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| Business Energy Efficiency Rebates Impact Evaluation Report  Energy Efficiency Plan: Program Year 2024  (1/1/2024-12/31/2024) | | | | | | | |
| Prepared for:  Nicor Gas Company  DRAFT  April 18, 2025 | | | | | | | |
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# Introduction

This report presents the results of the Nicor Gas 2024 Business Energy Efficiency Rebates (BEER) program. It presents a summary of the energy impacts for the total program and broken out by program path and relevant measures. The appendices present the impact analysis methodology and Illinois total resource cost (TRC) inputs. Program year 2024 covers January 1, 2024 through December 31, 2024.

# Program Description

The BEER program provides incentives to business (private) and public sector customers that install new, high efficiency space heating, water heating, pipe insulation, commercial kitchen, and weatherstripping equipment covered by the program. The program consists of five delivery paths:

* Rebates for prescriptive cost-effective equipment as well as services (such as boiler tune-ups) to improve the energy efficiency of existing equipment.
* Free assessments and direct install measures, such as efficient faucet aerators, low-flow showerheads, and pre-rinse sprayers.
* Business optimization measures including steam traps and tune-ups.
* Midstream commercial food service (CFS) equipment incentives offering using midstream delivery channels. This path’s goals are to reduce barriers for food service operators to purchasing energy efficient equipment, and to reduce energy usage in the commercial food service sector.
* Building Operator Certification training and certification program, teaching participants how to improve building comfort and efficiency by optimizing a building’s systems. This has been offered for several years by the Midwest Energy Efficiency Alliance, at full tuition reimbursement for ComEd, Ameren Illinois, and natural gas customers who complete the curriculum.

The program had 477 participants in 2024 and completed 551 projects as shown in the following table. The program served customers in both the private and public sectors.

Table 1. 2024 Volumetric Findings Detail

| **Participation** | **Assessment Direct Install** | **Building Operator Certification** | **Business Optimization Program** | **Direct Install** | **Midstream CFS** | **Prescriptive** | **Total** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Private Sector** |  |  |  |  |  |  |  |
| Participants \* | 20 | 9 | 75 | 52 | 84 | 98 | **336** |
| Installed Projects † | 20 | 9 | 87 | 53 | 89 | 105 | **363** |
| Measure Types Installed ‡ | 5 | 1 | 8 | 1 | 14 | 27 | **44** |
| **Public Sector** |  |  |  |  |  |  |  |
| Participants \* | 14 | 8 | 1 | 6 | 0 | 113 | **141** |
| Installed Projects † | 14 | 8 | 1 | 7 | 0 | 158 | **188** |
| Measure Types Installed ‡ | 4 | 1 | 2 | 1 | 0 | 14 | **19** |
| **Program 2024 Total** |  |  |  |  |  |  |  |
| Participants \* | 34 | 17 | 76 | 58 | 84 | 211 | **477** |
| Installed Projects † | 34 | 17 | 88 | 60 | 89 | 263 | **551** |
| Measure Types Installed ‡ | 5 | 1 | 8 | 1 | 14 | 29 | **46** |

\* Participants are defined as the distinct count of site addresses, or applicants for the Building Operator Certification path.

† Installed Projects are defined as the distinct count of project IDs.

‡ Measure Types Installed are defined as the distinct count of reporting measure types.

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. 2024 Installed Measure Quantities

| **Program Category** | **Program Path** | **Measure** | **Quantity Unit** | **Installed Quantity** |
| --- | --- | --- | --- | --- |
| Private | Assessment Direct Install | Faucet Aerator - Bath | Each | 430 |
| Private | Assessment Direct Install | Faucet Aerator - Kitchen | Each | 2 |
| Private | Assessment Direct Install | Pre-Rinse Spray Valves | Each | 2 |
| Private | Assessment Direct Install | Showerheads | Each | 440 |
| Private | Building Operator Certification | BOC | Participant | 9 |
| Private | Business Optimization Program | Boiler Tune Up, Process | Each | 44 |
| Private | Business Optimization Program | Pipe Insulation | Ln Ft | 100 |
| Private | Business Optimization Program | Steam Trap, Dry Cleaner | Each | 277 |
| Private | Business Optimization Program | Steam Trap, Industrial High Pressure | Each | 135 |
| Private | Business Optimization Program | Steam Trap, Industrial Medium Pressure | Each | 263 |
| Private | Direct Install | Garage Door Hinge | Each | 202 |
| Private | Midstream CFS | Automatic Conveyor Broiler | Each | 2 |
| Private | Midstream CFS | Combination Oven | Each | 10 |
| Private | Midstream CFS | Convection Oven | Each | 3 |
| Private | Midstream CFS | Conveyor Oven | Each | 21 |
| Private | Midstream CFS | Fryer | Each | 127 |
| Private | Midstream CFS | Griddle | Each | 15 |
| Private | Midstream CFS | Infrared Salamander Broiler | Each | 2 |
| Private | Midstream CFS | Kitchen Demand Ventilation Controls | Each | 12 |
| Private | Midstream CFS | Pasta Cooker | Each | 1 |
| Private | Midstream CFS | Rack Oven - Double Oven | Each | 1 |
| Private | Midstream CFS | Rotisserie Oven | Each | 1 |
| Private | Prescriptive | Boiler Tune Up, Process | Each | 3 |
| Private | Prescriptive | Boiler Tune Up, Space Heating | Each | 9 |
| Private | Prescriptive | Combination Oven | Each | 4 |
| Private | Prescriptive | Compressed Air Heat Recovery | Each | 2 |
| Private | Prescriptive | Fryer | Each | 51 |
| Private | Prescriptive | Grain Dryer Tune-Up | Each | 3 |
| Private | Prescriptive | Griddle | Each | 3 |
| Private | Prescriptive | High Efficiency Boiler | Each | 12 |
| Private | Prescriptive | High Efficiency Furnace | Each | 36 |
| Private | Prescriptive | Infrared Charbroiler | Each | 4 |
| Private | Prescriptive | Ozone Laundry | Each | 2 |
| Private | Prescriptive | Pipe Insulation | Ln Ft | 1,175 |
| Private | Prescriptive | Pre-Rinse Spray Valves | Each | 2 |
| Private | Prescriptive | Small Commercial Thermostat | Each | 3 |
| Private | Prescriptive | Steam Trap, Commercial | Each | 87 |
| Private | Prescriptive | Steam Trap, Dry Cleaner | Each | 185 |
| Private | Prescriptive | Steam Trap, Industrial High Pressure | Each | 94 |
| Private | Prescriptive | Steam Trap, Industrial Medium Pressure | Each | 85 |
| Private | Prescriptive | Water Heater | Each | 13 |
| Public | Assessment Direct Install | Faucet Aerator - Bath | Each | 178 |
| Public | Assessment Direct Install | Faucet Aerator - Kitchen | Each | 8 |
| Public | Assessment Direct Install | Pre-Rinse Spray Valves | Each | 2 |
| Public | Assessment Direct Install | Showerheads | Each | 7 |
| Public | Building Operator Certification | BOC | Participant | 8 |
| Public | Business Optimization Program | Steam Trap, Industrial High Pressure | Each | 2 |
| Public | Business Optimization Program | Steam Trap, Industrial Medium Pressure | Each | 8 |
| Public | Direct Install | Garage Door Hinge | Each | 49 |
| Public | Prescriptive | Boiler Chemical Descaling | Each | 2 |
| Public | Prescriptive | Boiler Tune Up, Process | Each | 6 |
| Public | Prescriptive | Boiler Tune Up, Space Heating | Each | 154 |
| Public | Prescriptive | High Efficiency Boiler | Each | 62 |
| Public | Prescriptive | High Efficiency Furnace | Each | 34 |
| Public | Prescriptive | Pipe Insulation | Ln Ft | 78 |
| Public | Prescriptive | Steam Trap, Commercial | Each | 11 |
| Public | Prescriptive | Steam Trap, Industrial High Pressure | Each | 14 |
| Public | Prescriptive | Steam Trap, Industrial Medium Pressure | Each | 41 |
| Public | Prescriptive | Water Heater | Each | 2 |

Source: Nicor Gas tracking data and evaluation team analysis

# Program Savings Detail

Table 3 summarizes the energy savings the BEER Program achieved by path in 2024.

Table 3. 2024 Annual Energy Savings Summary

| **Program Category** | **Program Path** | **Ex Ante Gross Savings (Therms)** | **Verified Gross RR\*** | **Verified Gross Savings (Therms)** | **NTG†** | **Verified Net Savings (Therms)** |
| --- | --- | --- | --- | --- | --- | --- |
| Private, Non-DAC | Assessment Direct Install | 7,068 | 100% | 7,068 | 0.86 | 6,079 |
| Private, Non-DAC | Building Operator Certification | 13,036 | 117% | 15,298 | NA | 15,298 |
| Private, Non-DAC | Business Optimization Program | 1,545,639 | 101% | 1,562,832 | 0.92 | 1,437,806 |
| Private, Non-DAC | Direct Install | 8,305 | 106% | 8,766 | 0.86 | 7,539 |
| Private, Non-DAC | Midstream CFS | 143,827 | 159% | 229,382 | 0.80 | 183,506 |
| Private, Non-DAC | Prescriptive | 863,030 | 103% | 885,758 | Varies | 761,776 |
| ***Private, Non-DAC Subtotal*** | | ***2,580,906*** | ***105%*** | ***2,709,104*** |  | ***2,412,002*** |
| Private, DAC | Assessment Direct Install | 1,132 | 100% | 1,132 | 1.00 | 1,132 |
| Private, DAC | Business Optimization Program | 132,896 | 113% | 150,155 | 1.00 | 150,155 |
| Private, DAC | Direct Install | 1,715 | 100% | 1,715 | 1.00 | 1,715 |
| Private, DAC | Prescriptive | 239,671 | 101% | 242,716 | 1.00 | 242,716 |
| ***Private, DAC Subtotal*** | | ***375,414*** | ***105%*** | ***395,718*** |  | ***395,718*** |
| Public, Non-DAC | Assessment Direct Install | 2,073 | 100% | 2,073 | 0.86 | 1,783 |
| Public, Non-DAC | Building Operator Certification | 14,116 | 89% | 12,537 | NA | 12,537 |
| Public, Non-DAC | Business Optimization Program | 17,188 | 102% | 17,529 | 0.92 | 16,127 |
| Public, Non-DAC | Direct Install | 1,334 | 181% | 2,412 | 0.86 | 2,075 |
| Public, Non-DAC | Prescriptive | 608,202 | 110% | 671,816 | 0.86 | 577,762 |
| ***Public, Non-DAC Subtotal*** | | ***642,914*** | ***110%*** | ***706,367*** |  | ***610,283*** |
| Public, DAC | Assessment Direct Install | 89 | 100% | 89 | 1.00 | 89 |
| Public, DAC | Prescriptive | 72,326 | 134% | 97,211 | 1.00 | 97,211 |
| ***Public, DAC Subtotal*** | | ***72,415*** | ***134%*** | ***97,300*** |  | ***97,300*** |
| **Total** | | **3,671,650** | **106%** | **3,908,490** |  | **3,515,304** |

\* 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-2024/>. Note: Note: All savings estimating algorithms presented in the IL TRM v12.0 for the Building Operator Certification measure are for net savings. Therefore, this measure does not require the additional application of a NTG value.

Source: Evaluation team analysis

# Program Savings by Measure

The BEER program includes 33 measures as shown in the following table. The Steam Trap, Industrial High Pressure and Steam Trap, Industrial Medium Pressure measures contributed the most savings.

Table 4. 2024 Annual Energy Savings by Measure

| **Program Category** | **Program Path** | **Savings Category** | **Ex Ante  Gross  Savings (Therms)** | **Verified Gross RR\*** | **Verified  Gross  Savings  (Therms)** | **NTG†** | **Verified Net  Savings  (Therms)** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Private, Non-DAC | Assessment Direct Install | Faucet Aerator - Bath | 2,944 | 100% | 2,944 | 0.86 | 2,532 |
| Private, Non-DAC | Assessment Direct Install | Faucet Aerator - Kitchen | 7 | 100% | 7 | 0.86 | 6 |
| Private, Non-DAC | Assessment Direct Install | Pre-Rinse Spray Valves | 396 | 100% | 396 | 0.86 | 340 |
| Private, Non-DAC | Assessment Direct Install | Showerheads | 3,722 | 100% | 3,722 | 0.86 | 3,201 |
| Private, Non-DAC | Building Operator Certification | BOC | 13,036 | 117% | 15,298 | NA | 15,298 |
| Private, Non-DAC | Business Optimization Program | Boiler Tune Up, Process | 169,317 | 100% | 169,317 | 0.92 | 155,772 |
| Private, Non-DAC | Business Optimization Program | Pipe Insulation | 1,045 | 100% | 1,045 | 0.92 | 961 |
| Private, Non-DAC | Business Optimization Program | Steam Trap, Dry Cleaner | 212,577 | 101% | 214,846 | 0.92 | 197,659 |
| Private, Non-DAC | Business Optimization Program | Steam Trap, Industrial High Pressure | 816,818 | 101% | 822,923 | 0.92 | 757,089 |
| Private, Non-DAC | Business Optimization Program | Steam Trap, Industrial Medium Pressure | 345,882 | 103% | 354,701 | 0.92 | 326,325 |
| Private, Non-DAC | Direct Install | Garage Door Hinge | 8,305 | 106% | 8,766 | 0.86 | 7,539 |
| Private, Non-DAC | Midstream CFS | Automatic Conveyor Broiler | 5,952 | 100% | 5,952 | 0.80 | 4,762 |
| Private, Non-DAC | Midstream CFS | Combination Oven | 6,261 | 78% | 4,853 | 0.80 | 3,883 |
| Private, Non-DAC | Midstream CFS | Convection Oven | 690 | 99% | 684 | 0.80 | 547 |
| Private, Non-DAC | Midstream CFS | Conveyor Oven | 21,198 | 98% | 20,740 | 0.80 | 16,592 |
| Private, Non-DAC | Midstream CFS | Fryer | 87,916 | 107% | 94,065 | 0.80 | 75,252 |
| Private, Non-DAC | Midstream CFS | Griddle | 7,851 | 109% | 8,589 | 0.80 | 6,871 |
| Private, Non-DAC | Midstream CFS | Infrared Salamander Broiler | 480 | 100% | 480 | 0.80 | 384 |
| Private, Non-DAC | Midstream CFS | Kitchen Demand Ventilation Controls | 9,288 | 965% | 89,629 | 0.80 | 71,703 |
| Private, Non-DAC | Midstream CFS | Pasta Cooker | 1,380 | 100% | 1,380 | 0.80 | 1,104 |
| Private, Non-DAC | Midstream CFS | Rack Oven - Double Oven | 1,986 | 110% | 2,185 | 0.80 | 1,748 |
| Private, Non-DAC | Midstream CFS | Rotisserie Oven | 824 | 100% | 824 | 0.80 | 659 |
| Private, Non-DAC | Prescriptive | Boiler Tune Up, Process | 46,466 | 111% | 51,366 | 0.86 | 44,175 |
| Private, Non-DAC | Prescriptive | Boiler Tune Up, Space Heating | 50,809 | 100% | 50,809 | 0.86 | 43,696 |
| Private, Non-DAC | Prescriptive | Combination Oven | 2,019 | 96% | 1,946 | 0.86 | 1,673 |
| Private, Non-DAC | Prescriptive | Compressed Air Heat Recovery | 48,361 | 100% | 48,361 | 0.86 | 41,590 |
| Private, Non-DAC | Prescriptive | Fryer | 26,722 | 116% | 30,936 | 0.86 | 26,605 |
| Private, Non-DAC | Prescriptive | Grain Dryer Tune-Up | 39,906 | 100% | 39,906 | 0.86 | 34,319 |
| Private, Non-DAC | Prescriptive | Griddle | 652 | 227% | 1,481 | 0.86 | 1,274 |
| Private, Non-DAC | Prescriptive | High Efficiency Boiler | 17,296 | 131% | 22,696 | 0.86 | 19,519 |
| Private, Non-DAC | Prescriptive | High Efficiency Furnace | 8,998 | 102% | 9,212 | 0.86 | 7,922 |
| Private, Non-DAC | Prescriptive | Infrared Charbroiler | 2,827 | 100% | 2,827 | 0.86 | 2,431 |
| Private, Non-DAC | Prescriptive | Ozone Laundry | 18,854 | 99% | 18,606 | 0.86 | 16,001 |
| Private, Non-DAC | Prescriptive | Pipe Insulation | 4,412 | 100% | 4,412 | 0.86 | 3,794 |
| Private, Non-DAC | Prescriptive | Pre-Rinse Spray Valves | 475 | 92% | 438 | 0.86 | 377 |
| Private, Non-DAC | Prescriptive | Small Commercial Thermostat | 406 | 100% | 406 | 0.92 | 373 |
| Private, Non-DAC | Prescriptive | Steam Trap, Commercial | 152 | 106% | 161 | 0.86 | 139 |
| Private, Non-DAC | Prescriptive | Steam Trap, Dry Cleaner | 82,199 | 101% | 83,076 | 0.86 | 71,445 |
| Private, Non-DAC | Prescriptive | Steam Trap, Industrial High Pressure | 418,189 | 101% | 421,297 | 0.86 | 362,315 |
| Private, Non-DAC | Prescriptive | Steam Trap, Industrial Medium Pressure | 93,509 | 103% | 96,036 | 0.86 | 82,591 |
| Private, Non-DAC | Prescriptive | Water Heater | 779 | 229% | 1,787 | 0.86 | 1,537 |
| ***Private, Non-DAC Subtotal*** | |  | ***2,580,906*** | ***105%*** | ***2,709,104*** |  | ***2,412,002*** |
| Private, DAC | Assessment Direct Install | Faucet Aerator - Bath | 135 | 100% | 135 | 1.00 | 135 |
| Private, DAC | Assessment Direct Install | Showerheads | 997 | 100% | 997 | 1.00 | 997 |
| Private, DAC | Business Optimization Program | Boiler Tune Up, Process | 42,382 | 138% | 58,551 | 1.00 | 58,551 |
| Private, DAC | Business Optimization Program | Steam Trap, Dry Cleaner | 80,377 | 101% | 81,235 | 1.00 | 81,235 |
| Private, DAC | Business Optimization Program | Steam Trap, Industrial High Pressure | 5,507 | 101% | 5,557 | 1.00 | 5,557 |
| Private, DAC | Business Optimization Program | Steam Trap, Industrial Medium Pressure | 4,630 | 104% | 4,812 | 1.00 | 4,812 |
| Private, DAC | Direct Install | Garage Door Hinge | 1,715 | 100% | 1,715 | 1.00 | 1,715 |
| Private, DAC | Prescriptive | Fryer | 3,095 | 111% | 3,435 | 1.00 | 3,435 |
| Private, DAC | Prescriptive | High Efficiency Furnace | 2,675 | 101% | 2,689 | 1.00 | 2,689 |
| Private, DAC | Prescriptive | Ozone Laundry | 37,411 | 100% | 37,411 | 1.00 | 37,411 |
| Private, DAC | Prescriptive | Steam Trap, Commercial | 17,249 | 106% | 18,259 | 1.00 | 18,259 |
| Private, DAC | Prescriptive | Steam Trap, Dry Cleaner | 47,516 | 101% | 48,023 | 1.00 | 48,023 |
| Private, DAC | Prescriptive | Steam Trap, Industrial High Pressure | 119,400 | 101% | 120,346 | 1.00 | 120,346 |
| Private, DAC | Prescriptive | Steam Trap, Industrial Medium Pressure | 12,325 | 102% | 12,554 | 1.00 | 12,554 |
| ***Private, DAC Subtotal*** | |  | ***375,414*** | ***105%*** | ***395,718*** |  | ***395,718*** |
| Public, Non-DAC | Assessment Direct Install | Faucet Aerator - Bath | 1,470 | 100% | 1,470 | 0.86 | 1,264 |
| Public, Non-DAC | Assessment Direct Install | Faucet Aerator - Kitchen | 53 | 100% | 53 | 0.86 | 46 |
| Public, Non-DAC | Assessment Direct Install | Pre-Rinse Spray Valves | 475 | 100% | 475 | 0.86 | 408 |
| Public, Non-DAC | Assessment Direct Install | Showerheads | 75 | 100% | 75 | 0.86 | 65 |
| Public, Non-DAC | Building Operator Certification | BOC | 14,116 | 89% | 12,537 | NA | 12,537 |
| Public, Non-DAC | Business Optimization Program | Steam Trap, Industrial High Pressure | 11,015 | 101% | 11,114 | 0.92 | 10,225 |
| Public, Non-DAC | Business Optimization Program | Steam Trap, Industrial Medium Pressure | 6,173 | 104% | 6,415 | 0.92 | 5,902 |
| Public, Non-DAC | Direct Install | Garage Door Hinge | 1,334 | 181% | 2,412 | 0.86 | 2,075 |
| Public, Non-DAC | Prescriptive | Boiler Chemical Descaling | 2,982 | 63% | 1,876 | 0.86 | 1,613 |
| Public, Non-DAC | Prescriptive | Boiler Tune Up, Process | 83 | 100% | 83 | 0.86 | 71 |
| Public, Non-DAC | Prescriptive | Boiler Tune Up, Space Heating | 325,813 | 100% | 325,813 | 0.86 | 280,200 |
| Public, Non-DAC | Prescriptive | High Efficiency Boiler | 161,727 | 139% | 224,866 | 0.86 | 193,385 |
| Public, Non-DAC | Prescriptive | High Efficiency Furnace | 9,817 | 100% | 9,817 | 0.86 | 8,443 |
| Public, Non-DAC | Prescriptive | Pipe Insulation | 49 | 100% | 49 | 0.86 | 42 |
| Public, Non-DAC | Prescriptive | Steam Trap, Commercial | 1,593 | 106% | 1,686 | 0.86 | 1,450 |
| Public, Non-DAC | Prescriptive | Steam Trap, Industrial High Pressure | 75,906 | 101% | 76,439 | 0.86 | 65,737 |
| Public, Non-DAC | Prescriptive | Steam Trap, Industrial Medium Pressure | 30,154 | 103% | 31,086 | 0.86 | 26,734 |
| Public, Non-DAC | Prescriptive | Water Heater | 79 | 128% | 102 | 0.86 | 87 |
| ***Public, Non-DAC Subtotal*** | |  | ***642,914*** | ***1.10*** | ***706,367*** |  | ***610,283*** |
| Public, DAC | Assessment Direct Install | Faucet Aerator - Bath | 81 | 100% | 81 | 1.00 | 81 |
| Public, DAC | Assessment Direct Install | Faucet Aerator - Kitchen | 8 | 100% | 8 | 1.00 | 8 |
| Public, DAC | Prescriptive | Boiler Tune Up, Process | 2,162 | 177% | 3,836 | 1.00 | 3,836 |
| Public, DAC | Prescriptive | Boiler Tune Up, Space Heating | 11,928 | 100% | 11,928 | 1.00 | 11,928 |
| Public, DAC | Prescriptive | High Efficiency Boiler | 57,205 | 141% | 80,382 | 1.00 | 80,382 |
| Public, DAC | Prescriptive | High Efficiency Furnace | 1,031 | 103% | 1,065 | 1.00 | 1,065 |
| ***Public, DAC Subtotal*** | |  | ***72,415*** | ***134%*** | ***97,300*** |  | ***97,300*** |
| **Total** | |  | **3,671,650** | **106%** | **3,908,490** |  | **3,515,304** |

\* 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-2024/>.

Note: All savings estimating algorithms presented in the IL TRM v12.0 for the Building Operator Certification measure are for net savings. Therefore, this measure does not require the additional application of an NTG value.

Source: Evaluation team analysis

# Impact Analysis Findings and Recommendations

## Impact Parameter Estimates

Table 5 shows the unit 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 a 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** | **Data Source(s)** |
| --- | --- | --- | --- | --- | --- |
| TAutomatic Conveyor Broiler | Each | Varies | Varies | 100% | IL TRM v12.0†, Section 4.2.22 |
| BOC (in TRM) | Sq. ft. | Varies | 0.0046 | Vary | Section 4.8.24 and PTD\* |
| Boiler Chemical Descaling | Each | Varies | Varies | 63% | Section 4.4.49 |
| Boiler Tune Up, Process | Each | Varies | Varies | 109% | Section 4.4.3 |
| Boiler Tune Up, Space Heating | Each | Varies | Varies | 100% | Section 4.4.2 |
| Combination Oven | Each | Varies | Varies | 82% | Section, 4.2.1 |
| Compressed Air Heat Recovery | Each | Varies | Varies | 100% | Section 4.7.9 |
| Convection Oven | Each | Varies | Varies | 99% | Section 4.2.5 |
| Conveyor Oven | Each | Varies | Varies | 98% | Section 4.2.4 |
| Faucet Aerator - Bath | Each | Varies | Varies | 100% | Section 4.3.2 |
| Faucet Aerator - Kitchen | Each | Varies | Varies | 100% | Section 4.3.2 |
| Fryer | Each | Varies | Varies | 109% | Section 4.2.7 |
| Garage Door Hinge | Each | Varies | Varies | 114% | Section 4.8.12 |
| Grain Dryer Tune-Up | Each | Varies | Varies | 100% | Section 4.1.15 |
| Griddle | Each | Varies | Varies | 118% | Section 4.2.8 |
| High Efficiency Boiler | Each | Varies | Varies | 139% | Section 4.4.10, IL TRM v12.0 Errata Memo |
| High Efficiency Furnace | Each | Varies | Varies | 101% | Section 4.4.11 |
| Infrared Charbroiler | Each | Varies | Varies | 100% | Section 4.2.12 |
| Infrared Salamander Broiler | Each | Varies | Varies | 100% | Section 4.2.14 |
| Kitchen Demand Ventilation Controls | Each | Varies | Varies | 965% | Section 4.2.16 |
| Ozone Laundry | Each | Varies | Varies | 100% | Section 4.3.6 |
| Pasta Cooker | Each | 1380 | 1380 | 100% | Section 4.2.17 |
| Pipe Insulation | Ln Ft | Varies | Varies | 100% | Section 4.4.14 |
| Pre-Rinse Spray Valves | Each | Varies | Varies | 97% | Section 4.2.11 |
| Rack Oven - Double Oven | Each | Varies | Varies | 110% | Section 4.2.18, IL TRM v12.0 Errata Memo |
| Rotisserie Oven | Each | Varies | Varies | 100% | Section 4.2.13 |
| Showerheads | Each | Varies | Varies | 100% | Section 4.3.3 |
| Small Commercial Thermostat | Each | Varies | Varies | 100% | Section 4.4.48 |
| Steam Trap, Commercial | Each | Varies | Varies | 106% | Section 4.4.16 |
| Steam Trap, Dry Cleaner | Each | Varies | Varies | 101% | Section 4.4.16 |
| Steam Trap, Industrial High Pressure | Each | Varies | Varies | 101% | Section 4.4.16 |
| Steam Trap, Industrial Medium Pressure | Each | Varies | Varies | 103% | Section 4.4.16 |
| Water Heater | Each | Varies | Varies | 220% | Section 4.3.1 |

\* Program Tracking Data (PTD) provided by Nicor Gas, extract dated January 30, 2025.

† State of Illinois Technical Reference Manual version 12.0 from http://www.ilsag.info/technical-reference-manual.html.

## Findings and Recommendations

#### Food Service Equipment

**Finding 1a.** The evaluation team compared variable inputs in the tracking data to the Qualified Products List (QPL) according to manufacturer and model number for measures in the Food Service Equipment end use. The Combination Oven, Convection Oven, Fryer (Standard and Large Vat), Griddle, Conveyor Oven >=25in, and Rotisserie Oven measures had some input values that did not match between the tracking data and QPL, so verified savings utilize the QPL values.

**Finding 1b.** The Rack Oven – Double Oven measure only provided an efficiency value in the tracking data, this did not align with the QPL so verified savings utilized the QPL for the efficiency. Verified savings also use the QPL to fill in all other input values for this measure.

**Finding 1c.** The evaluation team was unable to recreate ex ante savings for some Fryer, Griddle, Combination Oven, and Convection Oven measures before applying any of these QPL changes.

**Recommendation 1.** Review the QPL and tracking data to ensure reported measure input values align and ex ante savings reflect the tracking data values. Review the ex ante algorithms, especially the Idle Energy term, to confirm they are producing the correct value.

**Finding 2**. The evaluation team found instances of Food Service Equipment end use measures, such as some Fryer, Griddle, and Rotisserie Oven, with values in the tracking data that do not align with the QPL but ex ante savings reflect QPL values. This indicates the tracking data values do not support the ex ante savings calculations. Verified savings use the QPL values so this has no impact on the realization rate for these measures.

**Recommendation 2.** Review the QPL and tracking data to ensure tracking data measure input values align with reported ex ante savings.

**Finding 3.** The evaluation team compares tracking data inputs against the QPL according to manufacturer and model number for Food Service Equipment. There are a few instances where the evaluation team could not utilize the QPL:

* The Infrared Charbroiler measures manufactured by Vulcan with the model numbers “VCCB25” and “VBBC60” could not be found in the QPL so verified savings utilize input values from the tracking data.
* The Pre-Rinse Spray Valve measures manufactured by Niagra with the model number “N2180-1.1” could not be found in the QPL so verified savings utilize input values from the tracking data.
* The Fryer measure manufactured by Pitco with the model number “SSH60” in the tracking data did not have enough details provided in the tracking data’s model number to utilize the QPL so verified savings utilize input values from the tracking data.
* The Conveyor Oven <25in measures had no information provided in the tracking data so verified savings utilize input values from the TRM.
* The Infrared Salamander Broiler utilizes the TRM algorithms and values because it is not clear which column contains the Energy Input Rate value, the main value listed in the QPL. Verified savings utilize input values from the tracking data.
* The Pasta Cooker measure utilizes a deemed savings approach. This deemed value is used by both ex ante and verified savings.
* The Kitchen Demand Ventilation Controls measure only has incentive information listed in the QPL so verified savings utilize input values from the tracking data.

**Recommendation 3.** Review the model numbers provided in the tracking data against the QPL to make sure the two align. Ensure the variable inputs are provided for all tracking data measures as appliable and that they are clearly labeled in the column header.

**Finding 4.** As noted during the midyear interim impact analysis[[1]](#footnote-2), the evaluation team observed ex ante savings calculations for the Kitchen Demand Ventilation Controls measures do not include the horsepower (HP) variable. The IL TRM v12.0 outlines this input as the second term in the savings calculation. The tracking data has 7.75 HP value, but this value aligned with a previous version of the TRM. The TRM v12.0 for 2024 lists a value of 9.65 HP, which we used in the verified savings calculation.

**Recommendation 4.** Ensure tracking data inputs align with the most recent version of the TRM and ensure ex ante savings calculations include all necessary inputs.

**Finding 5.** The IL TRM v12.0 Errata Memo has updated the Days value for the Rack Oven – Double Oven measure to 365 with no language allowing a custom actual value. Verified savings use this TRM value instead of the 312 in the tracking data’s OperationDaysYear column.

**Recommendation 5.** Ensure ex ante savings calculations for Rack Oven – Double Oven utilizes deemed inputs from the current TRM Errata Memo.

#### HVAC

**Finding 6.** As noted during the midyear interim impact analysis, the evaluation team observed ex ante savings utilize the tracking data column ‘Utilization Factor’ for the T1 variable’s value for all Steam Trap measures. The source of these values is unclear, they should be based on an equation provided in IL TRM v12.0. Verified savings use the IL TRM v12.0 equation to calculate the T1 value.

**Recommendation 6.** Provide more information on the source of the T1 values in the ‘Utilization Factor’ column of the tracking data or ensure the tracking data inputs align with the current IL TRM.

**Finding 7.** The evaluation team was unable to recreate ex ante savings for some High Efficiency Furnace, High Efficiency Boiler, Boiler Chemical Descaling, and Boiler Tune Up, Process measures. Verified savings use information provided in the tracking data and the IL TRM v12.0.

**Recommendation 7.** Ensure the input values provided in the tracking data for the High Efficiency Furnace, High Efficiency Boiler, Boiler Chemical Descaling, and Boiler Tune Up, Process measures support the ex ante savings in the tracking data.

**Finding 8.** The evaluation team found the values in PreInstallationEfficiency and PostInstallationEfficiency tracking data columns were switched for Boiler Tune Up, Process’ MeasureID\_IC MLI – 24180565 and Boiler Tune Up, Space Heating’s MeasureID\_IC MLI – 19979260. The values as written were producing negative savings, so verified savings utilize the PostInstallationEffieciency value for the Pre-installation efficiency variable and the PreInstallationEfficiency value for the Post-installation efficiency variable. This had no impact on the realization rate.

**Recommendation 8.** Ensure the values provided in the PreInstallationEfficiency and PostInstallationEfficiency tracking data columns are accurate and support the ex ante savings calculation.

**Finding 9.** Verified savings treat the tracking data measures Condensing Boilers, >90% and Non-Condensing Boilers, >85% as Hot Water High Efficiency Boilers. The IL TRM v12.0 Errata Memo has updated the baseline efficiency values for measures with capacity ranging from 300,00 to 2,500,000 Btu/hr from 84% to 80%. This update was necessary for all measures except for MeasureID\_IC MLI – 17905225 and MLI – 17905248 since they have a capacity of 199,000 Btuh/hr in the tracking data. Some measures that were impacted had a realization rate of 100%, indicating these correctly incorporate the errata, while others did not.

**Recommendation 9.** Ensure ex ante savings from boilers align with the applicable IL TRM, and values reported in the tracking data consistently support ex ante savings calculations.

**Finding 10.** The evaluation team had the following observations surrounding Equivalent Full Load Hours (EFLH):

* High Efficiency Furnace’s MeasureID\_IC MLI – 21376391 was reported as having an Office – Low Rise building type in the tracking data, but the value in the tracking data’s EquivalentFullLoadHours column is 1325 hours. This measure is installed in climate zone 2 and should thus report an EFLH of 2625 hours. Ex ante savings appear to reflect this value so there is no impact on the realization rate.
* The tracking data reported a building type of “-1” for some instances of Steam Trap, Industrial High Pressure, Boiler Tune Up, Process, Steam Trap, Industrial Medium Pressure, Faucet Aerator – Bath, High Efficiency Furnace, High Efficiency Boiler, Pipe Insulation, Compressed Air Heat Recovery, and Building Operator Certification measures. Verified savings use values from the tracking data’s EquivalentFullLoadHours column where a given measure needs the EFLH input. This has no impact on the realization rate.
* The tracking data reported a Public Sector building type for one instance of the Faucet Aerator – Bath measure and two instances of the High Efficiency Boiler measure. This building type was removed from the TRM in version 9. Verified savings use values from the tracking data’s EquivalentFullLoadHours column for the EFLH input. This has no impact on the realization rate.

**Recommendation 10.** Ensure the input values, climate zone and building types provided in the tracking data reflect the ex ante savings and align with the building types listed in the IL TRM v12.0.

#### Hot Water

**Finding 11.** Similar to the midyear interim impact analysis, the evaluation team used address information and tracking data clues to conclude both Ozone Laundry measures’ applications were Laundromat.

**Recommendation 11.** Include the application type in the tracking data for Ozone Laundry measures to avoid potential savings discrepancies.

**Finding 12.** The evaluation team was unable to recreate ex ante savings for the Water Heater measures. The Tankless Water Heater type provided no information in the tracking data’s Size column, verified savings assumed 50 gallons for these measures. Size is needed to inform the estimated annual hot water consumption in gallons (HotWaterUse\_gallons). The tracking data did not provide information for Tankless Water Heater type in “StandbyLoss” column, so standby losses were only calculated for the Storage Water Heater type.

**Recommendation 12.** Provide all necessary savings input in the tracking data to support the Storage and Tankless Water Heater ex ante values, specifically Size and Standby Loss for Tankless Water Heater measures. This will help to avoid savings discrepancies in the future.

#### Miscellaneous

**Finding 13.** Verified savings follow the IL TRM v12.0 deemed existing building therms values for Garage Door Hinge measures. These values were determined using the tracking data building type and zip code to determine the climate zone. The evaluation team was unable to replicate ex ante savings for this measure.

**Recommendation 13.** Provide all necessary details in the tracking data to follow the IL TRM v12.0 deemed savings tables for Garage Door Hinge measures. The tracking data does have Climate Zone and Building Type, but do not specify if the measure is installed as a retrofit or new construction measure. If ex ante savings follow the TRM’s algorithm, ensure the tracking data reflects that by providing all necessary input values.

#### Building Operator Certification

**Finding 14.** The gas savings for multiple projects were calculated using incorrect managed square footage as compared to the value reported in the project files.

* **BOC202406.** The Nicor Gas tracking data reported a managed square footage of 300,000 ft2 for this participant. The evaluation team verified a managed square footage of 542,000 ft2 for this participant consistent with the ComEd tracking data and the project files and updated the verified savings accordingly.
* **BOC202408.** For this participant, the Nicor Gas tracking data reported a managed square footage of 234,840 ft2. The evaluation team verified a managed square footage of over 500,000 ft2 for this participant consistent with the ComEd tracking data and the project files and updated the verified savings accordingly.
* **BOC202443.** For this participant who reported operating two buildings in the project files, the Nicor Gas tracking data only reported a managed square footage of 100,000 ft2 corresponding to Building 1. The evaluation team verified a total managed square footage of over 500,000 ft2 for this participant after including both buildings and updated the verified savings accordingly.

Recommendation 14. Implement quality control checks to ensure that the managed square footage in the tracking data is consistent with the total managed square footage in the project files. In instances where the participant reports operating more than one building, ensure that the tracking data reported area includes the managed square footage from all operated buildings.

**Finding 15.** For three projects, the evaluation team updated the building area operated by the participant based on online research and detailed review of area information in the project files.

* **BOC202403.** The participant reported operating one building with a managed square footage of 240,000 ft2. The evaluation team updated the area using a building flyer from the real estate developers for this building and verified savings for a managed square footage of 220,070 ft2.
* **BOC202440.** The project file for this participant included a detailed space-by-space breakdown of the total building area at the managed facility. The evaluation team used this information and updated the managed square footage from 250,000 ft2 to 240,050 ft2 after excluding any area corresponding to open-air spaces and greenhouse facilities.
* **BOC202401.** The participant only reported one building address in the project file with a managed square footage of more than 500,000 ft2. The evaluation team updated the managed area for this building using the facility information found on the county website and verified savings for a managed square footage of 294,200 ft2.

Recommendation 15. Ensure the managed square footage used to calculate ex ante savings does not include any open-air or unmanaged spaces at the building. If a participant operates more than one building, confirm details for all operated buildings are included in the project file.

**Finding 16.** For some facilities with multiple participants, the evaluation team verified different managed square footage as compared to the tracking data and project files after accounting for all the building square footage previously claimed through the program.

* **BOC202401 and BOC202402.** This facility had two participants in CY2024, with both participants reporting the same building address (one building with 50% of the time for both participants) for operated building in the project files. The program claimed savings for a managed square footage of 500,000 ft2 for one participant (BOC202401) and 402,800 ft2 for the other participant (BOC202402). As detailed in Finding 2 above, the evaluation team verified savings only for a managed square footage of 294,200 ft2 for BOC202401 resulting in a realization rate of 0.59. For BOC202402, since the savings associated with the building were already verified for BOC202401, the evaluation team verified no additional savings for this participant.
* **BOC202405 and BOC202446.** This facility had two participants in CY2024, with both participants managing the same building (100% of the time for one participant and 90% of the time for the other) and one of them (BOC202446) also managing another two buildings. The evaluation team verified a realization rate of 1.00 for BOC202405 using the maximum eligible area per participant (500,000 ft2) of the total managed square footage of 808,840 ft2 for the building in common. For BOC202446, the evaluation team updated the managed square footage from 500,000 ft2 to 421,484 ft2 (308,840 ft2 + 47,142 ft2 + 65,502 ft2) using the remaining managed area for the building in common and the full managed area for the two other buildings reported in the project files.

Recommendation 16. Administer additional scrutiny during the savings review for facilities that have multiple participants in the same program year or repeat participation (same participant or same building) across multiple program years to ensure savings are not claimed based on the same square footage for multiple participants.

#### Disadvantaged Communities

**Finding 17.** The evaluation team used information in the tracking data to determine if measures were installed in disadvantaged communities, with support from the supplemental file “2024 EEP Business Participant DAC 1-30”. The team deferred to the tracking data as this supplemental file did not contain disadvantaged community identifiers for measures in the Midstream CFS or BOC program paths.

**Recommendation 17.** Ensure the tracking data has enough information to properly identify if all measures are installed in disadvantaged communities for CFS projects.

#### Climate Zone

**Finding 18.** The evaluation team found the tracking data’s Climate Zone column is blank for all Midstream CFS projects as well as several other projects in the other program paths. In these cases, the evaluation team verified a climate zone using an Illinois Zip Code and Climate Zone Mapping file[[2]](#footnote-3) and the county information in the tracking data to inform verified savings as applicable. This has no impact on the realization rate.

**Recommendation 18.** Provide a climate zone for every project in the tracking data.

##### Impact Analysis Methodology

#### Building Operator Certification

The impact evaluation team applied the algorithms from Measure 4.8.24 Building Operator Certification from IL-TRM v12.0. Guidehouse used information collected from the participants and internet research to determine the inputs into the IL-TRM algorithm. If the square footage managed by a participant exceeded 500,000 ft2, savings were capped at 500,000 ft2 per participant .Table A‑1shows the savings coefficients from IL-TRM v12.0, and they are used in Equation 1, Equation 2, and Equation 3 to verify the estimated annual energy savings.

Table A‑1. Profile of Gross Impact Sample for Custom Projects

| **Savings Type** | **Variable Name** | **Value** | **Unit** |
| --- | --- | --- | --- |
| Natural Gas | Cg | 0.0046 | therms/ft2/participant |

Source: IL TRM V12.0, Measure 4.8.24

Equation 1. Natural Gas Energy Savings per Participant

*Natural Gas Savings = Cg x Area (Minimum of participant ft2 or 500,000 ft2)*

#### All Other Measures

Guidehouse calculated the verified gross savings for each measure type by conducting a review of the tracking data and applying the algorithms of IL TRM v12.0[[3]](#footnote-4) and IL TRM v12.0 Errata Memo[[4]](#footnote-5). The evaluation team checked that savings inputs provided in the tracking data matched IL TRM v12.0 and that custom inputs were properly used. Then the tracking data and custom values used for the verified savings were adjusted from the tracking data, as necessary. The savings algorithms were applied to determine the verified savings of each measure. Verified gross realization rates are calculated by dividing the verified savings by the ex ante gross savings.

For most Food Service Equipment end use measures (applicable measures can be found in the Assessment Direct Install, Midstream CFS, and Prescriptive program paths), Guidehouse conducted an additional tracking data verification step. The evaluation team compared the tracking data values for these ENERGY STAR measures to the ENERGY STAR QPLs[[5]](#footnote-6) by manufacturer and model number. Where the team found tracking data values and QPLs values disagreed, the evaluation team updated the tracking data using the QPL values. This approach aligns with Guidehouse’s process for the ComEd and Peoples Gas and North Shore Gas evaluations.

Based on the SAG policy, the evaluation team assigned a NTG of 1.00 to all projects that were in disadvantaged communities (DAC) based on census tract and with consumption under 35,000 Therms.

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##### 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 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 Category | 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) |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Private | Assessment Direct Install | Faucet Aerator - Bath | FALSE | Each | 380 | 10.00 | NO | 669,149 | 2,944 | 2,944 | 2,532 |
| Private | Assessment Direct Install | Faucet Aerator - Bath | TRUE | Each | 50 | 10.00 | NO | 30,694 | 135 | 135 | 135 |
| Private | Assessment Direct Install | Faucet Aerator - Kitchen | FALSE | Each | 2 | 10.00 | NO | 1,246 | 7 | 7 | 6 |
| Private | Assessment Direct Install | Pre-Rinse Spray Valves | FALSE | Each | 2 | 5.00 | NO | 54,288 | 396 | 396 | 340 |
| Private | Assessment Direct Install | Showerheads | FALSE | Each | 347 | 10.00 | NO | 590,728 | 3,722 | 3,722 | 3,201 |
| Private | Assessment Direct Install | Showerheads | TRUE | Each | 93 | 10.00 | NO | 158,322 | 997 | 997 | 997 |
| Private | Building Operator Certification | BOC | FALSE | Participant | 9 | 13.00 | NO | 0 | 13,036 | 15,298 | 15,298 |
| Private | Business Optimization Program | Boiler Tune Up, Process | FALSE | Each | 31 | 2.00 | NO | 0 | 169,317 | 169,317 | 155,772 |
| Private | Business Optimization Program | Boiler Tune Up, Process | TRUE | Each | 13 | 2.00 | NO | 0 | 42,382 | 58,551 | 58,551 |
| Private | Business Optimization Program | Pipe Insulation | FALSE | Ln Ft | 100 | 15.00 | NO | 0 | 1,045 | 1,045 | 961 |
| Private | Business Optimization Program | Steam Trap, Dry Cleaner | FALSE | Each | 201 | 6.00 | NO | 1,784,880 | 212,577 | 214,846 | 197,659 |
| Private | Business Optimization Program | Steam Trap, Dry Cleaner | TRUE | Each | 76 | 6.00 | NO | 674,880 | 80,377 | 81,235 | 81,235 |
| Private | Business Optimization Program | Steam Trap, Industrial High Pressure | FALSE | Each | 134 | 6.00 | NO | 6,807,314 | 816,818 | 822,923 | 757,089 |
| Private | Business Optimization Program | Steam Trap, Industrial High Pressure | TRUE | Each | 1 | 6.00 | NO | 46,078 | 5,507 | 5,557 | 5,557 |
| Private | Business Optimization Program | Steam Trap, Industrial Medium Pressure | FALSE | Each | 257 | 6.00 | NO | 2,991,073 | 345,882 | 354,701 | 326,325 |
| Private | Business Optimization Program | Steam Trap, Industrial Medium Pressure | TRUE | Each | 6 | 6.00 | NO | 40,997 | 4,630 | 4,812 | 4,812 |
| Private | Direct Install | Garage Door Hinge | FALSE | Each | 169 | 20.00 | NO | 0 | 8,305 | 8,766 | 7,539 |
| Private | Direct Install | Garage Door Hinge | TRUE | Each | 33 | 20.00 | NO | 0 | 1,715 | 1,715 | 1,715 |
| Private | Midstream CFS | Automatic Conveyor Broiler | FALSE | Each | 2 | 12.00 | NO | 0 | 5,952 | 5,952 | 4,762 |
| Private | Midstream CFS | Combination Oven | FALSE | Each | 10 | 12.00 | NO | 0 | 6,261 | 4,853 | 3,883 |
| Private | Midstream CFS | Convection Oven | FALSE | Each | 3 | 12.00 | NO | 0 | 690 | 684 | 547 |
| Private | Midstream CFS | Conveyor Oven | FALSE | Each | 21 | 12.00 | NO | 0 | 21,198 | 20,740 | 16,592 |
| Private | Midstream CFS | Fryer | FALSE | Each | 127 | 12.00 | NO | 0 | 87,916 | 94,065 | 75,252 |
| Private | Midstream CFS | Griddle | FALSE | Each | 15 | 12.00 | NO | 0 | 7,851 | 8,589 | 6,871 |
| Private | Midstream CFS | Infrared Salamander Broiler | FALSE | Each | 2 | 12.00 | NO | 0 | 480 | 480 | 384 |
| Private | Midstream CFS | Kitchen Demand Ventilation Controls | FALSE | Each | 12 | 20.00 | NO | 0 | 9,288 | 89,629 | 71,703 |
| Private | Midstream CFS | Pasta Cooker | FALSE | Each | 1 | 12.00 | NO | 0 | 1,380 | 1,380 | 1,104 |
| Private | Midstream CFS | Rack Oven - Double Oven | FALSE | Each | 1 | 12.00 | NO | 0 | 1,986 | 2,185 | 1,748 |
| Private | Midstream CFS | Rotisserie Oven | FALSE | Each | 1 | 12.00 | NO | 0 | 824 | 824 | 659 |
| Private | Prescriptive | Boiler Tune Up, Process | FALSE | Each | 3 | 2.00 | NO | 0 | 46,466 | 51,366 | 44,175 |
| Private | Prescriptive | Boiler Tune Up, Space Heating | FALSE | Each | 9 | 3.00 | NO | 0 | 50,809 | 50,809 | 43,696 |
| Private | Prescriptive | Combination Oven | FALSE | Each | 4 | 12.00 | NO | 0 | 2,019 | 1,946 | 1,673 |
| Private | Prescriptive | Compressed Air Heat Recovery | FALSE | Each | 2 | 15.00 | NO | 0 | 48,361 | 48,361 | 41,590 |
| Private | Prescriptive | Fryer | FALSE | Each | 45 | 12.00 | NO | 0 | 26,722 | 30,936 | 26,605 |
| Private | Prescriptive | Fryer | TRUE | Each | 6 | 12.00 | NO | 0 | 3,095 | 3,435 | 3,435 |
| Private | Prescriptive | Grain Dryer Tune-Up | FALSE | Each | 3 | 1.00 | NO | 0 | 39,906 | 39,906 | 34,319 |
| Private | Prescriptive | Griddle | FALSE | Each | 3 | 12.00 | NO | 0 | 652 | 1,481 | 1,274 |
| Private | Prescriptive | High Efficiency Boiler | FALSE | Each | 12 | 25.00 | NO | 0 | 17,296 | 22,696 | 19,519 |
| Private | Prescriptive | High Efficiency Furnace | FALSE | Each | 28 | 16.50 | NO | 0 | 8,998 | 9,212 | 7,922 |
| Private | Prescriptive | High Efficiency Furnace | TRUE | Each | 8 | 16.50 | NO | 0 | 2,675 | 2,689 | 2,689 |
| Private | Prescriptive | Infrared Charbroiler | FALSE | Each | 4 | 12.00 | NO | 0 | 2,827 | 2,827 | 2,431 |
| Private | Prescriptive | Ozone Laundry | FALSE | Each | 1 | 10.00 | NO | 358,065 | 18,854 | 18,606 | 16,001 |
| Private | Prescriptive | Ozone Laundry | TRUE | Each | 1 | 10.00 | NO | 719,949 | 37,411 | 37,411 | 37,411 |
| Private | Prescriptive | Pipe Insulation | FALSE | Ln Ft | 1,175 | 15.00 | NO | 0 | 4,412 | 4,412 | 3,794 |
| Private | Prescriptive | Pre-Rinse Spray Valves | FALSE | Each | 2 | 5.00 | NO | 60,091 | 475 | 438 | 377 |
| Private | Prescriptive | Small Commercial Thermostat | FALSE | Each | 3 | 11.00 | NO | 0 | 406 | 406 | 373 |
| Private | Prescriptive | Steam Trap, Commercial | FALSE | Each | 1 | 6.00 | NO | 1,371 | 152 | 161 | 139 |
| Private | Prescriptive | Steam Trap, Commercial | TRUE | Each | 86 | 6.00 | NO | 155,299 | 17,249 | 18,259 | 18,259 |
| Private | Prescriptive | Steam Trap, Dry Cleaner | FALSE | Each | 131 | 6.00 | NO | 690,171 | 82,199 | 83,076 | 71,445 |
| Private | Prescriptive | Steam Trap, Dry Cleaner | TRUE | Each | 54 | 6.00 | NO | 398,961 | 47,516 | 48,023 | 48,023 |
| Private | Prescriptive | Steam Trap, Industrial High Pressure | FALSE | Each | 75 | 6.00 | NO | 3,484,990 | 418,189 | 421,297 | 362,315 |
| Private | Prescriptive | Steam Trap, Industrial High Pressure | TRUE | Each | 19 | 6.00 | NO | 996,362 | 119,400 | 120,346 | 120,346 |
| Private | Prescriptive | Steam Trap, Industrial Medium Pressure | FALSE | Each | 80 | 6.00 | NO | 810,779 | 93,509 | 96,036 | 82,591 |
| Private | Prescriptive | Steam Trap, Industrial Medium Pressure | TRUE | Each | 5 | 6.00 | NO | 105,295 | 12,325 | 12,554 | 12,554 |
| Private | Prescriptive | Water Heater | FALSE | Each | 13 | 15.00 | NO | 0 | 779 | 1,787 | 1,537 |
| Public | Assessment Direct Install | Faucet Aerator - Bath | FALSE | Each | 166 | 10.00 | NO | 334,088 | 1,470 | 1,470 | 1,264 |
| Public | Assessment Direct Install | Faucet Aerator - Bath | TRUE | Each | 12 | 10.00 | NO | 18,453 | 81 | 81 | 81 |
| Public | Assessment Direct Install | Faucet Aerator - Kitchen | FALSE | Each | 7 | 10.00 | NO | 9,996 | 53 | 53 | 46 |
| Public | Assessment Direct Install | Faucet Aerator - Kitchen | TRUE | Each | 1 | 10.00 | NO | 1,538 | 8 | 8 | 8 |
| Public | Assessment Direct Install | Pre-Rinse Spray Valves | FALSE | Each | 2 | 5.00 | NO | 65,146 | 475 | 475 | 408 |
| Public | Assessment Direct Install | Showerheads | FALSE | Each | 7 | 10.00 | NO | 11,917 | 75 | 75 | 65 |
| Public | Building Operator Certification | BOC | FALSE | Participant | 8 | 13.00 | NO | 0 | 14,116 | 12,537 | 12,537 |
| Public | Business Optimization Program | Steam Trap, Industrial High Pressure | FALSE | Each | 2 | 6.00 | NO | 92,155 | 11,015 | 11,114 | 10,225 |
| Public | Business Optimization Program | Steam Trap, Industrial Medium Pressure | FALSE | Each | 8 | 6.00 | NO | 54,662 | 6,173 | 6,415 | 5,902 |
| Public | Direct Install | Garage Door Hinge | FALSE | Each | 49 | 20.00 | NO | 0 | 1,334 | 2,412 | 2,075 |
| Public | Prescriptive | Boiler Chemical Descaling | FALSE | Each | 2 | 6.00 | NO | 0 | 2,982 | 1,876 | 1,613 |
| Public | Prescriptive | Boiler Tune Up, Process | FALSE | Each | 1 | 2.00 | NO | 0 | 83 | 83 | 71 |
| Public | Prescriptive | Boiler Tune Up, Process | TRUE | Each | 5 | 2.00 | NO | 0 | 2,162 | 3,836 | 3,836 |
| Public | Prescriptive | Boiler Tune Up, Space Heating | FALSE | Each | 144 | 3.00 | NO | 0 | 325,813 | 325,813 | 280,200 |
| Public | Prescriptive | Boiler Tune Up, Space Heating | TRUE | Each | 10 | 3.00 | NO | 0 | 11,928 | 11,928 | 11,928 |
| Public | Prescriptive | High Efficiency Boiler | FALSE | Each | 45 | 25.00 | NO | 0 | 161,727 | 224,866 | 193,385 |
| Public | Prescriptive | High Efficiency Boiler | TRUE | Each | 17 | 25.00 | NO | 0 | 57,205 | 80,382 | 80,382 |
| Public | Prescriptive | High Efficiency Furnace | FALSE | Each | 30 | 16.50 | NO | 0 | 9,817 | 9,817 | 8,443 |
| Public | Prescriptive | High Efficiency Furnace | TRUE | Each | 4 | 16.50 | NO | 0 | 1,031 | 1,065 | 1,065 |
| Public | Prescriptive | Pipe Insulation | FALSE | Ln Ft | 78 | 15.00 | NO | 0 | 49 | 49 | 42 |
| Public | Prescriptive | Steam Trap, Commercial | FALSE | Each | 11 | 6.00 | NO | 14,342 | 1,593 | 1,686 | 1,450 |
| Public | Prescriptive | Steam Trap, Industrial High Pressure | FALSE | Each | 14 | 6.00 | NO | 631,507 | 75,906 | 76,439 | 65,737 |
| Public | Prescriptive | Steam Trap, Industrial Medium Pressure | FALSE | Each | 41 | 6.00 | NO | 263,222 | 30,154 | 31,086 | 26,734 |
| Public | Prescriptive | Water Heater | FALSE | Each | 2 | 15.00 | NO | 0 | 79 | 102 | 87 |
| **Total or Weighted Average** | |  |  |  |  | **7.91** |  | **23,128,010** | **3,671,650** | **3,908,490** | **3,515,304** |

Note: All savings estimating algorithms presented in the IL TRM v12.0 for the Building Operator Certification measure are for net savings. Therefore, this measure does not require an additional application of NTG value.

Based on SAG policy, participants in disadvantaged communities (DAC) based on their census tract and with consumption under 35,000 Therms are assigned a NTG of 1.00.

Source: Evaluation team analysis

1. Nicor Gas 2024 Interim Impact Review Summary Findings\_2024-12-15 Final [↑](#footnote-ref-2)
2. Sourced from <https://www.zipcodestogo.com/Illinois/>. [↑](#footnote-ref-3)
3. Available on the Illinois Stakeholder Advisory Group website: [Illinois Statewide Technical Reference Manual Version 12.0 - Illinois Energy Efficiency Stakeholder Advisory GroupIllinois Energy Efficiency Stakeholder Advisory Group](https://www.ilsag.info/illinois-statewide-technical-reference-manual-version-12-0/) [↑](#footnote-ref-4)
4. Ibid [↑](#footnote-ref-5)
5. Obtained from the Implementation Contractor for the 2024 calendar year: <https://www.il-foodservicerebates.com/qualifying-equipment> [↑](#footnote-ref-6)