



# Single Family Income Eligible Program Impact Evaluation Report

Energy Efficiency Plan: Program Year 2025

(01/01/2025-12/31/2025)

**Prepared for:**

**Nicor Gas Company**



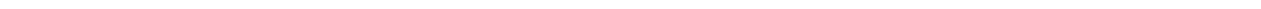
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**Prepared by:**

**Aidan Lewis**  
Guidehouse

**Yeab Lakew**  
Guidehouse



**Submitted to:**

Nicor Gas Company  
1844 Ferry Road  
Naperville, IL 60563

**Submitted by:**

Guidehouse Inc.  
167 N. Green Street  
12th Floor  
Chicago, IL 60607

**Contact:**

Charles Maglione, Partner  
202.481.7352

[cmaglione@guidehouse.com](mailto:cmaglione@guidehouse.com)

Jeff Erickson, Director  
608.616.4962

[jeff.erickson@guidehouse.com](mailto:jeff.erickson@guidehouse.com)

Laura Agapay-Read, Associate Director  
312.583.4178

[laura.agapay.read@guidehouse.com](mailto:laura.agapay.read@guidehouse.com)

Charles Ampong, Associate Director  
608.616.4922

[charles.ampong@guidehouse.com](mailto:charles.ampong@guidehouse.com)

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# 1 Introduction

This report presents the results of the impact evaluation of the Nicor Gas 2025 Single Family Income Eligible (SFIE) Program. It presents a summary of the energy impacts for the total program and broken out by relevant measure and program structure details. The appendices present the impact analysis methodology and inputs for cost effectiveness analysis. Program year 2025 covers January 1 to December 31, 2025.

## 2 Program Description

The SFIE program offers installation of energy efficiency measures for qualifying homeowners with a household income at or below 80% of the area median income (AMI). Eligible measures include programmable and advanced thermostats, water efficiency devices, weatherization measures, pipe insulation, heating and cooling equipment, and custom energy-saving measures for eligible properties.

The SFIE program has three main implementation paths that are offered jointly by Nicor Gas, ComEd, Peoples Gas (PGL), and North Shore Gas (NSG): (1) Illinois Home Weatherization Assistance Program (IHWAP), (2) Retrofits (contractor channel), and (3) Home Energy Assessment (HEA).

- The IHWAP provides weatherization services to low-income residents through local community action agencies or not for profit agencies.
- The Retrofit path offers assessments, direct installation of energy efficiency measures, replacement of inefficient equipment, weatherization services for customers, technical assistance, and educational information through approved agencies or partners (e.g., Chicago Bungalow Association) that perform outreach and intake.
- The HEA offers energy-saving products installed in homes at no cost to the customer. Homeowners can reduce their energy and water use with the installation of products available to owners of single-family homes, two-flats, and individually metered condos and townhomes.

Four additional implementation paths are administered by Nicor Gas with 100% therm allocation to Nicor Gas. These paths include installation of water heating efficiency measures (faucet aerators, showerheads, gas water heaters); advanced and programmable thermostats; air sealing, attic, duct, and rim insulation; and high efficiency boilers and furnaces.

- The SFIE HEA offering includes the Self-Assessment Portal (SAP) where a customer completes an online survey and has a kit of products shipped to their home for direct installation.
- Joint Ameren Illinois and Nicor Gas Energy Efficiency Offering (EEO), consisting of Ameren-Nicor Gas service area measures.
- Healthy Homes (HH), which was a new program Nicor Gas had launched since 2023. It offers installation of health and safety measures, including vents, asbestos and mold remediation.
- Community Pilot program path which was introduced in 2025.

The program had 3,174 participants in 2025 and completed 3,284 projects as shown in Table 1.

**Table 1. 2025 Volumetric Findings Detail**

Participation	Ameren Nicor SF	HH SF	IHWAP SF	Retrofits SF	HEA	SAP	Community Pilot	Total
Participants *	47	23	165	522	2,280	109	28	<b>3,174</b>
Installed Projects †	48	23	169	561	2,321	109	53	<b>3,284</b>
Measure Types Installed ‡	15	16	17	15	9	8	12	<b>20</b>

\* Participants are defined as the distinct count of addresses

† Installed Projects are defined as the distinct count of project ID

‡ Measure Types installed are the distinct count of Nicor Gas Measure Names

Source: Nicor Gas tracking data and evaluation team analysis.

Table 2 summarizes the installed measure quantities that are the basis for verified energy savings.

**Table 2. 2025 Installed Measure Quantities**

Program Path	Measure	Quantity Unit	Installed Quantity
Ameren Nicor	Advanced Thermostats	Unit	25
Ameren Nicor	Air Handler Filter Cleaning/Replacement	Unit	37
Ameren Nicor	Air Sealing - Method 1	Unit	39
Ameren Nicor	Air Sealing - Method 2	Unit	19
Ameren Nicor	Ceiling/Attic Insulation	SQ FT	20,115
Ameren Nicor	Domestic Hot Water Pipe Insulation	LN FT	266
Ameren Nicor	Duct Insulation And Sealing	Unit	37
Ameren Nicor	Floor Insulation Above Crawlspace	SQ FT	1,700
Ameren Nicor	Gas High Efficiency Furnace	Unit	4
Ameren Nicor	Gas Water Heater	Unit	4
Ameren Nicor	Low Flow Faucet Aerators	Unit	38
Ameren Nicor	Low Flow Showerheads	Unit	14
Ameren Nicor	Residential Furnace Tune Up	Unit	28
Ameren Nicor	Rim/Band Joist Insulation	Unit	5,420
Ameren Nicor	Wall Insulation	SQ FT	1,000
Ameren Nicor	Space Heating Boiler Tune-Up	Unit	1
HEA	Advanced Thermostats	Unit	726
HEA	Air Handler Filter Cleaning/Replacement	Unit	1,482
HEA	Air Sealing - Method 2	Unit	1,300
HEA	Boiler Pipe Insulation	LN FT	90
HEA	Domestic Hot Water Pipe Insulation	LN FT	2,412
HEA	Low Flow Faucet Aerators	Unit	948

Program Path	Measure	Quantity Unit	Installed Quantity
HEA	Low Flow Showerheads	Unit	1,053
HEA	Programmable Thermostats	Unit	469
HEA	Water Heater Temperature Setback	Unit	1,362
HH	Advanced Thermostats	Unit	10
HH	Air Handler Filter Cleaning/Replacement	Unit	10
HH	Air Sealing - Method 1	Unit	17
HH	Air Sealing - Method 2	Unit	135
HH	Basement Sidewall Insulation	SQ FT	868
HH	Ceiling/Attic Insulation	SQ FT	13,257
HH	Domestic Hot Water Pipe Insulation	LN FT	37
HH	Duct Insulation And Sealing	Unit	17
HH	Floor Insulation Above Crawlspace	SQ FT	800
HH	Gas High Efficiency Furnace	Unit	1
HH	Gas Water Heater	Unit	1
HH	Low Flow Faucet Aerators	Unit	8
HH	Low Flow Showerheads	Unit	11
HH	Residential Furnace Tune Up	Unit	7
HH	Rim/Band Joist Insulation	Unit	819
HH	Wall Insulation	SQ FT	537
IHWAP	Advanced Thermostats	Unit	59
IHWAP	Air Sealing - Method 1	Unit	164
IHWAP	Air Sealing - Method 2	Unit	73
IHWAP	Basement Sidewall Insulation	SQ FT	15,691
IHWAP	Ceiling/Attic Insulation	SQ FT	169,359
IHWAP	Domestic Hot Water Pipe Insulation	LN FT	1,434
IHWAP	Duct Insulation And Sealing	Unit	10
IHWAP	Floor Insulation Above Crawlspace	SQ FT	4,589
IHWAP	Gas High Efficiency Boiler	Unit	2
IHWAP	Gas High Efficiency Furnace	Unit	142
IHWAP	Gas Water Heater	Unit	70
IHWAP	Low Flow Faucet Aerators	Unit	116
IHWAP	Low Flow Showerheads	Unit	38
IHWAP	Programmable Thermostats	Unit	26
IHWAP	Residential Furnace Tune Up	Unit	11
IHWAP	Rim/Band Joist Insulation	Unit	9,600
IHWAP	Wall Insulation	SQ FT	25,317
Retrofits	Advanced Thermostats	Unit	7
Retrofits	Air Sealing - Method 1	Unit	266
Retrofits	Air Sealing - Method 2	Unit	13,729

Program Path	Measure	Quantity Unit	Installed Quantity
Retrofits	Basement Sidewall Insulation	SQ FT	32,143
Retrofits	Ceiling/Attic Insulation	SQ FT	329,200
Retrofits	Domestic Hot Water Pipe Insulation	LN FT	208
Retrofits	Duct Insulation And Sealing	Unit	177
Retrofits	Floor Insulation Above Crawlspace	SQ FT	900
Retrofits	Gas High Efficiency Boiler	Unit	3
Retrofits	Gas High Efficiency Furnace	Unit	36
Retrofits	Gas Water Heater	Unit	11
Retrofits	Programmable Thermostats	Unit	10
Retrofits	Residential Furnace Tune Up	Unit	156
Retrofits	Rim/Band Joist Insulation	Unit	14,681
Retrofits	Wall Insulation	SQ FT	184,292
Retrofits	Space Heating Boiler Tune-Up	Unit	4
SAP	Advanced Thermostats	Unit	56
SAP	Air Sealing - Method 2	Unit	122
SAP	Boiler Pipe Insulation	LN FT	18
SAP	Domestic Hot Water Pipe Insulation	LN FT	150
SAP	Low Flow Faucet Aerators	Unit	182
SAP	Low Flow Showerheads	Unit	130
SAP	Programmable Thermostats	Unit	9
SAP	Water Heater Temperature Setback	Unit	24
Community Pilot	Advanced Thermostats	Unit	16
Community Pilot	Air Sealing - Method 2	Unit	4,929
Community Pilot	Ceiling/Attic Insulation	SQ FT	5,313
Community Pilot	Domestic Hot Water Pipe Insulation	LN FT	198
Community Pilot	Duct Insulation And Sealing	Unit	22
Community Pilot	Gas High Efficiency Furnace	Unit	5
Community Pilot	Gas Water Heater	Unit	1
Community Pilot	Programmable Thermostats	Unit	2
Community Pilot	Residential Furnace Tune Up	Unit	19
Community Pilot	Rim/Band Joist Insulation	Unit	1,165
Community Pilot	Space Heating Boiler Tune-Up	Unit	1

Source: Nicor Gas tracking data and evaluation team analysis.

### 3 Program Savings Detail

Table 3 summarizes the energy savings the SFIE program achieved by path in 2025.

**Table 3. 2025 Annual Energy Savings Summary**

Program Path	Ex Ante Gross Savings (Therms)	Verified Gross RR*	Verified Gross Savings (Therms)	NTG†	Verified Net Savings (Therms)
Ameren Nicor	34,815	100%	34,775	1.0	34,775
HEA	129,856	99%	129,034	1.0	129,034
HH	11,299	98%	11,086	1.0	11,086
IHWAP	101,111	98%	98,635	1.0	98,635
Retrofits	117,897	100%	117,447	1.0	117,447
SAP	5,794	101%	5,744	1.0	5,744
Community Pilot	10,236	99%	10,160	1.0	10,160
<b>Total</b>	<b>411,008</b>	<b>99%</b>	<b>406,881</b>	<b>1.0</b>	<b>406,881</b>

\* Realization Rate (RR) is the ratio of verified gross savings to ex ante gross savings, based on evaluation research findings.

† NTG, Net to Gross is the deemed value available on the SAG website: <https://www.ilsag.info/evaluator-ntg-recommendations-for-2025/>.

Source: Evaluation team analysis.

## 4 Program Savings by Measure

The program includes 20 measures as shown in Table 4. The Advanced Thermostats and Ceiling/Attic Insulation measures contributed the most savings.

**Table 4. 2025 Annual Energy Savings by Measure**

Program Path	Savings Category	Ex Ante Gross Savings (Therms)	Verified Gross RR*	Verified Gross Savings (Therms)	NTG	Verified Net Savings (Therms)
Ameren Nicor	Advanced Thermostats	2,083	100%	2,083	1.0	2,083
Ameren Nicor	Air Handler Filter Cleaning/Replacement	252	100%	252	1.0	252
Ameren Nicor	Air Sealing - Method 1	6,903	100%	6,903	1.0	6,903
Ameren Nicor	Air Sealing - Method 2	120	100%	120	1.0	120
Ameren Nicor	Ceiling/Attic Insulation	3,673	100%	3,673	1.0	3,673
Ameren Nicor	Domestic Hot Water Pipe Insulation	563	100%	563	1.0	563
Ameren Nicor	Duct Insulation and Sealing	16,163	100%	16,163	1.0	16,163
Ameren Nicor	Floor Insulation Above Crawlspace	238	100%	238	1.0	238
Ameren Nicor	Gas High Efficiency Furnace	664	100%	664	1.0	664
Ameren Nicor	Gas Water Heater	471	100%	471	1.0	471
Ameren Nicor	Low Flow Faucet Aerators	188	100%	188	1.0	188
Ameren Nicor	Low Flow Showerheads	47	100%	47	1.0	47
Ameren Nicor	Residential Furnace Tune Up	2,583	100%	2,583	1.0	2,583
Ameren Nicor	Rim/Band Joist Insulation	583	93%	543	1.0	543
Ameren Nicor	Wall Insulation	146	100%	146	1.0	146

Program Path	Savings Category	Ex Ante Gross Savings (Therms)	Verified Gross RR*	Verified Gross Savings (Therms)	NTG	Verified Net Savings (Therms)
Ameren Nicor	Space Heating Boiler Tune-Up	140	100%	140	1.0	140
HEA	Advanced Thermostats	59,332	99%	58,614	1.0	58,614
HEA	Air Handler Filter Cleaning/Replacement	11,748	100%	11,747	1.0	11,747
HEA	Air Sealing - Method 2	9,512	100%	9,512	1.0	9,512
HEA	Boiler Pipe Insulation	39	100%	39	1.0	39
HEA	Domestic Hot Water Pipe Insulation	4,586	100%	4,586	1.0	4,586
HEA	Low Flow Faucet Aerators	3,914	100%	3,915	1.0	3,915
HEA	Low Flow Showerheads	10,810	100%	10,810	1.0	10,810
HEA	Programmable Thermostats	29,572	100%	29,470	1.0	29,470
HEA	Water Heater Temperature Setback	343	100%	342	1.0	342
HH	Advanced Thermostats	1,012	100%	1,012	1.0	1,012
HH	Air Handler Filter Cleaning/Replacement	78	100%	78	1.0	78
HH	Air Sealing - Method 1	2,164	100%	2,164	1.0	2,164
HH	Air Sealing - Method 2	105	100%	105	1.0	105
HH	Basement Sidewall Insulation	248	16%	41	1.0	41
HH	Ceiling/Attic Insulation	1,162	100%	1,162	1.0	1,162
HH	Domestic Hot Water Pipe Insulation	78	100%	78	1.0	78
HH	Duct Insulation and Sealing	5,263	100%	5,263	1.0	5,263
HH	Floor Insulation Above Crawlspace	138	100%	138	1.0	138
HH	Gas High Efficiency Furnace	158	100%	158	1.0	158
HH	Gas Water Heater	58	100%	58	1.0	58
HH	Low Flow Faucet Aerators	75	100%	75	1.0	75
HH	Low Flow Showerheads	59	100%	59	1.0	59
HH	Residential Furnace Tune Up	555	100%	555	1.0	555
HH	Rim/Band Joist Insulation	90	93%	83	1.0	83
HH	Wall Insulation	57	100%	57	1.0	57
IHWAP	Advanced Thermostats	5,244	100%	5,244	1.0	5,244
IHWAP	Air Sealing - Method 1	14,478	100%	14,478	1.0	14,478
IHWAP	Air Sealing - Method 2	48	100%	48	1.0	48
IHWAP	Basement Sidewall Insulation	3,471	29%	1,000	1.0	1,000
IHWAP	Ceiling/Attic Insulation	17,008	100%	17,008	1.0	17,008
IHWAP	Domestic Hot Water Pipe Insulation	2,933	100%	2,933	1.0	2,933
IHWAP	Duct Insulation and Sealing	2,565	100%	2,565	1.0	2,565
IHWAP	Floor Insulation Above Crawlspace	257	100%	257	1.0	257

Program Path	Savings Category	Ex Ante Gross Savings (Therms)	Verified Gross RR*	Verified Gross Savings (Therms)	NTG	Verified Net Savings (Therms)
IHWAP	Gas High Efficiency Boiler	1,414	100%	1,414	1.0	1,414
IHWAP	Gas High Efficiency Furnace	43,251	100%	43,251	1.0	43,251
IHWAP	Gas Water Heater	3,820	100%	3,820	1.0	3,820
IHWAP	Low Flow Faucet Aerators	261	100%	261	1.0	261
IHWAP	Low Flow Showerheads	133	100%	133	1.0	133
IHWAP	Programmable Thermostats	1,674	100%	1,674	1.0	1,674
IHWAP	Residential Furnace Tune Up	449	100%	449	1.0	449
IHWAP	Rim/Band Joist Insulation	1,297	100%	1,292	1.0	1,292
IHWAP	Wall Insulation	2,809	100%	2,809	1.0	2,809
Retrofits	Advanced Thermostats	581	100%	581	1.0	581
Retrofits	Air Sealing - Method 1	26,651	100%	26,651	1.0	26,651
Retrofits	Air Sealing - Method 2	6,841	100%	6,841	1.0	6,841
Retrofits	Basement Sidewall Insulation	4,037	90%	3,617	1.0	3,617
Retrofits	Ceiling/Attic Insulation	35,136	100%	35,136	1.0	35,136
Retrofits	Domestic Hot Water Pipe Insulation	419	100%	419	1.0	419
Retrofits	Duct Insulation and Sealing	12,241	100%	12,241	1.0	12,241
Retrofits	Floor Insulation Above Crawlspace	120	100%	120	1.0	120
Retrofits	Gas High Efficiency Boiler	652	100%	652	1.0	652
Retrofits	Gas High Efficiency Furnace	7,491	100%	7,491	1.0	7,491
Retrofits	Gas Water Heater	324	100%	324	1.0	324
Retrofits	Programmable Thermostats	695	98%	680	1.0	680
Retrofits	Residential Furnace Tune Up	3,535	100%	3,535	1.0	3,535
Retrofits	Rim/Band Joist Insulation	2,169	99%	2,155	1.0	2,155
Retrofits	Wall Insulation	16,833	100%	16,833	1.0	16,833
Retrofits	Space Heating Boiler Tune-Up	171	100%	171	1.0	171
SAP	Advanced Thermostats	3,334	99%	3,284	1.0	3,284
SAP	Air Sealing - Method 2	608	100%	608	1.0	608
SAP	Boiler Pipe Insulation	8	100%	8	1.0	8
SAP	Domestic Hot Water Pipe Insulation	302	100%	302	1.0	302
SAP	Low Flow Faucet Aerators	554	100%	554	1.0	554
SAP	Low Flow Showerheads	537	100%	537	1.0	537
SAP	Programmable Thermostats	445	100%	445	1.0	445
SAP	Water Heater Temperature Setback	6	98%	6	1.0	6
Community Pilot	Advanced Thermostats	1,391	100%	1,391	1.0	1,391
Community Pilot	Air Sealing - Method 2	2,302	100%	2,302	1.0	2,302
Community Pilot	Ceiling/Attic Insulation	494	100%	494	1.0	494

Program Path	Savings Category	Ex Ante Gross Savings (Therms)	Verified Gross RR*	Verified Gross Savings (Therms)	NTG	Verified Net Savings (Therms)
Community Pilot	Domestic Hot Water Pipe Insulation	400	100%	400	1.0	400
Community Pilot	Duct Insulation and Sealing	3,496	100%	3,496	1.0	3,496
Community Pilot	Gas High Efficiency Furnace	1,175	100%	1,175	1.0	1,175
Community Pilot	Gas Water Heater	54	100%	54	1.0	54
Community Pilot	Programmable Thermostats	157	100%	157	1.0	157
Community Pilot	Residential Furnace Tune Up	535	100%	535	1.0	535
Community Pilot	Rim/Band Joist Insulation	185	59%	110	1.0	110
Community Pilot	Space Heating Boiler Tune-Up	46	100%	46	1.0	46
<b>Total</b>		<b>411,008</b>	<b>99%</b>	<b>406,881</b>	<b>1.00</b>	<b>406,881</b>

Source: Evaluation team analysis.

## 5 Impact Analysis Findings and Recommendations

### 5.1 Impact Parameter Estimates

Table 5 shows the unit per therm savings and realization rate findings by measure from our review. The realization rate is the ratio of the verified savings to the ex ante savings. Following the table, we provide findings and recommendations, including discussion of all measures with realization rates above or below 100%. Appendix A provides a description of the impact analysis methodology.

**Table 5. Verified Gross Savings Parameters**

Measure	Unit Basis	Ex Ante Gross (therms/unit)	Verified Gross (therms/unit)	Realization Rate	IL-TRM v13.0 Section*
Advanced Thermostats	Unit	81.18	80.32	99%	5.3.16
Air Handler Filter Cleaning/Replacement	Unit	7.90	7.90	100%	5.3.21
Air Sealing - Method 1	Unit	103.28	103.28	100%	5.6.1
Air Sealing - Method 2	Unit	0.96	0.96	100%	5.6.1
Basement Sidewall Insulation	SQ FT	0.16	0.10	60%	5.6.2
Boiler Pipe Insulation	LN FT	0.44	0.44	100%	5.3.2
Ceiling/Attic Insulation	SQ FT	0.11	0.11	100%	5.6.5
Domestic Hot Water Pipe Insulation	LN FT	1.97	1.97	100%	5.4.1
Duct Insulation and Sealing	Unit	151.06	151.06	100%	5.3.4

Measure	Unit Basis	Ex Ante Gross (therms/unit)	Verified Gross (therms/unit)	Realization Rate	IL-TRM v13.0 Section*
Floor Insulation Above Crawlspace	SQ FT	0.09	0.09	100%	5.6.3
Gas High Efficiency Boiler	Unit	413.11	413.11	100%	5.3.6
Gas High Efficiency Furnace	Unit	280.53	280.53	100%	5.3.7
Gas Water Heater	Unit	54.33	54.33	100%	5.4.2
Low Flow Faucet Aerators	Unit	3.86	3.86	100%	5.4.4
Low Flow Showerheads	Unit	9.30	9.30	100%	5.4.5
Programmable Thermostats	Unit	63.07	62.84	100%	5.3.11
Residential Furnace Tune Up	Unit	34.65	34.65	100%	5.3.13
Rim/Band Joist Insulation	Unit	0.14	0.13	97%	5.6.6
Wall Insulation	SQ FT	0.09	0.09	100%	5.6.4
Water Heater Temperature Setback	Unit	0.25	0.25	100%	5.4.6

\* State of Illinois Technical Reference Manual version 13.0 from <http://www.ilsag.info/technical-reference-manual.html>

## 5.2 Findings and Recommendations

**Finding 1.** The evaluation team found four DWH Pipe Insulation measures (MEA-2025.04.03-886571, MEA-2025.04.03-886569, MEA-2025.04.03-886575, MEA-2025.04.03-886572) had a pipe length of 0.6. The other DWH Pipe Insulation measures had pipe length values of whole numbers, ranging from 1 to 28. The evaluation team concluded that these four measures had a typo in data entry, and a pipe length of 6 was used, resulting in a realization rate of 100%.

**Recommendation 1.** Ensure that tracking data is consistent with units and scale.

**Finding 2.** One low flow faucet aerator, Bathroom Aerator SF (DI) (MEA-2025.06.25-925943), used kitchen values for the drain factor, retrofit daily length of faucet use (L\_low), and baseline daily length of faucet use (L\_base) inputs rather than bathroom values. This resulted in a realization rate of 120%.

**Recommendation 2.** Ensure that all bathroom aerators use the corresponding bathroom values for drain factor, L\_low, and L\_base, and vice versa for kitchen aerators, according to the TRM's guidelines.

**Finding 3.** The tracking data did not include the R-value added Above Ground input for Basement/Sidewall Insulation measures, so the evaluation team assumed a zero value for R-value added Above Ground for all Basement/Sidewall measures. This caused a realization rate range between 3%-30% for 28 out of 137 measures. The rest of Basement/Sidewall measures were not impacted because they did not have above ground insulation installed.

**Recommendation 3.** Ensure R-value added Above Ground input is included in the tracking data.

**Finding 4.** The evaluation team found that 103 out of 896 of the low flow faucet aerators (both Bathroom Aerator SF (DI) and Kitchen Aerator SF (DI)) utilized an in-service rate (ISR) value of 0.77, corresponding to a

virtual assessment. The evaluation team was able to recreate these savings, using the ISR of 0.77 provided in the tracking data, but the measure names should include “(VA)” to signify that these were “Virtual Assessment followed by Unverified Self-Install”, assuming this is the case.

**Recommendation 4.** Ensure that “(VA)” is in the measure names of measures that included a virtual assessment for low flow faucet aerators.

**Finding 5.** The evaluation team found 18 out of 1384 water heater temperature setback measures had an electric fuel type, but ex ante therms savings were calculated using Tpre and Tpost values corresponding to a natural gas fuel type. This resulted in a realization rate of 72% for these measures.

**Recommendation 5.** Ensure that the correct Tpre and Tpost (temperature) values corresponding to the fuel type are used for water heater temperature setback measures.

**Finding 6.** The evaluation team found 10 out of 1384 water heater temperature setback measures were indicated as having a shared water heater in the tracking data but also had a recovery efficiency (RE\_gas) value of 0.78 in the tracking data. An RE\_gas input value of 0.78 corresponds to a Single-Family home. Ex ante savings for these measures used the 0.78 RE\_gas value and thus had a realization rate of 86%.

The evaluation team found that these 10 measures could have a realization rate of 100% if a RE\_gas value of 0.67, corresponding to a “Shared DHW”, was provided in the tracking data.

**Recommendation 6.** Ensure that the correct value for RE\_gas is provided in the tracking data for all water heater temperature setback measures.

**Finding 7.** The evaluation team found that Nicor data was missing values defining whether a space was conditioned or unconditioned for insulation measures. The team was able to pull a column “conditioned\_space” from ComEd’s data, but this remained blank for 27 Rim/Band Joist insulation measures. The evaluation team assumed these blank rows indicated an unconditioned space. Utilizing this assumption, we were unable to recreate the ex-ante savings for six out of 27 of these rows. As a result, six out of 261 Rim/Band Joist Insulation measures have realization rates below 100% (two at 58%, two at 59%, and two at 62%).

**Recommendation 7.** Ensure that the tracking data contains information about whether a space is conditioned or unconditioned for the insulation measures.

**Finding 8.** The evaluation team found that for two Air Sealing - Door Sweep measures (MEA-2025.02.12-851345, MEA-2025.02.19-855605), an ISR of 0.68 was used to calculate the ex-ante therms savings. There were 249 “Air Sealing - Door Sweep” measures in the data, and the ISR provided for these was either 1 or blank. The evaluation team believes that the two measures with an ISR of 0.68 were either misnamed or calculated incorrectly.

**Recommendation 8.** If the ISR provided is left blank, ensure that the calculations remain consistent for a given measure name, or that the measure is named correctly.

**Finding 9.** The evaluation team found 67 of the 540 Air Sealing - Door Sweep - DI measures used an ISR of 0.68 to calculate the ex-ante therms savings. Direct Install air sealing measures should have an ISR of 1.0 according to the TRM. All 540 of these measures had the “in\_service\_rate” column in the data blank.

**Recommendation 9.** If the ISR provided is left blank, ensure that the calculations remain consistent for a given measure name and the measure is named correctly.

**Finding 10.** For three instances of Advanced Thermostat (DI) – Manual measure (MEA-2025.01.30-843949, MEA-2025.01.30-843955 and MEA-2025.02.26-860012), ex ante calculations applied an 8.5% Heating Reduction factor, applicable when the existing thermostat type is unknown. However, the tracking data reported a 10.2% Heating Reduction factor.

For two instances of Advanced Thermostat (DI) – Manual measure (MEA-2025.05.21-915221 and MEA-2025.07.01-927942), ex ante calculations applied a 7.1% Heating Reduction factor, applicable when the existing thermostat is programmable.

For all these measure instances, the evaluation team applied a Heating Reduction factor of 10.2%, applicable when the existing thermostat type is Manual, consistent with the measure name and IL-TRM v13.0.

**Recommendation 10.** Ensure correct Heating Reduction factor applied reflects the baseline measure characterization associated with the measure, as indicated by the measure name.

**Finding 11.** For 18 out of 40 total instances of Advanced Thermostat (DI) – Programmable measure in the Self-Assessment Portal (SAP), ex ante savings calculations used an ISR for heating as 100%, associated with Direct Install measures. The evaluation team applied a 54% ISR, associated with self-install thermostats, consistent with the program delivery method and IL-TRM v13.0. Advanced Thermostats account for 57% of SAP component’s reported gross therms savings and the impact of the adjustments from Findings 18 and 19 resulted in a realization rate of 78% for this measure.

**Recommendation 11.** Ensure the correct ISR value is used and reflects the baseline measure characterization associated with the measure, as indicated by the measure name.

**Finding 12.** For four instances of Advanced Thermostat (DI) – Blended measure, ex ante calculations used Heating Reduction as 10.2%. However, the tracking data reported Heating Reduction as 8.5%. The evaluation team used Heating Reduction as 8.5%, applicable for Blended existing thermostat type, consistent with the measure name. The impact of this adjustment resulted in a realization rate of 83% for these measure instances.

**Recommendation 12.** Ensure savings are calculated, consistent with the measure name.

## Appendix A. Impact Analysis Methodology

### Impact Analysis Supplemental Information

The evaluation team determined the verified gross for each program measure by the following methodology:

- Reviewing the savings algorithm inputs in the measure workbook with the IL TRM v13 and IL-TRM Errata, when applicable.
- Referencing SFHU Savings Calculator to validate the savings algorithm was applied correctly.
- Cross-checking ComEd's 2025 year-end data to validate missing data.

## Appendix B. Program Specific Inputs for the Illinois TRC

Table 6 shows the Total Resource Cost (TRC) cost-effectiveness analysis inputs available at the time of producing this impact evaluation report. Additional required cost data (e.g., measure costs, program level incentive and non-incentive costs) are not included in this table and will be provided to the evaluation team later. Guidehouse will include annual and lifetime water savings and greenhouse gas reductions in the end of year summary report.

**Table 6. Verified Cost Effectiveness Inputs**

Program Path	Savings Category	DAC Project*	Units	Quantity	Effective Useful Life	Early Replacement Flag	Verified Gross Annual Water Savings (Gallons)	Ex Ante Gross Savings (Therms)	Verified Gross Savings (Therms)	Verified Net Savings (Therms)
Ameren Nicor	Advanced Thermostats	FALSE	Unit	25	11.00	NO	-	2,083	2,083	2,083
Ameren Nicor	Air Handler Filter Cleaning/Replacement	FALSE	Unit	37	3.00	NO	-	252	252	252
Ameren Nicor	Air Sealing - Method 1	FALSE	Unit	39	20.00	YES	-	6,903	6,903	6,903
Ameren Nicor	Air Sealing - Method 2	FALSE	Unit	19	20.00	YES	-	120	120	120
Ameren Nicor	Ceiling/Attic Insulation	FALSE	SQ FT	20,115	30.00	YES	-	3,673	3,673	3,673
Ameren Nicor	Domestic Hot Water Pipe Insulation	FALSE	LN FT	266	15.00	NO	-	563	563	563
Ameren Nicor	Duct Insulation and Sealing	FALSE	Unit	37	20.00	NO	-	16,163	16,163	16,163
Ameren Nicor	Floor Insulation Above Crawlspace	FALSE	SQ FT	1,700	30.00	YES	-	238	238	238
Ameren Nicor	Gas High Efficiency Furnace	FALSE	Unit	4	20.00	YES	-	664	664	664

Program Path	Savings Category	DAC Project*	Units	Quantity	Effective Useful Life	Early Replacement Flag	Verified Gross Annual Water Savings (Gallons)	Ex Ante Gross Savings (Therms)	Verified Gross Savings (Therms)	Verified Net Savings (Therms)
Ameren Nicor	Gas Water Heater	FALSE	Unit	4	14.50	YES	-	471	471	471
Ameren Nicor	Low Flow Faucet Aerators	FALSE	Unit	38	10.00	NO	213.56	188	188	188
Ameren Nicor	Low Flow Showerheads	FALSE	Unit	14	10.00	NO	43.21	47	47	47
Ameren Nicor	Residential Furnace Tune Up	FALSE	Unit	28	3.00	NO	-	2,583	2,583	2,583
Ameren Nicor	Rim/Band Joist Insulation	FALSE	Unit	5,420	30.00	YES	-	583	543	543
Ameren Nicor	Wall Insulation	FALSE	SQ FT	1,000	30.00	YES	-	146	146	146
Ameren Nicor	Space Heating Boiler Tune-Up	FALSE	Unit	1	3.00	NO	-	140	140	140
HEA	Advanced Thermostats	FALSE	Unit	726	11.00	NO	-	59,332	58,614	58,614
HEA	Air Handler Filter Cleaning/Replacement	FALSE	Unit	1,482	3.00	NO	-	11,748	11,747	11,747
HEA	Air Sealing - Method 2	FALSE	Unit	1,300	20.00	YES	-	9,512	9,512	9,512
HEA	Boiler Pipe Insulation	FALSE	LN FT	90	11.00	NO	-	39	39	39
HEA	Domestic Hot Water Pipe Insulation	FALSE	LN FT	2,412	15.00	NO	-	4,586	4,586	4,586
HEA	Low Flow Faucet Aerators	FALSE	Unit	948	10.00	NO	4,486.45	3,914	3,915	3,915
HEA	Low Flow Showerheads	FALSE	Unit	1,053	10.00	NO	10,029.10	10,810	10,810	10,810
HEA	Programmable Thermostats	FALSE	Unit	469	16.00	YES	-	29,572	29,470	29,470
HEA	Water Heater Temperature Setback	FALSE	Unit	1,362	2.00	NO	-	343	342	342

Program Path	Savings Category	DAC Project*	Units	Quantity	Effective Useful Life	Early Replacement Flag	Verified Gross Annual Water Savings (Gallons)	Ex Ante Gross Savings (Therms)	Verified Gross Savings (Therms)	Verified Net Savings (Therms)
HH	Advanced Thermostats	FALSE	Unit	10	11.00	NO	-	1,012	1,012	1,012
HH	Air Handler Filter Cleaning/Replacement	FALSE	Unit	10	3.00	NO	-	78	78	78
HH	Air Sealing - Method 1	FALSE	Unit	17	20.00	YES	-	2,164	2,164	2,164
HH	Air Sealing - Method 2	FALSE	Unit	135	20.00	YES	-	105	105	105
HH	Basement Sidewall Insulation	FALSE	SQ FT	868	30.00	YES	-	248	41	41
HH	Ceiling/Attic Insulation	FALSE	SQ FT	13,257	30.00	YES	-	1,162	1,162	1,162
HH	Domestic Hot Water Pipe Insulation	FALSE	LN FT	37	15.00	NO	-	78	78	78
HH	Duct Insulation and Sealing	FALSE	Unit	17	20.00	NO	-	5,263	5,263	5,263
HH	Floor Insulation Above Crawlspace	FALSE	SQ FT	800	30.00	YES	-	138	138	138
HH	Gas High Efficiency Furnace	FALSE	Unit	1	20.00	YES	-	158	158	158
HH	Gas Water Heater	FALSE	Unit	1	14.50	YES	-	58	58	58
HH	Low Flow Faucet Aerators	FALSE	Unit	8	10.00	NO	84.14	75	75	75
HH	Low Flow Showerheads	FALSE	Unit	11	10.00	NO	54.29	59	59	59
HH	Residential Furnace Tune Up	FALSE	Unit	7	3.00	NO	-	555	555	555

Program Path	Savings Category	DAC Project*	Units	Quantity	Effective Useful Life	Early Replacement Flag	Verified Gross Annual Water Savings (Gallons)	Ex Ante Gross Savings (Therms)	Verified Gross Savings (Therms)	Verified Net Savings (Therms)
HH	Rim/Band Joist Insulation	FALSE	Unit	819	30.00	YES	-	90	83	83
HH	Wall Insulation	FALSE	SQ FT	537	30.00	YES	-	57	57	57
IHWAP	Advanced Thermostats	FALSE	Unit	59	11.00	NO	-	5,244	5,244	5,244
IHWAP	Air Sealing - Method 1	FALSE	Unit	164	20.00	YES	-	14,478	14,478	14,478
IHWAP	Air Sealing - Method 2	FALSE	Unit	73	20.00	YES	-	48	48	48
IHWAP	Basement Sidewall Insulation	FALSE	SQ FT	15,691	30.00	YES	-	3,471	1,000	1,000
IHWAP	Ceiling/Attic Insulation	FALSE	SQ FT	169,359	30.00	YES	-	17,008	17,008	17,008
IHWAP	Domestic Hot Water Pipe Insulation	FALSE	LN FT	1,434	15.00	NO	-	2,933	2,933	2,933
IHWAP	Duct Insulation and Sealing	FALSE	Unit	10	20.00	YES	-	2,565	2,565	2,565
IHWAP	Floor Insulation Above Crawlspace	FALSE	SQ FT	4,589	30.00	YES	-	257	257	257
IHWAP	Gas High Efficiency Boiler	FALSE	Unit	2	25.00	YES	-	1,414	1,414	1,414
IHWAP	Gas High Efficiency Furnace	FALSE	Unit	142	20.00	YES	-	43,251	43,251	43,251
IHWAP	Gas Water Heater	FALSE	Unit	70	14.50	YES	-	3,820	3,820	3,820
IHWAP	Low Flow Faucet Aerators	FALSE	Unit	116	10.00	NO	315.97	261	261	261

Program Path	Savings Category	DAC Project*	Units	Quantity	Effective Useful Life	Early Replacement Flag	Verified Gross Annual Water Savings (Gallons)	Ex Ante Gross Savings (Therms)	Verified Gross Savings (Therms)	Verified Net Savings (Therms)
IHWAP	Low Flow Showerheads	FALSE	Unit	38	10.00	NO	123.04	133	133	133
IHWAP	Programmable Thermostats	FALSE	Unit	26	16.00	YES	-	1,674	1,674	1,674
IHWAP	Residential Furnace Tune Up	FALSE	Unit	11	3.00	NO	-	449	449	449
IHWAP	Rim/Band Joist Insulation	FALSE	Unit	9,600	30.00	YES	-	1,297	1,292	1,292
IHWAP	Wall Insulation	FALSE	SQ FT	25,317	30.00	YES	-	2,809	2,809	2,809
Retrofits	Advanced Thermostats	FALSE	Unit	7	11.00	NO	-	581	581	581
Retrofits	Air Sealing - Method 1	FALSE	Unit	266	20.00	YES	-	26,651	26,651	26,651
Retrofits	Air Sealing - Method 2	FALSE	Unit	13,729	20.00	YES	-	6,841	6,841	6,841
Retrofits	Basement Sidewall Insulation	FALSE	SQ FT	32,143	30.00	YES	-	4,037	3,617	3,617
Retrofits	Ceiling/Attic Insulation	FALSE	SQ FT	329,200	30.00	YES	-	35,136	35,136	35,136
Retrofits	Domestic Hot Water Pipe Insulation	FALSE	LN FT	208	15.00	NO	-	419	419	419
Retrofits	Duct Insulation and Sealing	FALSE	Unit	177	20.00	YES	-	12,241	12,241	12,241
Retrofits	Floor Insulation Above Crawlspace	FALSE	SQ FT	900	30.00	YES	-	120	120	120
Retrofits	Gas High Efficiency Boiler	FALSE	Unit	3	25.00	YES	-	652	652	652

Program Path	Savings Category	DAC Project*	Units	Quantity	Effective Useful Life	Early Replacement Flag	Verified Gross Annual Water Savings (Gallons)	Ex Ante Gross Savings (Therms)	Verified Gross Savings (Therms)	Verified Net Savings (Therms)
Retrofits	Gas High Efficiency Furnace	FALSE	Unit	36	20.00	YES	-	7,491	7,491	7,491
Retrofits	Gas Water Heater	FALSE	Unit	11	14.50	YES	-	324	324	324
Retrofits	Programmable Thermostats	FALSE	Unit	10	16.00	YES	-	695	680	680
Retrofits	Residential Furnace Tune Up	FALSE	Unit	156	3.00	NO	-	3,535	3,535	3,535
Retrofits	Rim/Band Joist Insulation	FALSE	Unit	14,681	30.00	YES	-	2,169	2,155	2,155
Retrofits	Wall Insulation	FALSE	SQ FT	184,292	30.00	YES	-	16,833	16,833	16,833
Retrofits	Space Heating Boiler Tune-Up	FALSE	Unit	4	3.00	NO	-	171	171	171
SAP	Advanced Thermostats	FALSE	Unit	56	11.00	NO	-	3,334	3,284	3,284
SAP	Air Sealing - Method 2	FALSE	Unit	122	20.00	YES	-	608	608	608
SAP	Boiler Pipe Insulation	FALSE	LN FT	18	11.00	YES	-	8	8	8
SAP	Domestic Hot Water Pipe Insulation	FALSE	LN FT	150	15.00	NO	-	302	302	302
SAP	Low Flow Faucet Aerators	FALSE	Unit	182	10.00	NO	782.10	554	554	554
SAP	Low Flow Showerheads	FALSE	Unit	130	10.00	NO	504.57	537	537	537

Program Path	Savings Category	DAC Project*	Units	Quantity	Effective Useful Life	Early Replacement Flag	Verified Gross Annual Water Savings (Gallons)	Ex Ante Gross Savings (Therms)	Verified Gross Savings (Therms)	Verified Net Savings (Therms)
SAP	Programmable Thermostats	FALSE	Unit	9	16.00	YES	-	445	445	445
SAP	Water Heater Temperature Setback	FALSE	Unit	24	2.00	NO	-	6	6	6
Community Pilot	Advanced Thermostats	FALSE	Unit	16	11.00	NO	-	1,391	1,391	1,391
Community Pilot	Air Sealing - Method 2	FALSE	Unit	4,929	20.00	YES	-	2,302	2,302	2,302
Community Pilot	Ceiling/Attic Insulation	FALSE	SQ FT	5,313	30.00	YES	-	494	494	494
Community Pilot	Domestic Hot Water Pipe Insulation	FALSE	LN FT	198	15.00	NO	-	400	400	400
Community Pilot	Duct Insulation and Sealing	FALSE	Unit	22	20.00	NO	-	3,496	3,496	3,496
Community Pilot	Gas High Efficiency Furnace	FALSE	Unit	5	20.00	YES	-	1,175	1,175	1,175
Community Pilot	Gas Water Heater	FALSE	Unit	1	14.50	YES	-	54	54	54
Community Pilot	Programmable Thermostats	FALSE	Unit	2	16.00	YES	-	157	157	157
Community Pilot	Residential Furnace Tune Up	FALSE	Unit	19	3.00	NO	-	535	535	535

Program Path	Savings Category	DAC Project*	Units	Quantity	Effective Useful Life	Early Replacement Flag	Verified Gross Annual Water Savings (Gallons)	Ex Ante Gross Savings (Therms)	Verified Gross Savings (Therms)	Verified Net Savings (Therms)
Community Pilot	Rim/Band Joist Insulation	FALSE	Unit	1,165	30.00	YES	-	185	110	110
Community Pilot	Space Heating Boiler Tune-Up	FALSE	Unit	1	3.00	NO	-	46	46	46
<b>Total or Weighted Average</b>					<b>18.80</b>		<b>16,636</b>	<b>411,008</b>	<b>406,881</b>	<b>406,881</b>

\* DAC – Disadvantaged Communities

Source: Evaluation team analysis.