

State of Rhode Island Energy Efficiency & Resource Management Council

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Annual Report May 2018

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# **Executive Summary**

## How Energy Efficiency is Paying Off for Rhode Islanders









services in 2017



## 1.28 million metric tons of greenhouse

gas emissions prevented over the life of efficiency measures installed in 2017. Equivalent to taking

274,090 cars off the road for one year

in total benefits achieved

by efficiency programs in 2017

### **Ensure Continued Leadership through 2018 Policy Recommendations**



Support Least-Cost Procurement (§ 39-1-27)



Facilitate financing options, especially for schools



Support efficiency in homes that use unregulated fuels, like oil and propane



Adopt energy and water efficiency standards for appliances



Support economically vulnerable households



Coordinate energy efficiency programs with renewable energy deployment



Define aggregated or assetbased building energy information as public

The Rhode Island Energy Efficiency & Resource Management Council (EERMC) is a group of stakeholders that represents all Rhode Islanders to ensure the utility is investing in the least expensive energy resource - energy efficiency. Learn more at www.rieermc.ri.gov

## LETTER FROM THE CHAIR

#### To Governor Gina M. Raimondo, Leaders and Members of the General Assembly, and all Rhode Island energy consumers:

On behalf of the Energy Efficiency & Resource Management Council, I am proud to present to you our 2018 Annual Report. In these pages, you will find an overview of our nationally recognized energy efficiency programs and the many signs of our progress.

These programs could not be successful without the extensive public education and outreach efforts of our council members and partners. The more that people understand what energy efficiency is, recognize its value and take positive action to implement it, the more effective we will be in achieving our state's long-term economic, environmental and energy goals.



As energy efficiency adoption spreads, we must work even harder to educate home owners, businesses, state and local government and the public about the lesserknown opportunities to become more energy efficient.

Replacing incandescent bulbs with energy efficient LEDs is often an easy and low-cost way to lower one's energy bills, but that is just the beginning of the benefits. Energy efficiency extends beyond cost savings and can improve the comfort and safety of buildings by cutting down on noise, improving air quality, and providing more control over temperature and climate zones. For instance, universities use energy efficient renovations to make their classrooms more comfortable and conducive for learning; companies make their workspaces more productive and their factories safer. Energy efficiency not only brings cost savings to the individual ratepayer, but also saves money for everyone on the system collectively, if we all reduce the amount of power we consume, the less power we have to generate and the less new wires, poles, transmission towers, transformers and

power plants we need to build or upgrade.

In addition the nabling nation-leading levels of energy savings, Rhode Island's investments in costeffective, low-cost energy efficiency are creating jobs and boosting economic activity. Energy efficiency reduces the cost of doing business in Rhode Island and lowers residents' energy bills, leaving them with more disposable income to spend on other goods and services. These two effects lead to job creation and economic growth.

Rhode Island's leaders and have shown a strong commitment to reducing energy waste across almost all policy sectors. The EERMC is grateful for your support in the past and looks forward to enjoying your continued support in coming years. We are committed to working cooperatively with policymakers and all of Rhode Island's energy consumers to continue the state's leadership position.

As a council, we have never been more engaged than we are today and we look forward to continuing our public education and engagement efforts with your support.

#### Respectfully Submitted,

Christopher M. Powell, Chair Energy Efficiency and Resource Management Council

# LETTER FROM THE EXECUTIVE DIRECTOR

# To Governor Gina M. Raimondo, Leaders and Members of the General Assembly, and all Rhode Island energy consumers:

The Rhode Island Energy Efficiency and Resource Management Council (EERMC), in partnership with the Office of Energy Resources (OER), is pleased to present the EERMC's 2018 Annual Report.

The EERMC's primary aim is to promote energy savings for Rhode Islanders in all seasons and markets. As global energy prices rise and fall, harsh winters and hot summers add strain to our systems, and federal regulations and incentives change, energy efficiency stands as one constant hedge against uncertainty, protecting Rhode Islanders' wallets as well as our quality of life.



We often say energy efficiency is Rhode Island's "first fuel." Here is

what this means: when homeowners, business owners and government officials take steps to install LEDs, properly insulate their buildings, and replace aging appliances and HVAC equipment with more efficient models, they are reducing their energy use, not just for today, but for decades. These energy savings are substantial each year, and the individual savings add up to billions of dollars over time. The overall costs of the state's energy system are lessened, even as the economy strengthens. Therefore, energy efficiency truly is our state's first fuel because it is the most important cost-savings investment we make before buying or generating new power.

EERMC has remained steadfast on deploying Rhode Island's nationally-recognized energy efficiency programs, staying true to its mission to represent and maximize energy efficiency benefits for residents, businesses, and all energy customers. EERMC has continued its results-oriented approach, making sure that the investments ratepayers make in energy efficiency produce nearly a 4-to-1 return. That is, for every \$1 invested, we see an economic return of about \$4 by creating new jobs in the energy efficiency economy, increasing consumer spending power by lowering their monthly energy bills, and providing other environmental and health benefits.

I want to extend a special note of appreciation to the Rhode Islanders who serve on the EERMC. These generous volunteers donate hundreds of hours over the course of the year, working to ensure that energy efficiency programs deliver on their promise to produce energy and cost savings for Rhode Island ratepayers. Rhode Island's award-winning programs would not be possible without their support and dedication.

#### Sincerely,

Carol Grant Commissioner, Rhode Island Office of Energy Resources Executive Director, Energy Efficiency and Resource Management Council

## **ABOUT THE EERMC**

#### **COUNCIL MEMBERSHIP**

The EERMC consists of fourteen members appointed by the Governor with the advice and consent of the Senate. Ten members are voting members with knowledge of energy regulation and law, environmental issues pertaining to energy, energy design and codes, energy efficiency education and employment tracking, and energy users in the following sectors: large commercial and industrial, small commercial and industrial, large non-profit, residential, low income, and municipal. Four members are ex-officio, non-voting members including the Commissioner of the Office of Energy Resources and others representing an electric distribution entity, a gas distribution entity and the fuel oil or heating fuel industry. Members serve voluntarily and meet year-round.

#### **COUNCIL MEMBERS**

Christopher Powell, Chair Voting Member Assistant Vice President, Sustainable Energy and Environmental Initiatives, Brown University Representing Expertise in Energy Regulation and the Law

#### Betsy Stubblefield Loucks, Vice Chair

Voting Member Independent Strategy Consultant Representing Residential Users

#### Joseph Cirillo

*Voting Member* Former Building Commissioner Representing Expertise in Energy Design & Code

#### **Roberta Fagan**

*Ex-Officio Member* President, Oil Heat Institute of Rhode Island Representing Expertise in Delivered Fuels

#### Carol J. Grant

*Ex-Officio Member* Commissioner, Office of Energy Resources Executive Director of the EERMC

#### **Anthony Hubbard**

Voting Member Director, YouthBuild Providence Representing Low Income Energy Consumers

#### Jennifer Hutchinson

*Ex-Officio Member* Senior Counsel, National Grid Representing Electric & Gas Utility

#### **Thomas Magliocchetti**

Voting Member Vice President, Facilities Management, Rhode Island Hospital Representing Large Non-Profit Users

#### **Michael McAteer**

*Ex-Officio Member* Director, RI Customer & Business Strategy, National Grid Representing an Electric Distribution Entity

#### Shigeru Osada

Voting Member Sr. Vice President, Toray Plastics Representing Large Commercial & Industrial Users

#### Karen Verrengia

Voting Member Field Manager, CLEAResult Former Energy Manager, Cranston Public School Department Representing Expertise in Workforce Development

#### **Diane Williamson**

Voting Member Director of Community Development, Town of Bristol Representing Municipalities

#### **Appointment pending**

Voting Member Representing Expertise in Environmental Issues

#### Appointment pending

Voting Member Representing Small Commercial & Industrial Users

#### WHO WE ARE & WHAT WE DO

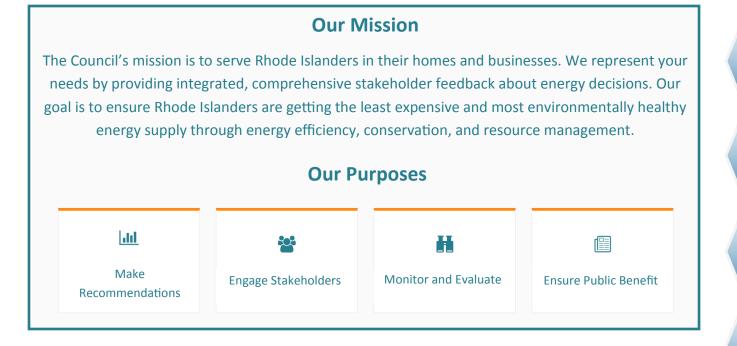
The Energy Efficiency and Resource Management Council (EERMC) has been providing an integrated, comprehensive, public, stakeholder-driven organizational structure to secure for Rhode Island's energy consumers the economic and environmental benefits of energy efficiency since the Council's formation in 2006 under amendments to R.I.G.L. § 42-140.1.

In representing small and large businesses, non-profit organizations, homeowners and renters, and municipalities and government, the EERMC oversees highly successful programs that allow Rhode Islanders to access energy efficiency instead of having to purchase more costly energy supply. A valuable outcome of these programs is to also support a growing industry of Rhode Island energy efficiency service and product suppliers, which support local job growth and in-state financial investments.

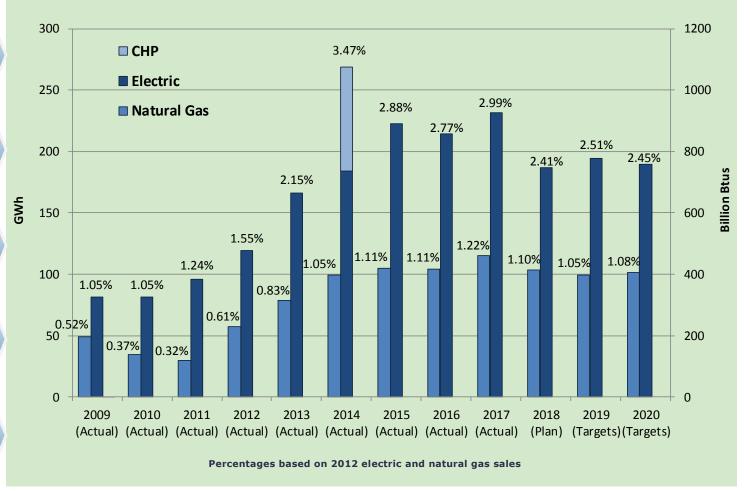
The effects of energy efficiency in the last decade now cumulatively account for approximately 20% of Rhode Island's electricity needs. Without the cost-effective energy efficiency investments made over time, which cost on average about 4 cents per kilowatt-hour saved, we would now be paying more than twice that amount to supply that energy.

Rhode Island consumers are the focus of Least Cost Procurement, so ensuring the consumer voice in energy efficiency procurement decisions is critically important. The EERMC, assisted by its expert consultant team, provides meaningful input into National Grid's efficiency procurement plans and adds significant stability to investment decisions. The EERMC's model for structured stakeholder participation has been successfully deployed annually in a nationally-recognized process to set appropriate energy saving targets and then establish implementation plans that are equitable, cost-efficient and cost-effective to maximize benefits for all Rhode Islanders.

A key accomplishment for the EERMC in 2017 was reviewing and approving the Three-Year Plan for Energy Efficiency covering 2018-2020, which resulted in National Grid filing the plan with the Rhode Island Public Utilities Commission (RI PUC), which subsequently approved it.



#### ACTUAL ENERGY SAVINGS (2009-2017) AND TARGETS (2018-2020)



The remainder of this report describes the specific activities of the EERMC in 2017 which include:

- Providing oversight and input into 2017 program implementation, which resulted in savings over 100% of the goal in all sectors, within budget.
- Collaborating with National Grid and key stakeholders on the development of the 2018 -2020 Three-Year Energy Efficiency Procurement Plan and System Reliability Plan, the 2018 Energy Efficiency Program Plan, and the 2018 System Reliability Procurement Report. The RI Public Utilities Commission unanimously approved these plans.
- Monitoring and supporting product launches and enhancements of the Rhode Island Infrastructure Bank, and proposing other key recommendations for making energy efficiency even easier and more accessible to Rhode Islanders through improved financing options.
- Exploring challenges, barriers, and opportunities to have a lower cost, cleaner energy future through comprehensive energy system planning and policies.

## **2017 ACHIEVEMENTS AND HIGHLIGHTS**

Rhode Island remains a nationally recognized leader in implementing high-quality energy efficiency programs. Since 2009, Rhode Island has consistently been in the top 10 states ranked by the American Council for an Energy Efficient Economy's State Energy Scorecard.

In 2017, Rhode Island received the number 1 ranking in the category of "utility-sector energy efficiency programs and policies" after once again being the only state to earn a perfect score in that category. Rhode Island also ranked #3 overall by having some of the most aggressive targets in other categories, including transportation, combined heat and power, and state government initiatives.

# Rhode Island State Scorecard Rank



### Utilities Score: 20 out of 20

Below: Infographic on the benefits of Energy Efficiency. Above: American Council for an Energy Efficient Economy (ACEEE) 2017 Rhode Island State and Utilities Ranking

# How **Energy Efficiency** is Paying Off for Rhode Islanders



**726** full-time equivalent jobs in 2017

917

firms delivered

energy efficiency

services in 2017



# 1.28 million

metric tons of greenhouse gas emissions prevented over the life of efficiency measures installed in 2017. Equivalent to taking

# 274,090 cars

# \$320 million

efficiency programs in 2017

#### **2017 ENERGY EFFICIENCY PROGRAM RESULTS**



**Total Participants** 799,435



Cost Per Lifetime kWh of **Electricity Saved** 

\$0.039

\$5.96



\$117.5 million



**Total Benefits** \$320.96 million



**Energy Savings as a Percent** of 2012 Electric Load

**Cost Per Lifetime MMBTU of** 

3.0% electric

**Natural Gas Saved** 

#### **TEN YEARS OF PROJECTED CUMULATIVE SAVINGS FROM ENERGY EFFICIENCY**



10 years of savings from ratepayer funded energy efficiency programs

## **POLICY RECOMMENDATIONS**

R.I.G.L. § 42-140.1-5 requires that the EERMC "Submit to the joint committee on energy an annual report... regarding the activities of the Council, its assessment of energy issues, the status of system reliability, energy efficiency and conservation procurement, and its recommendations regarding any improvements which might be necessary or desirable." The EERMC submits the following recommendations that will support Rhode Island's position as a national leader in energy efficiency and resource conservation.

As in previous years, we present both *Policy Recommendations* for 2018 and a *Progress Report* on previous recommendations.

#### **2018 Policy Recommendations**

 The EERMC strongly recommends that the executive branch and legislature continue to support Rhode Island's Least-Cost Procurement law (§ 39-1-27). It is essential that this law is protected because it actively saves Rhode Islanders money and supports Rhode Island's aggressive economic development and environmental goals. We encourage passing legislation that facilitates this law's implementation.

Rhode Island's Least-Cost Procurement law ensures electric and natural gas energy efficiency programs are available to Rhode Islanders. These programs reduce overall energy demand and infrastructure costs, support local jobs, and reduce greenhouse gas emissions. The law also requires all energy efficiency savings cost less than purchasing more power supply. In other words, the law actively saves Rhode Island ratepayers money.

- We should build on the successful creation of the Rhode Island Infrastructure Bank and facilitate new financing options for building energy projects for all sectors of the economy. In 2018, it is of particular importance that any barriers currently preventing Rhode Island schools from leveraging all available building financing programs be removed.
- 3. A method for funding and supporting efficiency investments in homes that use unregulated fuels, such as oil and propane, should be implemented.
- 4. Rhode Island should adopt comprehensive appliance efficiency standards that also backstop existing federal appliance standards that may languish. Such action would achieve large energy and cost savings for Rhode Islanders.
- 5. Rhode Island energy efficiency programs should constantly work to ensure that all customers and segments of the market have access to the benefits of energy efficiency savings. There should be a concerted effort to reach those who are economically vulnerable, and those who are currently above poverty guidelines, but need significant assistance to make efficiency investments.
- 6. A concerted effort should be made to coordinate energy efficiency programs with renewable energy deployment and other available state and federal clean energy and greenhouse gas reduction programs and incentives.
- 7. Aggregated or asset-based building energy information should be clearly defined as public information by the executive branch and general assembly. This would allow greater transparency in Rhode Island building transactions, would spur the market for more energy efficient homes, and would provide a level of customer protection not currently available to home buyers and renters.

#### **Progress on Previous Policy Recommendations**

Strong progress has been made on the following, previous EERMC policy recommendations:

- Expanding access to well-designed financing options that supplement and tie-in to successful rebate and incentive programs to allow more energy efficiency to be captured. The establishment of the Rhode Island Infrastructure Bank through the leadership of the Office of the Governor and the Office of the General Treasurer as well as the General Assembly's passage of supporting legislation successfully delivers an effective means to this end to benefit all Rhode Islanders. Financing options such as the Efficient Buildings Fund and Commercial Property Assessed Clean Energy (C-PACE) are now available for many Rhode Island municipal and commercial facilities.
- 2. Establishing a "Rhode Island Sustainability Hub" to empower customers to save energy and optimize the use of the electric distribution system. In 2016, National Grid selected a space in downtown Providence to create the Rhode Island Energy Innovation Hub (The Hub). The Hub opened in 2017 and is actively serving as an educational facility with interactive exhibits that highlight the successes of today's energy solutions while empowering customers to create the sustainable energy future of tomorrow.
- 3. Supporting the continuation of Rhode Island's landmark Comprehensive Energy Conservation, Efficiency, and Affordability Act of 2006 that established Least Cost Procurement as the state's overarching resource acquisition strategy for electricity and natural gas. This act was set to expire in 2018, but due to commendable action taken by the General Assembly, Least Cost Procurement has been extended through 2024. This ensures that all Rhode Islanders can continue benefitting from investments in all cost-effective energy efficiency. It is important that this law continue to be protected and perpetuated for the benefit of all Rhode Islanders.



Lighting demonstration at the 2018 Energy Expo. Visitors could feel how much harder it was to light up an incandescent bulb versus an LED.

## **2017 PROGRAMS & INITIATIVES**

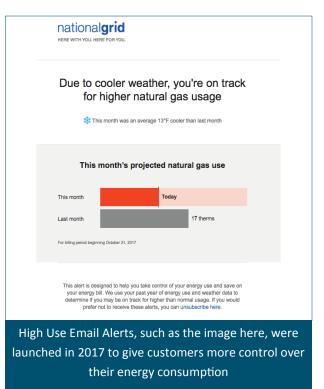
#### **Residential Energy Efficiency Programs**

National Grid offers comprehensive energy efficiency solutions for all Rhode Island residential customers. The goals of these offerings and services are to educate residents on saving energy and reducing energy bills while improving the comfort in their homes. The energy efficiency solutions concentrate on creating energy efficient homes, promoting efficient products, facilitating market transformation for efficient products, and educating consumers through community outreach and annual events such as the Energy Expo at the Rhode Island Home Show and the RI Energy Challenge.

2017 marked a continuation of residential market transformation in lighting, as energy efficient LED lighting technologies became the baseline lighting offering across the residential portfolio. To help the income eligible customers benefit from energy-saving LED lighting, the Company offered no-cost LED two-packs in RI Food Banks.

National Grid also continued to present Rhode Islanders with energy efficiency opportunities as well as tools to affect energy use behavior through Home Energy Reports (HER). In its fifth year running, the HER program continues to encourage energy efficiency behavior through personalized print and email reports, and a seamlessly integrated website. Each of the communication channels displays energy consumption patterns, contains a normative comparison to similarly sized and similarly heated homes, and gives customers the information and tools to reduce their usage.

New for 2017, the Company began sending non-Advanced Metering Infrastructure (AMI) High Use Alerts to customers trending to exceed the prior month's bill by 30%. In addition, the company included more personalized information in the communications.



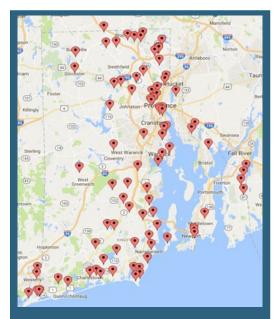
The towns of North Kingstown, Cumberland, Smithfield, and Richmond all ran intense 6month energy saving campaigns in their communities and earned grants to be used for energy efficiency improvements on public properties. As a result of these towns leading by example, energy committees or volunteer groups were formed in each town and over 1,300 requests for home energy assessments were generated.

In October 2017, National Grid opened the doors to the Energy Innovation Hub (Hub) as a community engagement destination designed to expand customer education and outreach and enrich the customer's understanding of energy and opportunities to reduce energy consumption. The Hub helps customers connect to their own energy use as well as the greater State-wide participation and how such participation contributes to the State's greenhouse gas and energy reduction goals.

National Grid continued its core residential energy efficiency programs in 2017:

- *EnergyWise* offers single family customers no-cost home energy assessments, weatherization, and information on their actual energy usage. Participants in this program receive personalized recommendations to reduce their energy consumption and improve the comfort in their home, technical assistance and education, and offers for financial incentives to replace inefficient lighting, appliances, thermostats, heating and cooling systems, and insulation with technologies that are more energy efficient. For the second consecutive year, the program was awarded the ENERGY STAR<sup>®</sup> Partner of the Year award in program implementation. This award recognizes the robust savings Rhode Islanders are receiving as well as the innovative program design. The program also celebrated 16 Century Club recipients who are insulation contractors that weatherized 100 or more residential homes in Rhode Island.
- The Residential New Construction Program provides technical support and incentives for the construction and renovation/remodeling of highperforming energy efficient single family, multi-family, and income eligible homes. The Program incentivizes both the efficient building envelope as well as high efficiency mechanical equipment. The number of customer homes served in 2017 increased 29% compared to 2016, and is the highest number of customers served by the program in a single year since program inception. 2017 was another year of increasing numbers of electrically heated homes. In the 2017 Residential New Construction Program 38% of homes were heated

with electric air source heat pumps and 52% were heated with gas. Throughout the year, the program offers training on best practices for designing and building high efficiency homes for builders, tradespeople, designers, and code officials. Outreach efforts were made in 2017 to Building Performance Institute (BPI) certified contractors to promote creating an open-market for Home Energy Rating System (HERS) Raters. HERS Rater training will take place in 2018.



Locations of homes completed in the Residential New Construction program in 2017

- The ENERGY STAR<sup>®</sup> Consumer Products Program promoted the purchase of high efficiency household appliances and electronics. 2017 produced strong results with both dehumidifier and refrigerator/freezer recycling programs.
- The ENERGY STAR® Lighting Program provides negotiated pricing to customers for the purchase of ENERGY STAR® qualified lighting, retail store promotions, and/or mail order. This program provides retailer education and support in the efficient lighting area contributing to overall market transformation.

- The High-Efficiency Heating and Cooling Programs (Gas Heat Program and CoolSmart Program) promotes the installation of high efficiency gas and electric space heating and cooling equipment, water heating measures, and controls via tiered customer rebates. In 2017, heat pump water heaters continued an upward trend and as a result they will be offered through an upstream delivery model in 2018. The heating and cooling programs provide contractor trainings and incentives for proper equipment sizing, AC-check of the coolant charge and distribution system improvements.
- The Home Energy Reports (HER) Program launched Non-AMI High Use Alerts in May 2017, giving customers more control over their energy consumption and reducing "bill shock" by notifying customers when they were on track to exceed the prior month's use by more than 30%. The New Movers and Points & Rewards program were discontinued in 2017 with more focus given to greater personalization, such as including balanced billing and Community Action Program (CAP) information for income eligible customers who receive reports and informing customers how the energy they have saved has positively benefitted the community.

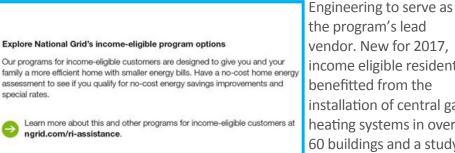
We're here to help

#### 2017 Residential Results

- 108,528 Annual MWh Saved
- 744,001 Lifetime MWh Saved
- 185,591 Annual MMBtu Saved •
- 1,638,484 Lifetime MMBtu Saved
- 426,169 Metric Tons of Greenhouse Gas **Emissions Avoided**
- 780,924 Program Participants
- \$75.8 Million in Lifetime Electric Cost Savings •
- \$17.2 Million in Lifetime Gas Cost Savings
- \$103.5 Million in Total Benefits

goals for the towns of North Kingstown, Cumberland, Richmond, and Smithfield. From junior high students in Cumberland committing the summer to promoting efficiency and penning an opinion piece for the local paper, to the creation of the Richmond Energy Challenge Committee, the residents went above and beyond. As such, all towns surpassed goals, generating over 1,300 requests for assessments and earning \$10,000 for energy improvements.

The Multifamily Program concluded the Request for Proposals (RFP) process initiated in 2016 and contracted with RISE



In 2017, the Home Energy Report included special modules for Income Eligible customers directing them to billing assistance and energy saving programs

ngrid.com/ri-assistance.

The Company's community based • initiative, the RI Energy Challenge, set specified residential energy assessment

special rates.

the program's lead vendor. New for 2017, income eligible residents benefitted from the installation of central gas heating systems in over 60 buildings and a study of boiler monitoring and optimization was conducted (final report

expected in Quarter 2 of 2018). Further, an online sign up website was created to help overcome the barrier of engaging offsite condominium owners, and delivered fuel

customers were also served with weatherization measures for the first time.

#### **Income Eligible Services**

The Income Eligible Services (IES) program helps reduce electricity and heating costs for residential income eligible customers without any financial obligation from the customer. Income Eligible Services are delivered by Rhode Island's six local Community Action Program (CAP) agencies to customers who are currently on the A-60 or 1301 Low Income rate; qualify for LIHEAP funds from the State; or whose household income level falls below 60% of the Area Median Income (AMI). Services offered to Income Eligible Customers include (1) an energy assessment of lighting, appliances, and behavior to determine baseline consumption and potential replacement if applicable, (2) an inspection of existing insulation to identify opportunities for weatherization, and (3) a safety and energy efficiency inspection of the customer's heating/cooling system for potential replacement if eligible. All customers receive all services and equipment upgrades at no cost.

The program continued to benefit from program improvements resulting in an increase in the number of assessments by 5% from 2016 to 2017 – to a total of 2,639 assessments. The program saw a significant jump in air conditioner replacements by 90% to 1,102 units. Air conditioner replacements may be due to increased frequency of long stretches of hot days. In 2017, targeted marketing efforts were delivered to the income eligible communities to increase awareness and participation in the program. IES initiated the development of an Appliance Management Program (AMP) Manual that will outline the steps and goals of the AMP Assessment. This manual is designed to increase consistency with

AMP Assessments across the six CAPs. Overall, in 2017, IES exceeded the gas goals, but missed the electric goals as a result of installing less LEDs per home than planned. LED bulbs are available at such low-price points that customers are installing them on their own.

#### Income Eligible Program/WAP Collaborative

National Grid's Income Eligible Services are administered along with related and complementary federal, state, and local programs in collaboration with Rhode Island Department of Human Services (DHS), the CAP agencies, and other local agencies.

#### **2017 Income Eligible Results**

- 8,020 Annual MWh Saved
- 76,147 Lifetime MWh Saved
- 32,242 Annual MMBtu Saved
- 554,588 Lifetime MMBtu Saved
- 84,314 Metric Tons of Greenhouse Gas Emissions Avoided
- 12,776 Program Participants
- \$8.3 Million in Lifetime Electric Cost Savings
- \$5.8 Million in Lifetime Gas Cost Savings
- \$53.6 Million in Total Benefits

#### Low Income Home Energy Assistance Program (LIHEAP)

The Low Income Home Energy Assistance Program (LIHEAP) block grant is funded through the U.S. Department of Health and Human Services. The purpose of LIHEAP is to assist Rhode Island's income eligible households in meeting the increasing costs of home energy and reduce the severity of any energy-related crisis. Rhode Island's LIHEAP is administered by the Rhode Island Department of Human Services (DHS) Individual and Family Support/Community Services Division. LIHEAP intake and outreach is provided by the six local CAP agencies. Households are determined eligible for LIHEAP assistance according to income guidelines established by DHS.

#### Weatherization Assistance Program

The Weatherization Assistance Program (WAP) enables income eligible families to reduce their energy bills (and helps LIHEAP funds go farther) by making their homes more energy efficient, while addressing health and safety concerns. Funds are used to improve the energy performance of income eligible dwellings using the most advanced technologies and testing protocols available in the industry.

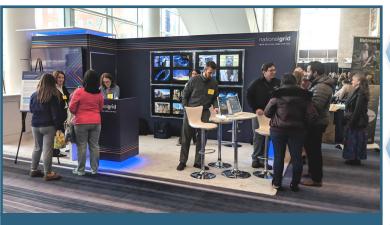
WAP is funded through annual appropriations from the U.S. Department of Energy's Weatherization Assistance Program and the U.S. Department of Health and Human Services. The state allocates 15% of its annual LIHEAP funding to weatherization.

#### 2018 Energy Expo at the Rhode Island Home Show

For the fifth consecutive year, the EERMC and National Grid sponsored the Energy Expo at the Rhode Island Home Show. The goal of the Energy Expo is to help Rhode Islanders reduce their energy costs while improving the comfort of their homes. This year, the show ran from April 5 – April 8 at the Rhode Island Convention Center. It provided Rhode Islanders with access to the state's energy efficiency programs, products and services. Show highlights include:

- Over 250 students from 24 Rhode Island career tech schools helped to construct a demonstration project that showcased the components of a home energy assessment
- 102 energy related companies and organizations exhibited

- Over 270 energy audit sign-ups were completed
- Over, 24,794 LEDs were sold as part of 1,771 energy efficiency kits
- Approximately 26,000 people attended the Home Show



National Grid booth at the 2018 Energy Expo

#### **Commercial, Industrial & Public Programs and Initiatives**

#### Large Commercial and Industrial Programs

National Grid offers two programs for large commercial and industrial customers with an average monthly peak demand in excess of 200 kW. Each program contains a few common elements:

- National Grid offers incentives to reduce the incremental cost barrier to investing in energy efficiency.
- National Grid reduces barriers to participation by offering a range of technical assistance from identifying opportunities to improving a company's manufacturing process.
- National Grid makes available various financing solutions for customers.
   Depending on the program year and budget, National Grid may also have funds available to provide business owners with zero interest loans for a defined period of time with on-bill payback.

 The programs are integrated to offer assistance with gas and electric projects at the same time.

The Commercial **New Construction Program** encourages energy efficiency in new construction, major renovations, planned replacement of aging equipment, and replacement of failed equipment through financial incentives and technical assistance to developers, manufacturers, vendors, customers, and design professionals. The program supports both the commercial and industrial new construction projects with proactive technical assistance during design with energy modeling and analysis.

In 2017, interest in new construction continued due to an improving economy. If the economy continues to strengthen, the Company expects to see growth in new construction projects materialize over the next 3-5 years.

In general, in 2017, there were more projects covering a range of building types demonstrating an increase in commercial and industrial development in Rhode Island. Projects included mid-size multifamily, university buildings, garage buildings and large commercial projects.

The Large Commercial Retrofit Program encourages the replacement of existing equipment and systems with energy efficient alternatives when the customer is not otherwise planning any investments. The program offers solutions including steam trap repair, Combined Heat and Power (CHP), multiyear Strategic Energy Management Plans (SEMP) with some of National Grid's largest customers, and a variety of upstream programs. In 2017, National Grid had several notable developments in the Large Commercial and Industrial space. The Company went broader by expanding the Upstream Products Initiatives, continued its partnership and goals with its two SEMP customers, and

engaged more customers in the industrial, grocery, and municipal vertical markets initiative. The Company also continued work on the SEMP established with the State of Rhode Island in 2016. In 2017, 27 scoping studies and one retro-commissioning studies were performed in state facilities.

This program also includes an industrial initiative with world-renowned engineering firm, Leidos, and training for trade allies among many other efforts.

#### 2017 Large C&I Results

- 102,520 Annual MWh Saved
- 1,348,793 Lifetime MWh Saved
- 246,106 Annual MMBtu Saved
- 2,390,443 Lifetime MMBtu Saved
- 701,605 Metric Tons of Greenhouse Gas Emissions Avoided
- 2,678 Program Participants
- \$131.9 Million in Lifetime Electric Cost Savings
- \$21.8 Million in Lifetime Gas Cost Savings
- \$149.0 Million in Total Benefits

The **Industrial Initiative** in Rhode Island had another very successful year. Goals for electric and gas were exceeded and delivered substantial savings to Rhode Island manufacturers. A total of 89 incentive applications were paid (66 electric and 23 gas) resulting in savings for 38 large industrial customers. The program continues to focus on custom process measures with 82% of the applications relating to process, HVAC, variable frequency drives (VFDs) and other custom measures.

The **EnergySmart Grocer** (ESG) initiative delivered cost effective, comprehensive energy savings in the grocery market segment in 2017. Notable projects include a

chain grocery store in Cranston, RI that will be the first project using CO2 as a refrigerant that the ESG initiative has supported. The program also had another strong year with the largest independent grocery chain in Rhode Island. This chain completed projects with ESG totaling over 1 million kWh making for a third strong year in a row. Other customer projects included chain wide antisweat heat controls (ASHC) implementation with a national grocer at their Rhode Island stores providing 1.4 million kWh savings. 2017 also saw an influx of projects with smaller local grocers.

Interest in **Combined Heat and Power (CHP)** projects continued in 2017. Several Technical Assistance (TA) Studies that are done prior to commencing a CHP project, were completed in 2017 and these projects will continue in 2018.

In 2015 National Grid launched a **Solid State Street Light Initiative** that provided energy efficiency incentives for solid state street lighting and controls to municipal customers. There are two options for participating in this initiative, customer owned and Company owned.

- Customer Owned Street Lighting Rhode Island municipal customers are now eligible to purchase their own street lights from National Grid. Incentives are being offered for solid state lighting and controls, as funding allows. National Grid worked closely with RI OER as well as the cities and towns.
- Company Owned Street Lighting National Grid filed a company owned street lighting tariff in 2016. This tariff's effective date is January 2017. If the municipal customer prefers to continue leasing their street lights from National Grid, the customer will receive the incentive and the Company will claim the savings. Participation in this initiative has expanded to 16 communities in Rhode Island as well at the RI DOT Highway

Department.

• In 2017 LED street lighting and controls accounted for 24,600 MWh in savings.

For municipal-owned streetlights, Rhode Island's Office of Energy Resources (OER) can also provide financial incentives in addition to those provided by National Grid for conversions to LED technologies with controls. To learn more about this program contact George Sfinarolakis at OER <u>George.Sfinarolakis@energy.ri.gov</u>.

In 2017, the Company launched a **demand response demonstration** called Connected Solutions. The Company's demand response program for C&I customer's aims to help customers reduce their energy use when the grid is at peak. Over the long term, this will enable National Grid to build a smaller transmission and distribution system, allow ISO-NE to acquire less generation capacity, and reduce customers' supply costs. During the summer of 2017 the Company enrolled 32 customers who had a total average curtailment per event of 10.6 MW.

#### Small Business Energy Efficiency Program

National Grid's Small Business Direct Install program is a retrofit program that provides turnkey services to customers with less than 200 kW average monthly peak electrical demand. As part of the program, customers receive a free on- site energy assessment and a customized report detailing recommended energy efficient improvements. National Grid then completes retrofit installations at the customer's convenience. In 2017, the program served small businesses of all types including restaurants, non-profits, small offices, and senior care facilities.

National Grid pays up to 70% of installation and equipment costs and customers can finance the remaining share of the project over as many as 60 months (typically 24) on their electric bill, interest free, using the Small Business Revolving Loan Fund, providing that funds are available.

Although the program has traditionally focused on lighting and refrigeration, National Grid is constantly updating the program to apply other measures such as energy management systems, roof-top HVAC unit replacement, and new heating systems. In 2017, controls for both electric and gas measures have gained traction. The program hopes to keep up the momentum in 2018 and beyond.

National Grid has also been actively pursuing new models that serve segments of the small business sector in more tailored and more cost-effective ways. The Company's success with schools, national and regional chains, food retailers, and upstream lighting are all signs of a more strategic approach to these customers.

In 2017, National Grid continued to utilize the existing contractor/electrician base through the Customer Directed Option where customers are allowed to use their own contractors in conjunction with the expertise of the lead vendor in the Small Business Program. These additional "feet on the street" are helping the program maintain its success even as some segments continue to be successfully served through other paths.

#### Farm Energy Efficiency Program

The Farm Energy Efficiency Program offers Rhode Island agribusinesses incentives for prescriptive energy efficiency measures. Program participants receive a free on-site energy assessment and a report detailing recommended energy-efficient improvements. Farmers or agribusiness owners can then choose to install any number of recommended electric or delivered fuels measures. Delivered fuels measures are eligible for incentives equal to 75% of their installed costs. Electric measure incentives vary depending on the application, but any approved electric measure cost not covered by an incentive

#### 2017 Small C&I Results

- 12,956 Annual MWh Saved
- 158,975 Lifetime MWh Saved
- 4,273 Annual MMBtu Saved
- 31,519 Lifetime MMBtu Saved
- 69,415 Metric Tons of Greenhouse Gas
   Emissions Avoided
- 3,057 Program Participants
- \$16.9 Million in Lifetime Electric Cost Savings
- \$258,257 in Lifetime Gas Cost Savings
- \$17.0 Million in Total Benefits

can be paid back, interest free, through National Grid's on-bill payment system provided that funds are available. In 2017, 26 Rhode Island farms received no-cost, farm-specific energy assessments.

#### **Commercial and Industrial Finance**

The Company along with the State and EERMC have made progress in developing opportunities for **finance mechanisms** to help customers overcome cost barriers and invest in energy efficiency.

**Efficient Buildings Fund (EBF):** The Efficient Buildings Fund (EBF) has funded \$28 Million in comprehensive energy efficiency and renewable energy projects since inception. OER and Rhode Island Infrastructure Bank (RIIB) recently held another project application round in April 2018.

The Infrastructure Bank and OER have partnered with National Grid to provide energy audits to municipalities interested in understanding opportunities to make investments in energy efficiency at public buildings. EBF has funded projects in 35 municipal buildings across ten municipalities. Significant savings can be attributed to energy savings from streetlight conversions. Many participating municipalities have used the streetlight savings to invest in deep energy retrofit projects in their buildings.

In the fall of 2017, legislation was passed that allows the Infrastructure Bank to lend to all quasi-state entities and public universities through EBF. In 2018, the Governor's budget proposes that Housing Aid reimbursement for projects financed through the EBF be on par with projects financed through Rhode Island Health Education Building Corporation.

**On-Bill Repayment (OBR):** National Grid also worked extensively with its sales people and several of its vendors to determine the future potential for On-Bill Repayment (OBR) and to understand the future role of OBR in our program offerings. The Company found that demand for OBR was much greater than it had previously estimated and that nearly all participating customers appreciated its unique attributes. The Company presented these findings in front of the PUC in a Technical Session, to the Energy Efficiency Resource Management Council (EERMC), and to the Collaborative.

The Company worked closely with an evaluation contractor to determine the timing and necessity of injections into the OBR fund in the 2018-2020 three year plan as well as the 2018 energy efficiency plan.

Commercial Property Assessed Clean Energy (C-

**PACE):** The Infrastructure Bank continued to market C-PACE as a financing product for comprehensive energy efficiency projects. The Infrastructure Bank worked with National Grid to provide energy audits to long-term care facilities. Results of these audits and discussions with the owners of the facilities led to projects moving forward with cash, not C-PACE financing, as the owners had cash reserves on hand for these improvements.

The Infrastructure Bank, National Grid and Greenworks Lending have met monthly in 2018 to put parameters on what makes a good C-PACE project and how National Grid's sales team can identify C-PACE projects at the outset and introduce them to the C-PACE program. The Infrastructure Bank and Greenworks Lending are developing an application that will pre-qualify properties for C-PACE financing and train the National Grid sales force in May 2018.

**Ascentium:** In the fourth quarter, National Grid began working with Ascentium Capital, a specialty financing firm who is a leader in equipment and technology financing solutions, to offer customers another way to finance their projects. A simple, rapid approval loan process allows customers to use their incentive to buy down interest on loans (typically to zero percent depending on the term) for up to \$250,000. The Company will continue to examine this option in 2018.

#### Lead by Example: State and Municipal Entities

In December 2015, Governor Gina Raimondo issued an Executive Order directing State agencies to 'Lead by Example' by achieving robust clean energy targets and developing clean energy practices. As of April 2018, Rhode Island State agencies have reduced their energy consumption by 11%, saved \$2.7million from competitive energy procurement processes, and continue to procure 50% of their electricity supply from "green" energy sources. The Lead by Example initiative is also promoting interdepartmental cooperation, unlocking opportunities to invest in comprehensive energy efficiency and renewable measures that can reduce and stabilize public sector energy costs, shrink government's carbon footprint, and support Rhode Island's burgeoning clean energy economy. Major projects completed in 2017 include, the deployment of solar arrays on Capitol Hill and at the new Veterans Home in Bristol, the conversion of almost all State-owned highway streetlights to cost- effective LEDs, and expanded electric vehicle charging infrastructure at State facilities including the Public Utilities Commission and the Department of Administration.

The programs and initiatives spurred by the Lead by Example executive order are also available for

municipalities and quasi-public agencies. Specifically, public entities can receive technical assistance, and in some cases financial support, from Rhode Island's Office of Energy Resources and National Grid to better manage their energy bills through Portfolio Manager (a free online tool from the U.S. Environmental Protection Agency), improve the energy efficiency of their buildings, install renewable energy systems and electric vehicle charging infrastructure, and purchase all-electric or hybrid fleet vehicles. Lead by Example efforts are meant to serve as a model for businesses, organizations, and citizens as we all work together to move Rhode Island toward a more secure, costeffective, and sustainable energy future.

Key 2017 Lead by Example accomplishments include:

- Ensuring that 50% of electricity consumed by State facilities comes from renewable energy resources
- Reducing the energy consumption across State facilities by 11% compared to 2014
- Supporting the installation of 7 new dual port electric vehicle charging stations across the State
- Launching a Demand Response Program to reduce peak energy demand and generate revenues for the State
- Developing the State's first a voluntary building Stretch Code
- Developing and managing competitive electricity and natural gas supply contracts for all state agencies

#### **Incentives By Town**

Table 1. National Grid Gas and Electric Energy Efficiency Incentives Provided to Residential, Commercial and Industrial Customers in 2017

Barrington	\$ 973,857	New Shoreham	\$ 6,337
Bristol	\$ 1,259,425	Newport	\$ 1,736,838
Burrillville	\$ 624,299	North Kingstown	\$ 2,561,392
Central Falls	\$ 371,610	North Providence	\$ 1,055,917
Charlestown	\$ 410,533	North Smithfield	\$ 778,511
Coventry	\$ 1,292,864	Pawtucket	\$ 3,829,233
Cranston	\$ 6,915,990	Portsmouth	\$ 1,123,516
Cumberland	\$ 2,337,447	Providence	\$ 24,061,157
East Greenwich	\$ 1,630,390	Richmond	\$ 225,415
East Providence	\$ 3,948,139	Scituate	\$ 728,992
Exeter	\$ 161,277	Smithfield	\$ 2,055,315
Foster	\$ 159,392	South Kingstown	\$ 494,209
Glocester	\$ 347,473	Tiverton	\$ 784,215
Hopkinton	\$ 233,704	Warren	\$ 779,954
Jamestown	\$ 250,708	Warwick	\$ 5,738,518
Johnston	\$ 2,571,811	West Greenwich	\$ 883,329
Lincoln	\$ 2,528,421	West Warwick	\$ 1,886,112
Little Compton	\$ 139,762	Westerly	\$ 1,165,770
Middletown	\$ 744,214	Woonsocket	\$ 2,199,009
Narragansett	\$ 2,027,233	Grand Total	\$ 81,022,288

- Developing a centralized utility bill payment system for all state agencies that saves money by avoiding late fees and increasing staff efficiency
- Converting State-Owned highway streetlights to LED technology

#### **Cross-Sector Programs**

# Building Energy Codes and Product Standards

National Grid's Codes and Standards initiative is an innovative efficiency offering that harnesses stakeholder outreach and technical analysis to catalyze increased energy savings from policies that establish minimum efficiency requirements for buildings and the energy-using products that comprise them. In 2017 the Company invested considerably in assessing the impact of this initiative thus far, crafting a document in partnership with OER to guide the state building industry towards our mutual building energy savings goals, and identifying new opportunities for energy savings from codes and standards support. In 2018 and beyond, the Company plans to continue the demonstrated success of our energy code compliance support program while expanding our efforts regarding support of product standards, energy code enhancement, and the new stretch code to unlock opportunities to save additional energy on behalf of customers.

#### **Code Compliance Enhancement Initiative**

(CCEI): This initiative includes robust stakeholder engagement and industry group outreach, classroom and hands-on trainings, project-specific technical assistance, and development and dissemination of documentation/ compliance tools. In 2017 CCEI conducted a total of 31 training events across the state with 513 total attendees. In addition, four evaluation studies were completed to measure our impact since the start of this initiative.

The CCEI will be entering its fifth full year in 2018, and there continues to be opportunity to improve Rhode Island's energy code compliance rates. The results of last year's evaluations have been leveraged to focus the CCEI's activities in 2018 on remaining code compliance gaps while preparing stakeholders for Rhode Island's anticipated energy code update at the end of the year. The Company will shift to shorter trainings focused on more specific content in order to directly address compliance gaps and reach new audiences. The Company will also continue to work with the RI Building Code Commission to accommodate the use of third party energy code specialists in the building inspection process as a strategic compliance improvement strategy. Finally, the Company will leverage new data sources including the state's new electronic building permitting system to better target code savings opportunities in major renovations and rehabilitations of existing buildings.

**Appliance and Equipment Standards** support: Over the past two years, the Company has worked with stakeholders to develop minimum efficiency standards for a targeted list of products, but the required legislation to complete this effort was not passed by state legislatures in 2017. In 2018 the Company is continuing to provide technical support in regards to the proposed product standards legislation. The Company will also work with stakeholders to develop a methodology to claim savings for product standards support in a similar manner to code compliance enhancement, which would allow us to greatly expand the scope and energy savings potential of this effort as

soon as 2019. In 2018 the Company also proposes to pursue opportunities to partner with other stakeholders in the northeast as well as efficiency program administrators in California in advancing federal appliance standards.

As of April 2018, bills setting minimum energy and water efficiency standards for nearly two-dozen products had been introduced in Rhode Island House and Senate committees. Similar legislation has been or is expected to be introduced in Massachusetts, New York, and Vermont, representing regional support for appliance standards. Continued collaboration between the Rhode Island Office of Energy Resources (OER), Northeast Energy Efficiency Partnership (NEEP), Appliance Standards Awareness Project (ASAP), National Grid, and others will enhance education about the net benefits of state appliance standards.

**Energy Code Enhancement:** Spurred by a two year delay in the state's latest energy code update process, the Company will begin pursuing opportunities in 2018 to strengthen the state energy code. Many of our planned activities parallel those described for product standards support above with the intention of providing technical guidance throughout the state's next code update cycle projected to begin in 2019.

**Stretch Code Support:** In 2017, the Company helped shape the final, voluntary Rhode Island stretch codes for commercial and residential buildings. In 2018 and in the years that follow, the Company will support proper application of the stretch codes by providing technical expertise on energy related requirements and conducting stretch code specific trainings through CCEI. The Company will also promote increased use of the stretch codes by aligning their specifications with the Company's new construction programs as much as possible and by empowering community-level support for increased use of the stretch code. The new stretch code documents can be viewed on the Office of Energy Resources website. For more information on Stretch Codes, contact Becca Trietch at OER at Becca.trietch@energy.ri.gov.

#### **Block Island Saves Pilot Program**

Block Island Saves was a pilot program to deliver energy efficiency assessments, education, incentives, and rebates to New Shoreham year-round residents and small businesses. The New Shoreham community faced unique energy challenges prior to 2017, including high energy prices stemming from electricity generation powered by imported and price-volatile diesel. The recent construction of North America's first offshore wind farm three miles off the coast of Block Island also resulted in connecting the island with the mainland electric grid. This connection has helped stabilize electric prices while strengthening reliability. However, reducing energy use on the island remains critical to ensuring long-term energy affordability and reliability for this important and unique community.

OER collaborated with National Grid to leverage best practices for program development and energy efficiency offerings were carefully chosen to align with existing programs available elsewhere in Rhode Island.

Over the course of the pilot, 79 residents and 31 businesses received free energy assessments, along with rebates and incentives for energy efficiency upgrades. These energy efficiency improvements will save 3,600 MWh of electricity over the lifetime of the improvements (equivalent to the electricity needed to power over 500 Rhode Island homes for one year), in addition to 4,800 MMBtu of oil and 2,300 MMBtu of propane. These energy savings also fostered important reductions in greenhouse gas emissions – a reduction of 2,400 tons of CO2 equivalent over the lifetime of the efficiency upgrades. This is equivalent to taking 470 passenger cars off the road for a year or growing nearly 57,000 tree seedlings for 10 years. Participants were able to decrease their energy bills, too. In total, program participants are saving an aggregate \$597,968 (residential) and \$714,396 (business) over the lifetime of the efficiency upgrades.

Block Island Saves had a benefit-cost ratio of 3.73 for the residential program and 1.64 for the small business program, for an aggregate ratio of 2.11 for the entire pilot. In other words, Block Island Saves was a costeffective program with each dollar spent on Block Island Saves generating \$2.11 in economic and environmental benefits.

The final report on the Block Island Saves Pilot Program is available on OER's website.

# Zero Energy Buildings (ZEB) Task Force & Working Group

Zero-energy buildings generate as much energy as they consume. These buildings not only save owners money on utility costs, but also provide a myriad benefits including improved comfort, increased durability, and better indoor air quality. These benefits have been shown to lead to improved health, education, and productivity outcomes for occupants of various building types.

In 2016, National Grid led the Rhode Island Zero-Energy Building Task Force consisting of key stakeholders from the State, associations, architects/engineers, and developers. The Task Force developed and issued a whitepaper report outlining a 20year roadmap for zero-energy buildings to contribute to the Energy 2035 goal of reducing greenhouse gas emissions by 45% by 2035. The roadmap identifies opportunities including stakeholder collaboration, incentives, education, financing and policies that will help to foster the growth of the residential and commercial Zero-Energy Building market in Rhode Island.

Working on recommendations from the report, OER established a "Zero-Energy Buildings Champion" in 2017 to lead a Zero-Energy Buildings Working Group. The mission of the Working Group is to bring together stakeholders and take action to transform the market. Notably, the Working Group is currently concentrating on building out educational and informational events, such as tours and trainings, as well as serving as a focus group for incorporating zeroenergy buildings into National Grid's programs.

#### **Rhode Island Energy Innovation Hub**



Entrance to the Energy Innovation Hub

Advances in technology and our changing energy landscape are fueling innovation and connecting people, places, and energy in meaningful new ways – changing how we live, work, and play. As such, National Grid in 2016 conceived an interactive space in downtown Providence where Rhode Islanders could become more engaged in learning about – and having a conversation around – energy and the environment.

National Grid is calling this collaborative space the Rhode Island Energy Innovation

Hub (Hub). The Hub, which opened in 2017 now serves as an educational facility with interactive exhibits that highlight the successes of today's energy solutions while empowering customers to create the sustainable energy future of tomorrow.

#### National Grid 2017 Energy Efficiency Jobs Study

National Grid hired Peregrine Energy Group, Inc. to conduct a study of the job impacts from National Grid's energy efficiency programs in 2017. The study estimates the number of full-time equivalent (FTE) employees engaged in all aspects of energy efficiency programs where National Grid provided funding support in 2017.

The FTE counts cover a wide range of energy efficiency services, including independent contractors and plumbers, rebate processers, engineers, and National Grid Staff. The study also includes counts of Weatherization Assistance Program (WAP) FTEs that are employed by the Community Action Program agencies that deliver lowincome energy efficiency services. A complete list of all contractors and subcontractors involved in 2017 Rhode Island energy efficiency programs is included in this report on page 45.

The study's findings were developed through interviews with energy services and equipment vendors and National Grid contractors, as well as through a detailed review of National Grid's records of all energy efficiency measures installed in homes, apartment buildings, businesses, and industries throughout the state in 2017. Peregrine Energy Group calculated the labor hours required for each installation based on industry standards and discussions with contractor experts.

Peregrine determined that 726.4 full-time equivalent (FTE) employees had work in 2017 as a result of investments by National Grid in energy efficiency programs provided to its Rhode Island electricity and natural gas customers. One FTE equals 1,760 work hours, or the total of one person working 8 hours a day for 220 work days in an average year. Because a "full-time equivalent" employee often represents the labors of more than one person over the course of a year, the number of individual workers employed as result of Rhode Island energy efficiency programs funded by National Grid is far larger than the total of FTEs. Most of the jobs created as a result of energy efficiency investments were local because they were tied to installation of equipment and other materials.

## Full-Time Equivalent Employment Supported by Energy Efficiency Programs in Rhode Island in 2017

Programs	Total FTEs	
Electric Programs		
Commercial and Industrial	263.5	
Residential Income Eligible	46.0	
Residential Non-Income Eligible	98.2	
Gas Programs		
Commercial and Industrial	34.4	
Residential Income Eligible	36.5	
Residential Non-Income Eligible	174.7	
National Grid EE Staffing	38.2	
Community Action Agency Staff Income Eligible	35.0	
Total 2017 Rhode Island FTEs	726.4	

The study also identified 917 companies and agencies involved in National Grid's 2017 energy efficiency programs, 79% of which were located in Rhode Island. The companies identified include those whose employees are counted in the FTE analysis, as well as additional companies who assisted customers to secure equipment rebates, for example through the New Construction, Commercial Upstream Lighting, or High Efficiency HVAC programs.

The study fulfills General Law 39-2-1.2, which was enacted by the General Assembly in 2012. The study will benefit those who work in workforce development, training or those interested in the state's green jobs.

#### **PLANNING INITIATIVES**

# State Goals: State Energy Plan & GHG reduction goals

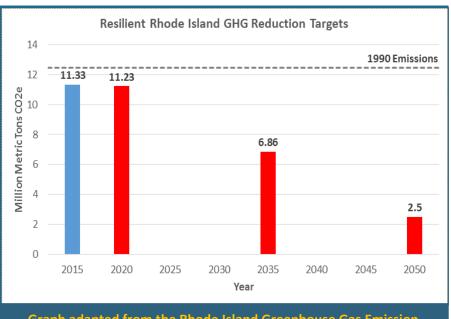
Energy 2035: The Rhode Island State Energy Plan, formally adopted in October 2015, lays out a long-term, comprehensive energy strategy for Rhode Island. The vision of the Plan is to provide energy services across all sectors—electricity, thermal, and transportation—using a secure, costeffective, and sustainable energy system. The Plan demonstrates that Rhode Island can increase sector fuel diversity, produce net economic benefits, and reduce greenhouse gas emissions by 45 percent by the year 2035. The Plan proposes state-of-the-art policies and strategies to achieve those goals.

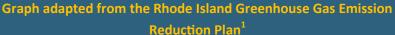
The Plan identifies energy efficiency as the state's "first fuel" and a centerpiece strategy for achieving the Rhode Island Energy 2035 Vision. The SEP identifies energy efficiency as

the lowest-risk, lowest-cost, and arguably, the most sustainable energy resource available for Rhode Island. The SEP lists Least -Cost Procurement as one of Rhode Island's cornerstone energy policies, and the primary vehicle for delivering the benefits of energy efficiency to Rhode Island consumers and businesses.

#### 2018-2020 Energy Efficiency Procurement Plan (Three-Year Plan)

As part of the legislated triennial process to develop Three-Year Energy Efficiency and System Reliability Plans, the EERMC worked with National Grid, the Office of Energy Resources, the Division of Public Utilities and Carriers, and additional key stakeholders to develop the 2018-2020 Energy Efficiency Procurement Plan for Rhode Island. National Grid filed the Three-Year Plan with the Public Utilities Commission on August 30, 2018. The purpose of this Three-Year Plan is to establish an overarching strategy for the next three years that will enable National Grid to successfully meet the goals of Least Cost Procurement and meet the Energy Savings Targets developed by the EERMC and approved by the Public Utilities Commission. The Three-Year Plan met the objectives of being cost-effective and less than the cost of





supply, and is grounded in economics, flexible to changing market conditions, and designed to maximize consumer benefit.

The 2018-2020 Three-Year Plan is expected to achieve the following large beneficial impacts:

Boost Rhode Island's
 Gross State Product by
 \$328 million.

• Create over 4,822 jobyears of employment.

- Deliver \$2.76 dollars in benefits to consumers for every dollar invested.
- Lead the nation in electric and natural gas savings as a percentage of total annual energy consumption.
- Create cumulative energy efficiency savings of 7.53% of Rhode Island's 2015 electric load and 2.90% of 2015 natural gas load over the period 2018-2020
- Generate approximately \$1.6 billion in benefits over the life of the installed measures.
- Reduce carbon emissions by 3.7 million tons over the lifetime of the installed measures.

# Energy Efficiency Program Plans (Annual Plans)

In addition to the three-year plan, annual energy efficiency program plans (Annual Plans) are developed by National Grid with significant stakeholder input. These annual plans clearly define how the energy efficiency programs will be implemented and specify how the programs will be costeffective. The annual plans are also reviewed and ruled on by the PUC. Work on the 2019 Annual Plan will commence in early summer 2018.

#### **System Reliability Procurement**

In System Reliability Procurement (SRP), the Company develops and implements nonwires alternative projects (NWAs). This involves identifying transmission or distribution needs that have the potential to be deferred by distributed energy resources within a specified timeline. These projects are customer-focused and can include some measures that are also offered through the Company's statewide energy efficiency programs.

Program year 2017 marked the last year of the Demandlink™ pilot in Tiverton and Little Compton. Launched in 2012, the pilot's primary objective is to implement a combination of energy efficiency and demand response measures in customer homes and businesses in order to reduce 1 MW of load on the affected feeders by the end of 2017. In 2017, the Company maintained the same portfolio of incentives as the previous year, hoping to continue the rate of recruitment. The Company also continued to leverage its statewide EnergyWise and Small Business Direct Install programs in the promotion and delivery of these measures. Between June and September 2017, fifteen demand response events were conducted. A final evaluation is being conducted in 2018 to report out on the final impacts from this pilot.

The new NWA project proposed in the 2018 SRP Plan is the Little Compton Battery Storage Project. This project includes a battery storage system that will be installed in Little Compton, RI that is capable of providing 1 MWh of energy storage at a level of 250 kW of continuous peak load relief in the areas of Tiverton and Little Compton between the hours of 3:30pm and 7:30pm during the months of June through September. This project will further defer the \$2.9 Million substation upgrade in this area.

In 2018, the SRP program is also focusing on the creation of the Rhode Island System Data Portal (Portal) and associated marketing and engagement plan. The Data Portal will provide information on parts of the electric system that are heavily loaded and could benefit from the installation of technologies that can reduce demand as well as areas where there is plenty of capacity that may be better suited for electric heat and electric vehicles. The Portal will also include an initial version of a distributed generation (DG)-focused map that identifies substations that are either DG-ready or in need of upgrades before DG can be installed. Together, these efforts will promote the Portal to potential distributed energy resource (DER) solution

providers. This effort would aim to increase industry knowledge of the Portal and incentives available through existing Company and state programs for conservation, peak load relief, and renewable energy projects in highly-utilized areas.

Additional SRP details on 2017 activities and 2018 plans can be found in the Company's 2018 System Reliability Procurement Report filed in Docket 4756 and approved by the PUC on December 20, 2017.

#### **Power Sector Transformation**

In March of 2017, Governor Gina M. Raimondo charged the Public Utilities Commission (PUC), the Office of Energy Resources (OER), and the Division of Public Utilities and Carriers (DPUC) with developing recommendations to advance power sector transformation (PST) in Rhode Island. The goal of the PST Initiative is to transition to a more dynamic utility regulatory framework in order to achieve a cleaner, more affordable, and reliable energy system for the 21st century and beyond. The three agencies partnered to solicit input from Rhode Island stakeholders and national experts, submitting a final Phase One Power Sector Transformation report with recommendations to the Governor in

# LOOKING FORWARD: 2018 ENERGY EFFICIENCY PROGRAM PLAN HIGHLIGHTS

November 2017. The final report drew upon previous work to date by the EERMC, the Distributed Generation Board, the Systems Integration Rhode Island Working Group, and the PUC's Docket 4600 Investigation of the Changing Distribution System. Policymakers, regulators, and stakeholders are working actively to implement the PST recommendations, including through the open docketed proceedings of National Grid's distribution rate case and Power Sector Transformation filings (Dockets 4770 and 4780).

#### **Residential Programs**

#### **Multifamily Program**

In 2018, the Multifamily program will make wider use of the personalized condominium sign up portal in the market rate program. Additionally, the company will focus on identifying sites where ductless mini-split heat pumps (DMSHP) will be installed to displace electric resistance heat. The company will further identify a delivered fuel -served site to investigate conversion to DSMHPs. In summer 2018, the Company will review the findings of the boiler monitoring and optimization work conducted in 2017 and consider expansion if results are favorable.

#### EnergyWise

The Energy*Wise* program will provide more moderate income financing by establishing a revolving loan fund with The Capital Good Fund in 2018.

#### **Residential New Construction**

In 2018 the Company will re-design the Residential New Construction program to accommodate the increased baseline and will launch a zero-energy home pilot. The Company will continue to work with the Zero-Energy Buildings - Residential Subgroup on developing a robust plan for residential zero energy homes.

#### The High-Efficiency Heating and Cooling Programs (Gas Heat Program and CoolSmart Program)

In 2018 the Company will deliver heat pump water heaters through an efficient and cost effective up-stream model with Lowes and other RI distributors. In addition, the Company will launch a new strategic electrification effort with mini-split heat pumps for customers with electric, oil or propane heat – either early replacement or upon failure.

#### **Income Eligible Enhancements**

The program will continue to increase services that deliver significant energy savings such as LEDs, heat pump water heaters, and replacement room air conditioners. The Company will add clothes washers, dehumidifiers, and possibly minisplit heat pumps in 2018.

#### **Community Initiative**

The Community Based Initiative in 2018 will operate under a revised model within two RI cities. This new model will focus on efficiency measure installations and home energy assessment sign ups. The cities will be provided with start-up funding and marketing kits to promote efficiency throughout the year.

#### **Home Energy Reports**

Customers will receive print and email reports in 2018 that are more personalized than in previous years. Efforts to give customized communications to income eligible customers will continue. Further, the High Use Alerts established in 2017 will continue in order to inform customers when they are trending towards a bill significantly higher than the prior month. Also of focus in 2018, information provided by customers who fill out the online home energy assessment will be used to provide those customers with tailored program offerings.

#### **Cold Climate Heat Pumps**

National Grid is proposing to incentivize a modest number of ductless air-source heat pumps in 2018 to begin the process of a long -term market transformation of displacing electric resistance or delivered fuels heating systems with high-efficiency cold climate electric heat pumps. The proposed program offering would include customer education about the benefits of the technology, criteria for proper use and optimal operation of the units; contractor education about the product, sizing and installation requirements; strategic marketing to customers through program segmentation; research, and piloting of available enhancements (i.e., integrated controls that tie into both the heat pump and existing heating system, mid/up-stream markets, bundling of incentives).

#### **Commercial, Industrial, Public & Other Programs**

In 2018 the RI energy efficiency programs will be focus on many initiatives including finance solutions, path to zero energy buildings initiatives, demand response demonstrations, as well as developing new CHP project pipeline for the future years.

The pilots and demonstrations can be classified into four focus areas that include demand response (gas and electric, including small and large commercial customers), lighting pilots that include new technologies and go-to market strategies, industrial initiatives and new construction, path to zero initiatives.

#### **Demand Response**

Demand response, peak load reduction demonstration for large commercial and industrial customers will continue for the second year in 2018.

The program has been modified from last year with easy to understand incentives structure so customers can easily understand the program. The program plans to enroll 20 MW of demand reduction capacity in 2018.

Demand response for small medium business customers in 2018 will be a new demonstration where the Company will test demand reduction with direct load control of Wi-Fi thermostats.

The gas demand response demonstration, similarly, will also be a new demonstration

program in 2018.

#### **Industrial Initiative**

The Company is looking to test two industrial initiatives that include new technologies and behavior change for small industrial facilities.

 Behavior Change though education in small and medium industrial plant personnel:

The objective is to provide smaller industrial plants with cost-effective access to an independent air systems specialist to facilitate comprehensive compressed air systems assessment incorporating mostly web based training materials and tools after initial visit to site. This will provide a more cost-effective solution to small and medium manufacturing facilities where having site assessments by specialty Technical Assistance vendors is cost prohibitive.

2. Underutilized Energy Efficiency Technologies on mechanical power transmission systems:

The objective is to investigate the adoption of higher efficiency belt and gear reduction drives associated with various types of machinery used in commercial and industrial facilities. This can result in efficiency improvement ranging from 1-3% on belt drives and significantly higher improvement with gear box upgrades.

#### Zero Energy Buildings (ZEB)

In 2016 a zero energy building (ZEB) task force prepared a white paper "Zero Energy Buildings pathway to 2035" that made three major recommendations on both the policy side and for utility programs moving forward.

The three recommendations that the Company is looking to implement on in 2018 are:

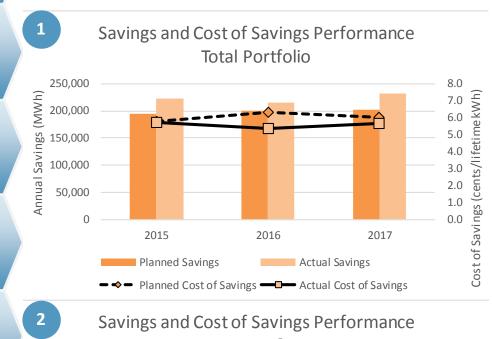
 Launch "ZEB demonstration projects" across building segments  Training and education that promotes low EUI buildings for stakeholders in RI to create awareness around Path to Zero Energy Buildings

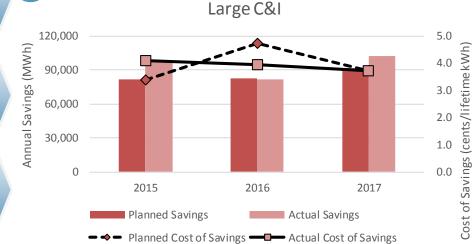
Supporting legislation like the Providence Energy Challenge with automated upload of data to EPA portfolio manager so customers can benchmark buildings and portfolio

#### **ENDNOTES**

<sup>1</sup><u>http://www.planning.ri.gov/documents/</u> <u>climate/EC4%20GHG%20Emissions%</u> <u>20Reduction%20Plan%20Final%20Draft%</u> <u>202016%2012%2029%20clean.pdf</u>

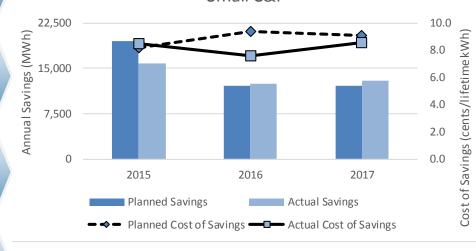
## **ELECTRIC PROGRAM TRENDS OVER TIME: 2015-2017**





Savings and Cost of Savings Performance Small C&I

3

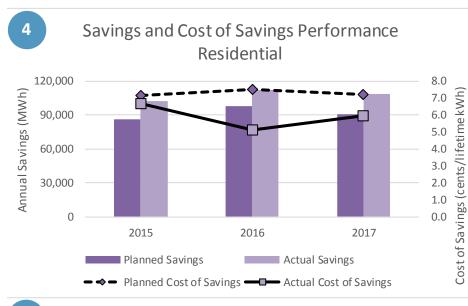


Graphs 1-5 on pages 34 and 35 show the cost per lifetime savings (cents/ lifetime kWh) achieved by the electric energy efficiency programs each year from 2015 through 2017. They also depict planned versus achieved energy savings. Graph 1 shows trends for the total portfolio of electric programs while graphs 2-5 highlight specific market sectors: Large Commercial & Industrial, Small Commercial & Industrial, Residential, and Income Eligible.

In general, achieved electric savings tend to exceed planned electric saving goals. Similarly, cost per lifetime kWh are often lower than predicted.

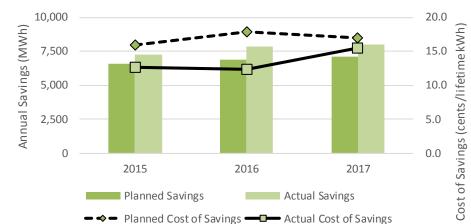
Each year, the EERMC works in coordination with National Grid to continue to enhance program delivery strategies and optimize energy efficiency benefits for all ratepayers. Maximizing the cost-efficiency of the programs is a top priority for the Council. Consistently, these efforts have resulted in greater than expected electric savings.

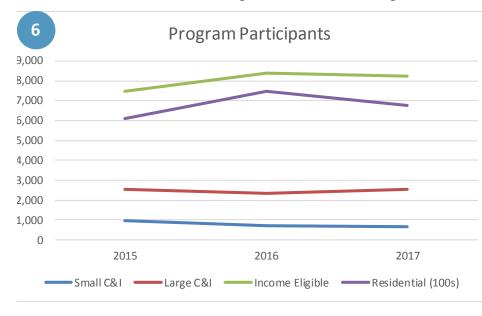
Through the programs, lighting upgrades have historically provided significant amounts of lower-cost energy efficiency savings. Both in RI and across the nation energy efficiency programs have played a critical role in transforming the lighting market from incandescent bulbs and other inefficient lighting to energy-efficient LEDs. With the





5





lighting market transforming to LED technologies, it means homeowners will be able to choose from energy efficient lighting options without need for program funding. This represents a great success story for energy efficiency.

However, because lighting savings currently make up a large portion of the electric energy efficiency portfolio and these lighting savings will not be claimable by the programs once the lighting market is fully transformed, it is essential that new technologies and program offerings be explored throughout 2018 and 2019. The EERMC looks forward to working with program administrators to continue innovating and evolving the programs.

Graph 6 shows program participation over time from 2015 through 2017. Please note that Residential program participation numbers are shown in hundreds. The residential electric programs have the largest participation numbers of all the sectors.

During the past three years participation levels have been relatively consistent. Access to the income eligible programs also continues to improve. It remains a priority of the EERMC and National Grid to continue expanding access to energy efficiency programs for all ratepayers. Appendix A: *Case Studies* 



### **Direct Install Program**

# Columban Fathers Senior Living Facility Bristol, RI

National Grid implemented energy efficiency renovation measures for a senior living facility in Bristol RI. The facility has studio and two-room apartments, kitchen and dining facilities, meeting rooms, offices, and lounges. The facility is approx. 40,000 sqft.

#### **Energy Efficiency Solutions**

- LED Lighting and sensors
- Custom Lighting
- Boiler Controls
- Gas domestic hot water measures

As a National Grid small business customer, you may be eligible for a Home Energy Assessment, at no cost to you. The assessment will measure your home's energy efficiency and put you on the path to reducing costs and saving big on home energy improvements.

#### The result:

Total Project cost	\$83,000
National Grid incentive	\$48,140
Customer Contribution	\$34,860
Customer Annual \$ savings	\$17,000
Annual kwh savings	63,000 kwh
Annual therm savings	6,400 therms





### **Income Eligible Program**

### Rose's Home — Cranston, RI

Rose from Cranston, RI had the Income Eligible Program perform energy efficiency services on her home. The result was a home with improved health and safety through the installation of a new high efficiency boiler, a new hardwired carbon monoxide and smoke detectors, LED lamps and indoor air quality measures. Home comfort was also improved with air sealing to reduce drafts, attic and wall insulation, LED lamps for cool bright light, an energy efficient refrigerator, smart power strips that automatically turn off equipment that isn't in use. The energy efficiency measures installed help to reduce Rose' energy costs by more than 30%!

#### **Energy Efficiency Solutions**

- Appliance Management Program
- Weatherization
- Heating System Replacement

As a National Grid customer, you may be eligible for a Home Energy Assessment, at no cost to you. The assessment will measure your home's energy efficiency and put you on the path to reducing costs and saving big on home energy improvements.

#### The result:

Total Project cost	\$19,499.16
National Grid incentive	<b>\$</b> 11,637.77
Department of Human Services Contribution	<b>\$</b> 7,681.39
Customer Contribution	\$0
Annual Energy Efficiency \$ savings	30%



"This work will make it possible for me to afford to stay in my home where I've lived for almost forty years."

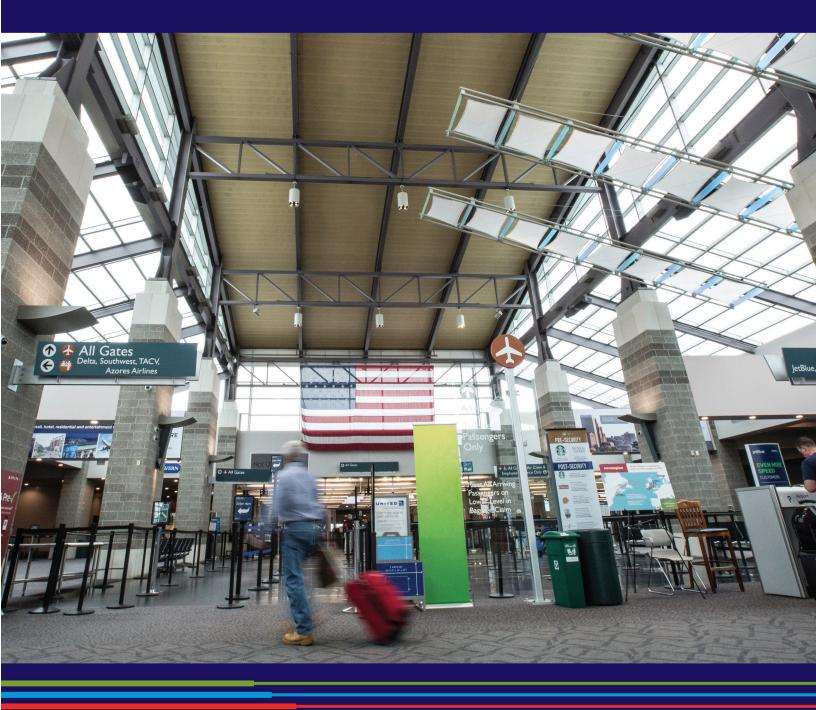
- Rose, Income Eligible Program Participant



**CASE STUDY - INDUSTRIAL ENERGY EFFICIENCY** 

### **Energy efficiency has landed**

At Rhode Island's T.F. Green Airport, the newest arrival is LED lighting.





## Easier. Faster. Further. That's the kind of travel T.F. Green Airport wants its customers to experience.

It's been their commitment for more than 80 years – a commitment that's now fulfilled by Rhode Island Airport Corporation (RIAC), the operator of Rhode Island's six state-owned airports. Since 1992, RIAC has been operating and innovating RI's airports. It's especially true for Warwick's T.F. Green Airport, where energy-efficient LED lighting upgrades have transformed both the inside and outside into brighter, safer and more welcoming spaces.

### LIGHTING THE WAY FOR ENERGY EFFICIENCY

In partnership with National Grid, Energy Source (National Grid's leading project expeditor) and electrical contractor Collard Enterprises, Inc., RIAC completed an interior and exterior lighting overhaul at T.F. Green. It all began with an energy audit from Energy Source, followed by LED lighting test cases conducted by RIAC's Joe DaSilva, Assistant Vice President of Landside Maintenance.

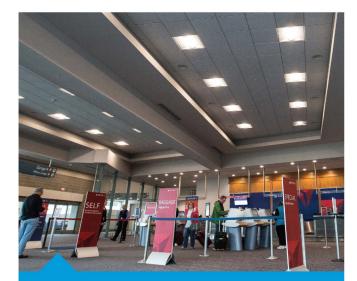
Joe compared lighting output levels and coverage of old bulbs to new LEDs and gathered feedback from key airport stakeholders. The results? Everyone involved noticed brighter, more evenly distributed light from LEDs, which weren't even operating at 100% light output.



### **UPGRADES TAKE OFF**

After the successful lighting test cases, RIAC and National Grid completed a major airport LED lighting upgrade, replacing terminal, roadway, garage and parking lot fluorescent and highintensity discharge (HID) lighting with LEDs individually equipped with motion and light-level sensors.

### SOARING INTO SAVINGS



"National Grid has been a great partner over the years," said RIAC's Joe DaSilva. "We've done numerous rebate projects with them, and they've always advocated different energy incentives that we can capitalize on."

	Project cost	Annual energy savings	Annual energy cost savings	National Grid incentives provided	Payback period
New LED interior and exterior lighting	\$4,121,705	5,566,890 kWh	\$855,276	\$2,282,958	2.15 years

While the estimated annual energy cost savings of the upgrade was very sizeable, this project wouldn't have gotten off the ground without National Grid incentives and on-bill financing.

"The savings we were achieving were offsetting the cost of the project. And because National Grid financed it for us with on-bill financing, it was almost a net zero cost to us." – Joe DaSilva, RIAC



### **COMING THROUGH WITH FLYING COLORS**

The lighting cost savings alone have made this upgrade a success. But there are many benefits beyond lower utility bills that RIAC, T.F. Green and travelers now experience.



**Brighter, more appealing spaces** – The terminal main lobby and baggage claim area now feature the crisp, white light only LEDs can offer. These new dimmable LEDs can be reduced to 60-80% of their total light output and still provide the needed illumination. Customers can enjoy a well-lit, welcoming environment all throughout the airport.



**Improved safety** – Bright LED lighting provides enhanced visibility and, in turn, safety. Unlike HID exterior lighting, LEDs have instant-on capabilities. It doesn't take them 15 minutes to come to full power when they're turned on after a period of inactivity. Parking lots, terminal ramps, roadways and building perimeters are safer and more secure.



**Increased employee productivity** – Because LED lighting closely mimics natural light, it's easier on the eyes and helps employees see better and stay more alert, which can boost productivity.



**Greater lighting control** – Built-in motion and light-level sensors are programmable and enable individual light control, making it easier and more efficient to take advantage of free daylight and power down lights in unoccupied spaces.



**Reduced maintenance costs** – Thanks to the long lifespans and durability of LEDs, less time and money will be spent repairing and replacing fixtures and bulbs.

*"We received nothing but positive feedback from customers and airport staff members about the LEDs."* 

– Joe DaSilva, RIAC



### Award-winning energy efficiency

In recognition of their impressive lighting upgrade at T.F. Green, RIAC was one of only six businesses honored by Northeast Energy Efficiency Partnerships (NEEP) as a 2016 Northeast Business Leader for Energy Efficiency.

### BRING ALL OF THE BENEFITS OF ENERGY EFFICIENCY TO YOUR FACILITY.

National Grid is ready to help you make it happen. We've got the financial incentives and technical support you need to successfully complete your upgrades.

Connect with us today: 1-800-787-1760 energysavings@ngrid.com ngrid.com/business

Appendix B: 2017 Energy Efficiency Vendors

The list includes contractors and subcontractors performing work directly for National Grid Energy Efficiency programs in 2017 that were counted in the FTE analysis and additional companies who assisted customers to secure equipment rebates, for example through the New Construction, upstream commercial lighting, or High Efficiency HVAC programs. The list also includes the Community Action Program agencies and their subcontractors involved with the delivery of the low-income program, whether under National Grid funding or WAP/LIHEAP/ARRA funding.

Of the 917 companies, agencies, contractors and sub-contractors listed here, 726 (79%) are either headquartered in Rhode Island, or have a physical presence in Rhode Island. The list is organized first by state (Rhode Island first and then alphabetically), and then alphabetically by company name.

Vendor	Town	State
2 Sons Electric LLC	East Providence	RI
A & I Electric	Pawtucket	RI
A & L Plumbing Mechanical and Consulting	Westerly	RI
A & M Compressed Air Products Inc.	Providence	RI
A E Costa Electrical Contractor LLC	Warwick	RI
A Santurri Electric	East Greenwich	RI
A.T. ELECTRIC Co.	Pawtucket	RI
Accurate Trades LLC	Providence	RI
Ace Electric	Providence	RI
ACR Construction and Management Corporation	Johnston	RI
Adell Construction LLC	Cranston	RI
Advance Electrical Corporation	Providence	RI
Advanced Comfort Systems Inc.	North Smithfield	RI
Advanced Heating and Cooling	Greenville	RI
Aero Mechanical Inc.	Johnston	RI
Affordable Building and Weatherization, Inc.	East Greenwich	RI
Affordable Heating and Air Conditioning Services	North Providence	RI
Air Conditioning Services Of New England Inc.	Cranston	RI
Air Metalworks Ltd	North Providence	RI
Air Quality LLC	Warwick	RI
Air Synergy Cooling and Heating Systems Specialists	Providence	RI
Aire Serv Of Central Rhode Island	Pawtucket	RI
Airhart Electric Inc.	Coventry	RI
AJS Plumbing and Heating	North Providence	RI
Aladdin Electric Co. Inc.	Johnston	RI
Alan Menard Plumbing LLC	Pawtucket	RI
Alan Paul Electric	Warwick	RI
Albert S Koenig Electrician	Pawtucket	RI
All Electrical Solutions	Providence	RI
All Phase Heating Concepts	Woonsocket	RI
All Seasons Heating and Air Inc.	Johnston	RI
All Star Insulation	Providence	RI
All State Electric Inc	Newport	RI
All Weather Heating and Air	Providence	RI
Allen Plumbing and Heating	North Providence	RI
Allen's Electric	Woonsocket	RI
Alliance Plumbing Heating and Air Conditioning	Cumberland	RI

Allied Electrical Group	Providence	RI
Alpha Electrical Contractors Inc.	Riverside	RI
Alpha Mechanical	East Providence	RI
Al's Electric	North Providence	RI
American Development Institute Inc.	Warwick	RI
American Electric Service Inc.	Cranston	RI
American Heating, Plumbing & Sprinkler Inc.	North Providence	RI
American Home Heating and Air Conditioning Inc.	Cranston	RI
American Pride Plumbing and Heating LLC	Warwick	RI
AMERITEST	North Providence	RI
Amity Electric	Wyoming	RI
AMS Development	Portsmouth	RI
Anchor Insulation Inc.	Pawtucket	RI
Anchor Plumbing and Heating Company Inc.	Providence	RI
Andrew Cantone	Johnston	RI
Andrew R McMahon Electrician	Lincoln	RI
Angelo DeFeo	Providence	RI
Anibal J Cante	Central Falls	RI
Anthony De Angelis	Lincoln	RI
Anthony J Santurri Jr	East Greenwich	RI
Anthony Silva	Pawtucket	RI
Anthony Simas	Woonsocket	RI
Anthonys Quick Plumbing and Heating	Johnston	RI
Antonio J Improta LLC	Cranston	RI
APB Plumbing and Heating	Cumberland	RI
APCO LLC	Johnston	RI
Apple Valley Alarms	North Scituate	RI
APuzzo Plumbing and Heating	North Scituate	RI
Aquidneck Services LLC	Portsmouth	RI
AR Heating and Cooling Inc.	Cranston	RI
Arden Engineering Constructors LLC	Pawtucket	RI
Ardente Supply Co., Inc.	Providence	RI
Arkwright Inc.	Fiskeville	RI
Arthur Lettieri	Providence	RI
Arthur W Adler	Bristol	RI
Astro Electric	Middletown	RI
ATC Group Services LLC	Providence	RI
Aten Energy	Pawtucket	RI
Atlantic Plumbing and Heating	Coventry	RI
Atlantis Comfort Systems Corp	Smithfield	RI
Auburn Electric Company	Cranston	RI
Autiello Plumbing and Heating LLC	Cranston	RI

Automatic Temperature Controls	Cranston	RI
AZ Corporation	Hopkinton	RI
Azverde Electric Company	Cumberland	RI
B & B Consumers Natural Gas Service	Woonsocket	RI
B & K Electric LLC	Cranston	RI
B and M Plumbing and Heating	Warwick	RI
B Mechanical AC & Heating Inc.	Exeter	RI
B&D Boiler Removal Inc.	Pawtucket	RI
B&W Building Maintenance Electrical Contractors	North Providence	RI
Baptista Electric	Cumberland	RI
Barlow Heating LLC	Warwick	RI
Barrington Plumbing and Heating	Barrington	RI
Bashaw Electric	East Greenwich	RI
Basics Group	Providence	RI
Baum Energy	Warren	RI
Baynes Electric	Westerly	RI
Bayside Electric Company	Warwick	RI
Belcher Electric LLC	Woonsocket	RI
Beneficial Energy Products	Pawtucket	RI
Berard Heating and Mechanical	Warwick	RI
Bermudez Plumbing and Heating	Pawtucket	RI
Bert Gardiner Plumbing	Charlestown	RI
Bertrand Plumbing Inc.	Pascoag	RI
Betco Plumbing and Drain Cleaning	West Greenwich	RI
Biello Electric Co	Fall River	RI
Bill Ellis Plumbing and Heating	Johnston	RI
Bill Gornostai Electric	Warwick	RI
Bill The Plumber	North Smithfield	RI
Bills Heating Service Inc.	Warwick	RI
Blackstone Valley Community Action	Pawtucket	RI
BMB Services LLC	Cranston	RI
Bob Larisas Plumbing and Heating Inc.	Barrington	RI
Bob Martel Plumbing and Heating	Central Falls	RI
Bob Sequeira Plumbing and Heating	West Warwick	RI
Bodell Plumbing and Heating	South Kingstown	RI
Boss Heating & Cooling	Westerly	RI
Boucher HVAC Inc.	Wakefield	RI
Boulevard Plumbing and Heating	Middletown	RI
Brian Mellor	Warren	RI
Brian's Fire Alarm System Solutions, LLC	North Smithfield	RI
Brian's Heating Concepts, Inc.	Tiverton	RI
Brien Godin	Cumberland	RI

Brittain Electric Inc.	Jamestown	RI
Bruno & Son Electric Inc.	Providence	RI
BSH Heating and Appliance	Barrington	RI
Buckley Heating and Cooling	Peace Dale	RI
Burbanks Plumbing and Heating, Inc.	North Kingstown	RI
Burns Cold Heating and Air	West Warwick	RI
Burns Plumbing	Newport	RI
Butler and Sons Plumbing and Heating, Inc.	Providence	RI
BZ Electric, Inc.	West Warwick	RI
C & K Electric Company Inc.	Providence	RI
C & L Energy Corp	Cranston	RI
C and D Mechanical	Cranston	RI
C Carr Electric LLC	Cumberland	RI
C J Nemes Inc.	Woonsocket	RI
C J Pereira	Portsmouth	RI
Caiazzo Plumbing	Middletown	RI
Cal Supply Co., Inc.	Cranston	RI
Calyx Retrofit	Lincoln	RI
Capwells Heating and Air Conditioning	Greene	RI
Carbone Plumbing Heating and Air	Johnston	RI
Cardillo Electric LLC	Providence	RI
Carjon Air Conditioning and Heating Inc.	Smithfield	RI
Carl Gross	Providence	RI
Carl Pecchia Heating Contractor	Warwick	RI
Carlino Electric Inc.	Coventry	RI
Carnevale Electric	Johnston	RI
Carpentier Home Services	North Smithfield	RI
Carter Brothers Inc.	Pascoag	RI
Carter Plumbing and Heating Co.	Warren	RI
Casa Buena Builders	Providence	RI
Cassana HVAC LLC	North Providence	RI
CBRE	Providence	RI
CD Heating Inc.	Cranston	RI
Century Heating	Smithfield	RI
Charland Enterprises Inc.	Pawtucket	RI
Charles Burton	Lincoln	RI
Charles Doherty	Warwick	RI
Charlie's Heating LLC	North Kingstown	RI
Chris Electric Co.	Newport	RI
Christopher Coppolino	Warwick	RI
Cinco Plumbing and Heating Inc.	Coventry	RI
Cipriano Plumbing and Heating	Wakefield	RI

CLEAResult	Providence	RI
Clermont Mechanical Plumbing & Heating Services	Glendale	RI
Climate Controlled Systems Inc.	Cranston	RI
CM Gifford Plumbing & Heating	Little Compton	RI
CMAGS Heating and Air Conditioning	Warwick	RI
Coast Modern Construction	Providence	RI
Coastal Electric Inc.	Newport	RI
Coastal HVAC & Refrigeration	Wakefield	RI
Cobra Electric and Compaction Services, Inc.	Providence	RI
Cohen Heating Supply, Inc.	Providence	RI
Cola Plumbing and Heating Inc.	North Kingstown	RI
Collard Enterprises Inc.	Coventry	RI
Comfort Systems & Solutions Inc.	Cranston	RI
Commercial and Residential Services	Johnston	RI
Community Action Partnership of Providence	Providence	RI
Compass Electric LLC	Riverside	RI
Competitive Chimney Sweep Inc.	Woonsocket	RI
Comprehensive Community Action	Cranston	RI
Computer Sciences Corporation	Warwick	RI
Consumers Propane - Bousquet Oil	Woonsocket	RI
Conti Brothers Inc.	Providence	RI
Continental Heating and Cooling Indoor Air Quality	Johnston	RI
Cooley Incorporated	Cranston	RI
Cooper Heating and Cooling LLC	Exeter	RI
Cotoia Electric	Johnston	RI
Cox Electric LLC	Narragansett	RI
Craig R Committo Electrician	Tiverton	RI
Cross Insulation	Cumberland	RI
Crystal Plumbing and Heating Inc.	Providence	RI
CSV Mechanical Inc.	Wakefield	RI
Custom Comfort	Woonsocket	RI
CW Cummings Plumbing Co.	Coventry	RI
D & D Electric Company	East Greenwich	RI
D & D Home Industrial Services	North Providence	RI
D & E Electric, Inc.	Warwick	RI
D & J Electric Corporation	Warwick	RI
D & J Plumbing and Heating Inc.	Cumberland	RI
D & S Construction Company	Lincoln	RI
D & V Mechanical Inc.	Westerly	RI
D F S Plumbing Services	Cranston	RI
D Gomes Electric LLC	Pawtucket	RI
D.S. Plumbing and Heating LLC	Норе	RI

D'Ambra Construction Co Inc.	Coventry	RI
Danico LLC	North Providence	RI
Dave Venancio Electric	Tiverton	RI
David J O'Brian Electrician	North Kingstown	RI
David Seddon Electrician	Rumford	RI
David R Gince Electrician	Woonsocket	RI
Davidson's Plumbing and Heating	Warwick	RI
Dayco Electric	Warwick	RI
Deal Electric	East Greenwich	RI
Delmonico Enterprises -Plumbing and Heating	Cranston	RI
Desarro Electric LLC	Hope Valley	RI
Desmarais Plumbing and Heating Inc.	Johnston	RI
Dessaint Electric Co.	Warwick	RI
DeVivo Plumbing and Heating	North Smithfield	RI
Dg Electric	Woonsocket	RI
Dimery Electrical	Barrington	RI
Dion Signs	Central Falls	RI
Diorio Plumbing and Heating, Inc.	Barrington	RI
DJL Electric	Warren	RI
DLD Plumbing & Mechanical Co	Tiverton	RI
Don Jesting & Sons LLC	Middletown	RI
Donald E. Lemay Electrician	Bristol	RI
Donovan and Sons Inc.	Middletown	RI
Drain Right Sewer & Drain Cleaning Services LLC	Pawtucket	RI
Drivers Plumbing and Mechanical Inc.	Providence	RI
DS Plumbing	Coventry	RI
DSA Mechanical	Barrington	RI
DSC Heating and Air Conditioning	North Kingstown	RI
DSL Properties, LLC	North Kingstown	RI
Dual Voltage Electric LLC	Johnston	RI
Dudek Oil Co.	Warren	RI
Dupuis Energy	Pawtucket	RI
Durante Electric	Lincoln	RI
DWI Group Ltd	Johnston	RI
Dynamic Air Systems Inc.	East Providence	RI
E Whitford Plumbing Services	Exeter	RI
E.W. Audet & Sons Inc.	Providence	RI
EA Marcoux and Son, Inc.	Woonsocket	RI
Eagle Electric	Ashaway	RI
East Bay Plumbing and Heating Inc.	Bristol	RI
East Coast Electric	Johnston	RI
Eastbay Community Action	Riverside	RI

Eastern Plumbing Co Inc.	North Kingstown	RI
Eastland Electric	Lincoln	RI
Ecologic Spray Foam Insulation Inc.	Jamestown	RI
Econ Electric Contractors	Bristol	RI
Ed Beaudoin Plumbing and Heating	Cranston	RI
Eddy's Weatherization	Providence	RI
Eirich Electric	Portsmouth	RI
Electrical Concepts Inc.	East Greenwich	RI
Electrical League of RI	Warwick	RI
Electrical Wholesaler Inc.	Cranston	RI
Emergency Response Plumbing Heating and Air Conditioning	Warwick	RI
Energy Conservation Inc.	South Kingstown	RI
Energy Efficient Exteriors, Inc.	Lincoln	RI
Energy Electric Co, Inc.	Woonsocket	RI
Energy Geeks	North Smithfield	RI
Energy One Southern Mechanical	West Warwick	RI
Energy Source LLC	Providence	RI
Eurotech Climatesystems LLC	Pawtucket	RI
Eveready Electric	Barrington	RI
Evergreen Plumbing and Heating Co., Inc.	Warwick	RI
Exodus Construction LLC	Narragansett	RI
F & S Electric Inc.	Bristol	RI
F. W. Webb Company	Warwick	RI
Ferreira Electric	Bristol	RI
Feula Plumbing and Heating LLC	Johnston	RI
FG Lees and Son Plumbing and Heating	Providence	RI
First Class Plumbing	Woonsocket	RI
Five Star Plumbing and Heating	Johnston	RI
Fleet Plumbing and Heating Inc.	North Scituate	RI
Fletcher Heating Burner Repairs	Ashaway	RI
Foremost Electric Service	Cranston	RI
Foster Electric, Inc.	Tiverton	RI
Francis Heating and Hydronics	East Providence	RI
Frank Knight Plumbing and Heating	Warwick	RI
Frederick Bailey Plumber	Johnston	RI
Frontier Mechanical LLC	Providence	RI
Furtado Lighting & Design LLC	Bristol	RI
G & B Electric	Exeter	RI
G & L Electric Inc.	Woonsocket	RI
G Hill Plumbing and Heating, Inc.	Westerly	RI
Gallo Electric LLC	West Greenwich	RI
Gamache Enterprises	North Smithfield	RI

Gambit Electric Inc.	Johnston	RI
Gary Fernandes Electrician	Woonsocket	RI
Gas Doctor	Providence	RI
Gem Plumbing and Heating Services Inc.	Lincoln	RI
General Construction & Painting LLC	Pawtucket	RI
George Gaulin Electrician	Cranston	RI
Georges Electric	Warwick	RI
Gerald M Lepore Jr.	Cranston	RI
Gilbane Building Company	Providence	RI
Ginos Plumbing	Warwick	RI
Giorno Plumbing and Heating	Cranston	RI
Global Plumbing and Heating	Pawtucket	RI
GM Control Systems Inc.	North Smithfield	RI
Grace Construction LLC	Providence	RI
Granite City Electric	Pawtucket	RI
Greenwich Insulation	West Greenwich	RI
Griff Electric LLC	Portsmouth	RI
Grillo Electric	Ashaway	RI
Gronski Plumbing and Heating, Inc.	Cranston	RI
Groom Energy Solutions	Providence	RI
Guarino Power Systems LLC	Smithfield	RI
Guy Clermont Plumbing and Heating	Cranston	RI
H V Holland Inc.	Jamestown	RI
Harris Plumbing and Heating	Narragansett	RI
Haven Plumbing and Heating Co	Cranston	RI
Hawkes Plumbing and Heating Co Inc.	Chepachet	RI
HD Supply Facilities Maintenance	Warwick	RI
Heffernan Mechanical Services	Warwick	RI
Henderson Electric	Warwick	RI
Heritage Restoration Inc.	Providence	RI
HH Heating	Lincoln	RI
Hilario Quezada Electrician	Providence	RI
HK Heating Inc.	Coventry	RI
Hodson Heating and Cooling	Harrisville	RI
Holland Electric	Peace Dale	RI
Home Savers LLC	Providence	RI
Homeserve USA Energy Services LLC	Natick	RI
Hope Valley Sheet Metal Inc.	Hope Valley	RI
Horizon Solutions LLC	Smithfield	RI
Houle Plumbing and Heating	Greene	RI
Howard's Heating Service	North Kingstown	RI
Hughes Incorporated	North Kingstown	RI

Hutchins Electric	Greenwich	RI
Hynson Electrical Construction Inc.	Bristol	RI
lasimone Plumbing-Heating & Drain Cleaning Inc.	North Providence	RI
Independent Plumbing Heating	Bristol	RI
Industrial Burner Service Inc.	Providence	RI
Innovative Plumbing and Heating Inc.	North Providence	RI
Iroquoian Plumbing and Heating	Providence	RI
Island Solar Plumbing and Heating	Jamestown	RI
It's Shocking Electric Corp.	Cranston	RI
Izzi and Sons Inc.	Providence	RI
Izzo & Sons Electric	Providence	RI
J & A Electric	Providence	RI
J & J Electric	Warwick	RI
J & M Plumbing LLC	Coventry	RI
J Joyce Plumbing and Heating Inc.	Warwick	RI
J&K Supplemental Plumbing Inc.	East Greenwich	RI
J&O Plumbing LLC	Warwick	RI
J.L. Electric	Middletown	RI
Jacob Messier	Warwick	RI
Jacobson Energy Research	Providence	RI
James Walsh	North Kingstown	RI
Janton Electric Contractors	West Warwick	RI
Jatwire Electric LLC	Tiverton	RI
Jay Almeida Electrician	Johnston	RI
JC Electric Inc.	Wakefield	RI
JD Mechanical Inc.	Greenville	RI
JD Mello Jr. Plumbing and Heating Inc.	Newport	RI
Jed Electric Inc.	Greene	RI
Jeff Berard Plumbing and HVAC	Warwick	RI
Jeffrey Reynolds	Westport	RI
JEM Construction Group LLC	North Scituate	RI
JG Home Remodeling	Woonsocket	RI
Jim Kelley Electrician	Warwick	RI
JJ McNamara Electric	Providence	RI
JKL Engineering Company Inc.	Providence	RI
JMAC Plumbing and Heating Inc.	Warwick	RI
JMC Construction	Johnston	RI
JN Jordan Plumbing LLC	Shannock	RI
JO Plumbing Septic and Drain Cleaning	Warwick	RI
Joe Chaves Heating and Plumbing	Middletown	RI
Joe Diorio Electric	Pawtucket	RI
Joe Lemay Electrician	Lincoln	RI

Joe the Plumber	Warwick	RI
Joe Vigneault Electrician	Riverside	RI
John Jackson	Cumberland	RI
John Nicholson Mechanical Contractor	North Scituate	RI
John P Keogh	West Warwick	RI
John R Bileau HVAC	Woonsocket	RI
John Simard Electric Contractor	North Smithfield	RI
Johnny Home Solutions LLC	Central Falls	RI
Johnny Mack Electric	Narragansett	RI
Johnny's Oil and Heating Inc.	Providence	RI
Johnson Brothers Heating & Air LLC	Providence	RI
Johnston Electric Inc.	North Scituate	RI
Jon Tasca Plumbing and Heating	Westerly	RI
Joseph C Grimm Plumbing & Heating Inc.	Narragansett	RI
Joseph Diorio	Pawtucket	RI
Joseph Giorno Plumbing and Heating	Cranston	RI
Joseph R Beaumier	Johnston	RI
Jouberts Heating and Air Conditioning	Warwick	RI
JP Island General Services	Middletown	RI
JS Plumbing and Heating	North Providence	RI
Juan Villanueva	Cumberland	RI
Just Heat	Portsmouth	RI
K Electric Inc.	Warwick	RI
Kafin Oil Company Inc.	Woonsocket	RI
Kelco Electric Inc.	Johnston	RI
Kelly Electric Inc.	Cumberland	RI
Kens Heating	Providence	RI
Kevin Messier Electrical	Cumberland	RI
Kevin's HVAC Installation and Repair	Bristol	RI
Kimberly Construction	North Smithfield	RI
Kirkbrae Electric	Lincoln	RI
Kirwin Plumbing	Newport	RI
KME Electric, Inc.	Woonsocket	RI
Koolco Inc.	Wakefield	RI
Kwik Plumbing and Heating, Inc.	Johnston	RI
L & M Construction & Realty, LLC	Cranston	RI
L J Giorgi Plumbing and Heating Inc.	North Providence	RI
L&B Remodeling	North Providence	RI
LAD Electric LLC	Providence	RI
Lamplighter, Inc.	Little Compton	RI
Landry and Martin Oil Co Inc.	Pawtucket	RI
Lang Plumbing and Heating	North Scituate	RI

Lawrence Air Systems Inc.	Barrington	RI
Lawrence Ashley	Barrington	RI
Leidos Engineering	Newport	RI
Lester Parente	Chepachet	RI
Leveille Electric	Smithfield	RI
Lima Construction	Pawtucket	RI
LJ Giorgi Plumbing and Heating, Inc.	North Providence	RI
Lombardo Electric Company	Warren	RI
Louie Electric & Son	Providence	RI
Lubera Plumbing	Coventry	RI
Luke Beaudreault Plumbing and Heating	North Smithfield	RI
Luso Plumbing and Heating Inc.	Cumberland	RI
M & M Electric Inc.	Providence	RI
M and M Mechanical	Richmond	RI
Madden Electric	Little Compton	RI
Mador Electric Inc.	Providence	RI
Magnetic Electric Inc.	Warwick	RI
Main Street Plumbing LLC	Pawtucket	RI
Malone Plumbing and Heating Inc.	Cranston	RI
Map Electric	Woonsocket	RI
Marcaccio Electric LLC	North Providence	RI
Marcel Multi Services	Pawtucket	RI
Marinelli & Sons Electric	West Kingston	RI
Marios Reconditioned Appliance Inc.	Woonsocket	RI
Marisa Desautel	Providence	RI
Mark Hartman	Cranston	RI
Marte Construction	Warwick	RI
Martel Plumbing and Heating	Lincoln	RI
Mastro Electric Supply Co Inc.	Providence	RI
Mastrocinque and Sons Plumbing and Heating LLC	Portsmouth	RI
Matthew Fitts Electrical	Greeneville	RI
Matthew A Marchetti	Cranston	RI
Matts Mechanical	Greenville	RI
Mazza Construction	Pawtucket	RI
McCormick Electrical	North Kingstown	RI
McDonough Electric LLC	West Warwick	RI
Mcs Electric Inc.	Portsmouth	RI
MD Heating and Air Conditioning LLC	North Providence	RI
Mechanical HVAC Systems Inc.	Wakefield	RI
Menard Electric	Manville	RI
Meryl Cohen	Smithfield	RI
Metro Electric	Woonsocket	RI

MH Electric	Cranston	RI
Michael - Rae Design LLC	Wyoming	RI
Michael Bowry	Cranston	RI
Michael Chace Electrician	Johnston	RI
Michael Cozzens	Saunderstown	RI
Michael Faiella	Newport	RI
Michael Fox Mechanical	Riverside	RI
Michael Freitas Plumbing and Mechanical	Pascoag	RI
Michael Principe	Cumberland	RI
Michael Zincone Heating and Air Condition	Warwick	RI
Michael R Lafleur	Smithfield	RI
Micheletti Oil Services Inc.	Johnston	RI
Midstate Heating and Cooling	Hope Valley	RI
Mikes Plumbing Service	Rumford	RI
Miller Mechanical Inc.	Rumford	RI
MJ Electric and Refrigeration	Pawtucket	RI
MJB Construction	West Warwick	RI
MJF Plumbing and Heating	Bristol	RI
Modern Mechanical LLC	Woonsocket	RI
MoonWorks	Woonsocket	RI
Morgan Electric	Warwick	RI
Morra Electric Inc.	Johnston	RI
Mpg Mechanical LLC	Charlestown	RI
Mr. Plumber LLC	East Providence	RI
Mr. Rooter Plumbing	Warwick	RI
Multi State Electric Co.	North Providence	RI
Mussulli Electric Co.	Harrisville	RI
Mutual Engineering Service Company	Warwick	RI
Nasons Heating Cooling Sheet Metal	Middletown	RI
National Refrigeration Inc.	Warwick	RI
Naxos Electric	Smithfield	RI
New England Boilder Works	Coventry	RI
New England Energy Concepts Inc.	North Dighton	RI
New England Plumbing Heating and Air LLC	Greenville	RI
Newbury Plumbing and Heating	Tiverton	RI
Newport Electric	Portsmouth	RI
Newport Plumbing and Heating Gas Company	Portsmouth	RI
NGB Electric	Smithfield	RI
Nicholas Electric	Cranston	RI
Nightingale Heating	Providence	RI
Nite Oil	Tiverton	RI
Nolin Electric Incorporated	Providence	RI

Norman Pelletier	North Kingstown	RI
North Atlantic Heating Inc.	Coventry	RI
North Scituate Electric, Inc.	North Scituate	RI
Northeast Efficiency Supply (NES)	Pawtucket	RI
Northeast Electrical Distributors	Cumberland	RI
Northeast Temperature Control Inc.	Westerly	RI
Northern Energy Services Inc.	Providence	RI
Northern Power Electrical Services	North Scituate	RI
Ocean State Air Solutions	Portsmouth	RI
Ocean State Mechanical, Inc.	Fiskeville	RI
Oceanline Combustion Service Inc.	Pawtucket	RI
O'Dowd Electric	Warwick	RI
Old Tyme Electric, Inc.	Pawtucket	RI
Omni Electric	Wakefield	RI
O'Neil Electric Company	Warwick	RI
Owen Blanco	Warwick	RI
P & S Electric Inc.	East Greenwich	RI
Pajan Services Inc.	North Providence	RI
Parente's Oil Service Inc.	Coventry	RI
Parrella Electric	Providence	RI
Patrick Cunningham Electrician	Smithfield	RI
Paul Cinquegrana Electric	North Providence	RI
Paul Manfredo Electric	Warwick	RI
Paul Scotto Electrical	Portsmouth	RI
Payne & Son Electrical Services LLC	Forster	RI
Pellegrino Plumbing and Heating	Westerly	RI
Percivalle Electric Inc.	Warwick	RI
Perez LLC Plumbing Heating and Air Conditioning	Cranston	RI
Performance Restoration Inc.	North Providence	RI
Perrino Electric	Cranston	RI
Peter Chilabato Sure Power Electrical	Portsmouth	RI
Peter J Shadoian	North Providence	RI
Pete's Electric	Johnston	RI
Petro Home Services	Warwick	RI
Petro West Bay Electric Inc.	Warwick	RI
Petronelli Plumbing and Heating	Cranston	RI
Pezzullo & Sons Electric Inc.	East Providence	RI
Philip M Child Inc.	Warren	RI
Philips Precision Plumbing LLC	Greene	RI
Phillip J Bolster Plumbing and Heating	Wakefield	RI
Phillip J Forcier Electric	Cumberland	RI
Phillips Plumbing and Mechanical Inc.	Cranston	RI

Phil's Heating and Air Conditioning	Westerly	RI
Pierce Plumbing and Heating LLC	Westerly	RI
Pinnacle Plumbing and Heating	Greenville	RI
Plumbing Solutions LLC	North Smithfield	RI
Potvin Enterprises Inc.	Warwick	RI
Power By Design Electrical Contracting LLC	Richmond	RI
Precision Climate Control LLC	West Warwick	RI
Preventive Maintenance Solutions	Warwick	RI
Priority Plumbing and Heating Inc.	Providence	RI
Providence Mechanical Services LLC	Smithfield	RI
R & M Electric Inc.	Coventry	RI
R F Heating & Cooling Inc.	Exeter	RI
R.E. Coogan Heating Inc.	Warwick	RI
R.S.C. Plumbing LLC	Exeter	RI
Ralph E Geiselman Plumbing and Heating	Pawtucket	RI
Ram Mechanical Heating & AC	North Kingstown	RI
Rama Electric	Wakefield	RI
Randall Plumbing	Warwick	RI
Ray Gagnon Electric, Inc.	Lincoln	RI
RB Queern Co.	Portsmouth	RI
RC Smith Electric	Warwick	RI
Reardon Plumbing and Heating	Warren	RI
Reddy Piping Concepts Inc.	Cranston	RI
Regan Heating & Air Conditioning Inc.	Providence	RI
Regent Electric CO Inc.	Coventry	RI
Reilly Electrical Contractor Inc.	Providence	RI
Reliable Electric Corp.	Coventry	RI
Reliant Electric	Cranston	RI
Renaissance Sheet Metal LLC	Cranston	RI
Resendes Heating Service LLC	Coventry	RI
Restivos Heating and Air Conditioning	Johnston	RI
Rexel Energy Solutions (Munro Distributing)	Cranston	RI
Rhode Island Sheet Metal LLC	Pawtucket	RI
Rhodes Technologies Inc.	Coventry	RI
RI Insulation	Норе	RI
Ricci Electric	Cranston	RI
Richard Brochu	Manville	RI
Richard Havey	Warren	RI
Rick Tetreault's Electrical Services	Woonsocket	RI
Right View Electric. Inc.	East Providence	RI
Rightway Electric, Inc.	Providence	RI
Rise Engineering	Cranston	RI

Ritacco Electric LLC	Westerly	RI
RMS Ruggieri and Sons Mechanical LLC	Richmond	RI
Robert Davignon	Warwick	RI
Robert Dionne Electrical Contractor	Providence	RI
Robert F Audet Inc.	East Greenwich	RI
Robert Lavigne	North Scituate	RI
Robert M Groleau	Cumberland	RI
Robert Perrino Electric	Cranston	RI
Robert Rachiele Electrician	Coventry	RI
Roberto Rodriguez Service LLC	Providence	RI
Roberts Electric	Pawtucket	RI
Roland Richard	Slatersville	RI
Ronald Vento Electrician	Johnston	RI
Rooter Man Plumbing	Johnston	RI
Ross Landy Electrician	Portsmouth	RI
Rossi Electric Company	Cranston	RI
RR Donnelley & Sons	North Kingstown	RI
RSM Electric	North Providence	RI
RST Mechanical	North Kingstown	RI
Russ Lembo Electrician	Johnston	RI
Ryan Electric Construction	Warwick	RI
Rycor Services	Cranston	RI
S & F Electric Inc.	Warwick	RI
S & K Electric Inc.	Charlestown	RI
S & S Electric	Chepachet	RI
Sadler Services LLC	East Providence	RI
Sakonnet Electric	Bristol	RI
Sakonnet Plumbing and Heating Inc.	Little Compton	RI
Sal Manzi and Son Plumbing and Heating Inc.	Cranston	RI
Sam Bliven Jr Plumbing & Heating Inc.	Westerly	RI
Sanford Electric	Bristol	RI
Santoro Electric	Hope Valley	RI
Santoro Oil Company Inc.	Providence	RI
Santurri Electric	East Greenwich	RI
Sargent Plumbing Inc.	West Kingston	RI
Sasa Energy LLC	Johnston	RI
Sasa Mechanical Contractors Inc.	Johnston	RI
Savard Oil Company Inc.	East Providence	RI
Schroff Technologies Inc.	North Kingston	RI
Scott Gatta Electric	Johnston	RI
Sensible Heating and Air Conditioning LLC	Hope Valley	RI
Sepol Industries Inc.	Portsmouth	RI

Shamrock Electric	Middletown	RI
Shearman Oil Inc.	Tiverton	RI
Shepherd Services	Cumberland	RI
Sheridan Electric Inc.	Warwick	RI
Shoreline Plumbing	Charlestown	RI
Skanska USA Building Inc.	Warwick	RI
Smalls Plumbing Inc.	Woonsocket	RI
Smp Electric LLC	West Warwick	RI
SMS Oil Burner Service Inc.	Jamestown	RI
Sonner Plumbing Heating and Construction Inc.	Cranston	RI
Sosa & Son Heating Air Conditioning & Refrigeration	Woonsocket	RI
South County Community Action	North Kingstown	RI
South County Gas Service	Narragansett	RI
Spencer's Plumbing	North Kingstown	RI
SPL Electrical Corporation	North Smithfield	RI
Stafford Electric	North Scituate	RI
Standish Heating and Air Conditioning	Coventry	RI
Statewide Insulation	North Smithfield	RI
Stedman & Kazounis Plumbing and Heating	Charlestown	RI
Stem Electrical	Warwick	RI
Stephen Andrea Fire & Electric, LLC	Coventry	RI
Stephen Freitas Plumbing and Heating	Lincoln	RI
Steven Cacicia Electrician	Providence	RI
Steven Maymon	Warwick	RI
Sullivan & McLaughlin	Greenville	RI
Summit Electrical Contractors Inc.	Lincoln	RI
Sunshine Fuels and Energy Services, Inc.	Bristol	RI
Superior Comfort Inc.	Bristol	RI
Superior Electric	Providence	RI
Superior Fire & Electrical Services	North Providence	RI
Superior Insulation	Narragansett	RI
Superior LED Light Solutions	Warwick	RI
Superior Plumbing and Heating	Cranston	RI
Superior Security Systems LLC	Cranston	RI
Supply New England	Pawtucket	RI
SW & Sons Plumbing & Heating	Johnston	RI
Swajian and Son	Cranston	RI
Sylvester Sheet Metal Inc.	West Warwick	RI
Symmes Maini & McKee Asso	Providence	RI
T & T Plumbing and Heating Inc.	Hope Valley	RI
T Gomes Heating and Cooling	Warwick	RI
T.A. Gardiner Plumbing & Heating Inc.	Bristol	RI

Tasso Plumbing and Heating	Middletown	RI
Tebano Electric	Bristol	RI
Tebo Electric Inc.	Woonsocket	RI
The Plumber Company LP	Cranston	RI
Thermal Energy Inc.	Cranston	RI
Therrien Mechanical Systems	Lincoln	RI
Thielsch Engineering Inc.	Cranston	RI
Thomas Calci Plumbing	Coventry	RI
Thomas J Danusis Electrical Contractor Inc.	Hopkinton	RI
Thomas P McGee Plumbing and Heating	North Smithfield	RI
Tom Whitaker	Newport	RI
Toms Plumbing LLC	Manville	RI
Toner Electric Company	Middletown	RI
Tops Lighting (Electric Supply Company)	Providence	RI
Total Comfort Heating and Cooling Inc.	Lincoln	RI
Total Control HVAC LLC	Cranston	RI
TPF Electrical Services	Pawtucket	RI
Travers Plumbing and Heating Inc.	Portsmouth	RI
TRC Companies, Inc.	Providence	RI
Tri-Town Community Action	North Providence	RI
TruNorth Construction	Warren	RI
Tuma Insulations	Warwick	RI
UG Nasons Inc.	Middletown	RI
United Mechanical Inc.	Cranston	RI
V Letizia Plumbing, Heating, Fire Protection	Providence	RI
Valcourt Heating Inc.	Tiverton	RI
Valley Heating and Cooling Inc.	Wyoming	RI
Van's Electric Inc.	Bristol	RI
Vaughn Oil Company Inc.	Smithfield	RI
Venco Electric LLC	Cranston	RI
Vicmir & Sons Heating and Air Conditioning Controls	Riverside	RI
Victor Aillienello	Providence	RI
Viking Electric Inc.	Providence	RI
Vintage Plumbing	Providence	RI
Vivona Plumbing and Heating Inc.	Portsmouth	RI
W.W. Grainger, Inc.	Warwick	RI
Wakefield Heating Service	Wakefield	RI
Waldo Plumbing and Heating LLC	Lincoln	RI
Warner's Appliance Services	Cumberland	RI
Warren Stephenson	Coventry	RI
Watermark Plumbing LLC	Cranston	RI
Westbay Community Action	Warwick	RI

Wickford Appliance and Lighting Inc.	Pawtucket	RI
Wilkinson Plumbing and Heating	West Kingston	RI
William Calia Electrician	Johnston	RI
William Francis	Bristol	RI
William J Riley Plumbing and Heating	Warwick	RI
William Merritt Plumbing and Heating LLC	North Kingstown	RI
William N Harris Inc.	Providence	RI
William R Vallee Jr. Plumbing and Heating	Block Island	RI
William Soares Electric	Bristol	RI
Wojcik Electric	Narragansett	RI
Woods Heating Service	East Providence	RI
Wordell Heating & Cooling LLC	Little Compton	RI
Wyman and Sons Inc.	Providence	RI
Yuszczaks Plumbing and Heating Inc.	North Smithfield	RI
Zawadzki Plumbing and Heating Inc.	Warwick	RI
Zompa Plumbing and Heating	Warren	RI
Calson Corporation	Johnston	RI
Benchmark Group Inc.	Rogers	AR
Association of Energy Services Professionals	Phoenix	AZ
AUTOGRID SYSTEMS INC	Redwood City	CA
Nest	Palo Alto	CA
PLMA	Vallejo	CA
Regency Lighting	Chatsworth	CA
Whisker Labs Inc.	Oakland	CA
E Source Companies LLC	Boulder	СО
Skumatz Economic Research Associates	Superior	СО
Dynamic Building & Energy (Formerly Uplands Construction	N. Stonington	СТ
John G Smith	Brooklyn	СТ
Kingspan Energy	Stamford	СТ
L&M Electric LLC	North Branford	СТ
Praxis Research Partners	Westport	СТ
Shannon Energy Resources	Thomaston	СТ
Techniart Inc.	Collinsville	СТ
TRC - EEC&C	Windsor	СТ
Tuscany Design Build	South Windsor	СТ
Voltz Electric	Wallingford	СТ
Wattsaver Lighting Products Inc.	East Hartford	СТ
Energy Solutions Center	Washington	DC
Smartpower	Washington	DC
Express Lighting, Corp.	Melbourne	FL
Pro. Unlimited Inc.	Boca Raton	FL

National Energy Educational Development Need	Manassas	GA
Innerworkings Inc.	Chicago	IL
3-D Lighting	Franklin	MA
A & M Electrical Mechanical, Inc.	Fall River	MA
ABE Electrical Installations	Northborough	MA
Action Inc.	Fall River	MA
Advanced Energy Services	Hopedale	MA
Ahaesy Electric	Fall River	MA
Air Energy LLC	South Easton	MA
Alternative Weatherization, Inc.	Fall River	MA
Andelman and Lelek Engineering Inc.	Norwood	MA
B2Q Associates Inc.	Andover	MA
Backlund Electric	Norfolk	MA
Baystate Energy Reduction	Sutton	MA
Beaupre Electric	Assonet	MA
Boiani Electric LLC	Portsmouth	MA
Brite Lite Electrical Company	Weymouth	MA
Broadway Electrical Co.	Dorchester	MA
Bruin Corp	North Attleboro	MA
Bulbs.com	Worcester	MA
Carlos A Magina Electrical Inc.	Seekonk	MA
Certified Connections Inc.	Worcester	MA
CL Fisk and Sons Inc.	Seekonk	MA
Coastal Light Electric Inc.	West Yarmouth	MA
Commonwealth Electrical Technologies	Worcester	MA
Complete Recycling Solutions LLC	Fall River	MA
Concord Electric Supply	Fall River	MA
Consolidated Marketing Services	Burlington	MA
Consortium For Energy Efficiency	Boston	MA
Corbiel Associates Inc.	South Weymouth	MA
Craig R Casavant Inc.	Blackstone	MA
Crown Supply Company Inc	Milford	MA
Daniel Cabral	Fall River	MA
DMI	Wellesley	MA
DP Electric Inc.	Blackstone	MA
Drolet Electric	North Attleboro	MA
DuCom Electric Inc.	Tewksbury	MA
Ecast Video LLC	Boston	MA
Ecova Inc.	Boston	MA
Efficiency Forward Inc. (DLC)	Medford	MA
Efficient Buildings LLC	Bridgewater	MA
Electric Supply Center	Mansfield	MA

ENE Systems Inc.	Canton	MA
Energiwise Inc.	Medford	MA
Energy & Resource Solutions Inc.	North Andover	MA
Energy Federation Inc.	Westborough	MA
Energy Monster	Worcester	MA
Engie Services U.S.	Norwell	MA
Florence Electric LLC	Canton	MA
Focal Point Data Risk LLC	Newton	MA
GenCon Service Inc.	West Bridgewater	MA
GH Electrical Service	Attleboro	MA
Graybar	Boston	MA
Greenleaf Associates Inc.	Weston	MA
Hancock Software Inc.	Framingham	MA
Hull Electric	Marblehead	MA
IBM Corp.	Cambridge	MA
ICF Resources LLC	Cambridge	MA
Insulate 2 Save	Fall River	MA
Insulation R Us Inc.	Fall River	MA
Interstate Electrical Services Co.	North Billerica	MA
ION Lighting Distribution Inc.	Chicopee	MA
James Cordeiro Jr. Electrical Services	Fall River	MA
John Landry Electrician	Somerset	MA
Jones Lang LaSalle Construction	Boston	MA
KEMA	Burlington	MA
Kevin R Curt Electrical LLC	Fall River	MA
KM Kelly Inc.	Rochdale	MA
Lefevre	Taunton	MA
Leiser Corporation	Weston	MA
Litemor	Norwood	MA
LLEJ Equipment Inc.	North Easton	MA
Lockheed Martin	Burlington	MA
Matthew DeCicco Electric	Reading	MA
Mike Bell Electrician	Seekonk	MA
MV3 LLC	Canton	MA
National LED Distributors	Milton	MA
National Lightbulb	North Easton	MA
National Resource Management	Canton	MA
Navigant Consulting, Inc.	Boston	MA
NESCO (Needham Electric Supply)	Canton	MA
New Ecology Inc.	Boston	MA
NMR Group Inc.	Somerville	MA
Northeast Energy Efficiency Partnerships (NEEP)	Lexington	MA

Northeast LED, LLC	Pepperell	MA
Northeast Sustainable Energy	Greenfield	MA
O'Brien & Neville Inc.	Holliston	MA
O'Brien Electric	Plymouth	MA
Opinion Dynamics Corporation	Waltham	MA
Opterra Energy Services	Norwell	MA
Oracle America	Cambridge	MA
Peregrine Energy Group	Boston	MA
Piper Electric Inc.	Leominster	MA
Pmm Electric Inc.	Sandwich	MA
Ralco Electric Inc.	Westport	MA
Raymond D. Melanson Electric	Swansea	MA
Raytheon Company	Waltham	MA
Rethinking Power Management	Boston	MA
Retrofit Insulation	Fall River	MA
RF Plumbing and Heating	Mansfield	MA
ROI Energy Investments LLC	East Walpole	MA
Rooney Electric	North Reading	MA
Sacks Exhibits	Wilmington	MA
Sanlo Electric	Fall River	MA
Savio Lighting	Needham	MA
Sikora Electric	Fall River	MA
SourceOne Inc.	Boston	MA
South Coast Alternative Power Solutions	Acushnet	MA
South Shore Electrical LLC	Hingham	MA
Souza & Branco Electric	New Bedford	MA
Sprague Energy	Westborough	MA
Standard Electric	Wilmington	MA
State Electric Corporation	Bedford	MA
Stateline Fuel & Burner Service Inc.	Seekonk	MA
Steam Trap Systems	Amesbury	MA
Superior Energy Solutions	Swansea	MA
Synapse Energy Economics Inc.	Cambridge	MA
Tetra Tech	Marlborough	MA
The RETEC Group Inc.	East Walpole	MA
TNZ Energy Consulting Inc.	Stoughton	MA
Universal	Providence	MA
Veolia ES Technical Solutions LLC	Boston	MA
Vinnie Farrell Plumbing & Heating	Fitchburg	MA
Waran Electrical Technologies	Boston	MA
Wayne D Faria	North Dartmouth	MA
Wiedenbach-Brown	Norwood	MA

Wipro	Quincy	MA
World Energy Efficiency Services LLC	Worcester	MA
ANTARES Group Inc.	Lanham	MD
APTEC LLC	Bethesda	MD
Earth Networks Inc.	Germantown	MD
Boyko Engineering Inc.	Gorham	ME
Don Gagon	Biddeford	ME
Energy Design Service Systems LLC	Whitmore Lake	MI
Appliance Recycling Centers of America, Inc. (ARCA)	Hopkins	MN
Wildman's Electric Inc.	Glenwood	MN
APEX Analytics	Greensboro	NC
Costal Lighting LLC	Wilmington	NC
IMMI (International Marketing Management, Inc.)	Portsmouth	NH
Clear Energy LLC	Bloomfield	NJ
CMC Energy Services Inc.	Cranbury	NJ
Ideas Agency Inc.	Blairstown	NJ
CDH Energy Corp.	Cazenovia	NY
CHA Consulting Inc.	Albany	NY
FDM Group Inc.	New York	NY
Integrated Marketing Services Inc.	Liverpool	NY
L&S Energy Services Inc.	Clifton Park	NY
Logistic Innovations	Valhalla	NY
Ram Marketing	Saint James	NY
Rensselar Research	Troy	NY
Loeb Electric	Columbus	ОН
Melink Corp.	Milford	ОН
Quality LED Lighting	Aurora	ОН
Questline Inc.	Columbus	ОН
ecobee Inc.	Toronto	ON
Aelux-Wesco	Blue Bell	PA
Pontoon Solutions Inc.	Pittsburgh	PA
Blackhawk Engagement Solutions	Lewisville	ТХ
NexRev Inc.	Plano	ТХ
Compressed Air Challenge	Alexandria	VA
Kelliher Samets Volk	Burlington	VT
Vermont Energy Investment Corporation	Burlington	VT
D & S Electrical Contractors Inc.	Clarkston	WA
New Buildings Institute Inc.	White Salmon	WA
Northwest Energy Efficiency Council	Seattle	WA
ILLUME Advising LLC	Madison	WI
Market Probe Inc.	Milwaukee	WI

