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| Multi-Family Market Rate Program Impact Evaluation Report  Energy Efficiency Plan: Program Year 2023  (1/1/2023-12/31/2023) | | | | | | | |
| Prepared for:  Nicor Gas Company  DRAFT  March 28, 2024 | | | | | | | |
| Prepared by: | | | | |  | | |
| Kyle McKenna  EcoMetric Consulting | Swapnil Lotake  EcoMetric Consulting | | | Mike Frischmann  EcoMetric Consulting | | | |
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|  |  |  | | | | |  |
| **guidehouse.com** |  | |  | | |  | |

**Submitted to:**

Nicor Gas Company

1844 Ferry Road

Naperville, IL 60563

**Submitted by:**

Guidehouse

150 N. Riverside Plaza, Suite 2100

Chicago, IL 60606

**Contact:**

|  |  |  |
| --- | --- | --- |
| Ted Walker  Partner  404.602.3463  **ted.walker@guidehouse.com**  Charles Ampong Associate Director  608.446.3172  **charles.ampong@guidehouse.com** | Stu Slote  Director  802.526.5113  **stu.slote@guidehouse.com** | Laura Agapay-Read Associate Director  312.583.4178  **laura.agapay.read@guidehouse.com** |

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Table of Contents

[1. Introduction 1](#_Toc162094550)

[2. Program Description 1](#_Toc162094551)

[3. Program Savings Detail 3](#_Toc162094552)

[4. Program Savings by Measure 3](#_Toc162094553)

[5. Impact Analysis Findings and Recommendations 5](#_Toc162094554)

[5.1 Impact Parameter Estimates 5](#_Toc162094555)

[5.2 Findings and Recommendations 7](#_Toc162094556)

[Appendix A. Impact Analysis Methodology A-1](#_Toc162094557)

[Appendix B. Program Specific Inputs for the Illinois TRC B-1](#_Toc162094558)

List of Tables, Figures, and Equations

[Table 2‑1. 2023 Multi-Family Market Rate Program Volumetric Findings Detail 1](#_Toc162094561)

[Table 2‑2. 2023 Multi-Family Market Rate Program Installed Measure Quantities 2](#_Toc162094562)

[Table 3‑1. 2023 Multi-Family Market Rate Program Annual Energy Savings Summary 3](#_Toc162094563)

[Table 4‑1. 2023 Multi-Family Market Rate Program Annual Energy Savings by Measure 4](#_Toc162094564)

[Table 5‑1. 2023 Multi-Family Market Rate Program Verified Gross Savings Parameters 6](#_Toc162094565)

[Table B‑1. 2023 Multi-Family Market Rate Program Verified Cost Effectiveness Inputs B-1](#_Toc162426465)

# Introduction

This report presents the results of the impact evaluation of the Nicor Gas 2023 Multi-Family Market Rate Program and a summary of the energy impacts for the total program, as well as relevant measure and program structure details. The appendix presents the impact analysis methodology. Program year 2023 covers January 1, 2023 through December 31, 2023.

# Program Description

The Multi-Family Program is delivered through four paths:

* The **Direct Installation (DI) path** is offered jointly with ComEd and 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 169 participants in 2023 and completed 861 projects, as shown in Table 2‑1.

Table 2‑1. 2023 Multi-Family Market Rate Program Volumetric Findings Detail

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Participation | ASI | CPOP | Direct Install | Prescriptive | Total |
| Participants \* | 4 | 77 | 13 | 75 | **169** |
| Installed Projects † | 26 | 88 | 641 | 106 | **861** |
| Measure Types Installed | 3 | 10 | 12 | 12 | **37** |

\* Participants are defined as unique Building Account Numbers.

† Installed Projects are defined as unique Vendor Project IDs.

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. 2023 Multi-Family Market Rate Program Installed Measure Quantities

| Program Category | Program Path | Measure | Quantity Unit | Installed Quantity |
| --- | --- | --- | --- | --- |
| **Multi-Family Market Rate** | CPOP | Pipe Insulation | Ln Ft | 24,336 |
| DHW Tank Insulation | SQ FT | 1,644 |
| Assessment/No Savings | Each | 558 |
| DHW Controller | Each | 489 |
| Steam Boiler Averaging Controls | Each | 4 |
| Boiler Tune Up | Each | 2 |
| Boiler Linkageless Controls | Each | 1 |
| Pipe Insulation - DAC | Ln Ft | 1,000 |
| DHW Controller - DAC | Each | 903 |
| Boiler Tune Up - DAC | Each | 1 |
| Steam Trap - IE | Each | 247 |
| Boiler Tune Up - IE | Each | 104 |
| Boiler Reset Controls - IE | Each | 2 |
| Prescriptive | Pipe Insulation | Ln Ft | 13,037 |
| Pool Covers | SQ FT | 5,387 |
| Boiler Tune Up | Each | 22 |
| High Efficiency Boiler | Each | 12 |
| High Efficiency Furnace (IU) | Each | 5 |
| High Efficiency Furnace (CA) | Each | 2 |
| Storage Water Heater | Each | 2 |
| Pipe Insulation - DAC | Ln Ft | 4,022 |
| Boiler Reset Controls - DAC | Each | 1,401 |
| High Efficiency Boiler - DAC | Each | 3 |
| Boiler Tune Up - DAC | Each | 1 |
| High Efficiency Furnace (IU) - DAC | Each | 1 |
| Direct Install | Assessment/No Savings | Each | 640 |
| Advanced Thermostat | Each | 432 |
| Showerheads (IU) | Each | 172 |
| Shower Timer | Each | 166 |
| Faucet Aerator - Bathroom (IU) | Each | 163 |
| Faucet Aerator - Kitchen (IU) | Each | 134 |
| Reprogrammable Thermostats | Each | 81 |
| Programmable Thermostats | Each | 34 |
| Assessment/No Savings - DAC | Each | 1 |
| Faucet Aerator - Bathroom (IU) - DAC | Each | 1 |
| Faucet Aerator - Kitchen (IU) - DAC | Each | 1 |
| Shower Timer - DAC | Each | 1 |
| ASI | Attic Insulation | SQ FT | 133,745 |
| Air Sealing | Each | 55,006 |
| Assessment/No Savings | Each | 23 |

Source: Nicor Gas tracking data and Guidehouse evaluation team analysis.

# Program Savings Detail

Table 3‑1 summarizes the energy savings the Multi-Family Program achieved by the DI, Prescriptive, CPOP and ASI paths in 2023.

Table 3‑1. 2023 Multi-Family Market Rate Program Annual Energy Savings Summary

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Program Category | Program Path | Ex Ante Gross Savings (Therms) | Verified Gross RR\* | Verified Gross Savings (Therms) | NTG† | NPSO‡ | Verified  Net Savings (Therms) |
| **Multi-Family Market Rate** | CPOP | 142,670 | 104% | 148,909 | 0.94 | 1.048 | 146,631 |
| CPOP - DAC | 62,193 | 100% | 62,193 | 1.00 | NA | 62,193 |
| CPOP - IE | 193,653 | 105% | 203,144 | 1.00 | NA | 203,144 |
| Prescriptive | 84,846 | 101% | 85,412 | 0.93 | 1.048 | 83,246 |
| Prescriptive – DAC | 26,261 | 100% | 26,163 | 1.00 | NA | 26,163 |
| Direct Install | 30,182 | 122% | 36,862 | 0.92 | 1.048 | 35,422 |
| Direct Install – DAC | 8 | 100% | 8 | 1.00 | NA | 8 |
| ASI | 41,840 | 86% | 35,919 | 0.93 | 1.048 | 35,008 |
| **Total or Weighted Average** | | **581,655** | **103%** | **598,610** | **0.99** | **0.99** | **591,816** |

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

† A deemed value. Available on the SAG web site: <https://www.ilsag.info/evaluator-ntg-recommendations-for-2023/>. Disadvantaged communities (DAC) designated sites based on zip codes used a NTG of 1.0

‡ The market rate net savings were multiplied by a residential non-participant spillover (NPSO) factor of 1.048 (not applicable to DAC designation sites).

Source: Guidehouse evaluation team analysis.

# Program Savings by Measure

The program includes 40 measures, as shown in Table 4‑1. The Boiler Tune Up and Pipe Insulation measures of the CPOP path contributed the most savings to the Multi-Family Market Rate program during 2023.

Table 4‑1. 2023 Multi-Family Market Rate Program Annual Energy Savings by Measure

| Program Category | Program Path | Savings Category | Ex Ante Gross Savings (Therms) | Verified Gross RR\* | Verified Gross Savings (Therms) | NTG† | NPSO‡ | Verified Net Savings (Therms) |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Multi-Family** | CPOP | Pipe Insulation | 84,327 | 111% | 93,979 | 0.95 | 1.048 | 93,094 |
| DHW Controller | 30,660 | 100% | 30,660 | 0.93 | 1.048 | 29,883 |
| Steam Boiler Averaging Controls | 11,448 | 100% | 11,448 | 0.93 | 1.048 | 11,157 |
| DHW Tank Insulation | 12,393 | 72% | 8,982 | 0.93 | 1.048 | 8,754 |
| Boiler Tune Up | 2,228 | 100% | 2,228 | 0.93 | 1.048 | 2,172 |
| Boiler Linkageless Controls | 1,613 | 100% | 1,613 | 0.93 | 1.048 | 1,572 |
| DHW Controller – DAC | 56,618 | 100% | 56,618 | 1.00 | NA | 56,618 |
| Pipe Insulation - DAC | 3,627 | 100% | 3,627 | 1.00 | NA | 3,627 |
| Boiler Tune Up - DAC | 1,948 | 100% | 1,948 | 1.00 | NA | 1,948 |
| Boiler Tune Up - IE | 150,851 | 100% | 150,851 | 1.00 | NA | 150,851 |
| Steam Trap – IE | 42,222 | 122% | 51,712 | 1.00 | NA | 51,712 |
| Boiler Reset Controls – IE | 580 | 100% | 580 | 1.00 | NA | 580 |
|  | ***CPOP Subtotal*** | ***398,517*** | ***104%*** | ***414,246*** | ***0.99*** | ***NA*** | ***411,968*** |
| Prescriptive | Pipe Insulation | 42,130 | 100% | 42,122 | 0.93 | 1.048 | 41,054 |
| Boiler Tune Up | 24,316 | 100% | 24,316 | 0.93 | 1.048 | 23,699 |
| High Efficiency Boiler | 11,797 | 100% | 11,797 | 0.93 | 1.048 | 11,498 |
| Pool Covers | 5,441 | 100% | 5,441 | 0.93 | 1.048 | 5,303 |
| High Efficiency Furnace (IU) | 697 | 100% | 697 | 0.93 | 1.048 | 679 |
| High Efficiency Furnace (CA) | 422 | 169% | 713 | 0.93 | 1.048 | 695 |
| Storage Water Heater | 44 | 746% | 327 | 0.93 | 1.048 | 319 |
| Pipe Insulation - DAC | 12,414 | 99% | 12,316 | 1.00 | NA | 12,316 |
| High Efficiency Boiler - DAC | 8,732 | 100% | 8,732 | 1.00 | NA | 8,732 |
| Boiler Tune Up - DAC | 4,781 | 100% | 4,781 | 1.00 | NA | 4,781 |
| High Efficiency Furnace (IU) - DAC | 135 | 100% | 135 | 1.00 | NA | 135 |
| Boiler Reset Controls - DAC | 200 | 100% | 200 | 1.00 | NA | 200 |
|  | ***Prescriptive Subtotal*** | ***111,108*** | ***101%*** | ***111,575*** | ***0.98*** | **NA** | ***109,409*** |
| Direct Install | Advanced Thermostat | 22,188 | 130% | 28,785 | 0.90 | 1.048 | 27,150 |
| Reprogrammable Thermostats | 3,149 | 104% | 3,281 | 0.96 | 1.048 | 3,301 |
| Showerheads (IU) | 2,147 | 99% | 2,126 | 1.01 | 1.048 | 2,250 |
| Programmable Thermostats | 1,397 | 99% | 1,377 | 0.96 | 1.048 | 1,385 |
| Shower Timer | 636 | 99% | 630 | 0.96 | 1.048 | 634 |
| Faucet Aerator - Kitchen (IU) | 387 | 100% | 386 | 1.01 | 1.048 | 408 |
| Faucet Aerator - Bathroom (IU) | 278 | 100% | 278 | 1.01 | 1.048 | 294 |
| Shower Timer - DAC | 4 | 99% | 4 | NA | NA | 4 |
| Faucet Aerator - Kitchen (IU) - DAC | 3 | 100% | 3 | 1.00 | NA | 3 |
| Faucet Aerator - Bathroom (IU) - DAC | 2 | 100% | 2 | 1.00 | NA | 2 |
|  | ***Direct Install Subtotal*** | ***30,191*** | ***122%*** | ***36,870*** | NA | **NA** | ***35,431*** |
| ASI | Air Sealing | 22,882 | 100% | 22,882 | ***0.96*** | 1.048 | 22,302 |
| Attic Insulation | 18,959 | 69% | 13,036 | 0.93 | 1.048 | 12,705 |
|  |  | ***ASI Subtotal*** | ***41,840*** | ***86%*** | ***35,919*** | NA | ***NA*** | ***35,008*** |
| **Total or Weighted Average** | | | **581,655** | **103%** | **598,610** | **0.99** | **NA** | **591,816** |

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

† A deemed value. Available on the SAG web site: <https://www.ilsag.info/evaluator-ntg-recommendations-for-2023/>. Disadvantaged communities (DAC) designated sites based on zip codes used a NTG of 1.0

‡ The market rate net savings were multiplied by a residential non-participant spillover (NPSO) factor of 1.048 (not applicable to DAC designation sites).

Source: Nicor Gas tracking data and Guidehouse evaluation team analysis.

# Impact Analysis Findings and Recommendations

The overall realization rate for the Multi-Family Market Rate program was 103% for herms in 2023. Many of the measures were calculated correctly, as a result, the evaluation team made minor changes during our review.

## Impact Parameter Estimates

Table 5‑1 shows the unit Therm savings and realization rate findings by measure from our review. The gross realization rate is the ratio of the verified savings to the ex ante savings. Following Table 5‑1are findings and recommendations, including discussion of all measures with realization rates above or below 100%. Appendix 1 provides a description of the impact analysis methodology.

Table 5‑1. 2023 Multi-Family Market Rate Program Verified Gross Savings Parameters

| Measure | Unit Basis | Ex Ante Gross (therms/unit) | Verified Gross (therms/unit) | Realization Rate | Data Source(s) |
| --- | --- | --- | --- | --- | --- |
| Advanced Thermostat | Unit | Varies | 66.63 | 130% | Illinois TRM, v11.0†, Section 5.3.16 and PTD\* |
| Air Sealing | Unit | 0.42 | 0.42 | 100% | Illinois TRM, v11.0†, Section 5.6.1 and PTD\* |
| Attic Insulation | SQ FT | Varies | Varies | 69% | Illinois TRM, v11.0†, Section 5.6.5 and PTD\* |
| Boiler Linkageless Controls | Unit | 1613.00 | 1613.00 | 100% | Illinois TRM, v11.0†, Section 4.4.21 and PTD\* |
| Boiler Reset Controls | Unit | Varies | Varies | 100% | Illinois TRM, v11.0†, Section 4.4.4 and PTD\* |
| Boiler Tune Up | Unit | Varies | Varies | 100% | Illinois TRM, v11.0†, Section 4.4.2 and PTD\* |
| DHW Controller | Unit | 62.70 | 62.70 | 100% | Illinois TRM, v11.0†, Section 4.3.8 and PTD\* |
| DHW Tank Insulation | SQ FT | Varies | Varies | 72% | Illinois TRM, v11.0†, Section 4.3.12 and PTD\* |
| Faucet Aerator - Bathroom (IU) | Unit | 1.71 | 1.71 | 100% | Illinois TRM, v11.0†, Section 5.4.4 and PTD\* |
| Faucet Aerator - Kitchen (IU) | Unit | Varies | Varies | 100% | Illinois TRM, v11.0†, Section 5.4.4 and PTD\* |
| High Efficiency Boiler | Unit | Varies | Varies | 100% | Illinois TRM, v11.0†, Section 4.4.10 and PTD\* |
| High Efficiency Furnace (CA) | Unit | Varies | Varies | 169% | Illinois TRM, v11.0†, Section 4.4.11 and PTD\* |
| High Efficiency Furnace (IU) | Unit | Varies | Varies | 100% | Illinois TRM, v11.0†, Section 5.3.7 and PTD\* |
| Pipe Insulation | Ln Ft | Varies | Varies | 107% | Illinois TRM, v11.0†, Section 4.4.14 and PTD\* |
| Pool Covers | SQ FT | 1.01 | 1.01 | 100% | Illinois TRM, v11.0†, Section 5.4.10 and PTD\* |
| Programmable Thermostats | Unit | Varies | 40.50 | 99% | Illinois TRM, v11.0†, Section 5.3.11 and PTD\* |
| Reprogrammable Thermostats | Unit | 38.88 | 40.50 | 104% | Illinois TRM, v11.0†, Section 5.3.11 and PTD\* |
| Shower Timer | Unit | 3.83 | 3.79 | 99% | Illinois TRM, v11.0†, Section 5.4.9 and PTD\* |
| Showerheads (IU) | Unit | 12.48 | 12.36 | 99% | Illinois TRM, v11.0†, Section 5.4.5 and PTD\* |
| Steam Boiler Averaging Controls | Unit | Varies | Varies | 100% | Illinois TRM, v11.0†, Section 4.4.36 and PTD\* |
| Steam Trap | Unit | Varies | 209.36 | 122% | Illinois TRM, v11.0†, Section 4.4.16 and PTD\* |
| Storage Water Heater | Unit | Varies | 163.42 | 746% | Illinois TRM, v11.0†, Section 4.3.1 and PTD\* |

\* Program Tracking Data (PTD) provided by Nicor Gas, extract dated January 30, 2024.

† State of Illinois Technical Reference Manual version 11.0 from <http://www.ilsag.info/technical-reference-manual.html>.

## Findings and Recommendations

The evaluation team developed several findings and recommendations based on the 2023 evaluation. The findings and recommendations are organized by path type in the following sections. The overall impact of these findings on the program is small, as the program achieved a 103% realization rate.

### Air Sealing and Insulation (ASI)

**Finding 1.** For the attic Insulation measure, the ex ante savings did not include the minimum value of R-3 for uninsulated assemblies in the Pre and Post R-values. The evaluation team added the minimum value of R-3 to the Pre and Post R-values to be consistent with the Illinois Statewide Technical Reference Manual v11.0 (IL-TRM)[[1]](#footnote-2).

**Recommendation 1.** Review the savings algorithm for attic insulation and ensure the inputs used in the savings calculation are consistent with the IL-TRM (Section 5.6.5).

### Centralized Plant Optimization Program (CPOP)

**Finding 2.** The program data reported three income eligible measures in the Multi-family Market Rate program CPOP path. The measure name indicates Income Eligible; however, the Net-to-Gross (NTG) ratio was reported as 0.93 for these measures. The evaluation team considered these three measures under Income Eligible per the measure name and used a NTG ratio of 1.0.

* Boiler Reset Controls - MF, IE
* Boiler Tune Up - MF, IE
* Steam Trap - MF, IE

**Recommendation 2.** Review the program data and ensure income eligible measures are reported in the appropriate program and include the proper NTG ratio.

**Finding 3.** For the measure *Steam Trap - MF,IE*, the ex ante calculation used a Boiler Efficiency of 80.7% for three instances and 77.6% one instance. These baseline efficiencies are applicable for steam boilers, except for multi-family low pressure boilers. The evaluation team used a boiler efficiency of 64.8%, which is the efficiency for multi-family low pressure boilers since that was the most applicable baseline type. This value resulted in a realization rate of 122% for this measure.

**Recommendation 3.** Use the appropriate Boiler Efficiency for the Multi-family program consistent with the IL-TRM (Section 4.4.16).

**Finding 4.** For five instances of the *DHW storage tank insulation* measure and five instances of the *pipe insulation* measure, the evaluation team could not replicate the ex ante savings per measure, based on the supplied program data and reference from the Master Measure Database (MMDB) of measure calculation. This issue led to a realization rate of 72% for tank insulation measures and 111% for pipe insulation measures.

**Recommendation 4.** Review the savings algorithm and the inputs used in the savings calculation and ensure these match the algorithms from the IL-TRM (Section 4.3.12).

### Prescriptive

**Finding 5.** For four instances of the *Pipe Insulation, Indoor Hot Water DHW* measure, the ex ante calculation used a thermal regain factor (TRF) of 1.0. However, the program data reported a TRF of 0.15 for three instances and 0.7 for one instance. The evaluation team calculated the savings using the reported TRF from the program data, leading to a measure level realization rate of 99%.

**Recommendation 5.** Ensure correct inputs are reported and used in the savings calculation consistent with the IL-TRM (Section 4.4.14).

**Finding 6.** For the *Common Areas (CA) Furnace, >95% AFUE* measure, the evaluation team could not replicate the ex ante savings based on the supplied program data and references from the Master Measure Database (MMDB). The evaluation team leveraged measure-specific inputs from the program tracking data and technical assumptions from the IL-TRM to determine the verified savings. This issue led to a realization rate of 169% for furnace measures.

**Recommendation 6.** Review the savings algorithm and the inputs being used in the savings calculation and ensure these matches the algorithms from the IL-TRM (Section 4.4.11 for CA Furnace).

**Finding 7.** For the Storage Water Heater, >88% TE measure, the ex ante savings reported only the standby loss reduction as quantified by the IL-TRM algorithm (Section 4.3.1 Water Heater). The evaluation team included the standby loss savings, as well as the efficiency savings for the two Storage Water Heater, >88% TE measures.

Recommendation 7. Ensure that the savings for Storage water heater measures included both efficiency improvements as well as standby loss savings consistent with Section 4.3.1 of the IL-TRM.

### Direct Install (DI)

**Finding 8.** For the *Programmable Thermostat (DI) MF-IU*, *Re-Program Thermostat (DI) MF-IU* and *Advanced Thermostat (DI) – Manual* measures, the program data reported net therms savings as gross therms. The evaluation team calculated the savings using algorithm and values consistent with the IL-TRM and used NTG ratios consistent with ILSAG NTG 2023 values. This change led to an overall gross realization rate of 99% for Programmable, 104% for Re-Program and 130% for Advance Thermostat.

**Recommendation 8.** Review the ex ante therms reported in the program tracking data to ensure that therms reported as gross do not include the application of the NTG ratio.

**Finding 9.** For four instances of the *Programmable Thermostat (DI) MF-IU* measure, the ex ante savings used 1,485 therms as an input for the gas heating consumption variable in the algorithm. For all other instances, the ex ante savings used furnace heating load of 1,005 therms. The evaluation team used a furnace heating load of 1,005 therms for all instances consistent with the IL-TRM default value, leading to a realization rate of 99%.

**Recommendation 9.** Ensure savings are calculated using consistent inputs for all relevant instances of each measure.

**Finding 10.** For water saving measures, the evaluation team could not replicate the ex ante savings based on the supplied program data and reference from the Master Measure Database (MMDB) of measure calculation. This issue led to a realization rate of 99% for these water saving measures in the Prescriptive path:

* Handheld Showerhead (DI) MF-IU
* Low Flow Aerator - Bath (DI) MF-IU
* Low Flow Aerator - Kitchen (DI) MF-IU
* Showerhead (DI) MF-IU
* Shower Timer, MF

**Recommendation 10.** Review the savings algorithm and the inputs being used in the savings calculation and ensure these match the algorithms from the IL-TRM.

##### Impact Analysis Methodology

The evaluation team used the same impact methodology for each component. Verified gross savings were determined for each program measure by:

* Reviewing the savings algorithm inputs in the measure workbook for agreement with the IL-TRM v11.0 and IL-TRM Errata, where applicable.
* Validating the savings algorithm was applied correctly.
* Cross-checking per-unit savings values in the program tracking data with the verified values in the measure workbook or in Guidehouse’s calculations, if the workbook did not agree with the IL-TRM v11.0.
* Multiplying the verified per-unit savings value by the quantity reported in the tracking data. The team calculated verified net savings by multiplying the verified gross savings estimates by a NTG ratio. In Program Year 2023, NTG estimates used to calculate the net verified savings were based on past evaluation research and defined by a consensus process through the Illinois SAG.
* For Disadvantaged Areas (DAC) postal codes, a NTG ratio of 1.0 is used.
* Guidehouse sourced methodologies and assumptions from the Illinois IL-TRM v11.0 and the final 2023 tracking data.

##### 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. Additional required cost data (e.g., measure costs, program level incentive and non-incentive costs) are not included in Table B‑1 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. 2023 Multi-Family Market Rate Program Verified Cost Effectiveness Inputs

| Program Category | Program Path | Savings Category | Units | Quantity | Effective Useful Life | Ex Ante Gross Savings (Therms) | Verified Gross Savings (Therms) | Verified  Net  Savings (Therms) |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Multi-Family** | CPOP | Pipe Insulation | Ln Ft | 24,336 | 15 | 84,327 | 93,979 | 93,094 |
| DHW Controller | Unit | 489 | 15 | 30,660 | 30,660 | 29,883 |
| Steam Boiler Averaging Controls | Unit | 4 | 20 | 11,448 | 11,448 | 11,157 |
| DHW Tank Insulation | SQ FT | 1,644 | 15 | 12,393 | 8,982 | 8,754 |
| Boiler Tune Up | Unit | 2 | 3 | 2,228 | 2,228 | 2,172 |
| Boiler Linkageless Controls | Unit | 1 | 20 | 1,613 | 1,613 | 1,572 |
| DHW Controller - DAC | Unit | 903 | 15 | 56,618 | 56,618 | 56,618 |
| Pipe Insulation - DAC | Ln Ft | 1,000 | 15 | 3,627 | 3,627 | 3,627 |
| Boiler Tune Up - DAC | Unit | 1 | 3 | 1,948 | 1,948 | 1,948 |
| Boiler Tune Up - IE | Unit | 104 | 3 | 150,851 | 150,851 | 150,851 |
| Steam Trap - IE | Unit | 247 | 15 | 42,222 | 51,712 | 51,712 |
| Prescriptive | Pipe Insulation | Ln Ft | 13,037 | 15 | 42,130 | 42,122 | 41,054 |
| Boiler Tune Up | Unit | 22 | 3 | 24,316 | 24,316 | 23,699 |
| High Efficiency Boiler | Unit | 12 | 25 | 11,797 | 11,797 | 11,498 |
| Pool Covers | SQ FT | 5,387 | 6 | 5,441 | 5,441 | 5,303 |
| High Efficiency Furnace (IU) | Unit | 5 | 20 | 697 | 697 | 679 |
| High Efficiency Furnace (CA) | Unit | 2 | 16.5 | 422 | 713 | 695 |
| Storage Water Heater | Unit | 2 | 15 | 44 | 327 | 319 |
| Pipe Insulation - DAC | Ln Ft | 4,022 | 15 | 12,414 | 12,316 | 12,316 |
| High Efficiency Boiler - DAC | Unit | 3 | 25 | 8,732 | 8,732 | 8,732 |
| Boiler Tune Up - DAC | Unit | 1 | 3 | 4,781 | 4,781 | 4,781 |
| High Efficiency Furnace (IU) - DAC | Unit | 1 | 20 | 135 | 135 | 135 |
| Boiler Reset Controls - DAC | Unit | 1,401 | 16 | 200 | 200 | 200 |
| Direct Install | Advanced Thermostat | Unit | 432 | 11 | 22,188 | 28,785 | 27,150 |
| Reprogrammable Thermostats | Unit | 81 | 2 | 3,149 | 3,281 | 3,301 |
| Showerheads (IU) | Unit | 172 | 10 | 2,147 | 2,126 | 2,250 |
| Programmable Thermostats | Unit | 34 | 16 | 1,397 | 1,377 | 1,385 |
| Shower Timer | Unit | 166 | 2 | 636 | 630 | 634 |
| Faucet Aerator - Kitchen (IU) | Unit | 134 | 10 | 387 | 386 | 408 |
| Faucet Aerator - Bathroom (IU) | Unit | 163 | 10 | 278 | 278 | 294 |
| Shower Timer - DAC | Unit | 1 | 2 | 4 | 4 | 4 |
| Faucet Aerator - Kitchen (IU) - DAC | Unit | 1 | 10 | 3 | 3 | 3 |
| Faucet Aerator - Bathroom (IU) - DAC | Unit | 1 | 10 | 2 | 2 | 2 |
| ASI | Air Sealing | Unit | 55,006 | 20 | 22,882 | 22,882 | 22,302 |
| Attic Insulation | SQ FT | 133,745 | 20 | 18,959 | 13,036 | 12,705 |
| **Total or Weighted Average** | | |  | **243,786** | **11.7** | **581,655** | **598,610** | **591,816** |

*Source: Nicor Gas tracking data and Guidehouse evaluation team analysis.*

1. In this report, unless stated otherwise, IL-TRM refers to version 11.0 (v11.0) [↑](#footnote-ref-2)