

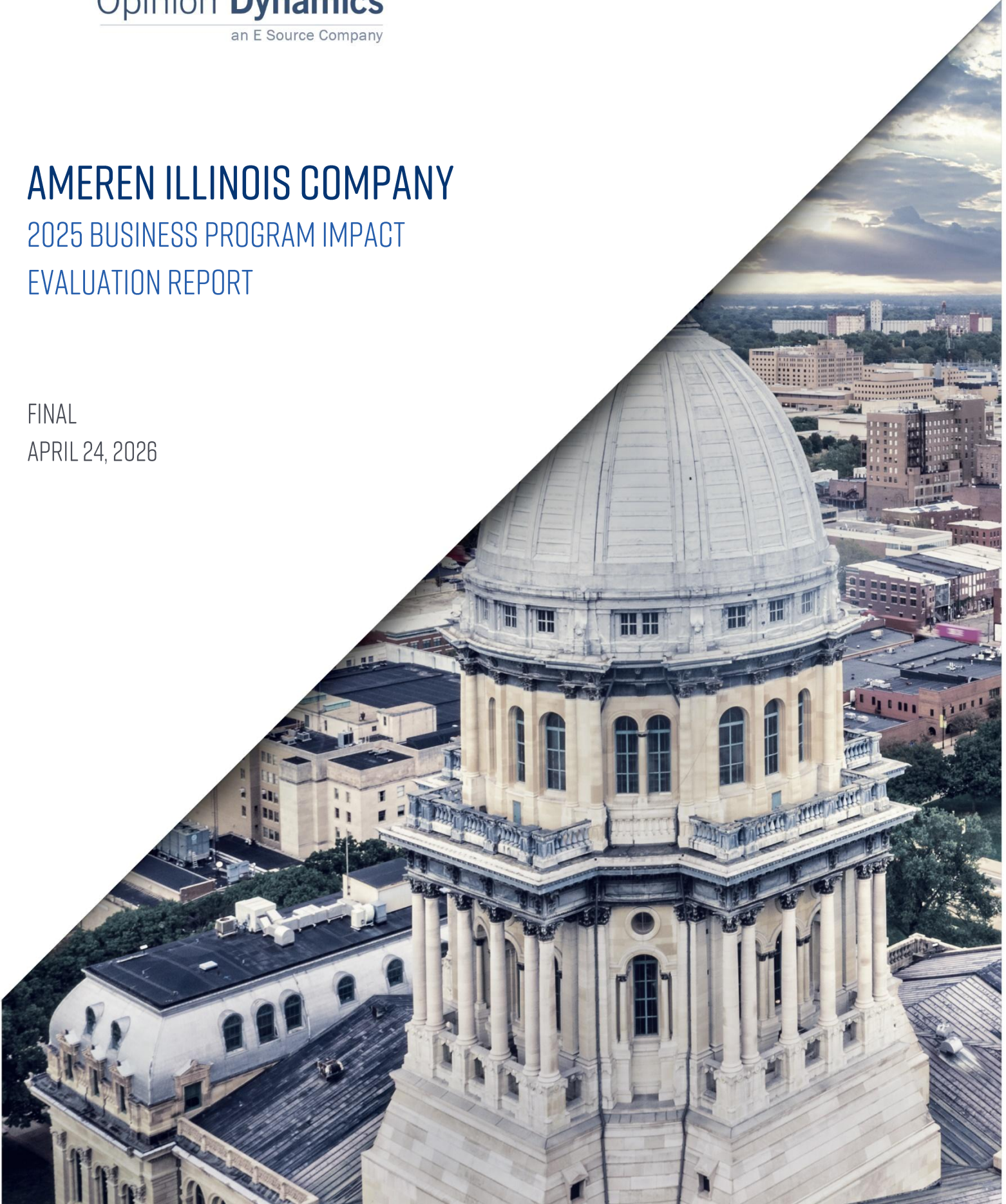


Opinion **Dynamics**
an E Source Company

AMEREN ILLINOIS COMPANY

2025 BUSINESS PROGRAM IMPACT EVALUATION REPORT

FINAL
APRIL 24, 2026



CONTENTS

1. Executive Summary.....	8
1.1 Program Overview.....	8
1.2 Policy Background.....	9
1.3 Program Savings.....	10
2. Evaluation Approach.....	14
2.1 Research Objectives and Evaluation Approach.....	14
2.2 Verified Gross Impact Analysis Approach.....	14
2.3 Verified Net Impact Analysis Approach.....	15
2.4 Sources and Mitigation of Error.....	16
3. Initiative-Level Results.....	18
3.1 Standard Initiative.....	18
3.2 Custom Initiative.....	35
3.3 Retro-Commissioning Initiative.....	47
3.4 Streetlighting Initiative.....	53
3.5 Small Business Initiative.....	58
3.6 Midstream Initiative.....	70
Appendix A. Impact Analysis Methodology.....	85
Standard Initiative.....	85
Custom Initiative.....	88
Retro-Commissioning Initiative.....	95
Streetlighting Initiative.....	111
Small Business Initiative.....	113
Midstream Initiative.....	114
Appendix B. Additional Impacts.....	116
Introduction.....	116
Standard Initiative.....	117
Custom Initiative.....	119
Retro-Commissioning.....	120
Streetlighting Initiative.....	121
Small Business Initiative.....	122
Midstream Initiative.....	123
Appendix C. Cumulative Persisting Annual Savings.....	125

Standard Initiative.....	126
Custom Initiative	127
Retro-Commissioning Initiative	128
Streetlighting Initiative.....	128
Small Business Initiative	129
Midstream Initiative.....	130
Appendix D. Custom Initiative Project Reports.....	131
Appendix E. 2025 LLLC MTI Market Progress Evaluation Report	132

TABLES AND FIGURES

Table 1. 2025 Business Program Electric Energy Annual Savings Summary.....	11
Table 2. 2025 Business Program Electric Demand Annual Savings Summary.....	11
Table 3. 2025 Business Program Gas Annual Savings Summary.....	12
Table 4. 2025 Business Program CPAS and WAML.....	13
Table 5. 2025 Business Program Impact Evaluation Activities.....	14
Table 6. 2025 Standard Initiative Annual Savings.....	18
Table 7. 2025 Standard Core Channel Participation Summary by Measure Category.....	20
Table 8. 2025 Standard Core Channel Program Ally Engagement Summary	22
Table 9. 2025 Standard Core Channel Electric Energy Savings by Measure	23
Table 10. 2025 Standard Core Channel Electric Demand Savings by Measure.....	23
Table 11. 2025 Standard Core Channel Gas Savings by Measure.....	24
Table 12. 2025 Online Store Channel Participation Summary by Measure.....	26
Table 13. 2025 Online Store Channel Electric Energy Savings by Measure	27
Table 14. 2025 Online Store Channel Electric Demand Savings by Measure	27
Table 15. 2025 Online Store Channel Gas Savings by Measure	27
Table 16. BOC Training Topics by Level	28
Table 17. 2025 BOC Training Channel Participation Summary by Segment.....	29
Table 18. 2025 BOC Training Channel Electric Energy Savings by Measure	29
Table 19. 2025 BOC Training Channel Electric Demand Savings by Measure	29
Table 20. 2025 BOC Training Channel Gas Savings by Measure	30
Table 21. 2025 Standard Initiative CPAS and WAML	31
Table 22. 2025 Standard Core Channel CPAS and WAML.....	32
Table 23. 2025 Online Store Channel CPAS and WAML.....	32
Table 24. 2025 BOC Training CPAS and WAML	33

Table 25. 2025 Custom Initiative Participation Summary by Channel	35
Table 26. 2025 Custom Initiative Projects by Facility Type	36
Table 27. 2025 Custom Initiative Annual Savings	37
Table 28. 2025 Custom Incentives Channel Gross Impact Results for Sampled Projects.....	38
Table 29. 2025 Custom Incentives Channel Gross Impact Results for Sampled Legacy Fuel Switching Projects.....	39
Table 30. 2025 Custom Incentives Channel Gross Electric Energy Impact Results for (b-27) Fuel Switching Projects	40
Table 31. 2025 Custom Incentives Channel Gross Demand Impact Results for (b-27) Fuel Switching Projects.....	40
Table 32. 2025 Custom Incentives Channel Realization Rates by Wave and Fuel Type.....	42
Table 33. 2025 Custom Incentives Channel Electric Energy Savings by Wave	42
Table 34. 2025 Custom Incentives Channel Electric Demand Savings by Wave.....	42
Table 35. 2025 Custom Incentives Channel Gas Savings by Wave.....	43
Table 36. 2025 New Construction Lighting Channel Gross Impact Results for Sampled Projects.....	43
Table 37. 2025 New Construction Lighting Channel Realization Rates	44
Table 38. 2025 New Construction Lighting Channel Electric Energy Savings.....	44
Table 39. 2025 New Construction Lighting Channel Electric Demand Savings.....	44
Table 40. 2025 Custom Initiative CPAS and WAML	45
Table 41. 2025 Retro-Commissioning Initiative Annual Savings	48
Table 42. 2025 Virtual Commissioning Channel Annual Savings	50
Table 43. 2025 Virtual Strategic Energy Management Channel Annual Savings	51
Table 44. 2025 Retro-Commissioning Initiative CPAS and WAML.....	52
Table 45. 2025 Streetlighting Initiative Annual Savings.....	54
Table 46. 2025 Municipality-Owned Streetlighting Channel Electric Energy Savings by Measure.....	54
Table 47. 2025 Utility-Owned Streetlighting Channel Electric Energy Savings by Measure.....	55
Table 48. 2025 Streetlighting Initiative CPAS and WAML	56
Table 49. 2025 Municipality-Owned Streetlighting Channel CPAS and WAML	56
Table 50. 2025 Utility-Owned Streetlighting Channel CPAS and WAML	57
Table 51. 2025 Small Business Initiative Annual Savings	59
Table 52. 2025 Small Business Direct Install Channel Participation Summary by Measure.....	60
Table 53. 2025 Small Business Direct Install Channel Program Ally Summary.....	61
Table 54. 2025 Small Business Direct Install Channel Electric Energy Savings by Measure	62
Table 55. 2025 Small Business Direct Install Channel Electric Demand Savings by Measure	62
Table 56. 2025 Small Business Energy Performance Channel Participation Summary by Measure.....	63
Table 57. 2025 Small Business Energy Performance Channel Electric Energy Savings by Measure	64
Table 58. 2025 Small Business Energy Performance Channel Electric Demand Savings by Measure	65

Table 59. 2025 Small Business Energy Performance Channel Gas Savings by Measure	65
Table 60. 2025 Small Business Initiative CPAS and WAML	67
Table 61. 2025 Small Business Direct Install Channel CPAS and WAML	68
Table 62. 2025 Small Business Energy Performance Channel CPAS and WAML.....	68
Table 63. 2025 Midstream Initiative Annual Savings	70
Table 64. 2025 Midstream Lighting Channel Participation Summary by Measure	71
Table 65. 2025 Midstream Lighting Channel Distributor Engagement Summary	72
Table 66. 2025 Midstream Lighting Channel Electric Energy Savings by Measure.....	72
Table 67. 2025 Midstream Lighting Channel Electric Demand Savings by Measure.....	73
Table 68. 2025 Midstream HVAC Channel Participation Summary by Measure	74
Table 69. 2025 Midstream HVAC Channel Distributor Engagement Summary	75
Table 70. 2025 Midstream HVAC Channel Electric Energy Savings by Measure.....	76
Table 71. 2025 Midstream HVAC Channel Electric Demand Savings by Measure.....	76
Table 72. 2025 Midstream HVAC Channel Gas Savings by Measure.....	76
Table 73. 2025 Midstream Food Service Channel Participation Summary by Measure.....	78
Table 74. 2025 Midstream Food Service Channel Electric Energy Savings by Measure	79
Table 75. 2025 Midstream Food Service Channel Electric Demand Savings by Measure	79
Table 76. 2025 Midstream Food Service Channel Gas Savings by Measure	80
Table 77. 2025 Midstream Initiative CPAS and WAML.....	81
Table 78. 2025 Midstream Lighting Channel CPAS and WAML.....	81
Table 79. 2025 Midstream HVAC Channel CPAS and WAML	82
Table 80. 2025 Midstream Food Service Channel CPAS and WAML.....	82
Table 81. Standard Initiative Evaluated Measures	85
Table 82. Deemed Inputs for VFD Calculations.....	87
Table 83. 2025 SAG-Approved Standard Initiative NTGRs	88
Table 84. Custom Incentives Channel Sampling Approach for Projects with Electric Savings.....	89
Table 85. Custom Incentives Channel Sampling Approach for Projects with Gas Savings	90
Table 86. Custom Incentives Channel Sampling Approach for Fuel-Switching Projects.....	90
Table 87. Custom Incentives Channel Measure Life Adjustments Due to Evaluation	92
Table 88. Sampling Approach for New Construction Lighting Projects with Electric Savings.....	93
Table 89. New Construction Lighting Channel Measure Life Adjustments Due to Evaluation	94
Table 90. 2025 SAG-Approved Custom Initiative NTGRs.....	95
Table 91. NRE Details.....	100
Table 92. 2025 Virtual Commissioning Annual Savings by Project	101
Table 93. 2025 Virtual Commissioning Model Goodness-of-Fit Metrics by Project	102

Table 94. Summary of Projects Completed through Other AIC Initiatives.....	104
Table 95. 2025 Virtual SEM Annual Savings by Project	110
Table 96. 2025 Virtual SEM Model Goodness-of-Fit Metrics by Project	110
Table 97. Summary of Projects Completed through Other AIC Initiatives.....	111
Table 98. 2025 SAG-Approved Retro-Commissioning Initiative NTGRs.....	111
Table 99. Streetlighting Initiative Evaluated Measures	111
Table 100. 2025 SAG-Approved Streetlighting Initiative NTGRs.....	112
Table 101. Small Business Initiative Evaluated Measures.....	113
Table 102. 2025 SAG-Approved Small Business Initiative NTGRs.....	113
Table 103. Midstream Initiative Evaluated Measures	114
Table 104. 2025 SAG-Approved Midstream Initiative NTGR.....	115
Table 105. 2025 Standard Core Channel Non-AIC Natural Gas Savings	117
Table 106. 2025 Standard Initiative Gas Heating Penalties.....	118
Table 107. 2025 Standard Initiative Secondary Electric and Water Savings by Measure	118
Table 108. 2025 Standard Initiative Verified Gross Impacts for Cost-Effectiveness.....	118
Table 109. 2025 Custom Initiative Non-AIC Natural Gas Savings	119
Table 110. 2025 Custom Initiative Propane Savings	119
Table 111. Custom Incentives Electric Energy Impacts by Project.....	120
Table 112. Custom Incentives Gas Impacts by Project.....	120
Table 113. 2025 Custom Initiative Verified Gross Impacts for Cost-Effectiveness	120
Table 114. 2025 Retro-Commissioning Initiative Verified Gross Impacts for Cost-Effectiveness	121
Table 115. 2025 Streetlighting Initiative Verified Gross Impacts for Cost-Effectiveness.....	121
Table 116. 2025 Small Business Energy Performance Channel Non-AIC Natural Gas Savings.....	122
Table 117. 2025 Small Business Initiative Gas Heating Penalties.....	122
Table 118. 2025 Small Business Initiative Verified Gross Impacts for Cost-Effectiveness	122
Table 119. 2025 Midstream Food Service Channel Non-AIC Natural Gas Savings.....	123
Table 120. 2025 Midstream Initiative Gas Heating Penalties	123
Table 121. 2025 Midstream Initiative Secondary Electric and Water Savings by Measures	123
Table 122. 2025 Midstream Initiative Verified Gross Impacts for Cost-Effectiveness.....	124
Table 123. 2025 Business Program CPAS and WAML	125
Table 124. 2025 Standard Initiative Program CPAS and WAML.....	126
Table 125. 2025 Custom Initiative Program CPAS and WAML	127
Table 126. 2025 Retro-Commissioning Initiative Program CPAS and WAML	128
Table 127. 2025 Streetlighting Initiative Program CPAS and WAML.....	128
Table 128. 2025 Small Business Initiative Program CPAS and WAML.....	129

Table 129. 2025 Midstream Initiative Program CPAS and WAML	130
Figure 1. 2025 Standard Core Channel Participation by Facility Type.....	21
Figure 2. 2025 Virtual Commissioning Participation by Facility Type	49
Figure 3. 2025 Small Business Direct Install Participation by Facility Type	61
Figure 4. 2025 Small Business Energy Performance Participation by Facility Type	64

I. EXECUTIVE SUMMARY

This report presents the impact evaluation results from Ameren Illinois Company's (AIC) 2025 Business Program. The Business Program is part of AIC's overall portfolio of residential and nonresidential energy efficiency programs implemented during 2025. The overarching objective of the 2025 Business Program impact evaluation is to determine gross and net electric energy, electric demand, and fossil fuel impacts associated with the program.

I.1 PROGRAM OVERVIEW

The Business Program is the largest component of AIC's portfolio and is made up of several initiatives (further broken down into channels) that the evaluation team assessed as part of the 2025 evaluation:¹

- Standard Initiative
 - Core channel
 - Online Store channel
 - Building Operator Certification (BOC) Training channel
- Custom Initiative
 - Custom Incentives channel
 - New Construction Lighting channel
- Retro-Commissioning (RCx) Initiative
 - Core channel (RCx Core)
 - Virtual Commissioning™ channel (VCx)
 - Virtual Strategic Energy Management (Virtual SEM) channel
- Streetlighting Initiative
 - Municipality-Owned Streetlighting (MOSL) channel
 - Utility-Owned Streetlighting (UOSL) channel
- Small Business Initiative
 - Small Business Direct Install (SBDI) channel
 - Small Business Energy Performance (SBEP) channel
- Midstream Initiative
 - Lighting channel
 - Heating, Ventilating, and Air Conditioning (HVAC) channel
 - Food Service channel
- Luminaire Level Lighting Control (LLLC) Market Transformation Initiative (MTI)²

¹ In addition to the channels described here, the Business Program operates a number of channels that provide customer services but do not directly produce energy savings (such as the Metering and Monitoring channel of the Custom Initiative).

² The evaluation findings for the LLLC MTI are presented under separate cover. See Appendix E.

The initiatives are designed to achieve energy savings from nonresidential customers in accordance with AIC’s plan filing. The Small Business and Standard Initiatives are key drivers of Business Program energy savings; they primarily provide customers with energy assessments, prescriptive rebates, and installation services. The Custom and RCx Initiatives provide information, technical support, and financial assistance for custom energy efficiency projects. The Midstream Initiative incentivizes equipment wholesalers and distributors to reduce prices at the point of sale. Lastly, the Streetlighting Initiative seeks to increase the adoption of energy-efficient streetlights throughout AIC’s territory.

1.2 POLICY BACKGROUND

This report covers the fourth and final calendar year of AIC’s sixth Electric and Gas Energy Efficiency and Demand Response Plan, covering calendar years 2022–2025 (Plan 6). AIC’s Plan 6 portfolio is governed by components of Illinois state law (220 ILCS 5/8-103B [Section 8-103B] and 220 ILCS 5/8-104 [Section 8-104]) that direct large, regulated utilities to offer electric and gas energy efficiency programs. Section 8-103B and Section 8-104 were most recently substantively revised through the passage of Illinois Public Act 102-0662 (the Climate and Equitable Jobs Act, or CEJA) in September 2021.

Section 8-103B and Section 8-104 define key policy points relevant to evaluating the 2025 AIC Business Program. These are summarized below as context for this evaluation report.

- **Cumulative Persisting Annual Savings (CPAS):** Since 2018, electric energy savings goals for Illinois utilities have been primarily defined based on persisting savings as a percentage of sales. Therefore, annual evaluations of AIC’s electric energy efficiency programs must present both annual and persisting savings over the life of delivered measures. As a result, AIC and its program implementer have sought to deliver programs that achieve savings that persist for longer periods of time.
- **Weighted Average Measure Life (WAML):** Section 8-103B allows AIC to create a regulatory asset from all of its expenditures incurred under Section 8-103B. AIC can then amortize and recover the total expenditures of this regulatory asset “over a period that is equal to the weighted average of the measure lives implemented for that year that are reflected in the regulatory asset.”³ Therefore, annual evaluations of AIC’s electric energy efficiency programs must present a WAML in accordance with the calculation guidelines in the Illinois Stakeholder Advisory Group’s (SAG) *WAML Report* and the *Illinois Energy Efficiency Policy Manual*.
- **Applicable Annual Incremental Goal (AAIG):** Section 8-103B allows AIC to earn a rate of return on its electric energy efficiency spending if it creates a regulatory asset, as discussed above. The rate of return that is earned can be adjusted either up or down as a function of AIC’s performance relative to its AAIG. The AAIG is defined as the difference between the cumulative persisting electric savings goal for the year being evaluated and the cumulative persisting electric savings goal for the previous year. AIC must achieve sufficient savings through its programs to replace savings from measures at the end of their measure life before progress can be counted toward the AAIG. Therefore, annual evaluations of AIC’s electric energy efficiency programs must assess AIC’s performance against its AAIG.
- **(b-25) Savings Conversion:** Subsection (b-25) of Section 8-103B allows electric utilities to “convert” savings achieved for other fuels, including natural gas, to electric savings for the purposes of goal attainment in certain cases. The total amount of savings allowed to be converted is capped at a maximum of 10% of the utility’s applicable annual total savings requirement.⁴ The *2025 AIC Integrated Impact Evaluation Report* presents the

³ Illinois Energy Efficiency Stakeholder Advisory Group. *Weighted Average Measure Life Report*. 2018. Accessed at: https://www.ilsag.info/wp-content/uploads/SAG_files/SAG_Reports/SAG_WAML_Report_Final_2-20-18.pdf.

⁴ The annual total savings requirement is the AAIG plus the additional savings that need to be acquired on an annual basis to replace any savings from measures at the end of their measure life before progress can be counted toward AAIG. Note that prior to the passage of CEJA, the (b-25) savings conversion was capped at 10% of AAIG, rather than the annual total savings requirement.

savings AIC claimed in 2025 via (b-25) conversions; whereas, this report presents actual savings achieved for all fuels.

- **Large Customer Opt-Outs:** In 2018, the Future Energy Jobs Act (FEJA) excluded large electric customers from participating in AIC's Business Program.⁵ CEJA removed this exclusion starting in the 2022 program year; however, large electric customers can still opt out of the programs. Large electric customers that opt out of the program must submit an American Society of Heating, Refrigeration, and Air-Conditioning Engineers (ASHRAE) level 2 or higher audit report to the utility. The ASHRAE report should identify all cost-effective energy efficiency project opportunities that could be invested in over the next 10 years. Additionally, customers must provide a detailed plan outlining how they intend to reallocate the funds they would have paid into the utility's energy efficiency programs toward their internal energy efficiency efforts. Opt-outs are only valid for a given plan cycle; large electric customers must request to opt out of future cycles. In 2020, large gas customers became ineligible to participate in AIC's Business Program; they remain excluded.⁶
- **Electrification:** CEJA added statutory language in subsection (b-27) of Section 8-103B that enables electric utilities to use their energy efficiency programs to offer and promote measures that electrify end uses, such as space and water heating, that would otherwise be served by fossil fuels. Utilities are instructed to claim those savings as the kWh equivalent of the change in site energy consumption due to electrification. In 2025, AIC completed one nonresidential project under this statutory authority as part of the Custom Initiative. Further detail on this project can be found in Section 3.2.4. Statutorily required reporting around these efforts is presented in the *AIC 2025 Integrated Impact Evaluation Report*.

1.3 PROGRAM SAVINGS

In the following sections, the evaluation team presents annual savings (annualized 2025 energy savings) and CPAS for AIC's Business Program. As discussed in greater detail in the *2025 AIC Integrated Impact Evaluation Report*, AIC's performance compared to its AAIG is determined based on both types of savings.

1.3.1 ANNUAL SAVINGS

The 2025 Business Program achieved 218,124 MWh, 28.25 MW, and 2,082,911 therms in verified net savings. These savings include (b-25) conversions of fuels not provided by AIC, which are detailed further in the *2025 AIC Integrated Impact Evaluation Report*. Table 1, Table 2, and Table 3 present ex ante gross, verified gross, and verified net electric energy, electric demand, and gas savings, by initiative and channel, for the 2025 Business Program.

⁵ Large electric customers are defined as nonresidential electric customers with electric demand of over 10 MW.

⁶ Large gas customers are defined as nonresidential natural gas customers with annual usage of 4,000,000 therms or more across all AIC service points, or 8,000,000 therms or more across all Illinois service points.

Table 1. 2025 Business Program Electric Energy Annual Savings Summary

Initiative/Channel	Ex Ante Gross MWh	Gross Realization Rate	Verified Gross MWh	Net-to-Gross Ratio (NTGR)	Verified Net MWh
Standard – Core	29,228	100%	29,175	0.870	25,380
Standard – OS	1,249	100%	1,250	0.933	1,166
Standard – BOC	464	106%	493	N/A	493
Custom – Custom Incentives	76,821	102%	77,981	0.762	59,408
Custom – New Construction Lighting	2,012	109%	2,186	0.905	1,977
RCx – VCx	4,507	99%	4,483	0.939	4,212
RCx – Virtual SEM	1,535	96%	1,468	1.000	1,468
Streetlighting – MOSL	79	100%	79	1.000	79
Streetlighting – UOSL	7,500	100%	7,500	1.000	7,500
Small Business – SBDI	42,477	100%	42,509	1.141	48,503
Small Business – SBEP	612	58%	355	1.000	355
Midstream – Lighting	28,983	100%	28,991	0.842	24,417
Midstream – HVAC	604	100%	606	0.683	414
Midstream – Food Service	492	99%	489	0.872	426
Midstream – Lighting Carryover ^a	N/A	N/A	3,441	0.953	3,280
LLLC MTI	N/A	N/A	0	N/A	0
<i>Business Program Subtotal</i>	<i>196,564</i>	<i>102%</i>	<i>201,004</i>	<i>0.891</i>	<i>179,078</i>
Business (b)-25 Conversions					39,046
Business Program Total	196,564	102%	201,004	0.891	218,124

^a Carryover savings are those achieved through the installation of measures during 2025 that were distributed or rebated in prior program years. For clarity, we break out carryover savings separately throughout this report.

Table 2. 2025 Business Program Electric Demand Annual Savings Summary

Initiative/Channel	Ex Ante Gross MW	Gross Realization Rate	Verified Gross MW	Net-to-Gross Ratio (NTGR)	Verified Net MW
Standard – Core	4.36	102%	4.45	0.841	3.74
Standard – OS	0.30	100%	0.30	0.908	0.27
Standard – BOC	0.05	106%	0.05	N/A	0.05
Custom – Custom Incentives	9.92	118%	11.74	0.759	8.92
Custom – New Construction Lighting	0.42	105%	0.44	0.905	0.40
RCx – VCx	0.00	N/A	0.00	N/A	0.00
RCx – Virtual SEM	0.00	N/A	0.00	N/A	0.00
Streetlighting – MOSL	0.00	N/A	0.00	N/A	0.00
Streetlighting – UOSL	0.00	N/A	0.00	N/A	0.00
Small Business – SBDI	8.08	100%	8.10	1.141	9.24
Small Business – SBEP	0.13	78%	0.10	1.000	0.10
Midstream – Lighting	6.70	81%	5.40	0.843	4.55
Midstream – HVAC	0.16	102%	0.16	0.669	0.11
Midstream – Food Service	0.09	98%	0.09	0.881	0.08
Midstream – Lighting Carryover	N/A	N/A	0.82	0.953	0.78
LLLC MTI	N/A	N/A	0	N/A	0
Business Program Total	30.20	105%	31.66	0.892	28.25

Table 3. 2025 Business Program Gas Annual Savings Summary

Initiative/Channel	Ex Ante Gross Therms	Gross Realization Rate	Verified Gross Therms	NTGR	Verified Net Therms
Standard – Core	1,173,797	100%	1,168,609	0.908	1,061,637
Standard – OS	60,170	100%	60,170	0.902	54,284
Standard – BOC	6,130	98%	6,017	N/A	6,017
Custom – Custom Incentives	734,326	149%	1,097,546	0.833	814,478
Custom – New Construction Lighting	0	N/A	0	N/A	0
RCx – VCx	0	N/A	0	N/A	0
RCx – Virtual SEM	0	N/A	0	N/A	0
Streetlighting – MOSL	0	N/A	0	N/A	0
Streetlighting – UOSL	0	N/A	0	N/A	0
Small Business – SBDI	0	N/A	0	N/A	5
Small Business - SBEP	17,514	104%	18,210	1.000	18,210
Midstream – Lighting	0	N/A	0	N/A	0
Midstream – HVAC	7,974	100%	7,974	0.827	6,593
Midstream – Food Service	26,557	95%	25,298	0.861	21,792
Midstream – Lighting Carryover	N/A	N/A	0	N/A	0
LLLC MTI	N/A	N/A	0	N/A	0
Business Program Total	2,026,469	118%	2,383,824	0.874	2,082,911

1.3.2 CUMULATIVE PERSISTING ANNUAL SAVINGS

Table 4 summarizes CPAS and WAML for the 2025 Business Program at the initiative level. For additional detail related to CPAS and measure life, please see the individual initiative subsections in Section 3 and Appendix C of this report, which present CPAS achieved in each future year. The overall WAML for the 2025 Business Program is 18.4 years.

Table 4. 2025 Business Program CPAS and WAML

Initiative/Channel	WAML	Annual Verified Gross Savings (MWh)	NTGR	CPAS – Verified Net Savings (MWh)							Lifetime Savings (MWh)
				2025	2026	2027	2028	...	2030	...	
Standard – Core	14.1	29,175	0.870	25,380	25,380	25,380	25,377	...	25,199	...	359,853
Standard – Online Store	10.6	1,250	0.933	1,166	1,166	1,166	1,166	...	1,166	...	12,271
Standard – BOC	13.0	493	1.000	493	493	493	493	...	286	...	4,542
Custom – Custom Incentives	22.6	77,981	0.762	59,408	59,408	59,408	59,408	...	59,408	...	1,341,485
Custom – New Construction Lighting	15.3	2,186	0.905	1,977	1,977	1,977	1,977	...	1,977	...	30,284
Retro-Commissioning – Virtual Commissioning	7.3	4,483	0.939	4,212	4,212	4,212	4,212	...	4,212	...	30,745
Retro-Commissioning – Virtual SEM	7.0	1,468	1.000	1,468	1,468	1,468	1,468	...	1,468	...	10,273
Streetlighting – MOSL	20.0	79	1.000	79	79	79	79	...	79	...	1,580
Streetlighting – UOSL	20.0	7,500	1.000	7,500	7,500	7,500	7,238	...	7,238	...	145,538
Small Business – SBDI	13.5	42,509	1.141	48,503	48,503	48,313	47,245	...	45,886	...	628,193
Small Business – SBEP	20.1	355	1.000	355	355	355	355	...	355	...	7,127
Midstream – Lighting	15.1	28,991	0.842	24,417	24,417	24,417	24,417	...	24,416	...	367,672
Midstream – HVAC	15.1	606	0.683	414	414	414	414	...	413	...	6,245
Midstream – Food Service	12.1	489	0.872	426	426	426	426	...	426	...	5,179
Midstream – Carryover	14.8	3,441	0.953	3,280	3,280	3,280	3,280	...	3,280	...	48,541
Business (b-25) Conversions	22.6	47,285	0.826	39,046	39,046	39,046	39,046	...	39,046	...	882,698
2025 Business Program CPAS		248,290	0.879	218,125	218,125	217,935	216,601	...	214,855	...	3,883,253
Expiring 2025 Business Program CPAS				0	0	190	1,334	...	678	...	
Expired 2025 Business Program CPAS				0	0	190	1,523	...	3,270	...	
WAML	18.4										

2. EVALUATION APPROACH

The following section of the report describes the evaluation approach taken for the 2025 Business Program impact evaluation. As part of the evaluation process, the evaluation team applied versions of the Illinois Energy Efficiency Policy Manual and the Illinois Technical Reference Manual (IL-TRM) applicable to the 2025 program year (Version 3.0 [V3.0]⁷ and Version 13.0 [V13.0], respectively) wherever relevant.⁸ Appendix A of this report provides more detailed, initiative-specific methodology where appropriate.

2.1 RESEARCH OBJECTIVES AND EVALUATION APPROACH

The overarching research objectives for the impact evaluation of AIC’s 2025 Business Program are as follows:

- Estimate the gross energy, demand, and gas impacts of the Business Program
- Estimate the net energy, demand, and gas impacts from the Business Program

We met these objectives by conducting the impact evaluation activities listed in Table 5. In addition, we reviewed initiative materials and interviewed initiative managers.

Table 5. 2025 Business Program Impact Evaluation Activities

Initiative	Gross Impacts				Net Impacts
	IL-TRM Application Review	Engineering Desk Reviews	On-Site Measurement and Verification (M&V)	Consumption Analysis	Application of SAG-Approved NTGRs
Standard	✓	✓			✓
Custom		✓	✓	✓ ^a	✓
RCx				✓	✓
Streetlighting	✓				✓
Small Business	✓				✓
Midstream	✓				✓

^a The evaluation team used site-specific regression analyses to estimate verified savings for some Custom projects.

The following sections provide further detail on the approaches to estimating verified gross and net savings.

2.2 VERIFIED GROSS IMPACT ANALYSIS APPROACH

2.2.1 APPLICATION OF IL-TRM V13.0

To determine verified gross impacts associated with the Standard, Small Business, Streetlighting, and Midstream Initiatives, we reviewed the contents of the tracking database to identify database errors and duplicate records and to ensure that the implementer correctly applied savings algorithms and assumptions stated in the IL-TRM V13.0 and the IL-TRM V13.0 errata document. In particular, we applied the algorithms and assumptions from the IL-TRM V13.0 while

⁷ Policy Manual Version 3.0 is effective as of January 1, 2024.

⁸ In future years, the evaluation team will apply updated versions of these manuals to the evaluation of the Business Program as required by law, Illinois Commerce Commission orders, and changes to the manuals themselves.

using project-specific data from the initiative tracking databases where appropriate. We verified measure installations by analyzing initiative tracking databases and reviewing supporting project documentation as part of this process.

We resolved discrepancies found in the databases and documented details related to any gross savings adjustments in the initiative-specific sections of this report. Further, in accordance with Illinois policy, the evaluation team omitted gas penalties from savings presented in the body of this report. Appendix B presents details on gas penalties for cost-effectiveness purposes.

2.2.2 CARRYOVER SAVINGS

In addition to savings achieved by AIC's Business Program through measures delivered during the 2025 program year, AIC claims carryover savings in 2025 from lighting measures distributed by the Business Program in prior years but not installed until 2025. In 2025, AIC claimed Business Program carryover savings from measures incentivized through the Midstream Initiative's Lighting channel in 2023 and 2024.

Carryover savings are estimated primarily based on assumptions outlined in the IL-TRM V13.0. We previously reported on AIC's 2025 carryover savings in an earlier memo.⁹ Carryover savings are not reported as part of the individual initiative subsections in Section 3.

2.2.3 APPLICATION OF CUSTOM IMPACT METHODS

The Custom and RCx Initiatives are not suitable for gross impact analysis using the IL-TRM. These initiatives require custom energy savings calculations to determine some or all of the gross impacts. Further details on the custom impact methods applied for these initiatives are presented in Appendix A.

2.3 VERIFIED NET IMPACT ANALYSIS APPROACH

To determine verified net savings for the 2025 Business Program, we applied SAG-approved net-to-gross ratios (NTGRs) to verified gross savings. There are two exceptions: (1) the BOC Training channel within the Standard Initiative, for which the savings algorithms in IL-TRM V13.0 directly estimate net savings, and (2) projects eligible under the NTG Ratio for Disadvantaged Areas Policy described in the following section. Details on all other SAG-approved NTGRs are presented in Appendix A.

2.3.1 NTG RATIO FOR DISADVANTAGED AREAS POLICY

Section 7.4 of the Illinois Policy Manual Version 3.0 outlines the NTG Ratio for Disadvantaged Areas policy.¹⁰ The policy recognizes that free-ridership among certain types of customers in economically disadvantaged areas is likely very low; therefore, it directs the application of an NTGR of 1.000 for eligible customers, superseding the SAG-approved NTGRs that would otherwise be applied.

For AIC's Business Program, this policy applies to all program activity involving the following customer segments:

⁹ Opinion Dynamics. *Ameren Illinois Company Lighting Carryover Savings Claimable in 2025*. Accessed at <https://www.ilsag.info/wp-content/uploads/AIC-2025-Carryover-Savings-Memo-FINAL-2026-01-21.pdf>

¹⁰ Illinois Energy Efficiency Policy Manual V3.0, Section 7.4. Accessed at https://www.ilsag.info/wp-content/uploads/IL_EE_Policy_Manual_Version_3.0_Final_11-3-2023.pdf.

- Business customers in disadvantaged neighborhoods with DS-2 and/or GDS-2 rate classes;¹¹ and
- Any general delivery service municipal, public school, and local government customers in a disadvantaged municipality.¹²

As a result, the reported NTGRs at the initiative- and measure-level vary from the SAG-approved NTGRs throughout this report. Further details on our approach to applying the policy, as well as lists of disadvantaged neighborhoods and disadvantaged municipalities, are available in Opinion Dynamics' July 17, 2024, presentation to the Illinois SAG.¹³

2.4 SOURCES AND MITIGATION OF ERROR

The evaluation team took steps to mitigate potential sources of error throughout the planning and implementation of the 2025 evaluation. In particular, we took the following actions to address potential sources of error:

- **Analysis Error**
 - **Prescriptive Gross Impact Calculations:** We calculated gross impacts by applying IL-TRM V13.0 calculations to the participant data in the tracking database. A separate team member reviewed all calculations to verify their accuracy and minimize data analysis errors.
 - **Custom Gross Impact Calculations:** We determined custom gross impacts using desk reviews and data collected during on-site measurement and verification (M&V). To minimize data analysis errors, we had a separate team member review all calculations to verify that calculations were performed accurately.
 - **Net Impact Calculations:** We derived net impacts by applying SAG-approved NTGRs to estimated gross impacts. A separate team member reviewed all calculations to verify their accuracy and minimize analytical errors.
- **Sampling Error**
 - **Custom Initiative Impact Sample:** The evaluation team completed an impact review for 38 of 96 Custom Initiative projects that achieved savings in 2025, drawing three waves of stratified samples separately for Custom Incentives projects claiming electric and gas savings and a fourth for New Construction Lighting projects. For gross impact results, at the 90% confidence level, we achieved a relative precision of 0.9% for electric energy savings, 3.6% for electric demand savings, and 13.2% for gas savings. Further detail on our methodology for Custom Initiative sampling is provided in Appendix A.
- **Non-Sampling Error**
 - **Measurement Error:** To minimize data collection error during on-site M&V, the evaluation team used trained engineers and technicians familiar with the equipment covered by the Custom Initiative and the methods used to calculate the gross impacts.

For the VCx and Virtual Strategic Energy Management (SEM) channels, we also addressed the following types of errors:

- **Errors Due to Presence of Non-Routine Events:** Non-routine events (NREs) refer to changes in facility energy consumption resulting from facility-related changes unrelated to the interventions recommended through the channel. NREs can make it difficult to accurately measure savings using meter-based approaches, including those we used for VCx and Virtual SEM. The evaluation team accounted for NREs in our modeling approach by removing data for the affected period and/or extending the baseline back in time accordingly, consistent with International

¹¹ Areas identified as "income-eligible households" by Illinois Solar for All.

¹² Municipalities where at least fifty percent (50%) of the municipality is identified as income-eligible through Illinois Solar for All.

¹³ Opinion Dynamics. *Overview of Disadvantaged Areas Net-to-Gross Tracking for Ameren Illinois Company*. July 17, 2024. Accessed at: https://www.ilsag.info/wp-content/uploads/SAG-NTGR-for-Disadvantaged-Areas-Presentation_ODC_2024-07-17.pdf.

Performance Measurement and Verification Protocol (IPMVP) Non-Routine Adjustment Options 1 and 3, respectively.¹⁴

- **Model Specification Error:** In this type of error, variables that predict model outcomes are left out when they should be included, which can produce biased estimates. A few of the models used to estimate ex ante impacts in 2025 excluded weather interaction terms despite the weather-sensitive nature of the interventions, such as HVAC scheduling adjustments. The evaluation team addressed this type of error by modifying the facility-level models to include weather interactions, where appropriate, before producing verified savings.
- **Measurement Error:** In the context of the VCx and Virtual SEM channels, measurement error can occur in two ways: (1) when utility electric meters do not accurately record the true energy consumption of a facility, and (2) when the defined post-period coincides with ongoing program implementation. In practice, little can be done in an evaluation context to mitigate errors from utility meters. However, we know from experience that this type of error is expected to be small and not significantly affect savings estimates. When appropriate and data permitted, the evaluation team re-defined model post-periods to exclude any periods of ongoing program implementation and only considered post-period data after all measures had been implemented.
- **Prediction Error:** Prediction error occurs when the model does not perfectly predict future energy consumption. We did not receive a full year of post-period data for all VCx and Virtual SEM projects in 2025. This introduces uncertainty because the models could not train on a full range of temperature data after the intervention was initiated. This could increase the prediction error for temperatures that are outside the range of the training data. We addressed this by carefully examining model fit diagnostics.
- **Multicollinearity:** This type of modeling error can bias the model results and produce very large variances. We addressed this issue by carefully considering model specifications and data to ensure that there were no multicollinearity issues.

Finally, note that the calculations in some of the tables in this report cannot be exactly reproduced due to rounding.

¹⁴ Webster, Lia. *IPMVP Application Guide on Non-Routine Events and Adjustments*. Efficiency Valuation Organization (EVO). 2020.
Opinion Dynamics

3. INITIATIVE-LEVEL RESULTS

3.1 STANDARD INITIATIVE

3.1.1 INITIATIVE DESCRIPTION

The Standard Initiative offers fixed incentives to AIC private and public sector business customers for installing prescriptive energy efficiency measures. The Initiative primarily focuses on lighting retrofits, lighting controls, motors, HVAC equipment, steam traps, and specialty applications such as agricultural and refrigeration measures. AIC also incentivizes building operators in their service territory to attend BOC Training through the Standard Initiative.

For the purposes of this report, the Initiative offerings are grouped into three channels:

- **Standard Core channel:** The Standard Core channel consists of a collection of downstream incentives targeted at various energy-intensive end uses. Incentive requests exceeding \$10,000 require pre-approval by AIC staff. For projects that do not exceed this cap, customers can apply for incentives after purchasing and installing qualifying equipment.
- **Online Store channel:** The Online Store channel is an e-commerce marketplace where AIC business customers can purchase energy-efficient equipment at a reduced price.
- **Building Operator Certification (BOC) Training:** BOC Training is a nationally recognized certification program that educates building operators on equipment operations, common low-cost operational improvements, performance benchmarking, and building commissioning.

Overall, the implementation team set a goal of achieving 30,533 MWh and 1,216,457 therms of savings through the Standard Initiative in 2025.

3.1.2 INITIATIVE ANNUAL SAVINGS SUMMARY

Table 6 presents the Standard Initiative savings achieved in 2025. The 2025 Standard Initiative achieved 27,039 MWh, 4.07 MW, and 1,121,938 therms in verified net savings. The Initiative also produced 5,823 therms in verified net gas savings in 2025 that are not directly claimable by AIC because the customers do not receive gas service from AIC; these savings are detailed further in Appendix B.

Table 6. 2025 Standard Initiative Annual Savings

	Electric Energy Savings (MWh)	Electric Demand Savings (MW)	Gas Savings (Therms)
Ex Ante Gross Savings	30,942	4.71	1,240,097
Gross Realization Rate	100%	102%	100%
Verified Gross Savings	30,917	4.80	1,234,796
NTGR	0.875	0.847	0.909
Verified Net Savings	27,039	4.07	1,121,938

3.1.3 STANDARD CORE CHANNEL

The following sections present the impact evaluation results for the 2025 Standard Core channel. Additional details on the impact analysis methodology are provided in Appendix A.

CHANNEL DESCRIPTION

The Standard Core channel offers traditional downstream incentives for lighting, variable frequency drives, HVAC equipment, refrigeration/grocery store equipment, commercial kitchen equipment, steam trap repair/replacement, green nozzles, and other measures. The channel separates these into a series of distinct offerings:

- Standard Lighting for Business (SLB)
- Variable Frequency Drives (VFDs)
- Specialty Equipment (SE)
- Heating, Ventilating, and Air Conditioning (HVAC)
- Green Nozzles (GNs)
- Steam Trap Repair/Replacement (STRR)
- Standard Weatherization (SW)

Marketing efforts leverage a targeted approach, directing customized communications and newsletters to specific customer segments, including public sector customers, small commercial facilities, and industrial/manufacturing facilities.

Summary of Key Implementation Changes

Initiative staff instituted the following design and implementation changes to the Standard Core channel in 2025:

- Two measures were added to the list of eligible offerings:
 - Low-Hours VFDs were added to the Standard VFD offering. This measure was added in response to customer interest in installing VFDs on motors with lower operating hours.
 - Unitary and Split Air Conditioners were added to the Standard HVAC offering.
- The implementation team launched the SW offering in 2025, which provides incentives for building insulation and air sealing improvements in nonresidential facilities.
- AIC streamlined the application process for customers, including digitizing the application, removing W-9 requirements for public sector applications, and modifying pre-approval requirements.

PARTICIPATION SUMMARY

Table 7 presents a summary of participation in the 2025 Standard Core channel by offering. We present these data, separated by public and private sector projects, to provide context for the primary drivers of participation. AIC customers completed 446 unique projects through the channel, encompassing 51,039 incentivized measures. The SLB offering continued to dominate channel activity, accounting for 44% of total projects completed in 2025. The HVAC and GN offerings accounted for the next largest shares of completed projects at 25% and 9%, respectively.

Table 7. 2025 Standard Core Channel Participation Summary by Measure Category

Offering	Total Unique Projects	Measure Quantity	Ex Ante Gross MWh	Ex Ante Gross MW	Ex Ante Therms
Private Sector					
SLB	139	34,466	10,564	1.92	0
VFDs	19	82	7,250	1.17	0
SE	31	877	5,148	0.19	156,021
HVAC	43	165	518	0.03	153,779
STRR	19	2,314	8	0.00	428,557
SW	1	4	3	<0.01	846
<i>Private Sector Subtotal</i>	<i>252</i>	<i>37,908</i>	<i>23,491</i>	<i>3.31</i>	<i>739,203</i>
Public Sector^a					
SLB	58	11,071	3,026	0.61	0
VFD	8	20	1,848	0.37	0
HVAC	68	403	806	0.07	339,594
GN	41	52	56	0.00	4,301
STRR	19	1,585	2	0.00	90,699
<i>Public Sector Subtotal</i>	<i>194</i>	<i>13,131</i>	<i>5,737</i>	<i>1.05</i>	<i>434,594</i>
Total	446	51,039	29,228	4.36	1,173,797

Note: The ex ante gas savings in this table reflect only AIC claimable gas savings. Two projects completed through the Standard Core channel produced non-AIC gas savings and, as such, were not included. More information on the savings from this project is presented in Appendix B.

^a The project counts, measure counts, and ex ante savings values presented in the Private Sector subsection of this table include State and Federal facilities, as these facility types are not included in the list of customer types covered in the public sector minimum funding requirements in subsection (c) of 220 ILCS 5/8-103B and subsection (e) of 220 ILCS 5/8-104.

Figure 1 shows the distribution of Standard Core projects completed by facility type. As shown, Educational and Manufacturing/Industrial were the most common facility types treated through the Standard Core channel in 2025.

Figure 1. 2025 Standard Core Channel Participation by Facility Type

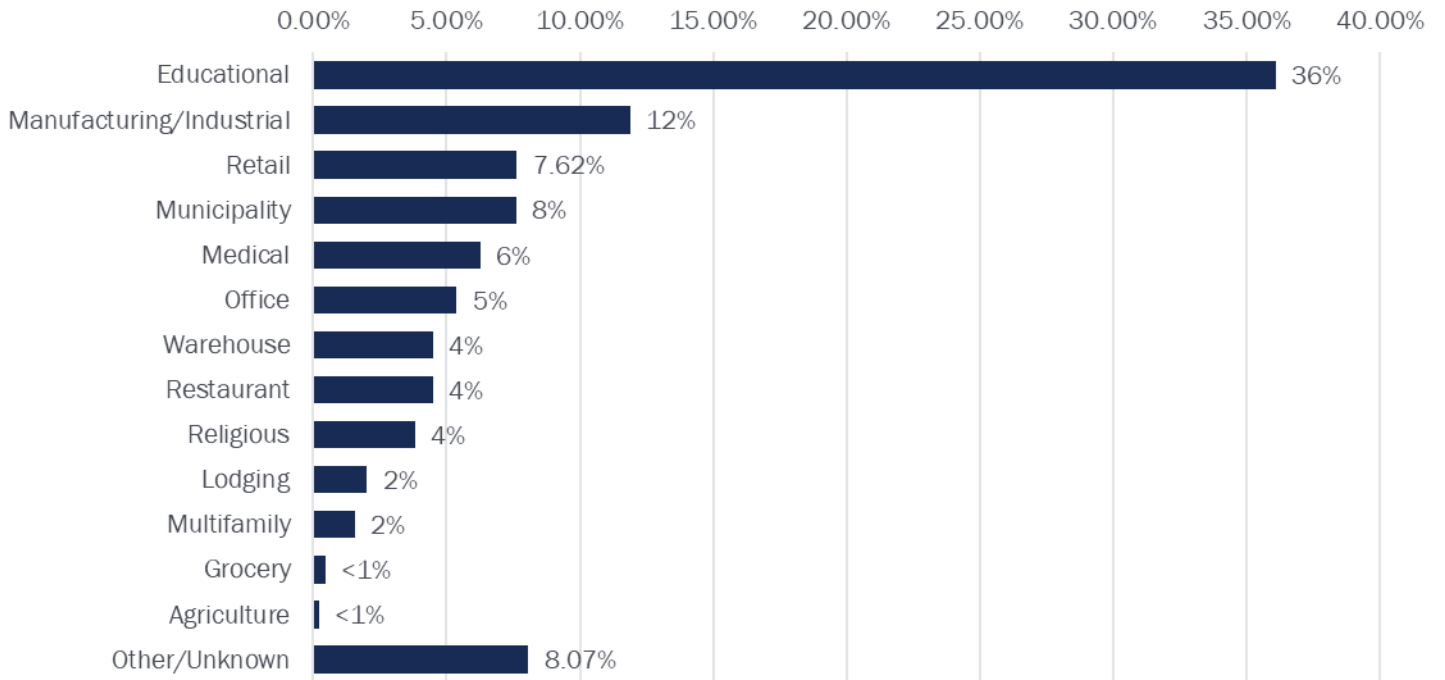


Table 8 presents Program Ally engagement in the channel.¹⁵ In total, 117 program allies supported projects in 2025, a 22% decrease compared to the 165 Program Allies in 2024. Notably, 21% of Standard Core projects were completed by customers without the assistance of a Program Ally. The majority of these projects were GN projects (44%) or SLB projects (23%). Enrolled Program Allies did not assist with any GN or SW projects. Table 8 presents information on the Program Allies that were most active in each channel offering in 2025.

¹⁵ A Program Ally is a contractor or vendor that is enrolled in AIC's Program Ally Network, which is a network of companies qualified to deliver services through AIC's initiatives.

Table 8. 2025 Standard Core Channel Program Ally Engagement Summary

Program Ally	Projects	Share of Total
SLB (n=197)		
Ally 1	36	18%
Ally 2	10	5%
Ally 3	10	5%
Ally 4	8	4%
Ally 5	7	4%
HVAC (n=111)		
Ally 6	29	26%
Ally 7	16	14%
Ally 8	8	7%
Ally 9	7	6%
SE (n=31)		
Ally 10	3	10%
Ally 11	3	10%
Ally 12	3	10%
Ally 13	2	6%
STRR (n=38)		
Ally 6	25	66%
Ally 14	4	11%
VFDs (n=27)		
Ally 15	4	15%
Ally 16	2	7%

Note: Program Allies were assigned a number to track participation across different channels in the Business Program.

SAVINGS DETAIL

Table 9 presents the ex ante, verified gross, and verified net electric energy savings achieved through the Standard Core channel in 2025. The channel achieved a 100% gross realization rate for electric energy savings. In 2025, the Standard Core channel saw a 55% decrease in verified net electric energy savings compared to 2024. The primary contributing offerings continue to be SLB and VFD, representing 75% of verified net savings in 2025. Since 2019, these two offerings have contributed 88% of channel verified net electric energy savings. Verified net savings from the SE offering increased by 88% compared to 2024, while savings from the HVAC offering decreased by 37%. Lastly, the GN, STRR, and SW offerings contributed less than 1% to verified net electric energy savings.

Table 9. 2025 Standard Core Channel Electric Energy Savings by Measure

Offering	Ex Ante Gross Savings (MWh)	Gross Realization Rate	Verified Gross Savings (MWh)	NTGR	Verified Net Savings (MWh)
SLB	13,589	100%	13,590	0.765	10,397
VFD	9,098	99%	9,047	0.953	8,626
SE	5,148	100%	5,148	0.989	5,088
HVAC	1,324	100%	1,320	0.910	1,202
GN	56	100%	56	0.965	54
STRR	10	116%	11	0.967	11
SW	3	100%	3	0.800	3
Total	29,228	100%	29,175	0.870	25,380

Table 10 presents the ex ante, verified gross, and verified net electric demand savings achieved through the Standard Core channel in 2025. The channel achieved a 102% gross realization rate for electric demand savings. The channel experienced a 65% decrease in verified net demand savings in 2025 compared to 2024. The SLB and VFD offerings contributed 90% of verified net demand savings and have represented 94% of demand savings since 2019. The SE offering saw a 17% decrease in savings, while the HVAC offering saw a 21% increase in demand savings, reversing the trend observed for electric energy savings. In its first year, the SW offering contributed less than 1% to the channel's demand savings.

Table 10. 2025 Standard Core Channel Electric Demand Savings by Measure

Offering	Ex Ante Gross Savings (MW)	Gross Realization Rate	Verified Gross Savings (MW)	NTGR	Verified Net Savings (MW)
SLB	2.53	100%	2.53	0.758	1.92
VFD	1.54	100%	1.54	0.953	1.46
SE	0.19	104%	0.20	0.989	0.20
HVAC	0.09	192%	0.18	0.888	0.16
SW	<0.01	100%	<0.01	0.800	<0.01
Total	4.36	102%	4.45	0.841	3.74

Table 11 presents the ex ante, verified gross, and verified net gas savings achieved through the Standard Core channel in 2025. The channel achieved a 100% gross realization rate for gas savings. The channel experienced a 5% decrease in verified net gas savings compared with 2024. STRR and HVAC contributed 86% of verified net gas savings in 2025 and have produced 80% of channel gas savings since 2019. The STRR offering has remained steady in its gas savings, experiencing a 6% decrease in 2025 compared to 2024. For the second consecutive year, the HVAC offering increased its gas savings contributions, with a 24% increase compared to 2024. The SE offering has declined for two consecutive years from its high-water mark in 2023, experiencing a 44% decrease compared to 2024. In its first year, the SW offering contributed less than 1% to the channel's gas savings.

Table 11. 2025 Standard Core Channel Gas Savings by Measure

Offering	Ex Ante Gross Savings (Therms)	Gross Realization Rate	Verified Gross Savings (Therms)	NTGR	Verified Net Savings (Therms)
SE	156,021	100%	156,030	0.901	140,552
HVAC	493,372	99%	488,378	0.868	423,915
GN	4,301	100%	4,301	0.931	4,005
STRR	519,256	100%	519,899	0.949	493,165
SW	846	0% ^a	0	N/A	0
Total	1,173,797	100%	1,168,609	0.908	1,061,637

Note: The savings presented in this table only reflect those directly claimable by AIC. One HVAC project produced non-AIC gas savings.

^a In addition, the lone Standard Weatherization project produced non-AIC gas savings; however, they were claimed as AIC gas savings. More information on these savings is presented in Appendix B.

We discuss significant discrepancies between ex ante claims and the verified analysis below.

- **VFDs** (31% of ex ante energy savings and 35% of demand savings): The gross realization rates for VFD are 99% for electric energy and 100% for demand savings.
 - The evaluation team observed a number of discrepancies between the initiative tracking data and the applications available in the implementation team’s tracking system, ALEET, mostly associated with the motor type (e.g., pump versus fan), but also two instances where the horsepower in the initiative tracking data did not match the value from the applications. Many of the inconsistencies did not impact savings because the implementation team correctly applied savings limits based on the motor application; however, there were three instances (2500205, 2400167, and 2500370) where the inconsistencies resulted in the savings limits being revised to match the motor type or horsepower from the application. The impact on those three measures ranged from a 22% decrease to a 60% increase in electric energy savings and a 2% to 60% increase in demand savings. The impact on overall channel savings was negligible, resulting in a 1% decrease in electric energy savings.
- **SE** (18% of ex ante energy savings, 4% of demand savings, and 13% of gas savings): The gross realization rates for SE are 100% for electric energy, 104% for demand, and 100% for gas savings.
 - For the two Desiccant Dryer Dew Point Demand Control measures, the implementation team did not estimate demand savings. The evaluation team verified the measure conditions and calculated demand savings, resulting in a 4% increase in demand savings for the SE offering. The impact on overall channel savings was less than 1%.
 - One uninterruptible power supply (UPS) measure was implemented in 2025. The evaluation team made two observations related to the savings calculations. First, the equipment model number and manufacturer were not located in the ENERGY STAR® Qualified Product List, and the evaluation team could not verify the equipment as ENERGY STAR–certified through the manufacturer specification data sheet. This is a requirement of the IL-TRM V13.0, which states, “The efficient condition is a new ENERGY STAR UPS in a telecommunication or similar application. For single-normal mode UPSs, the installed system must meet or exceed the average loading-adjusted efficiency values required by the ENERGY STAR program.” Therefore, the evaluation team determined the verified electric energy and demand savings to be zero for this measure. This has a minimal impact on the total channel savings.
 - We also noted that the IL-TRM V13.0 requires an input dependency characteristic to determine the savings. The implementation team applied savings associated with a Voltage and Frequency Independent (VFI) UPS. The evaluation team could not verify the input dependency of the incentivized equipment through the manufacturer specification data sheet or website. However, the ENERGY STAR product criteria include information on input

dependency and suggest that VFI UPS measures typically range up to 1,000 kVA. The incentivized equipment is 0.6 kVA, which, according to ENERGY STAR, is more likely to fall within the Voltage and Frequency Dependent UPS category. If the evaluation team were to estimate savings for this measure, we would have applied the Voltage and Frequency Dependent input dependency characterization, resulting in an 80% decrease in savings compared to the VFI characterization. We recommend that the implementation team ensure all incentivized UPS measures are ENERGY STAR–certified, and when possible, provide documentation to support the input dependency determination.

- **HVAC** (5% of ex ante energy savings, 2% of demand savings, and 42% of gas savings): The gross realization rates for HVAC are 100% for electric energy, 192% for demand, and 99% for gas savings.
 - For eight of the thirteen Single-Package and Split System Unitary Air Conditioner records, the initiative tracking data did not include energy efficiency ratios (EER2), leading the evaluation team to collect the information from project documentation posted to ALEET. During this documentation review process, the evaluation team identified inconsistencies for several parameters between the initiative tracking data and the documentation in ALEET. For two projects (2501352 and 2501353), the evaluation team found additional model numbers with different capacities and efficiencies than reported in the tracking data. For one project (2500926), the reported capacity was 20 kBtu/h, but documents in ALEET confirmed the capacity was 20 tons (240 kBtu/h). For another project (2500871), the capacity was listed as 150 kBtu/h in the tracking data, while the capacity in the backup documentation was 72 kBtu/h. In all instances, the total quantity of equipment was reported correctly. The evaluation team applied the verified data from the project documentation. Notably, the overall impact on channel savings was negligible; however, the record-level impacts to verified electric energy savings ranged from a decrease of 63% to an increase of 875%.

The impact on demand savings was much larger. For each record where the initiative tracking data did not include an EER2 value, the implementation team did not estimate ex ante demand savings. The evaluation team applied the EER2 values from the project documentation, resulting in a 710% increase in verified demand savings for the measure and a 2% increase for the channel overall.

- For two Gas Boiler Replacement records associated with projects 2301674 and 2500125, the implementation team applied the effective full load hours (EFLH) heating values from IL-TRM V13.0 associated with an existing building. The evaluation team applied the EFLH heating values associated with a new construction building, based on information in the initiative tracking data, which indicated the measures were associated with New Building applications. For two other projects (2400659 and 2501074), the implementation team applied measure assumptions associated with a smaller capacity hot water boiler than what was listed in the initiative tracking data. The tracking data indicates both measures have capacities at or above 3,000 kBtu/h, but other information in the initiative tracking data suggests the capacities are between 1,700 and 2,500 kBtu/h. The evaluation team confirmed the system sizes and applied the appropriate assumptions for the larger capacity boiler category, leading to a decrease in verified gas savings. Notably, this discrepancy does not appear to be systematic. The evaluation team confirmed that the appropriate assumptions were applied for all other incentivized measures. The impact of these two discrepancies on the overall HVAC offering was a decrease in verified gas savings of less than 1%.
- For three Gas Furnace Replacement records affiliated with 2500048 and 2401707, the implementation team applied the effective full load hours (EFLH) heating values from IL-TRM V13.0 associated with an existing building. The evaluation team applied the EFLH heating values associated with a new construction building, based on information in the initiative tracking data, which indicated the measures were associated with New Building applications. The result was a decrease in verified gas savings of less than 1%.
- **SW** (<1% of ex ante energy savings, <1% of demand savings, and <1% of gas savings): The gross realization rates for SW are 100% for electric energy, 100% for demand, and 0% for gas savings.

- The lone SW project was completed at a customer site that receives only electric service from AIC. The evaluation team verified the full claimed gas savings; however, because the customer does not receive gas service from AIC, we categorized them as non-AIC gas savings, resulting in a 0% realization rate for the claimed AIC gas savings. The non-AIC gas savings are presented in Appendix B.

3.1.4 ONLINE STORE CHANNEL

The following sections present the impact evaluation results for the 2025 Online Store channel. Additional details on the impact analysis methodology are provided in Appendix A.

CHANNEL DESCRIPTION

The Online Store channel within the Standard Initiative provides a convenient e-commerce alternative to purchase energy-efficient technologies (e.g., LEDs, lighting controls, advanced thermostats, and advanced power strips). The Online Store channel is also a resource for educating private and public sector customers about the benefits of energy-efficient products and is available to all AIC business customers.

PARTICIPATION SUMMARY

Table 12 presents a summary of participation through the Online Store Channel in 2025. In total, the channel incentivized the purchase of 2,582 units of efficient equipment.

Table 12. 2025 Online Store Channel Participation Summary by Measure

Measure Category	Measure Quantity	Ex Ante Gross MWh	Ex Ante Gross MW	Ex Ante Therms
Private Sector				
Advanced Thermostats	826	1,062	0.29	59,172
Advanced Power Strip – Tier 1	1,107	89	0.00	0
LED Bulbs and Fixtures	25	20	<0.01	0
Lighting Controls	11	7	<0.01	0
Smart Sockets	246	4	0.00	0
Exit Signs	7	<1	<0.01	0
<i>Private Sector Subtotal</i>	<i>2,222</i>	<i>1,183</i>	<i>0.29</i>	<i>59,172</i>
Public Sector^a				
Advanced Thermostats	19	39	0.01	998
Advanced Power Strip – Tier 1	333	27	0.00	0
LED Bulbs and Fixtures	1	<1	<0.01	0
Smart Sockets	7	<1	0.00	0
<i>Public Sector Subtotal</i>	<i>360</i>	<i>66</i>	<i>0.01</i>	<i>998</i>
Total	2,582	1,249	0.30	60,170

^a The project counts, measure counts, and ex ante savings values presented in the Private Sector subsection of this table include State and Federal facilities, as these facility types are not included in the list of customer types covered in the public sector minimum funding requirements in subsection (c) of 220 ILCS 5/8-103B and subsection (e) of 220 ILCS 5/8-104.

SAVINGS DETAIL

Table 13 presents the ex ante, verified gross, and verified net electric energy savings achieved through the Online Store channel in 2025. The channel achieved a 100% gross realization rate for electric energy savings. Overall, the channel experienced a 50% decrease in verified net electric energy savings compared to 2024. Notable changes at the measure level include a 90% decrease in verified net electric energy savings from LED Bulbs and Fixtures, a 65% decrease in savings from Advanced Power Strips, and a 43% decrease in Advanced Thermostat savings compared to 2024.

Table 13. 2025 Online Store Channel Electric Energy Savings by Measure

Measure Category	Ex Ante Gross Savings (MWh)	Gross Realization Rate	Verified Gross Savings (MWh)	NTGR	Verified Net Savings (MWh)
Advanced Thermostats	1,102	100%	1,102	0.903	995
Advanced Power Strips - Tier 1	116	100%	116	1.161	134
LED Bulbs and Fixtures	20	100%	20	1.161	24
Lighting Controls	7	100%	7	1.161	8
Smart Sockets	5	97%	4	1.161	5
Exit Signs	<1	100%	<1	1.161	<1
Total	1,249	100%	1,250	0.933	1,166

Table 14 presents the ex ante, verified gross, and verified net electric demand savings achieved through the Online Store channel in 2025. The channel achieved a 100% gross realization rate for electric demand savings. Channel verified net demand savings decreased by 44% in 2025 compared to 2024, primarily driven by a 43% decrease in demand savings from Advanced Thermostats.

Table 14. 2025 Online Store Channel Electric Demand Savings by Measure

Measure Category	Ex Ante Gross Savings (MW)	Gross Realization Rate	Verified Gross Savings (MW)	NTGR	Verified Net Savings (MW)
Advanced Thermostats	0.29	100%	0.29	0.903	0.26
LED Bulbs and Fixtures	<0.01	100%	<0.01	1.161	<0.01
Lighting Controls	<0.01	100%	<0.01	1.161	<0.01
Exit Signs	<0.01	100%	<0.01	1.161	<0.01
Total	0.30	100%	0.30	0.908	0.27

Table 15 presents the ex ante, verified gross, and verified net gas savings achieved through the Online Store channel in 2025. The channel achieved a 100% gross realization rate for gas savings. Overall, the channel experienced a 55% decrease in verified net gas savings compared to 2024. This decrease in savings aligns with a 45% decrease in the gas savings of advanced thermostats incentivized in 2025 compared to 2024.

Table 15. 2025 Online Store Channel Gas Savings by Measure

Measure Category	Ex Ante Gross Savings (MWh)	Gross Realization Rate	Verified Gross Savings (MWh)	NTGR	Verified Net Savings (MWh)
Advanced Thermostats	60,170	100%	60,170	0.902	54,284
Total	60,170	100%	60,170	0.902	54,284

We discuss significant discrepancies between ex ante claims and the verified analysis below.

- **Smart Sockets** (<1% of ex ante electric energy savings): The gross realization rate for Smart Sockets is 97% for electric energy savings.
 - The evaluation team awarded zero electric energy savings in the verified analysis for 10 records because the customers associated with the projects are not AIC electric customers. This resulted in lower verified electric energy savings (example projects: AMCG-IN1850570-2925, AMCG-IN1900969-2994, AMCG-IN1926865-3047).

3.1.5 BUILDING OPERATOR CERTIFICATION

The following sections present the impact evaluation results for the 2025 BOC Training channel. Additional details on the impact analysis methodology are provided in Appendix A.

CHANNEL DESCRIPTION

AIC offers the BOC Training channel to building operators in their service territory. BOC is a nationally recognized course and certification training developed by the Northwest Energy Efficiency Council (NEEC). It includes classroom training, project assignments to be completed at the participant’s facility, and in-class tests at the end of each day. Graduates who pass the Certification Exam earn the BOC Certification and become certified Building Operators. While participants do not need to be AIC customers to enroll in the course, AIC provides tuition reimbursements to customers in their service territory upon course completion to incentivize participation.

The BOC training consists of two levels. The Level I course focuses on energy-efficient building operations, and the Level II course focuses on preparing building operators to evaluate their facility’s performance and optimize operations. Table 16 includes a list of topics covered in each of the course levels.

Table 16. BOC Training Topics by Level

Topics	Level I	Level II
1001 – Energy-Efficient Operation of Building HVAC Systems	✓	
1002 – Measuring and Benchmarking Energy Performance	✓	
1003 – Efficient Lighting Fundamentals	✓	
1004 – HVAC Controls Fundamentals	✓	
1005 – Indoor Environmental Quality	✓	
1006 – Common Opportunities for Low-Cost Operational Improvements	✓	
2001 – Building Scoping for Operational Improvements		✓
2002 – Optimizing HVAC Controls for Energy Efficiency		✓
2003 – Introduction to Building Commissioning		✓
2004 – Water Efficiency for Building Operators		✓
2005 – Presentation of Final Projects		✓

Note: In addition to the topics listed in this table, both the Level I and Level II courses include one supplemental class. The topics covered in this supplemental class vary.

PARTICIPATION SUMMARY

Table 17 summarizes participation in the 2025 BOC Training channel by segment. Overall, 7 customers participated in the training. All trainees enrolled in Level I of the training.

Table 17. 2025 BOC Training Channel Participation Summary by Segment

Participant Number	BOC Level	Segment
2501785	I	School/College
2501775	I	School/College
2501782	I	School/College
2501781	I	Municipality
2501784	I	School/College
2501777	I	Medical
2501776	I	Medical

SAVINGS DETAIL

Table 18 presents the ex ante, verified gross, and verified net electric energy savings achieved through the BOC Training channel in 2025. The gross realization rate for electric energy savings is 106%. Overall, the channel produced 51% fewer verified net electric energy savings in 2025 than in 2024.

Table 18. 2025 BOC Training Channel Electric Energy Savings by Measure

Participant Number	Ex Ante Gross Savings (MWh)	Gross Realization Rate	Verified Gross Savings (MWh)	NTGR	Verified Net Savings (MWh)
2501785	137	100%	137	N/A	137
2501775	110	38%	41	N/A	41
2501782	103	100%	103	N/A	103
2501781	60	100%	60	N/A	60
2501784	27	52%	14	N/A	14
2501777	27	500%	137	N/A	137
Total	464	106%	493	N/A	493

Table 19 presents the ex ante, verified gross, and verified net electric demand savings achieved through the BOC Training channel in 2025. The gross realization rate for electric demand savings is 106%. Overall, the channel produced 55% fewer verified net electric demand savings in 2025 than in 2024.

Table 19. 2025 BOC Training Channel Electric Demand Savings by Measure

Participant Number	Ex Ante Gross Savings (MW)	Gross Realization Rate	Verified Gross Savings (MW)	NTGR	Verified Net Savings (MW)
2501785	0.02	100%	0.02	N/A	0.02
2501775	0.01	38%	<0.01	N/A	<0.01
2501782	0.01	100%	0.01	N/A	0.01
2501781	0.01	100%	0.01	N/A	0.01
2501784	<0.01	52%	<0.01	N/A	<0.01
2501777	<0.01	500%	0.02	N/A	0.02
Total	0.05	106%	0.05	N/A	0.05

Table 20 presents the ex ante, verified gross, and verified net gas savings achieved through the BOC Training channel in 2025. The gross realization rate for gas savings is 98%. Overall, the channel produced 56% fewer verified net gas savings in 2025 than in 2024.

Table 20. 2025 BOC Training Channel Gas Savings by Measure

Participant Number	Ex Ante Gross Savings (Therms)	Gross Realization Rate	Verified Gross Savings (Therms)	NTGR	Verified Net Savings (Therms)
2501785	2,300	100%	2,300	N/A	2,300
2501775	1,840	88%	1,610	N/A	1,610
2501782	1,738	100%	1,738	N/A	1,738
2501776	253	146%	369	N/A	369
Total	6,130	98%	6,017	N/A	6,017

We discuss significant discrepancies between ex ante claims and the verified analysis below.

- **BOC Training:** The realization rates for the 2025 BOC Training cohort are 106% for electric energy savings, 106% for demand savings, and 98% for natural gas savings.
- **2501775:** For trainee 2501775, the evaluation team determined that one of the facilities included in the analysis does not receive AIC gas service, and one does not receive AIC electric service. The implementation team included the square footage for these facilities in the ex ante calculations for both fuels. The evaluation team removed the square footage for these facilities from the verified savings of the relevant fuels, resulting in lower verified electric energy, demand, and gas savings.
- **2501784:** For trainee 2501784, the evaluation team determined that the ex ante square footage included facilities beyond those the participant reported managing. The participant reported managing a single facility with a square footage of 50,000. The evaluation team limited the verified savings calculations to reflect just this facility, which lowered the verified electric energy and demand savings.
- **2501777:** For trainee 2501777, the participant did not provide a square footage for the facility they reported managing. The evaluation team used Google Images to estimate the square footage, resulting in higher verified electric energy and demand savings.
- **2501776:** For trainee 2501776, the participant reported managing two additional facilities that were not included in the ex ante calculations. The verified savings incorporate these two facilities, resulting in higher verified gas savings.

3.1.6 CUMULATIVE PERSISTING ANNUAL SAVINGS

Table 21 through Table 24 present CPAS and WAML for the 2025 Standard Initiative by channel. The tables also include a summary of the measure-specific and total verified gross savings for the Initiative and respective channels, as well as CPAS in each year from 2025 to 2028.¹⁶ The WAML for the Standard Initiative is 13.9 years, and the WAML for the Standard Core, Online Store, and BOC Training channels are 14.1 years, 10.6 years, and 13.0 years, respectively.

Table 21. 2025 Standard Initiative CPAS and WAML

Channel	WAML	Annual Verified Gross Savings (MWh)	NTGR	CPAS – Verified Net Savings (MWh)							Lifetime Savings (MWh)
				2025	2026	2027	2028	...	2030	...	
Core	14.1	29,175	0.870	25,380	25,380	25,380	25,377	...	25,199	...	359,853
Online Store	10.6	1,250	0.933	1,166	1,166	1,166	1,166	...	1,166	...	12,271
BOC	13.0	493	N/A	493	493	493	493	...	286	...	4,542
2025 CPAS		30,917	0.875	27,039	27,039	27,039	27,036	...	26,651	...	376,665
Expiring 2025 CPAS				0	0	0	4	...	172	...	
Expired 2025 CPAS				0	0	0	4	...	388	...	
WAML	13.9										

¹⁶ For further detail, including achieved CPAS in years not presented in this table, please see the *2025 AIC CPAS and AAIG Workbook*.

Table 22. 2025 Standard Core Channel CPAS and WAML

Offering	WAML	Annual Verified Gross Savings (MWh)	NTGR	CPAS – Verified Net Savings (MWh)							Lifetime Savings (MWh)
				2025	2026	2027	2028	...	2030	...	
SLB	13.3	13,590	0.765	10,397	10,397	10,397	10,393	...	10,352	...	137,866
VFD	15.0	9,047	0.953	8,626	8,626	8,626	8,626	...	8,626	...	129,389
SE	14.7	5,148	0.989	5,088	5,088	5,088	5,088	...	5,017	...	74,629
HVAC	14.7	1,320	0.910	1,202	1,202	1,202	1,202	...	1,192	...	17,573
GN	5.0	56	0.965	54	54	54	54	...	0	...	268
STRR	6.1	11	0.967	11	11	11	11	...	11	...	67
SW	22.6	3	0.800	3	3	3	3	...	3	...	61
2025 CPAS		29,175	0.870	25,380	25,380	25,380	25,377	...	25,199	...	359,853
Expiring 2025 CPAS				0	0	0	4	...	171	...	
Expired 2025 CPAS				0	0	0	4	...	181	...	
WAML	14.1										

Table 23. 2025 Online Store Channel CPAS and WAML

Measure	Measure Life	Annual Verified Gross Savings (MWh)	NTGR	CPAS – Verified Net Savings (MWh)							Lifetime Savings (MWh)
				2025	2026	2027	2028	...	2030	...	
Advanced Thermostats	11.0	1,102	0.903	995	995	995	995	...	995	...	10,944
Advanced Power Strips – Tier 1	7.0	116	1.161	134	134	134	134	...	134	...	941
LED Bulbs and Fixtures	11.4	20	1.161	24	24	24	24	...	24	...	268
Lighting Controls	10.0	7	1.161	8	8	8	8	...	8	...	80
Smart Sockets	7.0	4	1.161	5	5	5	5	...	5	...	36
Exit Signs	5.0	<1	1.161	<1	<1	<1	<1	...	0	...	2
2025 CPAS		1,250	0.933	1,166	1,166	1,166	1,166	...	1,166	...	12,271
Expiring 2025 CPAS				0	0	0	0	...	0	...	
Expired 2025 CPAS				0	0	0	0	...	0	...	
WAML	10.6										

Table 24. 2025 BOC Training CPAS and WAML

Channel	Measure Life	Annual Verified Gross Savings (MWh)	NTGR	CPAS – Verified Net Savings (MWh)							Lifetime Savings (MWh)
				2025	2026	2027	2028	...	2030	...	
BOC	13.0	493	N/A	493	493	493	493	...	286	...	4,542
2025 CPAS		493	N/A	493	493	493	493	...	286	...	4,542
Expiring 2025 CPAS				0	0	0	0	...	0	...	
Expired 2025 CPAS				0	0	0	0	...	207	...	
WAML	13.0										

3.1.7 CONCLUSIONS AND RECOMMENDATIONS

Based on the results of this evaluation, the evaluation team offers the following key findings and recommendations for the Standard Initiative moving forward:

STANDARD CORE CHANNEL

- **Key Finding #1:** Inconsistencies in the transcription of data from program applications to the ALEET database led to discrepancies in verified savings, most notably for Single-Package and Split System Unitary Air Conditioners, where individual record realization rates ranged from 37% to 975% for electric energy savings. For that measure, capacities reported in the initiative tracking system were expressed in varying units (e.g., tons, kBtu/h) and did not include a unit of measure to clarify the system cooling capacity. The system capacity directly affects the savings calculations, both in estimating the consumption of the efficient system and in defining the baseline system efficiencies, as the baseline efficiency assumptions in the IL-TRM are tied to system capacity buckets.
- **Recommendation:** The ALEET tracking system quantifies energy savings based on embedded assumptions such as capacities in a specific unit of measure. This aligns with how the IL-TRM V13.0 defines the savings algorithms as well as the evaluation team. To ensure savings are not over- or under-estimated, we recommend that the implementation team deploy a standard capacity metric in ALEET across all measures offered through the Standard HVAC offering. Using btu/h as the standard metric could be useful, as it is easily identifiable due to the scale (1 ton = 12 kBtu/h = 12,000 Btu/h). We also recommend that the implementation team consider incorporating units of measure into key parameters, such as cooling capacity, to ensure accurate and consistent estimation of ex ante savings. While this would be a minor change, the wide ranging impact on this year's Single-Package and Split System Unitary Air Conditioner measures illustrates the importance of standardizing reporting in ALEET.

ONLINE STORE CHANNEL

- **Key Finding #1:** The implementation team authorized several bulk orders through the Online Store in 2025. These bulk orders receive exemption from program purchase limits. While the implementation team posted corresponding documentation to their ALEET database to confirm the details of most of these orders, one order was missing supporting documentation.
- **Recommendation:** We recommend that the implementation team continue to upload documentation for all bulk orders to validate their exemption from the program purchase limits.

BUILDING OPERATOR CERTIFICATION

- **Key Finding #1:** The evaluation team continued to observe significant improvements in streamlining the data tracking and documentation for the BOC Training channel. Specifically, the comments in ALEET specifying the accounts associated with each participant streamlined the verified analysis. However, additional refinements are needed to reduce evaluation risk. The evaluation team identified several cases of inconsistencies between the square footage used to calculate the ex ante savings and the square footage data included in the backup documentation. In addition, the account numbers listed in ALEET did not always align with the specific facilities the participants reported managing.
- **Recommendation:** We recommend the implementation team continue to refine the data tracking and documentation process for BOC participants in future years to ensure all participants' facility information is correctly reported.

3.2 CUSTOM INITIATIVE

3.2.1 INITIATIVE DESCRIPTION

The Custom Initiative offers incentives to AIC business customers for energy efficiency projects involving equipment not covered through AIC’s prescriptive initiatives. The Initiative also provides an avenue for piloting novel measures before incorporating them into the Standard Initiative. Business customers often represent the highest potential for energy savings, but these savings frequently result from highly specialized equipment designed for particular industries or types of facilities. The Custom Initiative allows customers to propose additional measures and tailor projects to their facility and equipment needs.

The Custom Initiative is delivered to customers through several different channels. The Custom Incentives and New Construction Lighting channels produce all the electric energy, electric demand, and gas savings claimed through the Initiative; these channels are described in more detail in Sections 3.2.4 and 3.2.5, respectively. In addition to these two channels, AIC also operates several smaller efforts through the Custom Initiative, including Staffing Grants, Metering and Monitoring, SEM, Process Energy Assessments, Feasibility Studies, and New Construction Design channels. These channels engage AIC’s business customers more deeply regarding energy efficiency and do not have direct savings claims associated with them.

Overall, the implementation team set a goal of achieving 60,615 MWh and 1,082,740 therms of savings through the Custom Initiative.

3.2.2 PARTICIPATION SUMMARY

Table 25 presents a summary of the number of projects completed through each Custom Initiative channel, as well as a breakdown of how channel participation was distributed among private and public sector customers.

Table 25. 2025 Custom Initiative Participation Summary by Channel

Measure Category	incentivTotal Projects	Ex Ante Gross MWh	Ex Ante Gross MW	Ex Ante Therms
Private Sector				
Custom Incentives	59	71,494	9.22	610,493
New Construction Lighting	11	1,990	0.41	0
Staffing Grant	31	0	0.00	0
Feasibility Study	7	0	0.00	0
Strategic Energy Management	3	0	0.00	0
New Construction Design	2	0	0.00	0
<i>Private Sector Subtotal</i>	<i>113</i>	<i>73,483</i>	<i>9.63</i>	<i>610,493</i>

Measure Category	Total Projects	Ex Ante Gross MWh	Ex Ante Gross MW	Ex Ante Therms
Public Sector^a				
Custom Incentives	34	5,328	0.70	123,834
New Construction Lighting	3	23	0.01	0
Staffing Grant	23	0	0.00	0
New Construction Design	2	0	0.00	0
Metering and Monitoring	1	0	0.00	0
<i>Public Sector Subtotal</i>	63	5,350	0.71	123,834
Total	176	78,834	10.34	734,326

Note: The ex ante gas savings in this table only reflect AIC claimable gas savings. Seven projects completed through the Custom Initiative produced non-AIC gas savings and one project produced propane savings and, as such, were not included. Additionally, one project produced both AIC and non-AIC gas savings. The AIC gas savings are reflected in this table and the non-AIC gas savings are excluded. More information on the savings from these non-AIC gas and propane saving projects is presented in Appendix B.

^a The project counts, measure counts, and ex ante savings values presented in the Private Sector subsection of this table include State and Federal facilities, as these facility types are not included in the list of customer types covered in the public sector minimum funding requirements in subsection (c) of 220 ILCS 5/8-103B and subsection (e) of 220 ILCS 5/8-104.

Table 26 presents a summary of participation in the Custom Incentives and New Construction Lighting channels by facility type. Manufacturing/Industrial, Education, and Medical facilities accounted for 65% of Initiative projects.

Table 26. 2025 Custom Initiative Projects by Facility Type

Facility Type	Share of Custom Incentives Projects	Share of New Construction Lighting Projects	Share of Total Projects
Manufacturing/Industrial	29%	29%	29%
Education	29%	14%	27%
Medical	11%	0%	9%
Municipality	8%	7%	7%
Office	6%	0%	6%
Warehouse	1%	36%	6%
Religious	4%	0%	4%
Restaurant	4%	0%	4%
Retail	1%	7%	2%
Multifamily	1%	0%	1%
Other/Unknown	5%	7%	6%

In total, 44 Program Allies participated in the Custom Initiative in 2025, with 32 completing projects through the Custom Incentives channel and 12 completing projects through the New Construction Lighting channel. Notably, 32% of Custom Incentives projects and 7% of New Construction Lighting projects were completed without the assistance of an enrolled Program Ally.

3.2.3 INITIATIVE ANNUAL SAVINGS SUMMARY

Table 27 presents the Custom Initiative annual savings achieved in 2025. The 2025 Custom Initiative achieved 61,385MWh, 9.32 MW, and 914,378 therms in verified net savings. In addition, the Initiative also produced 1,733,043 therms in verified net gas savings in 2025 that are not directly claimable by AIC because the customers do not receive gas service from AIC. The Initiative also produced 9,088 therms of verified net propane savings. These savings are detailed further in Appendix B.

Table 27. 2025 Custom Initiative Annual Savings

	Electric Energy Savings (MWh)	Electric Demand Savings (MW)	Gas Savings (Therms)
Ex Ante Gross Savings	78,834	10.34	734,326
Gross Realization Rate	102%	118%	149%
Verified Gross Savings	80,167	12.19	1,097,546
NTGR	0.766	0.765	0.833
Verified Net Savings	61,385	9.32	914,378

3.2.4 CUSTOM INCENTIVES CHANNEL

The following sections present the impact evaluation results for the 2025 Custom Incentives channel. Additional details on the impact analysis methodology are provided in Appendix A.

CHANNEL DESCRIPTION

The Custom Incentives channel provides incentives for electric and gas measures not incentivized through other AIC offerings. Some examples of common Custom Incentives measures include compressed air improvements, energy management systems (EMS), and industrial process measures including heat recovery, process heat, and improvements to steam systems.

Summary of Key Implementation Changes

Initiative staff instituted the following design and implementation changes to Custom Incentives in 2025:

- Developed a campus application bundle for large campuses. This allows the customer to submit a single application covering multiple projects to minimize the administrative burden associated with participation.

SAVINGS DETAIL

For the Custom Incentives channel, we verified participation and gross impacts through desk reviews and on-site M&V of a sample of projects, as described in Appendix A. Site-specific M&V was conducted for Custom Incentives projects in three distinct waves, with samples independently developed for each wave by fuel type (electric or gas). We used a stratified combined ratio estimator to develop a realization rate for each wave by savings type (presented later in this chapter).¹⁷

¹⁷ Cochran, William G. Sampling Techniques. John Wiley & Sons, 1977.
Opinion Dynamics

Site-Specific Results

Table 28 presents the gross impact results for 31 Custom Incentives projects we reviewed in 2025. Realization rates for individual projects ranged from 14% to 185% for electric energy and 19% to 288% for gas. In addition, Table 29, Table 30, and Table 31 present the gross impact results for two fuel-switching projects we reviewed. More details for nine selected project reviews are provided in the Appendix D supplement to this report.

Table 28. 2025 Custom Incentives Channel Gross Impact Results for Sampled Projects

Project ID	Sample			Ex Ante Gross Savings			Gross Realization Rate			Verified Gross Savings		
	Wave	Fuel	Stratum	MWh	MW	Therms	MWh	MW	Therms	MWh	MW	Therms
2401744	2	Electric	3	291	0.05	—	185%	168%	—	538	0.08	—
2400832	1	Electric	3	224	0.03	—	159%	120%	—	357	0.04	—
2500108	1	Electric	3	505	0.18	—	142%	50%	—	720	0.09	—
2400093	2	Both	4;3	933	0.00	83,642	142%	N/A	104%	1,325	0.00	87,374
2401225	1	Electric	2	139	0.02	—	133%	136%	—	185	0.02	—
2400882	1	Electric	3	191	0.02	—	115%	68%	—	219	0.01	—
2500071	2	Electric	4	954	0.11	—	107%	75%	—	1,022	0.08	—
2500165	3	Electric	2	340	0.02	—	101%	91%	—	345	0.02	—
2400051	3	Both	4:4	58,874	7.63	669,553	101%	128%	288%	59,689	9.75	1,926,765
2400072	1	Both	4;4	2,244	0.26	169,720	101%	100%	97%	2,268	0.26	163,829
2500174	2	Electric	2	183	0.02	—	100%	100%	—	183	0.02	—
2400890	3	Electric	3	530	0.06	—	100%	100%	—	530	0.06	—
2400879	1	Electric	3	279	0.03	—	100%	99%	—	279	0.03	—
2500025	3	Electric	1	81	0.01	—	100%	97%	—	81	0.01	—
2400130	1	Electric	3	685	0.00	—	98%	N/A	—	673	0.00	—
2500093	3	Electric	1	2	0.00	—	87%	N/A	—	2	0.00	—
2101292	3	Electric	3	574	0.27	—	81%	89%	—	468	0.24	—
2500065	2	Both	3;1	266	0.00	4,856	60%	N/A	19%	160	0.00	930
2400790	1	Electric	1	36	<0.01	—	50%	100%	—	18	<0.01	—
2500588	2	Electric	1	65	0.01	—	14%	91%	—	9	0.01	—
2500066	1	Gas	2	—	—	11,578	—	—	132%	—	—	15,228
2400097	3	Gas	3	—	—	90,514	—	—	100%	—	—	90,514
2400901	3	Gas	2	—	—	23,675	—	—	100%	—	—	23,675

Project ID	Sample			Ex Ante Gross Savings			Gross Realization Rate			Verified Gross Savings		
	Wave	Fuel	Stratum	MWh	MW	Therms	MWh	MW	Therms	MWh	MW	Therms
2400140	2	Gas	3	—	—	106,961	—	—	100%	—	—	106,601
2401342	1	Gas	3	—	—	15,027	—	—	99%	—	—	14,926
2500323	3	Gas	3	—	—	128,363	—	—	76%	—	—	97,785
2400798	3	Gas	3	—	—	54,832	—	—	73%	—	—	40,259
2500106	2	Gas	2	—	—	31,558	—	—	94%	—	—	29,567
2300018	1	Gas	1	—	—	5,305	—	—	60%	—	—	3,169
2400054	2	Gas	1	—	—	1,743	—	—	68%	—	—	1,180
2500035	3	Gas	1	—	—	3,006	—	—	21%	—	—	623

Note: The customers that completed projects 2400072, 2400051, and 2400901 are not AIC gas customers. Therefore, these savings are not directly claimable by AIC towards its Section 8-104 gas energy efficiency goals. However, we present the savings in this table because these gas savings did inform the ratio estimator used to develop Initiative-level savings. Additionally, AIC chose to claim the gas savings achieved through these projects as electric savings via (b-25) conversions. Project 2400093 produced both AIC and non-AIC gas savings. The gas savings values presented in this table represent the total site gas savings. AIC also chose to convert the non-AIC gas savings achieved through this project as electric savings via (b-25) conversions. More information on (b-25) conversion projects can be found in Appendix B.

As part of our Wave 3 sampling activities, Leidos identified two fuel-switching projects in the population of completed projects. We separated these projects into their own sample due to their unique characteristics and completed reviews of each project. Table 29, Table 30, and Table 31 present the results of our gross savings analysis for these projects.

Project 2400055 is a fuel switching project that the evaluation team deemed subject to legacy guidance provided in IL-TRM V13.0 for how to evaluate projects that involved customer-initiated fuel switching prior to fully developed Illinois guidance on interpretation of CEJA. This project is the final remaining Custom Incentives project that will be evaluated under this approach. Per the IL-TRM's guidance, the evaluation team determined the verified savings for project 2400055 presented in Table 29 by estimating the change in site MMBtus (million British thermal units [Btus]) produced through the project. As such, we present a single MMBtu realization rate instead of specific electric energy and gas realization rates. We then allocated the MMBtu savings for each project across electric energy and gas savings to count savings towards goal attainment in line with the IL-TRM.

Table 29. 2025 Custom Incentives Channel Gross Impact Results for Sampled Legacy Fuel Switching Projects

Project ID	Ex Ante Gross Savings				Gross Realization Rate	MMBtu Realization Rate	Verified Gross Savings			
	MWh	MW	Therms	MMBtu			MWh	MW	Therms	MMBtu
2400055	284	<0.01	0	968	101%	287	-0.01	0	978	

Project 2500015 is the first Custom Incentives project that the evaluation team has deemed subject to guidance provided in Illinois state law, the Illinois Energy Efficiency Policy Manual, and the IL-TRM for how to calculate savings to be claimed against AIC’s goals for fuel-switching projects.¹⁸ Table 30 presents electric energy savings calculated for this project under that guidance. Savings from the electrification of fossil fuel-fired end uses presented in Table 30 are reported in kilowatt-hour (kWh) equivalents, representing the net fuel-agnostic change in site energy usage. For a full accounting of at-the-meter impacts from these measures that are used in cost-effectiveness testing, please see Appendix B.

Table 30. 2025 Custom Incentives Channel Gross Electric Energy Impact Results for (b-27) Fuel Switching Projects

Project ID	Ex Ante Gross Savings (MWh Equivalents)	Gross Realization Rate	Verified Gross Savings (MWh Equivalents)
2500015	892	100%	892

Table 31 presents the gross demand savings associated with this project.

Table 31. 2025 Custom Incentives Channel Gross Demand Impact Results for (b-27) Fuel Switching Projects

Project ID	Ex Ante Gross Savings (MW)	Gross Realization Rate	Verified Gross Savings (MW)
2500015	0.02	100%	0.02

Given that each Custom Incentives project is unique regarding the measures involved and the methods the evaluation team used to estimate savings, we cannot present a full summary of the sources of discrepancy between the ex ante and verified gross savings estimates for the channel. However, we did make specific findings regarding consistent differences in the approach taken by the evaluation and implementation teams to estimate savings. These findings are provided below. For project-specific details, please see Appendix D to this report and the separate backup documentation provided by the evaluation team. Overarching findings and recommendations for the Custom Initiative are presented in Section 3.2.7.

HVAC Controls Projects

- Ten projects involving adjustments to HVAC control settings were sampled this year, with realization rates ranging from 50% to 142% for electric energy savings, and 19% to 104% for gas savings.
 - Project 2400093 had a realization rate of 142% for electric savings. The differences between the ex ante and verified savings resulted from differing baseline and treatment period dates between the verified and ex ante calculations, and normalization to TMY3 weather conditions in the verified analysis.
 - Project 2400790 had a 50% realization rate for electric savings. The project documentation did not include complete ex ante savings calculations, and the ex ante savings claim was ultimately based on the savings calculated by the HVAC Capping formula rather than the ex ante calculations. Given that complete documentation of the ex ante calculations was not available, the evaluation team could not determine the reasons for the savings discrepancies between the ex ante and verified calculations. Ultimately, the discrepancy between the ex ante and verified savings was driven by the fact that the verified savings were calculated based on the specific details of the project and the ex ante savings were developed using the capping formula.
 - Project 2500035 had a 21% realization rate for gas savings. This project’s ex ante savings were based on engineering calculations, while the verified savings are based on a regression analysis. The evaluation team

¹⁸ See 220 ILCS 5/8-103B(b-27).
Opinion Dynamics

could not reach the customer to verify key input assumptions in the engineering calculations, so we determined it was most appropriate to estimate the verified savings using a regression analysis.

- For project 2500065, the evaluation team applied the same approach from the ex ante calculations for the verified savings, but corrected errors and updated key parameters based on findings from the customer interview. This resulted in a 19% realization rate for gas savings.

Compressed Air Projects

- The ex ante calculations for project 2500071, which involved the installation of a new variable speed drive (VSD) compressor and dryer, were developed using IL-TRM algorithms to calculate the savings for the compressor and dryer individually and then summing the savings together. The evaluation team used a system approach that considered the specific operating conditions of the compressor and dryer, resulting in a 107% realization rate for electric energy savings. Although IL-TRM calculations may be appropriate to apply for smaller or relatively standard projects, the evaluation team encourages the use of system approaches for more complex projects that are generally found in the Custom Initiative, and that take into account the interactivity between system components and the specific conditions affecting system performance.

Lighting Controls

- For the one lighting controls project (2401744), the evaluation team determined from the project documentation and a customer interview that the number of fixtures with controls and the percentage of time the lights were dimmed were underestimated in the ex ante savings calculations, resulting in a 185% realization rate.

New Construction

- The evaluation team found relatively low realization rates for electric and gas savings across the three new construction projects evaluated in this cycle.
 - In project 2300018, the evaluation team determined that demand control ventilation was required by IECC 2018 in the gymnasium and kitchen. Removing these measures from the claimed savings resulted in a 60% realization rate.
 - In project 2101292, the evaluation team determined that some lighting power density and fan power savings were overstated in the ex ante calculations, leading to a 81% realization rate.
 - In project 2400054, the evaluation team determined that an in-slab exterior ice/snow melt system was not in the as-built design, leading to a 68% realization rate.

Process Efficiency

- Three of the seven process efficiency projects that were sampled this year (2400832, 2400798, and 2500108), had notably high or low realization rates, primarily due to discrepancies in input parameters between the verified and ex ante calculations. These discrepancies were driven, in part, by the evaluation team's collection of trend data, but in other cases were driven by changes to inputs based on discussions with the facility operators.
- Process efficiency projects often involve complex technologies, multiple pieces of equipment, and changes in production that can make estimating savings challenging. It is especially important for these projects that ex ante workbooks are clearly organized, that input sources are clearly documented, formulas avoid the use of hardcoded values, and baseline and proposed conditions are clearly defined. Workbooks that do not meet these standards hinder understanding and review by internal technical reviewers and the evaluation team, and are prone to errors that could significantly impact realization rates. For example, the ex ante savings calculations for project 2500323 were difficult to evaluate because the original calculations and the updated calculations from the technical reviewer were intermingled, certain formulas included hardcoded inputs, baselines were not clearly defined, and the sources of various inputs were not clearly documented within the context of the calculations. Ultimately, the realization rate for this project was 76%.

Overall Results

We used a stratified combined ratio estimation technique to estimate gross realization rates for each wave by fuel type.^{19,20} These realization rates are presented in Table 32.

Table 32. 2025 Custom Incentives Channel Realization Rates by Wave and Fuel Type

Wave	Energy Savings (MWh)	Demand Savings (MW)	Gas Savings (Therms)
1	107%	87%	98%
2	111%	100%	96%
3	101%	122%	185%
Fuel Switching (FS)	100%	65%	N/A

We produced verified gross savings estimates for the Custom Incentives channel by applying the gross realization rates in Table 31 to the population of projects in each wave. Table 33, Table 34, and Table 35 present the annual ex ante, verified gross and net electric energy, electric demand, and gas savings for each wave. Overall, Custom Incentives channel projects accounted for 97% of Custom Initiative verified net MWh savings, 96% of Initiative verified net MW savings, and 100% of Initiative verified net gas savings. The evaluation team achieved a relative precision of 0.9% for channel gross electric energy savings, 3.7% for gross electric demand savings, and 13.2% for gas savings at the 90% confidence level. Further details on our methodology for Custom Initiative sampling are provided in Appendix A.

Table 33. 2025 Custom Incentives Channel Electric Energy Savings by Wave

Wave	Ex Ante Gross Savings (MWh)	Gross Realization Rate	Verified Gross Savings (MWh)	NTGR	Verified Net Savings (MWh)
1	4,541	107%	4,844	0.758	3,672
2	3,254	111%	3,614	0.764	2,760
3	67,850	101%	68,345	0.758	51,798
FS	1,175	100%	1,178	1.000	1,178
Total	76,821	102%	77,981	0.762	59,408

Note: The FS savings presented in this table reflect savings claims toward goal attainment. They do not reflect the impacts at the meter. More information on full site impacts associated with these projects are presented in Appendix B.

Table 34. 2025 Custom Incentives Channel Electric Demand Savings by Wave

Wave	Ex Ante Gross Savings (MW)	Gross Realization Rate	Verified Gross Savings (MW)	NTGR	Verified Net Savings (MW)
1	0.67	87%	0.58	0.758	0.44
2	0.44	100%	0.44	0.793	0.35
3	8.79	122%	10.72	0.758	8.12
FS	0.02	65%	0.01	1.000	0.01
Total	9.92	118%	11.74	0.759	8.92

¹⁹ Cochran, William Gemmill. Sampling Techniques. John Wiley & Sons, 1977.

²⁰ Levy, Paul S., and Stanley Lemeshow. Sampling of Populations: Methods and Applications. John Wiley & Sons, 2008.

Table 35. 2025 Custom Incentives Channel Gas Savings by Wave

Wave	Ex Ante Gross Savings (Therms)	Gross Realization Rate	Verified Gross Savings (Therms)	NTGR	Verified Net Savings (Therms)
1	70,418	98%	68,884	0.865	59,612
2	225,373	96%	217,278	0.827	179,692
3	438,535	185%	811,384	0.832	675,073
Total	734,326	149%	1,097,546	0.833	914,378

Note: The savings presented in this table only reflect those directly claimable by AIC. Eight additional projects produced non-AIC gas savings, one project produced propane savings, and one project produced both AIC and non-AIC gas savings. More information on these savings are presented in Appendix B.

3.2.5 NEW CONSTRUCTION LIGHTING CHANNEL

The following sections present the impact evaluation results for the 2025 New Construction Lighting channel. Additional details on the impact analysis methodology are provided in Appendix A.

CHANNEL DESCRIPTION

The New Construction Lighting channel offers incentives for lighting measures in new construction projects. For these New Construction Lighting projects, a tool is provided to help customers design efficient lighting for any facility size. Additionally, a simple application is used to incentivize the installation of lighting that is more efficient than Illinois energy code requirements.

Summary of Key Implementation Changes

Initiative staff instituted the following design and implementation changes to New Construction Lighting in 2025:

- Pre-approval requirements for New Construction Lighting projects were removed for projects under \$10,000.

SAVINGS DETAIL

For the New Construction Lighting channel, we verified initiative participation and gross impacts through desk reviews and M&V activities of a sample of projects, as described in Appendix A. Site-specific M&V was conducted for New Construction Lighting channel projects in a single wave at the close of the program year.

Site-Specific Results

Table 36 presents the gross impact results for the five New Construction Lighting projects we reviewed in 2025. Realization rates for individual projects ranged from 75% to 113%.

Table 36. 2025 New Construction Lighting Channel Gross Impact Results for Sampled Projects

Project ID	Sample Stratum	Ex Ante Gross Savings		Gross Realization Rate		Verified Gross Savings	
		MWh	MW	MWh	MW	MWh	MW
2500418	2	616	0.07	113%	113%	694	0.08
2500420	1	34	0.00	113%	N/A	38	0.00
2400413	2	473	0.11	104%	100%	492	0.11
2400102	1	16	0.01	101%	102%	16	0.01

Project ID	Sample Stratum	Ex Ante Gross Savings		Gross Realization Rate		Verified Gross Savings	
		MWh	MW	MWh	MW	MWh	MW
2500085	1	4	<0.01	75%	100%	3	<0.01

We reviewed the sampled 2025 New Construction Lighting projects to identify consistent differences in the savings estimation approach taken by the evaluation and implementation teams. These findings are provided below to contextualize the impact evaluation results for the channel.

The evaluation team found that the drivers of the New Construction Lighting channel's realization rates included adjustments to operating hours, wattages, and fixtures quantities based on data collected from project documentation or customer interviews. In addition, for one exterior lighting project (2500420), the evaluation team determined that the area of the parking lot was larger than what was estimated in the ex ante savings calculations.

Overall Results

We used a stratified combined ratio estimation technique to estimate gross realization rates for each savings type.^{21,22} These realization rates are presented in Table 37.

Table 37. 2025 New Construction Lighting Channel Realization Rates

Wave	Electric Energy Savings (MWh)	Electric Demand Savings (MW)
New Construction Lighting	109%	105%

We produced verified gross savings estimates for the New Construction Lighting channel by applying these gross realization rates to the population of projects. Table 38 and Table 39 present the ex ante, verified gross, and verified net electric energy and electric demand savings for the New Construction Lighting channel in 2025. Overall, New Construction Lighting projects accounted for 3% of Custom Initiative verified net MWh savings and 4% of Custom Initiative verified net MW savings. The evaluation team achieved a relative precision of 2.5% for channel electric energy savings and 3.4% demand savings at the 90% confidence level. Further details on our methodology for Custom Initiative sampling are provided in Appendix A.

Table 38. 2025 New Construction Lighting Channel Electric Energy Savings

Wave	Ex Ante Gross Savings (MWh)	Gross Realization Rate	Verified Gross Savings (MWh)	NTGR	Verified Net Savings (MWh)
New Construction Lighting	2,012	109%	2,186	0.905	1,977

Table 39. 2025 New Construction Lighting Channel Electric Demand Savings

Wave	Ex Ante Gross Savings (MW)	Gross Realization Rate	Verified Gross Savings (MW)	NTGR	Verified Net Savings (MW)
New Construction Lighting	0.42	105%	0.44	0.905	0.40

²¹ Cochran, William Gemmill. Sampling Techniques. John Wiley & Sons, 1977.

²² Levy, Paul S., and Stanley Lemeshow. Sampling of Populations: Methods and Applications. John Wiley & Sons, 2008.

3.2.6 CUMULATIVE PERSISTING ANNUAL SAVINGS

Table 40 presents CPAS and WAML for the 2025 Custom Initiative by channel. The table also includes a summary of the total verified gross savings for the Initiative and channels, as well as CPAS in each year from 2025 to 2028.²³ The WAML for the Custom Initiative is 22.4 years, and the WAML for the Custom Incentives and New Construction Lighting channels are 22.6 years and 15.3 years, respectively.

Table 40. 2025 Custom Initiative CPAS and WAML

Channel	WAML	Annual Verified Gross Savings (MWh)	NTGR	CPAS – Verified Net Savings (MWh)							Lifetime Savings (MWh)
				2025	2026	2027	2028	...	2030	...	
Custom Incentives	22.6	77,981	0.762	59,408	59,408	59,408	59,408	...	59,408	...	1,341,485
New Construction Lighting	15.3	2,186	0.905	1,977	1,977	1,977	1,977	...	1,977	...	30,284
2025 CPAS		80,167	0.766	61,385	61,385	61,385	61,385	...	61,385	...	1,371,769
Expiring 2025 CPAS				0	0	0	0	...	0	...	
Expired 2025 CPAS				0	0	0	0	...	0	...	
WAML	22.4										

²³ For further detail, including achieved CPAS in years not presented in this table, please see the 2025 AIC CPAS and AAIG Workbook.

3.2.7 CONCLUSIONS AND RECOMMENDATIONS

Based on the results of this evaluation, the evaluation team offers the following key findings and recommendations for the Custom Initiative moving forward:

CUSTOM INCENTIVES CHANNEL

- **Finding #1:** Discrepancies between the verified inputs applied by the evaluation team and the ex ante inputs applied by the implementation team had a significant impact on the realization rates for several projects. In some cases, the evaluation team identified discrepancies through a review of the project documentation. In other cases, the evaluation team updated ex ante assumptions after reviewing trend data or conducting customer interviews.
- **Recommendation:** The evaluation team recommends the implementation team leverage trend data where available to confirm ex ante assumptions. Additionally, we recommend confirming key assumptions with customers prior to final application approval. Lastly, we recommend reviewing quality control procedures to ensure key inputs are verified against project documentation.
- **Finding #2:** Two different ex ante peak demand savings methodologies were applied in the HVAC controls projects reviewed by the evaluation team. In three of the six projects with evaluated electric savings, the implementation team assumed zero peak demand savings, and in the other three projects the implementation team calculated peak demand savings equivalent to non-coincident average demand savings (annual electric energy savings divided by 8760 hours per year). Neither approach correctly considers the average savings during the IL-TRM-defined summer peak demand period (1:00 PM – 5:00 PM on non-holiday weekdays, June through August).
- **Recommendation:** As a result of recent legislation, the accuracy of peak demand savings estimates will increase in importance going forward. We recommend that the implementation team adopt consistent methodologies for peak demand savings for HVAC controls projects.
- **Finding #3:** The ex ante savings for six HVAC controls projects were developed using engineering calculations. Four of these projects have realization rates below 90% for electric and/or gas savings, with a low of 19% (project 2500065). In addition, the approach and level of rigor varied within the projects using engineering calculations.
- **Recommendation:** While regression analysis is often the most accurate approach for quantifying the savings from controls projects, the evaluation team recognizes that it may not be practical for the implementation team to use regression analyses in all cases due to the need to collect several months to a year of treatment period meter data. Therefore, engineering calculations will continue to be a necessary approach for some projects. If the implementation team expects the number of HVAC controls-related projects to increase in the coming years, the evaluation team recommends the implementation team consider developing Excel-based example 8760 calculations to promote consistent calculation approaches among its trade allies, and offering training on standards for HVAC control project calculations in its regular trade ally events.
- **Recommendation:** The evaluation team recommends that the implementation team regularly perform post-project inspections of control projects to verify that control settings were implemented as proposed, and to adjust calculations, as necessary, based on the findings. Many inspections can be done virtually through screen sharing of the BAS interface.
- **Finding #4:** The ex ante savings for three HVAC controls projects were developed, in part, using pre- and post-meter comparisons.
- **Recommendation:** While the evaluation team supports the incorporation of meter data into savings calculations for HVAC controls projects, the evaluation team recommends using regression modeling to the extent possible

to better control for differing weather conditions in the baseline and treatment periods, and other project-specific parameters as needed, rather than relying on simplified pre- and post-meter comparisons.

- **Finding #5:** Two fuel-switching projects were completed in 2025. The evaluation team separated these projects into their own sample frame to account for the unique characteristics of these projects
 - **Recommendation:** We recommend that the implementation and evaluation teams continue to coordinate on potential fuel-switching projects, including through the early review process, prior to the next evaluation to discuss how to appropriately estimate savings for these types of projects. In addition, the implementation and evaluation teams should collaborate to ensure discussions are brought to the Illinois Technical Advisory Committee, as applicable, and that any updates that may need to be made to the IL-TRM are submitted for review as part of the V15.0 development process.
- **Finding #6:** The evaluation team found relatively low realization rates for electric and gas savings across the three new construction projects evaluated this cycle. Realization rates for the three projects were 81% (project 2101292), 68% (project 2400054), and 60% (project 2300018). The lower verified savings were primarily the result of discrepancies between as-built parameters and modeled parameters, leading to overstated ex ante savings claims for some measures and the removal of one measure from the verified savings that was not in the as-built design. In addition, in one project, two measures were found to be prescriptive code requirements and thus ineligible for savings claims
 - **Recommendation:** The evaluation team recommends that the implementation team review its quality control process for new construction projects. As part of its technical reviews, the team should consider reviewing the largest energy savings measures in each project to confirm measure eligibility and ensure that modeled parameters match the as-built parameters.

NEW CONSTRUCTION LIGHTING CHANNEL

- **Finding #1:** Discrepancies between the verified input applied by the evaluation team and the ex ante inputs applied by the implementation team had a significant impact on the realization rate of three of the five sampled New Construction Lighting (NCL) projects (2500085, 2500418, and 2500420). In some cases, the evaluation team identified discrepancies through a review of the project documentation. In other cases, the evaluation team updated ex ante assumptions after conducting customer interviews.
 - **Recommendation:** The evaluation team recommends that the implementation team confirm key assumptions such as operating hours with customers prior to final application approval. We also recommend reviewing quality control procedures to ensure that key inputs (e.g., fixture wattages) are verified against project documentation.

3.3 RETRO-COMMISSIONING INITIATIVE

3.3.1 INITIATIVE DESCRIPTION

The RCx Initiative helps AIC business customers evaluate their existing mechanical equipment and energy management systems to identify no-cost and low-cost efficiency measures to optimize existing energy-using systems.

Over time, deferred maintenance and changing operating directives and practices can lead to inefficient operation of building systems. Retro-commissioning is a process that examines current equipment operations relative to the needs of equipment owners and those served by the equipment, and determines opportunities for increasing equipment

efficiency through maintenance, system tune-ups, scheduling, and optimization of operations. Most of the identified improvement opportunities require little, if any, capital funds to implement.

Major market barriers to RCx include a lack of awareness of improvement opportunities and the cost of the detailed engineering studies required to identify these opportunities. Additionally, customer apathy can inhibit the implementation of recommendations, even when no cost is involved. To address these barriers, the RCx Initiative subsidizes Retro-Commissioning Service Provider (RSP) studies and publicizes the benefits of retro-commissioning to foster a market for the services, with utility-registered RSPs providing the marketing outreach.

The RCx Initiative is grouped into three offerings: the RCx Core channel, the VCx channel, and the Virtual SEM channel. Details on the services provided through the VCx and Virtual SEM channels are provided in Section 3.3.3 and Section 3.3.4, respectively. AIC customers did not complete any RCx Core projects in 2025; therefore, the evaluation team did not include a detailed section on this channel.

Overall, the implementation team set a goal of achieving 6,150 MWh and 21,429 therms of savings through the RCx Initiative in 2025.

3.3.2 INITIATIVE ANNUAL SAVINGS SUMMARY

Table 41 presents the RCx Initiative annual savings achieved in 2025. The 2025 RCx Initiative achieved 5,679 MWh in verified net savings.

Table 41. 2025 Retro-Commissioning Initiative Annual Savings

	Electric Energy Savings (MWh)	Electric Demand Savings (MW)	Gas Savings (Therms)
Ex Ante Gross Savings	6,042	0	0
Gross Realization Rate	98%	N/A	N/A
Verified Gross Savings	5,950	0	0
NTGR	0.954	N/A	N/A
Verified Net Savings	5,679	0	0

3.3.3 VIRTUAL COMMISSIONING CHANNEL

The following sections present the impact evaluation results for the 2025 VCx channel. Additional details on the impact analysis methodology are provided in Appendix A.

CHANNEL DESCRIPTION

Virtual Commissioning is an approach that remotely targets the traditionally hard-to-reach customer segment of small and medium business (SMB) customers, as well as public sector customers, to support low- and no-cost energy-saving measures. The VCx approach leverages Advanced Metering Infrastructure (AMI) data to support targeted insights for these customers through the design, implementation, and evaluation phases of the channel.

The implementation team uses proprietary software to complete an initial analysis of AMI data for AIC’s SMB and public sector customers to identify prospective participants. They then use the outcomes of this analysis to identify opportunities for low- and no-cost energy-saving improvements at prospective participants’ facilities. These opportunities commonly include modifications to HVAC system settings and lighting scheduling adjustments.

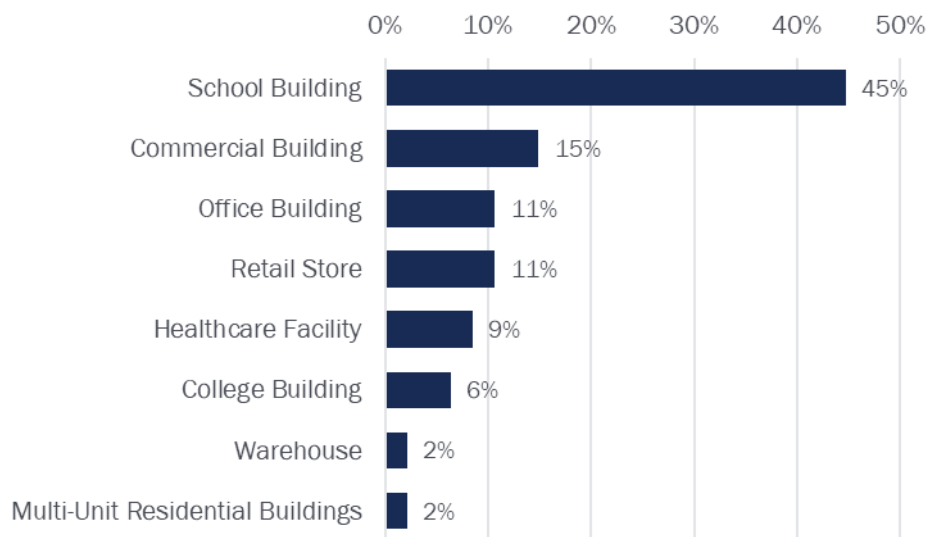
Energy advisors from the implementation team contact potential participants to share the analysis results, confirm the energy-saving opportunities, verify facility characteristics, and recommend energy-saving improvements. After participants implement the recommended changes, the implementation team develops individual, facility-level regression models using the participants' pre- and post-participation energy consumption to estimate savings. The models must meet certain criteria for robustness for savings to be claimed.²⁴ If a project demonstrates continued savings for three months and meets the model robustness criteria, annualized savings can be claimed for the project.

VCx operates using a pay-for-performance delivery model. The channel focuses on achieving savings goals by serving customers with a high potential to save energy rather than on enrolling a target number of customers to participate in the channel. The energy advisors also provide contact information and referrals the program staff leading AIC's other Business Program initiatives can use to support lead generation for these offerings.

PARTICIPATION SUMMARY

The VCx channel had 47 participants (i.e., unique sites) in 2025. This is more than double the number of sites that participated in 2024, though the total electric energy savings across all the projects is similar to the total savings achieved in 2024. All VCx participants adjusted their HVAC system setpoints, HVAC equipment, and/or HVAC system scheduling. Two projects also included adjustments to lighting scheduling. In 2025, the most common facility type served through the VCx channel were school buildings (Figure 2).

Figure 2. 2025 Virtual Commissioning Participation by Facility Type



SAVINGS DETAIL

Table 42 presents the ex ante, verified gross, and verified net electric energy savings achieved through the VCx channel in 2025. The 2025 VCx channel achieved 4,212 MWh in verified net electric energy savings after adjusting for cross-participation and free ridership. When comparing the implementation and evaluation teams' gross estimated savings,

²⁴ These criteria are specified in AIC's Virtual Commissioning M&V Plan authored by Power TakeOff and are as follows: the normalized savings uncertainty must be below 50% at 68% confidence; the absolute value of normalized mean bias error (NMBE) must be below 0.5%; and the coefficient of variation of root mean square error [CV(RMSE)] must be below 25%. CV(RMSE) and NMBE are both metrics of how well a regression model explains or fits the data.

the realization rate is 99%. AIC did not claim demand savings or gas savings from VCx in 2025. Savings are only presented at the channel level, as VCx is a single-measure channel.

Table 42. 2025 Virtual Commissioning Channel Annual Savings

	Electric Energy Savings (MWh)
Ex Ante Gross Savings ^a	4,507
Gross Realization Rate	99%
Verified Gross Savings ^a	4,483
NTGR	0.939
Verified Net Savings	4,212

^a Gross savings have been adjusted for cross-program participation

The main source of discrepancy between the ex ante and verified savings estimates is that the implementation team modeled savings for seven sites without weather interaction terms. The evaluation team included weather interaction terms for these sites. The evaluation team noted that 100% of VCx sites in 2025 received HVAC interventions, and 4% (two of 47) also adjusted their lighting schedules. In contrast, 25% (five of 20) of sites in 2024 included only adjustments to lighting schedules. Given the increased importance of weather-sensitive interventions in 2025, the evaluation team included weather interaction terms in all the site models. This reduced the savings uncertainty for all VCx sites compared to the ex ante estimates developed without weather interaction terms (see Table 93 in Appendix A). Moreover, we curtailed the post-period for one project to minimize the need for cross-participation adjustments.

3.3.4 VIRTUAL STRATEGIC ENERGY MANAGEMENT CHANNEL

The following sections present the impact evaluation results for the 2025 Virtual SEM channel. Additional details on the impact analysis methodology are provided in Appendix A.

CHANNEL DESCRIPTION

Virtual SEM is designed in accordance with the Consortium for Energy Efficiency’s minimum elements for effective SEM and seeks to educate participants and enable them to manage their facility’s energy usage holistically.²⁵ The implementation team targets customers previously engaged through the VCx channel who withdrew before implementation. Once participants enroll in the channel, the implementation team conducts an energy audit of the customer’s facility to identify all available low- and no-cost operational, maintenance, and behavioral improvement opportunities. The team then works with facility staff to develop an energy improvement plan. Participants receive the training, tools, and resources they need to develop and implement their continuous energy improvement plan.

PARTICIPATION SUMMARY

Six participants completed energy-saving improvements through the Virtual SEM channel in 2025. This is a 50% increase compared to the four participants in 2024. The 2025 participants adjusted their HVAC system setpoints, HVAC equipment, and/or HVAC system scheduling.

²⁵ CEE. *CEE Strategic Energy Management Minimum Elements*. 2024. Accessed at: <https://semhub.com/resources>.

SAVINGS DETAIL

Table 43 presents the ex ante, verified gross, and verified net electric energy savings achieved through the Virtual SEM channel in 2025. The 2025 Virtual SEM channel achieved 1,468 MWh in verified net electric energy savings after adjusting for cross-participation. This represents a 77% increase over 2024 savings. When comparing the implementation and evaluation teams' estimated savings, the gross realization rate is 96%. AIC did not claim demand savings or gas savings from Virtual SEM in 2025. Savings are only presented at the channel level, as Virtual SEM is a single-measure channel.

Table 43. 2025 Virtual Strategic Energy Management Channel Annual Savings

	Electric Energy Savings (MWh)
Ex Ante Gross Savings ^a	1,535
Gross Realization Rate	96%
Verified Gross Savings ^a	1,468
NTGR	1,000
Verified Net Savings	1,468

^a Gross savings have been adjusted for cross-program participation

We identified two main sources of discrepancies between the ex ante and verified savings estimates. The implementation team did not include weather interaction terms in the ex ante models for four sites. The evaluation team included weather interaction terms in all the site models since the interventions were weather sensitive, and these additions typically reduced savings uncertainty (see Table 96 in Appendix A). In addition, the evaluation team updated baseline and reporting start and end dates based on implementation logs for two projects. Two projects' baseline period end dates were later than their earliest implementation dates, while another project's reporting period start date was before the latest implementation date. This difference resulted in a 'ramp-up' phase in the ex ante post-period, during which interventions were implemented over several months. By excluding this ramp-up phase, the evaluation team ensured the post-period only reflected when all interventions were in place, allowing for a more accurate estimate of total savings produced through the Virtual SEM project.

3.3.5 CUMULATIVE ANNUAL PERSISTING SAVINGS

Table 44 presents CPAS and WAML for the 2025 RCx Initiative by channel. The table summarizes the total verified gross savings for the Initiative and channels, as well as CPAS in each year from 2025 to 2028.²⁶ The WAML for the Retro-Commissioning Initiative is 7.2 years, and the WAML for the VCx and Virtual SEM channels are 7.3 years and 7.0 years, respectively.

Table 44. 2025 Retro-Commissioning Initiative CPAS and WAML

Channel	Measure Life	Annual Verified Gross Savings (MWh)	NTGR	CPAS – Verified Net Savings (MWh)							Lifetime Savings (MWh)
				2025	2026	2027	2028	...	2030	...	
VCx	7.3	4,483	0.939	4,212	4,212	4,212	4,212	...	4,212	...	30,745
Virtual SEM	7.0	1,468	1.000	1,468	1,468	1,468	1,468	...	1,468	...	10,273
2025 CPAS		5,950	0.954	5,679	5,679	5,679	5,679	...	5,679	...	41,017
Expiring 2025 CPAS				0	0	0	0	...	0	...	
Expired 2025 CPAS				0	0	0	0	...	0	...	
WAML	7.2										

²⁶ For further detail, including achieved CPAS in years not presented in this table, please see the 2025 AIC CPAS and AAIG Workbook.

3.3.6 CONCLUSIONS AND RECOMMENDATIONS

Based on the evaluation results, the evaluation team offers the following key findings and recommendations for the RCx Initiative:

VIRTUAL COMMISSIONING CHANNEL

- **Finding #1:** The implementation team included weather interactions for the majority of projects in 2025. However, seven sites had weather-sensitive interventions for which the implementation team's models did not include weather interactions. Historically, the implementation team has expressed that including weather interactions in the ex ante models is not always practical from an implementation perspective due to the need to provide timely savings estimates to participating facilities. The evaluation team acknowledges these considerations but applied weather interactions in all verified models for sites with HVAC interventions, given the increased importance of weather-sensitive measures in 2025 and the fact that the addition of these terms reduced savings uncertainty.

VIRTUAL STRATEGIC ENERGY MANAGEMENT CHANNEL

- **Finding #1:** All six 2025 Virtual SEM projects had less than one year of post-period data. Lack of a balanced representation of each month in the pre- and post-period data makes it difficult to control site-specific seasonal patterns in energy consumption.
 - **Recommendation:** To reduce evaluation uncertainty, the evaluation team recommends claiming savings for a participant once post-period consumption data covering a full year (or most of a year) becomes available. If this is prohibitive, the evaluation team recommends that the implementation team suggest a methodology to account for site-specific seasonal energy consumption patterns.
- **Finding #2:** Based on a review of the implementation logs, it is evident that Virtual SEM projects include a broad set of interventions. The interventions are often implemented in multiple stages and over a long period of time. Individually, each intervention is expected to produce different magnitudes of energy savings, with these savings accumulating over time as each is implemented. In this context, defining an appropriate pre- and post-period is challenging but crucial.
 - **Recommendation:** The evaluation team recognizes the trade-offs the implementation team faces between capturing savings of interventions and providing timely savings estimates to participants and AIC. However, to accurately estimate savings from all Virtual SEM interventions, the evaluation team recommends removing implementation ramp-up periods from the analysis.

3.4 STREETLIGHTING INITIATIVE

3.4.1 INITIATIVE DESCRIPTION

The AIC Streetlighting Initiative, launched in 2018, encourages the replacement of streetlighting using high-pressure sodium (HPS) and mercury vapor (MV) lighting with energy-efficient LED technology. High-intensity discharge lighting, specifically HPS, is still the standard technology used for streetlighting in the United States. The implementation team targets streetlighting upgrades through the Municipality-Owned Streetlighting (MOSL) and Utility-Owned Streetlighting (UOSL) channels, described in more detail in subsequent sections.

Overall, the implementation team set a goal of achieving 5,779 MWh of savings through the Streetlighting Initiative in 2025.

3.4.2 INITIATIVE ANNUAL SAVINGS SUMMARY

Table 45 presents the Streetlighting Initiative annual savings achieved in 2025. The 2025 Streetlighting Initiative achieved 7,579 MWh in verified net savings. Streetlighting with standard operating hours does not produce any demand savings and all evaluated measures in 2025 were determined to be under standard operation. Therefore, AIC did not claim any demand savings for the Streetlighting Initiative, and the evaluation team did not calculate any verified demand savings.

Table 45. 2025 Streetlighting Initiative Annual Savings

	Electric Energy Savings (MWh)	Electric Demand Savings (MW)	Gas Savings (Therms)
Ex Ante Gross Savings	7,579	0	0
Gross Realization Rate	100%	N/A	N/A
Verified Gross Savings	7,579	0	0
NTGR	1.000	N/A	N/A
Verified Net Savings	7,579	0	0

3.4.3 MUNICIPALITY-OWNED STREETLIGHTING CHANNEL

The following sections present the impact evaluation results for the 2025 MOSL channel. Additional details on the impact analysis methodology are provided in Appendix A.

CHANNEL DESCRIPTION

Through the MOSL channel, AIC targets municipal customers who own their streetlighting fixtures. Incentives are provided to encourage these customers to replace existing streetlights (typically HPS and MV) with LED streetlights.

SAVINGS DETAIL

In total, the channel incentivized the installation of 80 measures in two municipalities. Table 46 presents the ex ante, verified gross, and verified net electric energy savings achieved through the MOSL channel in 2025.

Table 46. 2025 Municipality-Owned Streetlighting Channel Electric Energy Savings by Measure

Measure Category	Electric Energy Savings (MWh)	Gross Realization Rate	Electric Demand Savings (MWh)	NTGR	Verified Net Savings (MWh)
MOSL (HPS Baseline)	79	100%	79	1.000	79
Total	79	100%	79	1.000	79

3.4.4 UTILITY-OWNED STREETLIGHTING CHANNEL

The following sections present the impact evaluation results for the 2025 UOSL channel. Additional details on the impact analysis methodology are provided in Appendix A.

CHANNEL DESCRIPTION

Through the UOSL channel, AIC targets municipal customers with AIC-owned streetlighting fixtures. Early replacement of functioning HPS and MV streetlights with LED streetlights is available to customers through the Initiative for a per-fixture fee. The channel incentivizes customers to request early replacement of these fixtures and provides an incentive to decrease the per-fixture cost of the replacement for customers. In addition, through this channel, AIC claims savings from the ongoing replacement of existing AIC-owned HPS streetlighting with LED streetlights upon burnout (ROB).

SAVINGS DETAIL

In total, the channel incentivized the installation of 10,924 measures across 215 projects. Table 47 presents the ex ante, verified gross, and verified net electric energy savings achieved through the UOSL channel in 2025.

Table 47. 2025 Utility-Owned Streetlighting Channel Electric Energy Savings by Measure

Measure Category	Electric Energy Savings (MWh)	Gross Realization Rate	Electric Demand Savings (MW)	NTGR	Verified Net Savings (MWh)
UOSL (HPS Baseline, AIC ROB)	6,192	100%	6,192	1.000	6,192
UOSL (HPS Baseline)	803	100%	803	1.000	803
UOSL (MV Baseline)	504	100%	504	1.000	504
Total	7,500	100%	7,500	1.000	7,500

3.4.5 CUMULATIVE PERSISTING ANNUAL SAVINGS

Table 48 through Table 50 present CPAS and WAML for the 2025 Streetlighting Initiative by channel. The tables also include a summary of the measure-specific and total verified gross savings for the Initiative and respective channels, as well as CPAS in each year for 2025–2028.²⁷ The WAML for the Streetlighting Initiative is 20.0 years.

Table 48. 2025 Streetlighting Initiative CPAS and WAML

Channel	WAML	Annual Verified Gross Savings (MWh)	NTGR	CPAS – Verified Net Savings (MWh)							Lifetime Savings (MWh)
				2025	2026	2027	2028	...	2030	...	
MOSL	20.0	79	1.000	79	79	79	79	...	79	...	1,580
UOSL	20.0	7,500	0.965	7,238	7,238	7,238	7,238	...	7,238	...	145,538
2025 CPAS		7,579	1.000	7,579	7,579	7,579	7,317	...	7,317	...	147,119
Expiring 2025 CPAS				0	0	0	262	...	0	...	
Expired 2025 CPAS				0	0	0	262	...	262	...	
WAML	20.0										

Table 49. 2025 Municipality-Owned Streetlighting Channel CPAS and WAML

Measure	Measure Life	Annual Verified Gross Savings (MWh)	NTGR	CPAS – Verified Net Savings (MWh)							Lifetime Savings (MWh)
				2025	2026	2027	2028	...	2030	...	
MOSL (HPS Baseline)	20.0	79	1.000	79	79	79	79	...	79	...	1,580
2025 CPAS		79	1.000	79	79	79	79	...	79	...	1,580
Expiring 2025 CPAS				0	0	0	0	...	0	...	
Expired 2025 CPAS				0	0	0	0	...	0	...	
WAML	20.0										

²⁷ For further detail, including CPAS in years not presented in this table, please see the 2025 CPAS and AAIG Workbook.

Table 50. 2025 Utility-Owned Streetlighting Channel CPAS and WAML

Measure	Measure Life	Annual Verified Gross Savings (MWh)	NTGR	CPAS – Verified Net Savings (MWh)							Lifetime Savings (MWh)
				2025	2026	2027	2028	...	2030	...	
UOSL (HPS Baseline, AIC ROB)	20.0	6,192	1.000	6,192	6,192	6,192	6,192	...	6,192	...	123,839
UOSL (HPS Baseline)	20.0	803	1.000	803	803	803	803	...	803	...	16,069
UOSL (MV Baseline)	20.0	504	1.000	504	504	504	242	...	242	...	5,630
2025 CPAS		7,500	1.000	7,500	7,500	7,500	7,238	...	7,238	...	145,538
Expiring 2025 CPAS				0	0	0	262	...	0	...	
Expired 2025 CPAS				0	0	0	262	...	262	...	
WAML	20.0										

3.4.6 CONCLUSIONS AND RECOMMENDATIONS

Based on the results of this evaluation, the evaluation team offers the following key findings for the Streetlighting Initiative:

- **Finding #1:** The evaluation team observed that all ex ante savings calculations were performed correctly, and the implementation team provided the necessary backup documentation to support the verification of these savings. As such, the realization rate for the Initiative is 100%.

3.5 SMALL BUSINESS INITIATIVE

3.5.1 INITIATIVE DESCRIPTION

The primary objective of the Small Business Initiative is to deliver energy savings to small commercial and industrial customers by increasing access to energy-efficient products through financial and technical support. The Initiative targets private and public facilities through two channels that work in tandem to provide a comprehensive suite of offerings:

- **Small Business Direct Install (SBDI) channel:** The SBDI channel is available to all small nonresidential facilities in AIC's service territory and focuses on rapidly deployable lighting and refrigeration measures. The SBDI channel is the primary driver of the Small Business Initiative electric savings.
- **Small Business Energy Performance (SBEP) channel:** The SBEP channel targets facilities located in economically disadvantaged areas. This channel focuses on building envelope upgrades, HVAC improvements, and other non-SBDI measures supported by participating Program Allies.

Both channels leverage a network of Program Allies to coordinate and install the incentivized measures in participating facilities. These Program Allies specialize in serving small businesses, nonprofit organizations, schools, and local governments. Many projects are fully funded through channel incentives and require no out-of-pocket contribution from the customer. The low-touch, high-impact measures incentivized through the SBDI channel, combined with the customized, deeper retrofits incentivized through the SBEP channel, offer customers in this segment an opportunity to comprehensively upgrade their facilities.

Overall, the implementation team set a goal of achieving 37,667 MWh and 32,553 therms of savings through the Small Business Initiative in 2025.

3.5.2 INITIATIVE ANNUAL SAVINGS SUMMARY

Table 51 presents the Small Business Initiative annual savings achieved in 2025. The 2025 Small Business Initiative achieved 48,858 MWh, 9.35 MW, and 18,210 therms in verified net savings. The Initiative also produced 13,570 therms in verified net gas savings in 2025 that are not directly claimable by AIC because the customers do not receive gas service from AIC. These savings are detailed further in Appendix B .

Table 51. 2025 Small Business Initiative Annual Savings

	Electric Energy Savings (MWh)	Electric Demand Savings (MW)	Gas Savings (Therms)
Ex Ante Gross Savings	43,088	8.22	17,514
Gross Realization Rate	99%	100%	104%
Verified Gross Savings	42,864	8.20	18,210
NTGR	1.140	1.139	1.000
Verified Net Savings	48,858	9.35	18,210

3.5.3 SMALL BUSINESS DIRECT INSTALL CHANNEL

The following sections present the impact evaluation results for the 2025 SBDI channel. Additional details on the impact analysis methodology are provided in Appendix A.

CHANNEL DESCRIPTION

The SBDI channel provides small nonresidential customers with electric energy savings opportunities by offering a free energy assessment and a streamlined process for installing incentivized measures. Eligible customers receive an on-site assessment and report outlining recommended measures, estimated project costs, estimated energy savings, and estimated bill savings. The customer then selects the package of measures they wish to have installed. All measures must be installed by qualified Program Allies, and incentives are paid directly to Program Allies, enabling a streamlined transaction at the time of installation with zero or minimal out-of-pocket costs for customers.

Program Allies conduct most of the customer outreach activities for the channel, either through their own marketing efforts or direct conversations with prospective participants. Initiative staff support the allies through co-branding marketing materials, hosting community events and webinars, targeted customer outreach through email/mailed campaigns, partnerships with local chambers of commerce and other community-based organizations, and maintaining a Small Business landing page on the AIC Energy Efficiency website. The Business Program Energy Advisors contribute to recruitment efforts by conducting ad hoc outreach, including visiting organizations in their region that have not participated in the Initiative.

Small Business Initiative staff continue to partner with AIC Market Development Initiative staff to identify diverse contractors and train them to participate in the SBDI channel. Initiative staff provide allies with training and documentation for best practices for completing projects. In addition, Initiative staff engage Program Allies on their workforce development needs to help them expand their services and overall business through job placements, scholarships, seasonal employment, and training.

PARTICIPATION SUMMARY

Table 52 presents a summary of participation in the SBDI channel in 2025. We present these data separated by public and private sector customers to provide context as to the primary drivers of participation. AIC customers completed 1,283 unique projects through the channel, encompassing 207,916 incentivized measures. LED bulbs and fixtures accounted for 78% of total measures incentivized in 2025. Lighting controls and fluorescent delamping accounted for the next largest share of incentivized measures at 20% and 1%, respectively.

Table 52. 2025 Small Business Direct Install Channel Participation Summary by Measure

Measure Category	Unique Projects	Measure Quantity	Ex Ante Gross MWh	Ex Ante Gross MW
Private Sector				
LED Bulbs and Fixtures	1,067	126,610	29,408	5.42
Lighting Controls	414	32,163	5,341	1.05
Electronically Commuted Motors (ECM)	54	714	1,118	0.13
Fluorescent Delamping	16	966	120	0.02
Door Heater Controls for Cooler or Freezer	5	98	108	0.01
Evaporator Fan Controls for ECMs	42	95	70	0.01
Commercial LED Exit Signs	48	249	57	0.01
Automatic Door Closer for Walk-In Coolers and Freezers	9	19	20	<0.01
<i>Private Sector Subtotal</i>	<i>1,106</i>	<i>160,914</i>	<i>36,241</i>	<i>6.63</i>
Public Sector^a				
LED Bulbs and Fixtures	169	36,468	4,858	1.12
Lighting Controls	85	9,980	1,321	0.32
Fluorescent Delamping	4	194	32	<0.01
Commercial LED Exit Signs	16	360	24	0.01
<i>Public Sector Subtotal</i>	<i>177</i>	<i>47,002</i>	<i>6,235</i>	<i>1.45</i>
Total	1,283	207,916	42,477	8.08

^a The project counts, measure counts, and ex ante savings values presented in the Private Sector subsection of this table include State and Federal facilities, as these facility types are not included in the list of customer types covered in the public sector minimum funding requirements in subsection (c) of 220 ILCS 5/8-103B and subsection (e) of 220 ILCS 5/8-104.

Figure 3 shows the distribution of SBDI projects by facility type. In 2025, retail, office, and religious facilities were the most common facility types treated through the channel.

Figure 3. 2025 Small Business Direct Install Participation by Facility Type

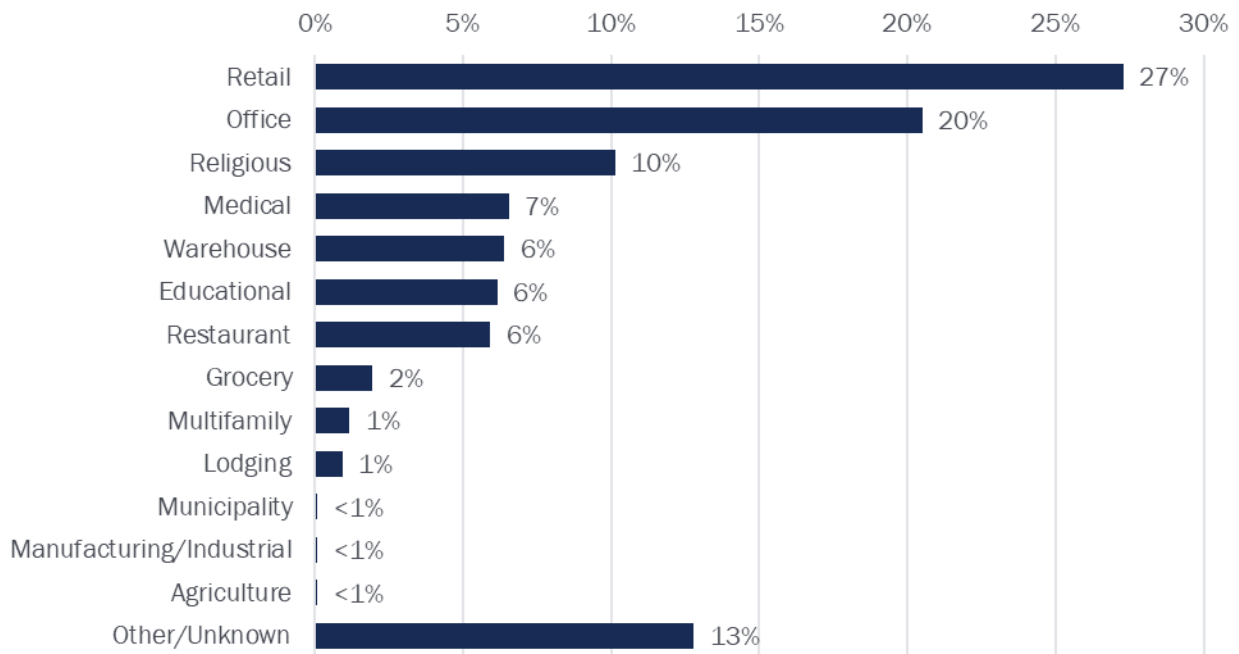


Table 53 presents information on Program Ally engagement in the channel. In total, 102 Program Allies supported projects in the channel in 2025, a 9% increase compared to the 94 program allies in 2024. Table 53 presents information on the five program allies most active in the channel in 2025. Notably, of the 102 active Program Allies, seven supported projects that included refrigeration measures. Of the 54 projects with refrigeration measures, 47 were supported by the same three allies, including 14 projects support by Ally 18 and 11 by Ally 20.

Table 53. 2025 Small Business Direct Install Channel Program Ally Summary

Program Ally	Projects	Share of Total (n=1,283)
Ally 17	235	18%
Ally 18	141	11%
Ally 19	96	7%
Ally 20	60	5%
Ally 21	56	4%

Note: Program Allies were assigned a number to track participation across different channels in the Business Program.

SAVINGS DETAIL

Table 54 presents the ex ante, verified gross, and verified net electric energy savings achieved through the SBDI channel in 2025. The SBDI channel achieved a 100% gross realization rate for electric energy savings. Overall, the channel achieved 42,509 MWh of gross verified savings in 2025, an increase of 21% from 2024. The channel's performance is primarily driven by lighting measures, with 81% of the verified gross electric energy savings for the channel produced through the installation of LED bulbs and fixtures and 17% produced through the installation of

lighting controls. Electronically commutated motors (ECMs) for walk-in and reach-in coolers and freezers were the next largest contributor to electric energy savings at 3%. In addition, savings increased across every measure category compared to 2024, with Lighting Controls (up 122%), ECMs for coolers and freezers (up 97%), and Automatic Door Closers (up 300%) experiencing the most growth. Lastly, Door Heater Controls were not incentivized in 2024 but accumulated 108 MWh of verified gross savings in 2025.

Table 54. 2025 Small Business Direct Install Channel Electric Energy Savings by Measure

Measure Category	Ex Ante Gross Savings (MWh)	Gross Realization Rate	Verified Gross Savings (MWh)	NTGR	Verified Net Savings (MWh)
LED Bulbs and Fixtures	34,266	100%	34,262	1.141	39,093
Lighting Controls	6,661	100%	6,662	1.141	7,601
ECMs for Coolers/Freezers	1,118	100%	1,118	1.141	1,276
Fluorescent Delamping	144	100%	144	1.141	164
Door Heater Controls	108	100%	108	1.141	124
Commercial LED Exit Signs	89	100%	89	1.141	102
Evaporator Fan Control for ECMs	70	100%	70	1.141	80
Automatic Door Closer	20	281%	56	1.141	64
Total	42,477	100%	42,509	1.141	48,503

Table 55 presents the ex ante, verified gross, and verified net electric demand savings achieved through the SBDI channel in 2025. The SBDI channel achieved a 100% gross realization rate for electric demand savings. Overall, the channel achieved 8.10 MW of verified gross demand savings in 2025, an increase of over 40% from 2024. LED bulbs and fixtures produced 81% of the channel’s verified gross demand savings, followed by lighting controls and ECMs for walk-in and reach-in coolers and freezers (17% and 2% of savings, respectively). In addition, verified gross savings increased for these three measures compared to 2024, with savings from LED Bulbs and Fixtures up 31%, Lighting Controls up 125%, and ECMs for Coolers and Freezers up 117%.

Table 55. 2025 Small Business Direct Install Channel Electric Demand Savings by Measure

Measure Category	Ex Ante Gross Savings (MW)	Gross Realization Rate	Verified Gross Savings (MW)	NTGR	Verified Net Savings (MW)
LED Bulbs and Fixtures	6.54	100%	6.54	1.141	7.47
Lighting Controls	1.37	100%	1.37	1.141	1.56
ECMs for Coolers/Freezers	0.13	100%	0.13	1.141	0.15
Fluorescent Delamping	0.02	100%	0.02	1.141	0.03
Door Heater Controls	0.01	100%	0.01	1.141	0.01
Commercial LED Exit Signs	0.01	100%	0.01	1.141	0.01
Evaporator Fan Control for ECMs	0.01	100%	0.01	1.141	0.01
Automatic Door Closer	<0.01	435%	0.01	1.141	0.01
Total	8.08	100%	8.10	1.141	9.24

We discuss significant discrepancies between ex ante claims and the verified analysis below.

- **Automatic Door Closer** (<1% of ex ante electric energy savings and <1% of demand savings): The gross realization rates for Automatic Door Closers is 281% for electric energy savings and 435% for electric demand savings.
 - For all records, the implementation team appears to have applied deemed savings values from IL-TRM V10.0, which are significantly smaller than the deemed values for electric energy and demand savings defined in IL-

TRM V13.0. For coolers, the implementation team applied a deemed savings value of 943 kWh per door instead of the deemed value of 2,399 kWh per door from IL-TRM V13.0. Similarly, the implementation team applied a deemed savings value of 0.137 kW per door instead of the 0.621 kW per door deemed in IL-TRM V13.0. For freezers, the implementation team applied a deemed savings value of 2,307 kWh per door instead of the deemed value of 6,949 kWh per door in IL-TRM V13.0; and 0.309 kW per door instead of 1.300 kW per door. Applying the savings values in IL-TRM V13.0 resulted in increased verified electric energy and demand savings. Example project IDs include: 0250332, 0250402, 0250842, 0251150, -0251457, 0251817, and 0251820.

3.5.4 SMALL BUSINESS ENERGY PERFORMANCE CHANNEL

The following sections present the impact evaluation results for the 2025 SBEP channel. Additional details on the impact analysis methodology are provided in Appendix A.

CHANNEL DESCRIPTION

The SBEP channel targeted nonresidential customers in economically disadvantaged areas, including schools, municipal buildings, and other nonprofit organizations. The eligible measures included building envelope upgrades, HVAC improvements, and other non-SBDI measures. In 2025, most completed projects comprised of air-sealing facility building envelopes. Similar to the SBDI channel, the services delivered through the SBEP channel are provided at zero or minimal out-of-pocket cost to the customer, qualified Program Allies must install all measures, and incentives are paid directly to the Program Allies to enable a streamlined transaction at the time of installation. A key focus of channel staff continues to be building out the Program Ally base for the channel, particularly by adding contractors who can provide the HVAC and weatherization services offered through the program.

PARTICIPATION SUMMARY

Table 56 presents a summary of participation in the SBEP channel by measure in 2025. We present these data separated by public and private sector customers to provide context as to the primary drivers of participation. AIC customers completed 16 unique projects through the channel, with commercial and industrial (C&I) air sealing being the primary driver of channel activity.

Table 56. 2025 Small Business Energy Performance Channel Participation Summary by Measure

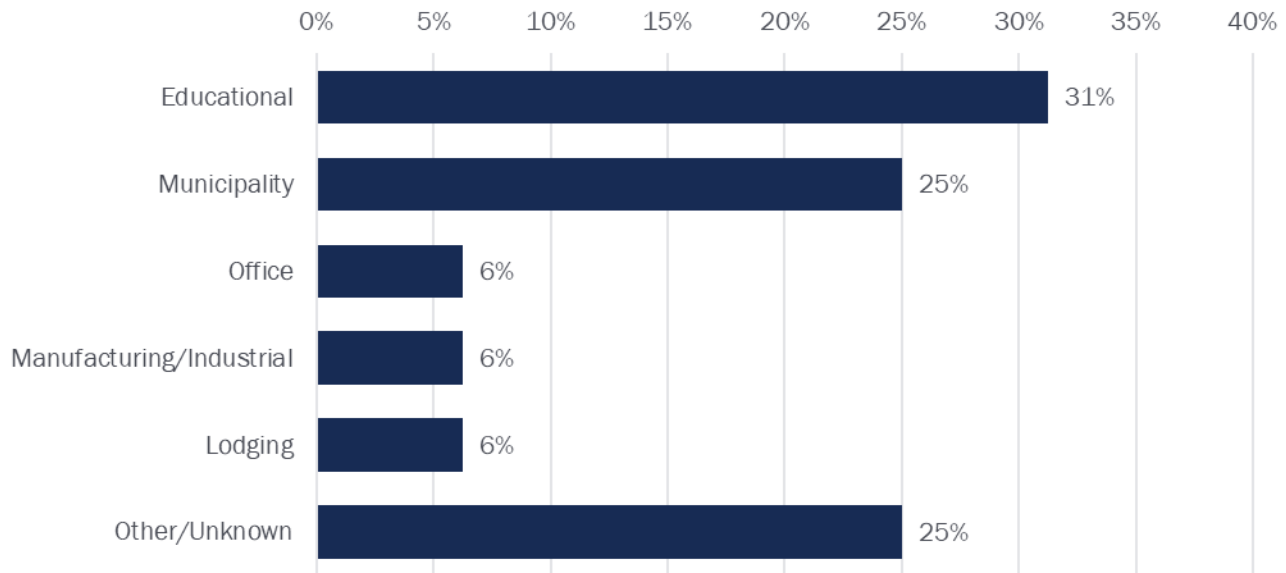
Measure Category	Unique Projects	Measure Quantity (sq. ft)	Ex Ante Gross MWh	Ex Ante Gross MW	Ex Ante Gross Therms
Private Sector					
C&I Air Sealing	2	22,206	107	0.04	9,528
Commercial Wall Insulation	3	25,635	11	<0.01	2,475
<i>Private Sector Subtotal</i>	4	47,841	118	0.04	12,057
Public Sector^a					
C&I Air Sealing	11	34,308	494	0.09	5,362
Roof Insulation for C&I Facilities	1	3,217	<1	0.00	94
<i>Public Sector Subtotal</i>	12	37,525	494	0.09	5,457
Total	16	85,433	612	0.13	17,514

Note: The ex ante therm savings presented in this table only reflect AIC claimable gas savings. Four projects completed through the SBEP channel produced non-AIC gas savings. More information on the savings from these projects is presented in Appendix B.

^a The project counts, measure counts, and ex ante savings values presented in the Private Sector subsection of this table include State and Federal facilities, as these facility types are not included in the list of customer types covered in the public sector minimum funding requirements in subsection (c) of 220 ILCS 5/8-103B and subsection (e) of 220 ILCS 5/8-104.

Figure 4 shows the distribution of SBEP projects by facility type. In 2025, educational and municipal facilities accounted for 56% of projects completed through the channel.

Figure 4. 2025 Small Business Energy Performance Participation by Facility Type



Two Program Allies engaged in the channel in 2025, a decrease from five in 2024. In total, these allies completed two projects compared to the 29 completed in 2024.

SAVINGS DETAIL

Table 57 presents the ex ante, verified gross, and verified net electric energy savings achieved through the SBEP channel in 2025. The SBEP channel achieved a 58% gross realization rate for electric energy savings. Overall, the channel achieved 355 MWh of gross verified savings in 2025, an increase of 55% from 2024. The channel's performance is primarily driven by C&I air sealing measures, which account for 98% of the verified gross savings. The bulk of the remainder of the channel's savings are due to commercial wall insulation measures, which account for 2% of the verified gross savings. A single roof insulation project was completed in 2025, accounting for <1% of verified gross savings.

Table 57. 2025 Small Business Energy Performance Channel Electric Energy Savings by Measure

Measure Category	Ex Ante Gross Savings (MWh)	Gross Realization Rate	Verified Gross Savings (MWh)	NTGR	Verified Net Savings (MWh)
C&I Air Sealing	600	58%	347	1.000	347
Commercial Wall Insulation	11	66%	7	1.000	7
Roof Insulation for C&I Facilities	<1	92%	<1	1.000	<1
Total	612	58%	355	1.000	355

Table 58 presents the ex ante, verified gross, and verified net electric demand savings achieved through the SBEP channel in 2025. The SBEP channel achieved a 78% gross realization rate for electric demand savings. Overall, the

channel achieved 0.10 MW of verified gross demand savings in 2025, a decrease of 9% from 2024. C&I air sealing measures produced well over 99% of the channel’s verified gross demand savings. Some demand savings were also produced from the commercial wall insulation measure (<1%). Roof insulation for C&I facilities did not generate any verified gross demand savings.

Table 58. 2025 Small Business Energy Performance Channel Electric Demand Savings by Measure

Measure Category	Ex Ante Gross Savings (MW)	Gross Realization Rate	Verified Gross Savings (MW)	NTGR	Verified Net Savings (MW)
C&I Air Sealing	0.13	78%	0.10	1.000	0.10
Commercial Wall Insulation	<0.01	100%	<0.01	1.000	<0.01
Total	0.13	78%	0.10	1.000	0.10

Table 59 presents the ex ante, verified gross, and verified net gas savings achieved through the SBEP channel in 2025. The SBEP channel achieved a 104% gross realization rate for gas savings. Overall, the channel achieved 18,210 therms of verified gross gas savings in 2025, a decrease of 6%. Like the verified gross electric energy and electric demand savings, the verified gross gas savings for this channel are primarily generated by the C&I air sealing measure, which accounts for 85% of verified gross gas savings. Despite generating a small proportion of the channel’s electric energy and electric demand savings, the commercial wall insulation measure generated 14% of the channel’s verified gross gas savings. Finally, roof insulation for C&I facilities generated <1% of verified gross gas savings.

Table 59. 2025 Small Business Energy Performance Channel Gas Savings by Measure

Measure Category	Ex Ante Gross Savings (Therms)	Gross Realization Rate	Verified Gross Savings (Therms)	NTGR	Verified Net Savings (Therms)
C&I Air Sealing	14,945	105%	15,649	1.000	15,649
Commercial Wall Insulation	2,475	100%	2,475	1.000	2,475
Roof Insulation for C&I Facilities	94	92%	87	1.000	87
Total	17,514	104%	18,210	1.000	18,210

Note: The savings presented in this table only reflect those directly claimable by AIC. Four additional projects produced non-AIC gas savings. More information on these savings is presented in Appendix B.

We discuss significant discrepancies between ex ante claims and the verified analysis below.

- C&I Air Sealing** (98% of ex ante energy savings, 99% of demand savings, and 85% of gas savings): The gross realization rates for C&I Air Sealing are 58% for electric energy savings, 78% for demand savings, and 105% for gas savings.
 - Some of the records in the Initiative tracking data list the relevant IL-TRM section as 4.8.27. The ex ante savings for these records appear to have been developed using the algorithms outlined in IL-TRM V12.0 as section 4.8.27, which no longer exists in the more current IL-TRM V13.0. The C&I Air Sealing measure has been moved to section 4.8.4 and changes have been made to the energy savings algorithms. Furthermore, for all measures which reference section 4.8.27, the implementation team divided the electric heat savings term (for both electric resistance and heat pump heating) by 1,000 (as is performed for the cooling energy savings) instead of by 3,412 (to convert from Btu to kWh) in their electric energy savings calculations. In addition, the ex ante electric demand savings for measures which reference section 4.8.27 appear to have been developed by dividing the electric energy savings by the coincidence factor (0.913) instead of multiplying by it. The results of these discrepancies vary considerably based on the sub-measure in question (“other crack sealing” versus “single doors”) and the heating fuel for the facility in question (e.g. facilities heated by electricity saw significant decreases to their electric energy savings while facilities heated by natural gas saw their electric energy savings slightly increase). Overall, these discrepancies resulted in decreased verified gross electric energy and verified

gross electric demand savings, but slightly increased verified gross gas savings for this measure (Example project IDs include 2401057, 2401139, 2401639, 2401679, 2401842, 2401844, and 2500043).

- **Commercial Wall Insulation** (2% of ex ante energy savings, <1% of demand savings, and 14% of gas savings): The gross realization rates for Commercial Wall Insulation are 66% for electric energy savings, 100% for demand savings, and 100% for gas savings.
 - For the one project that features an electrically heated facility (2401057), the implementation team incorrectly divided the electric heat savings term by 1,000 (as is performed for the cooling energy savings) instead of 3,412 (to convert from Btu to kWh). This discrepancy resulted in ex ante gross electric energy savings that are nearly three times larger than the verified gross electric energy savings.
- **Roof Insulation for C&I Facilities** (<1% of ex ante energy savings and 1% of gas savings): The gross realization rate for Roof Insulation is 92% for electric energy and gas savings.
 - The discrepancy between the ex ante and verified electric energy and gas savings for the sole project with this measure (2500104) were driven by differences in the existing furnace efficiency assumptions applied by the implementation and evaluation teams. In the ex ante savings calculations, an existing furnace efficiency of 80% was used instead of 78% as defined in section 4.8.1 of IL-TRM V13.0. This discrepancy resulted in slightly lower verified electric energy and gas savings for this measure. In addition, the evaluated team noted that the initiative tracking data listed an original insulation R-Value of 1; however, both the implementation and evaluation teams applied the default TRM baseline value of 13.5 in the savings calculations.

3.5.5 CUMULATIVE PERSISTING ANNUAL SAVINGS

Table 60 through Table 62 present CPAS and WAML for the 2025 Small Business Initiative by channel. The tables also include a summary of the measure-specific and total verified gross savings for the Initiative and respective channels, as well as CPAS in each year for 2025–2028.²⁸ The WAML for the SBDI and SBEP channels are 13.5 years and 20.1 years, respectively.

Table 60. 2025 Small Business Initiative CPAS and WAML

Channel	WAML	Annual Verified Gross Savings (MWh)	NTGR	CPAS – Verified Net Savings (MWh)							Lifetime Savings (MWh)
				2025	2026	2027	2028	...	2030	...	
SBDI	13.5	42,509	1.141	48,503	48,503	48,313	47,245	...	45,886	...	628,193
SBEP	20.1	355	1.000	355	355	355	355	...	355	...	7,127
2025 CPAS		42,864	1.140	48,858	48,858	48,668	47,600	...	46,240	...	635,320
Expiring 2025 CPAS				0	0	190	1,068	...	505	...	
Expired 2025 CPAS				0	0	190	1,258	...	2,617	...	
WAML	13.6										

²⁸ For further detail, including CPAS in years not presented in this table, please see the *2025 CPAS and AAIG Workbook*.
Opinion Dynamics

Table 61. 2025 Small Business Direct Install Channel CPAS and WAML

Measure	Measure Life	Annual Verified Gross Savings (MWh)	NTGR	CPAS – Verified Net Savings (MWh)							Lifetime Savings (MWh)
				2025	2026	2027	2028	...	2030	...	
LED Bulbs and Fixtures	13.2	34,262	1.141	39,093	39,093	38,903	37,835	...	34,233	...	490,446
Lighting Controls	14.9	6,662	1.141	7,601	7,601	7,601	7,601	...	7,601	...	113,505
ECMs for Walk-in and Reach-in Coolers/Freezers	15.0	1,118	1.141	1,276	1,276	1,276	1,276	...	1,276	...	19,140
Fluorescent Delamping	11.0	144	1.141	164	164	164	164	...	164	...	1,804
Door Heater Controls for Cooler or Freezer	10.0	108	1.141	124	124	124	124	...	124	...	1,240
Commercial LED Exit Signs	5.0	89	1.141	102	102	102	102	...	0	...	510
Evaporator Fan Control for ECMs	13.0	70	1.141	80	80	80	80	...	80	...	1,040
Automatic Door Closers	8.0	56	1.141	64	64	64	64	...	64	...	512
2025 CPAS		42,509	1.141	48,503	48,503	48,313	47,245	...	45,886	...	628,193
Expiring 2025 CPAS				0	0	190	1,068	...	505	...	
Expired 2025 CPAS				0	0	190	1,258	...	2,617	...	
WAML	13.5										

Table 62. 2025 Small Business Energy Performance Channel CPAS and WAML

Measure	Measure Life	Annual Verified Gross Savings (MWh)	NTGR	CPAS – Verified Net Savings (MWh)							Lifetime Savings (MWh)
				2025	2026	2027	2028	...	2030	...	
C&I Air Sealing	20.0	347	1.000	347	347	347	347	...	347	...	6,942
Commercial Wall Insulation	25.0	7	1.000	7	7	7	7	...	7	...	181
Roof Insulation for C&I Facilities	20.0	<1	1.000	<1	<1	<1	<1	...	<1	...	4
2025 CPAS		355	1.000	355	355	355	355	...	355	...	7,127
Expiring 2025 CPAS				0	0	0	0	...	0	...	
Expired 2025 CPAS				0	0	0	0	...	0	...	
WAML	20.1										

3.5.6 CONCLUSIONS AND RECOMMENDATIONS

Based on the results of this evaluation, the evaluation team offers the following key findings and recommendations for the Small Business Initiative moving forward:

SMALL BUSINESS DIRECT INSTALL CHANNEL

- **Finding #1:** The implementation team's ex ante savings for Automatic Door Closers are deemed savings values originating from IL-TRM V10.0.
 - **Recommendation:** We recommend the implementation team update their assumptions to reflect the current version of the IL-TRM. The deemed electric energy savings values would increase by 154% for coolers and 201% for freezers and the deemed electric demand savings would increase by 353% for coolers and 321% for freezers.
- **Finding #2:** The implementation team did not claim any ex ante gas savings for Automatic Door Closer measures. The IL-TRM prescribes deemed natural gas savings of 0.183 therms per cooler door and 0.516 therms per freezer door for customers with natural gas heating.
 - **Recommendation:** We recommend that the implementation team consider collecting gas account information from SBDI participants, as well as heating system type, to support claiming gas savings for projects completed at facilities with natural gas heating.

SMALL BUSINESS ENERGY PERFORMANCE

- **Finding #1:** The ex ante savings for many of the C&I Air Sealing measures were developed using algorithms and assumptions from IL-TRM V12.0 rather than those defined in IL-TRM V13.0. In addition, these calculations contain errors within those outdated algorithms.
 - **Recommendation:** We recommend that the implementation team update the savings calculations for all C&I Air Sealing measures to use the algorithms outlined in the most current version of the IL-TRM. In addition, the team should ensure the algorithms are updated to divide electric heat savings terms by 3,412 (to convert from Btu to kWh) instead of by 1,000 (as is performed for the cooling term). Furthermore, we recommend ensuring that the new demand savings algorithms are programmed to multiply by the coincidence factor instead of dividing by it.
- **Finding #2:** The ex ante electric energy savings for Wall Insulation measures are calculated by dividing the electric heating savings term by 1,000 instead of 3,412 (to convert from Btu to kWh).
 - **Recommendation:** We recommend that the implementation team update their algorithms to ensure they align with the IL-TRM.
- **Finding #3:** The ex ante calculations for Roof Insulation savings do not account for existing insulation R-Values. In addition, they appear to apply an incorrect furnace efficiency assumption and measure lifetime.
 - **Recommendation:** Ensure that savings algorithms for this measure account for the thermal resistance of the existing roof assembly (existing R-Value) and update the furnace efficiency and measure lifetime assumptions in accordance with the IL-TRM.

3.6 MIDSTREAM INITIATIVE

3.6.1 INITIATIVE DESCRIPTION

The Midstream Initiative incentivizes distributors and wholesalers to reduce prices for efficient equipment at the point of sale. The Initiative includes three channels: Midstream Lighting, Midstream HVAC, and Midstream Food Service. The goal is to increase the adoption of high efficiency equipment without requiring the end customer to submit an incentive application. Public sector and nonprofit customers can receive an additional incentive to cover the cost of installation services to install equipment purchased through the HVAC and Lighting channels.

Overall, the implementation team set a goal of achieving 29,808 MWh and 100,480 therms of savings through the Midstream Initiative in 2025.

3.6.2 INITIATIVE ANNUAL SAVINGS SUMMARY

Table 63 presents the Midstream Initiative annual savings achieved in 2025. The 2025 Midstream Initiative achieved 25,258 MWh, 4.73 MW, and 28,385 therms in verified net savings. The Initiative also produced 697 therms in verified net gas savings in 2025 that are not directly claimable by AIC because the customers do not receive gas service from AIC. These savings are detailed further in Appendix B.

Table 63. 2025 Midstream Initiative Annual Savings

	Electric Energy Savings (MWh)	Electric Demand Savings (MW)	Gas Savings (Therms)
Ex Ante Gross Savings	30,080	6.94	34,532
Gross Realization Rate	100%	81%	96%
Verified Gross Savings	30,086	5.65	33,272
NTGR	0.840	0.839	0.853
Verified Net Savings	25,258	4.73	28,385

3.6.3 LIGHTING CHANNEL

The following sections present the impact evaluation results for the 2025 Midstream Lighting channel. Additional details on the impact analysis methodology are provided in Appendix A.

CHANNEL DESCRIPTION

The Midstream Lighting channel provides incentives to participating lighting equipment distributors to reduce the final sale price of equipment for end customers and to encourage distributors to promote higher efficiency equipment. AIC has offered midstream incentives for efficient nonresidential lighting since the 2014–2015 cycle. Initiative staff provide incentives for the sale of linear LED tubes, pin-based bulbs, mogul-based LED lamps, wall packs, and LED exit signs. By providing incentives to distributors, Initiative staff aim to increase the adoption of high efficiency lighting without requiring customers to submit an incentive application.

Distributors are required to pass the full incentive on to the purchaser through a point-of-sale discount. However, participating distributors are eligible to receive bonuses based on their channel activity. To receive incentives, distributors collect equipment and end customer information from contractors and submit the information via an online

Midstream Lighting portal hosted and managed by Leidos.²⁹ Only sales to AIC end customers are eligible to receive channel incentives. Implementation partner Energy Sciences reviews all incoming transaction data for completeness, accuracy, and eligibility. Once a transaction is approved, the incentive is paid to the distributor.

AIC provides cobranded marketing materials to participating distributors, as well as educational materials and training on channel participation requirements. Leidos partners with CMC Energy Services to manage the network of participating distributors. CMC Energy Services provides each distributor with an account manager that helps them troubleshoot issues and increase their channel activity. AIC and Leidos continually recruit new distributors, focusing on reaching those in economically disadvantaged areas.

Summary of Key Implementation Changes

Initiative staff instituted the following design and implementation changes to the Midstream Lighting channel in 2025:

- Removed the controls requirement from the eligibility criteria for wall packs to broaden eligibility.

PARTICIPATION SUMMARY

Table 64 presents a summary of participation in the Midstream Lighting channel in 2025. We present these data separated into public and private sector customers to provide context as to the primary drivers of participation. AIC customers purchased 396,727 units of efficient lighting through the channel, representing a 69% increase compared to 2024. Linear LEDs dominated channel activity, accounting for 97% of all incentivized measures.

Table 64. 2025 Midstream Lighting Channel Participation Summary by Measure

Measure Category	Quantity	Ex Ante Gross MWh	Ex Ante Gross MW
Private Sector			
Linear LEDs	222,825	10,414	2.49
Wall Packs	3,938	3,957	0.83
Moguls	1,729	1,610	0.38
Pin-based LEDs	668	20	<0.01
Exit Signs	11	1	<0.01
<i>Private Sector Subtotal</i>	<i>229,171</i>	<i>16,002</i>	<i>3.70</i>
Public Sector^a			
Linear LEDs	163,001	9,281	2.22
Wall Packs	2,086	2,405	0.47
Moguls	1,550	1,237	0.30
Pin-based LEDs	909	58	0.01
Exit Signs	7	<1	<0.01
<i>Public Sector Subtotal</i>	<i>167,553</i>	<i>12,981</i>	<i>3.00</i>
Total	396,727	28,983	6.70

^a The project counts, measure counts, and ex ante savings values presented in the Private Sector subsection of this table include State and Federal facilities, as these facility types are not included in the list of customer types covered in the public sector minimum funding requirements in subsection (c) of 220 ILCS 5/8-103B and subsection (e) of 220 ILCS 5/8-104.

²⁹ Not all distributors have transitioned to using the portal yet. These distributors submit the necessary information via email.
Opinion Dynamics

Table 65 presents information on distributor engagement in the channel. Forty-one distributors supported projects in the channel in 2025 compared to 42 in 2024. In total, these distributors completed 746 projects. Table 65 presents information on the 10 distributors most active in the channel in 2025.

Table 65. 2025 Midstream Lighting Channel Distributor Engagement Summary

Distributor	Projects	Share of Total (n=748)
Ally 1	300	40%
Ally 2	45	6%
Ally 22	40	5%
Ally 23	38	5%
Ally 24	37	5%
Ally 25	26	3%
Ally 26	25	3%
Ally 27	23	3%
Ally 28	17	2%
Ally 29	16	2%

Note: Program Allies were assigned a number to track participation across different channels in the Business Program. The project counts included in this table are based on project numbers as they are tracked in the Initiative tracking data. For the Midstream Lighting channel, project numbers correspond to invoices; some invoices include a single customer purchase, while others can include several. Therefore, project numbers are used as a proxy for channel activity but may not reflect the true distribution of channel activity among distributors.

SAVINGS DETAIL

Table 66 presents the ex ante, verified gross, and verified net electric energy savings achieved through the Midstream Lighting channel in 2025. The channel achieved a 100% gross realization rate for electric energy savings. Overall, the channel experienced a 13% decrease in verified net electric energy savings compared to 2024. Initiative staff incentivized the same measures in 2025 as in 2024 with Linear LEDs continuing to be the primary driver of electric energy savings, accounting for 68% of the channel's verified net electric energy savings (down from 74% in 2024). Wall Packs were the second-highest contributor to channel savings in 2025, accounting for 22% of the verified net electric energy savings, up from 10% in 2024. The verified net energy savings produced by Mogul LEDs accounted for 10% of channel savings, down from 16% in 2024. Pin-based LEDs accounted for less than 1% of verified net energy savings in 2025, down from 1% in the prior year, and Exit Signs accounted for less than 1% of verified net energy savings, the same as in 2024.

Table 66. 2025 Midstream Lighting Channel Electric Energy Savings by Measure

Measure Category	Ex Ante Gross Savings (MWh)	Gross Realization Rate	Verified Gross Savings (MWh)	NTGR	Verified Net Savings (MWh)
Linear LEDs	19,695	100%	19,697	0.844	16,617
Wall Packs	6,362	100%	6,368	0.840	5,349
Moguls	2,847	100%	2,847	0.838	2,386
Pin-based LEDs	77	100%	77	0.835	64
Exit Signs	1	100%	1	0.897	1
Total	28,983	100%	28,991	0.842	24,417

Table 67 presents the ex ante, verified gross, and verified net electric demand savings achieved through the Midstream Lighting channel in 2025. The channel achieved an 81% gross realization rate for electric demand savings. A

discrepancy identified in the Wall Pack LEDs calculations, discussed below, drove the decrease in realization rates seen in 2025. Overall, the channel saw a 25% decrease in verified demand savings from 2024.

Table 67. 2025 Midstream Lighting Channel Electric Demand Savings by Measure

Measure Category	Ex Ante Gross Savings (MW)	Gross Realization Rate	Verified Gross Savings (MW)	NTGR	Verified Net Savings (MW)
Linear LEDs	4.70	100%	4.70	0.844	3.97
Wall Packs	1.30	0%	0.00	N/A	0.00
Moguls	0.68	100%	0.68	0.838	0.57
Pin-based LEDs	0.02	100%	0.02	0.835	0.01
Exit Signs	<0.01	100%	<0.01	0.897	<0.01
Total	6.70	81%	5.40	0.843	4.55

We discuss significant discrepancies between ex ante claims and the verified analysis below.

- **Wall Packs** (22% of ex ante electric energy savings and 19% of demand savings): The gross realization rates for Wall Packs are 100% for electric energy savings and 0% for demand savings.
 - The implementation team applied a coincidence factor (CF) of 0.67, which is associated with interior installations of LED lighting. The evaluation team applies a CF of zero in accordance with IL-TRM V13.0 guidance for exterior installations of LED lighting. This results in zero verified demand savings for wall pack measures, and accounts for the full discrepancy in demand savings for the channel.

3.6.4 HVAC CHANNEL

The following sections present the impact evaluation results for the 2025 Midstream HVAC channel. Additional details on the impact analysis methodology are provided in Appendix A.

CHANNEL DESCRIPTION

The Midstream HVAC channel provides incentives to participating HVAC equipment distributors to reduce the final sale price of equipment for end customers and to encourage distributors to promote higher efficiency HVAC and water heating equipment. By providing incentives to distributors, channel staff aim to increase the adoption of high efficiency HVAC and water heating equipment without requiring customers to submit an incentive application. The measures currently incentivized through the channel include ducted and ductless air source heat pumps, heat pump water heaters (HPWHs), smart thermostats, and notched V-belts. Distributors are permitted to keep up to approximately 10% of the incentive to support their internal data tracking and incentive submission processes, as well as their marketing, education, and outreach efforts.³⁰

AIC provides cobranded marketing materials to participating distributors, as well as educational materials and training on channel participation requirements and eligible equipment specifications. Leidos partners with CMC Energy Services to manage the network of participating distributors. CMC Energy Services provides each distributor with an account manager who helps distributors troubleshoot issues and increase their channel activity. The distributors are encouraged to disseminate the provided marketing and educational materials to contractors and to host their own equipment showcases, events, and training sessions to increase contractor engagement with the channel. Any contractor in AIC's service territory is eligible to engage with the channel; however, those who enroll as Program Allies

³⁰ The exact percentage that distributors can keep varies by measure.

are listed on AIC’s website and receive cobranded marketing materials and channel-related communications from AIC. AIC and Leidos continually recruit new distributors and contractors, focusing on reaching those in economically disadvantaged areas.

To receive incentives, distributors collect equipment and end customer information from contractors and submit the information via an online Midstream HVAC portal that is hosted and managed by Leidos. Only sales to AIC end customers are eligible to receive channel incentives. Implementation partner Energy Sciences reviews all incoming transaction data for completeness, accuracy, and eligibility. Once a transaction is approved, the incentive is paid to the distributor. Given the dynamics of the HVAC market and the requirement that distributors verify end customer eligibility, incentivized sales typically occur in one of two ways:

- Scenario 1: A contractor purchases equipment for a specific end customer and provides the customer’s information to the distributor at the time of purchase. In this scenario, the distributor can typically confirm the customer’s eligibility on the spot and sell the equipment to the contractor at a discounted price. Distributors submit the transaction information via the web portal and recoup the incentive.
- Scenario 2: A contractor purchases equipment for stock and not for a specific end customer. In this scenario, the distributor sells the equipment to the contractor at full price. Once the contractor sells that equipment to an eligible end customer, the contractor provides the necessary end customer information to the distributor, who can issue a credit to the contractor and submit the information via the web portal for approval.

In both scenarios, the intent is that the incentive is passed through as savings to the end customer through a lower purchase price with the contractor.

Summary of Key Implementation Changes

Initiative staff instituted the following design and implementation changes to the Midstream HVAC channel in 2025:

- Incentives for Unitary and Split Air Conditioners were discontinued.
- The Energy Star listing requirement was removed from the smart thermostat eligibility criteria to broaden eligibility.

PARTICIPATION SUMMARY

Table 68 presents a summary of participation in the Midstream HVAC channel by measure in 2025. We present these data separated into public and private sector customers to provide context as to the primary drivers of participation. AIC customers purchased 477 units of efficient HVAC equipment through the channel, representing a 7% increase compared to 2024. Unitary Ductless Minisplit Heat Pumps (DMSHP) were the most popular measure, accounting for 68% of all incentivized measures.

Table 68. 2025 Midstream HVAC Channel Participation Summary by Measure

Measure Category	Measure Quantity	Ex Ante Gross MWh	Ex Ante Gross MW	Ex Ante Gross Therms
Private Sector				
Unitary Ductless Minisplit Heat Pumps (DMSHP)	283	368	0.11	0
Advanced Thermostats	76	101	0.03	7,974
Unitary Air Source Heat Pumps (ASHP)	54	80	0.01	0
Heat Pump Water Heater	5	19	<0.01	0
Notched V Belts for HVAC Systems	5	1	<0.01	0
<i>Private Sector Subtotal</i>	423	569	0.15	7,974

Measure Category	Measure Quantity	Ex Ante Gross MWh	Ex Ante Gross MW	Ex Ante Gross Therms
Public Sector^a				
Unitary Ductless Minisplit Heat Pumps (DMSHP)	22	30	0.01	0
Unitary Air Source Heat Pumps (ASHP)	2	5	<0.01	0
<i>Public Sector Subtotal</i>	24	35	0.01	0
Total	447	604	0.16	7,974

^a The project counts, measure counts, and ex ante savings values presented in the Private Sector subsection of this table include State and Federal facilities, as these facility types are not included in the list of customer types covered in the public sector minimum funding requirements in subsection (c) of 220 ILCS 5/8-103B and subsection (e) of 220 ILCS 5/8-104.

Table 69 presents information on distributor engagement in the channel. Twenty-six distributors supported projects in the channel in 2025, a 16% decrease compared to 31 distributors in 2024. In total, these distributors completed 313 projects. Table 69 presents information on the 10 distributors most active in the channel in 2025.

Table 69. 2025 Midstream HVAC Channel Distributor Engagement Summary

Distributor	Projects	Share of Total (n=313)
Ally 30	53	17%
Ally 31	30	10%
Ally 32	30	10%
Ally 33	26	8%
Ally 34	26	8%
Ally 35	23	7%
Ally 36	19	6%
Ally 37	18	6%
Ally 38	15	5%
Ally 39	12	4%
Ally 40	11	4%

Note: Program Allies were assigned a number to track participation across different channels in the Business Program. The project counts included in this table are based on project numbers as they are tracked in the Initiative tracking data.

SAVINGS DETAIL

Table 70 presents the ex ante, verified gross, and verified net electric energy savings achieved through the Midstream HVAC channel in 2025. The channel achieved a 100% gross realization rate for electric energy savings. The channel achieved a 45% increase in savings over 2024 performance. Unitary ductless mini-split heat pumps (DMSHP) saw a 139% increase in savings (157 MWh) over 2024, and was the leading contributor to the change in overall channel savings. The unitary air source heat pump (ASHP) measure doubled its savings from 2024, contributing an additional 39 MWh. Each of the other measures exhibited a decrease in savings compared to 2024. Advanced thermostats decreased by 3%, heat pump water heaters by 9%, and notched v-belts by 97%, for a total decrease of 39 MWh from 2024.

Table 70. 2025 Midstream HVAC Channel Electric Energy Savings by Measure

Measure Category	Ex Ante Gross Savings (MWh)	Gross Realization Rate	Verified Gross Savings (MWh)	NTGR	Verified Net Savings (MWh)
Unitary DMSHP	398	100%	399	0.678	270
Advanced Thermostats	101	100%	101	0.707	71
Unitary ASHP	85	100%	85	0.679	58
Heat Pump Water Heater	19	108%	20	0.691	14
Notched V-Belt	1	100%	1	0.800	1
Total	604	100%	606	0.683	414

Table 71 presents the ex ante, verified gross, and verified net electric demand savings achieved through the Midstream HVAC channel in 2025. The channel achieved a 102% gross realization rate for electric demand savings. Year-over-year changes in demand savings followed a similar trend to electric energy savings with an overall channel increase in demand savings of 51% from 2024. Unitary DMSHPs led with a 198% increase in demand savings, contributing an additional 0.05 MW of demand reductions in 2025.

Table 71. 2025 Midstream HVAC Channel Electric Demand Savings by Measure

Measure Category	Ex Ante Gross Savings (MW)	Gross Realization Rate	Verified Gross Savings (MW)	NTGR	Verified Net Savings (MW)
Unitary DMSHP	0.11	101%	0.12	0.670	0.08
Advanced Thermostats	0.03	100%	0.03	0.706	0.02
Unitary ASHP	0.01	111%	0.02	0.597	0.01
Heat Pump Water Heater	<0.01	111%	<0.01	0.691	<0.01
Notched V-Belt	<0.01	100%	<0.01	0.800	<0.01
Total	0.16	102%	0.16	0.669	0.11

Table 72 presents the ex ante, verified gross, and verified net gas savings achieved through the Midstream HVAC channel in 2025. The channel achieved a 100% gross realization rate for gas savings. The channel achieved a 7% increase in natural gas savings in 2025, amounting to an increase of 437 therms.

Table 72. 2025 Midstream HVAC Channel Gas Savings by Measure

Measure Category	Ex Ante Gross Savings (Therms)	Gross Realization Rate	Verified Gross Savings (Therms)	NTGR	Verified Net Savings (Therms)
Advanced Thermostats	7,974	100%	7,974	0.827	6,593
Total	7,974	100%	7,974	0.827	6,593

We discuss significant discrepancies between ex ante claims and the verified analysis below.

- Unitary DMSHP** (66% of ex ante energy savings and 72% of demand savings): The gross realization rates for Unitary DMSHPs are 100% for electric energy and 101% for demand savings.
 - The implementation team did not claim ex ante electric energy and demand savings for one Unitary DMSHP project (2501686). The initiative tracking data did not include an energy efficiency ratio (EER2) value, which is needed to estimate demand savings. The evaluation team verified the project details and awarded electric energy and demand savings for this project. The net impact was a slight (<1%) increase in electric energy savings and a 1% increase in demand savings for the channel.

- **Unitary ASHP** (14% of ex ante energy savings and 9% of demand savings): The gross realization rates for Unitary ASHPs are 100% for electric energy and 111% for demand savings.
 - The implementation team did not claim demand savings for one Unitary ASHP project (2501579). The initiative tracking data did not include an energy efficiency ratio (EER2) value, which is needed to estimate demand savings. The evaluation team verified the project details and awarded demand savings. The net impact was a 1% increase in demand savings for the channel.
- **Heat Pump Water Heater (HPWH)** (3% of ex ante energy savings and 2% of demand savings): The gross realization rates for HPWHs are 108% for electric energy and 111% for demand savings.
 - The implementation team assumed that all HPWH installations occurred at sites where an ASHP is the primary HVAC system, resulting in the use of a COP_{heat} of 1.92 in the ex ante savings calculations. This assumption results in the calculation of negative electric heating impacts due to HPWH's output of cool air into a conditioned space. The evaluation team assumed that all installations occurred at businesses with a natural gas furnace as the primary heating system, due to the prevalence of natural gas furnaces throughout the service territory. This resulted in the replacement of an electric heating penalty with a gas heating penalty, increasing verified electric energy savings by <1% for the channel (example projects include 2500747, 2500227, and 2500748).

3.6.5 FOOD SERVICE CHANNEL

The following sections present the impact evaluation results for the 2025 Midstream Food Service channel. Additional details on the impact analysis methodology are provided in Appendix A.

CHANNEL DESCRIPTION

The Midstream Food Service channel is a statewide offering that provides incentives to participating food service equipment distributors to reduce the final sale price of equipment for end customers and to encourage distributors to promote higher efficiency equipment. By providing incentives to distributors, channel staff aim to increase the adoption of high efficiency food service equipment without requiring customers to submit an incentive application. Distributors are permitted to keep a portion of equipment incentives to support their internal data tracking and incentive submission processes, as well as their marketing, education, and outreach efforts. The channel targets both national and local food service equipment suppliers to participate in the channel. The incentives are intended to be passed through as savings to the end customer through a lower purchase price, either directly from the participating distributor or through a contractor.

Frontier Energy implements the channel and is primarily responsible for setting incentive levels, establishing eligibility criteria, and paying out the incentives to distributors. They coordinate with Leidos to share transaction data to estimate savings and track AIC-specific channel activity.

PARTICIPATION SUMMARY

Table 73 presents a summary of participation in the Midstream Food Service channel by measure in 2025. We present these data separated into public and private sector customers to provide context as to the primary drivers of participation. AIC customers purchased 155 units of efficient food service equipment through the channel, representing a 38% decrease compared to 2024. Solid and glass door refrigerators & freezers were the most commonly incentivized measure, accounting for 50% of all measures.

Table 73. 2025 Midstream Food Service Channel Participation Summary by Measure

Measure Category	Measure Quantity	Ex Ante Gross MWh	Ex Ante Gross MW	Ex Ante Gross Therms
Private Sector				
Fryers	21	119	0.02	9,486
Automatic Conveyor Broilers	9	84	0.03	7,566
Refrigerators & Freezers	59	45	<0.01	0
Dishwashers	4	36	<0.01	294
Steam Cookers	2	31	0.01	1,745
Electric Deck Ovens	1	30	0.01	0
Kitchen Demand Ventilation Controls	3	28	<0.01	853
Griddles	1	8	0.00	280
Ice Makers	9	8	<0.01	0
Hot Food Holding Cabinets	2	4	<0.01	0
Convection Ovens	5	3	<0.01	872
<i>Private Sector Subtotal</i>	116	395	0.07	21,097
Public Sector ^a				
Refrigerators & Freezers	18	9	<0.01	0
Dishwashers	6	30	<0.01	1,627
Steam Cookers	1	53	0.01	0
Griddles	1	0	0.00	343
Hot Food Holding Cabinets	3	4	<0.01	0
Convection Ovens	6	3	<0.01	1,002
Combination Ovens	4	0	0.00	2,488
<i>Public Sector Subtotal</i>	39	98	0.01	5,460
Total	155	492	0.09	26,557

Note: The ex ante gas savings in this table reflect only AIC claimable gas savings. One project completed through the Midstream Food Service channel produced non-AIC gas savings and, as such, was not included. More information on the savings from this project is presented in Appendix B.

^a The project counts, measure counts, and ex ante savings values presented in the Private Sector subsection of this table include State and Federal facilities, as these facility types are not included in the list of customer types covered in the public sector minimum funding requirements in subsection (c) of 220 ILCS 5/8-103B and subsection (e) of 220 ILCS 5/8-104.

SAVINGS DETAIL

Table 74 presents the ex ante, verified gross, and verified net electric energy savings achieved through the Midstream Food Service channel in 2025. The channel achieved a 99% gross realization rate for energy savings. Initiative staff continued to incentivize many of the measures that were incentivized in 2024, with the addition of Kitchen Ventilation Systems in 2025. Channel energy savings were primarily driven by fryers, which produced 27% of verified net energy savings, up from 19% in 2024. Overall, the channel saw a 7% decrease in verified electric net energy savings due in part to the reduction in the number of dishwashers incentivized through the program this year. Dishwashers saw a 58% decrease in contribution to verified net energy savings. Refrigerators and freezers (11%, down from 18%), griddles (2%, down from 5%), ice machines (2%, down from 3%), and convection ovens (1%, down from 4%) all decreased in their contribution to verified net energy savings compared to 2024. Steam cookers (16%, up from 6%), automatic conveyor broilers (18%, up from 4%), and hot food holding cabinets (1%, up from <1%) have all increased in contribution to verified net energy savings from 2024.

Table 74. 2025 Midstream Food Service Channel Electric Energy Savings by Measure

Measure Category	Ex Ante Gross Savings (MWh)	Gross Realization Rate	Verified Gross Savings (MWh)	NTGR	Verified Net Savings (MWh)
Fryers	119	100%	119	0.960	114
Steam Cookers	84	100%	85	0.801	68
Automatic Conveyor Broilers	84	100%	84	0.911	76
Dishwashers	65	100%	65	0.839	55
Refrigerators and Freezers	54	100%	54	0.840	45
Electric Deck Ovens	30	100%	30	0.800	24
Kitchen Demand Ventilation Controls	28	100%	28	0.864	24
Griddles	8	98%	8	0.800	6
Ice Makers	8	100%	8	0.800	6
Hot Food Holding Cabinets	7	61%	4	0.880	4
Convection Ovens	6	98%	5	0.800	4
Total	492	99%	489	0.872	426

Table 75 presents the ex ante, verified gross, and verified net electric demand savings achieved through the Midstream Food Service channel in 2025. The channel achieved a 98% gross realization rate for electric demand savings. Overall, the channel saw a 79% increase in verified net demand savings from 2024. While fryers accounted for a larger portion of the channel verified net demand savings (23%) than in 2024, the main driver of the increased demand savings were automatic conveyor broilers, accounting for 36% of the verified net demand savings.

Table 75. 2025 Midstream Food Service Channel Electric Demand Savings by Measure

Measure Category	Ex Ante Gross Savings (MW)	Gross Realization Rate	Verified Gross Savings (MW)	NTGR	Verified Net Savings (MW)
Fryers	0.02	100%	0.02	0.960	0.02
Steam Cookers	0.01	100%	0.01	0.800	0.01
Automatic Conveyor Broilers	0.03	100%	0.03	0.911	0.03
Dishwashers	<0.01	100%	<0.01	0.840	<0.01
Refrigerators and Freezers	0.01	100%	0.01	0.840	<0.01
Electric Deck Ovens	0.01	100%	0.01	0.800	<0.01
Kitchen Demand Ventilation Controls	<0.01	100%	<0.01	0.864	<0.01
Ice Makers	<0.01	100%	<0.01	0.800	<0.01
Hot Food Holding Cabinets	<0.01	61%	<0.01	0.880	<0.01
Convection Ovens	<0.01	63%	<0.01	0.800	<0.01
Total	0.09	98%	0.09	0.881	0.08

Table 76 presents the ex ante, verified gross, and verified net gas savings achieved through the Midstream Food Service channel in 2025. The channel achieved a 95% gross realization rate for gas savings. Overall, the channel saw a 26% decrease in verified net gas savings from 2024. Fryers (34%) were the main driver of verified net gas savings for 2025, while automatic conveyor broilers were the second highest contributor accounting for 30% of net gas savings.

Table 76. 2025 Midstream Food Service Channel Gas Savings by Measure

Measure Category	Ex Ante Gross Savings (Therms)	Gross Realization Rate	Verified Gross Savings (Therms)	NTGR	Verified Net Savings (Therms)
Fryers	9,486	98%	9,338	0.800	7,471
Steam Cookers	1,745	100%	1,745	1.000	1,745
Automatic Conveyor Broilers	7,566	92%	6,966	0.925	6,443
Dishwashers	1,921	100%	1,921	0.800	1,537
Kitchen Demand Ventilation Controls	853	100%	853	0.900	768
Griddles	623	98%	610	0.800	488
Convection Ovens	1,875	73%	1,376	0.800	1,100
Combination Ovens	2,488	100%	2,488	0.900	2,239
Total	26,557	95%	25,298	0.861	21,792

We discuss significant discrepancies between ex ante claims and the verified analysis below.

- **Automatic Conveyor Broilers** (17% of ex ante energy savings, 34% of demand savings, and 28% of gas savings): The gross realization rate for Automatic Conveyor Broilers was 100% for both electric energy and demand savings and 92% for gas savings.
 - The evaluation team applied actual cooking energy rates from the tracking data in the verified analysis, rather than the default values from the IL-TRM. The actual cooking energy rates were higher than the IL-TRM deemed values, resulting in lower verified gas savings (example project IDs: 2500464, 2500466, 2500468, 2500470).
- **Hot Food Holding Cabinets** (1% of ex ante energy savings and 2% of demand savings): The gross realization rate for Hot Food Holding Cabinets was 61% for both electric energy and demand savings.
 - For three records, the implementation team applied an idle energy value of 0.2807 W for the efficient equipment. The evaluation team suspects that this was a data entry error where 0.2807 kW was mistakenly entered as 0.2807 W. The evaluation team applied an idle energy value of 280.7 W for the efficient equipment in the verified calculations, resulting in lower verified electric energy and demand savings (example project IDs: 2500572, 2501483, 2501486).
- **Convection Ovens** (1% of ex ante energy savings, 2% of demand savings, and 7% of gas savings): The gross realization rate for Convection Ovens was 98% for electric energy savings, 63% for demand savings, and 73% for gas savings.
 - For four records, the evaluation team applied the input values provided in the tracking data and used the IL-TRM algorithms to estimate the verified savings, consistent with the approach programmed in the implementation team’s database. However, the resulting savings did not match the reported ex ante values. This discrepancy indicates that a data entry or other database-related error may have affected the ex ante savings values. The verified analysis produced lower verified gas savings (example project IDs: 2500568, 2500573, 2500815, 2500945).
 - For two records, the evaluation team applied the IL-TRM deemed production capacity for Electric Full-Size Equipment with ≥ 5 pans for the efficient equipment because the tracking data did not include actual production capacity values for the units. The evaluation team also applied the IL-TRM deemed CF value in the verified analysis. The implementation team applied production capacity values for the efficient equipment that could not be confirmed and a CF value that does not align with the IL-TRM, resulting in lower verified electric energy and demand savings (example project IDs: 2500949, 2501088).

3.6.6 CUMULATIVE PERSISTING ANNUAL SAVINGS

Table 77 through Table 80 presents CPAS and WAML for the 2025 Midstream Initiative by channel. The tables also include a summary of the measure-specific and total verified gross savings for the Initiative and respective channels, as well as CPAS in each year from 2025–2028.³¹ The WAML for the Midstream Initiative is 15.0 years, and the WAML for the Lighting, HVAC, and Food Service channels are 15.1 years, 15.1 years, and 12.1 years, respectively.

Table 77. 2025 Midstream Initiative CPAS and WAML

Channel	WAML	Annual Verified Gross Savings (MWh)	NTGR	CPAS – Verified Net Savings (MWh)							Lifetime Savings (MWh)
				2025	2026	2027	2028	...	2030	...	
Lighting	15.1	28,991	0.842	24,417	24,417	24,417	24,417	...	24,416	...	367,672
HVAC	15.1	606	0.683	414	414	414	414	...	413	...	6,245
Food Service	12.1	489	0.872	426	426	426	426	...	426	...	5,179
2025 CPAS		30,086	0.840	25,258	25,258	25,258	25,258	...	25,256	...	379,097
Expiring 2025 CPAS				0	0	0	0	...	1	...	
Expired 2025 CPAS				0	0	0	0	...	2	...	
WAML	15.0										

Table 78. 2025 Midstream Lighting Channel CPAS and WAML

Measure	Measure Life	Annual Verified Gross Savings (MWh)	NTGR	CPAS – Verified Net Savings (MWh)							Lifetime Savings (MWh)
				2025	2026	2027	2028	...	2030	...	
Linear LEDs	14.8	19,697	0.844	16,617	16,617	16,617	16,617	...	16,617	...	245,890
Wall Packs	16.0	6,368	0.840	5,349	5,349	5,349	5,349	...	5,349	...	85,580
Moguls	14.8	2,847	0.838	2,386	2,386	2,386	2,386	...	2,386	...	35,305
Pin-based LEDs	13.8	77	0.835	64	64	64	64	...	64	...	892
Exit Signs	5.0	1	0.897	1	1	1	1	...	0	...	5
2025 CPAS		28,991	0.842	24,417	24,417	24,417	24,417	...	24,416	...	367,672
Expiring 2025 CPAS				0	0	0	0	...	1	...	
Expired 2025 CPAS				0	0	0	0	...	1	...	
WAML	15.1										

³¹ For further detail, including CPAS in years not presented in this table, please see the 2025 AIC CPAS and AAIG Workbook, Opinion Dynamics

Table 79. 2025 Midstream HVAC Channel CPAS and WAML

Measure	Measure Life	Annual Verified Gross Savings (MWh)	NTGR	CPAS – Verified Net Savings (MWh)							Lifetime Savings (MWh)
				2025	2026	2027	2028	...	2030	...	
Unitary DMSHP	16.0	398	0.678	270	270	270	270	...	270	...	4,320
Advanced Thermostat	11.0	101	0.707	71	71	71	71	...	71	...	786
Unitary ASHP	16.0	85	0.679	58	58	58	58	...	58	...	924
Heat Pump Water Heater	15.0	20	0.691	14	14	14	14	...	14	...	211
Notched V-Belt	3.8	1	0.800	1	1	1	1	...	0	...	4
2025 CPAS		606	0.683	414	414	414	414	...	413	...	6,245
Expiring 2025 CPAS				0	0	0	0	...	0	...	
Expired 2025 CPAS				0	0	0	0	...	1	...	
WAML	15.1										

Table 80. 2025 Midstream Food Service Channel CPAS and WAML

Measure	Measure Life	Annual Verified Gross Savings (MWh)	NTGR	CPAS – Verified Net Savings (MWh)							Lifetime Savings (MWh)
				2025	2026	2027	2028	...	2030	...	
Fryers	12.0	119	0.960	114	114	114	114	...	114	...	1,365
Steam Cookers	12.0	85	0.801	68	68	68	68	...	68	...	812
Automatic Conveyor Broilers	12.0	84	0.911	76	76	76	76	...	76	...	916
Dishwashers	10.0	65	0.839	55	55	55	55	...	55	...	548
Refrigerators and Freezers	12.0	54	0.840	45	45	45	45	...	45	...	543
Deck Ovens	12.0	30	0.800	24	24	24	24	...	24	...	284
Kitchen Ventilation Systems	20.0	28	0.864	24	24	24	24	...	24	...	478
Griddles	12.0	8	0.800	6	6	6	6	...	6	...	77
Ice Machines	9.0	8	0.800	6	6	6	6	...	6	...	58
Hot Food Holding Cabinets	12.0	4	0.880	4	4	4	4	...	4	...	46
Convection Ovens	12.0	5	0.800	4	4	4	4	...	4	...	53
2025 CPAS		489	0.872	426	426	426	426	...	426	...	5,179
Expiring 2025 CPAS				0	0	0	0	...	0	...	
Expired 2025 CPAS				0	0	0	0	...	0	...	
WAML	12.1										

3.6.7 CONCLUSIONS AND RECOMMENDATIONS

Based on the results of this evaluation, the evaluation team offers the following key findings and recommendations for the Midstream Initiative moving forward:

LIGHTING CHANNEL

- **Finding #1:** The evaluation team observed inconsistency in the treatment of Wall Pack measures in the implementation team's analysis. The ex ante analysis treats wall packs as exterior lights with respect to the hours of operation (4,303 hours), which is affiliated with exterior dusk-to-dawn application, but assigns a coincidence factor of 0.67, which is affiliated with an interior installation location. Moreover, the ex ante effective useful life (EUL) is calculated following an interior application resulting in an EUL of 11.6 years, while the IL-TRM V13.0 suggests a 16-year EUL for exterior dusk-to-dawn applications, which is used in the verified analysis.
- **Recommendation:** The evaluation team recommends developing a consistent treatment of wall pack measures as exterior fixtures. A consistent approach will reduce the risk at evaluation and improve the accuracy of ex ante CPAS estimates.

HVAC CHANNEL

- **Finding #1:** The evaluation team identified one DMSHP project (2500657) where seventeen units were installed at a multifamily building. Given the number of incentivized units, the evaluation team reviewed project documents and searched for information on the location, ultimately determining that it is a former school that has been converted for multifamily housing. The commercial volume of IL-TRM V13.0 contains assumptions for characterizing installations of DMSHPs in multifamily common areas, but has limited assumptions for in-unit applications. It is unclear from the project documentation whether all seventeen units were installed in common areas, or whether some were intended for residential units.
- **Recommendation:** Incentivizing the DMSHPs through a residential program, and in-turn applying assumptions from the residential volume of the IL-TRM V13.0, would have resulted in a 20-30% increase in electric energy savings for these measures. It is our understanding that the Midstream HVAC channel will be discontinued after 2025. However, if this channel is offered in future years, we recommend that the implementation team add additional means of identifying and documenting in-unit applications of DMSHPs and either directing those units through the residential Midstream HVAC channel or applying residential assumptions. This will improve the accuracy of ex ante savings since the IL-TRM V13.0 residential volume is designed for in-unit applications and subsequently results in more savings for that equipment.

FOOD SERVICE CHANNEL

- **Finding #1:** The evaluation team found that several discrepancies between the ex ante and verified savings calculations were driven by gaps in the Initiative tracking data. For several measures, the tracking data did not include specific equipment characteristics that the evaluation team suspects were used in the ex ante calculations. As a result, the evaluation team applied default assumptions from the IL-TRM, resulting in discrepancies. For example, the efficient production capacities for the convection ovens were not included in the data, resulting in the evaluation team applying deemed values from the IL-TRM. In other cases, values were entered into the tracking data incorrectly. For example, the idle energy for some of the hot food holding cabinet records was entered into in the initiative tracking data using incorrect units.

- **Recommendation:** The evaluation team understands that the midstream implementation model limits the amount of data that can be collected and tracked. However, we recommend that the implementation team collect data on equipment characteristics wherever possible and ensure values are entered using consistent units to reduce the evaluation risk around these measures.

APPENDIX A. IMPACT ANALYSIS METHODOLOGY

STANDARD INITIATIVE

GROSS IMPACT METHODOLOGY

The evaluation team calculated verified savings for the Standard Initiative by applying savings algorithms from the IL-TRM V13.0. The team leveraged information from the Initiative tracking data, such as primary heating and cooling type, LED wattage, LED lamp type, and project location (for weather-dependent variables), to inform savings assumptions. For variables outside these parameters, the evaluation team relied on defaults from the IL-TRM V13.0. Table 81 lists the measures in the Standard Initiative, their corresponding IL-TRM section, and whether or not IL-TRM errata applied to the measure in the 2025 evaluation.

Table 81. Standard Initiative Evaluated Measures

IL-TRM Measure Name	IL-TRM Measure Code	Errata Applied?
Commercial LED Grow Lights	4.1.11	No errata present for this measure
High Efficiency Pre-Rinse Spray Valve	4.2.11	No errata present for this measure
Water Heater	4.3.1	No errata present for this measure
Tank Insulation	4.3.12	No errata present for this measure
Ozone Laundry	4.3.6	No errata present for this measure
High Efficiency Boiler	4.4.10	No errata present for this measure
High Efficiency Furnace	4.4.11	No errata present for this measure
Single-Package and Split System Unitary Air Conditioners	4.4.15	Errata Applied
Steam Trap Replacement or Repair	4.4.16	No errata present for this measure
Variable Speed Drives for HVAC Pumps and Cooling Tower Fans	4.4.17	No errata present for this measure
Demand Controlled Ventilation	4.4.19	No errata present for this measure
Space Heating Boiler Tune-up	4.4.2	No errata present for this measure
Variable Speed Drives for HVAC Supply and Return Fans	4.4.26	No errata present for this measure
Process Boiler Tune-up	4.4.3	No errata present for this measure
Unitary HVAC Condensing Furnace	4.4.37	No errata present for this measure
High Temperature Heating and Ventilation (HTHV) Direct Fired Heater	4.4.39	No errata present for this measure
Advanced Rooftop Controls (ARC)	4.4.41	No errata present for this measure
Small Commercial Thermostats	4.4.48	No errata present for this measure
Steam Trap Monitoring System	4.4.58	Errata Applied
Electric Chiller	4.4.6	No errata present for this measure
Guest Room Energy Management (PTAC & PTHP)	4.4.8	No errata present for this measure
Lighting Controls	4.5.10	No errata present for this measure
LED Bulbs and Fixtures	4.5.4	No errata present for this measure
Commercial LED Exit Signs	4.5.5	No errata present for this measure
Automatic Door Closer for Walk-In Coolers and Freezers	4.6.1	No errata present for this measure
Electronically Commutated Motors (ECM) for Walk-in and Reach-in Coolers / Freezers	4.6.4	No errata present for this measure
Evaporator Fan Control for Electrically Commutated Motors	4.6.6	No errata present for this measure

IL-TRM Measure Name	IL-TRM Measure Code	Errata Applied?
VSD Air Compressor	4.7.1	No errata present for this measure
Reduce Compressed Air Setpoint	4.7.11	No errata present for this measure
Compressed Air Low Pressure Drop Filters	4.7.2	No errata present for this measure
Compressed Air No-Loss Condensate Drains	4.7.3	No errata present for this measure
Desiccant Dryer Dew Point Demand Controls	4.7.8	No errata present for this measure
Roof Insulation for C&I Facilities	4.8.1	No errata present for this measure
C&I Air Sealing	4.8.4	No errata present for this measure
Commercial Wall Insulation	4.8.7	No errata present for this measure
Variable Speed Drives for Process Fans	4.9.11	No errata present for this measure
ENERGY STAR Low Wattage Uninterruptible Power Supply	4.9.15	No errata present for this measure
Smart Sockets	4.9.19	No errata present for this measure
Lithium Ion Fork Truck Batteries	4.9.20	No errata present for this measure
Building Operator Certification	4.9.21	No errata present for this measure
Advanced Power Strip – Tier 1 Commercial	4.9.6	No errata present for this measure
High Frequency Battery Chargers	4.9.8	No errata present for this measure

NON IL-TRM MEASURES AND ASSUMPTIONS

Variable Frequency Drives for Process Pumps

Process VFDs are available through the Standard Core channel’s VFD offering and include installations for both process fans and process pumps. The IL-TRM V13.0 Volume 2 includes a VFD measure for process fans but does not provide an approach for calculating gross impacts for VFDs on process pumps. For the VFDs controlling process pumps, the evaluation team applied a mix of methods to evaluate verified savings, including the use of IL-TRM V13.0 Section 4.9.11 algorithms and assumptions in coordination with a 2010 memorandum that provides guidance on capping savings at a percentage of estimated base energy consumption.³² The following discussion details the evaluation team’s methods for evaluating verified savings.

The evaluation team adopted the IL-TRM V13.0 Section 4.9.11 algorithms for calculating the base energy consumption of processes before the installation of VFDs. The algorithms for calculating verified energy and demand savings are provided below in Equation 1 through Equation 3. The deemed assumptions applied by the evaluation team in these algorithms are provided in Table 82.

³² The memorandum titled “Recommendations for Verifying Savings for non-HVAC VFDs” was submitted in response to program administrator comments regarding the PY2 evaluation methods for non-HVAC VFDs.

Equation 1. Base Annual Electric Energy Usage

$$kWh_{base} = \left[\left(0.746 \times HP \times \frac{LF}{\eta_{motor}} \right) \times RHRS_{base} \times \sum_{0\%}^{100\%} (\%FF \times PLR_{base}) \right]$$

Equation 2. VFD Electric Energy Savings for Process Pumps

$$Energy(kWh) = kWh_{base} \times ESF$$

Equation 3. VFD Electric Demand Savings for Process Pumps

$$Demand(kW) = \left[\left(0.746 \times HP \times \frac{HP}{\eta_{motor}} \right) PLR_{Base,FFpeak} \right] \times ESF$$

Table 82. Deemed Inputs for VFD Calculations

Algorithm Variable	Description	Value	Source
kWh_{base}	Base energy consumption of the existing motor prior to installation of the VFD	Calculated	IL-TRM V13.0
HP	Nominal horsepower of controlled motor	Actual value	Incentive tracking database
LF	Motor load factor	75%	2010 memorandum ^b
$\Sigma(\%FF \times PLR)$	Flow Fraction and Part Load Ratio (PLR) factor: assumes “No control or Bypass Damper”	1	IL-TRM V13.0
η_{motor}	Installed nominal/nameplate motor efficiency, based on horsepower ^a	NEMA Standard	Extracted from IL-TRM V13.0. Table of NEMA Motor Efficiencies
$RHRS_{base}$	Annual operating hours of base motor	Actual value	Initiative tracking database
$ESF(pump)$	Energy Savings Factor for pump applications	42%	2010 memorandum ^b

^a Default motor type is a National Electrical Manufacturers Association (NEMA) Premium Efficiency, Open Drip Proof, 4-pole/1800 RPM fan motor.

^b Recommendations for Verifying Savings for non-HVAC VFDs provides details on load factor and ESF assumptions.

Energy and demand savings are capped by the energy savings factor (ESF) of 42% for pump applications. The evaluation team compares the verified electric energy and demand savings against the claimed savings to ensure savings are capped. If the proportion of claimed savings to kWh_{base} is greater than the savings limit, then the savings limit is applied to the kWh_{base} . If the proportion is less than the claimed savings, the claimed savings are accepted as verified savings.

The evaluation team will continue to apply the method outlined above to calculate verified savings for VFDs installed on process pumps until the IL-TRM provides guidance for this application of VFDs.

Measure Lives and Cumulative Persisting Annual Savings

For prescriptive measures, the evaluation team applied measure lives and mid-life adjustments from the IL-TRM V13.0.

NET IMPACT METHODOLOGY

The evaluation team applied the NTG Ratio for Disadvantaged Areas Policy for eligible projects, as outlined in Section 2.3.1. For all other projects, we applied the SAG-approved 2025 NTGRs to the verified gross savings to calculate verified net savings.

Table 83. 2025 SAG-Approved Standard Initiative NTGRs

Channel	Measure	Electric NTGR	Gas NTGR
Online Store	Advanced Thermostats	0.880	0.880
Online Store	All Other Measures	1.161	1.161
SLB	All Measures	0.735	N/A
HVAC	All Non-Advanced Thermostat Measures	0.860	0.817
HVAC	Advanced Thermostat Measures	0.968	0.937
VFD	All Measures	0.944	N/A
SE	All Measures	0.988	0.901
STRR	All Measures	0.963	0.944
GN	All Measures	0.925	0.914
SW	All Measures	0.800	0.800
BOC	Trainees	N/A	N/A

CUSTOM INITIATIVE

GROSS IMPACT METHODOLOGY – CUSTOM INCENTIVES CHANNEL

The evaluation team’s gross impact analysis for the Custom Incentives channel used desk reviews and on-site M&V to determine verified gross impacts. Overall, the evaluation team reviewed 33 Custom Incentives channel projects.

The evaluation team completed desk reviews and, in most cases, on-site M&V to provide increased accuracy for the 33 sampled projects to determine gross impact results. Desk reviews were used to compare the inputs provided in the application to the assumptions used in the analysis, verify consistency in savings estimates throughout the project file, and provide insight into the validity of the ex ante savings. The team accomplished this by reviewing the project documentation and calculations for consistency, accuracy, and correct application of engineering principles.

SAMPLING APPROACH

We selected the sample of 2025 projects for evaluation in three waves, drawing each sample from the population of completed Custom Incentives channel projects. As part of this process, we selected projects independently by fuel type and by wave to satisfy random sampling requirements.

We chose a sample of 33 projects using a stratified random sample design targeting 10% relative precision at a 90% level of confidence for each fuel type across all the sample waves. We used the Dalenius-Hodges method to determine

strata boundaries,³³ and the Neyman allocation to determine the optimal allocation of the available projects to the strata.³⁴

The sample included 20 projects chosen for the Custom Incentives electric sample and 15 projects chosen for the gas sample.³⁵ We also sampled two projects the implementation team identified as having fuel-switching impacts. The evaluation team classified these fuel-switching projects into a separate sample and reviewed a census of projects. The 33 total project reviews accounted for 89% of the total ex ante gross Custom Incentives electric energy savings and 71% of the total ex ante gross gas savings. Table 84, Table 85, and Table 86 present details around the sample of electric, gas, and fuel-switching projects chosen for the 2025 evaluation.

Table 84. Custom Incentives Channel Sampling Approach for Projects with Electric Savings

Wave	Sampling Stratum	Savings Range	Population of Projects		Completed Reviews	
			Project Count	Ex Ante MWh	Project Count	Ex Ante MWh
1	1	< 69 MWh	9	178	1	36
	2	> 69 MWh & < 165 MWh	2	235	1	139
	3	> 165 MWh & < 2,244 MWh	5	1,884	5	1,884
	4	> 2,244 MWh	1	2,244	1	2,244
	<i>Subtotal</i>			17	4,541	8
2	1	< 97 MWh	4	181	1	65
	2	> 97 MWh & < 224 MWh	4	631	1	183
	3	> 224 MWh & < 900 MWh	2	557	2	557
	4	> 900 MWh	2	1,886	2	1,886
	<i>Subtotal</i>			12	3,254	6
3	1	< 193 MWh	22	1,191	2	84
	2	> 193 MWh & < 468 MWh	10	3,285	2	340
	3	> 468 MWh & < 58,873 MWh	7	4,501	2	1,105
	4	> 58,873 MWh	1	58,874	1	58,874
	<i>Subtotal</i>			40	67,850	6
Total			69	75,646	20	67,396

³³ Dalenius, Tore, and Joseph L. Hodges. "Minimum Variance Stratification." *Journal of the American Statistical Association* 54, no. 285 (1959): 88-101. <https://doi.org/10.2307/2282141>.

³⁴ Neyman, Jerzy. "On the Two Different Aspects of the Representative Method: The Method of Stratified Sampling and the Method of Purposive Selection." *Journal of the Royal Statistical Society* 97, no. 4 (1934): 558-625. <https://doi.org/10.2307/2342192>.

³⁵ Four projects were sampled as part of both the electric and gas samples.

Table 85. Custom Incentives Channel Sampling Approach for Projects with Gas Savings

Wave	Sampling Stratum	Savings Range	Population of Projects		Completed Reviews	
			Project Count	Ex Ante Therms	Project Count	Ex Ante Therms
1	1	< 6,348 therms	3	8,339	1	5,305
	2	> 6,348 therms & < 13,302 therms	2	18,971	1	11,578
	3	> 13,302 therms & < 169,000 therms	2	43,107	1	15,027
	4	> 169,000 therms	1	169,720	1	169,720
	<i>Subtotal</i>		8	240,137	4	201,631
2	1	< 20,947 therms	4	18,679	2	6,599
	2	> 20,947 therms & < 60,669 therms	2	69,255	1	31,558
	3	> 60,669 therms	2	190,603	2	190,603
	<i>Subtotal</i>		8	278,537	5	228,760
3	1	< 15,411 therms	17	81,172	1	3,006
	2	> 15,411 & < 45,488 therms	7	184,700	1	23,675
	3	> 45,488 & < 669,552 therms	5	527,960	3	273,709
	4	> 669,552 therms	1	669,553	1	669,553
	<i>Subtotal</i>		30	1,463,385	6	969,942
Total			46	1,982,059	15	1,400,333

Note: The therm savings presented in this table include savings for eight non-AIC gas projects and one propane-saving project. These savings are not directly claimable by AIC. However, we present the savings in this table because they informed the ratio estimator used to develop Initiative-level savings. Additionally, AIC chose to convert the therm savings achieved through this project to electric savings under subsection (b-25).

Table 86. Custom Incentives Channel Sampling Approach for Fuel-Switching Projects

Wave	Savings Range	Population of Projects			Completed Reviews		
		Project Count	Ex Ante MWh	Ex Ante Therms	Project Count	Ex Ante MWh	Ex Ante Therms
FS	Census	2	1,175	0	2	1,175	0

To estimate the channel's verified savings, the evaluation team used the combined ratio adjustment method.^{36,37} As described in Equation 4, below, we calculated the gross realization rate based on the desk reviews and on-site M&V for a stratified random sample of projects. For each wave and fuel type, we then applied the ratio of the verified gross savings to the ex ante gross savings (the realization rate) to adjust the ex ante gross savings for the population of all 2025 Custom Incentives channel projects (N=82).³⁸

³⁶Cochran, William Gemmill. Sampling Techniques. John Wiley & Sons, 1977.

³⁷ Levy, Paul S., and Stanley Lemeshow. Sampling of Populations: Methods and Applications. John Wiley & Sons, 2008.

³⁸ The population number represents the population of completed 2025 projects which produced electric energy or gas savings.

Equation 4. Ratio Adjustment Method

$$I_{EP} = \frac{I_{EPS}}{I_{EAS}} \times I_{EA}$$

Where:

I_{EP} = the verified population energy demand and impacts

I_{EA} = the ex ante population energy demand and impacts

I_{EPS} = the verified sample energy demand and impacts

I_{EAS} = the ex ante sample energy demand and impacts

Precision Calculations

We calculated the precision for our gross impact results by pooling the results from all waves of project reviews.³⁹ To calculate relative precision, the team first determined the variance in the sample and then calculated the standard error and confidence interval. We used Equation 5 through Equation 8 to support these calculations.

Equation 5. Stratified Ratio Estimator

$$\text{Stratified Ratio Estimator} = \frac{\sum_{i=1}^n w_i y_i}{\sum_{i=1}^n w_i x_i}$$

Equation 6. Standard Error

$$\text{Standard Error} = \frac{1}{x} \sqrt{\sum_{i=1}^n w_i (w_i - 1) e_i^2}$$

Equation 7. Confidence Interval

$$90\% \text{ Confidence Interval} = 1.645 \times \text{Standard Error}$$

Equation 8. Relative Precision

$$\text{Relative Precision} = \frac{90\% \text{ Confidence Interval}}{\text{Stratified Ratio Estimator}}$$

Where:

w = case weights for each stratum h (N_h/n_h)

y = verified savings

³⁹ The error bound of the total savings is estimated by calculating the square root of the sum of the squared error bounds of each wave or group of projects. These calculations are consistent with the California Evaluation Framework.

x = ex ante savings

$e = y_i - b x_i$

$\hat{X} = \sum_{i=0}^n w_i x_i$

MEASURE LIVES AND CUMULATIVE PERSISTING ANNUAL SAVINGS

In accordance with methods presented and discussed in the IL-TRM V13.0 Attachment B,⁴⁰ the evaluation team reviewed the ex ante measure life assumptions provided by the implementation team for sampled Custom Incentives channel projects in 2025 and revised these assumptions where necessary. We then calculated an adjustment to ex ante measure lives in a manner similar to that of calculating a gross savings realization rate and applied that adjustment to the population of ex ante measure lives. Table 87 provides a summary of Custom Incentives channel project measure lives that were adjusted after evaluation. All other ex ante measure lives in our sample were determined to have been applied appropriately.

Table 87. Custom Incentives Channel Measure Life Adjustments Due to Evaluation

Project Number	End Use	Measure Life		Rationale for Adjustment
		Ex Ante	Verified	
2400790	Custom HVAC	13.0	15.0	The evaluation team applied the measure life assumption from Attachment B for Custom HVAC – Controls projects.
2401225	Custom Compressed Air	13.0	15.0	The evaluation team applied the measure life assumption from Attachment B for custom compressed air projects.
2401342	Custom HVAC	25.0	19.3	The evaluation team calculated the verified EUL using the average across each individual boiler measure.
2500588	Custom Compressed Air	15.0	13.0	The evaluation team applied the deemed lifetime for refrigerated compressed air dryers according to IL-TRM section 4.7.5.
2400097	Custom HVAC	13.0	15.0	The evaluation team applied the measure life assumption from Attachment B for Custom HVAC – Controls projects.
2400890	Custom HVAC	8.8	8.6	The evaluation team applied the lifetime assumption deemed in Attachment B for RCx projects due to the nature of the improvements completed through this project.
2400901	Custom HVAC	15.0	8.6	The evaluation team applied the lifetime assumption deemed in Attachment B for RCx projects due to the nature of the improvements completed through this project.
2500165	Custom HVAC	25.0	23.0	The evaluation team applied the deemed lifetime for electric chiller replacements according to IL-TRM section 4.4.6.

GROSS IMPACT METHODOLOGY – NEW CONSTRUCTION LIGHTING CHANNEL

The evaluation team’s gross impact analysis for the New Construction Lighting channel used desk reviews and on-site M&V to determine verified gross impacts. Overall, the evaluation team reviewed five New Construction Lighting projects.

The evaluation team completed desk reviews for the five sampled projects to determine gross impact results. Desk reviews were used to compare the inputs provided in the application to the assumptions used in the analysis, verify consistency in savings estimates throughout the project file, and provide insight into the validity of the ex ante electric energy savings. The team accomplished this by reviewing the project documentation and calculations for consistency, accuracy, and correct application of engineering principles.

⁴⁰ Illinois Statewide Technical Reference Manual V13.0 – Attachment B: Effective Useful Life for Custom Measure Guidelines.
Opinion Dynamics

SAMPLING APPROACH

We chose the sample of five New Construction Lighting projects using a stratified random sample design targeting 10% relative precision at a 90% level of confidence. For the stratification, we used the Dalenius-Hodges method to determine strata boundaries and the Neyman allocation to determine the optimal allocation of the available projects to the strata.

The five projects we reviewed accounted for 57% of the total channel ex ante gross electric energy savings. Table 88 presents details around the sample of projects chosen for the 2025 evaluation.

Table 88. Sampling Approach for New Construction Lighting Projects with Electric Savings

Wave	Sampling Stratum	Savings Range	Population		Completed Reviews	
			Project Count	Ex Ante MWh	Project Count	Ex Ante MWh
NCL	1	< 289 MWh	11	442	3	54
	2	> 289 MWh	3	1,570	2	1,089
Total			14	2,012	5	1,143

To estimate the channel's verified savings, the evaluation team used the combined ratio adjustment method. As described in Equation 9, we calculated the gross realization rate based on the desk reviews for a stratified random sample of projects. We then applied the ratio of the verified gross savings to the ex ante gross savings (the realization rate) to adjust the ex ante gross savings for the population of New Construction Lighting projects with savings (N=14).

Equation 9. Ratio Adjustment Method

$$I_{EP} = \frac{I_{EPS}}{I_{EAS}} \times I_{EA}$$

Where:

I_{EP} = the verified population energy demand and impacts

I_{EA} = the ex ante population energy demand and impacts

I_{EPS} = the verified sample energy demand and impacts

I_{EAS} = the ex ante sample energy demand and impacts

Precision Calculations

To calculate relative precision, the team first determined the variance in the sample and then calculated the standard error and confidence interval. We used Equation 10 through Equation 13 to support these calculations.

Equation 10. Stratified Ratio Estimator

$$\text{Stratified Ratio Estimator} = \frac{\sum_{i=1}^n w_i y_i}{\sum_{i=1}^n w_i x_i}$$

Equation 11. Standard Error

$$\text{Standard Error} = \frac{1}{x} \sqrt{\sum_{i=1}^n w_i (w_i - 1) e_i^2}$$

Equation 12. Confidence Interval

$$90\% \text{ Confidence Interval} = 1.645 \times \text{Standard Error}$$

Equation 13. Relative Precision

$$\text{Relative Precision} = \frac{90\% \text{ Confidence Interval}}{\text{Stratified Ratio Estimator}}$$

Where:

w = case weights for each stratum h (N_h/n_h)

y = verified savings

x = ex ante savings

$e = y_i - b x_i$

$\hat{X} = \sum_{i=0}^n w_i x_i$

MEASURE LIVES AND CUMULATIVE PERSISTING ANNUAL SAVINGS

In accordance with methods presented and discussed in the IL-TRM V13.0 Attachment B,⁴¹ the evaluation team reviewed the ex ante measure life assumptions provided by the implementation team for sampled NCL channel projects in 2025. Table 89 provides a summary of NCL channel project measure lives adjusted after evaluation. All other ex ante measure lives in our sample were determined to have been applied appropriately.

Table 89. New Construction Lighting Channel Measure Life Adjustments Due to Evaluation

Project Number	Ex Ante Measure Life	Verified Measure Life	Rationale for Adjustment
2500420	10.2	16.0	The evaluation team applied the IL-TRM assumption for exterior dusk-to-dawn fixtures.

⁴¹ Illinois Statewide Technical Reference Manual V13.0 – Attachment B: Effective Useful Life for Custom Measure Guidelines.
Opinion Dynamics

NET IMPACT METHODOLOGY

The evaluation team applied the NTG Ratio for Disadvantaged Areas Policy for eligible projects, as outlined in Section 2.3.1. For all other projects, we applied the SAG-approved 2025 NTGRs to the verified gross savings to calculate verified net savings.

Table 90. 2025 SAG-Approved Custom Initiative NTGRs

Channel	Electric NTGR	Gas NTGR
Custom Incentives	0.757	0.824
New Construction Lighting	0.905	N/A

RETRO-COMMISSIONING INITIATIVE

GROSS IMPACT METHODOLOGY – VIRTUAL COMMISSIONING CHANNEL

The evaluation team evaluated gross savings from VCx channel activities in 2025 by replicating and verifying Power TakeOff’s facility-level modeling approach. Our approach, which leans heavily on the IPMVP Option C guidelines, focused on verifying Power TakeOff’s methods. We were able to take this approach because Power TakeOff agreed to adopt the evaluation team’s methodological recommendations from the 2021 AIC Virtual Commissioning impact evaluation, which enabled both Power TakeOff and the evaluation team to agree on a common methodology to estimate savings for 2022 and beyond. In 2025, after replicating Power TakeOff’s models, the evaluation team adjusted the facility-level models for seven projects to account for the exclusion of weather interaction terms.

As part of the verification process, the evaluation team assessed Power TakeOff’s data cleaning and processing methods, model specifications and evaluation process, and process for calculating electric energy savings. In addition to verifying the savings associated with VCx, the evaluation team independently verified whether the individual project modeling results met the channel’s guidelines for model fitness criteria. All projects that Power TakeOff claimed as part of the 2025 VCx channel met model robustness criteria.

Lastly, the evaluation team reviewed and verified cross-participation adjustments Power TakeOff made to the ex ante savings estimates. Cross-participation adjustments are necessary to avoid double-counting savings produced through other AIC initiatives. Power TakeOff identified two sites that participated in the VCx channel and also participated in other AIC initiatives. The modeling-based approach to estimating savings for the VCx channel produces facility-level savings estimates, which include savings produced through other program interventions. Therefore, savings achieved through program activity incentivized and claimed through other AIC initiatives need to be removed from the savings estimates for VCx. Both the implementation and evaluation teams made cross-participation adjustments to project a1CT000000265w52AA. In addition, the evaluation team noted cross-participation occurring in project a1CT0000002RmaU2AS starting at the end of December 2025. As such, December 2025 data was dropped from the project’s post-period to avoid any risk of capturing savings from the cross-participation project. Notably, the post-period still contained more than 12 months of data. More information on these modifications is provided in the Uplift from Other AIC Initiatives section.

DATA REVIEW AND CLEANING

The evaluation team compared the raw and processed AMI data provided by Power TakeOff for a subset of projects to independently verify the data cleaning process that Power TakeOff used to estimate their models. The evaluation team utilized Power TakeOff's processed data for modeling and reviewed this data for completeness.

MODELING APPROACH

The evaluation team verified the electric energy savings results Power TakeOff claimed for VCx by validating their site-level model specifications, replicating Power TakeOff's results, and updating modeling results as necessary. To calculate annualized savings, we first developed regression-based baseline energy usage models and incorporated Typical Meteorological Year (TMYx) data to estimate normalized gross annual savings.

We developed the baseline model by fitting a regression model to pre- and post-intervention data. Power TakeOff selected an hourly or a daily regression model, depending on the project. Hourly models were estimated for 32 facilities, and daily models were estimated for 15 facilities. Model specifications also differed depending on whether there was an NRE.

All VCx sites received weather-sensitive interventions (i.e., HVAC set point or scheduling adjustments), and only two sites also implemented lighting schedule adjustments. In contrast, 25% of the 2024 VCx sites received only lighting schedule adjustments. Given the increased importance of weather-sensitive interventions, the evaluation team opted to include weather interactions for all 47 models, whereas Power TakeOff included weather interactions in their ex ante models for 40 projects. As a validation of the verified approach, the evaluation team conducted analysis of variance (ANOVA) tests and found that weather interaction terms improved model fit for the remaining seven sites, and reduced savings uncertainty substantially (Table 93). The evaluation team also curtailed the post-period to one year for one project to limit the need for cross-participation corrections. The remaining model specifications and observations that went into modeling were kept the same.

TIME-BASED REGRESSION MODEL

Equation 14 and Equation 15 below describe the four model specifications utilized in our evaluation.

Equation 14. Regression Model Considering Time and Weather Interactions

$$iE(i) = \sum_{j=1}^k \beta_j Time(i) + \alpha_j Change(i) + H(i) + C(i) + \left(\sum_{j=1}^k \beta_j Time(i) \times \alpha_j Change(i) \right) + \left((H(i) + C(i)) \times \alpha_j Change(i) \right)$$

Equation 15. Regression Model Considering Time, Weather, and NRE Interactions

$$E(i) = \sum_{j=1}^k \beta_j Time(i) + \alpha_j Change(i) + H(i) + C(i) + NRE(i) + \left(\sum_{j=1}^k \beta_j Time(i) \times \alpha_j Change(i) \right) + \left(\sum_{j=1}^k \beta_j Time(i) \times \alpha_j NRE(i) \right) + \left((H(i) + C(i)) \times \alpha_j Change(i) \right)$$

Across these two specifications, two time-based models were run.

Where daily consumption data was used, the resolution of the model (j) was the day of the week, k represents 1 through 7 for the days in a week. $H(i)$ represents the heating component while $C(i)$ reflects the cooling component. $H(i)$ is defined as:

$$H(i) = h_1T_1(i) + h_2T_2(i) + h_3T_3(i) + h_4T_4(i)$$

Where:

$$T_1(i) = \sum_{i=1}^{24} \min(\max(55 - \text{Temp}(i), 0), 10)$$

$$T_2(i) = \sum_{i=1}^{24} \min(\max(45 - \text{Temp}(i), 0), 10)$$

$$T_3(i) = \sum_{i=1}^{24} \min(\max(35 - \text{Temp}(i), 0), 15)$$

$$T_4(i) = \sum_{i=1}^{24} \max(20 - \text{Temp}(i), 0)$$

$\text{Temp}(i)$ is temperature in degrees Fahrenheit for hour i .

$C(i)$ is defined as:

$$C(i) = c_1P_1(i) + c_2P_2(i) + c_3P_3(i) + c_4P_4(i)$$

Where:

$$P_1(i) = \sum_{i=1}^{24} \min(\max(\text{Temp}(i) - 55, 0), 10)$$

$$P_2(i) = \sum_{i=1}^{24} \min(\max(\text{Temp}(i) - 65, 0), 10)$$

$$P_3(i) = \sum_{i=1}^{24} \min(\max(\text{Temp}(i) - 75, 0), 15)$$

$$P_4(i) = \sum_{i=1}^{24} \max(\text{Temp}(i) - 90, 0)$$

Where hourly consumption data was used present, the time period j used was the hour of the week, and k represents the hours in a week (1 of 168). $H(i)$ represents the heating component while $C(i)$ reflects the cooling component. $H(i)$ is defined as:

$$H(i) = h_1T_1(i) + h_2T_2(i) + h_3T_3(i) + h_4T_4(i)$$

Where:

$$T_1(i) = \min(\max(55 - \text{Temp}(i), 0), 10)$$

$$T_2(i) = \min(\max(45 - \text{Temp}(i), 0), 10)$$

$$T_3(i) = \min(\max(35 - \text{Temp}(i), 0), 15)$$

$$T_4(i) = \max(20 - \text{Temp}(i), 0)$$

$\text{Temp}(i)$ is temperature in degrees Fahrenheit for hour i .

$C(i)$ is defined as:

$$C(i) = c_1P_1(i) + c_2P_2(i) + c_3P_3(i) + c_4P_4(i)$$

Where:

$$P_1(i) = \min(\max(\text{Temp}(i) - 55, 0), 10)$$

$$P_2(i) = \min(\max(\text{Temp}(i) - 65, 0), 10)$$

$$P_3(i) = \min(\max(\text{Temp}(i) - 75, 0), 15)$$

$$P_4(i) = \max(\text{Temp}(i) - 90, 0)$$

$\text{Time}(i)$ is an indicator variable set to one if i is the j^{th} hour of the week or day of the week (depending on model resolution) and zero otherwise.

$\text{Change}(i)$ is the treatment variable, set to one if hour i occurs during the reporting period and zero otherwise.

$\text{NRE}(i)$ is a flag for all non-routine event periods. There can be multiple NRE periods per model; each NRE is treated separately and will add a new set of NRE terms and interactions if applicable.

NORMALIZED GROSS ANNUAL SAVINGS

To verify gross annual savings resulting from the VCx channel, the evaluation team first estimated the hourly model for 32 facilities and the daily model for 15 facilities using actual weather data. Next, we calculated each facility's annual predicted baseline and reporting period electricity consumption using estimated regression coefficients and TMYx weather data. Finally, we computed the annual savings by calculating the difference between the annual predicted baseline and reporting period electricity consumption.

For each facility where Power TakeOff estimated the hourly regression model specified in Equation 14 and Equation 15, the evaluation team calculated hourly predicted baseline period electricity consumption based on Equation 16. Equation 16 contains the maximum terms that would be used to calculate the baseline. Models corresponding to

facilities that do not have an NRE (i.e., Equation 14) did not include the NRE terms. The following equations show how we calculated the gross annual savings in detail.

Equation 16. Hourly Predicted Baseline Period Electricity Consumption

$$E_B(i) = \sum_{j=1}^{7 \times 24} \hat{\beta}_j HOW_j + \hat{H}(i) + \hat{C}(i) + NRE(i) + \left(\sum_{j=1}^{7 \times 24} \beta_j HOW_j(i) \times NRE(i) \right) + \left((\hat{H}(i) + \hat{C}(i)) \times NRE(i) \right)$$

In Equation 16, $E_B(i)$ is predicted baseline period electricity consumption for hour i . $\hat{\beta}_j$ is the estimated coefficient on the j^{th} hour/day of the week indicator variable as defined in Equation 14 and Equation 15, $\hat{H}(i)$ and $\hat{C}(i)$ specified below are estimated heating and cooling components evaluated using TMY3 weather data and regression coefficients.

$$\hat{H}(i) = \hat{h}_1 T_1(i) + \hat{h}_2 T_2(i) + \hat{h}_3 T_3(i) + \hat{h}_3 T_3(i) + \hat{h}_4 T_4(i)$$

$$\hat{C}(i) = \hat{c}_1 P_1(i) + \hat{c}_2 P_2(i) + \hat{c}_3 P_3(i) + \hat{c}_3 P(i) + \hat{c}_4 P_4(i)$$

We calculated hourly reporting period electricity consumption based on Equation 17. Equation 17 contains the maximum terms that would be used to calculate the reporting period.

Equation 17. Hourly Predicted Reporting Period Electricity Consumption

$$E_R(i) = \sum_{j=1}^{7 \times 24} \hat{\beta}_j HOW_j + \hat{H}(i) + \hat{C}(i) + \hat{\alpha}_j Change(i) + \left(\sum_{j=1}^{7 \times 24} \beta_j HOW_j(i) \times \hat{\alpha}_j Change(i) \right) + \left((\hat{H}(i) + \hat{C}(i)) \times \hat{\alpha}_j Change(i) \right)$$

In Equation 17, $E_R(i)$ is predicted reporting period electricity consumption for hour i . $\hat{\alpha}_j$ is the estimated coefficient on the interaction term between the treatment variable and the j^{th} hour of the week indicator variable as defined for the hourly model versions of Equation 14 and Equation 15.

Annual savings were calculated as follows:

$$\sum_{i \in TMY} E_B(i) - \sum_{i \in TMY} E_R(i)$$

Where each sum was across all the hours in the TMY.

Similarly, for each facility where Power TakeOff estimated the daily regression model specified in Equation 14 and

Equation 15, the evaluation team calculated daily predicted baseline and reporting period electricity consumption based on Equation 18 and Equation 19. We calculated annual savings using the formula defined above, but the sum included all the days in the TMY. Equation 18 contains the maximum terms that would be used to calculate the daily baseline. Models that do not include an NRE (Equation 14) will not include NRE terms. Equation 19 contains the maximum terms that would be used to calculate the reporting period.

Equation 18. Daily Predicted Baseline Period Electricity Consumption

$$E_B(i) = \sum_{j=1}^7 \hat{\beta}_j W_j + \hat{H}(i) + \hat{C}(i) + NRE(i) + \left(\sum_{j=1}^7 \beta_j W_j(i) \times NRE(i) \right) + \left((\hat{H}(i) + \hat{C}(i)) \times NRE(i) \right)$$

Equation 19. Daily Predicted Reporting Period Electricity Consumption

$$E_R(i) = \sum_{j=1}^7 \hat{\beta}_j W_j + \hat{H}(i) + \hat{C}(i) + \hat{\alpha}_j Change(i) + \left(\sum_{j=1}^7 \beta_j W_j(i) \times \hat{\alpha}_j Change(i) \right) + \left((\hat{H}(i) + \hat{C}(i)) \times \hat{\alpha}_j Change(i) \right)$$

As before, annual savings were calculated as follows:

$$\sum_{i \in TMY} E_B(i) - \sum_{i \in TMY} E_R(i)$$

Where each sum over all the hours in the TMY.

NON-ROUTINE EVENTS

Power TakeOff identified NRE at four participating sites in 2025. The details of these NRE are provided in Table 91. Both the implementation and the evaluation teams handled these NREs following the IPMVP NRE guidelines by dropping data for the affected period and extending the baseline back in time accordingly.

Table 91. NRE Details

Project ID	NRE Description	IPMVP Method
a1CT00000023vIE2AQ	School closure for summer break	3
a1CT00000023vIE2AQ	School closure for winter break	3
a1CT000000265w72AA	New HVAC equipment installed	3
a1CT0000002RmaV2AS	Change in site usage	3
a1CT0000002zunt2AA	School closure for winter break	3

MODEL FITNESS CRITERIA

To claim project savings as part of the channel, the model for each project must meet the following goodness-of-fit criteria:

- Absolute Value of Normalized Mean Bias Error (NMBE) < 0.5%
- Coefficient of Variation of Root Mean Square Error CV(RMSE) < 25%

- Savings Uncertainty < 50% at 68% confidence

These goodness-of-fit metrics were calculated consistent with industry best practices.⁴² All of the projects met the savings uncertainty criteria.

DETAILED PROJECT SAVINGS

Table 92 presents the results of the gross savings analysis (unadjusted for cross-participation) for the 47 VCx projects completed in 2025. Electric energy savings realization rates for individual projects range from 41% to 113%. All projects met model uncertainty thresholds in 2025.

Table 92. 2025 Virtual Commissioning Annual Savings by Project

Project ID	Ex Ante Gross kWh ^c	Verified Gross kWh	Gross Realization Rate
a1CT00000023vk02AA	307,480	307,480	100%
a1CT00000023vk22AA	311,401	311,401	100%
a1CT00000023vk72AA	60,729	60,960	100%
a1CT00000023vkA2AQ	159,801	158,887	99%
a1CT00000023vl42AA	354,637	359,291	101%
a1CT00000023vl52AA	213,780	213,780	100%
a1CT00000023vle2AA	106,680	106,589	100%
a1CT00000023vIE2AQ	65,664	67,511	103%
a1CT00000023vIr2AA	49,417	49,417	100%
a1CT00000023vIS2AQ	47,233	47,233	100%
a1CT00000023vm12AA	17,068	17,278	101%
a1CT00000023vm42AA	18,653	18,653	100%
a1CT00000023vmB2AQ	11,610	11,610	100%
a1CT00000023vmD2AQ	13,421	13,421	100%
a1CT000000265w52AA	38,941	38,941	100%
a1CT000000265w62AA	165,501	165,501	100%
a1CT000000265w72AA	20,998	20,998	100%
a1CT0000002dPWs2AM	21,665	21,666	100%
a1CT0000002dPWt2AM	16,595	16,595	100%
a1CT0000002dPWu2AM	49,762	49,762	100%
a1CT0000002dPWv2AM	150,235	149,783	100%
a1CT0000002dPWw2AM	57,468	57,468	100%
a1CT0000002dPWy2AM	9,896	10,293	104%
a1CT0000002dPWz2AM	337,574	337,574	100%
a1CT0000002dPX02AM	30,878	30,878	100%
a1CT0000002dPX12AM	37,463	37,210	99%
a1CT0000002HYVY2A4	60,155	60,155	100%
a1CT0000002HYVZ2A4	18,792	18,792	100%
a1CT0000002oHJ52AM	154,584	154,583	100%
a1CT0000002oHJ72AM	20,154	20,014	99%

⁴² *Uncertainty Assessment for IPMVP*. Efficiency Valuation Organization (EVO), 2019. Opinion Dynamics

Project ID	Ex Ante Gross kWh ^c	Verified Gross kWh	Gross Realization Rate
a1CT0000002oHJ92AM	96,926	95,668	99%
a1CT0000002oHJA2A2	43,753	43,754	100%
a1CT0000002RmaU2AS ^b	41,743	17,008	41%
a1CT0000002RmaV2AS	408,064	407,200	100%
a1CT0000002zunm2AA ^a	94,483	91,872	97%
a1CT0000002zunn2AA	284,224	284,224	100%
a1CT0000002zunq2AA	24,372	25,722	106%
a1CT0000002zunt2AA ^a	53,209	60,247	113%
a1CT0000002zuo82AA	27,366	27,367	100%
a1CT0000002zuoh2AA	27,738	27,511	99%
a1CT0000003B2xf2AC	21,354	21,354	100%
a1CT0000003B2xi2AC ^a	45,252	43,494	96%
a1CT0000003i97H2AQ ^a	154,243	153,652	100%
a1CT0000003i97T2AQ ^a	132,940	121,982	92%
a1CT0000003XdeG2AS ^a	63,193	65,686	104%
a1CT0000003Xdel2AS ^a	30,368	30,960	102%
a1CT00000041Zxl2AE	33,126	33,126	100%

^a Evaluation team model included weather interactions, but implementation team did not include weather interactions.

^b Evaluation team identified cross-participation with a project that was implemented towards the end of December 2025. All of December 2025 data was dropped from the post-period to limit the savings contamination from that project.

^c Ex ante gross kWh numbers in this table do not reflect adjustments for cross-participation.

Table 93 shows the model goodness-of-fit metrics that Power TakeOff and the evaluation team produced for the 47 VCx projects.

Table 93. 2025 Virtual Commissioning Model Goodness-of-Fit Metrics by Project

Project ID	Adjusted R ²		CV(RMSE)		NMBE		Savings Uncertainty	
	Opinion Dynamics	Power TakeOff	Opinion Dynamics	Power TakeOff	Opinion Dynamics	Power TakeOff	Opinion Dynamics	Power TakeOff
a1CT00000023vk02AA	0.91	0.91	12.45%	12.45%	0.00%	0.00%	0.00%	1.48%
a1CT00000023vk22AA	0.91	0.91	18.37%	18.37%	0.00%	0.00%	0.64%	1.53%
a1CT00000023vk72AA	0.81	0.81	17.89%	17.92%	0.00%	0.00%	12.70%	14.53%
a1CT00000023vkA2AQ	0.80	0.80	17.37%	17.51%	0.00%	0.00%	8.61%	7.83%
a1CT00000023vi42AA	0.81	0.81	20.99%	20.89%	0.00%	0.00%	7.74%	9.00%
a1CT00000023vi52AA	0.71	0.71	22.66%	22.66%	0.00%	0.00%	1.00%	7.59%
a1CT00000023vle2AA	0.84	0.84	22.14%	22.16%	0.00%	0.00%	9.29%	14.03%
a1CT00000023viE2AQ	0.69	0.69	23.60%	23.51%	0.00%	0.00%	14.04%	17.16%
a1CT00000023vIr2AA	0.86	0.86	13.47%	13.47%	0.00%	0.00%	2.43%	5.30%
a1CT00000023viS2AQ	0.55	0.55	18.79%	18.79%	0.00%	0.00%	3.38%	6.92%
a1CT00000023vm12AA	0.62	0.62	22.71%	22.62%	0.00%	0.00%	19.30%	31.49%
a1CT00000023vm42AA	0.72	0.72	14.75%	14.75%	0.00%	0.00%	2.81%	7.83%
a1CT00000023vmB2AQ	0.86	0.86	19.38%	19.38%	0.00%	0.00%	3.09%	6.35%
a1CT00000023vmD2AQ	0.78	0.78	24.75%	24.75%	0.00%	0.00%	5.59%	14.02%
a1CT000000265w52AA	0.75	0.75	24.27%	24.27%	0.00%	0.00%	2.67%	9.54%

Project ID	Adjusted R ²		CV(RMSE)		NMBE		Savings Uncertainty	
	Opinion Dynamics	Power TakeOff	Opinion Dynamics	Power TakeOff	Opinion Dynamics	Power TakeOff	Opinion Dynamics	Power TakeOff
a1CT000000265w62AA	0.82	0.82	15.44%	15.44%	0.00%	0.00%	1.40%	3.36%
a1CT000000265w72AA	0.78	0.78	21.47%	21.47%	0.00%	0.00%	2.18%	11.64%
a1CT0000002dPWs2AM	0.84	0.84	24.69%	24.69%	0.00%	0.00%	5.99%	12.26%
a1CT0000002dPWt2AM	0.74	0.74	15.83%	15.83%	0.00%	0.00%	0.00%	19.53%
a1CT0000002dPWu2AM	0.89	0.89	20.31%	20.31%	0.00%	0.00%	2.57%	6.53%
a1CT0000002dPWv2AM	0.70	0.70	19.66%	19.84%	0.00%	0.00%	9.56%	11.69%
a1CT0000002dPWw2AM	0.86	0.86	14.64%	14.64%	0.00%	0.00%	3.09%	5.04%
a1CT0000002dPWy2AM	0.69	0.70	19.31%	19.07%	0.00%	0.00%	23.43%	21.32%
a1CT0000002dPWz2AM	0.76	0.76	15.61%	15.61%	0.00%	0.00%	0.44%	2.97%
a1CT0000002dPX02AM	0.83	0.83	15.69%	15.69%	0.00%	0.00%	4.29%	16.62%
a1CT0000002dPX12AM	0.74	0.73	14.65%	14.86%	0.00%	0.00%	14.14%	18.12%
a1CT0000002HYVY2A4	0.78	0.78	16.59%	16.59%	0.00%	0.00%	1.84%	7.52%
a1CT0000002HYVZ2A4	0.78	0.78	21.20%	21.20%	0.00%	0.00%	2.66%	6.44%
a1CT0000002oHJ52AM	0.82	0.82	18.45%	18.45%	0.00%	0.00%	2.10%	4.81%
a1CT0000002oHJ72AM	0.92	0.92	23.04%	23.06%	0.00%	0.00%	15.76%	26.81%
a1CT0000002oHJ92AM	0.65	0.66	21.93%	21.60%	0.00%	0.00%	25.93%	41.60%
a1CT0000002oHJA2A2	0.52	0.52	19.53%	19.53%	0.00%	0.00%	9.42%	24.22%
a1CT0000002RmaU2AS ^b	0.52	0.49	15.48%	16.38%	0.00%	0.00%	19.66%	29.82%
a1CT0000002RmaV2AS	0.84	0.84	16.77%	16.78%	0.00%	0.00%	1.02%	3.68%
a1CT0000002zunm2AA ^a	0.85	0.84	16.87%	17.34%	0.00%	0.00%	1.02%	3.03%
a1CT0000002zunn2AA	0.81	0.81	17.01%	17.01%	0.00%	0.00%	2.79%	3.83%
a1CT0000002zunq2AA	0.82	0.82	17.95%	17.84%	0.00%	0.00%	16.28%	22.80%
a1CT0000002zunt2AA ^a	0.91	0.89	21.25%	24.07%	0.00%	0.00%	9.18%	15.34%
a1CT0000002zuo82AA	0.90	0.90	23.09%	23.09%	0.00%	0.00%	2.44%	4.67%
a1CT0000002zuoh2AA	0.82	0.82	16.84%	16.84%	0.00%	0.00%	28.93%	37.88%
a1CT0000003B2xf2AC	0.72	0.72	17.40%	17.40%	0.00%	0.00%	1.77%	3.57%
a1CT0000003B2xi2AC ^a	0.82	0.81	22.15%	22.55%	0.00%	0.00%	4.29%	8.49%
a1CT0000003i97H2AQ ^a	0.91	0.91	11.89%	12.05%	0.00%	0.00%	1.25%	3.23%
a1CT0000003i97T2AQ ^a	0.84	0.83	15.22%	15.60%	0.00%	0.00%	1.76%	4.55%
a1CT0000003XdeG2AS ^a	0.92	0.91	12.39%	12.91%	0.00%	0.00%	1.48%	4.18%
a1CT0000003XdeI2AS ^a	0.87	0.83	19.85%	22.48%	0.00%	0.00%	9.35%	17.16%
a1CT00000041ZxI2AE	0.83	0.83	13.88%	13.88%	0.00%	0.00%	3.12%	6.16%

^a Evaluation team modeled including weather interaction terms, but implementation team did not include weather interactions.

^b Evaluation team found cross-participation with a project that was implemented towards the end of December 2025. All of December 2025 data was dropped from the post-period to avoid the need for a cross-participation adjustment.

UPLIFT FROM OTHER AIC INITIATIVES

The savings analysis for the VCx channel considers energy savings that resulted from energy-efficient actions taken through other AIC Business Program initiatives. The implementation team identified one site that completed projects through other AIC Business Program initiatives after participating in the VCx offering in 2025. They adjusted the ex ante savings estimate to exclude savings generated from these other AIC initiatives. The evaluation team modified the cross-participation adjustments made for this project.

For this site (a1CTO00000265w52AA), the difference in the cross-participation adjustment appears to stem from the implementation team adjusting for additional projects beyond those the evaluation team determined to be relevant. The evaluation team accounted for cross-program participation by subtracting verified gross savings for each project completed through another AIC initiative from the verified gross electric savings from the VCx channel at the corresponding site. Table 94 summarizes the projects completed through other AIC Initiatives and the associated verified gross electric energy savings.

Table 94. Summary of Projects Completed through Other AIC Initiatives

Project ID	Source of Cross-Program Participation	Verified Gross Savings (kWh)	Verified Gross Savings from Cross-Program Participation (kWh)	Verified Gross Savings Adjusted for Cross-Program Participation (kWh)
a1CTO00000265w52AA	Midstream Lighting	38,941	1,686	37,255

MEASURE LIVES AND CUMULATIVE PERSISTING ANNUAL SAVINGS

The evaluation team applied an EUL of 7.3 for VCx based on guidance in Attachment B of IL-TRM V13.0, Volume 4.⁴³

GROSS IMPACT METHODOLOGY – VIRTUAL STRATEGIC ENERGY MANAGEMENT CHANNEL

The evaluation team evaluated the gross savings resulting from Virtual SEM in 2025 by replicating and verifying Power TakeOff’s facility-level modeling approach. Our approach, which leans heavily on the IPMVP Option C guidelines, focused on verifying Power TakeOff’s methods. In 2025, after replicating Power TakeOff’s models, the evaluation team adjusted the facility-level models for four projects to account for the exclusion of weather interaction terms.

As part of the verification process, the evaluation team assessed Power TakeOff’s data cleaning and processing methods, model specification and evaluation process, and process for calculating electric energy savings. In addition to verifying the savings associated with Virtual SEM, the evaluation team independently verified whether the individual project modeling results met the channel’s guidelines for model robustness. All the projects that Power TakeOff claimed as part of the 2025 Virtual SEM channel were found to have met model robustness criteria.

Lastly, the evaluation team reviewed and verified the cross-participation adjustments Power TakeOff made to the ex ante savings estimates. These cross-participation adjustments are necessary to avoid double-counting savings produced through other AIC initiatives. Power TakeOff identified one site that participated in the Virtual SEM channel as well as other AIC initiatives. The modeling-based approach to estimating savings for the Virtual SEM channel produces facility-level savings estimates, which envelop savings produced through other program interventions. Therefore, savings achieved through program activity incentivized and claimed through other AIC initiatives need to be removed from the savings estimates for Virtual SEM. Both the implementation and evaluation teams adjusted for cross-participation for project a1CTO000002HYVa2AO, however, the evaluation team identified two cross-participation projects; the implementation team only adjusted for one. In addition, the evaluation team identified cross-participation for project a1CTO000002HYVb2AO. The Uplift from Other AIC Initiatives section provides more information on these cross-participation adjustments.

⁴³ Illinois Statewide Technical Resource Manual – Volume 4: Cross-Cutting Measures and Attachments. Accessed at: https://www.ilsag.info/wp-content/uploads/IL-TRM_Effective_010125_v13.0_Vol_4_X-Cutting_Measures_and_Attach_09202024_FINAL.pdf

DATA REVIEW AND CLEANING

The evaluation team compared the raw and processed AMI data provided by Power TakeOff for the individual projects to independently verify the data cleaning process that Power TakeOff used to estimate their model. The evaluation team utilized Power TakeOff's processed data for modeling and reviewed this data for completeness.

MODELING APPROACH

The evaluation team verified the electric energy savings results that Power TakeOff claimed for Virtual SEM by validating their site-level model specifications and replicating Power TakeOff's results. To calculate annualized savings, we first developed a regression-based baseline energy usage model. We then used the baseline models, together with TMYx data, to estimate normalized gross annual savings.

Following Power TakeOff's process, we developed the baseline models by fitting a regression model to pre- and post-intervention data. Power TakeOff selected daily regression models.

The evaluation team added weather interactions to four model specifications since the projects had weather-sensitive interventions (e.g., HVAC set point or scheduling adjustments) and the additions typically reduced savings uncertainty (Table 96).

TIME-BASED REGRESSION MODEL

Equation 20 below describes the model specifications utilized in our evaluation.

Equation 20. Regression Model Considering Time and Weather Interactions

$$E(i) = \sum_{j=1}^k \beta_j Time(i) + \alpha_j Change(i) + H(i) + C(i) + \left(\sum_{j=1}^k \beta_j Time(i) \times \alpha_j Change(i) \right) + \left((H(i) + C(i)) \times \alpha_j Change(i) \right)$$

Across these two specifications, two time-based models were run.

Where daily consumption data were present, the time used in j was the day of the week, k represents 1 through 7 for the days in a week. $H(i)$ represents the heating component while $C(i)$ reflects the cooling component. $H(i)$ is defined as:

$$H(i) = h_1 T_1(i) + h_2 T_2(i) + h_3 T_3(i) + h_4 T_4(i)$$

Where:

$$T_1(i) = \sum_{i=1}^{24} \min(\max(55 - Temp(i), 0), 10)$$

$$T_2(i) = \sum_{i=1}^{24} \min(\max(45 - Temp(i), 0), 10)$$

$$T_3(i) = \sum_{i=1}^{24} \min(\max(35 - Temp(i), 0), 15)$$

$$T_4(i) = \sum_{i=1}^{24} \max(20 - \text{Temp}(i), 0)$$

$\text{Temp}(i)$ is temperature in degrees Fahrenheit for hour i .

$C(i)$ is defined as:

$$C(i) = c_1 P_1(i) + c_2 P_2(i) + c_3 P_3(i) + c_4 P_4(i)$$

Where:

$$P_1(i) = \sum_{i=1}^{24} \min(\max(\text{Temp}(i) - 55, 0), 10)$$

$$P_2(i) = \sum_{i=1}^{24} \min(\max(\text{Temp}(i) - 65, 0), 10)$$

$$P_3(i) = \sum_{i=1}^{24} \min(\max(\text{Temp}(i) - 75, 0), 15)$$

$$P_4(i) = \sum_{i=1}^{24} \max(\text{Temp}(i) - 90, 0)$$

Where hourly data were present, the time period j used was the hour of the week, and k represents the hours in a week (1 of 168). $H(i)$ represents the heating component while $C(i)$ reflects the cooling component. $H(i)$ is defined as:

$$H(i) = h_1T_1(i) + h_2T_2(i) + h_3T_3(i) + h_4T_4(i)$$

Where:

$$T_1(i) = \min(\max(55 - \text{Temp}(i), 0), 10)$$

$$T_2(i) = \min(\max(45 - \text{Temp}(i), 0), 10)$$

$$T_3(i) = \min(\max(35 - \text{Temp}(i), 0), 15)$$

$$T_4(i) = \max(20 - \text{Temp}(i), 0)$$

$\text{Temp}(i)$ is temperature in degrees Fahrenheit for hour i .

$C(i)$ is defined as:

$$C(i) = c_1P_1(i) + c_2P_2(i) + c_3P_3(i) + c_4P_4(i)$$

Where:

$$P_1(i) = \min(\max(\text{Temp}(i) - 55, 0), 10)$$

$$P_2(i) = \min(\max(\text{Temp}(i) - 65, 0), 10)$$

$$P_3(i) = \min(\max(\text{Temp}(i) - 75, 0), 15)$$

$$P_4(i) = \max(\text{Temp}(i) - 90, 0)$$

$\text{Time}(i)$ is an indicator variable set to one if i is the j^{th} hour of the week or day of the week and zero otherwise.

$\text{Change}(i)$ is the treatment variable, set to one if hour i occurs during the reporting period and zero otherwise.

NORMALIZED GROSS ANNUAL SAVINGS

To verify gross annual savings resulting from the Virtual SEM channel, the evaluation team first estimated the hourly model for four facilities and the daily model for two facilities using actual weather data. Next, we calculated each facility's annual predicted baseline and reporting period electricity consumption using estimated regression coefficients and TMYx weather data. Finally, we computed the annual savings by calculating the difference between the annual predicted baseline and reporting period electricity consumption.

For each facility where Power TakeOff estimated the hourly regression model specified in Equation 20, the evaluation team calculated hourly predicted baseline period electricity consumption based on Equation 21. Equation 21 contains the maximum terms that would be used to calculate the baseline. The following equations detail how we calculated the gross annual savings.

Equation 21. Hourly predicted Baseline Period Electricity Consumption

$$E_B(i) = \sum_{j=1}^{7 \times 24} \hat{\beta}_j HOW_j + \hat{H}(i) + \hat{C}(i) + \left((\hat{H}(i) + \hat{C}(i)) \times NRE(i) \right)$$

In Equation 21, $E_B(i)$ is predicted baseline period electricity consumption for hour i . $\hat{\beta}_j$ is the estimated coefficient on the j^{th} hour/day of the week indicator variable as defined in Equation 18, $\hat{H}(i)$ and $\hat{C}(i)$ specified below are estimated heating and cooling components evaluated using TMY3 weather data and regression coefficients.

$$\hat{H}(i) = \hat{h}_1 T_1(i) + \hat{h}_2 T_2(i) + \hat{h}_3 T_3(i) + \hat{h}_3 T_3(i) + \hat{h}_4 T_4(i)$$

$$\hat{C}(i) = \hat{c}_1 P_1(i) + \hat{c}_2 P_2(i) + \hat{c}_3 P_3(i) + \hat{c}_3 P(i) + \hat{c}_4 P_4(i)$$

We calculated hourly reporting period electricity consumption based on Equation 22.

Equation 22. Hourly Predicted Reporting Period Electricity Consumption

$$E_R(i) = \sum_{j=1}^{7 \times 24} \hat{\beta}_j HOW_j + \hat{H}(i) + \hat{C}(i) + \hat{\alpha}_j Change(i) + \left(\sum_{j=1}^{7 \times 24} \beta_j HOW_j(i) \times \hat{\alpha}_j Change(i) \right) + \left((\hat{H}(i) + \hat{C}(i)) \times \hat{\alpha}_j Change(i) \right)$$

In Equation 22, $E_R(i)$ is predicted reporting period electricity consumption for hour i . $\hat{\alpha}_j$ is the estimated coefficient on the interaction term between the treatment variable and the j^{th} hour of the week indicator variable as defined for the hourly model versions of Equation 14 and Equation 15.

Annual savings were calculated as follows:

$$\sum_{i \in TMY} E_B(i) - \sum_{i \in TMY} E_R(i)$$

Where each sum was across all the hours in the TMY.

Similarly, for each facility where Power TakeOff estimated the daily regression model specified of Equation 20, the evaluation team calculated daily predicted baseline and reporting period electricity consumption based on Equation 20. We calculated annual savings using the formula defined above, but the sum included all the days in the TMY. Equation 23 contains the maximum terms that would be used to calculate the daily baseline. Models that do not include an NRE (Equation 14) will not include NRE terms.

Equation 24 contains the maximum terms that would be used to calculate the reporting period.

Equation 23. Daily Predicted Baseline Period Electricity Consumption

$$E_B(i) = \sum_{j=1}^7 \hat{\beta}_j W_j + \hat{H}(i) + \hat{C}(i) + NRE(i) + \left(\sum_{j=1}^7 \beta_j W_j(i) \times NRE(i) \right) + \left((\hat{H}(i) + \hat{C}(i)) \times NRE(i) \right)$$

Equation 24. Daily Predicted Reporting Period Electricity Consumption

$$E_R(i) = \sum_{j=1}^7 \hat{\beta}_j W_j + \hat{H}(i) + \hat{C}(i) + \hat{\alpha}_j Change(i) + \left(\sum_{j=1}^7 \beta_j W_j(i) \times \hat{\alpha}_j Change(i) \right) + \left((\hat{H}(i) + \hat{C}(i)) \times \hat{\alpha}_j Change(i) \right)$$

As before, annual savings were calculated as follows:

$$\sum_{i \in TMY} E_B(i) - \sum_{i \in TMY} E_R(i)$$

Where each sum was over all the hours in the TMY.

NON-ROUTINE EVENTS

Power TakeOff did not identify any NREs that occurred at the participating sites in 2025.

MODELING FITNESS CRITERIA

To claim project savings as part of the channel, the model for the project must meet the following goodness-of-fit criteria:

- Absolute Value of Normalized Mean Bias Error (NMBE) < 0.5%
- Coefficient of Variation of Root Mean Square Error CV(RMSE) < 25%
- Savings Uncertainty < 50% at 68% confidence

These goodness-of-fit metrics were calculated consistent with industry best practices.⁴⁴ The project met the savings uncertainty criteria.

DETAILED PROJECT SAVINGS

Table 95 presents the results of the gross savings analysis (unadjusted for cross-participation) for the six Virtual SEM projects completed in 2025. Electric energy savings realization rates for individual projects range from 80% to 119%. All projects met model uncertainty thresholds in 2025.

⁴⁴ *Uncertainty Assessment for IPMVP*. Efficiency Valuation Organization (EVO), 2019.
Opinion Dynamics

Table 95. 2025 Virtual SEM Annual Savings by Project

Project ID	Ex Ante Gross kWh ^c	Verified Gross kWh	Gross Realization Rate
a1CT00000023vk82AA ^{ab}	34,252	40,673	119%
a1CT0000002HYVa2AO	184,939	200,902	109%
a1CT0000002HYVb2AO ^{ab}	99,388	91,038	92%
a1CT0000002HYVd2AO ^b	994,057	994,056	100%
a1CT0000002zupO2AQ ^a	152,000	121,763	80%
a1CT0000002zvEj2Al ^a	71,629	57,433	80%

^a Evaluation team models including weather interaction terms, but implementation team did not include weather interactions.

^b Evaluation team used different baseline and/or reporting start and end dates to reflect dates in implementation logs.

^c Ex ante gross kWh numbers in this table do not reflect adjustments for cross-participation.

Table 96 shows the model goodness-of-fit metrics that Power TakeOff and the evaluation team produced for the six Virtual SEM projects.

Table 96. 2025 Virtual SEM Model Goodness-of-Fit Metrics by Project

Project ID	Adjusted R ²		CV(RMSE)		NMBE		Savings Uncertainty	
	Opinion Dynamics	Power TakeOff	Opinion Dynamics	Power TakeOff	Opinion Dynamics	Power TakeOff	Opinion Dynamics	Power TakeOff
a1CT00000023vk82AA ^{ab}	0.88	0.89	18.15%	18.10%	0.00%	0.00%	10.07%	21.10%
a1CT0000002HYVa2AO	0.67	0.67	21.02%	21.02%	0.00%	N/A ^c	2.33%	4.63%
a1CT0000002HYVb2AO ^{ab}	0.64	0.62	20.87%	21.35%	0.00%	0.00%	34.89%	35.65%
a1CT0000002HYVd2AO ^b	0.78	0.76	14.64%	15.42%	0.00%	0.00%	11.10%	13.92%
a1CT0000002zupO2AQ ^a	0.72	0.72	15.51%	15.60%	0.00%	0.00%	2.29%	8.13%
a1CT0000002zvEj2Al ^a	0.89	0.89	19.02%	19.50%	0.00%	0.00%	5.37%	5.29%

^a Evaluation team modeled including weather interaction terms, but implementation team did not include weather interactions.

^b Evaluation team used different baseline and/or reporting start and end dates to reflect dates in implementation logs.

^c Value was missing.

UPLIFT FROM OTHER AIC INITIATIVES

The savings analysis for the Virtual SEM channel considers energy savings that resulted from energy-efficient actions taken through other AIC Business Program initiatives. The evaluation team identified two Virtual SEM participants that completed projects through other AIC Business Program initiatives after participating in the Virtual SEM offering in 2025 and adjusted the ex ante savings estimates to exclude savings produced through the other AIC initiatives.

The first site (a1CT0000002HYVa2AO) was not flagged for cross-participation by the implementation team, but the evaluation team identified a Midstream Lighting project completed on the same day as the start date of the Virtual SEM project, meaning the impact of this project would influence post-period consumption data and not pre-period consumption. Therefore, the evaluation team determined it was necessary to make an adjustment for this project. For the second site (a1CT0000002HYVb2AO) the difference between the cross-participation adjustments made by the implementation and evaluation teams was because the implementation team only accounted for one of the two projects that the evaluation team had flagged for cross-participation. The implementation team adjusted for the completed SLB project, but not the Midstream Lighting project.

The evaluation team accounted for cross-program participation by subtracting verified gross savings for each project completed through another AIC initiative from the verified gross electric savings from the Virtual SEM channel at the Opinion Dynamics

corresponding site. Table 97 summarizes the projects completed through other AIC Initiatives and the associated verified gross electric energy savings.

Table 97. Summary of Projects Completed through Other AIC Initiatives

Project ID	Source of Cross-Program Participation	Verified Gross Savings (kWh)	Verified Gross Savings from Cross-Program Participation (kWh)	Verified Gross Savings Adjusted for Cross-Program Participation (kWh)
a1CT0000002HYVa2AO	Midstream Lighting	994,056	29,477	964,579
a1CT0000002HYVb2AO	Standard Lighting and Midstream Lighting	121,763	8,889	112,874

MEASURE LIVES AND CUMULATIVE PERSISTING ANNUAL SAVINGS

The evaluation team applied an EUL of 7.0 for Virtual SEM based on guidance in Attachment B of IL-TRM V13.0, Volume 4.⁴⁵

NET IMPACT METHODOLOGY

The evaluation team applied the NTG Ratio for Disadvantaged Areas Policy for eligible projects, as outlined in Section 2.3.1. For all other projects, we applied the SAG-approved 2025 NTGRs to the verified gross savings to calculate verified net savings. Table 98 outlines the SAG-approved NTGR values applied to the verified gross savings for VCx and Virtual SEM.

Table 98. 2025 SAG-Approved Retro-Commissioning Initiative NTGRs

Channel	Electric NTGR
Virtual Commissioning	0.936
Virtual SEM	1.000

STREETLIGHTING INITIATIVE

GROSS IMPACT METHODOLOGY

The evaluation team calculated verified savings for the Streetlighting Initiative by applying savings algorithms from the IL-TRM V13.0. The team leveraged information from the Initiative tracking data such as fixture quantity, baseline fixture wattage and type, and LED wattage to inform savings assumptions. For variables outside these parameters, the evaluation team relied on defaults from the IL-TRM V13.0. Table 99 lists the measures in the Streetlighting Initiative, their corresponding IL-TRM section, and whether or not IL-TRM errata applied to the measure in the 2025 evaluation.

Table 99. Streetlighting Initiative Evaluated Measures

IL-TRM Measure Name	IL-TRM Measure Code	Errata Applied?
LED Streetlighting	4.5.16	No

⁴⁵ Illinois Statewide Technical Resource Manual – Volume 4: Cross-Cutting Measures and Attachments. Accessed at: https://www.ilsag.info/wp-content/uploads/IL-TRM_Effective_010125_v13.0_Vol_4_X-Cutting_Measures_and_Attach_09202024_FINAL.pdf.

MEASURE LIVES AND CUMULATIVE PERSISTING ANNUAL SAVINGS

We applied EULs and baseline adjustments per IL-TRM V13.0 to determine CPAS for this evaluation. The IL-TRM specifies an EUL of 20 years for an LED streetlight under standard operation and 10 years for an LED streetlight under continuous operation.⁴⁶

In cases where LED streetlights replaced existing, functional MV fixtures, a baseline adjustment was made after the remaining useful life (RUL) of the MV fixture expired. Per IL-TRM V13.0, the RUL for MV streetlights under standard operation is assumed to be three years.

NET IMPACT METHODOLOGY

The evaluation team applied the NTG Ratio for Disadvantaged Areas Policy for eligible projects, as outlined in Section 2.3.1. For all other projects, we applied the SAG-approved 2025 NTGRs to the verified gross savings to calculate verified net savings.

Table 100. 2025 SAG-Approved Streetlighting Initiative NTGRs

Channel	Measure	Electric NTGR	Gas NTGR
MOSL	All Measures	0.690	N/A
UOSL	All Measures	1.000	N/A

⁴⁶ All evaluated streetlights in 2025 were determined to be under standard operation.
Opinion Dynamics

SMALL BUSINESS INITIATIVE

GROSS IMPACT METHODOLOGY

The evaluation team calculated verified savings for the Small Business Initiative by applying savings algorithms from the IL-TRM V13.0. The team leveraged information from the Initiative tracking data, such as primary heating and cooling type, LED wattage, LED lamp type, project location (e.g., weather-dependent variables), and building type, to inform savings assumptions. For variables outside these parameters, the evaluation team relied on defaults from the IL-TRM V13.0. Table 101 lists the measures in the Small Business Initiative, their corresponding IL-TRM section, and whether or not IL-TRM errata applied to the measure in the 2025 evaluation.

Table 101. Small Business Initiative Evaluated Measures

IL-TRM Measure Name	IL-TRM Measure Code	Errata Applied?
Fluorescent Delamping	4.5.2	No errata present for this measure
LED Bulbs and Fixtures	4.5.4	No errata present for this measure
Commercial LED Exit Signs	4.5.5	No errata present for this measure
Lighting Controls	4.5.10	No errata present for this measure
Automatic Door Closer for Walk-In Coolers and Freezers	4.6.1	No errata present for this measure
Door Heater Controls for Cooler or Freezer	4.6.3	No errata present for this measure
Electronically Commutated Motors (ECM) for Walk-in and Reach-in Coolers / Freezers	4.6.4	No errata present for this measure
Evaporator Fan Control for Electrically Commutated Motors	4.6.6	No errata present for this measure
Roof Insulation for C&I Facilities	4.8.1	No errata present for this measure
C&I Air Sealing	4.8.4	No errata present for this measure
Commercial Wall Insulation	4.8.7	No errata present for this measure

MEASURE LIVES AND CUMULATIVE PERSISTING ANNUAL SAVINGS

For prescriptive measures, the evaluation team applied measure lives defined in IL-TRM V13.0.

NET IMPACT METHODOLOGY

The evaluation team applied the NTG Ratio for Disadvantaged Areas Policy for eligible projects, as outlined in Section 2.3.1. For all other projects, we applied the SAG-approved 2025 NTGRs to the verified gross savings to calculate verified net savings.

Table 102. 2025 SAG-Approved Small Business Initiative NTGRs

Channel	Measure	Electric NTGR	Gas NTGR
SBDI	LED Bulbs and Fixtures	1.141	N/A
	Fluorescent Delamping	1.141	N/A
	Exit Signs	1.141	N/A
	Lighting Controls	1.141	N/A
	Evaporator Fan Control for ECMs	1.141	N/A

Channel	Measure	Electric NTGR	Gas NTGR
	ECMs for Coolers/Freezers	1.141	N/A
	Automatic Door Closer	1.141	N/A
SBEP	All Measures	1.000	1.000

MIDSTREAM INITIATIVE

GROSS IMPACT METHODOLOGY

The evaluation team calculated verified savings for the Midstream Initiative by applying savings algorithms from the IL-TRM V13.0. The team leveraged information from the Initiative tracking data such as equipment capacity and efficiency, LED wattage, LED lamp type, and project location and facility type (e.g., for weather-dependent variables) to inform savings assumptions. For variables outside these parameters, the evaluation team relied on defaults from the IL-TRM V13.0. Table 103 lists the measures in the Midstream Initiative, their corresponding IL-TRM section, and whether or not IL-TRM errata applied to the measure in the 2025 evaluation.

Table 103. Midstream Initiative Evaluated Measures

IL-TRM Measure Name	IL-TRM Measure Code	Errata Applied?
Combination Ovens	4.2.1	No errata present for this measure
Ice Machines	4.2.10	No errata present for this measure
Kitchen Ventilation Systems	4.2.16	No errata present for this measure
Refrigerators and Freezers	4.2.2	No errata present for this measure
Automatic Conveyor Broilers	4.2.22	No errata present for this measure
Deck Ovens	4.2.23	No errata present for this measure
Steam Cookers	4.2.3	No errata present for this measure
Convection Ovens	4.2.5	No errata present for this measure
Dishwashers	4.2.6	No errata present for this measure
Fryers	4.2.7	No errata present for this measure
Griddles	4.2.8	No errata present for this measure
Hot Food Holding Cabinets	4.2.9	No errata present for this measure
Water Heater	4.3.1	No errata present for this measure
Notched V Belts for HVAC Systems	4.4.30	No errata present for this measure
Small Commercial Thermostats	4.4.48	No errata present for this measure
Air and Water Source Heat Pump Systems (Centrally Ducted and Ductless)	4.4.9	Errata Applied
LED Bulbs and Fixtures	4.5.4	No errata present for this measure
Commercial LED Exit Signs	4.5.5	No errata present for this measure

MEASURE LIVES AND CUMULATIVE PERSISTING ANNUAL SAVINGS

For prescriptive measures, the evaluation team applied measure lives defined in IL-TRM V13.0.

NET IMPACT METHODOLOGY

The evaluation team applied the NTG Ratio for Disadvantaged Areas Policy for eligible projects, as outlined in Section 2.3.1. For all other projects, we applied the SAG-approved 2025 NTGRs to the verified gross savings to calculate verified net savings.

Table 104. 2025 SAG-Approved Midstream Initiative NTGR

Channel	Measure	Electric NTGR	Gas NTGR
Midstream HVAC	Advanced Thermostat – Heating	0.800	0.800
Midstream HVAC	Advanced Thermostat – Cooling	0.600	N/A
Midstream HVAC	Unitary DMSHP	0.600	N/A
Midstream HVAC	Unitary ASHP	0.600	N/A
Midstream HVAC	Notched V-Belt	0.800	N/A
Midstream HVAC	Heat Pump Water Heater	0.600	N/A
Midstream Lighting	Specialty LED	0.835	N/A
Midstream Lighting	Mogul	0.835	N/A
Midstream Lighting	Exit Sign	0.835	N/A
Midstream Lighting	Wall Pack	0.835	N/A
Midstream Lighting	4-Pin LED	0.835	N/A
Midstream Lighting	Linear LED	0.835	N/A
Midstream Food Service	All measures	0.800	0.800

APPENDIX B. ADDITIONAL IMPACTS

INTRODUCTION

In this appendix, we provide additional quantified impacts from AIC's Business Program that are not presented in the body of the report. Three specific types of additional inputs are provided:

- Summaries of fossil fuel impacts achieved by the Business Program that cannot be directly claimed against AIC's goals but can be used in cost-effectiveness testing and to support savings conversions under Illinois law;
- Summaries of gas penalties that are not counted toward goal attainment but are required for cost-effectiveness analysis; and
- Summaries of water savings and secondary electric energy savings from water supply and wastewater treatment that are required for cost-effectiveness analysis.

ADDITIONAL FOSSIL FUEL IMPACTS

Some AIC customers receive natural gas service from other providers or use unregulated fuels such as propane to serve their energy needs. Measures provided by AIC to these customers through its existing programs may save units of these fuels in addition to energy sources provided by AIC. While these savings cannot be directly claimed against AIC's energy savings goals, where possible, we quantify these impacts in this appendix to support both cost-effectiveness testing and savings conversions under Illinois state law.

The Standard Core, Custom Incentives, SBEP, and MFS channels produced quantifiable non-AIC natural gas impacts in 2025.

GAS HEATING PENALTIES

Per the Policy Manual, AIC is not required to account for gas heating penalties resulting from the installation of energy efficiency measures designed to save electricity when considering savings for goal attainment purposes.^{47,48} Therefore, we exclude those effects from all savings reported throughout the body of this report. However, these effects must be evaluated and considered as part of cost-effectiveness testing and are therefore presented in this appendix.

In the following sections, the evaluation team focuses specifically on the following gas heating penalties:

- **Lighting Heating Penalties.** The inclusion of waste heat factors for lighting is based on the concept that heating loads are increased to supplement the reduction in waste heat that was once provided by the existing, less efficient lamp type. The evaluation team applied the IL-TRM V13.0 waste heat factors to lamps based on heating fuel types provided in the tracking database to arrive at gross heating penalties. For cases where tracking data did not provide the heating type, the team assumed natural gas heating, per the IL-TRM.
- **Furnace Blower Motor Heating Penalties.** High efficiency fan motors operate at cooler temperatures than traditional furnace blower motors. The amount of heat that is released decreases due to cooler operating

⁴⁷ Illinois Energy Efficiency Policy Manual. Section 7.7. Accessed at: https://www.ilsag.info/wp-content/uploads/IL_EE_Policy_Manual_Version_3.0_Final_11-3-2023.pdf.

⁴⁸ AIC is required to account for electric heating penalties resulting from the installation of energy efficiency measures designed to save electricity, and those effects are accounted for throughout this report.

conditions. Heating equipment must compensate for this heat loss during the heating season, which can increase HVAC heating loads. The team applied IL-TRM V13.0 algorithms to calculate the associated heating penalty.

- **Heat Pump Water Heater Heating Penalties.** When HPWHs are installed in conditioned spaces, they move heat from the ambient air into water stored in a tank. During the heating season, this can result in an increase in HVAC heating loads. The team applied IL-TRM V13.0 algorithms to calculate the associated heating penalty.

All gas heating penalties were calculated using algorithms from the IL-TRM V13.0 (with applicable errata applied).

SECONDARY ELECTRIC SAVINGS FOR WATER SUPPLY AND WASTEWATER TREATMENT

Some measures delivered through the Business Program produce water savings as well as energy savings. For applicable measures, the IL-TRM V13.0 includes an algorithm to calculate the secondary electric impacts of these water savings resulting from decreased electricity usage for water supply and wastewater treatment. As directly instructed in the IL-TRM, these savings may be included toward goal attainment but must be removed for cost-effectiveness calculations. Therefore, we present these savings separately in this appendix to provide transparency on the reduced savings that will be used when conducting testing for cost-effectiveness. All secondary electric savings were calculated using algorithms from the IL-TRM V13.0.

ELECTRIFICATION IMPACTS

Two projects delivered through the Custom Initiative in 2025 are subject to rules on counting electrification savings detailed in the IL-TRM V13.0, in Illinois statute⁴⁹, and in the Policy Manual.⁵⁰ Energy savings for these projects included in the body of this report are expressed in kWh equivalents for goal attainment purposes and are not appropriate for cost-effectiveness testing. Therefore, we present the actual at-the-meter energy impacts of these projects separately in this appendix to provide transparency on the impacts used for cost-effectiveness testing. Note, the electric demand savings presented in the body of this report are accurate for use in cost-effectiveness testing; therefore, no revised values are presented here.

STANDARD INITIATIVE

ADDITIONAL FOSSIL FUEL IMPACTS

Two projects completed through the Standard Core channel produced non-AIC gas savings in 2025. The ex ante gross, verified gross, and verified net gas savings produced through the project are summarized in Table 105.

Table 105. 2025 Standard Core Channel Non-AIC Natural Gas Savings

Measure Category	Ex Ante Gross Savings (Therms)	Gross Realization Rate	Verified Gross Savings (Therms)	NTGR	Verified Net Savings (Therms)
HVAC	6,300	100%	6,300	0.817	5,146
Standard Weatherization (SW)	0	N/A	846	0.800	677
Total	6,300	113%	7,146	0.815	5,823

Note: The implementation team claimed the savings from the SW project as AIC gas savings. The evaluation team determined that the associated customer does not receive gas service from AIC, and therefore, presents the verified gas savings from this project in this table.

⁴⁹ 220 ILCS 5/8-103B(b-27).

⁵⁰ Illinois Energy Efficiency Stakeholder Advisory Group. *Illinois Energy Efficiency Policy Manual Version 3.0*, Section 12.3. 2023. Accessed at https://www.ilsag.info/wp-content/uploads/IL_EE_Policy_Manual_Version_3.0_Final_11-3-2023.pdf

GAS HEATING PENALTIES

Table 106 presents gas penalties not reported in the body of the report for the Standard Initiative.

Table 106. 2025 Standard Initiative Gas Heating Penalties

Channel	Measure	Therms
Standard Core	LED Fixtures and Bulbs	-91,707
	Lighting Controls	-26,308
Online Store	LEDs	-221
	Exit Signs	-5
	Lighting Controls	-125
Total Gas Penalties		-118,366

SECONDARY ELECTRIC SAVINGS FOR WATER SUPPLY AND WASTEWATER TREATMENT

Table 107 presents water savings and secondary electric savings for the Standard Initiative.

Table 107. 2025 Standard Initiative Secondary Electric and Water Savings by Measure

Measure Category	Verified Gross Water Savings (Gallons)	Conversion Factor	Verified Gross Secondary Electric Savings (kWh)
Ozone Laundry	528,190	5,010 kWh/million gal ^a	2,646
Steam Trap Replacement or Repair	4,222,519	2,571 kWh/million gal ^a	10,856
Steam Trap Monitoring System	144,142		371
Green Nozzles	883,678	5,010 kWh/million gal ^a	4,427
Total	5,778,529		18,300

^a Source: IL-TRM V13.0

TOTAL IMPACTS FOR COST-EFFECTIVENESS

Table 108 presents a summary of the 2025 Standard Initiative verified gross impacts adjusted for the above effects.

Table 108. 2025 Standard Initiative Verified Gross Impacts for Cost-Effectiveness

	Electric Energy (kWh)	Gas (Therms)	Non-AIC Gas (Therms)	Water (Gallons)
Verified Gross Impacts for Goal Attainment	30,917,427	1,234,796	N/A	N/A
Gas Penalties	N/A	-118,015	N/A	N/A
Water Savings	N/A	N/A	N/A	5,778,529
Secondary Electric Savings	18,300	N/A	N/A	N/A
Additional Fossil Fuel Impacts	N/A	N/A	7,146	N/A
Final Verified Gross Impacts for Cost-Effectiveness	30,899,127	1,116,429	7,146	5,778,529

Note: All electric demand savings used in cost-effectiveness testing align with those presented in Section 3.

CUSTOM INITIATIVE

ADDITIONAL FOSSIL FUEL IMPACTS

Eight projects completed through the Custom Incentives channel of the Custom Initiative produced non-AIC gas savings in 2025. The ex ante gross, verified gross, and verified net gas savings produced through the projects are summarized in Table 109.

Table 109. 2025 Custom Initiative Non-AIC Natural Gas Savings

Project ID	Ex Ante Gross Savings (Therms)	Gross Realization Rate	Verified Gross Savings (Therms)	NTGR	Verified Net Savings (Therms)
2400072	169,720	98%	166,023	0.824	136,853
2400093	53,164	96%	51,254	0.824	42,249
2400051	669,553	185%	1,238,816	0.824	1,021,156
2400889	36,144	185%	66,875	0.824	55,125
2400890	178,384	185%	330,048	0.824	272,059
2400891	35,267	185%	65,251	0.824	53,786
2400901	23,675	185%	43,804	0.824	36,108
2400904	75,868	185%	140,371	0.824	115,708
Total	1,241,774	169%	2,102,442	0.824	1,733,043

One project completed through the Custom Incentives channel of the Custom Initiative produced propane savings in 2025. The ex ante gross, verified gross, and verified net gas savings produced through the projects are summarized in Table 110.

Table 110. 2025 Custom Initiative Propane Savings

Project ID	Ex Ante Gross Savings (Therms)	Gross Realization Rate	Verified Gross Savings (Therms)	NTGR	Verified Net Savings (Therms)
2400143	5,959	185%	11,025	0.824	9,088
Total	5,959	185%	11,025	0.824	9,088

GAS HEATING PENALTIES

No measures delivered through the Custom Initiative produced quantifiable gas heating penalties in 2025.

SECONDARY ELECTRIC SAVINGS FOR WATER SUPPLY AND WASTEWATER TREATMENT

No measures delivered through the Custom Initiative produced quantifiable secondary electric savings in 2025.

ELECTRIFICATION IMPACTS

Table 111 and Table 112 provide a summary of at-the-meter verified electric energy, natural gas, and propane impacts for the 2025 Custom Incentives channel to be used in cost-effectiveness testing.

Table 111. Custom Incentives Electric Energy Impacts by Project

Project ID	Ex Ante Gross Impacts (kWh)	Gross Realization Rate	Verified Gross Impacts (kWh)	NTGR	Verified Net Impacts (kWh)
2400055	141,809	101%	143,262	1.000	143,262
2500015	-269,772	100%	-269,772	1.000	-269,772

Table 112. Custom Incentives Gas Impacts by Project

Project ID	Ex Ante Gross Impacts (Therms)	Gross Realization Rate	Verified Gross Impacts (Therms)	NTGR	Verified Net Impacts (Therms)
2400055	4,839	101%	4,888	1.000	4,888
2500015	39,636	100%	39,636	1.000	39,636

TOTAL IMPACTS FOR COST-EFFECTIVENESS

Table 113 presents a summary of the 2025 Custom Initiative verified gross impacts adjusted for the above effects.

Table 113. 2025 Custom Initiative Verified Gross Impacts for Cost-Effectiveness

	Electric Energy (kWh)	Gas (Therms)	Non-AIC Gas (Therms)	Propane (Therms)	Water (Gallons)
Verified Gross Impacts for Goal Attainment	80,166,821	1,097,546	N/A	N/A	N/A
Gas Penalties	N/A	N/A	N/A	N/A	N/A
Water Savings	N/A	N/A	N/A	N/A	0
Secondary Electric Savings	0	N/A	N/A	11,025	N/A
Additional Fossil Fuel Impacts	N/A	N/A	2,102,442	0	N/A
Fuel Switching Project Adjustments	-1,304,882	44,524	0	0	N/A
Final Verified Gross Impacts for Cost-Effectiveness	78,861,939	1,142,070	2,102,442	11,025	0

Note: All electric demand savings used in cost-effectiveness testing align with those presented in Section 3.

RETRO-COMMISSIONING

ADDITIONAL FOSSIL FUEL IMPACTS

The Retro-Commissioning Initiative produced no additional fossil fuel impacts in 2025.

GAS HEATING PENALTIES

No measures delivered through the Retro-Commissioning Initiative produced quantifiable gas heating penalties in 2025.

SECONDARY ELECTRIC SAVINGS FOR WATER SUPPLY AND WASTEWATER TREATMENT

No measures delivered through the Retro-Commissioning Initiative produced quantifiable secondary electric savings in 2025.

TOTAL IMPACTS FOR COST-EFFECTIVENESS

Table 114 presents a summary of the 2025 Retro-Commissioning Initiative verified gross impacts adjusted for the above effects.

Table 114. 2025 Retro-Commissioning Initiative Verified Gross Impacts for Cost-Effectiveness

	Electric Energy (kWh)	Gas (Therms)	Non-AIC Gas (Therms)	Water (Gallons)
Verified Gross Impacts for Goal Attainment	5,950,366	0	N/A	N/A
Gas Penalties	N/A	N/A	N/A	N/A
Water Savings	N/A	N/A	0	0
Secondary Electric Savings	N/A	N/A	N/A	N/A
Additional Fossil Fuel Impacts	N/A	0	0	0
Final Verified Gross Impacts for Cost-Effectiveness	5,950,366	0	N/A	N/A

Note: All electric demand savings used in cost-effectiveness testing align with those presented in Section 3.

STREETLIGHTING INITIATIVE

ADDITIONAL FOSSIL FUEL IMPACTS

The Streetlighting Initiative produced no additional fossil fuel impacts in 2025.

GAS HEATING PENALTIES

No measures installed through the Streetlighting Initiative in 2025 produced gas heating penalties.

SECONDARY ELECTRIC SAVINGS FOR WATER SUPPLY AND WASTEWATER TREATMENT

No measures delivered through the Streetlighting Initiative produced quantifiable secondary electric savings in 2025.

TOTAL IMPACTS FOR COST-EFFECTIVENESS

Table 115 presents a summary of the 2025 Streetlighting Initiative verified gross impacts adjusted for the above effects.

Table 115. 2025 Streetlighting Initiative Verified Gross Impacts for Cost-Effectiveness

	Electric Energy (kWh)	Gas (Therms)	Non-AIC Gas (Therms)	Water (Gallons)
Verified Gross Impacts for Goal Attainment	7,578,637	0	N/A	N/A
Gas Penalties	N/A	0	N/A	N/A
Water Savings	N/A	N/A	N/A	0
Secondary Electric Savings	0	N/A	N/A	N/A
Final Verified Gross Impacts for Cost-Effectiveness	7,578,637	0	0	0

Note: All electric demand savings used in cost-effectiveness testing align with those presented in Section 3.

SMALL BUSINESS INITIATIVE

ADDITIONAL FOSSIL FUEL IMPACTS

Four projects completed through the SBEP channel produced non-AIC gas savings in 2025. The ex ante gross, verified gross, and verified net gas savings produced through the projects are summarized in Table 116.

Table 116. 2025 Small Business Energy Performance Channel Non-AIC Natural Gas Savings

Measure Category	Ex Ante Gross Savings (Therms)	Gross Realization Rate	Verified Gross Savings (Therms)	NTGR	Verified Net Savings (Therms)
C&I Air Sealing	8,421	161%	13,570	1.000	13,570
Total	8,421	161%	13,570	1.000	13,570

GAS HEATING PENALTIES

Table 117 presents gas penalties not reported in the body of the report for the Small Business Initiative.

Table 117. 2025 Small Business Initiative Gas Heating Penalties

Channel	Measure	Therms
SBDI	LED Bulbs and Fixtures	-450,428
	Lighting Controls	-96,037
	Fluorescent Delamping	-3,146
	Exit Signs	-946
Total Gas Penalties		-550,477

SECONDARY ELECTRIC SAVINGS FOR WATER SUPPLY AND WASTEWATER TREATMENT

No measures delivered through the Small Business Initiative produced quantifiable secondary electric savings in 2025.

TOTAL IMPACTS FOR COST-EFFECTIVENESS

Table 118 presents a summary of 2025 Small Business Initiative verified gross impacts adjusted for the above effects.

Table 118. 2025 Small Business Initiative Verified Gross Impacts for Cost-Effectiveness

	Electric Energy (kWh)	Gas (Therms)	Non-AIC Gas (Therms)	Water (Gallons)
Verified Gross Impacts for Goal Attainment	42,863,932	18,210	N/A	N/A
Gas Penalties	N/A	-550,477	N/A	N/A
Water Savings	N/A	N/A	N/A	0
Secondary Electric Savings	0	N/A	N/A	N/A
Additional Fossil Fuel Impacts	N/A	N/A	13,570	N/A
Final Verified Gross Impacts for Cost-Effectiveness	42,863,932	-532,266	13,570	0

Note: All electric demand savings used in cost-effectiveness testing align with those presented in Section 3.

MIDSTREAM INITIATIVE

ADDITIONAL FOSSIL FUEL IMPACTS

One project completed through the Midstream Food Service channel produced non-AIC gas savings in 2025. The ex ante gross, verified gross, and verified net gas savings produced through the projects are summarized in Table 119.

Table 119. 2025 Midstream Food Service Channel Non-AIC Natural Gas Savings

Measure Category	Ex Ante Gross Savings (Therms)	Gross Realization Rate	Verified Gross Savings (Therms)	NTGR	Verified Net Savings (Therms)
Automatic Conveyor Broilers	946	92%	871	0.800	697
Total	946	92%	871	0.800	697

GAS HEATING PENALTIES

Table 120 presents gas penalties not reported in the body of the report for the Midstream Initiative.

Table 120. 2025 Midstream Initiative Gas Heating Penalties

Channel	Measure	Therms
Lighting	Linear LED	-273,573
	Mogul	-39,543
	4-Pin LED	-1,072
	Exit Sign	-15
HVAC	Heat Pump Water Heater	-130
Total Gas Penalties		-314,333

SECONDARY ELECTRIC SAVINGS FOR WATER SUPPLY AND WASTEWATER TREATMENT

Table 121 presents water savings and secondary electric savings for the Midstream Initiative.

Table 121. 2025 Midstream Initiative Secondary Electric and Water Savings by Measures

Channel	Measure Category	Verified Gross Water Savings (Gallons)	Conversion Factor	Verified Gross Secondary Electric Savings (kWh)
Food Service	Dishwashers	374,383	5,010 kWh/million gal ^a	1,876
Food Service	Steam Cookers	240,868	2,571 kWh/million gal	619
Total Savings		615,251		2,495

^a Source: IL-TRM V13.0

TOTAL IMPACTS FOR COST-EFFECTIVENESS

Table 122 presents a summary of the 2025 Midstream Initiative verified gross impacts adjusted for the above effects.

Table 122. 2025 Midstream Initiative Verified Gross Impacts for Cost-Effectiveness

	Electric Energy (kWh)	Gas (Therms)	Non-AIC Gas (Therms)	Water (Gallons)
Verified Gross Impacts for Goal Attainment	30,086,036	33,272	N/A	N/A
Gas Penalties	N/A	-314,333	N/A	N/A
Water Savings	N/A	N/A	N/A	615,251
Secondary Electric Savings	-2,495	N/A	N/A	N/A
Additional Fossil Fuel Impacts	N/A	N/A	871	N/A
Final Verified Gross Impacts for Cost-Effectiveness	30,083,541	-281,061	871	615,251

Note: All electric demand savings used in cost-effectiveness testing align with those presented in Section 3.

APPENDIX C. CUMULATIVE PERSISTING ANNUAL SAVINGS

This appendix presents detailed CPAS for the Business Program initiatives and channels. Due to many years of CPAS, tables are challenging to read; please reference the separately provided CPAS spreadsheet for additional details as needed.

Table 123 provides CPAS for the 2025 Business Program through 2052 at the initiative level. Lifetime savings for the 2025 Business Program through 2052 are 3,883,253 MWh.

Table 123. 2025 Business Program CPAS and WAML

Initiative	WAML	Annual Verified Gross Savings (MWh)	NTGR	CPAS - Verified Net Savings (MWh)													
				2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
Standard	13.9	30,917	0.875	27,039	27,039	27,039	27,036	26,823	26,651	26,241	25,697	25,414	25,323	24,514	22,189	21,049	20,248
Custom	22.4	80,167	0.766	61,385	61,385	61,385	61,385	61,385	61,385	61,385	61,385	61,282	60,973	60,955	60,940	60,857	57,257
Retro-Commissioning	7.2	5,950	0.954	5,679	5,679	5,679	5,679	5,679	5,679	5,679	1,263	0	0	0	0	0	0
Streetlighting	20.0	7,579	1.000	7,579	7,579	7,579	7,317	7,317	7,317	7,317	7,317	7,317	7,317	7,317	7,317	7,317	7,317
Small Business	13.6	42,864	1.140	48,858	48,858	48,668	47,600	46,745	46,240	43,896	42,294	42,013	41,242	40,585	38,994	32,590	30,073
Midstream	15.0	30,086	0.840	25,258	25,258	25,258	25,258	25,257	25,256	25,256	25,256	25,256	25,250	25,195	25,123	24,782	24,772
Midstream - Carryover	14.8	3,441	0.953	3,280	3,280	3,280	3,280	3,280	3,280	3,280	3,280	3,280	3,280	3,280	3,280	3,280	3,280
Business (b-25) Conversions	22.6	47,285	0.826	39,046	39,046	39,046	39,046	39,046	39,046	39,046	39,046	39,046	39,046	39,046	39,046	39,046	39,046
2025 Business Program CPAS		248,290	0.879	218,125	218,125	217,935	216,601	215,532	214,855	212,100	205,539	203,608	202,431	200,893	196,889	188,922	181,992
Expiring 2025 Business Program CPAS				0	0	190	1,334	1,069	678	2,754	6,561	1,931	1,177	1,538	4,004	7,967	6,929
Expired 2025 Business Program CPAS				0	0	190	1,523	2,592	3,270	6,024	12,586	14,516	15,694	17,232	21,236	29,203	36,132

Initiative	WAML	Annual Verified Gross Savings (MWh)	NTGR	CPAS - Verified Net Savings (MWh)													
				2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052
Standard	13.9	30,917	0.875	20,192	1,872	300	300	300	300	299	299	299	102	102	0	0	0
Custom	22.4	80,167	0.766	55,990	48,428	47,339	46,769	46,465	46,465	46,464	46,464	46,428	46,308	41,306	0	0	0
Retro-Commissioning	7.2	5,950	0.954	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Streetlighting	20.0	7,579	1.000	7,317	7,317	7,317	7,317	7,317	7,317	0	0	0	0	0	0	0	0
Small Business	13.6	42,864	1.140	29,716	5,492	355	355	355	355	7	7	7	7	7	0	0	0
Midstream	15.0	30,086	0.840	20,865	5,700	24	24	24	24	0	0	0	0	0	0	0	0
Midstream - Carryover	14.8	3,441	0.953	2,615	0	0	0	0	0	0	0	0	0	0	0	0	0
Business (b-25) Conversions	22.6	47,285	0.826	38,420	30,604	30,604	30,423	30,337	30,337	29,930	29,930	29,930	29,930	26,635	0	0	0
2025 Business Program CPAS		248,290	0.879	175,116	99,413	85,938	85,187	84,797	84,797	76,700	76,700	76,664	76,347	68,049	0	0	0
Expiring 2025 Business Program CPAS				6,877	75,702	13,476	751	390	0	8,097	0	36	317	8,298	68,049	0	0
Expired 2025 Business Program CPAS				43,009	118,711	132,187	132,938	133,328	133,328	141,424	141,424	141,461	141,778	150,075	218,125	218,125	218,125
WAML	18.4																

STANDARD INITIATIVE

Table 124 provides CPAS for the 2025 Standard Initiative through 2051. Lifetime savings for the Initiative are 376,665 MWh.

Table 124. 2025 Standard Initiative Program CPAS and WAML

Channel	WAML	Annual Verified Gross Savings (MWh)	NTGR	CPAS - Verified Net Savings (MWh)													
				2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
Core	14.1	29,175	0.870	25,380	25,380	25,380	25,377	25,371	25,199	24,789	24,385	24,102	24,011	23,214	21,900	20,761	20,245
Online Store	10.6	1,250	0.933	1,166	1,166	1,166	1,166	1,166	1,166	1,166	1,027	1,027	1,027	1,015	3	3	3
BOC	13.0	493	1.000	493	493	493	493	286	286	286	286	286	286	286	286	286	0
2025 CPAS		30,917	0.875	27,039	27,039	27,039	27,036	26,823	26,651	26,241	25,697	25,414	25,323	24,514	22,189	21,049	20,248
Expiring 2025 CPAS				0	0	0	4	213	172	410	544	283	91	809	2,325	1,139	801
Expired 2025 CPAS				0	0	0	4	217	388	799	1,343	1,625	1,717	2,525	4,851	5,990	6,791
WAML	13.9																

Channel	WAML	Annual Verified Gross Savings (MWh)	NTGR	CPAS - Verified Net Savings (MWh)													
				2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052
Core	14.1	29,175	0.870	20,189	1,871	300	300	300	300	299	299	299	102	102	0	0	0
Online Store	10.6	1,250	0.933	3	2	0	0	0	0	0	0	0	0	0	0	0	0
BOC	13.0	493	1.000	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2025 CPAS		30,917	0.875	20,192	1,872	300	300	300	300	299	299	299	102	102	0	0	0
Expiring 2025 CPAS				56	18,319	1,572	0	0	0	1	0	0	197	0	102	0	0
Expired 2025 CPAS				6,848	25,167	26,740	26,740	26,740	26,740	26,741	26,741	26,741	26,938	26,938	27,039	27,039	27,039
WAML	13.9																

CUSTOM INITIATIVE

Table 125 provides CPAS for the 2025 Custom Initiative through 2050. Lifetime savings for the Initiative are 1,371,769 MWh.

Table 125. 2025 Custom Initiative Program CPAS and WAML

Channel	WAML	Annual Verified Gross Savings (MWh)	NTGR	CPAS - Verified Net Savings (MWh)													
				2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	
Custom Incentives	22.6	77,981	0.762	59,408	59,408	59,408	59,408	59,408	59,408	59,408	59,408	59,408	59,305	58,996	58,996	58,996	58,913
New Construction Lighting	15.3	2,186	0.905	1,977	1,977	1,977	1,977	1,977	1,977	1,977	1,977	1,977	1,977	1,977	1,960	1,944	1,944
2025 CPAS		80,167	0.766	61,385	61,385	61,385	61,385	61,385	61,385	61,385	61,385	61,385	61,282	60,973	60,955	60,940	60,857
Expiring 2025 CPAS				0	0	0	0	0	0	0	0	0	103	309	17	16	83
Expired 2025 CPAS				0	0	0	0	0	0	0	0	0	103	412	430	445	529

Channel	WAML	Annual Verified Gross Savings (MWh)	NTGR	CPAS - Verified Net Savings (MWh)													
				2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	
Custom Incentives	22.6	77,981	0.762	55,313	54,046	47,650	47,339	46,769	46,465	46,465	46,464	46,464	46,428	46,308	41,306	0	
New Construction Lighting	15.3	2,186	0.905	1,944	1,944	778	0	0	0	0	0	0	0	0	0	0	
2025 CPAS		80,167	0.766	57,257	55,990	48,428	47,339	46,769	46,465	46,465	46,464	46,464	46,428	46,308	41,306	0	
Expiring 2025 CPAS				3,600	1,266	7,562	1,089	571	304	0	0	0	36	120	5,002	41,306	
Expired 2025 CPAS				4,129	5,395	12,957	14,046	14,617	14,920	14,921	14,921	14,921	14,921	14,957	15,077	20,079	61,385
WAML	22.4																

RETRO-COMMISSIONING INITIATIVE

Table 126 provides CPAS for the 2025 Retro-Commissioning Initiative through 2034. Lifetime savings for the Initiative are 41,056 MWh.

Table 126. 2025 Retro-Commissioning Initiative Program CPAS and WAML

Channel	WAML	Annual Verified Gross Savings (MWh)	NTGR	CPAS - Verified Net Savings (MWh)									
				2025	2026	2027	2028	2029	2030	2031	2032	2033	
Virtual Commissioning™	7.3	4,483	0.939	4,212	4,212	4,212	4,212	4,212	4,212	4,212	4,212	1,263	0
Virtual Strategic Energy Management	7.0	1,468	1.000	1,468	1,468	1,468	1,468	1,468	1,468	1,468	1,468	0	0
2025 CPAS		5,950	0.954	5,679	5,679	5,679	5,679	5,679	5,679	5,679	5,679	1,263	0
Expiring 2025 CPAS				0	0	0	0	0	0	0	0	4,416	1,263
Expired 2025 CPAS				0	0	0	0	0	0	0	0	4,416	5,679
WAML	7.2												

STREETLIGHTING INITIATIVE

Table 127 provides CPAS for the 2025 Streetlighting Initiative through 2045. Lifetime savings for the Initiative are 147,119 MWh.

Table 127. 2025 Streetlighting Initiative Program CPAS and WAML

Channel	WAML	Annual Verified Gross Savings (MWh)	NTGR	CPAS - Verified Net Savings (MWh)										
				2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Municipality-Owned Streetlighting	20.0	79	1.000	79	79	79	79	79	79	79	79	79	79	79
Utility-Owned Streetlighting	20.0	7,500	1.000	7,500	7,500	7,500	7,238	7,238	7,238	7,238	7,238	7,238	7,238	7,238
2025 CPAS		7,579	1.000	7,579	7,579	7,579	7,317	7,317	7,317	7,317	7,317	7,317	7,317	7,317
Expiring 2025 CPAS				0	0	0	262	0	0	0	0	0	0	0
Expired 2025 CPAS				0	0	0	262	262	262	262	262	262	262	262

Channel	Measure Life	First-Year Verified Gross MWh	NTGR	CPAS - Verified Net Savings (MWh)											
				2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	
Municipality-Owned Streetlighting	20.0	79	1.000	79	79	79	79	79	79	79	79	79	79	0	0
Utility-Owned Streetlighting	20.0	7,500	1.000	7,238	7,238	7,238	7,238	7,238	7,238	7,238	7,238	7,238	7,238	0	0
2025 CPAS		7,579	1.000	7,317	7,317	7,317	7,317	7,317	7,317	7,317	7,317	7,317	7,317	0	0
Expiring 2025 CPAS				0	0	0	0	0	0	0	0	0	0	7,317	0
Expired 2025 CPAS				262	262	262	262	262	262	262	262	262	262	7,579	7,579
WAML	20.0														

SMALL BUSINESS INITIATIVE

Table 128 provides CPAS for the 2025 Small Business Initiative through 2049. Lifetime savings for the Initiative are 635,320 MWh.

Table 128. 2025 Small Business Initiative Program CPAS and WAML

Channel	WAML	Annual Verified Gross Savings (MWh)	NTGR	CPAS - Verified Net Savings (MWh)												
				2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037
SBDI	13.5	42,509	1.141	48,503	48,503	48,313	47,245	46,391	45,886	43,542	41,940	41,659	40,888	40,231	38,639	32,236
SBEP	20.1	355	1.000	355	355	355	355	355	355	355	355	355	355	355	355	355
2025 CPAS		42,864	1.140	48,858	48,858	48,668	47,600	46,745	46,240	43,896	42,294	42,013	41,242	40,585	38,994	32,590
Expiring 2025 CPAS				0	0	190	1,068	855	505	2,344	1,602	281	771	657	1,592	6,403
Expired 2025 CPAS				0	0	190	1,258	2,113	2,617	4,961	6,563	6,844	7,615	8,272	9,864	16,267

Channel	WAML	Annual Verified Gross Savings (MWh)	NTGR	CPAS - Verified Net Savings (MWh)												
				2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050
SBDI	13.5	42,509	1.141	29,718	29,362	5,138	0	0	0	0	0	0	0	0	0	0
SBEP	20.1	355	1.000	355	355	355	355	355	355	355	7	7	7	7	7	0
2025 CPAS		42,864	1.140	30,073	29,716	5,492	355	355	355	355	7	7	7	7	7	0
Expiring 2025 CPAS				2,518	357	24,224	5,138	0	0	0	347	0	0	0	0	7
Expired 2025 CPAS				18,785	19,142	43,365	48,503	48,503	48,503	48,503	48,851	48,851	48,851	48,851	48,851	48,858
WAML	13.6															

MIDSTREAM INITIATIVE

Table 129 provides CPAS for the 2025 Midstream Initiative through 2045. Lifetime savings for the Initiative are 379,097 MWh.

Table 129. 2025 Midstream Initiative Program CPAS and WAML

Channel	WAML	Annual Verified Gross Savings (MWh)	NTGR	CPAS - Verified Net Savings (MWh)										
				2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Lighting	15.1	28,991	0.842	24,417	24,417	24,417	24,417	24,417	24,416	24,416	24,416	24,416	24,416	24,416
HVAC	15.1	606	0.683	414	414	414	414	413	413	413	413	413	413	413
Food Service	12.1	489	0.872	426	426	426	426	426	426	426	426	426	420	365
2025 CPAS		30,086	0.840	25,258	25,258	25,258	25,258	25,257	25,256	25,256	25,256	25,256	25,250	25,195
Expiring 2025 CPAS				0	0	0	0	1	1	0	0	0	6	55
Expired 2025 CPAS				0	0	0	0	1	2	2	2	2	8	63

Channel	WAML	Annual Verified Gross Savings (MWh)	NTGR	CPAS - Verified Net Savings (MWh)										
				2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046
Lighting	15.1	28,991	0.842	24,416	24,416	24,406	20,500	5,349	0	0	0	0	0	0
HVAC	15.1	606	0.683	342	342	342	342	328	0	0	0	0	0	0
Food Service	12.1	489	0.872	365	24	24	24	24	24	24	24	24	0	0
2025 CPAS		30,086	0.840	25,123	24,782	24,772	20,865	5,700	24	24	24	24	0	0
Expiring 2025 CPAS				71	341	10	3,907	15,165	5,676	0	0	0	24	0
Expired 2025 CPAS				135	476	486	4,393	19,558	25,234	25,234	25,234	25,234	25,258	25,258
WAML	15.0													

APPENDIX D. CUSTOM INITIATIVE PROJECT REPORTS

This appendix is provided under a separate cover.

APPENDIX E. 2025 LLLC MTI MARKET PROGRESS EVALUATION REPORT

This appendix is provided under a separate cover.



Opinion **Dynamics**

an E Source Company



CONTACT:

Zach Ross

Senior Director

zross@opiniondynamics.com

Tyler Sellner

Associate Director

tsellner@opiniondynamics.com



Boston | Headquarters

617 492 1400 [tel](#)
617 492 7944 [fax](#)
800 966 1254 [toll free](#)

130 Turner Street
Bldg 3, Suite 520
Waltham, MA 02453

San Diego

858 270 5010 [tel](#)
858 270 5211 [fax](#)

1200 Prospect Street
Suite #G-100
La Jolla, CA 92037

Portland

503 287 9136 [tel](#)
503-281-7375 [fax](#)

1500 NE Irving Street
Suite #370
Portland, OR 97232

All product or company names that may be mentioned in this publication are tradenames, trademarks or registered trademarks of their respective owners.

opiniondynamics.com