

Rhode Island Energy Efficiency

Third Quarter 2020 | National Grid

November 6, 2020

Overview

In the third quarter of 2020, National Grid's energy efficiency programs continued to deliver energy savings for Rhode Island customers by achieving 86,450 annual MWh of electric savings (48.5% of the annual goal) and 173,132 annual MMBtu of natural gas savings (38.8% of the annual goal) while continuing to address the challenges posed by the global COVID-19 pandemic. In the third quarter, programs continued to implement strategies that had been developed during the program suspension during the second quarter. Some examples of these strategies include:

- **Income Eligible Services:** On August 3rd, the program returned to providing in-field assessments after completion of personal protective equipment (PPE) training and utilizing approved PPE equipment. On August 13th, a well-attended Virtual Best Practice meeting was held, where the agenda included the impact of COVID-19, year to date goals, and marketing and data tracking updates.
- **EnergyStar HVAC:** Tech Field Support staff conducted both virtual and onsite trainings and refresher sessions with HVAC contractor field staff and their managers to encourage more participation in the HVAC and mini-split (MS) Check testing.

Additionally, there were several other highlights that occurred in the third quarter. These include:

- National Grid won two Responsible Appliance Disposal (RAD) awards through US EPA for refrigerator recycling program. National Grid has been awarded the RAD Champion and RAD Program Growth awards. The RAD Champion award recognizes the top 10 partners with the highest number of units processed with foam recovery. In 2019, National Grid processed 23,628 units with foam recovery. Since becoming a RAD Partner in 2011, National Grid has processed 165,574 units. That has reduced carbon dioxide emissions equivalent to those from 126,685 homes' energy use for one year. The Program Growth Award recognizes the top 3 partners to achieve the greatest percent increase in the number of units processed compared to the previous reporting year. In 2019, National Grid processed 29,221 units – that is a 109% increase from 2018.
- The EnergyWise Single Family (EWSF) Process Evaluation found that the program is performing at a high level. Participants expressed satisfaction with the EWSF program (91%), saying that they had a positive experience “from start to finish” and stakeholders appreciate how well the program is managed and delivered to customers.
- The EnergyWise Multifamily Process Evaluation found significant customer satisfaction with the program (86%); stakeholders believe the program is working well and credit the quality of working relationships

between key program implementers (i.e., contractors, assessors, and inspectors).

2020 Program & Initiative Updates

Residential New Construction (RNC)

The Residential New Construction (RNC) program achieved 352 annual MWh of electric savings (40.5% of the annual goal) and 826 annual MMBtu of gas savings (19.0% of the annual goal) through the third quarter of 2020. The program enrolled 100 customer residences in the third quarter and completed 129 customer residences.

Of the 129 customer residences completed, 68 customer residences (53%) used electric heat and just 37 customer residences (29%) had gas heat, demonstrating the continued increase in the percentage of new construction homes with electric heat (heat pump) vs gas for both market rate and affordable housing. It should be noted that fieldwork (which includes final verification inspections) was discontinued mid-March due to COVID-19 and did not resume until mid-June. During that time half of the RNC team was placed on furlough.

211 master-metered gas renovation/rehab affordable housing units receiving equipment rebates through the EnergyWise Multifamily Program partnered with RNC for envelope improvements.

There are 221 units of Zero Energy Ready homes currently in the pipeline, including 207 seeking Passive House certification and 14 seeking DOE Zero Energy Ready certification.

ZE Pilot	
In Process (Planning & Design Phase)	
Passive House	99
DOE ZER	4
In Process (Construction Phase)	
Passive House	108
DOE ZER	10
Complete	
Passive House	0
DOE ZER	2

Pictured above: The Zero Energy Ready Homes Pilot Pipeline

Challenges and Responses

RNC program field operations, including duct leakage verification testing, ceased from late March until June due to COVID-19. While RNC provided interim virtual support for project teams, a significant decline in duct tightness has been observed in many projects. RNC is responding by increasing training

efforts. While on-site training is the most effective approach, this is challenging to conduct safely during the pandemic.

Customer Highlight

Two single family homes achieved RNC's highest efficiency tier this quarter (62% and 52% savings beyond baseline).



Pictured above: Units at different stages of development in a five-unit affordable Passive House development (Olneyville neighborhood of Providence)

Income Eligible Services (IES)

The National Grid Income Eligible Services program achieved 1,492 annual MWh of electric savings (39.7% of the annual goal) and 2,079, annual MMBtu of gas savings (20.6% of the annual goal) through the third quarter of 2020.

On August 3rd, the program returned to providing in-field assessments after completion of personal protective equipment (PPE) training and utilizing approved PPE equipment. On August 13th, a well-attended Virtual Best Practice meeting was held, where the agenda included the impact of COVID-19, year to date goals, and marketing and data tracking updates.

In response to the Process Evaluation recommendation to improve communication with CAPs, a monthly meeting with the Executive Directors of the CAP agencies began in the third quarter. The COVID-delayed KPI process was reviewed and approved by the Standardization committee and is scheduled to launch in the fourth quarter of 2020.

“Auditor was professional, he showed up with a shoe cover and mask. Knowledgeable on every related item.” - Hoi from Cranston

Challenges and Responses

The COVID-19 pandemic continues to be the biggest challenge to implementation. Concerned customers, PPE precautions, children schooling from home, and many more issues are stretching the time needed for each

step in the process. National Grid IES has developed several approaches to reducing the impact of these barriers:

- Contracting for additional Auditors
- Working with RISE to provide Weatherization Services
- Adding weekend hours
- BPI training & Certification provided locally by CLEAResult

EnergyWise Single Family

The program achieved 2,883 annual MWh of electric savings (47.4% of the annual goal) and 13,377 annual MMBtu of gas savings (52.2% of the annual goal) through the third quarter. In addition, the program completed 5,293 energy audits and 1,973 weatherization jobs through the third quarter.

Both in person and virtual home energy assessments continue to be available based on customer request. Weatherization services are provided upon PPE training and testing.

Challenges and Responses

COVID-19 resulted in many challenges for the EnergyWise program, including getting contractors back into the field with new Personal Protective Equipment requirements, addressing customer concerns, and ensuring the health and welfare of customers and contractors. Additionally, some employees did not return to work due to transitions to other employment opportunities during the pandemic. Online workforce trainings also faced some difficulties because many contractors had furloughed employees and could not bring them back during this time without risking the loss of unemployment benefits.

An email campaign went out to customers in September with arrearages encouraging them to take advantage of 100% insulation offer. Assessments needed to be scheduled by 9/30/20.

EnergyWise Multifamily, Income Eligible Multifamily, C&I Multifamily

The EnergyWise Multifamily program achieved 440 annual MWh of electric savings (15.8% of the annual goal) and 4,466 annual MMBTU of gas savings (30.7% of the annual goal) through the third quarter of 2020. The Income Eligible Multifamily program achieved 29 annual MWh of electric savings (1.2% of the annual goal) and 578 MMBTU of annual gas savings (2.4% of the annual goal) through the third quarter of 2020. The C&I Multifamily program achieved 792 MMBTU of annual gas savings (7.1% of the annual goal) in the third quarter.

In the third quarter, the EnergyWise Multifamily program completed a condominiums project in Woonsocket resulting in an estimated 38,191 net annual kWh of savings. This project included common area LED fixtures to exterior and interior, in-unit screw in LED lamps, in-unit showerheads aerators and thermostats. Additionally, EnergyWise Multifamily completed a project in

North Providence for an estimated 315 net annual MMBtu of savings through outdoor air reset controls to boilers at five sites.

The Income Eligible EnergyWise Multifamily program completed a project in Providence, including exterior wall insulation using 2-1" Exterior Insulation Finish System layers (EIFS) adhered to the existing building siding, for an estimated 12,752 net annual kWh of energy savings. The program also installed air sealing, wall insulation, basement insulation, heat pipe insulation, and attic insulation at a scattered site in Providence for an estimated 269 net annual MMBtu of energy savings.

Challenges and Responses

The resumption of in-field services after COVID has been generally well received by sites for common area/mechanical room work, but there is a very limited appetite for in-unit work. There is difficulty in securing management company acceptance of in-unit installs.

Commercial gas opportunities during the period were extremely limited. Rent collection difficulties appeared to inhibit willingness to make capital investments.

Customer Highlight

During the third quarter, the Company completed energy assessments of the entire RI portfolio of Brady Sullivan Properties. Over the past decade, Brady Sullivan has re-developed some of the most iconic mill buildings in RI, including the former US Rubber plant in Providence, the American Tourister building in Warren, and the American Wire complex in Pawtucket.

The Company looks forward to implementing recommended improvements for all seven sites in its RI portfolio, accounting for almost 1.3 million net annual kWh in savings across lighting and domestic hot water measures. Installations will take place in the fourth quarter, addressing both common area and individually metered dwelling units.

ENERGYSTAR® HVAC (Heating and Cooling)

The ENERGYSTAR® HVAC (Heating and Cooling) program achieved 1,744 annual MWh of electric savings (78.1% of the annual goal) and 13,387 annual MMBtu of gas savings (44.6% of the annual goal) through the quarter of 2020.

On the electric side, 16 onsite Quality Control (QC) inspections were performed and three remote HVAC Check trainings were held, certifying 14 technicians from three companies during the third quarter. Contractors have begun HVAC Check testing, resulting in 106 HVAC or MS check tests completed. On the gas side, 15 distributor or contractor meetings were held to promote the Gas HVAC

Enhanced Incentives. The enhanced incentives offer launched on September 30th.

Challenges and Responses

COVID-19 continues to present multiple challenges to the HVAC contractors and the Energy Star HVAC Program. Although government and program restrictions began to be lifted, many customers remain reluctant to have contractors or QC inspectors in their homes.

Pent up demand from the work stoppages and slowdowns created a backlog for the contractors to perform essential services and repairs, as well as to install new or replacement equipment. Efficiency practices such as MS Check tests were being skipped by many contractors during this timeframe. Tech Field Support staff conducted both virtual and onsite trainings and refresher sessions with HVAC contractor field staff and their managers to encourage more participation in the HVAC and MS Check testing. Extra coaching for the three largest HVAC contractors in RI produced a significant increase in tests by the end of the third quarter. A contractor new to the program was recruited and trained and quickly began submitting passing tests.

nationalgrid

Natural Gas Heating and Water Heating Equipment Incentives Available



Hurry – Limited time on eligible equipment!

National Grid is committed to helping our customers and trade allies during this time, which is why we are offering Rhode Island residential customers enhanced incentives. By doing this we are supporting your business while helping our customers save energy and money, as heating season approaches.

This limited time incentive is available for installations performed September 30 – November 15, 2020. For customers to receive this enhanced incentive, please complete and submit the following:

1. Complete RI Residential Gas Heating Rebate application form with all required documentation or apply online at ngrid.com/ri-heatrebates. Complete submission must be postmarked or submitted online no later than **November 30, 2020**.
2. Copy of this flyer should accompany your submission.



Hot Water Boiler
95% AFUE
\$900



Combined Condensing boiler and on-demand water heating unit
95% AFUE
\$1,300



Furnaces
95%+ AFUE and electronic commutated motor
\$400



ENERGY STAR® Storage Water Heaters
.64 UEF (MD) / .68 UEF (HD)
\$150

As always, we appreciate your continued partnership and thank you for your patience during this difficult time.

For details and updates including safety precautions we are taking, please visit ngrid.com/covid-19.

National Grid is dedicated to promoting energy efficiency in Rhode Island to help customer reduce consumption and manage energy costs. To learn more about additional savings opportunities, please visit ngrid.com.

Our employees and contractors will continue to strictly follow all health and safety protocols such as maintaining social distancing and wearing personal protective equipment.

EE8163 RI (10/20)

Enhanced Incentive for Natural Gas Heating and Water Heating Equipment

ENERGYSTAR® Lighting and Residential Consumer Products

ENERGYSTAR® Lighting achieved 22,189 annual MWh of electric savings (58.3% of goal) and 3,650 annual kW of electric demand (58.9% of the annual goal) through the third quarter of 2020.

Residential Consumer Products achieved 2,158 annual MWh of electric savings (45.3% of goal) and 404 annual kW of electric demand (56.6% of the annual goal) through the third quarter of 2020.

National Grid won two Responsible Appliance Disposal awards through US EPA for refrigerator recycling program. National Grid has been awarded the RAD Champion and RAD Program Growth awards. The RAD Champion award recognizes the top 10 partners with the highest number of units processed with foam recovery. In 2019, National Grid processed 23,628 units with foam recovery. Since becoming a RAD Partner in 2011, National Grid has processed 165,574 units. That has reduced carbon dioxide emissions equivalent to those from 126,685 homes' energy use for one year. The Program Growth Award recognizes the top 3 partners to achieve the greatest percent increase in the number of units processed compared to the previous reporting year. In 2019, National Grid processed 29,221 units – that is a 109% increase from 2018.

Challenges and Responses

COVID behavior has change the number of customers wanting to hold on to secondary refrigerators or purchasing new refrigerators while hanging on to former primary fridge.

In the third quarter, the program partnered with Providence and Woonsocket high schools to provide back-to-school energy efficiency kits for students, including a desk lamp and advanced power strip as well as additional information about other energy efficiency programs. These schools were selected due to the high number of students on the free school lunch program. Other school districts were also approached but did not complete the memorandum of understanding for participation.

Home Energy Reports (HER)

The Home Energy Reports electric program achieved 20,235 annual MWh of electric savings (87.1% of the annual goal) and the gas program achieved 78,255 annual MMBtu of gas savings (67.8% of the annual goal) through the third quarter of 2020.

Summer Home Energy Reports focused on smart thermostats as an option to reduce cooling costs, budget billing, and energy savings products for gas customers.

Code Compliance Enhancement Initiative (CCEI)

Home Building Industry Outreach

CCEI continues to deliver a monthly training as part of RIBA's Contractor Development Program. Topics this quarter included air leakage testing, HVAC and IAQ, and insulation installation.

Commercial Stretch Code Support

A total of eight CCEI courses were approved for continuing education credits this quarter by the RI Contractor Registration & Licensing Board and the RI Association of Realtors. CCEI also developed four new training modules focusing on deeper dives into the code, building science and real-life case studies and strategies.

Challenges and Responses

With in-person trainings not possible, CCEI has delivered a full suite of interactive webinars since April. Tactics such as audience size control and poll questions have since been employed to increase participant engagement. Additional steps to decrease the risks associated with live webinars are under consideration.

Relevant KPIs

Eight training events that engaged 47 industry stakeholders were held during this quarter. Six of these events were focused on residential construction (30 attendees) and two were focused on commercial (17 attendees).

Large Commercial New Construction

The Large Commercial New Construction program achieved 4,054 annual MWh of electric savings (41.2% of the annual goal) and 31,110 annual MMBtu of gas savings (68.4% of the annual goal) through the third quarter of 2020.

Getting Ready for Schools: Program staff coordinated a meeting with RIDE and the Partnership for RI regarding four possible school new construction projects. More will be known about which projects will move forward in November.

Cross-Pollination with Communities Initiative: The program was connected to the Quonset Community Projects by our Communities initiative early enough in the process to engage with two small building projects.

Challenges and Responses

Financial restrictions have put Brown University's two Residence Hall projects targeting Zero Net Energy on hold.

Large Commercial Retrofit

Through the third quarter of 2020, the Large Commercial Retrofit program achieved 25,078 annual MWh of electric savings (34.4% of the annual goal) and 26,692 annual MMBtu of gas savings (16.4% of the annual goal).

Engagement with national grocery chains remains very strong. The initiative had a strong third quarter due in no small part to several projects at a large protein processing plant that yielded nearly 1,000 gross MWh and several refrigeration door products at a regional grocer's stores.

Challenges and Responses

The economic uncertainty of COVID-19 continues to impact customer financial priorities and project commitments. The Company continues to work with customers to address their concerns and develop energy efficiency strategies based on their unique economic position.

Relevant KPIs

A box manufacturer installed controls to automatically shut down the blowers (used for scrap collection) when the production line is not in operation. The expected savings for this measure is >83,000 annual kWh.

After monitoring the customer's compressors, the Industrial Initiative vendor was able to determine that the compressors were running slightly below the optimal efficiency base on the CAGI data sheet. As a result of the analysis, the compressors will be programmed to automatically shut down at the end of production. The Industrial vendor has also advised the customer to reduce the compressor setpoints from 125 psig to 110 psig. These two measures are expected to yield 93,077 kWh of annual electric savings.

Small Business Direct Install

Through the third quarter of 2020, the Small Business Direct Install program achieved 5,796 annual MWh of electric savings (50.4% of the annual goal) and 1,570 annual MMBtu of gas savings (62.2% of the annual goal).

The program's vendor, RISE, completed a retrofit lighting project of an office building in Providence. This project will result in savings of 23,000 kWh per year and \$3,600 per year. The customer was very complimentary of the impact the upgrade had on their internal office spaces and wrote in part *"the RISE representative explained the program and the options extremely well!"*

The cost savings to do such a project was phenomenal as well as the ability to spread the cost of the entire project over a 24-month period being billed directly on the electric bill. Finally, the electricians that did the installation were very professional and extremely neat!”

Evaluation, Measurement and Verification

Final reports were completed for several studies.

- 2017-2019 Impact and Process Evaluation of the EnergyWise Single Family Program. This study verified savings for each measure in the EnergyWise Single Family program and yielded insights and recommendations National Grid can use to continue improving the program.
- 2017-2019 Impact and Process Evaluation of the Multifamily Programs. This study verified savings for each measure in the EnergyWise Multifamily and Income Eligible Multifamily programs. The study also yielded insights and recommendations National Grid can use to continue improving the program.
- 2017-2019 Impact Evaluation of the Home Energy Reports Program. This study verified energy savings from the Home Energy Reports program and recommended updated realization rates. The HER program continues to produce robust savings and customers who have received reports for longer generally have higher savings. The program also produces a small uplift (1 to 5%) in participation in other National Grid energy efficiency programs.
- 2019 Rhode Island Shelf Stocking Study. This study assessed trends in the availability and shelf prices of multiple types of light bulb in National Grid's ENERGY STAR® Lighting Program partner stores. The analysis showed that the amount of space dedicated to light bulbs in general continues to decrease in most channels. Program incentives and general market trends have reduced the LED prices consumers see on shelves by more than half at Hardware and Discount Stores since 2016.
- Rhode Island Compliance Training and Building Permit Review Memo. This memo documented the trainings held by the Rhode Island Code Compliance Enhancement Initiative (CCEI) in the years 2017, 2018, and 2019, and assessed the building permit data that is available online in Rhode Island. This analysis was intended to assist National Grid in developing placeholder values for savings that may be attributable to the CCEI as well as planning for upcoming baseline studies.
- An interim memo was completed for the Impact Evaluation of PY2018 Custom Electric Installations. Though most on-site work for this study has been paused due to COVID-19 considerations, this memo summarized findings based on desk reviews of the sample sites. On-site work is expected to resume in the fourth quarter for this study.

Challenges and Responses

Other Evaluation, Measurement and Verification studies are still in-progress and several data collection activities were temporarily paused due to COVID-19. While the majority of field work remains on hold, remote EM&V study work has resumed as of the end of the third quarter, and on-site work is expected to resume in the fourth quarter.

Customer Initiatives

A customer installed a kitchen hood control system on the ventilation and exhaust fans. The kitchen hood control system is activated when the kitchen oven and grills are in operation and when the kitchen equipment is turned off, the VFDs ramp down, thereby reducing the customer's energy consumption. In total, the customer installed two 5-horsepower variable frequency drives in place of the existing motor started for the kitchen exhaust and ventilation fans, in addition to installing a temperature sensor in the kitchen ductwork to regulate the exhaust. This project will result in roughly 17,700 kWh of gross annual savings and 462 gross annual MMBtu of gas savings.

Challenges and Responses

SEMP customers have expressed concern over a lingering economic downturn and financial restrictions. The Company continues to provide guidance and recommendations on ways to reduce operating cost via energy efficiency upgrades.

Community Initiatives

East Providence has signed onto the National Grid Community Initiative with a goal of achieving energy efficiency savings through a menu of options and earning a subsequent incentive of up to \$20K if all goals are achieved. Energy efficiency options will include both residential and small business savings opportunities. East Providence will distribute promotional materials to encourage the community to participate in the energy efficiency programs.

Challenges and Responses

COVID-19 has caused the program rollout to be delayed. East Providence will have through the first quarter of 2021 to achieve the energy efficiency goals and to earn the \$20K.

Connected Solutions

National Grid provided feedback to OER for their Renewable Energy Fund (REF) Energy Storage Adder Pilot Program. The 2021 Connected Solutions Battery Storage program was updated to support the REF Energy Storage Adder Pilot.

Rhode Island Pilots, Demonstrations and Assessments¹

<u>Pathway to Zero Buildings - Pilot - C&I</u>	Date	8/1/2020
	Stage	Project Recruitment - All prospective ZNE projects are on hold due to COVID.
	Recent Activity	Website for ZNE is complete.
	Next steps	Fall Forum and webinars are on planning stage.
<u>Performance Based Procurement - Demonstration - C&I</u>	Date	7/30/2020
	Stage	Demonstration
	Recent Activity	New Construction team met with prospective project design team mid-Q2, Customer and DT not interested in Performance Based Procurement, pivoted to WBA offering.
	Next steps	After 6 different project recruitment efforts were ultimately unsuccessful the team is exiting demonstration. Writeup and findings underway.
<u>Underutilized EE on MPT systems - Demonstration - C&I</u>	Date	7/30/2020
	Stage	Concept
	Recent Activity	No update
	Next steps	Next steps will be to determine appropriate vendor to complete demonstration research, including installations at 3 customer sites
<u>SEM - Demonstration - C&I</u>	Date	8/1/2020
	Stage	
	Recent Activity	SEM/CEI Workshop number 5 (Employee Engagement) was facilitated in two parts using live online format via GoToMeeting platform on June 4th and 10th.
	Next steps	Sites are continuing with CEI activity and continuing to adapt their operations in response to the COVID-19 pandemic. The Company is working with Cascade to determine if the upcoming Treasure Hunts

¹ Due to the second quarter report being sent at a later date, third quarter updates for pilots, demonstrations, and assessments were included in the second quarter report in order to provide more up to date information.

		should be conducted virtually or in-person with strict safety protocols in place.
<u>HVAC Lighting Controls Plus - Demonstration - C&I</u>	Date	7/27/2020
	Stage	Develop or Demonstrate
	Recent Activity	Wrapping up Phase I of demonstration, which includes interviews with industry, customers, and National Grid staff. Results indicate barriers to a successful program, which largely center around the ability of the industry to successfully integrate HVAC with lighting sensors. It can be difficult to assign responsibility and motivate involved parties with integrating and commissioning the controls.
	Next steps	Final presentation of Phase I results. Discussion on whether to move forward with Phase II (customer installations)
<u>Kitchen Exhaust - Demonstration - C&I</u>	Date	7/27/2020
	Stage	Develop or Demonstrate
	Recent Activity	Wrapping up Phase I of demonstration, which includes interviews with industry, customers, and National Grid staff. Slipstream provided an analysis of overall potential of examined measures. Key findings from interviews indicate target customers
	Next steps	Final presentation of Phase I results. Discussion on whether to move forward with Phase II (customer installations)
<u>Air Absorption Cleaning - Demonstration - C&I</u>	Date	8/1/2020
	Stage	Demonstration
	Recent Activity	Wrapping up Phase I of demonstration, which included interviews with industry, customers, and National Grid staff.
	Next steps	Final presentation of Phase I results. Discussion on whether to move forward with Phase II (customer installations)
<u>Small Business Electric Heat Pumps - Demonstration - C&I</u>	Date	7/30/2020
	Stage	Concept
	Recent Activity	Following MA simple system displacement HP work. Will utilize application form, calculations, and setup for ER heat in RI for the interim.

	Next steps	Waiting for MA form to be finalized.
<u>Gas DR - Pilot - C&I</u>	Date	8/1/2020
	Stage	Demonstration
	Recent Activity	Review of data from winter 19/20 and comparison of program structure with other DR programs to determine what modifications, if any, are needed before reengaging with customers for winter 20/21 enrollments
	Next steps	Finalize program materials and market to customers
<u>Gas HPs - Demonstration - C&I</u>	Date	8/1/2020
	Stage	Concept
	Recent Activity	Researching or gathering more GHP information. Developed preliminary customer cost estimates and comparisons to existing technology and cost effectiveness ramifications.
	Next steps	Determine appropriate level of research required, plan activity for next year. Compile information on different gas HP technologies, customer costs, cost comparisons to existing tech, estimate cost-effectiveness.
<u>Home Energy Score Evaluation - Residential</u>	Date	8/1/2020
	Stage	The EnergyWise Impact and Process Evaluation is in-progress.
	Recent Activity	Vendor is summarizing findings/results and drafting the evaluation report. For HES, vendor will include insights gathered from stakeholder interviews and assess Wx uptake among participants that received HES reports.
	Next steps	Draft report by mid-August

NATIONAL GRID ENERGY EFFICIENCY PROGRAMS IN RHODE ISLAND

Table 1: Summary of Electric 2020 Target and Preliminary 3rd Quarter Results

ELECTRIC PROGRAMS Sector and Program	(1)	(2)	(3)	(18)	(4)	(5)	(6)	(19)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
	Demand Reduction (Annual kW)				Energy Savings (Annual MWh)				Customer Participation			Expenses (\$ 000)			Energy Savings (Lifetime MWh)			\$/Lifetime kWh	
	Target	Year To Date	Pct Achieved	Year End Forecast kW Range	Target	Year To Date	Pct Achieved	Year End Forecast MWh Range	Target	Year To Date	Pct Achieved	Budget	Year To Date	Pct Achieved	Planned	Year To Date	Pct Achieved	Planned	Year to Date
Commercial and Industrial																			
Large Commercial New Construction	1,183	576	48.6%		9,828	4,054	41.2%		108	54	49.7%	\$ 5,335.7	2,294.4	43.0%	147,913	60,787	41.1%	\$ 0.036	\$ 0.038
Large Commercial Retrofit	14,933	3,636	24.3%		72,871	25,078	34.4%		2,669	2,242	84.0%	\$ 23,801.3	11,573.7	48.6%	823,828	291,797	35.4%	\$ 0.029	\$ 0.040
Small Business Direct Install	1,347	921	68.4%		11,500	5,796	50.4%		693	324	46.8%	\$ 7,568.6	4,149.8	54.8%	126,066	70,697	56.1%	\$ 0.060	\$ 0.059
Commercial Connected Solutions												\$ 2,078.5	105.7	5.1%					
Commercial Pilots												\$ 106.3	27.5	25.9%					
Community Based Initiatives - C&I												\$ 66.1	0.6	0.9%					
Financing												\$ 5,216.7	0.0	0.0%					
SUBTOTAL	17,463	5,133	29.4%	52%-82%	94,198	34,927	37.1%	52%-82%	3,470	2,620	75.5%	\$ 44,173.1	18,151.7	41.1%	1,097,807	423,281	38.6%	\$ 0.040	\$ 0.043
Income Eligible Residential																			
Single Family - Income Eligible Services	566	254	44.9%		3,755	1,492	39.7%		3,300	2,750	83.3%	\$ 12,846.1	4,087.4	31.8%	45,723	15,689	34.3%	\$ 0.281	\$ 0.261
Income Eligible Multifamily	155	4	2.3%		2,392	29	1.2%		4,800	546	11.4%	\$ 3,549.0	199.3	5.6%	31,899	489	1.5%	\$ 0.111	\$ 0.407
SUBTOTAL	721	257	35.7%	40%-70%	6,147	1,522	24.8%	40%-70%	8,100	3,296	40.7%	\$ 16,395.1	4,286.7	26.1%	77,623	16,179	20.8%	\$ 0.211	\$ 0.265
Non-Income Eligible Residential																			
Residential New Construction	74	59	79.7%		870	352	40.5%		352	322	91.5%	\$ 973.5	585.8	60.2%	15,846	6,424	40.5%	\$ 0.061	\$ 0.091
ENERGY STAR® HVAC	94	71	75.7%		2,233	1,744	78.1%		1,992	3,124	156.8%	\$ 2,525.1	1,806.2	71.5%	33,961	29,233	86.1%	\$ 0.074	\$ 0.062
EnergyWise	967	460	47.5%		6,082	2,883	47.4%		11,000	6,588	59.9%	\$ 15,692.2	7,514.4	47.9%	22,310	12,942	58.0%	\$ 0.703	\$ 0.581
EnergyWise Multifamily	364	32	8.7%		2,793	440	15.8%		4,000	2,131	53.3%	\$ 2,804.3	521.4	18.6%	29,344	3,099	10.6%	\$ 0.096	\$ 0.168
ENERGY STAR® Lighting	6,201	3,650	58.9%		38,093	22,189	58.3%		256,082	206,207	80.5%	\$ 15,375.8	5,549.5	36.1%	195,647	113,081	57.8%	\$ 0.079	\$ 0.049
Residential Consumer Products	714	404	56.6%		4,768	2,158	45.3%		26,905	3,833	14.2%	\$ 2,199.2	1,213.8	55.2%	32,041	15,890	49.6%	\$ 0.069	\$ 0.076
Home Energy Reports	3,195	2,782	87.1%		23,239	20,235	87.1%		323,248	272,342	84.3%	\$ 2,728.1	1,654.0	60.6%	23,239	20,235	87.1%	\$ 0.117	\$ 0.082
Residential Connected Solutions												\$ 461.6	209.6	45.4%					
Energy Efficiency Education Programs												\$ 40.0	18.8	47.0%					
Residential Pilots												\$ 287.8	48.4	16.8%					
Community Based Initiatives - Residential												\$ 203.9	7.4	3.6%					
Comprehensive Marketing - Residential												\$ 382.3	39.1	10.2%					
SUBTOTAL	11,609	7,458	64.2%	77%-97%	78,077	50,001	64.0%	77%-97%	623,580	494,547	79.3%	\$ 43,673.8	19,168.5	43.9%	352,388	200,904	57.0%	\$ 0.124	\$ 0.095
Regulatory																			
EERMC												\$ 893.7	555.8	62.2%					
OER												\$ 893.7	670.3	75.0%					
SUBTOTAL												\$ 1,787.4	\$ 1,226.1	68.6%					
TOTAL	29,793	12,848	43.1%	63%-88%	178,423	86,450	48.5%	63%-88%	635,150	500,463	78.8%	\$ 106,029.4	\$ 42,833.0	40.4%	1,527,817	640,364	41.9%	\$ 0.069	\$ 0.067
Municipal LED Street Lights												\$ 600.0	23.1	3.9%					
System Reliability Procurement												\$ 81.2	20.0	24.6%					

NOTES

(1)(4)(7) Targets from Docket 4979 - Attachment 5, Table E-7 (electric), Refiled December 23, 2019

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

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

(7) Participation was planned and is reported in 'net' terms which takes into account free-ridership and spillover.

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

(10) Approved Implementation Budget from Docket 4979, Attachment 5 Table E-3 (electric), Refiled December 23, 2019

(11) Year To Date Expenses include Implementation expenses.

(12) Pct Achieved is Column (11)/ Column (10).

(18) \$/lifetime kWh = Column (11)/Column (14)

(16) Planned \$/lifetime MWh from Docket 4979 - Attachment 5, Table E-5 (electric), Refiled December 23,2019 - adjusted to reflect format of quarterly report. Program Implementation Expenses/lifetime kWh.

(18),(19) Given ongoing uncertainties related to the impact of COVID-19 on customer adoption of energy efficiency measures, the Company is providing a range for its program year sector level forecasts. The high end of savings forecasts assumes accelerated recovery in vendor access to and capacity for on-premise service delivery and customer appetite for energy efficiency investments. The low-end of the savings forecast assumes a degradation in COVID-19 related conditions, including the potential for additional suspensions of on-premise services later in 2020.

System Reliability Procurement targets from Docket 4979 - Attachment 5, Table E-2 (electric), not included in Expenses Total

\$600,000 of RGFI funding was transferred from the Office of Energy Resources to National Grid for Municipal LED Street Lights in the first quarter.

Values in quarterly reports are preliminary and subject to change. Data is finalized in the Year-End Report.

NATIONAL GRID ENERGY EFFICIENCY PROGRAMS IN RHODE ISLAND
Table 2: Summary of Gas 2020 Target and Preliminary 3rd Quarter Results

GAS PROGRAMS	(1)	(2)	(3)	(16)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
	Energy Savings (MMBtu)				Customer Participation			Expenses (\$ 000)			Energy Savings (Lifetime MMBtu)			\$/Lifetime MMBtu		Peak Hour Gas Demand Savings (MMBtu)
Sector and Program	Target	Year To Date	Pct Achieved	Year End Forecast MMBtu Range	Target	Year To Date	Pct Achieved	Budget	Year To Date	Pct Achieved	Planned	Year To Date	Pct Achieved	Planned	Year to Date	Year to Date
Commercial and Industrial																
Large Commercial New Construction	45,474	31,110	68.4%		83	36	43.6%	\$ 2,652.6	\$ 1,669.5	62.9%	776,748	472,159	60.8%	\$ 3.41	\$ 3.54	15.56
Large Commercial Retrofit	163,011	26,692	16.4%		88	44	49.7%	\$ 4,889.1	\$ 1,231.4	25.2%	1,689,045	238,514	14.1%	\$ 2.89	\$ 5.16	13.35
Small Business Direct Install	2,523	1,570	62.2%		59	41	68.7%	\$ 125.0	\$ 92.5	74.0%	17,662	13,701	77.6%	\$ 7.08	\$ 6.75	0.79
Commercial & Industrial Multifamily	11,155	792	7.1%		729	40	5.5%	\$ 967.9	\$ 200.7	20.7%	155,596	13,609	8.7%	\$ 6.22	\$ 14.75	0.40
Commercial Pilots								\$ 366.0	\$ 2.5	0.7%						
Finance								\$ 500.0	\$ -	0.0%						
Community Based Initiatives - C&I								\$ 22.0	\$ -	0.0%						
SUBTOTAL	222,164	60,165	27.1%	51%-81%	958	160	16.7%	\$ 9,522.7	\$ 3,196.6	33.6%	2,639,051	737,983	28.0%	\$ 3.61	\$ 4.33	30.08
Income Eligible Residential																
Single Family - Income Eligible Services	10,096	2,079	20.6%		861	189	22.0%	\$ 5,952.3	\$ 1,422.4	23.9%	201,916	41,570	20.6%	\$ 29.48	\$ 34.22	1.04
Income Eligible Multifamily	24,413	578	2.4%		3,500	580	16.6%	\$ 3,009.5	\$ 227.7	7.6%	447,962	8,689	1.9%	\$ 6.72	\$ 26.20	0.29
SUBTOTAL	34,508	2,657	7.7%	30%-60%	4,361	769	17.6%	\$ 8,961.8	\$ 1,650.1	18.4%	649,878	50,259	7.7%	\$ 13.79	\$ 32.83	1.33
Non-Income Eligible Residential																
EnergyWise	25,621	13,377	52.2%		2,050	1,951	95.2%	\$ 8,117.6	\$ 4,486.5	55.3%	608,029	316,118	52.0%	\$ 13.35	\$ 14.19	6.69
Energy Star® HVAC	29,994	13,387	44.6%		3,677	1,355	36.9%	\$ 2,693.1	\$ 1,511.7	56.1%	495,828	228,347	46.1%	\$ 5.43	\$ 6.62	6.69
EnergyWise Multifamily	14,561	4,466	30.7%		4,360	139	3.2%	\$ 1,512.1	\$ 319.7	21.1%	225,079	74,017	32.9%	\$ 6.72	\$ 4.32	2.23
Home Energy Reports	115,426	78,255	67.8%		152,324	155,118	101.8%	\$ 471.5	\$ 276.1	58.6%	115,426	78,255	67.8%	\$ 4.08	\$ 3.53	39.13
Residential New Construction	4,346	826	19.0%		300	65	21.7%	\$ 620.5	\$ 283.2	45.6%	82,971	8,589	10.4%	\$ 7.48	\$ 32.98	0.41
Comprehensive Marketing - Residential								\$ 79.9	\$ 9.1	11.4%						
Community Based Initiatives - Residential								\$ 68.9	\$ 1.2	1.7%						
SUBTOTAL	189,948	110,310	58.1%	71%-91%	162,711	158,628	97.5%	\$ 13,563.6	\$ 6,887.6	50.8%	1,527,333	705,326	46.2%	\$ 8.88	\$ 9.77	55.16
Regulatory																
EERMC								\$ 361.2	\$ 224.6	62.2%						
OER								\$ 361.2	\$ 270.9	75.0%						
SUBTOTAL								\$ 722.4	\$ 495.5	68.6%						
TOTAL	446,621	173,132	38.8%	58%-84%	168,030	159,557	95.0%	\$ 32,770.4	\$ 12,229.8	37.3%	4,816,261	1,493,568	31.0%	\$ 6.80	\$ 8.19	86.57

NOTES

- (1)(4) Targets from Docket 4979 - Attachment 6, Table G-7 (gas).
 - (3) Pct Achieved is Column (2)/ Column (1).
 - (4) Participation was planned and is reported in 'net' terms which takes into account free-ridership and spillover.
 - (6) Pct Achieved is Column (5)/ Column (4).
 - (7) Approved Implementation Budget from Docket 4979, Attachment 6 Table G-3 (gas), Refined December 4, 2019.
 - (8) Year To Date Expenses include Implementation expenses.
 - (9) Pct Achieved is Column (8)/ Column (7).
 - (13) Planned \$/lifetime MMBtu from Docket 4979 - Attachment 6, Table G-5 (gas), Refined December 4, 2019 - adjusted to reflect format of quarterly report. Program Implementation Expenses/lifetime MMBtu.
 - (14) \$/lifetime MMBtu = Column (8)*1000/Column (11)
 - (15) Peak Hour Gas Demand Savings is a test metric in 2020 and represents a rough approximation of peak-hour gas demand impacts. Column(2) *0.01 *0.05
 - (16) Given ongoing uncertainties related to the impact of COVID-19 on customer adoption of energy efficiency measures, the Company is providing a range for its program year sector level forecasts. The high end of savings forecasts assumes accelerated recovery in vendor access to and capacity for on-premise service delivery and customer appetite for energy efficiency investments. The low-end of the savings forecast assumes a degradation in COVID-19 related conditions, including the potential for additional suspensions of on-premise services later in 2020.
- Values in quarterly reports are preliminary and subject to change. Data is finalized in the Year-End Report.

**Table 3
National Grid
Revolving Loan Funds**

Large C&I Electric Revolving Loan Fund

Small Business Electric Revolving Loan Fund

<u>Income Statement</u>		
(1)	2020 Funds Available	\$7,023,410
(2)	2020 Loan budget	\$10,000,000
(3)	Committed	\$5,124,596
(4)	Paid	\$2,243,962
(5)	Repayments	\$3,938,568
(6)	Available 09/30/20	\$6,570,009

<u>Income Statement</u>		
(1)	2020 Funds Available	\$2,556,663
(2)	2020 Loan Budget	\$3,000,000
(3)	Committed	\$215,000
(4)	Paid	\$627,072
(5)	Repayments	\$1,129,164
(6)	Available 09/30/20	\$3,287,092

<u>Program Impact</u>		
(7)	Number of loans	50
(7b)	Participants	26
(8)	Annual Savings (Net MWh)	3,014
(9)	Lifetime Savings (Net MWh)	37,425
(10)	Annual Savings (Net kW)	534

<u>Program Impact</u>		
(7)	Number of loans	334
(8)	Annual Savings (Net MWh)	5,796
(9)	Lifetime Savings (Net MWh)	70,697
(10)	Annual Savings (Net kW)	921

Rhode Island Public Energy Partnership (RI PEP)

C&I Gas Revolving Loan Fund

<u>Income Statement</u>		
(1)	2020 Funds Available	\$321,649
(2)	2020 Loan Budget	\$0
(3)	Committed	\$0
(5)	Repayments	\$121,459
(6)	Available 09/30/20	\$443,108

<u>Income Statement</u>		
(1)	2020 Funds Available	\$804,205
(2)	2020 Loan Budget	\$1,100,000
(3)	Committed	\$105,108
(4)	Paid	\$425,867
(5)	Repayments	\$529,649
(6)	Available 09/30/20	\$1,098,675

<u>Program Impact</u>		
(7)	Number of loans	0
(7b)	Participants	0
(8)	Annual Savings (Net MWh)	0
(9)	Lifetime Savings (Net MWh)	0
(10)	Annual Savings (Net kW)	0

<u>Program Impact</u>		
(7)	Number of loans	19
(7b)	Participants	17
(8)	Annual Savings (Net MMBtu)	12,899
(9)	Lifetime Savings (Net MMBtu)	130,122

Notes

- 1 Amount available as of January 1, 2020. C&I Gas Revolving Loan Fund Includes injection as detailed in Attachment 6, Table G-10 of 2020 Annual Plan.
- 2 Budget adopted by Sales Team for 2020 operations. Budget includes projections of repayments made during 2020.
- 3 As of September 30, 2020
- 4 As of September 30, 2020
- 5 As of September 30, 2020
- 6 Fund balance as of September 30, 2020
- 7 As of September 30, 2020. Number is associated with paid loans.
- 7b Unique customer names for large business (one customer name can have multiple sub accounts as is in the case of a franchise). Customer accounts used for small business (not adjusted for net-to-gross). Number is associated with paid loans.
- 8 As of September 30, 2020. Number is associated with paid loans.
- 9 As of September 30, 2020. Number is associated with paid loans.
- 10 As of September 30, 2020. Number is associated with paid loans.

**Table 4
National Grid
2020 Test Metrics**

Customer Satisfaction¹
94.0%

NOTES

¹The Customer Satisfaction metric is based on an average across the EnergyWise, Single Family Income Eligible Services, and Residential Consumer Products Programs. The metric is based off customer responses to the following questions: Would you recommend this service to friend or family? How satisfied are you with the energy efficiency services you received?