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2019 ANNUAL REPORT EXECUTIVE SUMMARY

How Energy Efficiency is Paying Off for Rhode Islanders



804 full-time equivalent jobs in 2018



1,109 firms delivered energy efficiency services in 2018



1.15 million metric tons of greenhouse

metric tons of greenhouse gas emissions prevented over the life of efficiency measures installed in 2018. Equivalent to taking

244,161 cars off the road for one year



\$483 million

in total benefits achieved by efficiency programs in 2018

2019 Policy Recommendations



Continue Least Cost Procurement Law (§ 39-1-27)



Expand workforce development in energy efficiency and renewables



Share building energy information with new homeowners and renters



Ensure program accessibility for all types of customers



Adopt energy and water efficiency standards for appliances



Promote well-being, energy security and affordability

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 2019 Annual Report.

In the past year, we have made incredible progress, particularly with the energy star lighting program for residential consumers. Energy star LED lighting products use a fraction of the electricity of an incandescent bulb and are an easy, low-cost way for consumers to start reducing their energy use right away. These products are widely available in stores such as Home Depot, Lowes, Walmart and Target and they have become extremely popular.

However, the success of this program means that we must look to other ways of lowering our collective energy use. For the rest of 2019 and beyond, we have several new opportunities before us.



While we have been successful at reaching and influencing middle-class homeowners, there is still much work to do with our state's low-income population, particularly those who live in multifamily homes. While programs exist for this population, they must be thoroughly reexamined and reinvigorated to increase participation. We must produce new ways to engage low-income populations and deliver our programs more effectively.

Companies are advancing technology at exponential rate, making incredible breakthroughs in the world of energy efficiency. To continue creating highly competitive and streamlined energy efficiency programs, we must continually watch advancements in energy technology, including artificial intelligence. We need to develop a method to evaluate these technologies for practicality, cost-effectiveness and potential for customer satisfaction. It is up to us to create the next model of energy efficiency and bring modern technologies to the market, so they can become as mainstream as LED bulbs are today.

To help us achieve this aim, we are investing in a new energy efficiency potential study which will evaluate new energy efficiency technologies and programs across the nation, to see which may have the potential to be successful here in Rhode Island. This result of this study will be key to shaping our state's energy efficiency programs over the next five to 10 years.

While we are proud of the progress we have made, there is still much work to do. Thank you for your continued 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 2019 Annual Report.

Energy efficiency policies and programs offer many benefits to Rhode Islanders. While some of these benefits may be immediate – such as lower gas and electric bills which help customers put extra money back into their wallets – other benefits are less visible but very real in the long term.

Lowering our state's energy use reduces wear and tear on our electrical and gas infrastructure and may even delay the need to add new poles and wires to the system, saving everyone money. Furthermore, energy efficiency supports jobs in our clean energy economy. Workers, such as those who install

home insulation or help a business upgrade its HVAC system to a more efficient model, are often local contractors. In addition, energy efficiency is good for our environment because it

lowers our carbon emissions.

In 2018, we were hard at work to ensure that Rhode Island's energy efficiency programs continue to deliver on their promises and produce a return on investment. We continue to review our programs and look for ways to improve and customize them to the needs of all energy customers.

In the years ahead, we see several opportunities to further develop our energy efficiency policies. We would like to make building energy information available to prospective buyers and renters – much like the fuel efficiency sticker on a new car – so they can make more informed purchase decisions. Rhode Island should adopt comprehensive appliance efficiency standards so that appliances sold in our state are delivering acceptable energy savings. We must strive to make skills training available to current and future clean energy workers to help prepare them for the arrival of new technology and practices. Finally, our programs must work to make sure that all customers, particularly those who are economically vulnerable, have access to the benefits of energy saving programs.

We are proud of our progress so far and look forward to developing programs that continue to deliver energy cost savings and benefits to all Rhode Islanders.

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

Betsy Stubblefield Loucks, Vice Chair

Voting Member Independent Strategy Consultant Representing Residential Users

Roberta Fagan

and the Law

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

Rachel Henschel

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

Anthony Hubbard

Voting Member
Director, YouthBuild Providence
Representing Low Income Energy Consumers

Tim Roughan

Ex-Officio Member
Director, Regulatory Strategy, National Grid
Representing Electric & Gas Utility

Thomas Magliocchetti

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

Karen Verrengia

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

Peter Gill Case

Voting Member Principal, Truth Box Architects Representing Expertise in Energy Design & Code

Bill Riccio

Voting Member
Director, Public Services, City of Newport
Representing Municipalities

Maurice Roberts

Voting Member Executive Board Member, Energy Council of RI, Bristol Former Corp. Purchasing Manager, Teknor Apex Representing Large Commercial & Industrial Users

Kurt Teichert

Voting Member
Sr. Lecturer, Brown University
Representing Expertise in Environmental Issues

Bob White

Voting Member
President, RJWhite Consulting
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.

Our Mission

The Council's mission is to serve Rhode Islanders in their homes and businesses. We represent your needs by providing integrated, comprehensive stakeholder feedback about energy decisions. Our goal is to ensure Rhode Islanders are getting the least expensive and most environmentally healthy energy supply through energy efficiency, conservation, and resource management.

Our Purposes

diff

Make Recommendations



Engage Stakeholders



Monitor and Evaluate

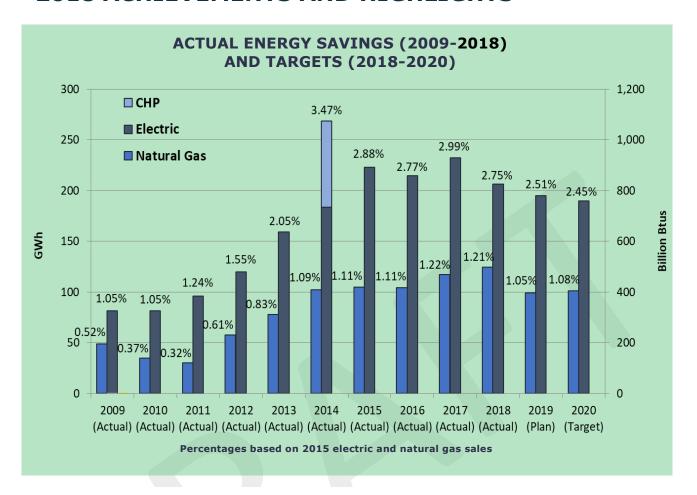


Ensure Public Benefit

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 kilowatthour 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.

2018 ACHIEVEMENTS AND HIGHLIGHTS



How Energy Efficiency is Paying Off for Rhode Islanders



804 full-time equivalent jobs in 2018



1,109 firms delivered energy efficiency services in 2018



1.15 million metric tons of greenhouse

gas emissions prevented over the life of efficiency measures installed in 2018. Equivalent to taking

244,161 cars off the road for one year



\$483 million

in total benefits achieved by efficiency programs in 2018 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 (ACEEE) State Energy Scorecard.

In 2018, 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, for the second consecutive year, for its progressive work in codes, state government facilities, combined heat and power, and transportation.

2018 ENERGY EFFICIENCY PROGRAM RESULTS



Total Participants:

789,893



Utility Program Cost:

\$115.3 million



Total Benefits:

\$482.95 million



Cost Per Lifetime kWh of Electricity Saved: \$0.048



Cost Per Lifetime MMBTU of Natural Gas Saved: \$4.94



Energy Savings as a Percent of **2015** Electric Load: 2.75%

Rhode Island State Scorecard Rank 41.0 Scored out of 50 Updated 10/2018

UTILITIES SCORE: 20 OUT OF 20

ACEEE 2018 Rhode Island State and Utilities Ranking

The remainder of this report describes the specific activities of the EERMC in 2018 which include:

- Providing oversight and input into 2018 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 2019 Energy Efficiency Program Plan and the 2019 System Reliability Procurement Plan. 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.

2019 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.

Continue Least Cost Procurement law



The EERMC strongly recommends that the executive branch and legislature continue to support Rhode Island's Least Cost Procurement law (§ 39-1-27.7) for both electric and gas service by passing legislation that facilitates and enhances its implementation.

Share building energy information with new homeowners and renters



Aggregated or asset-based building energy information should be shared with prospective buyers/renters when a building is put up for sale or lease. 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.

Adopt appliance efficiency standards



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.

Expand workforce development in energy efficiency and renewables



It is anticipated that the energy efficiency workforce will be rapidly changing in the coming years and will require a retooling of existing skillsets. Therefore, current efforts by the RI Department of Labor & Training as well as the Governor's Workforce Board to support the energy efficiency and renewable energy workforce in Rhode Island should be expanded and coordinated with existing energy programs wherever possible. As the energy market continues to grow and transform within the state, training for the future and current workforce is essential.

Ensure program accessibility for all types of customers



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. Coordination among all utility, state and federal income-eligible offerings/programs should be optimized to enhance the customer experience, increase program efficiency, and to strive for widespread program participation.

Promote well-being, energy security and affordability



A concerted effort should be made to coordinate energy efficiency programs with renewable energy deployment, state health initiatives, resiliency efforts, and any other relevant state and federal programs that promote well-being and energy security and affordability for all Rhode Islanders.

Progress on Previous Policy Recommendations

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

- 1. 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. 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.
- 3. Supporting the use of energy efficiency funds collected from electricity sales for both electric and delivered fuels such as oil and propane efficiency improvements. By encouraging energy efficiency programs to equally support the reduction of natural gas and delivered fuels use, the State has allowed the energy efficiency programs to better support Rhode Island's greenhouse gas emission reduction goals. Moreover, these programs are helping homes and businesses that rely on oil and propane to save money.

2018 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 Company's community-based initiative.

2018 marked a continuation of residential market transformation in lighting, as energy efficient LED lighting technologies became the baseline lighting offering across the residential portfolio. Progress is expected to continue in 2019 as the program aims to increase LED market saturation.

In its sixth year, the Rhode Island Home Energy Reports (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 and contains a normative comparison to similarly sized and similarly heated homes, as well as to an energy reduction goal for each customer. 282,593 Rhode Island customers received reports in 2018.

The Town of Warren and the City of Woonsocket, ran 6-month energy saving campaigns in their communities and earned grants to be used for energy efficiency improvements on public properties. Both communities surpassed their assessment and weatherization goals, while also promoting

small business programs and mini-split heat pumps for the first time as part of the initiative.

The Energy Innovation Hub continued to serve 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 to understand their own energy use as well as how participation in energy efficiency programs contributes to the State's greenhouse gas and energy reduction goals. Located in the Dunkin' Donuts Center, the Hub draws walk-in customers and groups of customers from local businesses and schools.

2018 Residential Results

- 94,464 Annual MWh Saved
- 477,278 Lifetime MWh Saved
- 208,024 Annual MMBtu Saved
- 1,518,529 Lifetime MMBtu Saved
- 326,103 Metric Tons of Greenhouse

Gas Emissions Avoided

- 773,166 Program Participants
- \$124.9 Million in Lifetime Electric Bill Savings
- \$39.5 Million in Lifetime Gas Bill Savings
- \$164.4 Million in Total Economic Benefits

National Grid continued its core residential energy efficiency programs in 2018:

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 third consecutive year, the program was awarded the Sustained Excellence, ENERGY STAR® Partner of the Year award in program delivery. 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. In 2018, EnergyWise established a revolving loan fund at the Capital Good Fund to provide additional access to moderate income customers interested in energy efficiency financing. In 2018 the Company also provided parity in weatherization incentives for all customers regardless of heating fuel starting mid-year. Finally, a language line was implemented so additional languages beyond Spanish and Portuguese could be supported.

The Residential New Construction (RNC)

Program provides technical support and incentives for the construction and renovation/remodeling of high-performing 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. In 2017 a new program baseline to determine savings for the RNC program was developed which meant that all projects completed in 2018 were held to the new, significantly more stringent baseline. RNC representatives worked closely with participants to determine the impact on each of their projects and offered technical guidance to improve the project's energy performance to



Locations of homes completed in the Residential New Construction program in 2018

meet the higher baseline of the program. In 2018, 36% of homes were heated with electric air source heat pumps, which is a similar level to 2017 (38%), but much higher than in prior years. The local HERS Rater community was expanded to create a fully open-rater program model in which Rhode Islanders can compete effectively with experienced HERS raters from surrounding states. Throughout the year, the program offers training on best practices for designing and building high efficiency homes for builders, tradespeople, designers, and code officials.

The ENERGY STAR® Consumer Products

Program promoted the purchase of high efficiency household appliances and electronics. 2018 produced strong results with strong consumer interest in dehumidifiers, dryers, pool pumps, room air conditioners, and advanced power strips.

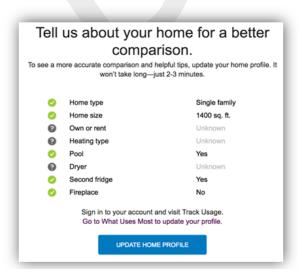
The ENERGY STAR® Lighting Program

provides negotiated pricing to customers for the purchase of ENERGY STAR® qualified lighting, retail store promotions, and/or pop up stores, and limited online, flash sales. This program provides retailer education and support in the efficient lighting area contributing to overall market transformation. This program benefited from consistent program support resulting in a transforming lighting market and strong consumer sales.

The ENERGY STAR® HVAC Programs (Gas

Heat Program and Electric Heating and Cooling) promote the installation of high efficiency gas and electric space heating and cooling equipment, water heating measures, and controls via tiered customer rebates. In 2018, the gas heating program saw a significant increase in energy efficient combination boiler/hot water systems and a decrease in the stand-alone efficient boilers. The HVAC electric program introduced an electric heating solution with cold climate air source heat pumps (ASHP) for the replacement of electric heat and displacement of oil and propane systems. Mini-Split (MS) Check, a contractorincentivized offer, became a new measure for 2018. The MS Check will ensure that savings are accurate, and equipment is working properly.

The Home Energy Reports (HER) Program in 2018 expanded and improved email High Bill Alerts for customers, released an email



Online Home Energy Audit Campaign

Personal Tracker module, cross-promoted their paperless billing program, and conducted an online home energy audit campaign. For the online home energy audit campaign, Customers were presented with the current information in their home profile and were prompted to fill out the HEA to provide more information. This information provides a better user experience with more accurate tips and a more accurate neighbor comparison. During the campaign, National Grid Rhode Island saw a 97% increase in the number of customers that had completed the HEA.

The Company's **Community Initiative**, celebrated the success of the prior year's program participants at the Customer Listening forum in 2018, and recruited the communities of Warren and Woonsocket to participate for the program year. Specified metrics were again set for these new participants including residential energy assessment goals, weatherization jobs, WIFI thermostats, and refrigerators recycled. New for 2018, the program also set goals for small business program participation and the purchase of mini-split heat pumps. Both Warren and Woonsocket had great success, both far surpassing assessment and weatherization goals.

The Multifamily Program concluded 2018 with mixed results for the year. The multifamily program was challenged in meeting its 2018 electric goals due to declining opportunities for lighting savings which make up a significant portion of the programs' savings. In contrast, the program excelled in achieving its gas goals by identifying numerous opportunities for heating boilers. One notable advancement in the program was the use of customized condo website portals to improve accessibility for this customer segment.

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; and 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 IES program continued to benefit from program improvements resulting in an increase in the number of assessments by 2% from 2017 to 2018 – to a total of 2,703 assessments. A long awaited heating solution for electric resistance heat customers was introduced with the Cold Climate Air Source Heat Pumps to replace electric resistance heat and displace oil/ propane heat. This heating solution will create significant cost savings for customers. To support consistency in the delivery of program services across the RI Community Action Program, The RI WAP/ IES (Weather Assistance Program/Income Eligible Services) Field Guide was updated and approved. 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 2018, IES exceeded the gas goal (105% of savings), and the electric goal (104% of savings).

2018 Income Eligible Results

- 6,816 Annual MWh Saved
- 73,997 Lifetime MWh Saved
- 36,850 Annual MMBtu Saved
- 622,138 Lifetime MMBtu Saved
- 90,293 Metric Tons of Greenhouse Gas

Emissions Avoided

- 11,350 Program Participants
- \$43.3 Million in Lifetime Electric Bill Savings
- \$23.6 Million in Lifetime Gas Bill Savings
- \$66.8 Million in Total Economic Benefits

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.

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 (WAP)

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.

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 200kW. 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 commercial and industrial new construction projects with proactive technical assistance during design with energy modeling and analysis.

In 2018, the Company launched a new demonstration called Accelerate Performance for New Construction projects. Accelerate Performance is a performance-based procurement process whereby the Company engages with developers and building owners early in the project process and helps the owner set Energy Use Intensity (EUI) goals before an RFP is issued to engage a design team. This goal of this demonstration is to achieve deeper energy efficiency savings for New Construction projects.

After a successful marketing campaign during 2018, 85 electric & gas high efficiency food service equipment products were sold via the upstream channel, saving 17,313 gross annual therms & 27,506 gross annual kWh.

Overall in 2018 there were more projects covering a range of building types

demonstrating the ongoing increase in commercial and industrial development in Rhode Island. Projects included mid-size multifamily, university buildings, garage buildings and large commercial projects. One large financial institution built a new campus using the Comprehensive Design approach. The total project included nine Energy Conservation Measures (ECMs) with over 1,200 MWh saved.

The Large Commercial Retrofit Program

encourages the replacement of existing equipment and systems with energyefficient 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 (SEMPs) with some of National Grid's largest customers, and a variety of Upstream programs. In 2018, National Grid had several notable developments in the Large Commercial and Industrial space. The Company broadened the program 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 verticals. The Company continued work on the SEMP with the State of Rhode Island that began in 2017. In 2018, 9 scoping studies and 5 retro-commissioning studies were performed in state facilities. In 2018, the Company also launched a Strategic Energy Management (SEM)/ Continuous Energy Improvement (CEI) demonstration for industrial customers whereby a cohort of industrial customer meet regularly and share best practices for operation and maintenance of their facilities.

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

The Industrial Initiative in Rhode Island had

another successful year. Goals for electric and gas were exceeded and delivered substantial savings to Rhode Island manufacturers. A total of 96 incentive applications were paid (78 electric and 18 gas) resulting in savings for 59 large industrial customers. The program continues to focus on custom process measures with a majority of the applications relating to process, HVAC, VFDs and other custom process measures. The Industrial Initiative also assisted several smaller customers (under 400 kW) with energy efficiency measures. The customers included a beer distributor and paving

2018 Large C&I Results

- 94,608 Annual MWh Saved
- 1,171,046 Lifetime MWh Saved
- 249,107 Annual MMBtu Saved
- 3,346,412 Lifetime MMBtu Saved
- 676,597 Metric Tons of Greenhouse Gas

Emissions Avoided

- 3,528 Program Participants
- \$179.7 Million in Lifetime Electric Bill Savings
- \$49.4 Million in Lifetime Gas Bill Savings
- \$229.1 Million in Total Economic Benefits

company, and the measures were related to refrigeration and dust/particle collection. The Industrial Initiative team also assisted the beer distributor in identifying electric heat that was being left on during unoccupied hours. With the aid of interval data, the team was able to identity the savings to the customer from shutting the heat off during unoccupied hours.

The EnergySmart Grocer (ESG) Initiative

delivered cost effective, comprehensive energy savings in the Grocery market segment in 2018 delivering over 6,300 MWh and 1,100 MMBTUs in annual net savings. Stop & Shop continued to rollout anti-sweat heater controls in their Rhode Island stores which accounted for 1,400 MWh savings. Dave's Marketplace also continued its effort to make their stores more energy efficient with projects at all ten of their locations. Upgrades included adding doors to their display cases, replacing their lights in their walk-in boxes and adding floating controls to their refrigeration systems. In total, Dave's Marketplace achieved over 1,000 MWh and 500 MMBTUs in annual savings. The initiative also continued to find opportunity with the smaller grocers. Sizeable refrigeration projects were completed at Clements, Dino's Park-n-Shop, and McQuade's Marketplace which, in total, achieved over 400 MWh savings.

Destratification fans were added to the initiative in late 2018. This technology provides gas savings by delivering warmer air from the ceiling to the ground. EnergySmart Grocer will discuss this measure with customers, where appropriate, and expects to see a significant uptake of this technology in 2019.

Several *Combined Heat and Power (CHP)* projects were pursued in 2018. A proposal to Rhode Island College was made, but the project has not yet proceeded. Two projects were also commissioned in 2018, including the Crowne Plaza (150kW) and Avalon Post (75kW). In2019, a pipeline of CHP projects will be developed, and several TA studies will be completed. In addition, National Grid is working closely with the Council, the Division of Public Utilities & Carries, the Office of Energy Resources, and other key stakeholders to enhance the CHP program for 2020.

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 RIOER 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.

The streetlighting incentive for the Town of Tiverton helped the Town to close their fiscal year in the black. Other towns installing LED street lighting during 2018 included West Warwick, Westerly, North Providence, Central Falls, Hopkinton & Cumberland. Close to \$800,000 in incentives were awarded resulting in energy savings of nearly 4,000 MWh.

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.

National Grid pays 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.

National Grid has also been actively pursuing new models that serve segments within what has been traditionally considered small business in more tailored and more costeffective 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.

2018 Small C&I Results

- 10,321 Annual MWh Saved
- 126,524 Lifetime MWh Saved
- 3,138 Annual MMBtu Saved
- 26,691 Lifetime MMBtu Saved
- 55,331 Metric Tons of Greenhouse Gas
 Emissions Avoided
- 1,849 Program Participants
- \$22.0 Million in Lifetime Electric Bill Savings
- \$0.60 Million in Lifetime Gas Bill Savings
- \$22.6 Million in Total Economic Benefits

In 2018, National Grid continued to utilize the existing contractor/electrician base through the Customer Directed Option and explored whether C-PACE may be an attractive option for some of the larger small business customers.

In 2019, the company plans to launch a restaurant initiative that will serve non-chain

restaurants in Rhode Island.

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 can be paid back, interest free, through National Grid's on-bill payment system provided that funds are available.

In 2018, 12 Rhode Island farms received nocost, farm-specific energy assessments. With help from University of Rhode Island Energy Fellows, additional outreach was conducted at 10 farmers markets in 7 towns across 4 counties, representing roughly 100 farms. Presentations were also given at 2 workshops and 1 conference. Further outreach was conducted via social media: Facebook and Instagram (@RIFarmEnergyResources).

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 August 2018, Rhode Island
State agencies have reduced their energy
consumption by 10.1% (2014 baseline),
saved \$4.75 million (FY 2018) 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 2018 include, the deployment of solar arrays on three buildings on Capitol Hill, Solar PV installations on the Veterans Home and the Attorney General's new building, the completion of a solar carport at the Public Utilities Commission, the conversion of almost all State-owned highway streetlights to cost-effective LEDs, and the expansion of 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, cost- effective, and sustainable energy future.

Key 2018 Lead by Example accomplishments include:

- Supporting the installation of solar arrays on five state buildings
- ♦ Converting State-owned highway

- streetlights to LED technologies.
- Procurement of a web-based utility bill management software to track and audit energy expenses.
- Ensuring that 50% of electricity consumed by State facilities comes from renewable energy resources
- Reducing the energy consumption across State facilities by 10% compared to 2014 baseline
- 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
- Developing a centralized utility bill payment system for all state agencies that saves money by avoiding late fees and increasing staff efficiency
- Converting multiple facilities lighting to LED
- HVAC and control improvements at the Chapin Health Lab
- Retro-commissioning of three large facilities Energy Management System including Powers (DOA).

COMMERCIAL, INDUSTRIAL & PUBLIC FINANCE

Large C&I Revolving Loan Fund

Through the electric LC&I revolving loan fund, the Company offered \$5.28 million in on-bill financing to 65 Large Commercial customers through 77 loans resulting in electric savings of 11,887 annual MWh. At

the end of 2018, the fund had a balance of \$10.0 million, money that will be available for more loans in 2019 and in the future.

In 2018, National Grid began Financial Test One. The purpose of this test, as outlined in the 2018 EE plan, was to determine if customers were willing to accept a lower incentive if they were allowed to "finance" the balance of their project costs through OBR. From the beginning of the test to the end of 2018, 35 applications had been processed from 26 unique customers for a savings of \$68,773.

Through the gas LC&I revolving loan fund, the Company offered \$1.17 million in loans to 21 Large Commercial customers resulting in gas savings of 22,906 MMBtu. At the end of 2018, the fund had a balance of \$1.19 million, which will be available for more loans in 2019 and in the future.

The Company continued to manage a revolving loan fund in support of the RI Public Energy Partnership (RIPEP). No customers participated in this offering in 2018. At the end of 2018, the fund had a balance of \$66,060. \$1,046,058 was returned to the RI Office of Energy Resources (OER) as per the December 17th request.

Small Business Revolving Loan Fund

Of the 759 customers that participated in the Small Business Direct Install program, each received financing to cover 30% share of the project costs, either over 24 months at zero (0) percent interest or a lump sum payment with a 15% discount. Overall, the Small Business Revolving Loan fund was able to provide \$3.10 million in loans that led to more than 10,321 MWh in annual energy savings. At year end, the fund had a balance of \$1.92 million.

Efficient Buildings Fund (EBF)

Since 2015, National Grid, Rhode Island

Office of Energy Resources (OER), and the Rhode Island Infrastructure Bank (RIIB) have been working together to leverage system benefit charge (SBC) funds and drive energy improvements in facilities in cities and towns across Rhode Island.

The seed money to support this unique revolving loan fund came from a \$1.8 million allocation of rate-payer (SBC) funds, mandated by the law, and \$3.0 million in funds from the Regional Greenhouse Gas Initiative (RGGI) controlled by OER. In addition, National Grid, based on requests from RIIB, and working in conjunction with the Collaborative each program year, agreed to transfer \$5 million in energy efficiency program funds to RIIB in 2018 and in 2019. Both of these transfers were included in their respective Energy Efficiency Plan and related budgets.

In 2018, EBF helped support many energy efficiency projects in municipalities, including Pawtucket, Warren, and East Providence.

EBF helped Pawtucket complete installations of energy efficient lighting, energy management systems, and boilers in several city buildings. The Town of Warren utilized the EBF to convert their street lights from various old technologies to LED. The City of East Providence used EBF to install gas and electric measures in several city buildings.

Commercial Property Assessed Clean Energy (C-PACE)

National Grid continued to work with RIIB and its program administrator, Sustainable Real Estate Solutions (SRS), to advance the concept of C-PACE in the market, with our salespeople, and among vendors. In 2018, RIIB, SRS, Greenworks Lending, and National Grid co-wrote a presentation for National Grid sales professionals. The presentation, given by Greenworks and SRS, was well received by the National Grid sales team,

enhanced their understanding of the mechanism, and cleared up some previous misconceptions. National Grid also hosted SRS and Greenworks Lending at a Project Expeditor (turn-key vendors for C&I customers) meeting in August 2018. National Grid joined RIIB and Greenworks on a panel speaking about the benefits of C-PACE on a panel at the RI Infrastructure Summit in September 2018.

As of the end of 2018 one small C-PACE project had been completed and a larger one was still in the design phase.

Ascentium

In 2018 National Grid continued 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 saw some interest in this offering but no funded projects in 2018.

In 2018, a school in Rhode Island completed a substantial retrofit project with a creative rental offering from Ascentium. The Company will continue to offer both loan and rental options in 2019.

Other commercial financial developments

National Grid is committed to making sure that customers have a robust selection of financial mechanisms that have proven themselves successful in other programs across the United States and Canada. In 2018, National Grid began discussing Metrus Energy's Efficiency as a Service offering. Metrus has completed projects with numerous Fortune 500 companies across the United States. Metrus has restricted this offer to customers with a combined energy gas and electric spend of greater than \$1,000,000 dollars annually.

CROSS-SECTOR PROGRAMS

The *Community Initiative* celebrated the success of the prior year's program participants at the Customer Listening forum in 2018, and recruited the communities of Warren and Woonsocket to participate for the program year. Specified metrics were again set for these new participants including residential energy assessment goals, weatherization jobs, Wi-Fi thermostats, and refrigerators recycled. New for 2018, the program also set goals for small business program participation and the purchase of mini-split heat pumps. Both Warren and Woonsocket had great success, both far surpassing assessment and weatherization goals.

Due to the Community Initiative being expanded to include small businesses, there was a joint effort with the Northern RI Chamber of Commerce for Woonsocket to educate small business customers about energy efficiency. Forty projects were completed in Woonsocket and Warren resulting in an annual reduction of 525 MWh, saving approximately \$73,500 in energy annually.

Additionally, the Town of Coventry received a Lead by Example Energy Award from the Office of Energy Resources for investing \$5,000,000 over a five-year period in energy efficiency improvements to schools. The Town of Warren began on-the-ground promotions in the second quarter with customized marketing materials being created for both Woonsocket and Warren.

Building Energy Codes and Product Standards

National Grid's Codes and Standards initiative is an innovative efficiency offering that provides targeted stakeholder outreach and technical guidance to:

- Improve compliance with existing minimum efficiency requirements for buildings and the energy-using products that comprise them; and
- Accelerate the improvement of these minimum efficiency requirements.

In 2018 the Company continued to provide its energy code compliance enhancement services and reached important new stakeholder groups. The Company also prepared for efforts to increase the company's assistance for improved state energy codes and product standards in coming years, thereby unlocking new opportunities to save energy on behalf of customers.

Code Compliance Enhancement Initiative (CCEI): In 2018 CCEI conducted 40 training events across the state with 532 total attendees (an increase from 31 and 513 in 2017, respectively).

This initiative includes robust stakeholder engagement and industry outreach, classroom and hands-on trainings, project-specific technical assistance, and development and dissemination of documentation/compliance tools to reduce energy savings lost to noncompliance with the state's energy code. In 2019, CCEI will continue to focus its activities on remaining code compliance

General Contractor
Mechanical Engineer
2.0%

HVAC Contractor
2.4%

Appraiser
3.6%

Facility Owner
4.5%

Code Official
33.9%

Code Official
33.9%

Developer
10.8%

Developer
12.8%

gaps identified in the 2017 new construction evaluations as well as preparing stakeholders for Rhode Island's energy code update, which is scheduled to go into effect this August.

Energy Code Development Support: In 2018 the Company began to prepare code changes it will propose when the state launches its 2018 IECC code adoption process, which is currently scheduled for fall 2019. These changes would increase the energy savings potential of the state's future code, with compliance support from CCEI helping to realize these savings.

Stretch Code Support: When the Rhode Island Stretch Code was published in early 2018, the Company shifted its support to increasing use of this new guide for high performance new residential and commercial construction. The Company provided education and outreach through our CCEI program, including promotion at every training event, to increase market awareness of this brand new tool. The Company also began financially incentivizing its increased use by aligning our new construction programs with the Stretch Code; new homes, for example, are eligible for a "bonus" incentive if they demonstrate compliance with the Stretch Code. The 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.

Appliance & Equipment Standards
Support: In 2018 the Company increased its role in supporting the adoption of new state appliance standards compared to preceding years. While 2018's appliance standards bill was ultimately unsuccessful, it proceeded farther through the legislative process than its predecessors. In 2019, the Company will continue to provide technical support to proposed

product standards legislation. The Company will also work with stakeholders to adapt for use in R.I. a methodology currently under development in Mass. to claim savings for product standards support in a similar manner to code compliance enhancement. The Company also proposes to continue ramping up efforts to partner with other stakeholders in the northeast as well as efficiency program administrators in California in advancing federal appliance standards.

Block Island Saves Pilot Program

Through the Regional Greenhouse Gas Initiative, proceeds were allocated to the Block Island Power Company to support the delivery of cost-effective energy efficiency programs and incentives to customers over three years. OER is working in coordination with Block Island Power Company management to leverage existing utility funds and identify cost-effective investment opportunities in the community of New Shoreham. This program will be modeled on the Block Island Saves Pilot Program, which ran 2015-2017.

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 3.65 for the residential program and 1.64 for the small business program, for an aggregate ratio of 2.23 for the entire pilot. In other words, Block Island Saves was a cost-effective program with each dollar spent on Block Island Saves generating \$2.23 in economic and environmental benefits.

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

Energy Efficiency in Pascoag Utility District

Through the Regional Greenhouse Gas Initiative, proceeds were allocated to support the accelerated adoption and delivery of cost-effective energy efficiency measures by customers located in the Pascoag Utility District. OER worked closely with Pascoag Utility District management and the Burrillville School Department to identify cost-effective energy efficiency lighting upgrades in three school buildings, leveraging additional funding from both organizations. The three schools receiving these lighting upgrades are William L. Callahan (grades 2-5), Steere Farm (grades 2 -5) and Austin T. Levy (grades pre-K, K and 1). OER also worked with Pascoag Utility District management to develop a threeyear strategy to enhance access to energy efficiency in the community, starting in 2019 . Strategies include increasing the number of no-cost residential energy audits provided and optimizing incentive levels to encourage energy efficiency in homes and businesses.

Zero-Energy Buildings (ZEB) Task Force and Working Group

In 2018, National Grid kicked off the Path to Zero Ready Demonstration Program to complement the Residential New Construction Program and also to provide new opportunities to support the growth of the zero energy home market.

The Path to Zero Ready Demonstration Program focused on four key elements:

1. Education and awareness - In an effort to raise awareness of the design, construction, benefits and beauty of zero energy homes in RI, 11 Zero Energy presentations were held in 2018 with over 160 attendees. In addition, tours of zero energy homes were conducted to provide hands on learning for building professional and customers.

A select group of Rhode Island designers, architects, builders, developers and other industry professionals were provided passes to attend the annual Passive House Institute US (PHIUS, www.phius.org) conference in Boston that focused on "The Path to Zero Energy".

2. Workforce Development - In 2018, the Zero Energy Advisory Group was created. The Group is comprised of eight Rhode Island construction professionals at different stages of understanding of the zero-energy building market. A spirit of collaboration is the hallmark of the group as they strive to create momentum in the zero energy and zero energy-ready markets. Members meet periodically over the year to refine best practices and marketing opportunities.

Support for architectural drawing revisions as well as a design charrette were conducted through this program to provide technical support to facilitate decision-making as project teams evaluate the opportunity to build a zero-energy ready project.

A series of infield trainings were held at a development in North Kingstown to demonstrate Zero Energy construction techniques including the framing stage, the rough stage before insulation, and at the point of final inspection

- **3. Project Incentives** In addition to the technical support and financial incentives provided through the RNC program, a project that commits to zero energy ready can receive additional technical support as well as additional incentives for meeting the RI Stretch Code or being PV and EV ready.
- **4. Marketing** National Grid held a strategic planning session to gather input and insights as to how to create a market for Zero Energy Homes who to target, how to learn from and leverage what's currently working and develop priorities and next steps to move the local market forward.

Rhode Island Energy Innovation Hub

The Energy Innovation Hub (Hub) is a community engagement destination designed to provide a hands-on opportunity for customers to learn about energy efficiency, renewable technologies, electric vehicles, state energy goals, and a vision for a clean energy future. The Hub content, and knowledgeable staff, provide information to customers to empower them to take action to reduce their energy use, adopt smart technologies and learn about renewable power and electric vehicles. The space and its exhibits showcase: (a) energy solutions accessible to all customers; (b) innovative advancements for system reliability; and (c) a vision of a sustainable energy future. Visitors learn about technologies available to create smart, energy-efficient homes and businesses, renewable technologies, demand response, electric vehicles, storm management, and core services that the Company provides. In 2018, the Energy Innovation Hub hosted 2,600 customers via on-site meetings, trainings, tours, events and walk-in customers.



Entrance to the Energy Innovation Hub

Council Public Education Efforts

2019 Energy Expo at the Rhode Island Home Show

For the sixth 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 4 –7 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:

- 91 energy related companies and organizations exhibited
- 262 energy audit sign-ups were completed
- ♦ 887 LEDs were sold, many as part of 767 energy efficiency kits
- Over 19,000 people attended the Home Show

2018 EERMC Public Education Event

One of the EERMC's core purposes is to promote public awareness of energy efficiency programs and their benefits. To further fulfill this mission, the EERMC hosted its first Public Education Event in April 2018. Approximately 50 people attended, including legislative staff, state agency leaders, municipal representatives, CAP agencies,

efficiency vendors, efficiency program participants, environmental advocacy groups, and members of the public. Speakers highlighted the large-scale benefits of energy efficiency, including how this work supports Rhode Island's economic, environmental, and health goals. Attendees heard firsthand from program participants about how energy efficiency programs directly lowered their energy bills, from local efficiency vendors about how Rhode Island's efficiency programs support the local workforce and economy, and from EERMC Chair, Chris Powell, about how to get engaged in the public process that oversees these programs.

2018 Building Operator Certification

In 2018, the EERMC co-sponsored a Building Operator Certification (BOC) course which provided discounted or free training on energy management and maintenance to 19 building operators in Rhode Island. Through the course, participants learned about building systems, maintenance, and energy management. Those that completed the course are expected to benefit from holding the professional BOC credential, being better able to communicate with occupants about maximizing facility efficiency, being able to identify low-cost energy conservation opportunities, and knowing how to implement best practices in preventative maintenance.

2018 Appraiser Training

The EERMC supported reduced tuition for a training about valuing energy features of buildings for appraisers through the Appraisal Institute in April 2018. Over fifty professionals attended, including RI-licensed appraisers from Rhode Island, Connecticut, and Massachusetts. In addition to appraisers, attendees included municipal tax assessors, real estate brokers, appraisal management company reviewers, and bank review appraisers. Nationally-renowned expert Sandy Adomatis led the training and the

Office of Energy Resources presented on state energy policies and initiatives.

2018 Combined Heat and Power Public Meeting

On August 29, 2018, the EERMC hosted the Annual Rhode Island Combined Heat and Power (CHP) Public Meeting at the Energy Innovation Hub in Providence. As a legislative mandate, these meetings are designed to collect stakeholder feedback on how the state's CHP program could be improved. The meetings also serve to inform developers and potential participants on program details, any updates for the current year, and finance options. This year the majority of attendees were CHP developers or vendors who provide related technical assistance or financing. Representatives of National Grid, the Division of Public Utilities and Carriers (DPUC), the EERMC and its Consultant Team, and the Rhode Island Infrastructure Bank (RIIB) were also present. While much of the audience's participation was aimed at clarifying specific program details, attendees also shared some valuable insights into the challenges of implementing CHP projects in Rhode Island.

Incentives By Town

Table 1. National Grid Gas and Electric Energy Efficiency Incentives Provided to Residential, Commercial and Industrial Customers in 2018

Barrington	\$ 1,004,790	New Shoreham	\$ 4,622
Bristol	\$ 1,520,736	Newport	\$ 2,176,940
Burrillville	\$ 655,670	North Kingstown	\$ 2,627,959
Central Falls	\$ 588,303	North Providence	\$ 1,548,871
Charlestown	\$ 461,883	North Smithfield	\$ 824,790
Coventry	\$ 1,468,691	Pawtucket	\$ 5,298,643
Cranston	\$ 7,798,143	Portsmouth	\$ 1,039,945
Cumberland	\$ 2,759,018	Providence	\$ 20,369,785
East Greenwich	\$ 1,923,071	Richmond	\$ 296,235
East Providence	\$ 3,988,237	Scituate	\$ 747,884
Exeter	\$ 253,702	Smithfield	\$ 1,888,478
Foster	\$ 207,401	South Kingstown	\$ 549,568
Glocester	\$ 387,649	Tiverton	\$ 1,083,534
Hopkinton	\$ 394,060	Warren	\$ 762,907
Jamestown	\$ 277,830	Warwick	\$ 6,640,733
Johnston	\$ 3,236,622	West Greenwich	\$ 749,080
Lincoln	\$ 1,449,213	West Warwick	\$ 3,174,816
Little Compton	\$ 198,365	Westerly	\$ 1,749,768
Middletown	\$ 1,118,205	Woonsocket	\$ 2,567,032
Narragansett	\$ 2,287,776	Grand Total	\$ 86,080,953

National Grid 2018 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 2018. 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 2018.

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 low- income energy efficiency services. A complete list of all contractors and subcontractors involved in 2018 Rhode Island energy efficiency programs is included in Appendix B of this report .

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 2018. Peregrine Energy Group calculated the labor hours required for each installation based on industry standards and discussions with contractor experts.

Peregrine determined that 804.1 full-time equivalent (FTE) employees had work in 2018 supported by 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

Full-Time Equivalent Employment Supported by Energy Efficiency Programs in Rhode Island in 2018

Programs	Total FTEs
Electric Programs	
Commercial and Industrial	250.0
Residential Income Eligible	45.8
Residential Non-Income Eligible	170.9
Gas Programs	
Commercial and Industrial	31.9
Residential Income Eligible	39.4
Residential Non-Income Eligible	191.6
National Grid EE Staffing	39.5
Community Action Agency Staff Income Eligible	35.0
Total 2018 Rhode Island FTEs	804.1

is far larger than the total of FTEs. Most of the jobs supported by energy efficiency investments were local because they were tied to installation of equipment and other materials.

The study also identified 1,109 companies and agencies involved in National Grid's 2018 energy efficiency programs, 73% 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.

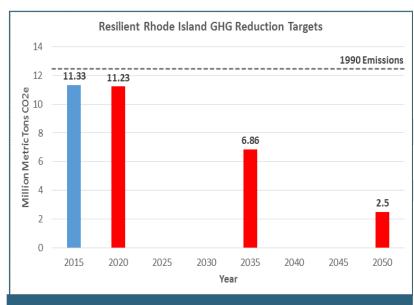
The study fulfills General Law 39-2-1.2, which was enacted by the General Assembly

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



Graph adapted from the Rhode Island Greenhouse Gas Emission Reduction Plan¹

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 job-years 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 2020 Annual Plan will commence in early summer 2019.

System Reliability Procurement

Through System Reliability Procurement (SRP), the Company identifies customer and grid-side opportunities that are safe and reliable, environmentally responsible, cost-effective, and provide the path to lower supply and delivery costs to customers in Rhode Island. As part of meeting this purpose, the Company develops and implements non-wires alternative (NWA) projects.

Non-Wires Alternative (NWA) is the inclusive term for any electrical grid investment that is intended to defer or remove the need to construct or upgrade components of a distribution and/or transmission system, or "wires investment". NWAs involve identifying distribution and/or transmission

needs that have the potential to be deferred by alternative solutions, such as distributed energy resources (DERs), with a specified timeline. These projects are customerfocused and can include measures that are also offered through the Company's statewide energy efficiency (EE) programs, as part of a targeted EE approach in an NWA portfolio solution.

Calendar year 2018 held the final evaluation of the Tiverton NWA Pilot, which was launched in 2012. This final evaluation catalogued the year-over-year program activities, customer engagement, and impacts of the Tiverton NWA Pilot.

The Company went live with the Rhode Island System Data Portal (Portal) through the SRP program on June 30, 2018. The Portal is an online, interactive mapping tool that provides information on National Grid's electric distribution system in Rhode Island. The Portal further provides detail on the approximate loading level of lines and substations. The Company went live with the Hosting Capacity map resource on September 28, 2018, which is a major update that illustrates how much distributed generation (DG), such as solar or battery storage installations, can be implemented on specific lines and substations. A public landing page for the Portal is located on the customer-facing National Grid website.

A corresponding Marketing and Engagement Plan was developed and implemented in the SRP program to promote the Portal to third-party solution providers. This effort aims to increase industry knowledge of the Portal and incentives available through existing Company and state programs for NWA, energy conservation, peak load relief, and renewable energy projects in highly-utilized areas. The Company implemented marketing and engagement for the Portal in calendar year 2018 and plans to continue outreach and engagement in 2019.

The Company issued two new NWA requests for proposals (RFPs) in December 2018, to help address electric grid need in the town of Narragansett, Rhode Island. The Narragansett 42F1 NWA RFP seeks third-party market solutions to provide 2.1 megawatts (MW) load relief for the Bonnet 42F1 feeder. The Narragansett 17F2 NWA RFP seeks solutions to provide 1.8 MW load relief for the Wakefield Substation 17F2 feeder.

Additional details on 2018 SRP activities and the 2019 SRP Plan can be found in the Company's 2019 System Reliability Procurement Plan Report filed in Docket 4889 and approved by the PUC on December 20, 2018.

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 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).

LOOKING FORWARD: 2019 ENERGY EFFICIENCY PROGRAM PLAN HIGHLIGHTS

2019 Residential Programs

EnergyWise

The EnergyWise program will provide online scheduling of EnergyWise home energy assessments. Landlords of single family residences are also eligible for a 100% weatherization incentive.

Residential New Construction

In 2019 the Company will work with building industry representatives to determine the cost-effectiveness of offering the zero energy ready initiatives in the RNC program. The Company will continue to work with the Zero-Energy Buildings Advisory Group to develop a robust plan for residential zero energy homes.

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

In 2019 the Company will focus on the implementation of the electric heat program to ensure that contractors are properly trained in cold climate air source heat pump system design and installation as well as delivering customer education. The electric heat program is for customers with electric, oil or propane heat and who have completed an energy assessment and all recommended insulation measures. The Company will work on determining the effectiveness of the electric heat offering to ensure customer satisfaction and use as the primary heating source. The Company will continue to participate in the development of effective integrated controls for ASHPs that will present the electric heat as the primary heating source and then call for the original, now back up heat, if necessary. The Company will continue to deliver heat pump

water heaters through an efficient and cost effective up-stream model with big-box retailers and RI distributors.

Income Eligible Enhancements

In 2019, the Program aims to install cold climate air source heat pumps in 30 homes that currently heat their home with electric radiant heat, oil or propane. The Program team will continue to monitor the installation of cold climate air source heat pumps to ensure proper sizing, installation and customer education/satisfaction. There will be a focus on customer education to ensure that customers properly utilize the ASHP as the primary heating source. The IES Program will continue to participate in the Community Expos services to provide customer service and increase participation in the IES program.

Community Initiative

The Community Based Initiative in 2019 will continue the new model put forward in the prior program year that emphasized the importance of achieving certain energy saving metrics to ear the grant monies that will be used on energy efficiency projects at a municipal site. The Company will recruit up to four new communities for 2019 and will incorporate a new Demand Response program enrollment metric. The communities will again 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 2019 that are more personalized than in previous years. For customers who have consistently been higher users than their neighbors, the program in 2019 will

begin using a "Target Rank". This new approach will encourage customers to aim for higher ranking, so they know their energy saving actions are having an impact on their usage. Also, of focus in 2019, the non-AMI High Bill Alerts program will be expanded to even more customers.

Multifamily Program

In 2019, the company has set a goal of installing 75 ductless mini-split heat pumps (DMSHP) to displace electric and oil resistance heat. The Company remains committed to offering a comprehensive program that is both cost effective yet thorough in treating this diverse segment of the population. One example of this is the Company's commitment to serving non-profit group homes seamlessly through the multifamily program.

2019 Commercial, Industrial, Public & Other Programs

In 2019 the commercial and industrial energy efficiency programs will focus on many initiatives including finance solutions, path to zero energy buildings initiatives, as well as developing its CHP project pipeline for the future years. Demand Response will move from being a demonstration to a full program offering for commercial customers in 2019.

In 2019 the Company will have a new classification of pilots, demonstrations and assessments in RI. Pilots from 2018 will continue with new demonstrations for small business with heat pumps. The pilots, demonstrations and assessments can be broadly classified into four focus areas, lighting technologies, new construction and a path to zero energy, industrial and manufacturing sector, and gas demand response.

In 2018, the Company continued and concluded its demand response (DR)

demonstration for commercial customers. The company started the commercial customer section of this demonstration in 2017. In 2017 the program reduced peak loading on the grid by 12MW. In 2018 the program reduced peak loading on the grid by 18MW. Due to the success of this program, the company proposed to transition this demonstration to a regular energy efficiency program, and this was approved in the 2019 Energy Efficiency Plan.

Based on what the Company learned during the demonstration stage, in 2019 the company will offer two options for commercial customers to participate in the demand response programs. The Targeted Dispatch option has 2 to 8 events per summer and has and incentive rate of \$35/ kW-year. The Daily Dispatch option has about 40 events per summer and pays \$300/kWyear. The added events of the Daily Dispatch option provide more system benefits. Although both options are open to any technology that can reliable perform, the Company expects the new Daily Dispatch option to attract customers with large battery storage systems.

The gas demand response pilot launched in 2018, will continue in 2019. The Company will look to enroll more customers into this program in the summer and fall of 2019 for participation in Gas DR events in the winter of 2019- 2020.

The Company is looking to continue testing two industrial initiatives that include new technologies and behavior change from small industrial facilities.

In 2016 a zero-energy building 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 Company is looking to continue to build on the three recommendations that were

outlined in the white paper:

- ◆ 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

Appendix A:

Case Studies





No easy feat for a small town facilities team, Coventry embarked on a \$5 million energy upgrade project.

The combination of aging infrastructure of the municipal buildings and schools, deferred maintenance and rising energy costs prompted the town of Coventry, R.I. (population 35,000), to jumpstart essential energy upgrades.

In 2012, a \$5 million energy upgrade bond was passed. Roughly \$3.2 million was earmarked for town facility upgrades while \$1.8 million was allocated for school buildings. Coventry facilities staff partnered with National Grid to make this extensive upgrade possible.

Making change happen

National Grid initiated energy audits and cost-benefit analysis by bringing in Energy Conservation, Inc. (ECI) for municipal projects and RISE Engineering for the school projects. There were no architects or builders involved. The energy audits (scoping studies) led to a list of recommendations. The upgrade involved eight municipal buildings (town hall and annex, garages, library, parks, police department and senior center) totaling close to 200,000 square feet and the school district comprised of five elementary schools, one middle school and a 296,000-square-foot high school.

"Any energy savings we can secure are crucial to school operations. I think this shows our commitment to the community, to the families — about energy efficiency conservation, and that we can put most of our resources toward improving student performance."

- Craig Levis, Superintendent, Public Schools, Coventry, R.I.

Town of Coventry Case Study continued

Turning plans into action

After analyzing energy savings projections and payback periods, the town made the following upgrades:



Installed air sealing in municipal buildings. This proved to be a core part of the project and supported the overall upgrade of energy end-use equipment.



Upgraded indoor classroom and common area lighting and outdoor parking lot and stadium lighting.



Added Energy Management Systems to five older municipal buildings. Monitoring energy use (gas and electric) identified other unknown deficiencies (for instance, pumps that needed to be replaced).



Replaced the boilers in the town hall annex, which boosted heating efficiency from 75% to over 90%.



Replaced hot water and one steam boiler in the high school. The new steam boiler operates at 85% efficiency compared to 60% efficiency in the old unit.



Recommissioned pneumatic thermostat control in the high school and fixed air leaks and recalibrated sensors.

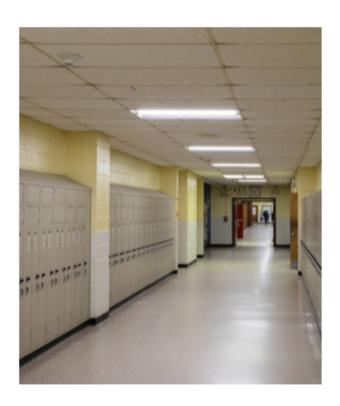


Implemented Variable Speed Drives (VSDs) on HVAC units.

A proactive focus

The nearly 20-year ongoing partnership between National Grid and the Coventry community proved invaluable throughout the project. Utilizing a hands-on, proactive approach, the National Grid team worked with key stakeholders to ensure the upgrade process went as smoothly as possible. From securing a contractor to install equipment to monitoring progress, every step of the process involved careful coordination between the National Grid team, town facilities staff and the turnkey energy solutions providers (ECI and RISE Engineering).

In addition to technical advice and project expediting, National Grid was able to offer both prescriptive and custom incentives totaling \$591,000. This funding allowed the town to purchase energy end-use components and controls of higher quality and significantly expand the scope of the energy upgrades. The town also received a subsidy from the Rhode Island Energy Office for scoping studies.



Town of Coventry Case Study continued



Leaders in clean energy

In 2018, the Town of Coventry and Coventry Schools received a Lead By Example Energy Award from the Rhode Island Office of Energy Resources. This significant achievement recognizes public sector facilities that have implemented clean energy initiatives.

Improved learning environments

Non-energy benefits included improved working conditions and learning environment for students/staff (e.g., increased comfort, productivity) as well as reduced maintenance costs.

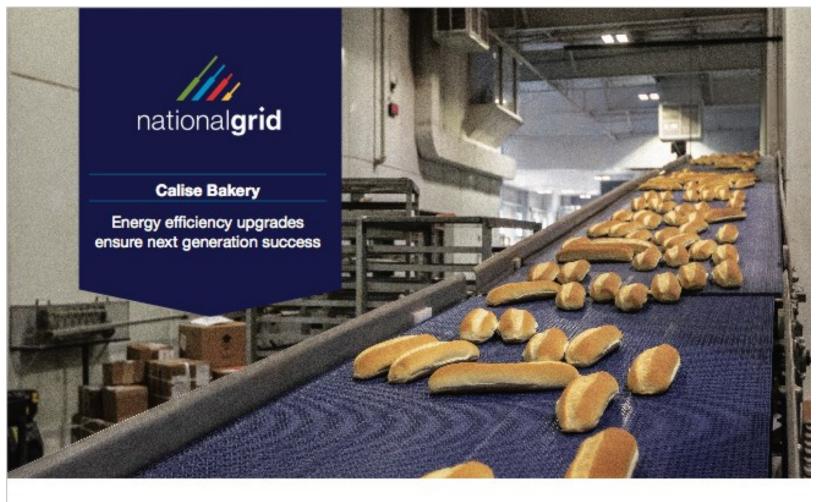
Town of Coventry directors Kevin McGee and Jason Martin made the following recommendation to anyone looking at upgrading their facilities, especially in municipalities:

"Get all decision makers involved at the outset. Then communicate early and often. No surprises to stakeholders!"

Improve the work and learning environment through energy efficiency

National Grid can make your energy efficiency goals a reality. Let our technical experts work with you to identify the right projects.

In addition, our **Strategic Energy Management Plan (SEMP)** can help you fund them. Along with the incentives to reduce capital costs, we offer financial options to help fund the net cost after incentives. This allows you to afford the upgrades you need.



National Grid helps Calise & Sons Bakery with a major equipment upgrade.

In business for over 100 years, Calise & Sons Bakery in Lincoln, R.I., is renowned for its commitment to the highest quality products – a mission known as the "Calise Way." To help ensure continued success in the future, the leadership team embarked on a large-scale upgrade to the facility's aging HVAC, refrigeration, compressed air and lighting systems. In addition to a focus on safety, the company is passionate about reducing its environmental footprint.

All in the family

Founded in the early 1900s, the family-run wholesale bakery is currently in its **fourth generation**. Calise Bakery's products are sold to grocery retailers, sub shops, schools and hospitals throughout New England, New York and Virginia.

"This year, Calise Bakery will be celebrating 110 years," says Peter Petrocelli, Chief Financial Officer. "It is truly remarkable how the company has stayed in the family after all these years. It has grown from a small neighborhood bakery in Rhode Island to a major wholesaler."

"This project is a pillar that supports the 'Calise Way,' which is our mission to produce high-quality breads and rolls in a safe and clean environment."

— Peter Petrocelli, Chief Financial Officer, Calise & Sons Bakery

Calise Bakery Case Study continued

Teamwork at its best

Equipping the bakery for another 100 years of success, Calise leadership partnered with National Grid, Leidos Inc. and RISE Engineering to get started.

National Grid covered nearly **30 percent** of costs through the National Grid incentive program – a significant savings for the bakery. Leidos consulted with Calise's Chief Engineer John Almagno to identify energy efficiency measures. RISE Engineering handled the lighting component, including ordering materials and installation. Leidos identified the mechanical measures and assisted with energy savings calculations and incentives paperwork. Almagno managed the overall project, including scheduling.

Ready, set, upgrade

The year-long project consisted of four major upgrades to the HVAC, refrigeration, compressed air and lighting systems:



HVAC: Due to aging equipment, the existing chiller and HVAC systems needed to be replaced. According to Almagno, maintaining the right temperature and humidity in the bakery is essential for product quality.

In addition, an HVAC system maintains positive pressure, which prevents outdoor air contaminants from entering the facility. This is an important requirement for the bakery's BRC and GFSI food safety accreditations. With the new system, programmable logic controls and added air intakes better maintain positive pressure.



Refrigeration: Calise Bakery has about 1,500 square feet of refrigeration space, including one large freezer and two walk-in coolers. To increase energy efficiency, Freeaire upgraded the condenser and evaporator fan controls. With the new refrigeration system, the bakery has saved more than \$10,000 per year in energy costs.



Compressed Air: Compressed air is a critical part of manufacturing operations. However, this is an inherently inefficient process, as shown in a compressed air survey conducted at the facility. The company previously added a large compressor to augment two smaller compressors. A larger, more efficient compressor was installed. Air leaks were identified and repaired, all incentivized by National Grid. The result added to the energy savings.



Lighting: From improving energy efficiency to enhancing product quality, lighting plays an important role in daily operations. The bakery originally used metal halide high-bay lights before switching to fluorescent bulbs about 10 years ago. Now, they were ready to upgrade to LEDs for significant energy cost and maintenance savings and improved light quality.

RISE Engineering changed the facility's fluorescent lights to LEDs. In addition, exterior lighting was upgraded to increase employee safety and security.

In the 55,000-square-foot production area – nearly the size of a football field – the brighter LED lighting allows for more accurate inspections of product colors and textures. The greater visibility also increases employee safety. According to Petrocelli, the old lighting created a dark and dreary facility. Now, the aesthetically pleasing environment has improved employee morale and retention.

Calise Bakery Case Study continued

A busy bakery

Operating 24 hours a day, six days a week, Calise Bakery is a fast-paced, large-volume manufacturer. As a result, one of the biggest challenges was accommodating the installation around the busy production schedule.

"Due to food safety protocol, we couldn't have them install equipment around our products," says Petrocelli.

"The installation had to be completed when we had down time on Sundays and Tuesdays. Although this extended the timeframe, RISE Engineering was very accommodating with our schedule."



PROJECT FAST FACTS:

Final cost of Installed ECMs	\$383,052
Authorized Incentive	\$103,442
Customer Cost	\$279,629
Annual kWh Reduction	543,071 kWh
Annual Carbon Reduction	200 metric tons CO ² @ 810 pounds per MWh
Annual Savings	\$70,600 @ \$0.13/kWh
Return on Investment (ROI)	25%

A catalyst for change

For bakery management, the partnership with National Grid, RISE Engineering and Leidos was the key to success. Instead of tackling it on their own, bakery employees were able to focus on what they do best: producing quality breads and rolls.

"It would be very difficult to do the equipment upgrades on our own," says Almagno. "In a DIY project, there is always the potential to make mistakes. It was helpful to work with experts who understand what is required and ensure we qualify for the food safety accreditations."

These equipment upgrades have had a major impact on the bakery, such as significant energy cost savings of **over** \$60,000 annually, improved product quality and safety, and a reduced carbon footprint. "Many customers ask about our sustainability efforts, so it's great to be able to talk about these upgrades," Petrocelli says. "This project has helped us pave the way for continued success now and in the future."

Give your manufacturing facility an upgrade

National Grid can help your efficiency projects come to light. We offer technical guidance and can help you learn the best opportunities for energy efficiency.

And when you're ready to make a change, technical energy advisors are available at no cost through National Grid's industrial initiative in Rhode Island and Massachusetts.



Lifespan is always on the lookout for energy improvements.

With four major hospital campuses, multiple offsite facilities (ambulatory care, MRI buildings, offices) and buildings ranging in age and size, Lifespan was facing many energy efficiency challenges in identifying and prioritizing projects that would be suitable for its overall strategic energy management plan.

Collaborative Process

National Grid approached Lifespan to help examine energy savings solutions. This was based on a multi-year examination of opportunities that would support the growth of the hospital in an efficient, asset management-driven process. When individual projects were considered holistically as part of an overall strategic energy management plan, the puzzle pieces fit and served as a catalyst for National Grid and Lifespan to move forward together.

Along with National Grid, **B2Q Engineering** was instrumental in making this project a reality through **technical assessment studies**. Using these studies and Lifespan's in-house design capabilities, they developed a cost-feasible plan that took into account project risk, available capital and the financial payback period.

Invisible Yet Invaluable

With ten project groups, each with multiple measures across Lifespan campuses, the behind-the-scenes improvements were the real game changers. These largely invisible upgrades included, but were not limited to:

- Implementing and optimizing outside air reset control
- Repairing non-functioning economizers
- Reducing air handling unit (AHU) fan speed during unoccupied hours
- Installing or repairing variable-frequency drives (VFDs) for fans and pumps
- Tying HVAC systems into the building management system (BMS)

"The project was successful, the energy savings are great and all disciplines worked together to achieve scale. These upgrades also aligned with our commitment to environmental stewardship."

- Thomas Magliocchetti, Vice President, Facilities Services

Lifespan Case Study continued

These upgrades allowed for **greater command over critical systems**, such as heating and cooling, resulting in improved energy efficiency. In addition, controls that monitored temperature and fan speed translated into non-energy benefits, notably greater patient comfort.

Part of this project also consisted of a significant lighting upgrade to all of Lifespan's campus facilities, including parking lots. Among the non-energy benefits, the project produced a positive change for patients, visitors and staff. Doctors and other hospital employees immediately remarked about the brighter lighting throughout the hospital campuses.

These improvements strengthened the efficiency of Lifespan's basic operating systems. At the heart of the strategic energy management plan, this comprehensive project provided a cost-feasible approach that considered project risk, available capital and financial payback. When all the individual projects were bundled together, the result proved to be an attractive return on investment.

Improvements Abound in an Environment of Care

There are many ways Lifespan's upgrades have benefited patients, staff and visitors.



Greater cooling capacity enables a more comfortable environment.



More even temperatures and lighting levels improve the sense of well-being.



The lighting upgrades create better visibility and ambience.



The new integrated BMS has the ability to efficiently regulate system functions while reducing the health system's overall operating costs and environmental impact.

How National Grid and Lifespan Made This Happen Together

Of all the projects recommended, Lifespan went forward with 60% of the projects initially. National Grid was able to provide Lifespan with generous financial incentives through its Strategic Energy Management Plan (SEMP) initiative which helped offset a significant portion of the equipment and installation costs. The combination of these incentives and an attractive on-bill financing option helped Lifespan secure the necessary capital to invest deeply in energy efficiency and patient care, while also reaching an attractive return on investment for the hospitals.

Lifespan achieved 8 to 10 percent in savings. This equates to roughly \$1.4 million annually.

When asked if companies should consider National Grid for their future projects, a representative from Lifespan said, "I would highly recommend this thoughtful approach for energy planning and environmental stewardship. The energy savings are great, and all disciplines worked together to achieve scale."

After the success of their last project, Lifespan is working with National Grid again to enable implementation of the remaining projects. The collaborative partnership between Lifespan, National Grid, and B2Q Engineering made this a rewarding endeavor, benefiting Lifespan's patients, visitors, employees and finances.

With a team of technical experts, financial incentives to drive down capital costs, and resources to help you every step of the way, there's no better way to achieve the scale required to improve energy efficiency.

Ready to take the first step? Contact National Grid:

Call: 1-855-236-7052

Email: energysavings@nationalgrid.com



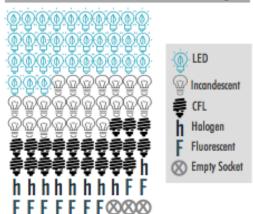
Rhode Island Residential Lighting Market Assessment

This study updated estimates of lighting saturation and assessed the lighting market in Rhode Island. NMR visited 75 homes in April and May of 2018 to collect data on lighting use, storage, and purchasing behavior. The results show that National Grid programs have had a strong impact on LED adoption. LED saturation and penetration rates in the comparison area (New York) continued to lag behind the rates measured in Rhode Island. In addition, ENERGY STAR LEDs (the only LEDs supported by the programs) accounted for the majority of the difference in LED saturation between the states. There were nearly five times as many ENERGY STAR LEDs in use in Rhode Island compared to New York.

2018 Saturation Rates

Saturation is the percentage of sockets filled by a specific bulb type.





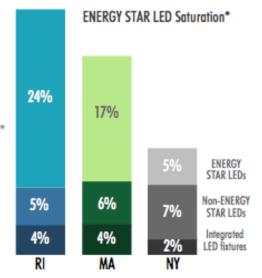
In Rhode Island, 33% of all installed bulbs were LED, followed by incandescent (24%), CFL (22%), halogen (9%), and fluorescent (9%). 3% of sockets were empty. Total efficient bulb saturation was 64%. In Rhode Island, 86% of all LEDs purchased or received in the previous year were ENERGY STAR, compared to 74% in Massachusetts and 37% in New York.*



Saturation of ENERGY STAR LEDs in Rhode Island (24%) was nearly five times the rate observed in New York (5%).

Massachusetts, which also has program support, has 17% ENERGY STAR LED saturation.*

This is strong evidence that Rhode Island programs (which exclusively support ENERGY STAR products - including LEDs) are driving increased adoption of LEDs.



*Data collection in Rhode Island took place nearly 6 months after Massachusetts and New York.

In Rhode Island, LEDs are installed in all room types; even the rooms with the lowest penetration still had some LEDs.

The rooms with the highest LED penetration were offices, dining rooms, and bedrooms.



/0%



3%



65%

The rooms with the lowest LED penetration were garages, closets, and utility/laundry rooms, besides "other" room types.



32%



31%



22%

LED Penetration Rates



Rhode Island Prospective NTG

Net-to-gross (NTG) is a ratio that indicates how much of a program's savings the program is actually responsible for.





Reflector 2019: 45% 2020: 40%







research into action*

National Grid's HEAT Loan in Rhode Island provides financing for space heating, water heating, and weatherization (Wx) upgrades to qualified customers participating in the EnergyWise program. Customers can borrow up to \$25,000 for up to seven years at 0% interest.

OBJECTIVE: Understand the extent to which HEAT Loans enable HVAC and Wx projects; and identify opportunities to enable higher uptake of measures.



METHODS



Program Database Analysis



Participant Survev



HVAC Contractor In-Depth Interviews



HEAT Loan Lender In-Depth Interviews

KEY FINDINGS

- 3,354 customers (19% of EnergyWise participants) received a HEAT Loan from 2014 to 2017.
- 71% of surveyed EnergyWise participants were aware of the HEAT Loan.
- No surveyed customers would be interested in the HEAT Loan at ≥ 5% interest. Lenders and contractors said 3% interest is where most customers would lose interest.
- Substantial interest in expanding HEAT Loan offering to AC and windows.

- HEAT Loans enabled greater natural gas savings per HVAC and/or Wx project compared to non-HEAT Loan recipients, but not greater electric savings.*
- Without HEAT Loan, 76% would delay, reduce or cancel their project.
- Contractors and lenders report some customer confusion about HEAT Loan steps and requirements.
- * The study did not include analysis of oil/propane savings

CONCLUSIONS

AND

RECOMMENDATIONS

- HEAT Loan enabled energy efficiency investments that otherwise would not have happened.
- Customers, contractors, and lenders liked the 0% interest aspect of the loan.
- Conduct educational outreach to clarify customer participation process and emergency replacement policy.
- Determine additional cost-effective measures for HEAT Loan.

Appendix B: 2018 Energy Efficiency Vendors



2018 ENERGY EFFICIENCY VENDORS

The following list includes contractors and subcontractors performing work directly for National Grid Energy Efficiency programs in 2018 that were counted in the FTE analysis and additional companies who assisted customers to secure equipment rebates, for example through the New Construction, High Efficiency HVAC programs, and upstream lighting. 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.

The list is organized by state, with companies then listed alphabetically. Rhode Island firms are listed first. Of the 1,109 companies, agencies, contractors and sub-contractors listed here, 73% are either headquartered in Rhode Island or have a physical presence in Rhode Island. 19% are Massachusetts-based companies with no physical presence in Rhode Island. 2% of companies are Connecticut firms. The remaining firms have offices in the other New England states or outside of New England.

Vendor	Town	State
2 Sons Electric LLC	East Providence	RI
A & L Plumbing Mechanical and Consulting	Westerly	RI
A E Costa Electrical Contractor LLC	Warwick	RI
A Perry Plumbing, Heating, & Construction	Coventry	RI
A&J Electric	Cranston	RI
A.T. Electric Co.	Pawtucket	RI
A-1 Electric Co.	North Smithfield	RI
AAA Plumbing, Heating, And Contracting	Johnston	RI
Abernathy Lighting Design	Providence	RI
Able Electric Inc	Warwick	RI
Accu Electric	Providence	RI
Accurate Trades LLC	Providence	RI
Ace Electric	Providence	RI
Acorn Maintenance	Warwick	RI
ACR Construction and Management Corporation	Johnston	RI
Action Plumbing	Pawtucket	RI
Addessi Plumbing	Providence	RI
Adi Energy	Smithfield	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.	Cumberland	RI
After Hours Plumbing	Providence	RI
Air Conditioning Services of New England Inc.	Cranston	RI
Air Flow Inc	Coventry	RI
Air Metalworks Ltd	North Providence	RI
Air Quality LLC	Warwick	RI
Air Synergy Cooling and Heating Systems Specialists	Providence	RI
Airhart Electric Inc.	Coventry	RI
Air-Tech Heating & Air Conditioning	Rumford	RI
AJ's Plumbing and Heating	North Providence	RI
AJS Plumbing and Heating	North Providence	RI
Ak Mechanical	Coventry	RI
Ala & Sons Construction Inc.	Warwick	RI
Aladdin Electric Co. Inc.	Johnston	RI

Aladdin Electric Co. Inc.	Johnston	RI
Alan Menard Plumbing LLC	Pawtucket	RI
Alan Paul Electric	Warwick	RI
All Electrical Solutions	Providence	RI
ALL IN ONE Plumbing and Heating	Coventry	RI
All Phase Heating & Cooling	Coventry	RI
All Seasons Heating and Air Inc.	Johnston	RI
All Star Insulation	Providence	RI
Allen Plumbing & Heating	North Providence	RI
Allen's Electric	Woonsocket	RI
Alliance Plumbing and Heating Inc.	Cumberland	RI
Almeida Plumbing, Heating & Air	Greenville	RI
Alpha Electrical Contractors Inc.	Riverside	RI
Al's Electric	North Providence	RI
Amazon	Barrington	RI
American Green Energy Inc	Harrisville	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
Amity Electric	Wyoming	RI
Anchor Insulation Inc.	Pawtucket	RI
Andrews Heating	West Greenwich	RI
Andy's Overhead Electric LLC	Exeter	RI
Anibal J Cante	Central Falls	RI
Anthony Divello Construction	Saunderstown	RI
Anthony J Santurri Jr	East Greenwich	RI
Anthony Macari	Warwick	RI
Anthony's Plumbing and Heating Hvac	Riverside	RI
Anthony's Quick Plumbing and Heating	Johnston	RI
Anytime Plumbing Services	Harrisville	RI
APB Plumbing and Heating	Cumberland	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 Building Companies LLC	Pawtucket	RI
Arema Hvac	Greenville	RI
Aris Plumbing Inc	Middletown	RI
Arthur Lettieri	Providence	RI
Arthur W Adler	Bristol	RI
Aten Energy	Pawtucket	RI
Atlantic Control Systems, Inc.	North Kingstown	RI
Atlantic Plumbing and Heating Supply Co.	Coventry	RI
Atlantis Comfort Systems Corp	West Warwick	RI
Atlas Copco Compressors Inc	Johnston	RI
Atms Electrical	East Providence	RI
Auburn Electric Company	Cranston	RI

Audet, E.W. And Sons Inc	Providence	RI
Aussant Electric	Cumberland	RI
Autiello Plumbing and Heating LLC	Cranston	RI
Automatic Heating Equipment Inc	Providence	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	Warwick	RI
B and M Plumbing And Heating	Warwick	RI
B&D Boiler Removal Inc.	Pawtucket	RI
B&W Building Maintenance Electrical Contractors	North Providence	RI
Baptista Electric	Cumberland	RI
Bard Plumbing and Heating	Warwick	RI
Barlow Heating LLC	Warwick	RI
Barrett Plumbing and Heating Inc	West Greenwich	RI
Barrington Plumbing and Heating	Barrington	RI
Bashaw Electric	East Greenwich	RI
Baum Energy	Warren	RI
Baynes Electric Supply Company	Westerly	RI
Bayside Electric Company	Warwick	RI
Beach Mechanical	Warwick	RI
Behan Bros. General Contractor	Middletown	RI
Belcher Electric LLC	Woonsocket	RI
Beneficial Energy Products	Pawtucket	RI
Bermudez Plumbing and Heating	Pawtucket	RI
Bertrand Plumbing Inc.	Pascoag	RI
Best Buy	Warwick	RI
Biello Electric Co	Fall River	RI
Bileau Hvac Inc	Woonsocket	RI
Bill Gornostai Electric	Warwick	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
Bob's Mechanical	Warwick	RI
Boss Heating & Cooling	Westerly	RI
Boss Heating and Cooling Inc	Charlestown	RI
Boucher Hvac Inc.	Wakefield	RI
Boulevard Plumbing and Heating	Middletown	RI
Brandon Greist	Cranston	RI
Brano & Son Construction	Pawtucket	RI
Brendan Prest Plumbing	Wakefield	RI
Brian's Fire Alarm System Solutions, LLC	North Smithfield	RI
Brien Godin	Cumberland	RI

Brittain Electric Inc.	Jamestown	RI
Broway Electric, LLC	Cranston	RI
Bruno & Son Electric Inc.	Providence	RI
Bryant's Lemme	Coventry	RI
BSH Heating and Appliance	Barrington	RI
Buckley Heating and Cooling	Wakefield	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 Carr Electric LLC	Cumberland	RI
C. Mancuso Construction, LLC	Cranston	RI
C.W. Cummings Plumbing Co Inc.	Coventry	RI
Cadorette Plumbing & Heating	North Smithfield	RI
Calyx Retrofit	Lincoln	RI
Campco Electrical Services LLC	Wyoming	RI
Capital Good Fund	Providence	RI
Capitol Plumbing and Heating Services Inc	Cumberland	RI
Capo Plumbing and Heating	Foster	RI
Carbone Plumbing Heating and Air	Johnston	RI
Cardillo Plumbing & Heating, Inc.	Hope	RI
Carello Plumbing	East Providence	RI
Carjon Air Conditioning and Heating Inc.	Smithfield	RI
Carl Gross	Providence	RI
Carlino Electric Inc.	Coventry	RI
Carnevale Electric	Johnston	RI
Carter Brothers Inc	Glendale	RI
Cassana HVAC LLC	Johnston	RI
CBRE	Providence	RI
Cd Heating Inc.	Cranston	RI
Century Electric	Westerly	RI
Century Heating	Smithfield	RI
Century Sheet Metal	Riverside	RI
Chad Megrew Plumbing and Heating	Charlestown	RI
Charland Enterprises Inc.	Pawtucket	RI
Charles Burton	Lincoln	RI
Charles Doherty	Warwick	RI
Charlie's Heating Service LLC	East Greenwich	RI
Chevalier Electric	Johnston	RI
Chris Cardillo Electrician	Providence	RI
Chris Electric, Ltd	Newport	RI
Christopher Coppolino	Warwick	RI
Ciamparelli Plumbing and Heating	West Kingston	RI
Cipriano Plumbing and Heating	Wakefield	RI
CJ's Plumbing and Heating Specialists LLC	Smithfield	RI
Clearesult	Providence	RI
Clermont Mechanical Plumbing & Heating Services	Glendale	RI

Climate Controlled Systems Inc.	Cranston	RI
Climate Masters	Providence	RI
CMAGS Heating and Air Conditioning	Warwick	RI
Coastal Electric Inc.	Newport	RI
Cobra Electric and Compaction Services, Inc.	Providence	RI
Cola Plumbing and Heating Inc.	North Kingstown	RI
Comfort Systems & Solutions Inc.	West Kingston	RI
Commercial Electric	East Providence	RI
Community Action Partnership of Providence	Providence	RI
Competitive Chimney Sweep Inc.	Woonsocket	RI
Comprehensive Community Action	Cranston	RI
Computer Sciences Corporation	Warwick	RI
Construction and Rehabilitation	Johnston	RI
Consumers Propane - Bousquet Oil	Woonsocket	RI
Contemporary Builders	East Greenwich	RI
Continental Engineering and Service Co Inc	Johnston	RI
Corona Plumbing and Heating Supply	Providence	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
Cutler H Besser & Sons	Scituate	RI
Cv Construction	Cumberland	RI
D & D Electric Company	East Greenwich	RI
D & E Electric, Inc.	Warwick	RI
D & J Electric Corporation	Warwick	RI
D & J Plumbing and Heating Inc.	Carolina	RI
D & S Construction Company	Lincoln	RI
D F S Plumbing Services	Cranston	RI
D Gomes Electric LLC	Pawtucket	RI
D&D Metal Works	Cranston	RI
D&V Mechanical Inc.	Westerly	RI
D. Heywood Construction Inc.	Johnston	RI
Dan S Electric	Exeter	RI
Dante Gonzales Heating	Providence	RI
David Development Group LLC	Newport	RI
David Fisher	Lincoln	RI
David Parrillo Plumbing Heating and Son LLC	Норе	RI
David Seddon Electrician	Rumford	RI
David R Gince Electrician	Woonsocket	RI
Dayco Electric	Warwick	RI
Delmonico Enterprises -Plumbing and Heating	Cranston	RI
Delta Mechanical Contractors, LLC	Warwick	RI
Desarro Electric LLC	Hope Valley	RI
Desimone Electric	Cranston	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
_	Woonsocket	RI
<u>-</u> .	Johnston	RI
	Cranston	RI
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	Warwick	RI
	Middletown	RI
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	rawlucket	RI
	Warwick	RI
Emmett Electric	East Providence	RI
	Desmarais Plumbing and Heating Inc. Dessaint Electric Co. Devivo Plumbing and Heating Dg Electric Dimery Electrical Dion Signs Dionne's Plumbing System Dirocco Plumbing and Heating Services LLC Divona Plumbing DJL Electric Dmr Builders Don Jesting & Sons LLC Donald E. Lemay Electrician Donovan And Sons Inc. Doug Brownlow Associate General Contractor DPR Sheet Metal Drivers Plumbing and Mechanical Inc. Ds Plumbing DSA Mechanical DSC Heating and Air Conditioning Dudek Oil Co. Dupuis Energy Durante Electric DWI Group Ltd Dynamic Air Systems Inc. E. A. Marcoux & Son Inc E.W. Audet & Sons Inc. EAM Anacoux And Son, Inc. East Coast Building and Remodeling Inc East Coast Masonry & Restoration Eastern Electric Construction Co. Inc Eastern Plumbing Co Inc. Eastend Electric EB Wood Construction Ecologic Spray Foam Insulation Inc. Econ Electric Contractors Economy Air Inc Ed Beaudoin Plumbing and Heating Edward Martino Plumbing and Heating Edward Martino Plumbing and Heating Edward Silvia Heating Plumbing Inc Electrical Wholesaler Inc. Electrical Wholesaler Inc. Electrical Wholesaler Inc. Electric-Tec Systems Inc Elite Heating and Cooling LLC Emergency Response Plumbing Heating and Air Conditioning Emmett Electric	Dessaint Electric Co. Devivo Plumbing and Heating Dg Electric Woonsocket Dimery Electrical Dion Signs Central Falls Dionne's Plumbing System Woonsocket Dirocco Plumbing and Heating Services LLC Divona Plumbing DIL Electric Warren DIL Electric Warren DIM Bidders Donald E. Lemay Electrician Donovan And Sons Inc. Doug Brownlow Associate General Contractor DPR Sheet Metal DSA Mechanical DSC Heating and Air Conditioning DSC Heating and Air Conditioning Duguis Energy Durante Electric Duyli Group Ltd Dynamic Air Systems Inc. E. A. Marcoux & Son Inc E. W. Audet & Sons Inc. EAW. Audet & Sons Inc. EAW Ander Sons Inc. EAW Ander Sons Inc. EAW Ander Sons Inc. EAW Cooks Bond Inc. EAW Cooks B

Emre Construction LLC	Saunderstown	RI
Energy Conservation Inc.	South Kingstown	RI
Energy Efficient Exteriors, Inc.	Pawtucket	RI
Energy Electric Co, Inc.	Woonsocket	RI
Energy Geeks	North Smithfield	RI
Energy Monster	Lincoln	RI
Energy One Southern Mechanical	West Warwick	RI
Energy Source LLC	Providence	RI
Ep Electric	East Providence	RI
Eric R Krause Electrician	Cranston	RI
Esmond Electric Cod Acct	Smithfield	RI
Eurotech Climate systems LLC	Pawtucket	RI
Eveready Electric	Barrington	RI
Evergreen Plumbing and Heating Co., Inc.	Warwick	RI
EW Audet & Sons	Providence	RI
F & S Electric Inc.	Bristol	RI
Falcone Electric	Hope Valley	RI
Feula Plumbing and Heating LLC	Johnston	RI
Figliozzi Plumbing and Heating	Peace Dale	RI
Five Star Mechanical	West Kingston	RI
Five Star Plumbing and Heating	Johnston	RI
Fleet Plumbing and Heating Inc.	North Scituate	RI
Fletcher Heating Burner Repairs	Ashaway	RI
Flou Heating and Air Conditioning	Charlestown	RI
Fossati Plumbing and Construction	Greenville	RI
Foster Electric, Inc.	Tiverton	RI
Francis Heating and Hydronics	East Providence	RI
Frank Alessio Building Contractor	Westerly	RI
Frank Dimaio Heating LLC	Cranston	RI
Frank Lombardo & Sons	Providence	RI
Fred Manuppelli Plumbing and Heating	Johnston	RI
Fressilli Plumbing	Riverside	RI
Frontier Mechanical LLC	Providence	RI
Furtado Lighting & Design LLC	Bristol	RI
G & B Electric	Exeter	RI
G & L Electric Inc.	Woonsocket	RI
G Asselin Improvements Property Maintenance	Coventry	RI
G Gagnon Sons Limited	Cumberland	RI
G M Perron & Son Inc.	North Smithfield	RI
	North Smithfield	
Gamache Enterprises Gambit Electric Inc.		RI
	Johnston	RI
Gary Figure Floatrisian	Woonsocket	RI
Gary Faction Lives	North Smithfield	RI
Gary Fortin Hvac	Smithfield	RI
Gas Doctor	Providence	RI
Gatta Electric LLC	Cranston	RI
Gem Plumbing and Heating Services Inc.	Lincoln	RI
Ginos Plumbing and Heating	Warwick	RI

Giorno Plumbing and Heating	Cranston	RI
GKT Refrigeration Inc.	Pawtucket	RI
Global Pro Maintenance Corporation	Warwick	RI
Gm Control Systems	North Smithfield	RI
Granite City Electric	Pawtucket	RI
Gravel Electric Inc.	Harrisville	RI
Greenwich Insulation	West Greenwich	RI
Greenwood Plumbing and Heating	Warwick	RI
Greg R Brown	Smithfield	RI
Griff Electric LLC	Portsmouth	RI
Gs Roy Electrical Service Inc	Westerly	RI
Gt World	Chepachet	RI
Guarino Power Systems LLC	Smithfield	RI
GYR Makina Construction and Plumbing	Central Falls	RI
H and H Heating	Lincoln	RI
H V Holland Inc.	Jamestown	RI
Hawkes Plumbing and Heating Co Inc.	Chepachet	RI
HB LLC	Providence	RI
Heating Unlimited South County Energy	Westerly	RI
Heffernan Mechanical Services	Warwick	RI
Henderson Electric	Warwick	RI
High Tech Plumbing and Mechanical LLC	Ashaway	RI
Hill & Harbor Design Build	East Greenwich	RI
Hill Electrical Services	Pascoag	RI
HK Heating Inc.	Coventry	RI
HM LEI AND Associates LLC	Woonsocket	RI
Holgate Plumbing and Heating	Cumberland	RI
Holland Electric	Peace Dale	RI
Homeserve USA	Riverside	RI
Houle Plumbing and Heating	Greene	RI
Howard C Saucier	Pawtucket	RI
Howard's Heating Service	North Kingstown	RI
HP Electric Co.	Cranston	RI
Hutchins Electric	Greenwich	RI
Hvac Inc	Cumberland	RI
Hynson Electrical Construction Inc.	Bristol	RI
lasimone Plumbing-Heating & Drain Cleaning Inc.	North Providence	RI
Innovative Plumbing and Heating Inc.	North Providence	RI
Ironman Heating and Cooling	Riverside	RI
Iroquoian Plumbing and Heating Supplies	Providence	RI
It's Shocking Electric Corp.	Cranston	RI
Izzo & Sons Electric	Providence	RI
J & A Electric	Providence	RI
J & J Electric	Warwick	RI
J Berard Heating and Plumbing	Warwick	RI
J H Lynch & Sons	Rumford	RI
J Joyce Plumbing and Heating Inc.	Warwick	RI
J Truppi Plumbing	North Providence	RI

J&E Mechanical Contractors Inc.	Johnston	RI
J&K Supplemental Plumbing Inc.	East Greenwich	RI
J&O Plumbing LLC	Warwick	RI
J. Marchetti Construction and Snow Removal LLC	Warwick	RI
Jack's Electric	Jamestown	RI
Jacob Messier	Warwick	RI
Jacobson Energy Research	Providence	RI
Jake Lavoie Plumbing and Heating LLC	Pawtucket	RI
James Amaral Mechanical	Riverside	RI
Janton Electric Contractors	West Warwick	RI
Jaquez General Contractor	Providence	RI
Jason M Malafronte	Bristol	RI
Jatwire Electric LLC	Tiverton	RI
Jbe Industries LLC	Warwick	RI
Jc Electric Inc.	Wakefield	RI
	West Warwick	RI
Jc Refrigeration Jd Mechanical Inc.	Greenville	
		RI
JD Mello Jr. Plumbing and Heating Inc.	Newport	RI
Jdv Electric	Cranston	RI
Jed Electric Inc.	Greene	RI
Jeffrey Reynolds	Westport	RI
Jenkins Enterprises LLC	Middletown	RI
Jenkins Heating	Smithfield	RI
Jesse Bernardin Hvac R	Chepachet	RI
JJ Mcnamara Electric	Providence	RI
Jkl Engineering Company Inc.	Providence	RI
JI Electric	Middletown	RI
JMAC Plumbing and Heating Inc.	Warwick	RI
Jmb Mechanical Inc	Johnston	RI
Jmc Construction	Johnston	RI
Jo Da Plumma	Providence	RI
Joaquin Refrigeration	Portsmouth	RI
Joe Britto	Providence	RI
Joe Chaves Heating and Plumbing	Middletown	RI
Joe Vigneault Electrician	Riverside	RI
John Fraser Dba Gastech	Cranston	RI
John Jackson	Cumberland	RI
John Nicholson Mechanical Contractor	North Scituate	RI
John St George	Foster	RI
Johnny Home Solutions LLC	Central Falls	RI
Johnny Mack Electric	Narragansett	RI
Johnny's Oil and Heating Inc.	Providence	RI
Johnson & Johnson Plumbing and Heating Inc	Narragansett	RI
Johnston Electric Inc.	North Scituate	RI
Johnstone Supply	Providence	RI
Joseph A Gelinas Plumbing LLC	Warwick	RI
Joseph Diorio	Pawtucket	RI
Joseph Stroscio - Morra Electric	Johnston	RI
JOSEPH SU OSCIO INIOTTA LICCUTO	3011130011	131

Jouberts Heating and Air Conditioning	Warwick	RI
Jp Island General Services	Middletown	RI
Jr Vinagro Corporation	Johnston	RI
JS Plumbing and Heating	North Providence	RI
Julio Ortiz	Johnston	RI
Just Heat	Portsmouth	RI
Justin Boiani - Boiani Electric	Middletown	RI
Kafin Oil Company Inc.	Woonsocket	RI
Kelco Electric Inc.	Johnston	RI
Kelly Electric LLC	Cumberland	RI
Kens Heating	Providence	RI
Kevin Messier Electrical	Cumberland	RI
Kirk Rerick	Норе	RI
Kmj Electric & Construction	North Providence	RI
Koolco Inc.	Wakefield	RI
Kwik Plumbing and Heating, Inc.	Johnston	RI
Kyle Quinn Hvac Service	Warwick	RI
L J Giorgi Plumbing and Heating Inc.	North Providence	RI
L&B Remodeling	North Providence	RI
L&F Plumbing Inc	Cranston	RI
Lad Electric LLC	Providence	RI
Lama & Sons	Warwick	RI
Lamar And Sons	Greenville	
		RI
Lamplighter, Inc.	Little Compton	RI
Landry And Martin Oil Co Inc.	Pawtucket	RI
Landscape Lighting Concepts	Cranston	RI
Leidos Engineering	Newport	RI
Leveille Electric	Smithfield	RI
Lifespan Corporation	Providence	RI
LIGHTHOUSE CONSULTING Group Inc.	Warren	RI
Lincoln Energy Mechanical Services Inc	West Warwick	RI
Lombardo Electric Company	Warren	RI
Louie Electric & Son	Providence	RI
Lp And Son LLC	Cranston	RI
Lubera Plumbing LLC	Coventry	RI
Lucas-Milhaupt LLC	Warwick	RI
Luke Beaudreault Plumbing and Heating	North Smithfield	RI
Luso Plumbing and Heating Inc.	Cumberland	RI
M & M Electric Inc.	Providence	RI
M and J Plumbing, Inc.	West Greenwich	RI
M D'andrea Electric LLC	Portsmouth	RI
Madden Electric	Little Compton	RI
Magnetic Electric Inc.	Warwick	RI
Main Street Plumbing LLC	Pawtucket	RI
Malone Plumbing and Heating Inc.	Cranston	RI
Mandarini Plumbing and Heating	Cranston	RI
Manning Plumbing Company	Warwick	RI
Map Electric	Woonsocket	RI
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Marcel Multi Services	Pawtucket	RI
Marciano Electrical Contractors	West Warwick	RI
Marinelli & Sons Electric	West Kingston	RI
Marisa Desautel	Providence	RI
Martel Plumbing and Heating	Lincoln	RI
Massed Electric	Warren	RI
Mastro Electric Supply Co Inc.	Providence	RI
Mastrocinque & Sons Plumbing	Portsmouth	RI
Matthew A Truppi	North Providence	RI
Matthew Cedarfield	Warwick	RI
Matthew Fitts Electrical	Greeneville	RI
Matts Mechanical	Smithfield	RI
	West Warwick	RI
Matt's Plumbing LLC Mccormick Electrical		RI
	North Kingstown	
Mcdonough Electric LLC	West Warwick	RI
Mckee Brothers Energy Solutions	Cumberland	RI
Mcs Electric Inc.	Portsmouth	RI
Mcshane Home Improvements Inc	Pawtucket	RI
MD Heating and Air Conditioning LLC	North Providence	RI
Mechanical Engineering	Central Falls	RI
Mechanical Hvac Systems Inc.	Wakefield	RI
Megawatt Energy Solutions LLC	Pawtucket	RI
Melco Plumbing and Heating Inc	Lincoln	RI
Menard Electric	Manville	RI
Meticulous Construction	Warwick	RI
Metro Electric	Woonsocket	RI
Mh Electric	Cranston	RI
Michael Chace Electrician	Johnston	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
Mike Chace	Johnston	RI
Mike Manfredo Electrician	North Providence	RI
Miller Electric Corp	West Warwick	RI
Miller Mechanical Inc.	Rumford	RI
MJ Electric and Refrigeration	Central Falls	RI
Mj Heating and Air Conditioning	Tiverton	RI
MJF Plumbing and Heating	Bristol	RI
Modern Mechanical LLC	Woonsocket	RI
Moonworks	Woonsocket	RI
Morel Plumbing & Heating LLC	North Providence	RI
Morra Electric Inc.	Johnston	RI
	Warren	RI
Morrair Heating and Air Conditioning LLC	Warren Warwick	
Mpg Machanisa LLC		RI
Mpg Mechanical LLC	Charlestown	RI

Mr. Plumber LLC	East Providence	RI
Mr. Rooter Plumbing	Warwick	RI
Msc Mechanical	Warwick	RI
Multi State Electric Co.	North Providence	RI
Mutual Engineering Service Company	Warwick	RI
National Efficiency Supply (Nes)	Providence	RI
National Refrigeration Inc.	Warwick	RI
Neil Smith Plumbing & Heating Contracting	East Providence	RI
New England Boiler Works	Coventry	RI
New England Energy Concepts Inc.	North Dighton	RI
New England Plumbing Heating and Air LLC	Foster	RI
New England Sheet Metal Inc	Cranston	RI
New Freedom Group	Coventry	RI
Newbury Insulation	Woonsocket	RI
Newport Electric	Portsmouth	RI
Nexgen Mechanical	Warwick	RI
Nexus Electric	North Providence	RI
Ngb Electric	Smithfield	RI
Nicholas Donnelly LLC	Cumberland	RI
Nightingale Heating	Providence	RI
Nite Oil	Tiverton	RI
Nivaldo Rocha	Central Falls	RI
Nolin Electric	North Scituate	RI
Nolin Electric Incorporated	Providence	RI
North Atlantic Heating Inc.	Coventry	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
Nrg Electrical Inc	Harrisville	RI
Oak Service Co	Central Falls	RI
Ocean State Air Solutions	Portsmouth	RI
Ocean State Mechanical Inc	Coventry	RI
Ocean State Service Group LLC	Cranston	RI
Oceanline Combustion	Pawtucket	RI
Ocwen Loan Servicing LLC	Pawtucket	RI
O'hearne Home Development	North Smithfield	RI
Omni Electric	Wakefield	RI
On the Side Hvac	Providence	RI
O'neil Electric Company	Warwick	RI
O'rourke James J Inc	Warwick	RI
Ost Services, LLC	Providence	RI
Owen Blanco	Warwick	RI
P & S Electric Inc.	East Greenwich	RI
P E Plumbing Inc	Tiverton	RI
Pagnozzi & Sons Plumbing	Smithfield	RI
Pajan Services Inc.	North Providence	RI
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Papa's Plumbing Corporation	Johnston	RI
Parrella Electric	Providence	RI
Patt Matt	Warwick	RI
Paul Holgate Plumbing	Warwick	RI
Paul Manfredo Electric	Warwick	RI
Paul Scotto Electrical	Portsmouth	RI
Paul Scotto Electrical Contracting	Portsmouth	RI
Pav Electric	Wakefield	RI
Pawtucket Power Association	Pawtucket	RI
Peak Plumbing and Heating LLC	Cumberland	RI
Pecchia Plumbing and Heating	Warwick	RI
Pellegrino Plumbing and Heating	Westerly	RI
Pelletier & Son Plumbing & Heating	North Kingstown	RI
Percivalle Electric Inc.	Warwick	RI
Perez LLC Plumbing Heating and Air Conditioning	Cranston	RI
Perfect Touch Electrical Cont Corp	Cranston	RI
Peter Bibby	Providence	RI
Peter Chilabato Sure Power Electrical	Portsmouth	RI
Peter Marino Electrician	Providence	RI
Petro Home Services	Warwick	RI
Petro West Bay Electric Inc.	Warwick	RI
Petronelli Plumbing and Heating	Johnston	RI
Pezzullo & Sons Electric Inc.	East Providence	RI
Pgl Contractors	Cumberland	RI
Philip Michael Child	Bristol	RI
Philip P Sands	Warwick	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	Ashaway	RI
Pinnacle Plumbing and Heating	Greenville	RI
Plumb Perfection	Johnston	RI
Plumbers Company Inc	Warren	RI
Plumbing and Heating Solutions LLC	East Greenwich	RI
Polar Air	Wakefield	RI
Polaris Plumbing & Heating Inc	Johnston	RI
Potvin Enterprises Inc.	Warwick	RI
Power by Design Electrical Contracting LLC	Richmond	RI
Powertrak Efficiency Systems, LLC	Bristol	RI
Pratt Plumbing and Heating LLC	Harrisville	RI
Precision Mechanical	Cumberland	RI
Premair Hvac	Warwick	RI
Premier Home Restoration	Cranston	RI
Presto Plumber LLC	Westerly	RI
Price Right Construction	Providence	RI
Priority Plumbing and Heating Inc.	Warwick	RI
Prout Construction Company	Coventry	RI
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Prout Mechanical	Warwick	RI
Providence Mechanical Services LLC	Smithfield	RI
PSE Agency	Providence	RI
Quinn Plumbing and Heating	Providence	RI
R & M Electric Inc.	Coventry	RI
R and G General Contracting	Central Falls	RI
R E L Services Inc	Johnston	RI
R.E. Coogan Heating Inc.	Warwick	RI
Ralph A Devivo	Lincoln	RI
Rama Electric	Wakefield	RI
Rambone And Sprague Oil Services Inc.	North Scituate	RI
Rapid Electric	Cranston	RI
Raymond Degnan	North Providence	RI
Raymond J Reinsant Plumbing	Lincoln	RI
Raz Heating & Plumbing Services	Foster	RI
Rb Queern Co.	Portsmouth	RI
Red White And Blue Mechanical LLC	Pawtucket	RI
Reddy Piping Concepts Inc.	Cranston	RI
Regan Heating & Air Conditioning Inc.	Providence	RI
Regent Electric Co Inc.	Coventry	RI
Regent Electric Company	Coventry	RI
Reilly Electrical Contractor Inc.	Providence	RI
Reliable Electric Corp.	Coventry	RI
Reliant Electric	Cranston	RI
Resendes Heating Service LLC	Coventry	RI
Restivos Heating and Air Conditioning	Johnston	RI
Rexel Energy Solutions (Munro Distributing)	Cranston	RI
Rexel/CLS	Warwick	RI
Rhode Island Heating Oil Company	Bradford	RI
Rhode Island Sheet Metal	East Providence	RI
Rhode Island's Affordable Heating and Air Conditioning Services	North Providence	RI
Rhodes Technologies Inc.	Coventry	RI
Ri Insulation	Hope	RI
Ri Pipe Guys	Warwick	RI
Ricci Electric	Cranston	RI
Richard Brochu	Manville	RI
Richard Distefano Heating and Cooling LLC	Warwick	RI
Richburns Plumbing	Newport	RI
Rightway Electric, Inc.	Providence	RI
Rise Engineering	Cranston	RI
Ritacco Electric LLC	Westerly	RI
Rmd Plumbing	Newport	RI
Robert Colaluca Plumbing Heating Cooling	Greenville	RI
Robert Dionne	Smithfield	RI
Robert Hagen Electrician	Warwick	RI
Robert Hopkins Electrician	Exeter	RI
Roberto Rodriguez Service LLC	Providence	RI
Roberts Electric	Pawtucket	RI
HONOI G LICCUITO	. avvidence	111

Ronald Vento Electrician	Johnston	RI
Rooter Man Plumbing	Johnston	RI
Ross Landy Electrician	Portsmouth	RI
Rossi Electric Company	Cranston	RI
Rpm Electrical Services	Providence	RI
Rsm Electric	North Providence	RI
Rst Mechanical	North Kingstown	RI
Russ Lembo Electrician	Johnston	RI
Rwl General Contractors	Pawtucket	RI
Ryan Electric Construction	Warwick	RI
Rycor Services	Cranston	RI
S & K Electric Inc.	Charlestown	RI
S & S Electric	Chepachet	RI
Sakonnet Electric	Bristol	RI
Sal Manzi And Son Plumbing and Heating Inc.	Cranston	RI
Sam Ponte Heating and Air Conditioning LLC	Foster	RI
Santoro Oil Company Inc.	Providence	RI
Santurri Electric	East Greenwich	RI
Sasa Energy LLC	Johnston	RI
Sasa Mechanical Contractors Inc.	Johnston	RI
Sauvageau, Roy	South Kingstown	RI
Sb Carbone Plumbing and Heating Co Inc	Cranston	RI
SCG Construction	Charlestown	RI
Scott Gatta Electric	Johnston	RI
Scotto Electric	Portsmouth	RI
Seaview Plumbing and Heating	Narragansett	RI
Sensible Heating and Air Conditioning LLC	Hope Valley	RI
Shamrock Electric	Middletown	RI
Shawn Woods Electric	Burrillville	RI
Shearman Oil	Portsmouth	RI
Shepherd Services	Cumberland	RI
Sheridan Electric Inc.	Warwick	RI
Simons Supply Co Inc	Pawtucket	RI
Sine Plumbing and Heating Co Inc	East Providence	RI
Site Specific LLC	Providence	RI
Sizemore Plumbing and Heating	Warwick	RI
Smalls Plumbing Inc.	Woonsocket	RI
Smc Mechanical	East Providence	RI
Smithco Oil Service	Wakefield	RI
Sms Oil Burner Service Inc.	Jamestown	RI
Sosa & Son Heating Air Conditioning & Refrigeration	Woonsocket	RI
South County Community Action	North Kingstown	RI
South County Energy	Westerly	RI
Spencer's Plumbing LLC	East Greenwich	RI
Spl Electrical Corporation	North Smithfield	RI
Stable Hvac	Pawtucket	RI
Staffall Electronic Hardware	Cranston	RI
Stafford Electric	North Scituate	RI

Stan Bailey Construction	Wakefield	RI
Standish Brothers Hvac LLC	Coventry	RI
Stan's Plumbing and Heating	Cumberland	RI
Stanton Electric, Inc.	Cumberland	RI
Statewide Insulation	North Smithfield	RI
Statewide Plumbing and Heating Co Inc	Cranston	RI
Stay Cool	Cranston	RI
Stedman And Company	Charlestown	RI
Stem Electrical	Warwick	RI
Stephen Andrea Fire & Electric, LLC	Coventry	RI
Stephen Haun Inc.	Providence	RI
Stephen Larochelle	Cumberland	RI
Stephen Turner Inc	Providence	RI
Sterling Mechanical Services	Greene	RI
Steven Cacicia Electrician	Providence	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 Lighting LLC	Warwick	RI
Superior Security Systems LLC	Cranston	RI
Supply New England	Pawtucket	RI
Supreme Duct Systems	Lincoln	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 Gomes Heating and Cooling	Warwick	RI
T Miozzi Inc	North Kingstown	RI
T. Cabral Rooter and Plumbing Repair	Cranston	RI
T. H. Malloy & Sons Inc.	Cumberland	RI
T.A. Gardiner Plumbing & Heating Inc.	Bristol	RI
Td Construction	Hope	RI
Tebano Electric	Bristol	RI
Tebo Electric Inc.	Woonsocket	RI
Technic Inc.	Cranston	RI
Teknicote Inc	Rumford	RI
Temptec Mechanical	Providence	RI
The Home Depot	Johnston	RI
The Plumber Company Lp	Cranston	RI
Thermal Energy Inc.	Cranston	RI
Therrien Mechanical Systems	Lincoln	RI
Thibault Plumbing and Heating Co	Cranston	RI
Thielsch Engineering Inc.	Cranston	RI
Thomas Calci Plumbing	Coventry	RI

Thomas McGee Plumbing and Heating	Forestdale	RI
Todd Campopiano Electrician	North Providence	RI
Tom Peters Plumbing & Heating Inc	Portsmouth	RI
Tom Whitaker Pm	Newport	RI
Tomark	Saunderstown	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 Construction Services Inc	Providence	RI
Total Control Hvac LLC	Cranston	RI
Towerhill Electric	Cumberland	RI
Towner Design Build	Pawtucket	RI
Tpf Electrical Services	Pawtucket	RI
Tri-Town Community Action	North Providence	RI
Tuma Insulations	Warwick	RI
Ug Nasons Inc.	Middletown	RI
Ultimate Plumbing Corporation	Warwick	RI
United Mechanical Inc.	Cranston	RI
Universal HVAC LLC	North Providence	RI
V Letizia Plumbing, Heating, Fire Protection	Providence	RI
Valco Electric	Warwick	RI
Valcourt Heating Inc.	Tiverton	RI
Valley Heating and Cooling Inc.	Wyoming	RI
Valley Plumbing and Heating	Cumberland	RI
Van's Electric Inc.	Bristol	RI
Vaughn Oil Company Inc.	Smithfield	RI
Vicmir & Sons Heating and Air Conditioning Controls	Riverside	RI
Victor Aillienello	Providence	RI
Viking Mechanical	Warwick	RI
Viking Supply Company	Westerly	RI
Villanueva Services	Cumberland	RI
Vinas Construction	Providence	RI
Vintage Plumbing	Riverside	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
Watermark Plumbing LLC	Cranston	RI
Wayne Electric, Inc.	Bristol	RI
Wesco Oil	Smithfield	RI
West Bay Electric	Providence	RI
West End Plumbing and Heating	Cranston	RI
Westbay Community Action	Warwick	RI
Wickford Appliance and Lighting Inc.	Pawtucket	RI
Wilkinson Plumbing and Heating	West Kingston	RI
Willam Rocchio	Coventry	RI
William Bernardino Electrician	Cumberland	RI

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William Francis	Bristol	RI
William Gornostai	Warwick	RI
William J Riley Plumbing and Heating	Warwick	RI
William R Vallee Jr. Plumbing and Heating	Block Island	RI
William Soares Electric	Bristol	RI
Wood's Heating Service	Providence	RI
Wordell Heating & Cooling LLC	Little Compton Johnston	RI
Wyman & Sons Electric Co	Warwick	RI
Zawadzki Plumbing and Heating Inc.	Warwick	RI
Zinc Heating and Air Conditioning	Warren	RI RI
Zompa Plumbing and Heating	Johnston	RI
Calson Corporation Association of Energy Services Professionals	Phoenix	AZ
· ·		CA
Autogrid Systems Inc Axiom Energy Solutions LLC	Redwood City Brea	CA
Cohen Ventures	Oakland	CA
CRM Orbit	San Francisco	CA
Nest	Palo Alto	CA
Regency Lighting	Chatsworth	CA
Whisker Labs Inc.	Oakland	CA
E Source Companies LLC	Boulder	CO
A&B Cooling & Heating Corp	South Windsor	CT
Duarte Costa	Jewett City	CT
Duncklee Cooling and Heating Inc.	Stonington	CT
Dynamic Building & Energy (Formerly Uplands Construction Group)	N. Stonington	CT
Hdl LLC	Jewett City	CT
J&M Plumbing and Construction LLC	Norwich	CT
Jkmuir LLC	Rocky Hill	CT
Kenair	Niantic	CT
L&M Electric LLC	North Branford	CT
Lupo Electric	Waterbury	CT
Mcneil Heating and Cooling	Pawcatuck	CT
Milla's Heating & Cooling LLC	Mystic	CT
Mystic Plumbing & Heating	Mystic	CT
Praxis Research Partners	Westport	CT
Simmons Hyac	Pawcatuck	CT
Smart Thermal Solutions LLC	Pawcatuck	CT
South Shore Heating and Cooling Inc	Pawcatuck	CT
Techniart Inc.	Collinsville	CT
Terranova Plumbing	Pawcatuck	CT
Thermaxx LLC	West Haven	CT
Tom Buehler Plumbing & Heating	North Stonington	CT
Wattsaver Lighting Products Inc.	East Hartford	CT
Williams & Associates Mechanical Contracting Inc.	North Stonington	CT
Wjr Plumbing and Heating LLC	Voluntown	CT
Cadeo Group LLC	Washington	DC
Energy Solutions Center	Washington	DC
Express Lighting, Corp.	Melbourne	FL
Express Lighting, corp.	MICIDOUTTIC	1 L

Parker Davis Hvac International Inc	Miami	FL
Sears Home Improvement Products Inc	Longwood	FL
Apogee Interactive Inc	Tucker	GA
Frontier Energy Inc	Chicago	IL
Innerworkings Inc.	Chicago	IL
3 D Lighting	Franklin	MA
A & M Electrical Mechanical, Inc.	Fall River	MA
A&M Electrical	Fall River	MA
Action Inc.	Fall River	MA
Adams Refrigerator and Air Conditioning	Seekonk	MA
Advanced Energy Services	Hopedale	MA
Aegis Energy Services Inc	Holyoke	MA
Ags Hvac Services LLC	Westport	MA
Ahaesy Electric	Fall River	MA
Air Masters Hvac Services of Ne Inc	Fall River	MA
Air Tight Insulators	Webster	MA
Ak Electric Inc	Palmer	MA
Aks Electric	Rehoboth	MA
All American Electric		
	Lynn North Attleboro	MA MA
All State Plumbing & Heating Co Inc.		
All-Pro Electric, LLC	Bradford	MA
Alternative Weatherization, Inc.	Fall River	MA
Ameresco Inc	Framingham	MA
American Plant Maintenance	Woburn	MA
Andelman And Lelek Engineering Inc.	Norwood	MA
Andy Ramos Electric	Holyoke	MA
Anthony Vieira Heating and Air Conditioning	Attleboro	MA
Apollo Lighting & Supply	Holbrook	MA
Arca Recycling Inc	Franklin	MA
Atlantic Power Services	Seekonk	MA
Attention to Detail Plumbing & Heating LLC	Somerset	MA
B&L Ductless LLC	Swansea	MA
B2q Associates Inc.	Andover	MA
Baraby Electric	Fall River	MA
Barry L KUTZ, ELECTRIC	Waltham	MA
Baystate Energy Reduction	Sutton	MA
Beaupre Electric	Assonet	MA
Boivin Electric LLC	North Attleborough	MA
Boston Air Corp.	Stoughton	MA
Botelho Electric	Rehoboth	MA
Brh Electrical Services	Seekonk	MA
Briggs Mechanical Inc	North Attleboro	MA
Bristow Electric Company, Inc.	Attleboro	MA
Bruin Corp	North Attleboro	MA
Brunelli, Philip M Jr	Franklin	MA
Bulbs.Com	Worcester	MA
Camara's Heating & Air Conditioning Services	Westport	MA
Carlos A Magina Electrical Inc.	Seekonk	MA

Cavallaro Plumbing	East Freetown	MA
CENTER FOR ECOLOGICAL Technology	Pittsfield	MA
Certified Safe Electric	Marshfield	MA
Cma Heating & Air	North Dartmouth	MA
Coastline Plumbing and Mechanical LLC	Westport	MA
Coghlin Electrical Contractors	Worcester	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
Costa Plumbing and Heating Inc	Seekonk	MA
Craig R Casavant Inc.	Blackstone	MA
Crown Supply Company Inc	Milford	MA
Cullen Energy	Shrewsbury	MA
D Cabral Plumbing	Swansea	MA
Dan Mckay Heating and Cooling	Sagamore Beach	MA
Daniel Cabral	Fall River	MA
Datasense Solutions Inc	Waltham	MA
David J Dionne Electric	Blackstone	MA
DMI	Wellesley	MA
Dons Plumbing and Heating LLC	Fall River	MA
Dougs Installation and Service	Fall River	MA
Dp Electric Inc.	Blackstone	MA
Dube's Plumbing	Blackstone	MA
E.M. Corbeil Inc	Millville	MA
Eagle Energy Systems	Raynham	MA
Eagle Mechanical Solutions	Framingham	MA
Ecast Video LLC	Boston	MA
Ecova Inc.	Boston	MA
Efficiency Forward Inc. (Dlc)	Medford	MA
Efficient Buildings LLC	Bridgewater	MA
Efr Electric Inc	Bellingham	MA
Electric Supply Center	Mansfield	MA
Electrical Technologies	Medford	MA
Elite Construction Corp	Rehoboth	MA
Ellsworth Supply Co Inc	Boston	MA
Ene Systems Inc.	Canton	MA
Energy & Resource Solutions Inc.	North Andover	MA
ENERGY EFFICIENCY Advisers Inc	Mendon	MA
Energy Federation Inc.	Westborough	MA
ENERGY MANAGEMENT Associates Inc	Franklin	MA
Energysavvy Inc.	Cambridge	MA
Etech, Inc.	Millbury	MA
F.L. Machado Plumbing and Heating LLC	Seekonk	MA
Florence Electric LLC	Canton	MA
Focal Point Data Risk LLC	Newton	MA

Generators by F.S.G.	Dover	MA
Germain Plumbing and Heating	Attleboro	MA
Gh Electrical Service	Attleboro	MA
Glynn Electric Inc	Plymouth	MA
Gm Refrigeration Co	Fall River	MA
Graybar Electric Co.	Boston	MA
Green Elements LLC	Newton	MA
Hannon Electric	South Easton	MA
Horizon Solutions LLC	Taunton	MA
Hughes Electrical Services	Marshfield	MA
Hull Electric	Marblehead	MA
Hvac360	North Dighton	MA
IBM Corp.	Cambridge	MA
Illuminating Engineering Society	Boxford	MA
Independent Electric Supply	Somerville	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
J Derenzo Company	Brockton	MA
J Senecal Construction	Seekonk	MA
J&L Heating and Air Conditioning	Plainville	MA
Jason Cabral Electric	Fall River	MA
JAY SHELDON's HEATING and Cooling	Seekonk	MA
Jf Electrical	Quincy	MA
John A. Moniz Electrical	Swansea	MA
John Mcdonough Electrician	Boston	MA
Jones Lang Lasalle Construction	Boston	MA
Jr's Hvac Design	Westport	MA
K & K Contractors LLC	Wareham	MA
KELLEY, JAMES - Middleton Electric Light Dept.	Middleton	MA
Kema	Burlington	MA
Kevin R Curt Electrical LLC	Fall River	MA
L.S. Heating and Air Conditioning	Seekonk	MA
Lafleur Plumbing and Heating	Swansea	MA
Lawrence Air Systems Inc.	Seekonk	MA
Ledoux Electric	Seekonk	MA
Lefevre	Taunton	MA
Leiser Corporation	Weston	MA
Litemor	Norwood	MA
Lockheed Martin	Burlington	MA
Lussier Plumbing and Heating	Seekonk	MA
Lussier Electric Services	Worcester	MA
Machado Plumbing & Heating LLC	Dighton	MA
MALONE Brothers Inc.	Swansea	MA
Marc's Sheet Metal	Fall River	MA
Mass Electric Construction	Waltham	MA
Mcnamara Electric	North Attleboro	MA

Mello Electric Co Inc	Fall River	MA
Michael Devine Electric	Plymouth	MA
Mike Bell Electrician	Seekonk	MA
Mike's Heating and Ac Inc	Fall River	MA
Mog Heating and Cooling	Taunton	MA
Mr Electric	Framingham	MA
Mts Mechanical	Swansea	MA
National Led Distributors	Boston	MA
Nesco (Needham Electric Supply)	Canton	MA
New England Combustion Products, Inc.	Rockland	MA
New England Energy Concepts Inc	North Dighton	MA
Nmr Group Inc.	Somerville	MA
Northeast Electrical Service	Bellingham	MA
Northeast Energy Efficiency Partnerships (Neep)	Lexington	MA
O H Burg Corp	Stoughton	MA
O'brien & Neville Inc.	Holliston	MA
Oracle America	Cambridge	MA
Pacheco-Cooke Electrical	Plainville	MA
Pbz Construction - Robert Ayers	Stoughton	MA
Peregrine Energy Group	Boston	MA
Phd Plumbing and Heating	Seekonk	MA
Piquette & Howard Electric Service	Somerville	MA
Potter Electric Inc	Fairhaven	MA
Prism Energy Services	Quincy	MA
Quality Climate Control Inc.	Fall River	MA
Quality Energies	Rehoboth	MA
R & F Construction	Dedham	MA
R E M Electric	Attleboro	MA
R R Services Inc	Swansea	MA
Ralco Electric Inc.	Westport	MA
Raymond D. Melanson Electric	Swansea	MA
Rethinking Power Management	Boston	MA
Retrofit Insulation	Fall River	MA
RF Plumbing and Heating	Mansfield	MA
Rickard And Sons Plumbing	Seekonk	MA
Robert J Malloy	Rockland	MA
Rock Electric Inc	New Bedford	MA
Roi Energy Investments LLC	East Walpole	MA
Jason Roia	Fall River	MA
Rooney Electric	North Reading	MA
Sacks Exhibits	Wilmington	MA
Sarnie Electrical Contracting	Walpole	MA
Sense Labs Inc	Cambridge	MA
Sikora Electric	Fall River	MA
South Coast Alternative Power Solutions	Acushnet	MA
South Coast Greenlight Energy	Swansea	MA
Standard Electric	Wilmington	MA
State Electric Corporation	Bedford	MA
State Electric corporation	Dealord	IVIA

Stateline Fuel & Burner Service Inc.	Seekonk	MA
Steam Trap Systems	Amesbury	MA
Steven Lascola Electrician	Seekonk	MA
SUBURBAN HEATING AND COOLING Services	Somerset	MA
Superior Energy Solutions	Swansea	MA
SYLVANIA LIGHTING Solutions	Wilmington	MA
Synapse Energy Economics Inc.	Cambridge	MA
Teeg LLC	Sharon	MA
The Brattle Group	Boston	MA
The Cadmus Group LLC	Boston	MA
Theroux Mechanical	Attleboro	MA
Tj's Plumbing and Heating	Attleboro	MA
Tnz Energy Consulting Inc.	Stoughton	MA
Towne Heating Co Inc	Swansea	MA
Trc Environmental Corp.	Boston	MA
Triple B Plumbing Inc	Seekonk	MA
Trust Energy Solutions	Marlborough	MA
Utility Energy Inc	Fall River	MA
Uts Energy Engineering Llc	Quincy	MA
Veolia North America	Boston	MA
Victory Heating, Air Conditioning, Plumbing	Bellingham	MA
Walls, Jeff Electrician	Franklin	MA
Wayne D Faria	North Dartmouth	MA
Wayne Electric & Alarms	Fairhaven	MA
Wellington Plumbing and Heating	Roxbury	MA
Wipro Ltd.	Quincy	MA
Worcester Electric Assoc	Worcester	MA
World Energy Efficiency Services LLC	Worcester	MA
Antares Group Inc.	Lanham	MD
Lynne Kaplan & Associates	Kensington	MD
Utilityboost LLC	Rochester	MI
The Maintenance Team	Minneapolis	MN
Apex Analytics	Greensboro	NC
Costal Lighting LLC	Wilmington	NC
Daniels Equipment	Auburn	NH
KT&T Distributors	Nashua	NH
National Energy & Light Inc.	Nashua	NH
Sprague Operating Resources	Portsmouth	NH
Clear Energy LLC	Bloomfield	NJ
Cmc Energy Services Inc.	Cranbury	NJ
Ideas Agency Inc.	Blairstown	NJ
Shi International Corp.	Somerset	NJ
T-Systems North America Inc	Red Bank	NJ
Cdh Energy Corp.	Cazenovia	NY
Fdm Group Inc.	New York	NY
L&S Energy Services Inc.	Clifton Park	NY
Radiator Labs Inc	Brooklyn	NY
Ram Marketing	Saint James	NY

Troy	NY
Albany	NY
Columbus	ОН
Columbus	ОН
Portland	OR
Seven Fields	PA
Trappe	PA
Pittsburgh	PA
Austin	TX
Lewisville	TX
Lewisville	TX
Lewisville	TX
Austin	TX
Alexandria	VA
Alexandria	VA
Burlington	VT
Hinesburg	VT
Seattle	WA
White Salmon	WA
Seattle	WA
Madison	WI
Milwaukee	WI
Madison	WI
	Albany Columbus Columbus Portland Seven Fields Trappe Pittsburgh Austin Lewisville Lewisville Lewisville Austin Alexandria Alexandria Burlington Hinesburg Seattle White Salmon Seattle Madison Milwaukee