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Multi-Family Program Impact Evaluation Report

Energy Efficiency Plan: Program Year 2022 (1/1/2022-12/31/2022)

Prepared for:

Nicor Gas Company

FINAL

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1. Introduction

This report presents the results of the impact evaluation of the Nicor Gas 2022 Multi-Family Program, including a summary of the energy impacts for the total program and broken out by relevant measure and program structure details. The appendix presents the impact analysis methodology. Program year 2022 covers January 1, 2022 through December 31, 2022.

2. Program Description

The Multi-Family Program is delivered through four paths:

- The Direct Installation (DI) path is offered jointly with ComEd, which provides free assessment and no-cost direct installation (DI) in-unit (IU) of measures in residential multi-family buildings with three or more living units.
- The Prescriptive path offers incentives to multi-family decision-makers to install energy saving measures in common areas (CA) of multi-family buildings.
- The Centralized Plant Optimization Program (CPOP) path where program-approved contractors provide free central plant upgrades, including boiler tune-ups, boiler controls, pipe and tank insulation, and steam trap testing and repair.
- The Air Sealing and Insulation (ASI) path focuses on weatherization and shell measures, such as attic insulation and air sealing to improve comfort and reduce overall heating loads.

The program had 120 participants in 2022 and completed 2,384 projects as shown in Table 2-1.

Table 2-1. 2022 Volumetric Findings Detail

Participation	DI	Prescriptive	CPOP	ASI	Total
Multi-Family					
Participants *	24	52	40	4	**120**
Installed Projects †	2,254	80	46	4	**2,384**
Total Number of Buildings‡	24	52	40	4	**120**
Total Number of Units in Building	4,030	NR	4,114	137	**8,281**

* Participants are defined as unique site addresses from tracking data.
† Installed Projects are defined as unique project IDs from tracking data.
‡ Number of buildings are defined as the count of unique premise IDs from tracking data.
NR = not reported. The prescriptive data did not include number of units in the tracking data.
Source: Nicor Gas tracking data and Guidehouse evaluation team analysis.

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

Table 2-2. 2022 Installed Measure Quantities

Program Path	Measure	Quantity Unit	Installed Quantity
DI	Prog. T-Stat (DI) IU	Unit	1,608
DI	Low Flow Showerhead (DI) IU	Unit	616
DI	Shower Timer	Unit	575
DI	Faucet Aerator - Bathroom (DI) IU	Unit	713
DI	Faucet Aerator - Kitchen (DI) IU	Unit	393
DI	Pipe Insulation (DI) CA	Ln Ft	225
DI	Low Flow Showerhead (DI) CA	Unit	10
DI	Faucet Aerator - Bathroom (DI) CA	Unit	15
DI	Faucet Aerator - Kitchen (DI) CA	Unit	4
Prescriptive	Pipe Insulation Indoor Hot Water (HW) DHW	Ln Ft	11,800
Prescriptive	Pipe Insulation Indoor Hot Water (HW) Space Heat	Ln Ft	7,583
Prescriptive	Condensing Boilers	Unit	9
Prescriptive	Hydronic Boilers	Unit	4
Prescriptive	Outdoor Pool Covers	Sq Ft	4,126
Prescriptive	Boiler Tune Up	Unit	9
Prescriptive	Boiler Reset Controls	Unit	1
Prescriptive	Furnace	Unit	3
CPOP	DHW Controller	Unit	1,302
CPOP	Boiler Tune Up	Unit	119
CPOP	Steam Traps	Unit	357
CPOP	Pipe Insulation (DI) CA	Ln Ft	15,942
CPOP	Boiler Averaging Controls	Unit	19
CPOP	Boiler Reset Controls	Unit	26
CPOP	DHW Tank Insulation	Sq Ft	2,331
CPOP	Steam Traps - Test/Audit	Unit	1,134
ASI	Air Sealing - Sealing Tape	Unit	10,088
ASI	Attic Insulation	Sq Ft	60,117

Source: Nicor Gas tracking data and evaluation team analysis.

3. Program Savings Detail

Table 3-1 summarizes the energy savings the Multi-Family Program achieved by the DI, Prescriptive, CPOP and ASI paths in 2022.

Table 3-1. 2022 Annual Energy Savings Summary

Program Path	Ex Ante Gross Savings (Therms)	Verified Gross RR*	Verified Gross Savings (Therms)	NTG†	Verified Net Savings (Therms)
Multi-Family					
DI	47,120	95%	44,665	Varies	43,159
Prescriptive	85,468	100%	85,468	0.93	79,485
CPOP	292,502	102%	297,356	0.93	276,541
ASI	8,033	100%	8,033	0.93	7,471
Total or Weighted Average	**433,123**	**101%**	**435,522**	**0.93**	**406,656**

* Realization Rate (RR) is the ratio of verified gross savings to ex ante gross savings, based on evaluation research findings.
† Net-to-gross (NTG): A deemed value. Available on the Stakeholder Advisory Group (SAG) website: **https://www.ilsag.info/evaluator-ntg-recommendations-for-2022/**.
Source: Guidehouse evaluation team analysis.

4. Program Savings by Measure

The program includes 26 measures as shown in Table 4-1. The Domestic Hot Water (DHW) Controller and Boiler Tune Up measures in the CPOP program contributed the most savings in 2022.

Table 4-1. 2022 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)
DI	Prog. T-Stat (DI) IU	39,594	94%	37,122	0.96	35,637
	Low Flow Showerhead (DI) IU	4,288	100%	4,294	1.01	4,337
	Shower Timer	1,242	100%	1,243	0.96	1,194
	Faucet Aerator - Bathroom (DI) IU	701	100%	702	1.01	709
	Faucet Aerator - Kitchen (DI) IU	624	100%	626	1.01	633
	Pipe Insulation (DI) CA	488	100%	487	0.96	468
	Low Flow Showerhead (DI) CA	107	106%	113	0.96	109
	Faucet Aerator - Bathroom (DI) CA	58	100%	58	0.96	56
	Faucet Aerator - Kitchen (DI) CA	19	100%	19	0.96	18
	DI Subtotal	***47,120***	***95%***	***44,665***		***43,159***

Program Path	Savings Category	Ex Ante Gross Savings (Therms)	Verified Gross RR*	Verified Gross Savings (Therms)	NTG†	Verified Net Savings (Therms)
Prescriptive	Pipe Insulation Indoor Hot Water (HW) DHW	36,701	100%	36,701	0.93	34,132
	Pipe Insulation Indoor Hot Water (HW) Space Heat	21,461	100%	21,461	0.93	19,959
	Condensing Boilers	10,665	100%	10,665	0.93	9,919
	Hydronic Boilers	8,069	100%	8,069	0.93	7,504
	Outdoor Pool Covers	4,167	100%	4,167	0.93	3,876
	Boiler Tune Up	2,922	100%	2,922	0.93	2,718
	Boiler Reset Controls	1,069	100%	1,069	0.93	994
	Furnace	412	100%	412	0.93	383
	Prescriptive Subtotal	***85,468***	***100%***	***85,468***		***79,485***
CPOP	DHW Controller	75,867	108%	81,635	0.93	75,921
	Boiler Tune Up	64,724	100%	64,724	0.93	60,194
	Steam Traps	60,754	100%	60,861	0.93	56,601
	Pipe Insulation (DI) CA	53,202	99%	52,520	0.93	48,843
	Boiler Averaging Controls	19,976	100%	19,976	0.93	18,578
	Boiler Reset Controls	15,720	100%	15,720	0.93	14,620
	DHW Tank Insulation	2,259	85%	1,919	0.93	1,785
	CPOP Subtotal	***292,502***	***102%***	***297,356***		***276,541***
ASI	Air Sealing - Sealing Tape	4,197	100%	4,197	0.93	3,903
	Attic Insulation	3,837	100%	3,837	0.93	3,568
	ASI Subtotal	***8,033***	***100%***	***8,033***		***7,471***
	Total or Weighted Average	**433,123**	**101%**	**435,522**		**406,656**

Note: DWH stand for Domestic Hot Water.
* Realization Rate (RR) is the ratio of verified gross savings to ex ante gross savings, based on evaluation research findings.
† Net-to-gross (NTG): A deemed value. Available on the Stakeholder Advisory Group (SAG) website: https://www.ilsag.info/evaluator-ntg-recommendations-for-2022/.
Source: Nicor Gas tracking data and Guidehouse evaluation team analysis.

5. Impact Analysis Findings and Recommendations

The overall realization rate for the Multi-Family program was 101% for therms in 2022. Many of the measures were calculated correctly, as a result, the evaluation team made very minor changes during our review.

5.1 Impact Parameter Estimates

Table 5-1 shows the unit therms savings and realization rate findings by measure from the evaluation review. The realization rate is the ratio of the verified savings to the ex ante savings. Following the table are 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. Appendix B shows the Total Resource Cost (TRC) cost-effectiveness analysis inputs available at the time of producing this impact evaluation report.

Table 5-1. Verified Gross Savings Parameters

Measure	Unit Basis	Ex Ante Gross (therms/unit)	Verified Gross (therms/unit)	Realization Rate	Data Source(s)
Air Sealing - Sealing Tape	Unit	0.42	0.42	100%	Illinois TRM, v10.0, Section 5.6.1 and PTD
Attic Insulation	Sq Ft	0.06	0.06	100%	Illinois TRM, v10.0, Section 5.6.5 and PTD
Boiler Averaging Controls	Unit	1,051.38	1,051.38	100%	Illinois TRM, v10.0, Section 4.4.36 and PTD
Boiler Reset Controls	Unit	Varies	Varies	100%	Illinois TRM, v10.0, Section 4.4.4 and PTD
Boiler Tune Up	Unit	Varies	Varies	100%	Illinois TRM, v10.0, Section 4.4.2 and PTD
Condensing Boilers	Unit	1,185.01	1,185.01	100%	Illinois TRM, v10.0, Section 4.4.10 and PTD
DHW Controller	Unit	Varies	62.7	108%	Illinois TRM, v10.0, Section 4.3.8 and PTD
DHW Tank Insulation	Sq Ft	Varies	Varies	85%	Illinois TRM, v10.0, Section 4.4.14 and PTD
Faucet Aerator - Bathroom (DI) CA	Unit	3.86	3.86	100%	Illinois TRM, v10.0, Section 4.3.2 and PTD
Faucet Aerator - Bathroom (DI) IU	Unit	0.98	0.98	100%	Illinois TRM, v10.0, Section 5.4.4and PTD
Faucet Aerator - Kitchen (DI) CA	Unit	4.65	4.65	100%	Illinois TRM, v10.0, Section 4.3.2 and PTD
Faucet Aerator - Kitchen (DI) IU	Unit	1.59	1.59	100%	Illinois TRM, v10.0, Section 5.4.4 and PTD
Furnace	Unit	137.43	137.43	100%	Illinois TRM, v10.0, Section 5.3.7 and PTD

Measure	Unit Basis	Ex Ante Gross (therms/unit)	Verified Gross (therms/unit)	Realization Rate	Data Source(s)
Hydronic Boilers	Unit	2,017.28	2,017.28	100%	Illinois TRM, v10.0, Section 4.4.10 and PTD
Low Flow Showerhead (DI) CA	Unit	Varies	Varies	106%	Illinois TRM, v10.0, Section 4.3.3 and PTD
Low Flow Showerhead (DI) IU	Unit	6.96	6.97	100%	Illinois TRM, v10.0, Section 5.4.5 and PTD
Outdoor Pool Covers	Sq Ft	1.01	1.01	100%	Illinois TRM, v10.0, Section 4.3.4 and PTD
Pipe Insulation (DI) CA	Ln Ft	Varies	Varies	99%	Illinois TRM, v10.0, Section 4.4.14 and PTD
Pipe Insulation Indoor Hot Water (HW) DHW	Ln Ft	Varies	Varies	100%	Illinois TRM, v10.0, Section 4.4.14 and PTD
Pipe Insulation Indoor Hot Water (HW) Space Heat	Ln Ft	Varies	Varies	100%	Illinois TRM, v10.0, Section 4.4.14 and PTD
Prog. T-Stat (DI) IU	Unit	Varies	23.09	94%	Illinois TRM, v10.0†, Section 5.3.11 and PTD*
Shower Timer	Unit	2.16	2.16	100%	Illinois TRM, v10.0, Section 5.4.9 and PTD
Steam Traps	Unit	Varies	Varies	100%	Illinois TRM, v10.0, Section 4.4.16 and PTD

* Program Tracking Data (PTD) provided by Nicor Gas, extract dated January 31, 2023.
† State of Illinois Technical Reference Manual version 10.0 from **http://www.ilsag.info/technical-reference-manual.html**.

5.2 Findings and Recommendations

The evaluation team developed several findings and recommendations based on the 2022 evaluation. The findings and recommendations are organized by measure type in the following sections. The overall impact of these findings on the program is very small, as the program achieved a 100% realization rate at the program level.

5.2.1 On-Demand DHW Controller

Finding 1. For four measures (MEA-2023.01.04-469272, MEA-2023.01.04-469273, MEA-2023.01.04-469274 and MEA-2023.01.04-469275) the gross savings realization rate (RR) is 2400%. The reported ex ante gross annual therms savings do not take into account the quantity of measures, instead the per unit gross therms was reported. The gross annual therms/unit is

62.70 therms, which is the deemed value from the Illinois Statewide Technical Reference Manual v10.0 (IL-TRM) Section 4.3.8.[1]

Recommendation 1. Review the database entries for On-Demand DHW Controller quantity, gross annual therms savings per unit, and gross annual therms savings, and ensure that ex ante calculations include additional quality assurance checks in the tracking system.

5.2.2 Programmable Thermostat (DI) MF-IU

Finding 2. For 224 measure installations out of 1,608, the evaluation team could not replicate the savings based on the tracking data records, which resulted in a RR of 68% for those measure installations. The rest of the measures had a RR of 100%.

Recommendation 2. Review the savings algorithm and the inputs being used in the savings calculation for all programmable thermostats and ensure these match with the algorithms from the IL-TRM (Section 5.3.11).

5.2.3 Pipe Insulation

Finding 3. The evaluation team could not replicate the ex ante savings for the pipe insulation measures based on the tracking data records. To determine the verified savings, the evaluation team used the measure information from the tracking data and the relevant algorithms from the IL-TRM (Section 4.4.14). Some verified savings estimates generated negative gross RRs.

- **Finding 3a**. Pipe Insulation HW Small: For this measure instance (MEA-2022.12.01-448158), the listed bare pipe heat loss value is lower than the insulated pipe heat loss value in the tracking data, resulting in a negative RR of -21%. The remaining 18 measure instances have a RR of 100%.
- **Finding 3b**. Pipe Insulation, HW Medium 2.1" to 4": For this measure instance (MEA-2022.12.01-448159), the listed bare pipe heat loss value is lower than the insulated pipe heat loss value in the tracking data, resulting in a RR of -54%. The remaining 8 measure instances have a RR of 100%.
- **Finding 3c**. Pipe Insulation, DHW Small <=1.25”: For this measure instance (MEA-2022.12.01-448156), the listed bare pipe heat loss value is lower than the insulated pipe heat loss value in the tracking data, resulting in a RR of -17%. For these two measure instances (MEA-2022.09.22-405667 and MEA-2022.09.22-405669), the evaluation team leveraged the algorithms and assumptions in IL-TRM (Section 4.4.14) resulting in a RR of 161%. The remaining 17 measure instances have a RR of 100%.
- **Finding 3d**. Pipe Insulation, DHW Medium 1.26-2": For this measure instance (MEA-2022.12.01-448157), the listed bare pipe heat loss value is lower than the insulated pipe heat loss value in the tracking data, resulting in a RR of -18%. For these two measure instances (MEA-2022.09.22-405668 and MEA-2022.09.22-405670), the evaluation team leveraged the algorithms and assumptions in IL-TRM (Section 4.4.14) resulting in a RR of 133%. The remaining 14 measure instances have a RR of 100%.

[1] In this report, unless stated otherwise, IL-TRM refers to version 10.0 (v10.0).

- **Finding 3e**. Pipe Insulation, DHW Large >2”: For this measure instance (MEA-2022.09.22-405671), the evaluation team leveraged the algorithms and assumptions in IL-TRM (Section 4.4.14) resulting in a RR of 93%. The remaining 11 measure instances have a RR of 100%.
- **Finding 3f**. Pipe Insulation, Steam Small 1" to 2": For these two measure instances (MEA-2022.09.22-405683 and MEA-2022.09.22-405686), the evaluation team leveraged the algorithms and assumptions in IL-TRM (Section 4.4.14) resulting in a RR of 151%. The remaining three measure instances have a RR of 100%.
- **Finding 3g**. Pipe Insulation, Steam Med 2.1" to 5": For these two measure instances (MEA-2022.09.22-405684 and MEA-2022.09.22-405687), the evaluation team leveraged the algorithms and assumptions in IL-TRM (Section 4.4.14) resulting in a RR of 149%. The remaining measure instance (MEA-2022.06.10-353506) has a RR of 100%.
- **Finding 3h**. Pipe Insulation, Steam Large 5.1" to 8": For this measure instance (MEA-2022.09.22-405685), the evaluation team leveraged the algorithms and assumptions in IL-TRM (Section 4.4.14) resulting in a RR of 118%. The remaining measure instance (MEA-2022.05.10-335892) has a RR of 100%.

Recommendation 3. Review the savings algorithm and the measure specific inputs being used in the savings calculation for all pipe insulation measures and ensure these match with the algorithms from the TRM (Section 4.4.14).

5.2.4 DHW Storage Tank Insulation

Finding 4. Out of 44 measure installations, one measure instance (MEA-2022.12.14-452728) has a RR of 21%. The evaluation team could not replicate the savings for this measure based on the supplied data. The rest of the 43 measures have a RR of 100%.

Recommendation 4. Review the savings algorithm and the inputs being used in the savings calculation and ensure these match with the algorithms from the TRM (Section 4.4.14).

5.2.5 Shower Timer

Finding 5. Out of 404 measure installations, 206 measures had a RR of 100%. As per the IL-TRM v10.0, the 'EPG_gas' value should be 0.00625 therms/gal. For 176 measures, ex ante analysis had selected the 'EPG_gas' value as 0.0063 therms/gal resulting in a RR of 99% for these 179 measures. For the remaining 22 measures, the 'EPG_gas' value was selected as 0.00583 therms/gal in ex-ante calculations, which is from the IL-TRM v9.0, resulting in a RR of 107% for these 22 measures.

Recommendation 5. Review the savings algorithm and the inputs being used in the savings calculation for shower timers and ensure these match with the algorithms from the TRM (Section 5.4.9).

5.2.6 Showerhead (DI) MF-CA

Finding 6. Out of four measure installations, three measures had a RR of 100%. For one measure installation (MEA-2022.10.19-423066), ex ante analysis had selected the 'EPG_gas' value as 0.0058 therms/gal, which is from IL-TRM v9.0. As per the IL-TRM v10.0, the 'EPG_gas' value should be 0.0063 therms/gal. For this same measure, GPM_base value is selected as 2.24 in ex ante calculations. As per IL-TRM v10.0, GPM_base should be 2.67. This resulted in a RR of 171% for this measure installation.

Recommendation 6. Review the savings algorithm and the inputs being used in the ex ante savings calculation, and ensure these match with the algorithms from the TRM (Section 4.3.3)**.**

5.2.7 Showerhead (DI) MF-IU

Finding 7. Out of 480 measure installations, 468 measures had a RR of 100%. For the remaining twelve measures, ex ante analysis had selected the 'EPG_gas' value as 0.00583 therms/gal which is as per IL-TRM v9.0. As per the IL-TRM v10.0, the 'EPG_gas' value should be 0.0063 therms/gal.

Recommendation 7. Review the savings algorithm and the inputs being used in the ex ante savings calculation, and ensure these match with the algorithms from the TRM (Section 5.4.5).

5.2.8 Low Flow Aerator - Bath (DI) MF-IU

Finding 8. Out of 503 measure installations, 500 measures had a RR of 100%. For the remaining three measures (MEA-2022.12.22-461416, MEA-2022.12.22-461417 and MEA-2022.12.22-461418) ex ante analysis had selected the 'EPG_gas' value as 0.00397 therms/gal, which is from IL-TRM v9.0. As per the IL-TRM v10.0, the 'EPG_gas' value should be 0.0044 therms/gal.

Recommendation 8. Review the savings algorithm and the inputs being used in the savings calculation and ensure these match with the algorithms from the IL-TRM (Section 5.4.4)**.**

5.2.9 Low Flow Aerator - Kitchen (DI) MF-IU

Finding 9. The evaluation team did not find any of the 393 measure installations with RR of 100%, based on the tracking data inputs. We calculated a RR of 98% for 219 measure installations, 104% for 160 measure installations, and 107% for fourteen measure installations.

Recommendation 9. Review the savings algorithm and the inputs being used in the ex ante savings calculation for in-unit kitchen aerators and ensure these match from the TRM (Section 5.4.4).

5.2.10 Tracking NTG Values

Finding 10. The NTG ratio was incorrectly reported for several measures as discussed below. The evaluation team reviewed the Nicor Gas deemed NTG values[2] and made the necessary adjustments.

- Pipe Insulation DHW Large >2": For these two measure instances (MEA-2022.07.22-374713 and MEA-2022.11.17-439882) under the DI path, the NTG was reported as 0.93 in tracking data. The evaluation team used the NTG of 0.96 as per Nicor Gas NTG values.
- Pipe Insulation DHW Medium 1.26-2": For all 13 measure instances under the CPOP path, the NTG was reported as 0.96 in tracking data. The evaluation team used the NTG of 0.93 as per Nicor Gas NTG values.
- Pipe Insulation DHW Small <=1.25": For all 16 measure instances under the CPOP path, the NTG was reported as 0.96 in tracking data. The evaluation team used the NTG of 0.93 as per Nicor Gas NTG values.
- Pipe Insulation HW Small: For these two measure instances (MEA-2022.04.28-328690 and MEA-2022.04.28-328691) under the DI path, the NTG was reported as 0.93 in tracking data. The evaluation team used the NTG of 0.96 as per Nicor Gas NTG values.
- Showerhead (DI) MF-CA: For all four measure instances (MEA-2022.05.12-337535, MEA-2022.05.18-341244, MEA-2022.07.22-374349 and MEA-2022.10.19-423066), the NTG ratio was reported as 1.01 in the tracking data. The evaluation team used the NTG of 0.96 as per Nicor Gas NTG values.
- Low Flow Aerator - Bath (DI) MF-CA: For all five measure instances, the NTG ratio was reported as 1.01 in the tracking data. The evaluation team used the NTG of 0.96 as per Nicor Gas NTG values.
- Low Flow Aerator - Kitchen (DI) MF-CA: For all four measure instances (MEA-2022.04.29-332176, MEA-2022.04.29-332177, MEA-2022.05.18-341368 and MEA-2022.07.22-374707), the NTG ratio was reported as 1.01 in the tracking data which is for in-unit measures. The evaluation team used the NTG of 0.96 as per Nicor Gas NTG value for common areas.

Recommendation 10. Review the NTG ratio values entered in the tracking data align with the Nicor Gas deemed NTG values found from the SAG website.

[2] A deemed value. Available on the Stakeholder Advisory Group (SAG) website: **https://www.ilsag.info/evaluator-ntg-recommendations-for-2022/**.

Appendix A. Impact Analysis Methodology

The evaluation team determined verified gross savings for each program measure by:

1. Reviewing the savings algorithm inputs in the tracking data for agreement with IL-TRM v10.0[3].
2. Validating that the savings algorithm was applied correctly.
3. Multiplying the verified per-unit savings values by the quantity reported in the tracking data.

[3] Available on the SAG web site: **http://www.ilsag.info/technical-reference-manual.html**

Appendix B. Program Specific Inputs for the Illinois TRC

Table B-1 shows the Total Resource Cost (TRC) cost-effectiveness analysis inputs available at the time of producing this impact evaluation report. Currently, 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 B-1. Verified Cost Effectiveness Inputs

Program Path	Savings Category	Units	Quantity	Effective Useful Life	Ex Ante Gross Savings (Therms)	Verified Gross Savings (Therms)	Verified Net Savings (Therms)
Direct Install	Prog. T-Stat (DI) IU	Unit	1,608	16.0	39,594	37,122	35,637
	Low Flow Showerhead (DI) IU	Unit	616	10.0	4,288	4,294	4,337
	Shower Timer	Unit	575	2.0	1,242	1,243	1,194
	Faucet Aerator - Bathroom (DI) IU	Unit	713	10.0	701	702	709
	Faucet Aerator - Kitchen (DI) IU	Unit	393	10.0	624	626	633
	Pipe Insulation (DI) CA	Ln Ft	225	15.0	488	487	468
	Low Flow Showerhead (DI) CA	Unit	10	10.0	107	113	109
	Faucet Aerator - Bathroom (DI) CA	Unit	15	10.0	58	58	56
	Faucet Aerator - Kitchen (DI) CA	Unit	4	10.0	19	19	18
Prescriptive	Pipe Insulation Indoor Hot Water (HW) DHW	Ln Ft	11,800	15.0	36,701	36,701	34,132
	Pipe Insulation Indoor Hot Water (HW) Space Heat	Ln Ft	7,583	15.0	21,461	21,461	19,959
	Condensing Boilers	Unit	9	25.0	10,665	10,665	9,919
	Hydronic Boilers	Unit	4	25.0	8,069	8,069	7,504
	Outdoor Pool Covers	Sq Ft	4,126	6.0	4,167	4,167	3,876
	Boiler Tune Up	Unit	9	3.0	2,922	2,922	2,718
	Boiler Reset Controls	Unit	1	16.0	1,069	1,069	994
	Furnace	Unit	3	20.0	412	412	383
CPOP	DHW Controller	Unit	1,302	15.0	75,867	81,635	75,921
	Boiler Tune Up	Unit	119	3.0	64,724	64,724	60,194
	Steam Traps	Unit	357	6.0	60,754	60,861	56,601
	Pipe Insulation (DI) CA	Ln Ft	15,942	15.0	53,202	52,520	48,843
	Boiler Averaging Controls	Unit	19	20.0	19,976	19,976	18,578
	Boiler Reset Controls	Unit	26	16.0	15,720	15,720	14,620
	DHW Tank Insulation	Sq Ft	2,331	15.0	2,259	1,919	1,785
ASI	Air Sealing - Sealing Tape	Unit	10,088	20.0	4,197	4,197	3,903
	Attic Insulation	Sq Ft	60,117	20.0	3,837	3,837	3,568
Total or Weighted Average				**12.6**	**433,123**	**435,522**	**406,656**

Source: Nicor Gas tracking data and evaluation team analysis.