady Sullivan.
- Trainings held during the first quarter included "Advanced Framing" in Tiverton and "Thermal Enclosure Checklists" for Olneyville Housing.
- Equipment rebates were incorporated into the New Construction offerings, which streamlined the process for program participants.

### Income Eligible

- The Weatherization and Technical Committee met on 4/3/14 and discussed the Operation Manual; the DOE Grant; importance of getting permits in advance of work; QCI training and testing; and Knob and Tube Wiring Policy.
- Jules Junker, a 30-year leader in energy-efficient building and owner of ThermalWorks, will be conducting training with all Community Action Programs (CAP) Agencies and working with each auditor.
- During the first quarter, statewide knob & tube protocols were finalized, Hancock software was implemented, and statewide ASHRAE 62.2 2010 Implementation protocols were completed.

### EnergyWise

- Completed 1,913 audits and 767 weatherization jobs in the first quarter.
- Full paperless invoicing was made available to all subcontractors to speed up processing time.
- An automated reminder call system was rolled out for customer appointments.
- The Company hosted Moisture Charette to highlight best practices for addressing moisture in customer homes.
- The Company designed and captured customer's incoming data for tiered audits which will commence in the second quarter.
- The Company also trained independent auditors that will perform same day air sealing for tier 4 audits.

## **EnergyWise and Income Eligible Multifamily**

- The income eligible electric program is performing strongly as it already achieved 25% of the savings goal in the first quarter. Attached to this report is a case study on a specific 126-unit project in West Warwick.
- Additionally, the gas and electric programs have built a strong pipeline of projects for the remainder of 2014 and the Company remains confident that program goals will be met by the end of the year.
- The Company, along with its vendor RISE Engineering, met with Rhode Island Housing to discuss potential 2014 projects and to continue their strong relationship in marrying upcoming portfolio investments with the program incentives.
- The Company is currently developing a program enhancement to better serve more customers with deeper energy efficiency offerings and services. In addition to internal work on this topic, the Company received external technical assistance from expert firms, including the American Council for an Energy Efficient Economy (ACEEE).

## **ENERGYSTAR® Lighting and Appliances**

### **Lighting:**

- On March 25, 2014, an educational table was set up at the Stop & Shop in Providence to support the Stop & Shop GE Lighting Promotion.
- Over the first quarter, 13 school fundraising programs were implemented in Rhode Island.
- Lighting was promoted at the Park View Energy Fair in Cranston, which had 140 participants. Customers were particularly interested in LED lighting.

### **Appliances:**

- Eight independent appliance dealers signed up for the room air conditioner midstream promotion.
- Tier 2 advanced power strips, with enhanced features like motion sensing, are now being offered through the program.
- Pool pump education began in the first quarter with the lead outreach vendor educating over 200 pool pump dealers, installers, and staff at regional seminars.
- Retailers responded positively to the dryer rebate.

## **ENERGYSTAR® HVAC (Heating and Cooling)**

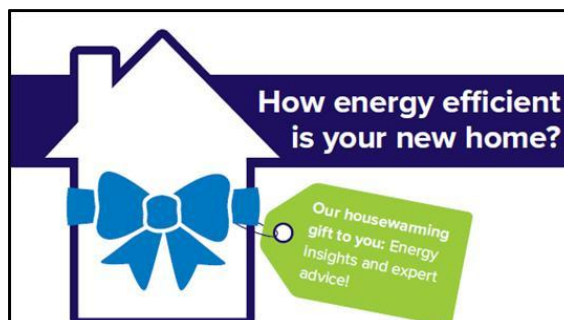
- More than 60 Rhode Island HVAC contractors attended the 2014 Gas Heat and Cool Smart kickoff meeting held on March 20 at the Hilton Garden Inn, Warwick RI. This event provided 2014 program and training opportunities.
- During the first quarter, 217 heat pump water heater (HPWH) rebates were approved for RI customers.
- Cool Smart staff participated in a RI-based Robinson Supply dealer meeting for RI HVAC contractors. More than 150 contractors attended this annual

event. Cool Smart staff presented program information and provided a Manual J load calculation demo.

- Several trainings were also held during the first quarter, including a QIV training class at SG Torrice in Providence, where 11 techs from 7 companies participated, and a Duct Diagnostics class at Supply New England in Middletown, where 8 techs from 6 companies participated.

## Home Energy Reports

- The program is off to a great start in achieving gas savings due to the fact that small behavior changes lead to significant savings during the winter months.
- The program underwent a few major expansions beginning in early 2014. All electric customers began receiving access to the Rewards program where they can earn points for saving energy, which in turn can be redeemed for gift cards. In addition, the New Movers feature began targeted outreach to new electric and gas customers across the state.



## Community Initiative

- The Rhode Island Energy Challenge: Find Your Four! is off to an excellent start in 2014, continuing to deliver the message of energy conservation and efficiency to grassroots networks across the state.
- The Company, alongside its vendor SmartPower, held a major press event on March 18th at the Boys and Girls Club in Warwick to celebrate the achievement of North Smithfield achieving its 5% participation goal and to officially kick-off the Challenge in the City of Warwick.
- Attendees at the event included town leaders from municipalities, non-profits, local businesses, and members of the press.
- The Challenge is now active in three towns/cities (North Smithfield, Newport, and Warwick) and the Company continues working to expand it to other communities.



## System Reliability – Little Compton and Tiverton

- Program materials and processes have been reviewed and updated for 2014 implementation.

- The first edition of the “LinkUp” newsletter to all pilot-eligible customers was disseminated in late February, highlighting DemandLink offers as well as energy efficiency opportunities. An insert was created specifically for customers who have already participated in DemandLink rebates.
- An updated marketing effectiveness memo was delivered by the evaluation team at the end of the first quarter, reporting on analysis of 2012 and all of 2013.

### **Commercial & Industrial Customer Experience**

- In order to have a more streamlined process and transaction experience for our small and mid-sized customers, and to increase our reach with vendors and customers, the sales organization was restructured to create a 'channel sales' group. The main intent of this team is to work with vendors to reach to customers based on specialization.

### **Codes Initiative**

- During the first quarter, the Company and the vendor developed a schedule for all residential and commercial trainings for 2014. In addition, the Company developed a marketing strategy for a state-wide awareness plan for codes support.

### **Large Commercial New Construction**

- The program is off to a slow start, with the majority of first quarter savings coming from the upstream lighting initiative. However, the dedicated new construction sales team has developed a large number of leads and extensive marketing was conducted.
- Upstream Lighting:
  - Upstream lighting started the year above Company projections but is in-line with previous program year first quarter results.
  - The Company worked with its third party program manager to make sure there is no fundamental issue with lamp market saturation.
  - The Company also continues to gather price and savings data to facilitate the addition of two new product offerings.
- Upstream HVAC:
  - The Company worked with the Massachusetts Program Administrators to solve some of the Upstream HVAC initiative challenges.
  - The Company made progress on building customers and contractor awareness of the initiative.
  - An investigation continued into what portion of the incremental can be covered and whether increased incentives are the key to more transactions and savings.
- Street lighting:
  - On March 17th the Company filed proposed changes to the customer owned street lighting tariff and closing documents.



- A technical session will be held at the Rhode Island Public Utilities Commission on May 6th to examine metering of customer owned LED street lighting.

### **Large Commercial Retrofit**

- This program is off to a slow start in the first quarter; however, numerous leads were created to develop a strong pipeline.
- The sales team for large customers was restructured to better align with vertical markets, while the sales team for small and mid-sized customers was restructured to work with an increased pool of vendors to broaden participation.
- Several municipal applications were created in the first quarter.

### **Small Business Direct Install**

- The program is off to a good start, especially in the electric sector. The program has already achieved 20% of the electric savings goal (completed and paid) and has an additional 11% under contract. The gas sector is off to a slower start, achieving 6% of the savings goal (completed and paid) with an additional 4% under contract.
- There were several success stories from the first quarter:
  - Maccoll Field YMCA updated the exterior of its facility with all new LED fixtures, replacing metal halide and high pressure sodium fixtures that used almost four times the electricity. With estimated savings of 111,171 kWh, this upgrade will save “the Y” over \$6,500 annually.
  - JD Byrider is a pre-owned car lot with two locations in Rhode Island. RISE worked with this customer to upgrade both facilities exterior with state of the art LED fixtures. Additionally the showrooms at each location were updated with high efficiency T8 lamps. Overall these upgrades helped improve the curb appeal of these locations in Cranston and Providence. These upgrades will save this customer over 135,314kWh or \$8,086 annually.
- The Customer Directed Option (CDO) portion of the program got off to a strong start in the 1st quarter, ending the period with 21 completed projects and 46 additional customer sites in the pipeline. Projects totaling over \$250K were completed, while almost \$500K is in the pipeline. Over 1,300 MWh are represented in approved, committed, or completed project status. Facilities included some exterior LED parking lot fixture replacements in small car dealerships and shopping plazas, in addition to the conventional direct install program mix upgrades for retail stores, offices, and hospitality facilities.

### **Evaluation**

- The 2013 Jobs Study was completed and found that 544.73 full-time equivalent (FTE) employees had work in 2013 as a result of investments by National Grid in energy efficiency programs provided to its Rhode Island electricity and natural gas customers. The study also identified 814

companies and agencies involved in National Grid's 2013 energy efficiency programs, 78% of which were located in Rhode Island.

- Proposed changes to participation reporting for future efficiency plans and reports were proposed at the RI Collaborative in March and at the EERMC in April.
- All data collection for the evaluation of the 2012 RI Upstream lighting installations has been completed. The final report is expected to be completed in June.
- In addition, an evaluation of pre-rinse spray valves was started in February and a process evaluation of Income Eligible Single Family began in January.

### Upcoming Events

- A Building Operator Certification (BOC) Level I class will begin in late May at the University of Rhode Island.
- NEEP's Northeast Energy Efficiency Summit Conference will be held in Newport, RI on June 2-3, 2014. <http://neep.org/neep-events/neep-summit/index>
- 2014 Power of Place Summit, Friday, May 23, 2014 at the Rhode Island Convention Center. <http://www.growsmartri.org/2014-summit/>
- Energy Efficiency Awareness Day, Moose Café, May 27, 2014, 4-8 pm. Tiverton, RI.



NATIONAL GRID ENERGY EFFICIENCY PROGRAMS IN RHODE ISLAND

Table 1. Summary of 2014 Target and Preliminary 1st Quarter Results

ELECTRIC PROGRAMS Sector and Program	(1)	(2)	(3)	(4)			(7)			(10)	(11)
	Energy Savings (Annual MWh)			Customer Participation			Implementation Expenses (\$ 000)			Lifetime savings,	
	Target	Year To Date	Pct Achieved	Approved Target	Year To Date	Pct Achieved	Budget	Year To Date	Pct Achieved	MWh	\$/kWh
<b>Commercial and Industrial</b>											
Large Commercial New Construction	27,472	2,712	9.9%	2,192	459	20.9%	\$7,811.0	\$1,212.6	15.5%	30,225	\$ 0.040
Large Commercial Retrofit	124,275	5,123	4.1%	833	100	12.0%	\$25,218.1	\$1,431.9	5.7%	62,387	\$ 0.023
Small Business Direct Install	21,170	4,267	20.2%	1,510	271	17.9%	\$12,645.5	\$1,585.4	12.5%	44,367	\$ 0.036
Community Based Initiatives - C&I							\$41.5	\$10.9	26.3%		
Commercial Pilots							\$364.1	\$0.0	0.0%		
Comprehensive Marketing - C&I							\$150.2	\$13.2	8.8%		
Finance Costs							\$1,000.0	\$1,000.0	100.0%		
<b>SUBTOTAL</b>	<b>172,917</b>	<b>12,101</b>	<b>7.0%</b>	<b>4,535</b>	<b>830</b>	<b>18.3%</b>	<b>\$47,230.3</b>	<b>\$5,254.1</b>	<b>11.1%</b>	<b>136,980</b>	<b>\$ 0.038</b>
<b>Income Eligible Residential</b>											
Single Family - Income Eligible Services	3,967	818	20.6%	2,450	588	24.0%	\$7,207.0	\$1,135.6	15.8%	10,358	\$ 0.110
Income Eligible Multifamily	2,113	538	25.5%	3,520	1,376	39.1%	\$2,092.3	\$391.0	18.7%	6,183	\$ 0.063
<b>SUBTOTAL</b>	<b>6,080</b>	<b>1,356</b>	<b>22.3%</b>	<b>5,970</b>	<b>1,964</b>	<b>32.9%</b>	<b>\$9,299.3</b>	<b>\$1,526.6</b>	<b>16.4%</b>	<b>16,541</b>	<b>\$ 0.092</b>
<b>Non-Income Eligible Residential</b>											
Residential New Construction	631	112	17.7%	458	85	18.6%	\$910.3	\$184.0	20.2%	1,426	\$ 0.129
ENERGY STAR® HVAC	726	369	50.8%	1,946	517	26.6%	\$919.7	\$300.0	32.6%	4,488	\$ 0.067
EnergyWise	7,674	3,066	40.0%	7,600	1,913	25.2%	\$6,448.4	\$1,907.2	29.6%	30,660	\$ 0.062
EnergyWise Multifamily	2,888	614	21.3%	4,500	1,669	37.1%	\$2,419.8	\$470.6	19.4%	7,037	\$ 0.067
ENERGY STAR® Lighting	35,731	4,021	11.3%	247,240	32,848	13.3%	\$7,389.7	\$709.1	9.6%	36,463	\$ 0.019
Residential Consumer Products	3,639	966	26.6%	13,285	6,559	49.4%	\$2,426.0	\$359.5	14.8%	6,917	\$ 0.052
Home Energy Reports	25,028	5,571	22.3%	227,600	200,482	88.1%	\$2,445.2	\$1,717.1	70.2%	5,571	\$ 0.308
Energy Efficiency Educational Programs							\$50.7	\$0.0	0.1%		
Residential Products Pilot							\$248.8	\$1.2	0.5%		
Community Based Initiatives - Residential							\$226.4	\$72.8	32.2%		
Comprehensive Marketing - Residential							\$581.9	\$11.4	2.0%		
<b>SUBTOTAL</b>	<b>76,317</b>	<b>14,719</b>	<b>19.3%</b>	<b>502,629</b>	<b>244,073</b>	<b>49%</b>	<b>\$24,066.9</b>	<b>\$5,733.0</b>	<b>23.8%</b>	<b>92,561</b>	<b>\$ 0.062</b>
<b>Regulatory</b>											
EERMC							\$816.7	\$0.0	0.0%		
OER							\$565.6	\$47.1	8.3%		
<b>SUBTOTAL</b>							<b>\$1,382.3</b>	<b>\$47.1</b>	<b>3.4%</b>		
<b>TOTAL</b>	<b>255,314</b>	<b>28,176</b>	<b>11.0%</b>	<b>513,134</b>	<b>246,867</b>	<b>48.1%</b>	<b>\$ 81,978.9</b>	<b>\$ 12,560.8</b>	<b>15.3%</b>	<b>235,724</b>	<b>\$ 0.053</b>
<b>System Reliability Procurement</b>							<b>\$ 279.2</b>	<b>\$36.8</b>	<b>13.2%</b>		

GAS PROGRAMS Sector and Program	(1)	(2)	(3)	(4)			(7)			(10)	(11)
	Energy Savings (MMBtu)			Customer Participation			Implementation Expenses (\$ 000)			Lifetime savings,	
	Approved Target	Year To Date	Pct Achieved	Approved Target	Year To Date	Pct Achieved	Approved Budget	Year To Date	Pct Achieved	MMBtu	\$/Lifetime MMBtu
<b>Commercial and Industrial</b>											
Large Commercial New Construction	31,863	3,485	10.9%	192	26	13.5%	\$2,096.7	(\$86.6)	-4.1%	74,474	\$ (1.163)
Large Commercial Retrofit	121,592	4,388	3.6%	606	14	2.3%	\$3,672.5	\$292.3	8.0%	47,797	\$ 6.116
Small Business Direct Install	10,496	582	5.5%	316	23	7.3%	\$545.9	\$10.4	1.9%	4,147	\$ 2.516
Commercial & Industrial Multifamily	5,511	593	10.8%	745	224	30.1%	\$488.8	\$34.9	7.1%	10,727	\$ 3.253
Commercial & Industrial Pilots							\$398.8	\$0.4	0.1%		
Comprehensive Marketing - C&I							\$173.6	\$7.9	4.6%		
Community Based Initiatives - C&I							\$30.0	\$10.9	36.4%		
Finance Costs							\$200.0	\$200.0	100.0%		
<b>SUBTOTAL</b>	<b>169,463</b>	<b>9,048</b>	<b>5.3%</b>	<b>1,859</b>	<b>287</b>	<b>15.4%</b>	<b>\$7,606.4</b>	<b>\$470.3</b>	<b>6.2%</b>	<b>137,146</b>	<b>\$ 3.429</b>
<b>Income Eligible Residential</b>											
Single Family - Income Eligible Services	6,395	1,124	17.6%	400	79	19.8%	\$2,584.0	\$394.8	15.3%	22,480	\$ 17.564
Income Eligible Multifamily	16,824	354	2.1%	2,200	51	2.3%	\$1,967.6	\$22.7	1.2%	4,954	\$ 4.586
<b>SUBTOTAL</b>	<b>23,219</b>	<b>1,478</b>	<b>6.4%</b>	<b>2,600</b>	<b>130</b>	<b>5.0%</b>	<b>\$4,551.5</b>	<b>\$417.6</b>	<b>9.2%</b>	<b>27,434</b>	<b>\$ 15.221</b>
<b>Non-Income Eligible Residential</b>											
EnergyWise	30,120	7,971	26.5%	2,000	668	33.4%	\$4,820.5	\$1,160.1	24.1%	159,420	\$ 7.277
Energy Star® HVAC	20,344	6,542	32.2%	2,584	578	22.4%	\$1,996.8	\$460.2	23.0%	108,121	\$ 4.257
EnergyWise Multifamily	9,256	2,261	24.4%	2,000	459	23.0%	\$1,314.7	\$137.8	10.5%	29,919	\$ 4.607
Home Energy Reports	73,877	33,212	45.0%	180,000	116,989	65.0%	\$468.3	\$207.5	44.3%	33,212	\$ 6.248
Residential New Construction	3,683	480	13.0%	392	43	11.0%	\$608.6	\$37.6	6.2%	11,995	\$ 3.136
Residential Products Pilot							\$136.2	(\$2.5)	-1.9%		
Comprehensive Marketing - Residential							\$139.7	\$1.3	0.9%		
Community Based Initiatives - Residential							\$44.4	\$10.4	23.4%		
<b>SUBTOTAL</b>	<b>137,281</b>	<b>50,465</b>	<b>36.8%</b>	<b>186,976</b>	<b>118,737</b>	<b>63.5%</b>	<b>\$9,529.3</b>	<b>\$2,012.4</b>	<b>21.1%</b>	<b>342,668</b>	<b>\$ 5.873</b>
<b>Regulatory</b>											
EERMC							\$245.4	\$0.0	0.0%		
OER							\$163.6	\$13.6	8.3%		
<b>SUBTOTAL</b>							<b>\$409.0</b>	<b>\$13.6</b>	<b>3.3%</b>		
<b>TOTAL</b>	<b>329,963</b>	<b>60,990</b>	<b>18.5%</b>	<b>191,435</b>	<b>119,154</b>	<b>62.2%</b>	<b>\$ 22,096.2</b>	<b>\$ 2,913.9</b>	<b>13.2%</b>	<b>507,247</b>	<b>\$ 5.744</b>

NOTES

(1)(4) Targets from Docket 4451 - Attachment 4, Table E-6 (electric) and Attachment 5, Table G-6 (gas).

(2) EnergyWise electric and gas savings are estimates from RISE Engineering

(3) Pct Achieved is Column (2)/ Column (1).

(6) Pct Achieved is Column (5)/ Column (4).

(7) Approved Implementation Expenses from Docket 4451, Attachment 4 Table E-4 (electric) and Attachment 5 Table G-5 (gas).

(8) Year To Date Implementation Expenses are net of evaluation expenses.

Small Business Direct Install Electric Includes OER funds spent in Quarter 1.

Large Commercial New Construction Gas shows negative spend due to a charge reversal from the 2012 program year.

(9) Pct Achieved is Column (8)/ Column (7).

(11) \$/lifetime kWh = Column (8)/Column (10); \$/lifetime therm = Column (8)\*1000/Column (10)\*10

System Reliability Procurement targets from Docket 4367, not included in Implementation Expenses Total

System Reliability Procurement targets and actuals do not reflect statewide EE amounts leveraged

**West Warwick Housing Authority-62 Roberts St Apts -126 units (Income Eligible elec and Gas)**

*\$112,213.00 in electrical measures installed, estimated 195,798 annual Kwh saved*

*\$855.00 in gas measures installed, estimated 622 annual therms saved*

- LED 2 x2 troffers installed throughout the common areas (elec)
- low flow showerheads and aerators to unit kitchens and baths (gas)
- CFL screw-in lamps for unit misc. portable lamps and fans (elec)
- Smart strips for each unit (elec)
- Variable Frequency Drives installed to hot water heat distribution system motors (elec)
- LED wall pack fixtures for common exterior building lighting (elec)
- vending misers installed to on-site vending machines (elec)
- LED exit signs (elec)



**Table 2**  
**National Grid**  
**Revolving Loan Funds**

<b>Large C&amp;I Revolving Loan Fund</b>			<b>Small Business Revolving Loan Fund</b>		
(1)	2014 Funds Available	\$6,858,467	2014 Funds Available		\$3,241,378
(2)	2014 Loan budget	\$5,007,151	2014 Loan Budget		\$3,000,000
(3)	Committed	\$2,191,170	Committed		\$346,429
(4)	<u>Paid</u>	<u>\$1,097,060</u>	<u>Paid</u>		<u>\$402,532</u>
(5)	Available	\$1,718,921	Available		\$2,251,039

**Rhode Island Public Energy Partnership (RI PEP)**

(6)	2014/2015 Loan Budget	\$1,000,000
(7)	Committed	\$0
(8)	<u>Paid</u>	<u>\$0</u>
(9)	Available	\$1,000,000

Notes

1 Amount Company estimated in 2014 Plan, Table E-10

2 Budget adopted by Sales Team for 2014 operations.

3 As of May 27, 2014

4 As of May 27, 2014

5 Does not include loan repayments

6 RI PEP funding is over two years

# Rhode Island Energy Efficiency

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Second Quarter 2014 | National Grid

August 7, 2014

## Overview

During the second quarter, National Grid built upon its strong first quarter foundation with continued focus on growing customer participation and savings.

One of the highlights of the second quarter was the success of the Rhode Island Energy Expo at the 2014 RI Home Show. National Grid partnered with the RI Office of Energy Resources (OER) and the RI Energy Efficiency and Resource Management Council (EERMC) to host the event. In total, 20,000 people were in attendance, up 45% over previous years. The Expo helped increase attendee awareness of energy efficiency and National Grid's program offerings. Over 300 leads were created for the Home Energy Assessment program, nearly 200 Rhode Islanders signed up for the RI Energy Challenge: Find Your Four!, and over 1,500 boxes of energy efficient lighting were sold.

In the residential sector, Newport joined North Smithfield as the second city to win the Rhode Island Energy Challenge: Find Your Four! With over 5% of the city's households pledging to be more efficient by finding four ways to save, Newport was designated as a Rhode Island Energy Champion and will receive \$7,500 from National Grid to be put toward energy efficiency improvements in a public building.

Commercial and industrial sector programs also made strong progress towards year end savings goals. The Codes initiative had strong attendance numbers at the five commercial and five residential classroom training sessions held in the second quarter. In addition, the Company was able to break down barriers to participation in the hard-to-reach manufacturing sector through its pilot initiative, enabling several large manufacturing customers to achieve significant energy savings.

During the second quarter, National Grid launched new initiatives and partnered with experts to create a strong foundation for reaching energy savings goals in 2014 and beyond. This included the roll-out of the Sustainable Office Design Initiative that targets tenant fit-out office spaces that are greater than 7,500 square feet. The Company also worked with industry experts including ACEEE and the Affordable Multifamily Housing Efficiency Project on enhancing its multifamily program delivery.

At the halfway point, the Company is projecting that we will reach 94% of the electric savings target and 102% of the gas savings target. The Company is looking forward to building off the momentum gained in the first two quarters to ensure a strong finish in the second half of the program year.

## 2014 Program & Initiative Updates

### Residential New Construction

- The program continued its strong performance in quarter two, enrolling a total 299 homes and completing 245 homes. Completed homes included 140 units at the American Wireworks (mill building) in Pawtucket; 36 units at the Mount Hope Court Apartments in Providence; and 28 units at the Veterans Memorial Family Housing in Woonsocket.
- Several trainings were held in the second quarter.
  - Sam Rashkin, Chief Architect of the Building Technologies Office at DOE, presented a comprehensive overview of zero-energy-ready home construction in front of more than 60 building professionals.
  - In addition, 56 students from the Woonsocket Area Career and Tech Center participated in a technical and job support training where they had the opportunity to learn about energy efficiency through classroom sessions and hands-on training.
- The program was highlighted at the Rhode Island Home Show in Providence with two 30-minute energy efficiency presentations.
- There were several Reno/Rehab success stories in the second quarter:
  - The developer of the 36-unit Mount Hope Court Apartments in Providence was able to significantly improve the air leakage in the building, helping to create better thermal comfort for tenants.
  - Insulation inspections were recently performed for a Newport Renewables home in Jamestown that is striving for Net Zero. This is the first RI RNC participant using the RI manufactured Climate Block Structural Insulated Panels (SIP) system.
- After a successful launch of the RI Code Enhancement Initiative, RI RNC has seen a recent uptick in requests for code testing. Builders have expressed interest in learning about RI RNC and several have enrolled homes in the program. This is a great example of the benefits of program crossover resulting in increased participation and energy savings.



### Income Eligible

- Eight Community Action Program (CAP) auditors and CLEAResult participated in the Building Performance Institute Quality Control Inspector training in May. In 2015, all final inspections will be completed by a BPI QCI certified inspector.

- The Weatherization and Technical Committee met in April and discussed the Operation Manual; Department of Energy grant; the importance of obtaining permits in advance of work; QCI training and testing; and Knob and Tube Wiring Policy.
- Jules Junker, a 30-year leader in energy-efficient building and owner of ThermalWorks in Vermont, continued his Rhode Island training program (1 day classroom, 2 days field) with four of the seven CAPs participating in the second quarter. Training will continue in the third quarter.
- The annual Rhode Island Weatherization Program Policy Advisory Council (WAP PAC) meeting was held in the second quarter. WAP PAC is a collaborative that shapes Rhode Island weatherization programs. Members are the Rhode Island Department of Human Services, the Department of Health, National Grid, Green and Healthy Home Initiative, RI Housing, Blackstone Valley CAP (as appointed by RICAA), and the Housing Resource Commission.

## **EnergyWise**

- The program had a strong second quarter with 2,050 assessments and 834 weatherization projects completed.
- During the second quarter, customer interest in EnergyWise home energy assessments and weatherization skyrocketed. As a result, gas incentive levels will be reduced from 75% of project cost (up to \$2,000) down to 50% of project cost (up to \$2,000) at the beginning of quarter three.
- The \$800,000 in oil weatherization funds was nearly exhausted at the end of the second quarter. With no additional funds available, this program element will most likely be suspended for the remainder of 2014.
- Ten Independent Installation Contractors (IICs) were awarded DOE and EPA Century awards for completing 100 or more weatherization projects in 2013.
- Contractor performance was also evident in the second quarter with New England Weatherization receiving a Golden Gun award for outstanding performance in air sealing.
- Nineteen air sealing projects were completed by Ocean State Energy Audits for the Tier 4 Air Sealing Pilot.
- 578 Heat Loans were processed through the end of quarter two.

## **EnergyWise and Income Eligible Multifamily**

- During the second quarter, the Company continued its commitment to program improvement. The company received multiple technical assistance studies on multifamily program design and implementation from various industry experts including ACEEE and the Affordable Multifamily Housing Efficiency Project (<http://www.nrdc.org/energy/files/multifamily-housing-energy-efficiency-FS.pdf>). In June, the Company met with ACEEE to discuss their findings, which included best practices for building energy benchmarking, incentive design, and marketing and outreach.
- Income Eligible multifamily is on track to meet year-end savings goals. One of the success stories from the second quarter was the 151-unit Babcock Village



Apartments in Westerly. Improvements included direct install measures for all units, a vender miser occupancy control for a refrigerated beverage dispenser, and over 2,500 square feet of cellulose insulation. Overall the improvements will result in estimated savings of more than 70,000 annual kWh and 6,800 annual therms.

- Market Rate multifamily also continues to perform well and is on track to meet year-end savings goals. One highlight during the last quarter was the 82-unit Woodbridge Apartments project in Cranston. The project received over \$80,000 in gas and electric energy efficiency measures. In addition to traditional direct install measures for common area and individual units, the facility received full air sealing measures and almost 30,000 square feet of cellulose insulation.

### **ENERGYSTAR® Lighting and Appliances**

- In April there was a Deals in RI promotion offering six LED BR030 bulbs (commonly used in recessed lighting) for \$20. There was a strong response to this offer, with over 1,300 kits sold.
- In June there was a social media promotion on the National Grid RI Facebook page that offered six globe CFL bulbs and the Evolve Roadrunner water saving showerhead for \$15. Over 2,800 kits were sold supporting the ongoing interest in CFLs and the emerging interest in water savings measures.
- To date the school fundraiser program has been used by sixteen schools in RI. A total of 4,700 students have been trained in ways to save energy around their homes and over 11,000 energy efficient lighting and energy savings items have been sold.

### **ENERGYSTAR® HVAC (Heating and Cooling)**

- During the second quarter, circuit rider outreach for both RI Gas and Electric programs continued with visits to several supply houses.
- Heat pump water heaters continued a strong trajectory with over 80 installations.
- Looking forward to the third quarter, on July 31, 2014 reduced gas heat rebates will take effect. Communications with contractors, installers and supply houses will be conducted at the beginning of the third quarter.

### **Home Energy Reports**

- The program continues to deliver excellent gas savings by capitalizing on the many opportunities during the very cold winter and early spring, achieving 59% of the savings goal.
- Electric savings continue to accumulate ahead of the summer months, with savings at 36% of the savings goal through the end of June.



## Community Initiative

- The Rhode Island Energy Challenge: Find Your Four! initiative continues to make excellent progress in engaging Rhode Islanders about energy efficiency and the ways that they can save at home. Major updates include:
  - The City of Warwick, a current municipal partner, has been actively encouraging residents to take energy efficient actions. With almost a month left in the Challenge, the City has already achieved 1,300 of its 1,700 sign-up goal. The Challenge is also reaching out to the Warwick faith community and presented at community gatherings such as little league tournaments and city concerts.
  - The City of Newport was named a RI Energy Champion by successfully signing up over 5% of households. Actually, while the goal was 530 emails/households, Newport signed up almost 900 homes!
  - The Challenge also made great advances in engaging businesses. National Grid and SmartPower were onsite for three days at Fidelity where over 10% of their employees signed up for the Challenge. The Challenge also made a second trip to Blue Cross Blue Shield (BCBS) and well exceeded their 10% mark. BCBS is now taking it upon themselves to Challenge GTECH (the newest Challenge partner) to see if they can get more employees to be energy efficient in their homes.

## Commercial & Industrial Customer Experience

- National Grid is continuing to work with identified market sectors. In the first quarter, the large customer sales group re-aligned to serve customers based market sectors. In the second quarter, the Company continued with process by modifying the small and medium customer sales team to also be structured based on market verticals. The sales force realignment will better serve customers and focus on energy savings based on each sector.

## Codes Initiative

- Attendance at energy code training was strong in the second quarter. In total, five commercial classroom training sessions (95 attendees) and five residential trainings (72 attendees) were held.
- CSG sent electronic invitations to trainings approximately every two weeks throughout the quarter. Training enrollments continue to spike during the week after the invite is sent.
- CSG partnered with the Town of North Smithfield and coordinated with National Grid on several residential trainings.
- Five blower door trainings were held and CSG sponsored trainings on structural insulated panels (SIPs) for both commercial and residential stakeholders with Branch River.
- Two commercial webinars were developed in June: "Controlling Air and Moisture in the Building Envelope" and "Daylighting Requirements". These webinars are ready to be launched in July and are scheduled for sessions through September.

- The National Grid marketing team is also working to develop a marketing strategy for a state-wide awareness plan for codes support.

## Large Commercial New Construction

- The program is on track to meet both electric and gas savings goals.
- Upstream Lighting:
  - Upstream lighting regained its footing in the second quarter, as January and February are historically the weakest months of the year. The addition of new products, including recessed lighting 25w and above and LED stairwell lighting should start to add to savings in the third quarter.
- Upstream HVAC:
  - This initiative continues to experience slow uptake. National Grid continues to improve the system and tighten relationships with distributors.
- Street lighting:
  - At the end of the second quarter, the Commission had not yet issued a decision on the customer owned street lighting docket. Once the tariff is approved, customer owned street lighting will be included as a Rhode Island Public Energy Partnership (RIPEP) project for energy efficiency.
- Office of the Future:
  - This initiative was formally rolled out from a pilot stage to an initiative and is now open to all customers. It is now called the Sustainable Office Design Initiative and targets tenant fit-out office spaces that are greater than 7,500 square feet.

## Large Commercial Retrofit

- This program is expecting to meet its gas savings goal and at least 90% of its electric savings goal.
- The manufacturing initiative pilot demonstrated great progress in the second quarter. Several large manufacturing customers that previously were not able to fully participate in energy efficiency programs were able to do so under this initiative. At the end of the second quarter, five of the Company's largest manufacturing customers signed-up for the pilot with an additional two expected by end of this year. The five enrolled customers are expected to save approximately 7 million kilowatt-hours and more than 400,000 therms, close to a 3% reduction of their annual energy usage.
- The Company continued to work with its existing Strategic Energy Management Plan (SEMP) customers. There were no new SEMP enrollments in the first two quarters of 2014. However, the Company is planning to ramp up this effort for the next year with one potential customer already lined up.
- The Company continues to work with customers that demonstrate a viable potential for CHP. To date, the Company is pursuing two potential candidates. Due the long sales cycle associated with CHP projects, it is uncertain when these projects will be solidified.
- A Level I BOC class was cancelled due to low enrollment. The next Level I class will be held in September in Worcester.

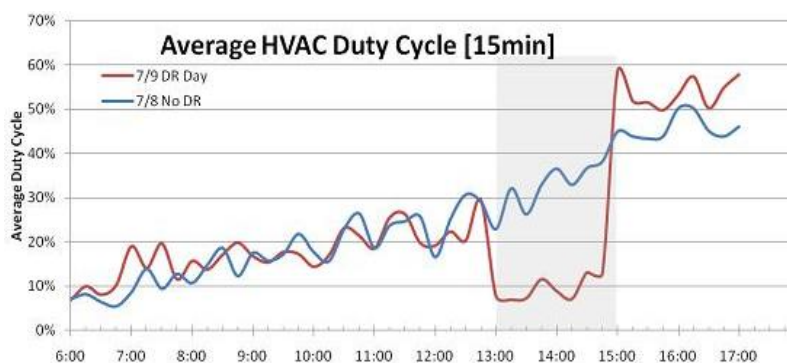
- Rhode Island Public Energy Partnership (RIPEP):
  - The Company's dedicated municipal and state sales lead is continuing to work with RIPEP partners to target customers. Several applications are already lined-up for this initiative. The Company is working to see which of these applications contribute towards RIPEP goals. The Company is also working on strategies to overcome the barriers to energy efficiency in state facilities.

### Small Business Direct Install

- The program is continues its strong start to the year. Several highlights from the second quarter include:
  - Providence YMCA, Wakefield, RI. RISE completed over \$46,000 worth of interior and exterior lighting upgrades. State-of-the-art LED luminaires were installed inside the facility and the exterior fixtures will be virtually maintenance free. This project will save the YMCA over \$5,000 per year.
  - Union Station Plaza Garage, Providence, RI. This customer will save just under \$7,000 per year after upgrading its 24-hour parking garage facility in Providence. The project used 18w LED tubes to replace the existing fluorescent lamps and ballasts. Not only is the company saving energy (62,000 kWh) and money, the facility is brighter and more appealing.
  - Mount Saint Charles Academy, Woonsocket, RI. RISE updated exterior lighting at both the High School and the Hockey arena complex from Metal Halide to LED lighting. In addition, the interior lighting of the ice rink was updated. The upgrades will save Mount Saint Charles 53,758 kWh, or about \$6,000 a year.

### Pilots

- In the second quarter of 2014 the Company continued the Automatic Temperature Control pilot and Energy Monitoring pilot. The Company anticipates that the pilot will be completed end of third quarter and then it will evaluate the results.
- Using AMR meter reading technology in combination with the communicating thermostat, the Company was able to monitor and assess the performance of units during a recent demand response (DR) event, which is a component of the Automatic Temperature Control pilot.
- In the third and fourth quarter, the Company is planning to launch a small pilot for Heat Pump Dryers to determine their effectiveness and test market reliability. The Company will also conduct a Ducted Variable Speed Pump assessment of heat pumps using customer installed equipment during 2014



and will focus on how much additional savings these units provide over standard units.

## **Evaluation**

- The results of the 2012 RI Upstream Lighting impact evaluation have been finalized.
- The Company is reviewing draft results from the Income Eligible Single Family process and impact evaluations.

## **Upcoming Events**

- National Night Out in Providence's Donigan Park, 5:00-8:00PM, 8/5/14.
- Water Fire with National Grid sponsorship, 5:00-8:30PM, 8/9/14. Waterplace Park.
- PawSox Fan Fest, 1:05-6:00PM, 8/16/14. McCoy Stadium.
- Sustainable Schools Summit, 8:00AM-3:00PM, 11/07/14. Rhode Island College Student Union.

**NATIONAL GRID ENERGY EFFICIENCY PROGRAMS IN RHODE ISLAND**

**Table 1. Summary of 2014 Target and Preliminary 2nd Quarter Results**

ELECTRIC PROGRAMS Sector and Program	(1)	(2)	(3)	(4)	(5) (6) (7)			(8) (9) (10)			(11)	(12)
	Energy Savings (Annual MWh)				Customer Participation			Implementation Expenses (\$ 000)			Lifetime	
	Target	Year To Date	Pct Achieved	Pct Projected	Approved Target	Year To Date	Pct Achieved	Budget	Year To Date	Pct Achieved	savings, MWh	\$/kWh
<b>Commercial and Industrial</b>												
Large Commercial New Construction	27,472	6,716	24.4%		2,192	1,605	73.2%	\$7,811.0	\$2,504.1	32.1%	74,811	\$ 0.033
Large Commercial Retrofit	124,275	11,479	9.2%		833	189	22.7%	\$25,218.1	\$3,755.2	14.9%	143,009	\$ 0.026
Small Business Direct Install	21,170	8,153	38.5%		1,510	501	33.2%	\$12,645.5	\$4,145.6	32.8%	86,828	\$ 0.048
Community Based Initiatives - C&I								\$41.5	\$11.0	26.5%		
Commercial Pilots								\$364.1	\$2.0	0.6%		
Comprehensive Marketing - C&I								\$150.2	\$32.0	21.3%		
Finance Costs								\$1,000.0	\$1,000.0	100.0%		
<b>SUBTOTAL</b>	<b>172,917</b>	<b>26,348</b>	<b>15.2%</b>	<b>94.0%</b>	<b>4,535</b>	<b>2,295</b>	<b>50.6%</b>	<b>\$47,230.3</b>	<b>\$11,450.0</b>	<b>24.2%</b>	<b>304,648</b>	<b>\$ 0.038</b>
<b>Income Eligible Residential</b>												
Single Family - Income Eligible Services	3,967	1,983	50.0%		2,450	1,302	53.1%	\$7,207.0	\$3,290.3	45.7%	24,395	\$ 0.135
Income Eligible Multifamily	2,113	1,218	57.6%		3,520	2,335	66.3%	\$2,092.3	\$854.2	40.8%	13,403	\$ 0.064
<b>SUBTOTAL</b>	<b>6,080</b>	<b>3,201</b>	<b>52.6%</b>	<b>100.0%</b>	<b>5,970</b>	<b>3,637</b>	<b>60.9%</b>	<b>\$9,299.3</b>	<b>\$4,144.5</b>	<b>44.6%</b>	<b>37,798</b>	<b>\$ 0.110</b>
<b>Non-Income Eligible Residential</b>												
Residential New Construction	631	373	59.1%		458	330	72.1%	\$910.3	\$533.1	58.6%	4,103	\$ 0.130
ENERGY STAR® HVAC	726	689	94.9%		1,946	1,211	62.2%	\$919.7	\$565.3	61.5%	8,543	\$ 0.066
EnergyWise	7,674	4,360	56.8%		7,600	4,135	54.4%	\$6,448.4	\$3,369.6	52.3%	39,211	\$ 0.086
EnergyWise Multifamily	2,888	1,475	51.1%		4,500	2,836	63.0%	\$2,419.8	\$1,101.6	45.5%	16,499	\$ 0.067
ENERGY STAR® Lighting	35,731	7,864	22.0%		247,240	111,227	45.0%	\$7,389.7	\$1,418.4	19.2%	72,837	\$ 0.019
ENERGY STAR® Products	3,639	2,058	56.5%		13,285	12,898	97.1%	\$2,426.0	\$858.6	35.4%	14,911	\$ 0.058
Home Energy Reports	25,028	9,014	36.0%		227,600	195,006	85.7%	\$2,445.2	\$1,735.4	71.0%	9,014	\$ 0.193
Energy Efficiency Educational Programs								\$50.7	\$35.6	70.3%		
Residential Products Pilot								\$248.8	\$1.3	0.5%		
Community Based Initiatives - Residential								\$226.4	\$73.2	32.3%		
Comprehensive Marketing - Residential								\$581.9	\$67.9	11.7%		
<b>SUBTOTAL</b>	<b>76,317</b>	<b>25,833</b>	<b>33.8%</b>	<b>96.0%</b>	<b>502,629</b>	<b>327,643</b>	<b>65%</b>	<b>\$24,066.9</b>	<b>\$9,760.0</b>	<b>40.6%</b>	<b>165,117</b>	<b>\$ 0.059</b>
<b>Regulatory</b>												
EERMC								\$816.7	\$164.8	20.2%		
OER								\$625.6	\$137.9	22.0%		
<b>SUBTOTAL</b>								<b>\$1,442.3</b>	<b>\$302.7</b>	<b>21.0%</b>		
<b>TOTAL</b>	<b>255,314</b>	<b>55,382</b>	<b>21.7%</b>	<b>94.0%</b>	<b>513,134</b>	<b>333,575</b>	<b>65.0%</b>	<b>\$ 82,038.9</b>	<b>\$ 25,657.2</b>	<b>31.3%</b>	<b>507,563</b>	<b>\$ 0.051</b>
<b>System Reliability Procurement</b>								<b>\$ 279.2</b>	<b>\$68.6</b>	<b>24.6%</b>		

GAS PROGRAMS Sector and Program	(1)	(2)	(3)	(4)	(5) (6) (7)			(8) (9) (10)			(11)	(12)
	Energy Savings (MMBtu)				Customer Participation			Implementation Expenses (\$ 000)			Lifetime	
	Approved Target	Year To Date	Pct Achieved	Pct Projected	Approved Target	Year To Date	Pct Achieved	Approved Budget	Year To Date	Pct Achieved	savings, MMBtu	\$/Lifetime MMBtu
<b>Commercial and Industrial</b>												
Large Commercial New Construction	31,863	6,494	20.4%		192	64	33.3%	\$2,096.7	\$183.0	8.7%	139,698	\$ 1.310
Large Commercial Retrofit	121,592	20,886	17.2%		606	39	6.4%	\$3,672.5	\$807.5	22.0%	153,079	\$ 5.275
Small Business Direct Install	10,496	1,709	16.3%		316	38	12.0%	\$545.9	\$34.1	6.3%	16,040	\$ 2.127
Commercial & Industrial Multifamily	5,511	1,976	35.9%		745	240	32.2%	\$488.8	\$161.4	33.0%	36,682	\$ 4.401
Commercial & Industrial Pilots								\$398.8	\$7.1	1.8%		
Comprehensive Marketing - C&I								\$173.6	\$27.6	15.9%		
Community Based Initiatives - C&I								\$30.0	\$11.0	36.6%		
Finance Costs								\$200.0	\$200.0	100.0%		
<b>SUBTOTAL</b>	<b>169,463</b>	<b>31,064</b>	<b>18.3%</b>	<b>108.0%</b>	<b>1,859</b>	<b>381</b>	<b>20.5%</b>	<b>\$7,606.4</b>	<b>\$1,431.7</b>	<b>18.8%</b>	<b>345,499</b>	<b>\$ 4.144</b>
<b>Income Eligible Residential</b>												
Single Family - Income Eligible Services	6,395	3,126	48.9%		400	214	53.5%	\$2,584.0	\$1,167.8	45.2%	62,526	\$ 18.677
Income Eligible Multifamily	16,824	1,792	10.7%		2,200	525	23.9%	\$1,967.6	\$140.3	7.1%	26,733	\$ 5.247
<b>SUBTOTAL</b>	<b>23,219</b>	<b>4,918</b>	<b>21.2%</b>	<b>100.0%</b>	<b>2,600</b>	<b>739</b>	<b>28.4%</b>	<b>\$4,551.5</b>	<b>\$1,308.1</b>	<b>28.7%</b>	<b>89,259</b>	<b>\$ 14.654</b>
<b>Non-Income Eligible Residential</b>												
EnergyWise	30,120	33,800	112.2%		2,000	1,415	70.8%	\$4,820.5	\$3,732.4	77.4%	642,196	\$ 5.812
Energy Star® HVAC	20,344	21,831	107.3%		2,584	2,187	84.6%	\$1,996.8	\$1,572.1	78.7%	364,071	\$ 4.318
EnergyWise Multifamily	9,256	5,357	57.9%		2,000	1,038	51.9%	\$1,314.7	\$310.0	23.6%	77,660	\$ 3.992
Home Energy Reports	73,877	43,493	58.9%		180,000	112,900	62.7%	\$468.3	\$212.4	45.4%	43,493	\$ 4.883
Residential New Construction	3,683	3,606	97.9%		392	309	78.8%	\$608.6	\$124.8	20.5%	90,158	\$ 1.384
Residential Products Pilot								\$136.2	(\$2.5)	-1.9%		
Comprehensive Marketing - Residential								\$139.7	\$16.3	11.7%		
Community Based Initiatives - Residential								\$44.4	\$10.5	23.5%		
<b>SUBTOTAL</b>	<b>137,281</b>	<b>108,087</b>	<b>78.7%</b>	<b>95.0%</b>	<b>186,976</b>	<b>117,849</b>	<b>63.0%</b>	<b>\$9,529.3</b>	<b>\$5,975.9</b>	<b>62.7%</b>	<b>1,217,578</b>	<b>\$ 4.908</b>
<b>Regulatory</b>												
EERMC								\$245.4	\$49.4	20.1%		
OER								\$163.6	\$38.7	23.6%		
<b>SUBTOTAL</b>								<b>\$409.0</b>	<b>\$88.0</b>	<b>21.5%</b>		
<b>TOTAL</b>	<b>329,963</b>	<b>144,069</b>	<b>43.7%</b>	<b>102.0%</b>	<b>191,435</b>	<b>118,969</b>	<b>62.1%</b>	<b>\$ 22,096.2</b>	<b>\$ 8,803.7</b>	<b>39.8%</b>	<b>1,652,337</b>	<b>\$ 5.328</b>

**NOTES**

- (1)(5) Targets from Docket 4451 - Attachment 4, Table E-6 (electric) and Attachment 5, Table G-6 (gas).  
(2) EnergyWise gas savings and participation are from RISE Engineering  
(3) Pct Achieved is Column (2)/ Column (1).  
(7) Pct Achieved is Column (6)/ Column (5).  
(8) Approved Implementation Expenses from Docket 4451, Attachment 4 Table E-4 (electric) and Attachment 5 Table G-5 (gas).  
(9) Year To Date Implementation Expenses are net of evaluation expenses.  
Small Business Direct Install Electric Includes OER funds spent through Q2.  
(10) Pct Achieved is Column (9)/ Column (8).  
(12) \$/lifetime kWh = Column (9)/Column (11); \$/lifetime therm = Column (9)\*1000/Column (11)\*10  
System Reliability Procurement targets from Docket 4367, not included in Implementation Expenses Total  
System Reliability Procurement targets and actuals do not reflect statewide EE amounts leveraged

**Table 2**  
**National Grid**  
**Revolving Loan Funds**

<b>Large C&amp;I Revolving Loan Fund</b>			<b>Small Business Revolving Loan Fund</b>		
(1)	2014 Funds Available	\$6,858,467	2014 Funds Available	\$3,241,378	
(2)	2014 Loan budget	\$5,957,151	2014 Loan Budget	\$3,000,000	
(3)	Committed	\$2,305,730	Committed	\$720,363	
(4)	Paid	\$1,218,645	Paid	\$238,225	
(5)	Available	\$2,432,776	Available	\$2,041,412	

**Rhode Island Public Energy Partnership (RI PEP)**

(6)	2014/2015 Loan Budget	\$1,000,000
(7)	Committed	\$81,448
(8)	Paid	\$0
(9)	Available	\$918,552

Notes

1 Amount Company estimated in 2014 Plan, Table E-10

2 Budget adopted by Sales Team for 2014 operations.

3 As of June 30, 2014

4 As of June 30, 2014

5 Does not include loan repayments

6 RI PEP funding is over two years

# Rhode Island Energy Efficiency

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Third Quarter 2014 | National Grid

November 10, 2014

## Overview

National Grid built upon the momentum from the first half of the year and is forecasting to finish 2014 strong. Several programs, including ENERGYSTAR® HVAC and EnergyWise have already met their 2014 goals.

Residential programs continued to excel during the third quarter. CoolSmart and Gas Heat Programs had robust participation despite the reduction in rebate levels for high efficiency heating units. The residential new construction program had 269 new enrollments, including over 100 units of affordable housing, and EnergyWise completed 2,274 assessments and 571 weatherization projects. The Company also developed and launched an energy benchmarking pilot program for Rhode Island affordable multifamily housing buildings. Up to 400 affordable multifamily housing buildings will be benchmarked for energy and water use by the first quarter of 2015.

In addition, Large Commercial New Construction gained momentum in the third quarter. The program is expected to meet the electric saving goal and exceed the gas savings goal. Under the Street Lighting initiative, the customer-owned street lighting tariff went into effect on August 1<sup>st</sup> and staff received training on the process for municipal customers to purchase their own lights in early September.

During the third quarter, the Company was also hard at work developing the 2015 Energy Efficiency Program Plan. The Plan looks to build upon the success of 2014 by reaching more customers with greater savings in a highly cost-effective manner.

With one quarter remaining, the Company is projecting that it will reach 97% of the electric savings target and 118% of the gas savings target. The Company is pleased with the continued progress toward goal and is looking to finish the year with a strong fourth quarter.



## 2014 Program & Initiative Updates

### Residential New Construction

- The third quarter was successful with 269 new enrollments, including over 100 units of affordable housing. The first 50 unit phase of Reynolds Farms in North Kingstown also enrolled a mixed-use project in the program including close to 600 units of housing, of which 20% will be affordable. Pawtucket Citizens Development Corporation and Valley Affordable Housing Corporation enrolled both New Construction and Reno-Rehab projects.
- In the third quarter 207 projects were completed.
  - In total, 147 units at Harris Mill were completed, which is the third large mill building to go through the program. The developer installed high efficiency heat pumps in 20 of these units (17 SEER, 13 EER, 9 HSPF). In addition CFLs, LEDs and showerheads were provided by the program.
  - A second phase of 15 affordable housing units at Belleville Housing was also completed, achieving Tier II savings over the UDRH and a HERS index of 50.
  - Lastly, two single family homes achieved Tier III, one in Westerly with a HERS index of 36, and one in Charlestown (see below). Both homes also met EPA Energy Star Version 3.
- On August 8th the program sponsored and attended the Rhode Island Builders Association's (RIBA) 64th Annual Summer Outing at Francis Farm in Rehoboth, RI. This was a great opportunity to highlight National Grid's partnership with RIBA. It was a very successful event with over 400 people in attendance.
- Success Story in Exeter: A building code official from Exeter recently attended one of the RI Code Compliance Enhancement Initiative trainings. Also in attendance was a builder who requested a Circuit Rider visit for a home he was building. He was introduced to the program and after receiving technical support and guidance, decided to change his design to meet Residential New Construction standards. The home was completed in July 2014 and achieved 35% savings over the RI User Defined Reference Home (UDRH).

### Income Eligible

- Three Best Practice meetings with the Weatherization Technical Committee meetings were conducted in the third quarter: South County Community Action Program (CAP), June 4; CAP of Providence, July 24; and, Tri-Town, September 25.
- Jules Junker, a leader energy-efficient building and owner of Thermal Works, provided his Rhode Island training program (1 day classroom, 2 days field) to three CAPs. All agencies have completed this training.
- Julie Capobianco, Department of Human Services (DHS), and David MacLellan, CLEAResult completed the Heating System Repair and Replacement Operations Manual. The manual provides guidance to ensure

safe, effective and efficient heating system repair and replacement across the state.

- Dennis Lopes, DHS, took the lead in developing protocols for Heat Pump Water Heater program. He also began a training process and oversaw the first heat pump water heater installed in the Income Eligible program.
- Julie Capobianco, DHS, and David MacLellan, CLEAResult have selected Saturn Management to provide the Rhode Island Weatherization Field Guide. The field guide will be aligned with the new Department of Energy Standardized Work System and will be supplied in draft form in the 4th quarter, and published in the first quarter of 2015.
- Julie Capobianco, DHS, John Costello DHS and David MacLellan, CLEAResult, worked with the Rhode Island Department of Health to develop a test protocol to ensure the safety of customers and weatherization workers when applying two-part low pressure foam - the preferred air sealing method in the Department of Energy Standardized Work System. Testing began in August. The contractor passed all on-site inspections validating the safety and training protocols. Two additional sites will be tested and OSHA will provide a report on their schedule.

## **EnergyWise**

- The program had a strong third quarter with 2,274 assessments and 571 weatherization projects.
- The Company learned that 94.9% of EnergyWise participants would recommend the program.

## **EnergyWise and Income Eligible Multifamily**

- During the third quarter the Company developed and launched an energy benchmarking pilot program for Rhode Island affordable multifamily housing buildings. Leveraging funding from the JPB Foundation, and utilizing the WegoWise benchmarking tool, up to 400 affordable multifamily housing buildings will be benchmarked for energy and water use by the first quarter of 2015. Results from this pilot program will help direct future multifamily program design.

## **ENERGYSTAR® Lighting and Appliances**

- In September there were two on-line LED bulb promotions that resulted in overwhelming customer response. There were 3,500 units available for sale for each promotion, one for recessed can LED lights and one for candelabra bulbs. Each promotion resulted in the products selling out before the end of the event.

## **ENERGYSTAR® HVAC (Heating and Cooling)**

- Participation in the CoolSmart and Gas Heat Programs continues to be robust despite the reduction in rebate levels for high efficiency heating units that were effective in July 2014.

- Due to the continued high level of participation in the Gas Heat Program, the Program has been suspended for the remainder of 2014. Suspended means that rebate applications will still be accepted but they will be processed in 2015. All applicants will receive a letter upon submission of their rebate explaining that the rebate will be processed in 2015 when new funding is available.
- In the third quarter the following items represented the highest number of rebates: combo condensing boilers, gas-only wi-fi thermostats and heat pump water heaters.
- Supply houses continue to support the program goal of increasing the sales of high efficiency equipment and look forward to the 2015 program.

## **Residential Pilots**

- In the third quarter of 2014, the Company continued the Automatic Temperature Control and Energy Monitoring demonstrations. The company has contracted with Cadmus Group to perform the evaluation for the pilot participants in the states of Rhode Island and Massachusetts.
- The Heat Pump Dryer demonstration kicked off in the third quarter. The pilot objectives and testing procedures were designed during the 3rd quarter with implementation projected to start early in the 4th quarter. The Company will test a high efficiency washer along with the heat pump dryer to test the performance, reliability and customer satisfaction of the unit. The proposed plan is to test seven (7) total units, four (4) units in Massachusetts, two (2) units in Rhode Island, and one (1) unit in a lab environment to be run with controlled testing. As of this time, there are only two (2) manufacturers who will have units available in the US market. We are attempting to test and evaluate the second unit, but currently the second manufacturer doesn't have product available for testing.
- The final activity for the period was the design of a demonstration for ECM Pumps and their ability to also provide gas savings. Working closely with manufacturers, including a Rhode Island pump manufacturer, the company has designed a program which will attempt to prove that ECM Pumps not only provide electric savings, but they also have the potential to provide gas savings using different pumping control strategies.

## **Home Energy Reports**

- The Company will utilize the reach of Home Energy Reports in late 2014/early 2015 to highlight the rising costs of electricity for residential customers -- emphasizing the benefits of small behavior changes and participation in the National Grid energy efficiency programs.
- The RI Small and Medium Business Energy Reports pilot program is set for an official launch in the fourth quarter, focused initially on the retail and food/restaurant sectors.

## Community Initiative

- The Rhode Island Energy Challenge: Find Your Four! initiative continues to generate buzz across the State, and driving awareness to the National Grid energy efficiency programs.
- The City of Warwick was successfully able to encourage over 5% of residents to take the pledge to be more efficient, and was awarded a \$7,500 grant that will be used to finance exterior LED's for the town's firehouses. The town of Central Falls is the next municipal participant in the Challenge.
- The Rhode Island Video Challenge will kick off in October, asking both individuals and schools to submit 30-60 second video clips of how they are "finding their four" ways to save energy at home. Prizes will be awarded to the winners in December. More information can be found at [www.findyourfour.com/videochallenge](http://www.findyourfour.com/videochallenge).

## Commercial & Industrial Customer Experience

- The sales team alignment with market sectors approach continues to serve those defined in the 2014 plan. The Company has yet to identify potential nursing home facilities for a pilot initiative.

## Codes Initiative

- There were three residential energy code classroom trainings (42 attendees) that occurred in the third quarter and one residential hands-on training (16 attendees) that occurred at the NE Institute of Technology.
- Two commercial energy code classroom trainings occurred (32 attendees) as well as a commercial classroom training at the AIA New England regional conference (held in Providence) that yielded 18 architects attending.
- Four commercial webinars occurred in the third quarter with a total of 23 participants. In addition, we continued to work with National Grid's marketing team to develop a marketing strategy for a state-wide awareness plan for codes support.

## Large Commercial New Construction

- As of the third quarter the electric savings are on target to meet goal and the gas savings are expected to exceed the goal.
- The Worcester Building Operator Certification (BOC) I Class started In September. The BOC II class started in September and is being held in Bourne, MA
- Upstream Lighting: this initiative is performing in line with expectations. It will make a large contribution to the New Construction goal in 2014. Uptake on the products added earlier in the year has been strong.
- Upstream HVAC: the Company continues discussions to get the last major manufacturer to fully support the initiative.
- Street lighting: the customer-owned street lighting tariff went into effect on August 1st. Jurisdiction and Energy Efficiency staff were trained on the process for municipal customers to purchase their own lights in early

September. A separate docket is now in place for metering associated with street lighting.

- Office of the Future: the Company generated some leads for this initiative. No project has currently enrolled in this initiative. The Company is continuing to conduct a lunch and learn series with lighting designers to train them on the program requirements for sustainable office design.

### **Large Commercial Retrofit**

- As of the third quarter, the electric sector continues to show progress towards making 95% of its savings goal. In the gas sector, the Company and the Lead Vendor continue to work closely together and are on track to meet the savings goal.
- Manufacturing:
  - The five enrolled projects are proceeding with the implementation of measures. In addition, two more projects have started enrollment. For one of the projects, the Company also provided education and awareness assistance that included an employee education day at the facility on the importance of compressed air maintenance.
- Strategic Energy Management Plan (SEMP):
  - The Company continued to work with existing SEMF customers and enrolling projects that will contribute towards the 2014 SEMF goals. No new SEMF customers were signed in third quarter.
- Rhode Island Public Energy Partnership (RIPEP):
  - In the third quarter the Company continued to gain momentum with municipal projects. The Company completed an internal technical potential analysis to see what type of projects it received since the beginning of the year and whether there is potential for 100 buildings to achieve a 'total' energy use reduction of 20% by end of 2015. The team concluded that it is very likely for more than 100 buildings to achieve greater than 20% but with a hybrid approach of either a single fuel 20% reduction or dual fuel. Most projects participating in the program have achieved 15-20% electric energy savings. Gas measures are not pursued as much. Most of the time, gas measures have longer paybacks and incentives were not sufficient to drive these capital intensive projects. The Company, Office of Energy Resources, and RIPEP teams are working together to develop strategies to push gas measures forward in addition to electric measures.

### **Small Business Direct Install**

- As of the end of the third quarter, the Company projects this program to deliver 82% of its electric goal and 76% of its gas goal.
- Program incentives were increased from 70% of the project cost to 80% of the project cost. The company hopes this will push customers who have expressed interest to take action and complete a project in 2014.

## Evaluation

- The process and impact evaluations for the Income Eligible Services Program were completed in the third quarter. The consulting team provided a webinar to the program managers, the lead vendor, and the EERMC consultants that detailed the results of these evaluations.
- The Home Energy Report impact evaluation was completed in the third quarter.
- The impact evaluation for the Thermostats and Rewards pilots, implemented with the Home Energy Reports, were completed.

## Upcoming Events

- Sustainable Schools Conference at Rhode Island College (Student Union) Nov 7<sup>th</sup> 8:00-3:00.
- Interconnection of Distributed Generation in RI Seminar. Tuesday, November 18, 2014. Lincoln Operations Center located at 642 George Washington Highway, Lincoln, RI. This seminar will focus on both the process and technical aspects of interconnecting to National Grid's electric power system, the Net Metering Program and the Distributed Generation (DG) Contract Program in Rhode Island.
- Stars of the Industry Annual Meeting. Twin Rivers Casino. December 3, 2014 4-8pm.

NATIONAL GRID ENERGY EFFICIENCY PROGRAMS IN RHODE ISLAND

Table 1. Summary of 2014 Target and Preliminary 3rd Quarter Results

ELECTRIC PROGRAMS Sector and Program	(1)		(2)	(3)	(4)	(5)			(6)	(7)	(8)			(9)	(10)	(11)		(12)
	Energy Savings (Annual MWh)		Pct		Pct	Customer Participation			Implementation Expenses (\$ 000)			Pct			Lifetime savings,			
	Target	Year To Date	Achieved	Projected		Approved Target	Year To Date	Pct Achieved	Budget	Year To Date	Achieved				MMWh			
<b>Commercial and Industrial</b>																		
Large Commercial New Construction	27,472	17,021	62.0%			2,192	2,650	120.9%	\$8,336.0	\$3,878.5	46.5%				186,140	\$	0.021	
Large Commercial Retrofit	124,275	19,269	15.5%			833	330	39.6%	\$25,218.1	\$5,940.4	23.6%				232,317	\$	0.026	
Small Business Direct Install	21,170	12,191	57.6%			1,510	956	63.3%	\$12,120.5	\$6,043.3	49.9%				132,317	\$	0.046	
Community Based Initiatives - C&I									\$41.5	\$20.3	49.0%							
Commercial Pilots									\$364.1	\$24.1	6.6%							
Comprehensive Marketing - C&I									\$150.2	\$57.4	38.2%							
Finance Costs									\$1,000.0	\$1,000.0	100.0%							
<b>SUBTOTAL</b>	<b>172,917</b>	<b>48,481</b>	<b>28.0%</b>	<b>94.0%</b>		<b>4,535</b>	<b>3,936</b>	<b>86.8%</b>	<b>\$47,230.3</b>	<b>\$16,964.1</b>	<b>35.9%</b>				<b>550,774</b>	<b>\$</b>	<b>0.031</b>	
<b>Income Eligible Residential</b>																		
Single Family - Income Eligible Services	3,967	3,361	84.7%			2,450	2,092	85.4%	\$7,207.0	\$5,148.2	71.4%				40,264	\$	0.128	
Income Eligible Multifamily	2,113	1,403	66.4%			3,520	2,685	76.3%	\$2,092.3	\$998.3	47.7%				15,382	\$	0.065	
<b>SUBTOTAL</b>	<b>6,080</b>	<b>4,765</b>	<b>78.4%</b>	<b>106.0%</b>		<b>5,970</b>	<b>4,777</b>	<b>80.0%</b>	<b>\$9,299.3</b>	<b>\$6,146.6</b>	<b>66.1%</b>				<b>55,646</b>	<b>\$</b>	<b>0.110</b>	
<b>Non-Income Eligible Residential</b>																		
Residential New Construction	631	530	84.1%			458	537	117.2%	\$910.3	\$841.5	92.4%				6,416	\$	0.131	
ENERGY STAR® HVAC	726	1,052	144.8%			1,946	1,585	81.4%	\$1,009.7	\$1,002.8	99.3%				13,918	\$	0.072	
EnergyWise	7,674	8,870	115.6%			7,600	8,330	109.6%	\$6,448.4	\$5,964.3	92.5%				85,607	\$	0.070	
EnergyWise Multifamily	2,888	1,958	67.8%			4,500	3,634	80.8%	\$2,419.8	\$1,483.0	61.3%				21,796	\$	0.068	
ENERGY STAR® Lighting	35,731	18,929	53.0%			247,240	190,161	76.9%	\$7,389.7	\$3,372.4	45.6%				186,179	\$	0.018	
ENERGY STAR® Products	3,639	3,450	94.8%			13,285	18,118	136.4%	\$2,426.0	\$1,483.8	61.2%				25,776	\$	0.058	
Home Energy Reports	25,028	20,018	80.0%			227,600	195,006	85.7%	\$2,445.2	\$1,960.4	80.2%				20,018	\$	0.098	
Energy Efficiency Educational Programs									\$50.7	\$35.7	70.5%							
Residential Products Pilot									\$158.8	\$8.0	5.0%							
Community Based Initiatives - Residential									\$226.4	\$135.8	60.0%							
Comprehensive Marketing - Residential									\$581.9	\$86.2	14.8%							
<b>SUBTOTAL</b>	<b>76,317</b>	<b>54,808</b>	<b>71.8%</b>	<b>103.0%</b>		<b>502,629</b>	<b>417,371</b>	<b>83%</b>	<b>\$24,066.9</b>	<b>\$16,374.0</b>	<b>68.0%</b>				<b>359,710</b>	<b>\$</b>	<b>0.046</b>	
<b>Regulatory</b>																		
EERMC									\$816.7	\$280.4	34.3%							
OER									\$625.6	\$420.7	67.2%							
<b>SUBTOTAL</b>									<b>\$1,442.3</b>	<b>\$701.1</b>	<b>48.6%</b>							
<b>TOTAL</b>	<b>255,314</b>	<b>108,054</b>	<b>42.3%</b>	<b>97.0%</b>		<b>513,134</b>	<b>426,084</b>	<b>83.0%</b>	<b>\$ 82,038.9</b>	<b>\$ 40,185.8</b>	<b>49.0%</b>				<b>966,130</b>	<b>\$</b>	<b>0.042</b>	
<b>System Reliability Procurement</b>									<b>\$ 279.2</b>	<b>\$158.8</b>	<b>56.9%</b>							

GAS PROGRAMS Sector and Program	(1)		(2)	(3)	(4)	(5)			(6)	(7)	(8)			(9)	(10)	(11)		(12)
	Energy Savings (MMBtu)		Pct		Pct	Customer Participation			Implementation Expenses (\$ 000)			Pct			Lifetime savings,			
	Approved Target	Year To Date	Achieved	Projected		Approved Target	Year To Date	Pct Achieved	Approved Budget	Year To Date	Achieved				MMBtu			
<b>Commercial and Industrial</b>																		
Large Commercial New Construction	31,863	9,484	29.8%			192	79	41.1%	\$2,096.7	\$363.0	17.3%				198,699	\$	1.827	
Large Commercial Retrofit	121,592	35,470	29.2%			606	69	11.4%	\$3,672.5	\$1,188.9	32.4%				240,881	\$	4.936	
Small Business Direct Install	10,496	2,626	25.0%			316	50	15.8%	\$545.9	\$60.4	11.1%				27,267	\$	2.216	
Commercial & Industrial Multifamily	5,511	2,115	38.4%			745	398	53.5%	\$488.8	\$182.8	37.4%				38,324	\$	4.770	
Commercial & Industrial Pilots									\$398.8	\$18.9	4.7%							
Comprehensive Marketing - C&I									\$173.6	\$44.0	25.4%							
Community Based Initiatives - C&I									\$30.0	\$24.2	80.7%							
Finance Costs									\$200.0	\$200.0	100.0%							
<b>SUBTOTAL</b>	<b>169,463</b>	<b>49,694</b>	<b>29.3%</b>	<b>134.0%</b>		<b>1,859</b>	<b>596</b>	<b>32.1%</b>	<b>\$7,606.4</b>	<b>\$2,082.3</b>	<b>27.4%</b>				<b>505,171</b>	<b>\$</b>	<b>4.122</b>	
<b>Income Eligible Residential</b>																		
Single Family - Income Eligible Services	6,395	5,381	84.1%			400	368	92.0%	\$2,784.0	\$1,852.7	66.6%				107,624	\$	17.215	
Income Eligible Multifamily	16,824	6,363	37.8%			2,200	885	40.2%	\$1,767.6	\$441.7	25.0%				119,500	\$	3.696	
<b>SUBTOTAL</b>	<b>23,219</b>	<b>11,745</b>	<b>50.6%</b>	<b>90.0%</b>		<b>2,600</b>	<b>1,253</b>	<b>48.2%</b>	<b>\$4,551.5</b>	<b>\$2,294.4</b>	<b>50.4%</b>				<b>227,124</b>	<b>\$</b>	<b>10.102</b>	
<b>Non-Income Eligible Residential</b>																		
EnergyWise	30,120	36,786	122.1%			2,000	2,105	105.3%	\$4,920.5	\$4,310.9	87.6%				698,925	\$	6.168	
Energy Star® HVAC	20,344	29,050	142.8%			2,584	2,706	104.7%	\$2,551.1	\$2,142.0	84.0%				486,037	\$	4.407	
EnergyWise Multifamily	9,256	10,461	113.0%			2,000	1,800	90.0%	\$1,314.7	\$846.2	64.4%				165,333	\$	5.118	
Home Energy Reports	73,877	40,258	54.5%			180,000	112,900	62.7%	\$286.0	\$215.7	75.4%				40,258	\$	5.358	
Residential New Construction	3,683	4,471	121.4%			392	482	123.0%	\$373.6	\$168.9	45.2%				111,785	\$	1.511	
Residential Products Pilot									\$34.2	(\$2.2)	-6.3%							
Comprehensive Marketing - Residential									\$4.7	\$16.5	352.0%							
Community Based Initiatives - Residential									\$44.4	\$19.4	43.6%							
<b>SUBTOTAL</b>	<b>137,281</b>	<b>121,026</b>	<b>88.2%</b>	<b>97.0%</b>		<b>186,976</b>	<b>119,993</b>	<b>64.2%</b>	<b>\$9,529.3</b>	<b>\$7,717.4</b>	<b>81.0%</b>				<b>1,502,337</b>	<b>\$</b>	<b>5.137</b>	
<b>Regulatory</b>																		
EERMC									\$245.4	\$85.6	34.9%							
OER									\$163.6	\$120.5	73.6%							
<b>SUBTOTAL</b>									<b>\$409.0</b>	<b>\$206.0</b>	<b>50.4%</b>							
<b>TOTAL</b>	<b>329,963</b>	<b>182,465</b>	<b>55.3%</b>	<b>118.0%</b>		<b>191,435</b>	<b>121,842</b>	<b>63.6%</b>	<b>\$ 22,096.2</b>	<b>\$ 12,300.1</b>	<b>55.7%</b>				<b>2,234,631</b>	<b>\$</b>	<b>5.504</b>	

NOTES

(1)(5) Targets from Docket 4451 - Attachment 4, Table E-6 (electric) and Attachment 5, Table G-6 (gas).

(2) EnergyWise gas savings estimated based on participation counts from RISE Engineering.

(3) Pct Achieved is Column (2)/ Column (1).

(7) Pct Achieved is Column (6)/ Column (5).

(8) Approved Implementation Expenses from Docket 4451, Attachment 4 Table E-4 (electric) and Attachment 5 Table G-5 (gas), adjusted to reflect "The Narragansett Electric Company, d/b/a National Grid 2014 Energy Efficiency Program Plan Transfer of Funds Request" dated September 26, 2014.

(9) Year To Date Implementation Expenses are net of evaluation expenses.

Small Business Direct Install Electric Includes OER funds spent through Q3.

(10) Pct Achieved is Column (9)/ Column (8).

(12) \$/lifetime kWh = Column (9)/Column (11); \$/lifetime therm = Column (9)\*1000/Column (11)\*10

System Reliability Procurement targets from Docket 4367, not included in Implementation Expenses Total

System Reliability Procurement targets and actuals do not reflect statewide EE amounts leveraged



**Table 2**  
**National Grid**  
**Revolving Loan Funds**

Large C&I Revolving Loan Fund			Small Business Revolving Loan Fund	
(1)	2014 Funds Available	\$6,858,467	2014 Funds Available	\$3,241,378
(2)	2014 Loan budget	\$5,957,151	2014 Loan Budget	\$3,000,000
(3)	Committed	\$2,222,836	Committed	\$677,358
(4)	Paid	\$2,025,451	Paid	\$1,340,408
(5)	Available	\$1,708,864	Available	\$982,234

**Rhode Island Public Energy Partnership (RI PEP)**

(6)	2014/2015 Loan Budget	\$1,000,000
(7)	Committed	\$128,593
(8)	Paid	\$0
(9)	Available	\$871,407

Notes

- 1 Amount Company estimated in 2014 Plan, Table E-10
- 2 Budget adopted by Sales Team for 2014 operations.
- 3 As of September 30, 2014
- 4 As of September 30, 2014
- 5 Does not include loan repayments
- 6 RI PEP funding is over two years

# Rhode Island Energy Efficiency

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Fourth Quarter 2014 | National Grid

February 12, 2014

## Overview

National Grid had a strong finish to 2014. The Company assisted customers in the completion of hundreds of energy efficiency projects across all customer classes. Preliminary year end results show that the Company achieved 105% of its electric savings goals and 120% of its gas savings goals.

In the residential sector, all electric programs exceeded savings goals except for ENERGYSTAR® Lighting, which came in at 86%. In addition, all gas programs exceeded savings goals except for Home Energy Reports, which was due to a forecasting error in the goal setting for the year. In total the residential sector achieved 119% of its electric savings goals and 132% of its gas goals.

The income eligible sector also had a phenomenal year. The single family program continued to make great strides under the new lead vendor model with CLEAResult. Single family achieved 122% of its electric goals and 126% of its gas goals. Likewise, income eligible multifamily also had an impressive year, achieving 155% of its electric goals and 125% of its gas goals. These results demonstrate the hard work and collaboration of multiple stakeholders that went into improving these programs in 2014.

The Commercial sector finished strong in 2014, achieving 98% of its electric goals and 109% of its gas goals. Upstream lighting had another outstanding year, contributing to 87% of the 2014 New Construction goal. The industrial initiative also gained momentum in 2014, enrolling seven of the largest customers. Likewise RIPEP made great progress with 75 public buildings reducing their electric or gas, or dual fuel energy consumption by at least 15% and often exceeding 20%.

During the fourth quarter the Rhode Island Public Utilities Commission approved the 2015 Energy Efficiency Program Plan on December 23, 2014. Therefore, even as the Company worked to complete projects and initiatives in 2014, it was also laying the foundation for achieve the energy savings and programmatic goals of 2015 through training, vendor meetings, communication, and readying internal systems. The Company is confident that it will be able to continue its momentum from 2014 into 2015, creating even more benefits and energy savings to the State of Rhode Island.

## 2014 Program & Initiative Updates

### Residential New Construction

- Due to the success of the first three quarters of 2014, the 4th quarter was relatively slow for enrollments and completions. The year ended very well for the program:
  - 2014 Total Completions Goal – 500
  - 2014 Total Completions Achieved – 573
  - 2014 Total Enrollments Goal – 500
  - 2014 Total Enrollments Achieved – 768
  - 101 high rise housing units participated in the program during the last quarter as part of a special pilot initiative
- The Rhode Island Pro Tour, organized by NESEA and Conservation Services Group and sponsored by National Grid, featured tours of two home sites with respective project teams and ended with a reception and Q&A session at Sandywoods Center for the Arts. The homes included:
  - A zero energy home designed and built by Newport Renewables in Jamestown with a 12 kW solar PV array powering both the geothermal heat pump and the plug loads of the house.
  - Two net zero home sites in Tiverton developed by Church Community Housing under construction in the Sandywoods development.
- A success story for Reno-Rehab included a triplex project located above a commercial space on North Main Street in Providence that met Tier 3. The building is now solar ready; with R30 double stud walls, R60 attic insulation, mini split heat pump technology, and a leakage rate under 2.5 ACH50. This project demonstrated a decrease in the cost per square foot in affordable homes, while increasing efficiency and comfort.

### Income Eligible

- The first Best Practices meeting was held on December 4th, 2014 with the seven RI Community Action Program (CAP) Agencies, RI Department of Human Services, CLEAResult and National Grid. This meeting will be held quarterly and will be focused on providing updates on best practices, tools to enhance consistency in delivering services, and will also serve as a venue to obtain direct feedback from the CAP agencies.
- The Income Eligible Services meeting was held October 6th. The purpose of the meeting was to develop opportunities to increase energy efficiency programs to offset the increases in electric costs. Attendees included the RI Office of Energy Resources, RI Department of Human Services, National Grid, The Energy Efficiency Management Council, CAP Agencies and CLEAResult.
- Julie Capobianco, DHS, led the team that completed a first draft of the Rhode Island Weatherization Field Guide. The field guide will be aligned with the new Department of Energy Standardized Work System and will be published complete in the first quarter of 2015.

## EnergyWise

- In the fourth quarter there were 2,246 audits and 1,178 weatherization projects completed. In total for 2014, over 8,800 audits and 3,350 weatherization projects were completed.
- Heat Loans also remained popular in 2014 with over 1,003 heat loans provided during the year, totaling \$6.78 million dollars loaned.

## EnergyWise and Income Eligible Multifamily

- The Multifamily program had a very strong finish to 2014, achieving 100% of savings or better in each residential multifamily program while remaining within budget. The Company is committed to expanding services to more customers in 2015, thereby achieving more energy savings.
- For Income Eligible Multifamily, the Company continues to deliver its energy benchmarking pilot program for Rhode Island affordable multifamily properties. Using the WegoWise benchmarking tool, the pilot is still on track to benchmark 400 multifamily affordable housing buildings by the end of the first quarter of 2015, and already has 250 inserted into the software. Results from this pilot program will help direct future multifamily program design and help facilitate outreach to potential participants.

## ENERGYSTAR® Lighting and Appliances

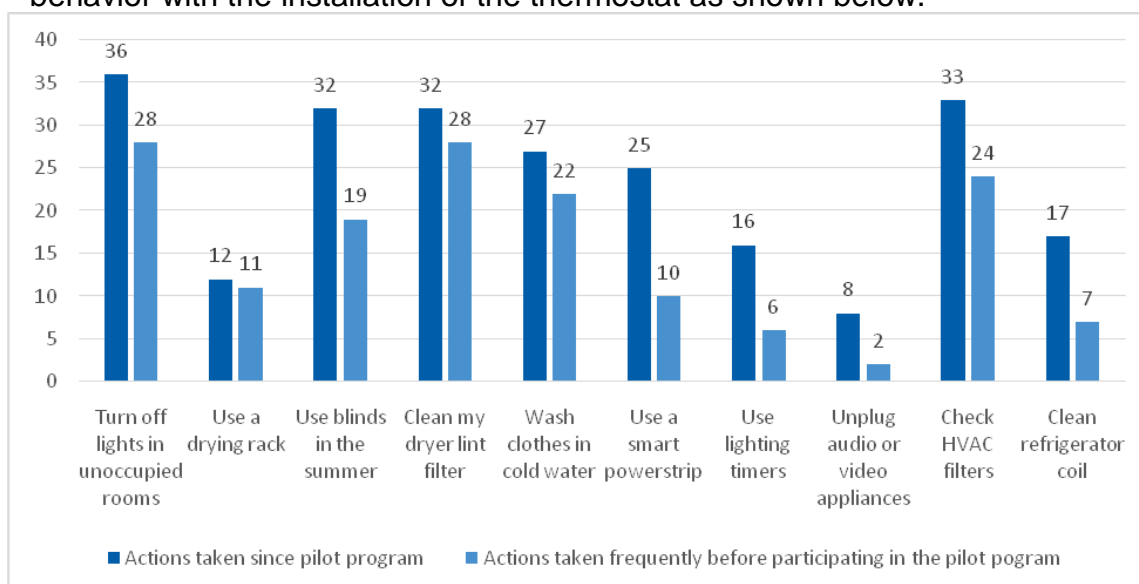
- National Grid presented at the Northeast Energy Efficiency Partnerships (NEEP) Residential Lighting Strategy Workshop in October, highlighting the change in program design and innovation of the RI and MA residential lighting programs and subsequent growth of lighting products.
- In the fourth quarter, lighting fair tables were staffed at Bristol Recycles, a Chepachet senior center, at a Central Falls Public Event, and at the Emmanuel Church Holiday Fair.

## ENERGYSTAR® HVAC (Heating and Cooling)

- Heating
  - The RI Gas Heat program closed out the year with well over 125% of savings achieved.
  - The marketing campaign is currently suspended until further evaluation of customer participation tied to savings and spend is completed.
- HVAC
  - The RI Cool Smart program had a strong year with over 1,400 air conditioning and heat pump rebates submitted for residential customers.
  - Retailers and supply houses promoting the sale of Heat Pump Water Heaters in RI helped to generate over 800 rebates for this energy saving measure.

## Residential Pilots

- During the 4th quarter of 2014, the Company completed the Automatic Temperature Control and Energy Monitoring demonstrations and the results are being finalized.
- The pilot resulted in different saving results for the same thermostats that are deployed in different ways. This substantiates the assumption that thermostat savings may change based on the information provided to a customer. In general, the Company found customers very motivated to accept new technologies, and that customers' main concern is saving money on their energy bill.
- Results demonstrated that customers continued to interact with the thermostats on a regular basis after a two year period and customers changed behavior with the installation of the thermostat as shown below.



- The Heat Pump Dryer Demonstration
  - This initiative was kicked off in the fourth quarter. The pilot evaluation is currently ongoing. The company expects to have further results by the first quarter of 2015. The overall customer satisfaction with the units was very positive.
- Electronically Commutated Motor (ECM) Pumps
  - Monitoring equipment was installed during the fourth quarter to determine if high efficiency variable speed pumps can provide gas savings in addition to electric savings. The Company is working with a Rhode Island mechanical contractor and using the Cadmus Group to perform the evaluation.
  - In parallel, the Company has started evaluating pumps on multifamily installations. The pumps which are being tested are new to the marketplace in 2014. The Company is working closely with the manufacturers to insure the pumps will achieve optimal savings while achieving high customer satisfaction results.

## Home Energy Reports

- During the fourth quarter the Company decided to utilize the reach of the Home Energy Reports in early 2015 to help highlight the rising costs of electricity for residential customers, emphasizing the benefits of small behavior changes and participation in energy efficiency programs.
- The New Movers program, a new and innovative targeted campaign for new National Grid customers, showed measurable electric savings in 2014 and will be expanded for further savings in 2015.

## Community Initiative

- The RI Energy Challenge: Find Your Four! initiative had a busy finish to the year with Central Falls becoming the most recent RI Energy Champion by having over 5% of its households take the pledge to be more energy efficient.
- The RI Video Challenge began in November and will accept submissions until the end of January 2015, with voting to then be completed by the end of February. The Company plans to announce the winners at the RI Energy Expo in early March.

## Commercial & Industrial Customer Experience

- In October, Sales & Program Operations and Program Strategy met with leaders in manufacturing to present on the Company's energy efficiency programs. This included Polaris, CommerceRI, and leaders from the Manufacturers Association. National Grid also participated in the RI Hospitality Association's Annual Meeting Held in December at Twin River.

## Codes Initiative

- During the fourth quarter, there were the residential energy code trainings (106 attendees) and four residential on-site trainings (60 attendees). Residential on-site trainings were conducted at Riverhead Lumber, Coventry Lumber, and Woonsocket Area Career and Technical Center (WATC).
- There were also four commercial classroom trainings (51 attendees) and one commercial on-site training (11 attendees) that occurred at Coventry Lumber. In addition, one commercial webinar (6 attendees) occurred in the fourth quarter: Controlling Air & Moisture in the Building Envelope.
- In the fourth quarter, there were 13 phone calls to the toll-free Circuit Rider technical assistance number, and four subsequent site visits made.
- National Grid Trade Ally marketing sent out approx. 9,500 post card notifications about energy code trainings to the following targets: all architects in all four states (RI, MA, CT, NY); all engineers in all four states (RI, MA, CT, NY); electrical (includes electrical engineers, electrical contractors, lighting designers) in RI; contractors (includes general or construction contractors) in RI; HVAC (includes contractors, dealers doing gas heating and/or electrical AC, ventilation, or refrigeration) in RI; and Builders in RI. National Grid Trade

Ally marketing also sent out e-mail blasts advertising the energy code trainings.

## **Large Commercial New Construction**

- Street lighting:
  - Preparation was made for the League of Cities & Towns Annual meeting in January where incentive levels for LED street lighting were shared.
- Office of the Future:
  - The Company is continuing to do outreach for the sustainable office design initiative (formerly known as Office of the Future). No applications have been signed yet.
- Upstream Lighting:
  - The initiative had another strong year. It contributed 23,877 net MWh to the New Construction Program in 2014. That equates to 87% of the proposed 2014 New Construction goal.
- Upstream HVAC:
  - Minor changes have been made to the offering which is intended to result in some additional participation. Progress has been made in getting the final large manufacturer into our initiative.

## **Large Commercial Retrofit**

- Manufacturing:
  - The Company worked with its industrial Technical Assistance vendor to expand their implementation services for 2015. The industrial initiative has been successful, enrolling the seven largest customers. Through the extended contract, Company will be able to serve more large customers in 2015 and beyond. Approximately 12 Million kWh savings are expected out of this initiative in 2015 and 2016.
- Strategic Energy Management Plan (SEMP):
  - The Company continued to work with Lifespan and Brown University SEMPs. The Lifespan memorandum of understanding (MOU) continues to make progress and the Company met with Brown several times to develop new strategies for an extension to its MOU. Going forward, the majority of the focus may be on retrocommissioning of existing buildings on the campus. The Company also introduced SEMPs to Providence College for consideration of a possible MOU.
- Rhode Island Public Energy Partnership (RIPEP):
  - The OER/National Grid team redefined the goals of RIPEP to track 20% improvements based on either electric or gas, or dual fuel, instead of just tracking a dual fuel 20% reduction. As of the fourth quarter, there are now approximately 75 RI public buildings that have reduced their electric or gas, or dual fuel, energy consumption by at least 15% and often exceeding 20%. The target for the RIPEP partnership is 100 buildings before the end of 2015. The company and the RIPEP team are confident that the DOE goals will be met.
- Combined Heat and Power (CHP):



- During the fourth quarter the strategy team began a deep investigation into the number of CHP projects available in RI over the next three years. The process was started by documenting any current leads and their timeframes. The investigation will stretch into the first quarter of 2015 and will include gathering, documenting and analyzing data and interviews from National Grid engineers, external vendors, and the RI energy efficiency sales team.
- On December 5th, National Grid sponsored a NEEP CHP conference that was held at the East Bay Met School in Newport and Michael McAteer was among the speakers.
- The Company continued to explore an initiative with two vendors as turnkey CHP service providers which may include outreach and technical support to potential medium sized customers. If this strategy is successful, the Company will use these vendors in 2015 to provide turnkey CHP assistance for our medium sized customers.

## **Small Business Direct Install**

- A Small Business success story from the fourth quarter involves the South County YMCA in Wakefield. The project included converting all interior and exterior lights at the site to LED technology. In addition, lighting occupancy controls were installed in selected areas, and a web-based Energy Management System took the place of existing standalone thermostat. The EMS allows the customer to monitor all of their HVAC equipment, enable C02 based demand control ventilation, set temperature and schedules, and facilitate holiday turndowns. The project will result in estimated savings of 111,115 kWh and 954 therms, saving the YMCA over \$18,000 annually.

## **Evaluation**

- Sample sites were selected and recruitment started in December for the Small Business lighting evaluation.
- The evaluation team began applying results from 2014 evaluations into the saving tracking system to ensure savings for 2015 reflect these results.

## **Upcoming Events**

- In early April 2015, an Energy Forum will be held at TACO's Learning Center in conjunction with TEC-RI, OER and CommerceRI. The forum will focus on energy delivery and supply issues in RI. The event is targeted towards business, manufacturing and industrial sectors, colleges /universities and possibly the hospitality sector. Preliminary topics include: Commodity purchasing and pricing; Energy Efficiency/CHP; Renewable Energy; Net Metering and Interconnections; and, National Grid customer success stories. The forum will provide an opportunity for networking and meeting vendors and business partners that can provide opportunities to both procure and use energy in an efficient manner.
- National Grid Community Connections Event. January 22, 2015 in Woonsocket, RI.
- Energy Expo at the RI Home Show. March 5-8, 2015 in Providence, RI.

NATIONAL GRID ENERGY EFFICIENCY PROGRAMS IN RHODE ISLAND

Table 1. Summary of 2014 Target and Preliminary 4th Quarter Results

ELECTRIC PROGRAMS Sector and Program	(1) Energy Savings (Annual MWh)		(3) Pct Achieved	(4) Customer Participation			(7) Implementation Expenses (\$ 000)			(10) Lifetime savings, MWh		(11) \$/kWh
	Target	Year To Date		Approved Target	Year To Date	Pct Achieved	Budget	Year To Date	Pct Achieved			
<b>Commercial and Industrial</b>												
Large Commercial New Construction	27,472	34,327	125.0%	2,192	3,767	171.9%	\$8,336.0	\$8,715.6	104.6%	383,717	\$	0.023
Large Commercial Retrofit	124,275	117,261	94.4%	833	541	65.0%	\$25,218.1	\$24,617.8	97.6%	2,010,046	\$	0.012
Small Business Direct Install	21,170	18,089	85.4%	1,510	1,303	86.3%	\$12,120.5	\$9,878.6	81.5%	199,318	\$	0.050
Community Based Initiatives - C&I							\$41.5	\$25.0	60.3%			
Commercial Pilots							\$364.1	\$67.1	18.4%			
Comprehensive Marketing - C&I							\$150.2	\$214.0	142.4%			
Finance Costs							\$1,000.0	\$1,000.0	100.0%			
<b>SUBTOTAL</b>	<b>172,917</b>	<b>169,677</b>	<b>98.1%</b>	<b>4,535</b>	<b>5,611</b>	<b>123.7%</b>	<b>\$47,230.3</b>	<b>\$44,518.0</b>	<b>94.3%</b>	<b>2,593,081</b>	<b>\$</b>	<b>0.017</b>
<b>Income Eligible Residential</b>												
Single Family - Income Eligible Services	3,967	4,835	121.9%	2,450	2,982	121.7%	\$7,207.0	\$7,291.8	101.2%	57,530	\$	0.127
Income Eligible Multifamily	2,113	3,276	155.0%	3,520	5,977	169.8%	\$2,092.3	\$2,259.0	108.0%	35,958	\$	0.063
<b>SUBTOTAL</b>	<b>6,080</b>	<b>8,111</b>	<b>133.4%</b>	<b>5,970</b>	<b>8,959</b>	<b>150.1%</b>	<b>\$9,299.3</b>	<b>\$9,550.8</b>	<b>102.7%</b>	<b>93,488</b>	<b>\$</b>	<b>0.102</b>
<b>Non-Income Eligible Residential</b>												
Residential New Construction	631	813	128.9%	458	1,098	239.7%	\$910.3	\$1,081.6	118.8%	10,652	\$	0.102
ENERGY STAR® HVAC	726	1,639	225.7%	1,946	2,445	125.6%	\$1,009.7	\$1,582.4	156.7%	22,365	\$	0.071
EnergyWise	7,674	13,242	172.5%	7,600	14,541	191.3%	\$6,448.4	\$8,691.2	134.8%	150,237	\$	0.058
EnergyWise Multifamily	2,888	3,556	123.1%	4,500	5,363	119.2%	\$2,419.8	\$2,668.6	110.3%	39,959	\$	0.067
ENERGY STAR® Lighting	35,731	30,668	85.8%	247,240	314,860	127.3%	\$7,389.7	\$5,381.6	72.8%	310,492	\$	0.017
ENERGY STAR® Products	3,639	5,269	144.8%	13,285	27,823	209.4%	\$2,426.0	\$2,248.5	92.7%	40,129	\$	0.056
Home Energy Reports	25,028	36,022	143.9%	227,600	266,353	117.0%	\$2,445.2	\$2,417.1	98.9%	36,022	\$	0.067
Energy Efficiency Educational Programs							\$50.7	\$35.9	70.9%			
Residential Products Pilot							\$158.8	\$23.7	14.9%			
Community Based Initiatives - Residential							\$226.4	\$174.5	77.1%			
Comprehensive Marketing - Residential							\$581.9	\$602.0	103.4%			
<b>SUBTOTAL</b>	<b>76,317</b>	<b>91,209</b>	<b>119.5%</b>	<b>502,629</b>	<b>632,483</b>	<b>126%</b>	<b>\$24,066.9</b>	<b>\$24,907.1</b>	<b>103.5%</b>	<b>609,856</b>	<b>\$</b>	<b>0.041</b>
<b>Regulatory</b>												
EERMC							\$816.7	\$649.2	79.5%			
OER							\$625.6	\$609.2	97.4%			
<b>SUBTOTAL</b>							<b>\$1,442.3</b>	<b>\$1,258.4</b>	<b>87.3%</b>			
<b>TOTAL</b>	<b>255,314</b>	<b>268,997</b>	<b>105.4%</b>	<b>513,134</b>	<b>647,053</b>	<b>126.1%</b>	<b>\$ 82,038.9</b>	<b>\$ 80,234.3</b>	<b>97.8%</b>	<b>3,296,424</b>	<b>\$</b>	<b>0.024</b>
<b>System Reliability Procurement</b>							<b>\$ 279.2</b>	<b>\$222.0</b>	<b>79.5%</b>			
<b>GAS PROGRAMS</b>												
Sector and Program	(1) Energy Savings (MMBtu)		(3) Pct Achieved	(4) Customer Participation			(7) Implementation Expenses (\$ 000)			(10) Lifetime savings, MMBtu		(11) \$/Lifetime MMBtu
	Approved Target	Year To Date		Approved Target	Year To Date	Pct Achieved	Approved Budget	Year To Date	Pct Achieved			
<b>Commercial and Industrial</b>												
Large Commercial New Construction	31,863	50,024	157.0%	192	115	59.9%	\$2,096.7	\$1,308.9	62.4%	1,014,637	\$	1.290
Large Commercial Retrofit	121,592	122,536	100.8%	606	120	19.8%	\$3,672.5	\$3,307.1	90.1%	1,601,627	\$	2.065
Small Business Direct Install	10,496	8,171	77.8%	316	297	94.0%	\$545.9	\$136.8	25.1%	60,606	\$	2.257
Commercial & Industrial Multifamily	5,511	5,287	95.9%	745	800	107.4%	\$488.8	\$330.0	67.5%	88,501	\$	3.729
Commercial & Industrial Pilots							\$398.8	\$52.1	13.1%			
Comprehensive Marketing - C&I							\$173.6	\$212.7	122.5%			
Community Based Initiatives - C&I							\$30.0	\$25.0	83.4%			
Finance Costs							\$200.0	\$200.0	100.0%			
<b>SUBTOTAL</b>	<b>169,463</b>	<b>186,018</b>	<b>109.8%</b>	<b>1,859</b>	<b>1,332</b>	<b>71.7%</b>	<b>\$7,606.4</b>	<b>\$5,572.7</b>	<b>73.3%</b>	<b>2,765,371</b>	<b>\$</b>	<b>2.015</b>
<b>Income Eligible Residential</b>												
Single Family - Income Eligible Services	6,395	8,039	125.7%	400	535	133.8%	\$2,784.0	\$2,712.1	97.4%	160,770	\$	16.870
Income Eligible Multifamily	16,824	21,052	125.1%	2,200	3,090	140.5%	\$1,767.6	\$1,514.2	85.7%	347,575	\$	4.357
<b>SUBTOTAL</b>	<b>23,219</b>	<b>29,090</b>	<b>125.3%</b>	<b>2,600</b>	<b>3,625</b>	<b>139.4%</b>	<b>\$4,551.5</b>	<b>\$4,226.3</b>	<b>92.9%</b>	<b>508,345</b>	<b>\$</b>	<b>8.314</b>
<b>Non-Income Eligible Residential</b>												
EnergyWise	30,120	69,527	230.8%	2,000	3,182	159.1%	\$4,920.5	\$5,415.0	110.1%	1,518,755	\$	3.565
Energy Star® HVAC	20,344	33,962	166.9%	2,584	3,037	117.5%	\$2,551.1	\$2,549.2	99.9%	569,683	\$	4.475
EnergyWise Multifamily	9,256	17,512	189.2%	2,000	2,496	124.8%	\$1,314.7	\$1,256.8	95.6%	268,915	\$	4.673
Home Energy Reports	73,877	53,977	73.1%	180,000	129,649	72.0%	\$286.0	\$252.3	88.2%	53,977	\$	4.674
Residential New Construction	3,683	7,115	193.2%	392	525	133.9%	\$373.6	\$290.8	77.8%	158,141	\$	1.839
Residential Products Pilot							\$34.2	\$21.5	62.9%			
Comprehensive Marketing - Residential							\$4.7	\$22.3	477.4%			
Community Based Initiatives - Residential							\$44.4	\$23.9	53.7%			
<b>SUBTOTAL</b>	<b>137,281</b>	<b>182,093</b>	<b>132.6%</b>	<b>186,976</b>	<b>138,889</b>	<b>74.3%</b>	<b>\$9,529.3</b>	<b>\$9,831.9</b>	<b>103.2%</b>	<b>2,569,472</b>	<b>\$</b>	<b>3.826</b>
<b>Regulatory</b>												
EERMC							\$245.4	\$195.9	79.8%			
OER							\$163.6	\$175.0	107.0%			
<b>SUBTOTAL</b>							<b>\$409.0</b>	<b>\$370.9</b>	<b>90.7%</b>			
<b>TOTAL</b>	<b>329,963</b>	<b>397,201</b>	<b>120.4%</b>	<b>191,435</b>	<b>143,846</b>	<b>75.1%</b>	<b>\$ 22,096.2</b>	<b>\$ 20,001.8</b>	<b>90.5%</b>	<b>5,843,188</b>	<b>\$</b>	<b>3.423</b>

NOTES

(1)(4) Targets from Docket 4451 - Attachment 4, Table E-6 (electric) and Attachment 5, Table G-6 (gas).

(3) Pct Achieved is Column (2)/ Column (1).

(6) Pct Achieved is Column (5)/ Column (4).

(7) Approved Implementation Expenses from Docket 4451, Attachment 4 Table E-4 (electric) and Attachment 5 Table G-5 (gas), adjusted to reflect "The Narragansett Electric Company, d/b/a National Grid 2014 Energy Efficiency Program Plan Transfer of Funds Request" dated September 26, 2014.

(8) Year To Date Implementation Expenses are net of evaluation expenses.

Small Business Direct Install Electric Includes OER funds spent through Q4.

Energy Wise includes RGGI oil fund spent through Q4

(9) Pct Achieved is Column (8)/ Column (7).

(11) \$/lifetime kWh = Column (8)/Column (10); \$/lifetime therm = Column (8)\*1000/Column (10)\*10

System Reliability Procurement targets from Docket 4367, not included in Implementation Expenses Total

System Reliability Procurement targets and actuals do not reflect statewide EE amounts leveraged

**Table 2**  
**National Grid**  
**Revolving Loan Funds**

Large C&I Revolving Loan Fund			Small Business Revolving Loan Fund	
(1)	2014 Funds Available	\$6,858,467	2014 Funds Available	\$3,241,378
(2)	2014 Loan budget	\$5,957,151	2014 Loan Budget	\$3,000,000
(3)	Committed		Committed	
(4)	Paid	\$4,080,088	Paid	\$2,573,272
(5)	Available	\$1,877,063	Available	\$426,728

**Rhode Island Public Energy Partnership (RI PEP)**

(6)	2014/2015 Loan Budget	\$1,000,000
(7)	Committed	
(8)	Paid	\$150,596
(9)	Available	\$849,404

Notes

- 1 Amount Company estimated in 2014 Plan, Table E-10
- 2 Budget adopted by Sales Team for 2014 operations.
- 3 As of December 31, 2014
- 4 As of December 31, 2014
- 5 Does not include loan repayments
- 6 RI PEP funding is over two years



## Rhode Island CCEI 2014 Report

### Overview

The Rhode Island CCEI had a strong, successful year. Forty-five Code Compliance Enhancement Initiative (CCEI) events were hosted with 791 attendees. The initiative succeeded despite continued weakness in the local economy resulting in limited housing and commercial building starts. For residential code events, a robust offering of classroom, hands on, and in-field trainings contributed momentum with 509 attendees. Training participant surveys continue to be extremely positive and the data is provided to National Grid monthly.

Commercial code events which had limited attendance in 2013 were restarted in April. With proactive marketing and outreach, commercial classroom trainings, webinars and on-site tours netted 282 participants including an increasing participation from the architectural sector (46 attendees). Compliance tools were delivered to support the RI design and construction teams. Two mid-initiative focus groups provided valuable feedback to fine tune the initiative. Proactive marketing of the Circuit Rider offering increased participation and continues into 2015.

### Marketing, Website Development, and Customer Relationship Management (CRM)

In the second half of 2014, CSG worked with the National Grid marketing team with the goal of increasing the number of design and construction participants. This collaborative effort resulted in two direct and electronic mail campaigns to over one thousand targets in Rhode Island. Combined with ongoing, increased outreach to organizations including the Rhode Island chapters of AIA and USGBC, this resulted in an increasing number of initiative participants from the design and construction communities. Website improvements were made to enhance National Grid branding and provide a direct link to up-to-date training schedules.

CSG sent eighteen regular electronic mailings to a database of over 840 contacts (first example below). Multiple custom flyers were created for specific events including the circuit rider tours and other unique technical trainings (second and third examples below).

**Rhode Island Energy Code Trainings**

What and Who: National Grid's Energy Code Technical Support provides Rhode Island code officials, builders, subcontractors, and design professionals with FREE commercial and residential building energy code trainings. These trainings are part of a larger effort to support energy code compliance in Rhode Island. For assistance with the energy code call the program for free at 855-343-0105.

Date & Time	Session Name	Location
11/6/2014, 9:00-10:00am	RI Commercial Energy Code Webinar: Controlling Air & Moisture in The Building Envelope	Webinar: <a href="http://ngrid.com/web-daylight-wh-2014.eventbrite.com">http://ngrid.com/web-daylight-wh-2014.eventbrite.com</a>
11/6/2014, 6:30-8:30pm	RI Commercial Energy Code: East Bay Mkt Center Tour	East Bay Mkt Center, 1150 Market Ave., 2nd Floor, Newport, RI 02840
11/13/2014, 4:30-6:30pm	RI Commercial Energy Code Webinar: Daylighting Systems and Design Options	Cowley Lumber, 2000 Narragansett Hill Road, Coventry, RI 02816
11/13/2014, 12:00-1:00pm	RI Commercial Energy Code Webinar: Daylighting Requirements	Webinar: <a href="http://ngrid.com/web-daylight-wh-2014.eventbrite.com">http://ngrid.com/web-daylight-wh-2014.eventbrite.com</a>
11/19/2014, 8:30-11:00am	RI Commercial Energy Code Overview	Rhode Island Builders Association, 450 Veterans Memorial Parkway, Building 3, East Providence, RI 02914
11/19/2014, 1:00-4:00pm	RI Commercial Energy Code: Envelope and Building Science	Rhode Island Builders Association, 450 Veterans Memorial Parkway, Building 3, East Providence, RI 02914
12/10/2014, 9:30-11:30am	RI Residential Energy Code: Envelope and Building Science	Rhode Island Builders Association, 450 Veterans Memorial Parkway, Building 3, East Providence, RI 02914
12/10/2014, 1:00-4:00pm	RI Residential Energy Code: HVAC and Indoor Air Quality	Rhode Island Builders Association, 450 Veterans Memorial Parkway, Building 3, East Providence, RI 02914

Additional training dates available. For questions about the program or to register, please visit [www.ngrid.com/energycode](http://www.ngrid.com/energycode) or call 855-343-0105.

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**Brown University Renovation Tour**  
Building for Environment Research & Teaching

Cosponsored by the AIA RI COTE and USGBC RI

**PROJECT DESCRIPTION**  
This project tour will showcase built examples of passive and active systems that were implemented at the Building for Environmental Research & Teaching (BERT) project to reduce its predicted site energy use by more than 26% when compared to its code equivalent baseline. The Building for Environmental Research & Teaching (BERT) project included the complete renovation of the existing 55,000 square foot, four-story brick structure, Hunter Lab building.

The renovation project updated the building to lab and teaching uses for the University's environmental sciences program. Compared to the code baseline case for building loads including special research equipment, the project is expected to reduce annual energy consumption by more than 26%.

The project is predicted to reduce annual energy costs by 20%. Energy efficiency measures include interior spray foam insulation, HVAC energy recovery, cooled beem, radiant heat, reduced light power densities, and automatic occupancy and daylight dimming controls.

AIA and code official education credits are available for this tour (1.5 hours/credits).

**WHEN** Thursday, December 11, 2014  
**WHERE** Brown University, 80 Waterman Street, Providence, RI 02906  
**TIME** 5:30-7:00PM  
**COST** Session is Free

**CLICK HERE to register or visit:**  
[www.eventbrite.com/ri-commercial-energy-code-brown-university-renovation-tour-12112014-registration-14319260657?aff=salespage](http://www.eventbrite.com/ri-commercial-energy-code-brown-university-renovation-tour-12112014-registration-14319260657?aff=salespage)

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**Rhode Island Energy Code Trainings**

**Understanding Air Barrier Systems and Design Options**

**WHEN** Wednesday, November 12, 2014  
**WHERE** Cowley Lumber, 2000 Narragansett Hill Rd, Coventry, RI 02816  
**TIME** 4:30-6:30pm  
**COST** Training session is free, pizza will be served

**YOU WILL LEARN**

- What is an air barrier? How is it different from a vapor barrier?
- What's the difference between an air & vapor barrier vs. weather resistive barrier.
- What is a membrane waterproofing?
- How to incorporate this technology into your wall system.
- What are the effects if you ignore air leakage?
- What are the anticipated energy savings?

Let the experts at Henry Company answer these questions and more. Henry Company has completed over 450 million SF of air and rain barriers throughout North America. Find out which system is right for your project.

**CLICK HERE to register or visit:**  
[www.eventbrite.com/ri-commercial-energy-code-understanding-air-barrier-systems-and-design-options-registration-1386663627](http://www.eventbrite.com/ri-commercial-energy-code-understanding-air-barrier-systems-and-design-options-registration-1386663627)

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## Trainings

The following trainings, webinars, and tours were offered in 2014 (split by residential versus commercial with number in parenthesis denoting number of sessions):

### Residential

- Classroom trainings held at RI Builders Association (RIBA) included Overview (3 sessions), Envelope and Building Science (4), HVAC and Indoor Air Quality (2), Building Science with Hands-On Air Barrier (1).
- All three of the core courses were offered at RI Housing in Providence (3 courses in total).
- Community College of RI (CCRI) was the site for multiple courses including Overview (1) and HVAC and Indoor Air Quality (1).
- Five blower door trainings were held at Apeiron Institute in Coventry.
- Two classroom trainings sponsored at Scouter's Hall in North Smithfield; Overview and Envelope and Building Science.
- At NE Institute of Technology, a condensed energy codes course and hands-on session was presented to 16 students.
- Preparation for the next generation of energy professionals occurred with two trainings at Woonsocket Career Center for a total of 34 students.
- Hands-on training at Warwick Area Career and Tech Center, a vocational high school.
- The RI Association of Plumbing and Mechanical Inspectors received energy code training at an association meeting at Spumoni's Restaurant in Pawtucket.

### Commercial

- Classroom trainings held at RI Builders Association (RIBA) included Overview (2), Envelope and Building Science (3), Lighting, Lighting Control and Other Electrical Provisions (3), Mechanical Provisions (3).
- An Overview of the 2012 Commercial Energy Code was sponsored at the AIA New England Conference at the Biltmore Hotel in Providence.
- An Understanding Air Barrier Systems and Design Options training was sponsored at Coventry Lumber with the Henry Company providing information on air and rain barrier systems.
- Two building tours cosponsored with the AIA and USGBC RI Chapters; including a new building tour of the Met Center in Newport and the renovated Building for Engineering and Technology (BERT) at Brown University. Both tours focused on challenging areas for code compliance (daylighting and lighting controls along with building enclosure).

Energy code webinars were launched with two different commercial courses; Controlling Air and Moisture in the Building Enclosure (3 webinars) and Daylighting Requirements (2). Webinar registration and attendance was low despite promotional efforts.



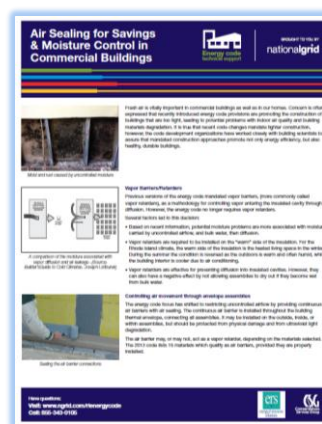
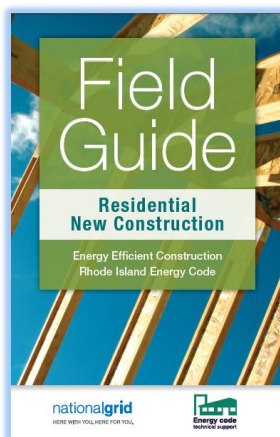
Hands on Duct Training at WATC



Commercial Training for AIA in Providence

## Documentation Tools

The Rhode Island Residential Field Guide was delivered in electronic form in November. With over one hundred pages of text and drawings, this comprehensive guide provides extensive information on code compliance and a systems approach to residential building. Frequently Asked Question (FAQ) guides were provided for both the commercial and residential building sectors. Technical bulletins, both residential and commercial, were produced to emphasize the importance of controlling air and moisture.



## Circuit Riders

The technical assistance/circuit rider service has been actively promoted throughout the year. There has been an increase in the volume of calls primarily for residential buildings.

Stephen Turner Inc. (STI) joined the initiative as subcontractor to CSG to support commercial technical assistance/circuit rider replacing Jim Fikiet who was unable to continue providing support. Two proactive circuit rider building tours were held (one at a new building which is net zero ready and the other at a renovated Brown University building). The tours are designed to focus on challenging areas of the code including requirements for continuous air barrier and daylighting and controls. Tour handouts included summaries of how each building met and exceeded the commercial energy code.

## Evaluation

CSG worked closely with National Grid staff to develop a methodology for claiming CCEI savings on existing building projects that have pulled permits. We reviewed statewide data from 2013 and 2014 and used permit descriptions to estimate the new-home-equivalent of each residential project that was filed. (i.e., what was the percentage savings for the project compared with a new home?). The average new-home-equivalent percentage was then totaled to estimate the savings of retrofits as a number of new homes. This approach was reviewed and approved by the evaluation working group.

## Outreach Activity

Significant outreach has resulted in an increasing number of attendees from the design sectors, particularly residential builders in the residential sector and architects, engineers, and energy specialists. Additional partners for hosting trainings have included RI Housing, technical schools, several lumber yards, the RI chapters of USGBC and many others. The Rhode Island Builders Association continues to be an important partner and provides a convenient training location.