

July 19, 2022

# VIA ELECTRONIC MAIL

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

RE: Docket 5076 – 2021 Energy Efficiency Plan Year-End Report Responses to PUC Data Requests – Set 3

Dear Ms. Massaro:

On behalf of The Narragansett Electric Company d/b/a Rhode Island Energy (the "Company"), enclosed please find an electronic version<sup>1</sup> of the Company's responses to the Public Utilities Commission's Third Set of Data Requests in the above-referenced matter.

Thank you for your attention to this filing. If you have any questions, please do not hesitate to contact me at 401-784-4263.

Sincerely,

Andrew S. Marcaccio

love & m

cc: Docket 5076 Service List Margaret L. Hogan, Esq. John Bell, Division Joel Munoz, Division

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<sup>&</sup>lt;sup>1</sup> Per a communication from Commission counsel on October 4, 2021, the Company is submitting an electronic version of this filing followed by six (6) hard copies filed with the Clerk within 24 hours of the electronic filing.

# Certificate of Service

I hereby certify that a copy of the cover letter and any materials accompanying this certificate was electronically transmitted to the individuals listed below.

The paper copies of this filing are being hand delivered to the Rhode Island Public Utilities Commission and to the Rhode Island Division of Public Utilities and Carriers.

/S/	July 19, 2022
Andrew S. Marcaccio, Esa	

# Docket No. 5076 – The Narragansett Electric Co. d/b/a Rhode Island Energy – 2021-2023 Energy Efficiency Program Plan & 2021 Annual Energy Efficiency Program Plan

Service list updated 6/1/2022

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# PUC 3-1

# Request:

For each of the 2021 Electric Energy Star HVAC program measures listed on Bates page 331 of the 2021 Energy Efficiency Plan (Docket No. 5076), provide a table with the following columns of information:

- a) Planned number of installations
- b) Actual number of installations
- c) Planned annual energy savings (MWh)
- d) Actual annual energy savings (MWh)
- e) Planned lifetime energy savings (MWh)
- f) Actual lifetime energy savings (MWh)
- g) Planned summer demand savings (kW)
- h) Actual summer demand savings (kW)
- i) Planned winter demand savings (kW)
- i) Actual winter demand savings (kW)
- k) Planned annual oil savings (MMBtu)
- 1) Actual annual oil savings (MMBtu)
- m) Planned lifetime oil savings (MMBtu)
- n) Actual lifetime oil savings (MMBtu)
- o) Planned annual gas savings (MMBtu)
- p) Actual annual gas savings (MMBtu)
- q) Planned lifetime gas savings (MMBtu)
- r) Actual lifetime gas savings (MMBtu)
- s) Planned annual propane savings (MMBtu)
- t) Actual annual propane savings (MMBtu)
- u) Planned lifetime propane savings (MMBtu)
- v) Actual lifetime propane savings (MMBtu)

#### Response:

Please see Attachment PUC 3-1.

The Narragansett Electric Company d/b/a Rhode Island Energy RIPUC Docket No. 5076 Attachment PUC 3-1 Page 1 of 1

	a	b	С	d	e	f	g		i	j	k	I	m	n	0	р	q	r	S	t	u	V
Electric	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual
HVAC	Quantity	Quantity	net	net	net	net	net	net	net	net	net	net	net	net	net	net	net	net	net	net	net	net
			annual	annual	lifetime	lifetime	summer	summer	winter	winter	annual oil	annual oil	lifetime	lifetime	annual	annual	lifetime	lifetime	annual	annual	lifetime	lifetime
			MWh	MWh	MWh	MWh	kW	kW	kW	kW	savings	savings	oil	oil	gas	gas	gas	gas	propane	propane	propane	propane
											MMBTU	MMBTU	savings	savings	savings	savings	savings	savings	savings	savings	savings	savings
													MMBTU	MMBTU	MMBTU	MMBTU	MMBTU	MMBTU	MMBTU	MMBTU	MMBTU	MMBTU
ACQIVES	15	114	1	4	10	75	0	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ACS16SEE	165	220	29	38	487	649	16	21	-	-	-	-	-	-	-	-	-	-	-	-	-	
Central He	49	89	39	72	553	1,004	5	10	8	15	-	-	-	-	-	-	-	-	-	-	-	
DOWNSIZ	44		8		137		4		-		-		-		-		-		-		-	
ECM Pum	6,105	8,290	867	1,177	13,004	17,658	-	-	253	343	-	-	-	-	-	-	-	-	-	-	-	
Elec Res	186	615	868	2,875	15,631	51,745	8	27	231	765	-	-	-	-	-	-	-	-	-	-	-	
HP Mini-s	485	423	31	27	551	480	3	2	7	6	-	-	-	-	-	-	-	-	-	-	-	- !
HPQIVES	26	9	6	2	114	39	1	0	1	0	-	-	-	-	-	-	-	-	-	-	-	
HPTUNE	11	102	3	29	16	145	0	3	1	7	-	-	-	-	-	-	-	-	-	-	-	
HPWH < 5	450	190	566	239	7,361	3,108	52	22	95	40	(187)	(79)	(2,428)	(1,025)	(37)	(16)	(486)	(205)	(26)	(11)	(340)	(144)
HPWH >=	11	50	2	8	23	106	0	1	0	1	-	-	-	-	-	-	-	-	-	-	-	
Mini-Split	1,805	1,057	668	391	12,021	7,039	63	37	145	85	-	-	-	-	-	-	-	-	-	-	-	
WiFi Tstat	132	5,508	9	355	128	5,321	5	197	-	-	411	17,130	6,158	256,948	-	-	-	-	-	-	-	- !
WiFi Tstat	1,320	56	85	4	1,275	54	47	2	-	-	-	-	-	-	4,105	174	61,578	2,612	-	-	-	- '

Note: All savings are net

# PUC 3-2

# Request:

On Bates page 331 of the 2021 Energy Efficiency Plan (Docket No. 5076), the Company indicated that the Electric Energy Star HVAC program was comprised of 14 different measure offerings. The 2021 Energy Efficiency Program Plan Technical Reference Manual (TRM) indicated that only 2 of those measures deliver oil savings: -0.5 oil MMBtu savings from the 'HPWH <55 gallon (electric)' measure (page M-109) and 3.11 oil MMBtu savings from the 'WiFi programmable thermostat with cooling (oil)' measure (page M-95). Table E-6A of the 2021 Energy Efficiency Plan Compliance filing submitted to the Commission on December 23, 2020 indicated that the Company planned to deliver 224 and 3,730 MMBtu of annual and lifetime oil savings through the Electric Energy Star HVAC program, respectively. In Table E-2A of the 2021 Energy Efficiency Year-End Report, the Company reported that it had actually delivered 17,051 and 255,923 MMBtu of annual and lifetime oil savings, respectively. Given this information, please explain how the Company delivered so much more oil savings than has been planned for the program. Your response should address all relevant supply decisions and/or actions taken by the Company, as well as relevant customer demand factors.

# Response:

There were many more WiFi thermostats sold in 2021 than were planned. - This contributed to the increase in oil savings. The Company ran special sale promotions for WiFi thermostats where additional price reductions resulted from manufacturer incentives. A combination of attractive pricing and customer receptivity resulted in the large increase in products sold.

# PUC 3-3

# Request:

Of the actual 'WiFi programmable thermostat with cooling (oil)' measures installed through the 2021 Electric Energy Star HVAC program and reported in your response to the prior question, please confirm that each of those installations occurred in an oil-heated residence. In your response, explain how the Company is able to confirm this, using what information or data.

# Response:

There are two methods in which a customer can purchase a WiFi thermostat, either by submitting an incentive form online or by mail (downstream method) or by purchasing a WiFi thermostat from the Company marketplace. Both pathways ask a customer how they heat their home. If the customer checks the oil box for heating fuel type, the customer would be assigned as an oil-heated residence. The only way a customer would be assigned to the oil heated residence category is if they self-declared oil by heating fuel type.

# PUC 3-4

# Request:

Table E-5 of the 2021 Energy Efficiency Plan Compliance filing submitted to the Commission on December 23, 2020 indicated that the 2021 Electric Energy Star HVAC program was planned to be implemented with \$3.49 million of program implementation expenses and \$1.31 million of customer contributions. Table E-3 of the 2021 Energy Efficiency Year-End Report shows actual program implementation expenses of \$4.35 million and actual customer contributions of \$3.55 million. Please explain what conditions led the Company to almost triple the customer contributions for this program (relative to the planned customer contributions). Were those conditions specific to the 2021 program year or indicative of long-term trends?

# Response:

The larger customer contribution at years end is the result of a different balance of actual measures sold as compared to the balance of planned measures. WiFi thermostat incentives cover 28% of total resource costs (TRC). There are some incentives within this program that contribute a greater contribution to overall TRC and result in a relatively lower percentage customer contribution. Since the actual sales in WiFi was greater than initially planned, the net result was to increase the overall customer contribution of the entire program.

In the past few years, the actual customer contributions have exceeded the planned customer contributions. In 2018, the planned customer contributions exceed the actual customer contributions.

# PUC 3-5

# Request:

For each measure offered in the 2021 Electric Energy Star HVAC program, please provide a timeline showing: the initial incentive level, and if the incentive level changed over the course of the year, when it changed and by how much.

# Response:

The 2021 Electric Energy Start HVAC incentives did not change over the course of the year.

# PUC 3-6

# Request:

Were any of the 2021 Electric Energy Star HVAC program measures eligible for incentives or rebates from the Office of Energy Resources? If so, please list them.

# Response:

The Office of Energy Resources ("OER") incentivized the following measures to customers displacing oil or propane heating fuel in conjunction with the National Grid HVAC Electric Heat Pump program.

- Central Heat Pump Ducted
- Mini-Split Heat Pump Ducted or Mixed-Ducted and Non-Ducted Integrated Controls Add-on to new or existing Heat Pump

In addition to equipment rebates, OER offers zero-interest loans of up to \$25,000 for approved high-efficiency heat pump systems that are displacing oil or propane heating systems.

To the best of Rhode Island Energy's knowledge, the above equipment was the only OER incentivized measures in 2021 under the Electric HVAC program.

# PUC 3-7

# Request:

For each of the 2021 Gas Energy Star HVAC program measures listed on Bates page 335 of the 2021 Energy Efficiency Plan (Docket No. 5076), provide a table with the following columns of information:

- a) Planned number of installations
- b) Actual number of installations
- c) Planned annual energy savings (MWh)
- d) Actual annual energy savings (MWh)
- e) Planned lifetime energy savings (MWh)
- f) Actual lifetime energy savings (MWh)
- g) Planned summer demand savings (kW)
- h) Actual summer demand savings (kW)
- i) Planned winter demand savings (kW)
- i) Actual winter demand savings (kW)
- k) Planned annual oil savings (MMBtu)
- 1) Actual annual oil savings (MMBtu)
- i) Actual allitual oil saviligs (MiMbiu)
- m) Planned lifetime oil savings (MMBtu)
  n) Actual lifetime oil savings (MMBtu)
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- p) Actual annual gas savings (MMBtu)
- q) Planned lifetime gas savings (MMBtu)
- r) Actual lifetime gas savings (MMBtu)
- s) Planned annual propane savings (MMBtu)
- t) Actual annual propane savings (MMBtu)
- u) Planned lifetime propane savings (MMBtu)
- v) Actual lifetime propane savings (MMBtu)

#### Response:

Please see Attachment PUC 3-7.

#### PUC 3-7

	a	b	С	d	e	f	g		i	j	k	1	m	n	0	р	q	r	s	t	u	v
Gas HVAC	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual
	Quantity	Quantity	net	net	net	net	net	net	net	net	net	net	net	net	net	net	net	net	net	net	net	net
			annual	annual	lifetime	lifetime	summer	summer	winter	winter	annual oil	annual oil	lifetime	lifetime	annual	annual	lifetime	lifetime	annual	annual	lifetime	lifetime
			MWh	MWh	MWh	MWh	kW	kW	kW	kW	savings	savings	oil	oil	gas	gas	gas	gas	propane	propane	propane	propane
											MMBTU	MMBTU	savings	savings	savings	savings	savings	savings	savings	savings	savings	savings
													MMBTU	MMBTU	MMBTU	MMBTU	MMBTU	MMBTU	MMBTU	MMBTU	MMBTU	MMBTU
BOILER R	33		-		-		-		-						149		2,228					
Boiler90	65	10	-	-	-	-	-	-	-	-					585	90	11,122	1,711				
Boiler95	358	215	-	-	-	-	-	-	-	-					3,982	2,395	75,662	45,503				
COMBO C	35	4	-	-	-	-	-	-	-	-					285	33	5,411	618				
COMBO C	1,430	1,225	-	-	-	-	-	-	-	-					14,460	12,387	274,743	235,357				
ENERGY	5		(0)		(3)		(0)		(0)						35	-	525	-				
Furnace95	390	316	-	-	-	-	-	-	-	-					2,757	2,233	44,104	35,736				
Furnace97	70	60	-	-	-	-	-	-	-	-					521	447	8,342	7,150				
HEAT REC	22		(4)		(75)		-		(0)						189	-	3,784	-				
ENERGY	44		(2)		(19)		(0)		(0)						132	-	1,320	-				
ENERGY	50	32	(2)				(0)		(0)	(0)					149	96	1,485	960				
ENERGY	320	337	(13)	(14)	(254)	(267)	(1)	(1)	(2)	(2)					2,266	2,386	43,052	45,340				
LOW_FLO	250	369	-	-	-	-	-	-	-	-					300	443	4,500					
TSV	15	10	-	-	-	-	-	-	-	-					6	4	40	27				
TSV_SHO	185	29	-	-	-	-	-	-	-	-					226	35	1,580	248				
WiFi Therr	510		53		796		30		-						1,586	-	23,792					
WiFi Therr		2,627	-	-	-	-	-	-	-	-					9,408	8,170	141,116	122,550				
Programm	440	135	-	-	-	-	-	-	-	-					591	181	11,236	3,447				
Combo Fu	15		-		-		-		-						311	-	5,284	-				
Water Heater,																						
Indirect,	150	169	-	-	-	-	-	-	-	-					408	460	8,160	9,194				
Gas																						
Room Resp	onse Control	- 1		-		-		-		-		1				2	İ	33				

Note: All savings are net

# PUC 3-8

# Request:

According to the 2021 Energy Efficiency Year End Report, actual spending and electric energy savings from the 2021 Electric Energy Star HVAC program exceeded planned levels by 124.3% and 164.1% (respectively), while actual spending and gas savings from the 2021 Gas Energy Star HVAC program were only 71.7% and 76.6% of planned levels (respectively). Given that they offer similar measures, please explain why the Electric Energy Star HVAC program appears to have overperformed while the Gas Energy Star HVAC program appears to have underperformed.

# Response:

While the gas and electric HVAC programs may seem similar, there were subtle differences between the market acceptance and incentive values. The Gas ENERGY STAR HVAC program predominantly focuses on items that impact heating and water heating which are ubiquitous in Rhode Island gas heated homes. Since everyone has heating and water heating and these are costly items, the products are generally replaced upon failure. Unless a customer really pays attention to these gas appliances and realizes that a replacement is needed in the near-term future, they are faced with replacing an item in short order particularly if it is wintertime. From the 2018 Rhode Island Appliance Saturation survey (see below), the research indicates that 27% of Rhode Island homes have central AC and 5% have mini split ASHP. This study was three-years old in 2021, but it still shows that installing electric cooling appliances could be a new item to a home rather than an emergency replacement. Customers have more time to plan and research this purchase and it is a growth opportunity for new installations. With summers becoming hotter, cooling opportunities are of interest to customers.

Opportunities for MSHPs appear

plentiful. Three-fifths (60%) of

an average home's floor area is

high feasibility.

# PUC 3-8, page 2

National Grid Rhode In early 2018, NMR fielded a Residential Appliance Saturation Survey (RASS) study with National Grid Rhode Island Island Residential customers. This study, consisting of web surveys and on-site verification visits, resulted in the following report and a **Appliance Saturation** comprehensive database of results. We sought to estimate penetration and characterize a variety of end-uses among the customer population. The on-site visits enabled us to also Survey Report estimate the technical potential for mini-split heat pumps. **Approach** Select Key Findings Heating Water Heating Cooling System Types Fuel Type Primary Fuel Type Natural Fuel Electric Propane

http://rieermc.ri.gov/wp-content/uploads/2019/04/national-grid-ri2311-rass-final-report-11oct2018.pdf;

Homes most often have natural gas standard

tank water heaters (40%). Only 1% of homes

have heat pump water heaters, but 36%

could readily accommodate them.

Most often customers use

natural gas boilers (37%) and

oil boilers (28%).

Customers in the Electric HVAC program had the advantage of more time to decide on the type of equipment installed and the prevalence of enhanced incentives for Heat Pumps. These factors contributed to Electric HVAC overperforming. The Gas HVAC program had planned to offer a special, limited time enhanced incentive to boost program savings, but did not do so due to the residential gas sector forecasting high overspending in 2021.

Issued on July 1, 2022

# PUC 3-9

# Request:

For the 2021 Gas EnergyWise Program, please provide a table with the following information for each month, January 2020 – December 2021:

- a. number of new weatherization contracts offered to participants at the 100% incentive level
- b. number of completed weatherization contracts that had been offered to participants at the 100% incentive level
- c. number of outstanding weatherization contracts that had been offered to participants at the 100% incentive level
- d. number of new weatherization contracts offered to participants at the 75% incentive level
- e. number of completed weatherization contracts that had been offered to participants at the 75% incentive level
- f. number of outstanding weatherization contracts that had been offered to participants at the 75% incentive level
- g. number of new weatherization contracts offered to participants at the 50% incentive level
- h. number of completed weatherization contracts that had been offered to participants at the 50% incentive level
- i. number of outstanding weatherization contracts that had been offered to participants at the 50% incentive level

### Response:

Please see Attachment PUC 3-9.

The Narragansett Electric Company d/b/a Rhode Island Energy RIPUC Docket No. 5076 Attachment PUC 3-9 Page 1 of 1

#### Attachment PUC 3-9

		20-Jan	20-Feb	20-Mar	20-Apr	20-May	20-Jun	20-Jul	20-Aug	20-Sep	20-Oct	20-Nov	20-Dec	21-Jan	21-Feb	21-Mar	21-Apr	21-May	21-Jun	21-Jul	21-Aug	21-Sep	21-Oct	21-Nov	21-Dec	total
	number of new weatherization contracts offered to participants at the 100% incentive level	340	328	200	14	95	443	500	545	461	526	337	177	73	74	44	29	27	17	10	13	7	9	3		4272
100%	number of completed weatherization contracts that had been offered to participants at the 100% incentive level						21	152	177	162	189	145	241	161	171	271	261	215	221	140	129	70	67	75	41	2909
	number of outstanding weatherization contracts that had been offered to participants at the 100% incentive level	142	113	84	7	22	190	208	218	145	167	101	41	9	18	11	2	8	2		1	1				1490
	number of new weatherization contracts offered to participants at the 100% incentive level RENTER	72	79	48		3	1	1	1		4	23	39	43	53	79	77	88	60	55	72	45	49	73	53	1018
100% Renter	number of completed weatherization contracts that had been offered to participants at the 100% incentive level RENTER	28	27	45			4	15	16	10	10	8	5	1	5	7	11	8	25	14	19	16	30	40	38	382
	number of outstanding weatherization contracts that had been offered to participants at the 100% incentive level RENTER	42	38	36		2		1	1		3	12	23	24	36	52	49	63	46	47	59	40	49	69	53	745
	number of new weatherization contracts offered to participants at the 75% incentive level	182	84	44		2	6			1	56	131	259	311	284	402	366	321	225	21	25	13	12	11	8	2764
75%	number of completed weatherization contracts that had been offered to participants at the 75% incentive level	151	206	226			2	0	1	0	1	1	3	1	3	36	52	81	87	114	155	154	159	130	119	1682
	number of outstanding weatherization contracts that had been offered to participants at the 75% incentive level	50	39	34		2	5			1	31	72	145	174	150	201	201	205	130	7	11	7	10	4	6	1485
	number of new weatherization contracts offered to participants at the 50% incentive level																		117	293	280	318	316	307	285	1916
50%	number of completed weatherization contracts that had been offered to participants at the 50% incentive level																				2	1	6	43	100	152
	number of outstanding weatherization contracts that had been offered to participants at the 50% incentive level				•														92	244	231	292	314	303	278	1754

Note: Any outstanding contracts at the 100% and 75% incentive levels would now be recalculated at the 50% incentive level if work were to proceed.

# PUC 3-10

# Request:

In response to PUC 2-2, the Company claimed: a) "discontinuation of the program could fray relationships with experienced contractors to the point where they could no longer depend on steady work from the Company and would make other commitments. Similarly, skilled workforce might seek employment in other areas"; and b) "another example of workforce retention concerns occurred with a firm shifting from weatherization work to exterior siding projects during the 2020 program pause. When the program reopened, the firm decided to keep most of their employees working on siding projects." Please provide documentation to support both claims.

# Response:

The basis for the claims stem from conversations between the lead vendor and independent insulation contractors (IIC) which were then relayed to the Company. In addition, the Company notes that the number of projects and total dollar costs for contractors working in 2019 as compared to 2021 suggests that skilled workforce may have made other commitments or sought employment in other areas. The following table shows a list of contractors with the number of projects completed and total cost of projects completed in 2019 compared to 2021. These contractors are performing less work in the energy efficiency programs in 2021 even though there were more projects available in 2021 than in 2019.

[Table 1 starts on next page]

# PUC 3-10, page 2

Table 1

Contractor Jobs	2019	2021
IIC 1		
# of Projects	116	69
Cost of Projects	\$410,876	\$313,644
IIC 2		
# of Projects	179	142
Cost of Projects	\$628,843	\$555,840
IIC 3		
# of Projects	118	76
Cost of Projects	\$410,452	\$284,699
IIC 4		
# of Projects	80	73
Cost of Projects	\$330,076	\$294,707
IIC 5		
# of Projects	263	244
Cost of Projects	\$1,074,433	\$1,171,932

The Company also notes that one of the IIC's supporting the program completed no work from March 2020 through September 2020. For the remainder of 2020, there were only 10 projects completed each month compared to the historical performance of 20 projects per month during those months.

# PUC 3-11

# Request:

In response to PUC 2-2, the Company wrote "the program experienced workforce transitions with the 2020 COVID-19 pandemic related work stoppage. Employees at Independent Insulation Contractor firms found employment opportunities in other industries during a program pause that resulted in the employees being furloughed. These employees did not return when the program restarted." In response to PUC 1-4 in Docket No. 5189, the Company explained that "by June 2021, the Company estimates that the weatherization workforce had increased to 125% of (pre-COVID) 2020 levels." Please reconcile these two statements.

# Response:

As mentioned in the response to PUC 3-10, the knowledge the Company has about the contractor workforce stems from conversations between the Lead Vendor and Independent Insulation Contractors (IIC). Based on those conversations, and as explained below, the workforce decreased in 2020 due to the COVID pause, remained low during the second half of 2020 due to uncertainty and employee attrition, and then recovered by June 2021 once there was more certainty that program work would be available.

During the several months pause in 2020 when there was no in-person work at customer homes due to COVID, employees were furloughed from the IICs. When in person work began again in Q3 of 2020, many of those employees did not return to the IICs. A survey conducted in June of 2020 showed that IICs experienced a level of difficulty in bringing back staff due the following reasons:

- Daycare issues (5.3% a lot of difficulty, 15.8% some difficulty)
- Current unemployment compensation (40% a lot of difficulty, 20% some difficulty)
- Underlying health conditions for self or close family member (14.3% a lot of difficulty, 19% some difficulty)

Throughout the remainder of 2020, the IICs did not have as large a workforce as they did in 2019. In addition to employees not returning to work on their own accord, IICs were cautious not to staff back to the pre-COVID levels because there was a lot of uncertainty, such as being unable to predict whether there would be another shut down due to COVID. IICs reported that they did not want to staff up in case there was another shut down and employees would again need to be furloughed. Accordingly, when work began again in Q3 of 2020, there was a reduced workforce based, in part, by uncertainty in the marketplace and by employees that found other employment and did not return to the IIC.

# PUC 3-11, page 2

By June of 2021, the workforce recovered. The risk of another shut down had been greatly reduced and there was a lot of available weatherization work. As such, contractors staffed up to meet the demand for labor and workforce levels increased.

# PUC 3-12

# Request:

Please explain how you track the weatherization workforce, including those workers employed at Independent Insulation Contractor firms. What data do you collect, from whom do you collect it, and how frequently do you collect it (i.e. monthly, quarterly)? In response to PUC 2-2. The Company made the following claims: Please provide a table that shows that data at the frequency you collected it (i.e. monthly, quarterly) for the period of January 2020 – December 2021.

# Response:

The EnergyWise program does not track specific numbers of employees at IIC firms. The Company utilizes the Rhode Island Energy Efficiency Workforce Analysis Final Report ("Jobs Study")<sup>1</sup> which is updated annually to estimate workforce size. Estimates of workforce size are also based on the number and size of projects. There is an assumed number of man hours used to complete weatherization work by project and the size of the project.

In addition to the Jobs Study, there were surveys sent to the IICs regarding workforce size as well as other pertinent information. The surveys were sent during the onset of the pandemic and were updated periodically during the pandemic. Below are some highlights from the surveys. Please note that the March 2020 employee number changes with each survey due to different numbers of IICs responding to the survey.

#### **Weatherization Contractors**

	Sum of Number of Employees Engaged in EE Activities as of the Mid-March 2020 Program Suspension	Sum of Number of Employees Engaged in EE Activities at Present	% Change
Jun-20	314	211	-33%
Aug-20	283	241	-15%
Jan-21	246	253	3%

<sup>&</sup>lt;sup>1</sup> See <a href="https://ripuc.ri.gov/sites/g/files/xkgbur841/files/eventsactions/docket/4.-EE-Study---Rhode-Island-2020-EE-Workforce-Analysis.pdf">https://ripuc.ri.gov/sites/g/files/xkgbur841/files/eventsactions/docket/4.-EE-Study---Rhode-Island-2020-EE-Workforce-Analysis.pdf</a> for the 2020 Jobs Study.

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Below are the results of a question from the August 2020 survey which asked about contractor capacity.

Values	
Sum of How many crews do you currently have in RHODE ISLAND?	40
Sum of How many crews did you have before the shutdown in RHODE ISLAND?	55
Sum of How many crews do you intend to add, if any, before the end of the year in RHODE ISLAND?	30

# PUC 3-13

# Request:

Please explain why the Company pledged to honor all 100% weatherization incentives offered to customers, particularly after the size of the potential gas overspend became apparent to the Company. Did the Company believe that customers who were offered a 100% incentive would not pursue their weatherization projects if they only had access to the going-rate incentive level (75% or 50%, depending on the time of year)? Provide supporting evidence for your response.

# Response:

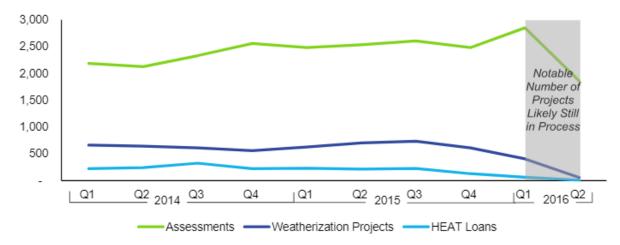
The Company pledged to honor all the 100% weatherization incentives offered to customers because it did not want to give the appearance of entering into a "bait and switch" situation. Deadlines expressed were for customers to sign a contract to receive weatherization work. Work could not be performed immediately due to backlogs resulting from the large response to the 2020 100% incentive offer and contractor workforce that was still ramping up throughout 2020. Additionally, customers with pre-weatherization barriers that required remediation before weatherization work could proceed, further pushed out 100% work. Finally, both customers and contractors had to cancel and reschedule work due to COVID incidences that also extended backlogs.

The 100% incentive was also initiated to protect customers from scope changes from the newly rolled out virtual home energy assessments (VHEA). Due to COVID, the VHEA was instituted to minimize in-person contact with customers. The program did not have any information that could forecast the size and scale of weatherization scope changes dues to issues not identified during the VHEA. The 100% incentive was a way of protecting customers and not making the customer feel like they were offered one scope of work only to have another, larger, customer contribution when the weatherization crew arrived.

It is the Company's understanding that conversion rates, the percentage of customers that move from assessment to weatherization, declines when the % incentive level declines. The National Grid Rhode Island EnergyWise Single Family Process Evaluation from 2016 highlights the degree of change from the evaluated period. This evaluation indicates conversion rates between 18% - 39%.

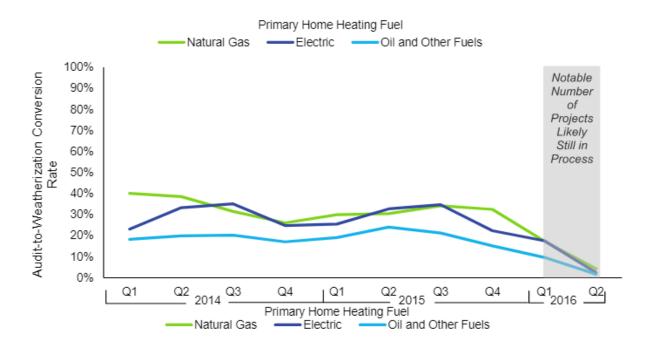
# PUC 3-13, page 2

Figure 3-5: EnergyWise Program Uptake 2014-2016



Overall, 27% of EnergyWise home energy assessment participants in 2014 and 2015 completed weatherization projects. This conversion rate varied by the participants' home heating fuel type, with the variation likely due, in part, to differences in the incentives available for weatherization projects. Participants heating with oil and other delivered fuels are eligible for the lowest incentives, and had the lowest conversion rates, averaging 18% over the two years. Participants heating with natural gas had the highest conversion rates (averaging 30% over the two years). Natural gas participants received lower incentives than participants heating with electricity for much of that period, but electrically-heated homes make up a relatively small proportion of EnergyWise participants, and Rhode Island homes in general.

# PUC 3-13, page 3



Variation in conversion rates among natural gas participants in particular shows the effect of changes in incentive level on uptake of weatherization projects (Figure 3-7). Conversion rates among participants heating with natural gas fell from an average of 39% in the first half of 2014 to 29% in the second half of 2014 and first half of 2015 as natural gas incentive levels declined from 75% of project costs to 50% of project costs. Conversion rates for natural gas participants gradually increased through the second half of 2015 and early 2016 as incentive levels increased. The decrease in conversion rates beginning at the end of 2015 likely reflects the time required for projects to move through the program; some projects may be in progress, or audit participants may not yet have begun weatherization projects.

# PUC 3-14

# Request:

Regarding the second email included in the Company's response to PUC 2-3, it appears that the Company communicated a deadline by which to complete gas weatherization projects that had been offered a 100% incentive. Regarding this deadline, please explain the following:

- a. How did the Company develop the deadline?
- b. For every customer who received the 100% incentive, did the Company require the same deadline?
- c. Did the Company enforce the deadline, and if so, how?
- d. Were any weatherization projects that were offered the 100% incentive level completed even after the deadline?

## Response:

- (a) The deadline was informed by many factors.
  - Current market situation, there was an effort to grow a pipeline to sustain contractors while also serving customers that may have incurred additional energy costs while staying home during covid.
  - During COVID, a virtual home energy assessment (VHEA) was first offered. At that time, there was no baseline for understanding how much weatherization job scopes could change based on using a virtual approach as opposed to an in-person home energy assessment. The 100% incentive was used as a way to mitigate potential cost increase risk during implementation of this new approach.
  - There was a large response to the 100% incentive promotion which resulted in a long lead time for virtual assessments. In order to make sure that customers could still take advantage of the weatherization offer, the deadline for signing the weatherization contract was extended.
  - Alignment with Massachusetts' deadlines.
- (b) The Company did its best to keep consistent deadline messaging.
- (c) The final deadline was to call for a Home Energy Assessment by September 30, 2020 to take advantage of the 100% incentive offer. Deadlines for completion of the weatherization work was the end of 2021 due to delays in completing assessments and weatherization work.
- (d) In some instances, customers with special circumstances had weatherization projects completed after the deadline.

# PUC 3-15

# Request:

When developing the Gas EnergyWise program budget included in the 2021 Energy Efficiency Plan, did the Company adjust the budget to reflect the actual number of outstanding 100% weatherization incentives for projects that had yet to be completed? If yes, please provide documentation showing those adjustments. If not, why not?

# Response:

No, the Company did not adjust the budget to reflect the actual number of outstanding 100% weatherization incentives for projects that had yet to be completed. The budget planning process began in April of 2020 with the 2021 plan filed in October of 2020. At that time, the scale and scope of the 2021 overperformance was unforeseen and unprecedented.

By the time the hearing for the Energy Efficiency Plan began in December 2020, the program could see there was a backlog of work but the scale and scope of the 2021 overperformance was still unforeseen. And, given that the Company struggled in 2020 to meet the projected spending budgets, the 2021 EnergyWise budget was set to 2020 levels, which was less than the proposed 2021 budget as filed in October 2020.