



Memorandum

To: Nicor Gas

Cc: Elizabeth Horne, ICC Staff;
Celia Johnson, Illinois Stakeholder Advisory Group

From: Charles Ampong, Yeab Lakew, Ensar Biscevic, Laura Agapay-Read, Guidehouse,
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Date: August 20, 2026

Re: Nicor Gas 2025 Verified Energy Savings and Cost Effectiveness Summary

This memo provides background material to support Guidehouse's summary reporting of verified energy savings and cost-effectiveness results for the Nicor Gas energy efficiency program portfolio for Gas Program Year 2025¹. The memo presents a summary of results followed by an explanation of methodology, inputs, and assumptions. Separately, Guidehouse provides brief annual summary reporting for each program year of the Plan 4 portfolio cycle, 2022 through 2025, and will produce a final report summarizing the combined results for the four program years after the 2025 final summary reporting.

Summary of Results

Table 1 provides a summary of verified net energy savings achieved in 2025 and the cost effectiveness test summary. The Total Resource Cost (TRC) Test and Program Administrator Cost Test (PACT) results are presented with and without non-energy impacts (NEI).

¹ Gas Program Year 2025 began January 1, 2025, and ended December 31, 2025.

Table 1. Nicor Gas 2025 Verified Energy Savings and Cost Effectiveness Test Results

Program	Verified Net Savings (Therms)	TRC Test (w/ NEI)	TRC Test (w/o NEI)	PACT Test (w/ NEI)	PACT Test (w/o NEI)
Business Custom Rebates, Plus Nicor Gas only Retro Commissioning	1,635,776	5.4	2.1	3.7	3.7
Business Energy Efficiency Rebates	3,321,274	10.5	4.4	3.9	3.6
Coordinated Non-Residential New Construction	88,477	6.6	3.2	2.2	1.5
Coordinated Retro Commissioning	47,887	1.8	0.7	1.0	1.0
Small Business Program	1,090,719	7.2	3.1	3.0	2.7
Strategic Energy Management	887,910	12.9	5.2	4.6	4.6
Business and Public Sector Total	7,072,044	7.0	2.9	3.6	3.4
Affordable Housing New Construction (AHNC)	28,898	2.7	1.6	1.2	0.5
Income Qualified Elementary Education Kits (IQ EEE)	89,057	5.0	2.1	2.5	2.3
Income Qualified Energy Savings Kits (IQ ESK)	639,966	14.1	7.0	6.2	4.0
Income Qualified Multi-Family	842,858	3.4	1.4	1.2	1.1
Public Housing Energy Savings	41,027	1.2	0.5	0.4	0.4
Income Qualified Single Family	406,885	1.8	0.7	0.4	0.4
Income Qualified Total	2,048,691	3.5	1.5	1.2	0.9
Elementary Education Kits (EEE)	168,042	5.6	2.5	3.0	2.5
Energy-Savings Kits (ESK)	501,827	15.2	8.2	7.8	4.3
Home Energy Efficiency Rebates (HEER)	1,797,424	4.7	2.1	6.5	5.2
Home Energy Reports	308,126	3.8	1.6	1.4	1.4
Home Energy Savings/Assessments	613,318	3.8	1.8	2.7	1.9
Multi-Family Program	486,405	2.6	1.0	1.5	1.5
Residential New Construction (Smart Neighborhood Builder)	559,278	5.8	2.7	5.8	4.5
Residential Sector Total	4,434,418	4.6	2.1	4.0	3.0
Market Transformation Total	0	0.0	0.0	0.0	0.0
Portfolio Total	13,555,153	4.2	1.8	2.0	1.7
Portfolio Total, without Income Qualified (IQ)	11,506,462	4.4	1.9	2.4	2.1

Note: Savings and benefits from the Building Operator Certification (BOC) are reported as part of the BEER program.
Source: Evaluation Research

The summary reporting is presented in one spreadsheet attachment with four tabs:

- Tab 1: Verified Program Energy Savings, Other Impacts, and Cost Summary
- Tab 2: High Impact Measures
- Tab 3 and Tab 4: TRC Cost-Effectiveness Results – Plan 4 Avoided Costs².
- Tab 5 and Tab 6: PACT Cost-Effectiveness Results – Plan 4 Avoided Costs

Key background information on each attachment tab follows.

Tab 1: Verified Program Energy Savings, Other Impacts, and Cost Summary

Tab 1 provides a summary of the components of verified therm savings and utility program costs for the 2025 program portfolio. Results for Residential, Business and Public Sector, Income Qualified, and Market Transformation have separate subtotals. For all joint and coordinated programs³ with ComEd, the interactive energy effects (resulting in negative gas savings) due to ComEd's electric saving measures are not included in the reported verified natural gas savings.⁴ Tab 1 also reports water savings and greenhouse gas (GHG) reductions.⁵

Tab 2: High Impact Measures

Tab 2 provides energy savings results for High Impact Measures (HIM) for the 2025 portfolio. Please note:

- Savings shown are verified gross therms.
- The Illinois TRM places some common area multi-family measures in the C&I sector. For 2025, Guidehouse grouped common-area measures for Multi-Family, Public Housing, and Affordable Housing New Construction with the residential sector.
- The HIM savings summary is rolled up by measure and sector, without reference to program, to show the importance of individual measure technologies to the overall portfolio.

Tab 3 and Tab 4: TRC Cost-Effectiveness Results

Tab 3 and Tab 4 provide TRC cost-effectiveness results for the 2025 Nicor Gas portfolio. Results are provided by program and sector (Residential, Business and Public Sector, Income Qualified, and

² Application pursuant to Section 8-104 of the Public Utilities Act for Consent to and Approval of an Energy Efficiency Plan, Case Details for ICC Docket P2021-0154 available at <https://www.icc.illinois.gov/docket/P2021-0154>.

³ Joint programs are jointly designed and delivered by ComEd and Nicor Gas to provide an integrated customer offering and require shared savings, cost, and evaluation attribution. Coordinated programs are utility-specific programs that remain separately administered but are aligned across utilities through common implementation, evaluation, and reporting practices to ensure consistent treatment of electric and gas impacts.

⁴ https://www.ilsag.info/wp-content/uploads/IL_EE_Policy_Manual_Version_3.0_Final_11-3-2023.pdf (Section 7.7 on Heating Penalties).

⁵ GHG reductions reported in metric tons CO₂, based on EPA calculators available at <https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator>.

Market Transformation). Tab 3 provides program and portfolio-level TRC with all NEI benefits, including water, electricity savings, additional quantifiable benefits (AQB)⁶, and carbon adders. Tab 4 provides program- and portfolio-level TRC without the AQB and carbon benefits and with the measure-level water and electricity benefits, as defined in the Illinois Technical Reference Manual (IL TRM). Portfolio-level TRC is provided with and without the Income Qualified programs included. The TRC benefits leverage the avoided costs from the Plan 4 filing updated with actual costs through 2025.

Tab 5 and Tab 6: PACT Cost-Effectiveness Results

Tab 5 and Tab 6 provide PACT cost-effectiveness results for the 2025 Nicor Gas portfolio. Tab 5 provides program- and portfolio-level PACT with measure-specific NEI estimates (i.e., water and electricity benefits), as defined in the IL TRM. The PACT does not include other societal benefits (i.e., AQB and carbon adders). Tab 6 provides program- and portfolio-level PACT without NEI estimates. Portfolio-level PACT is provided with and without the Income Qualified programs. The PACT benefits leverage the avoided costs from the Plan 4 filing updated with actual costs through 2025.

Cost-Effectiveness Methodology

As part of the evaluation of Nicor Gas energy efficiency programs for Gas Program Year 2025, Guidehouse performed benefit-cost calculations with data provided by Nicor Gas and Guidehouse-evaluated program results, referencing the IL TRM or Guidehouse research. The focus of this review is on the basis and calculations used to conduct the Illinois TRC test. The Illinois TRC test is defined in 220 ILCS 5/8-104(b)⁷ as follows:

“Cost-effective” means that the measures satisfy the total resource cost test which, for purposes of this Section, means a standard that is met if, for an investment in energy efficiency, the benefit-cost ratio is greater than one. The benefit-cost ratio is the ratio of the net present value of the total benefits of the measures to the net present value of the total costs as calculated over the lifetime of the measures. The total resource cost test compares the sum of avoided natural gas utility costs, representing the benefits that accrue to the system and the participant in the delivery of those efficiency measures, as well as other quantifiable societal benefits, including avoided electric utility costs, to the sum of all incremental costs of end use measures (including both utility and participant contributions), plus costs to administer, deliver, and evaluate each demand-side measure, to quantify the net savings obtained by substituting demand-side measures for supply resources. In calculating avoided costs, reasonable estimates shall be included for financial costs likely to be imposed by future regulation of emissions of greenhouse gases.

⁶ Additional Quantifiable Benefits (AQBs) are monetized societal benefits resulting from programs that are not captured in traditional avoided energy, capacity, or T&D benefits.

⁷ Public Utilities Act, Illinois Compiled Statutes maintained by the Legislative Reference Bureau, <http://www.ilga.gov/legislation/ilcs/fulltext.asp?DocName=022000050K8-104>.

The low-income programs described in item (4) of subsection (f) of this Section shall not be required to meet the total resource cost test.

The Illinois TRC test differs from a traditional TRC test in its requirement to include a reasonable estimate of the financial costs associated with future regulations and legislation on the emissions of greenhouse gases (GHG). Additional benefits included in the calculation are the NEIs and water savings. This difference adds an additional benefit to investments in efficiency programs that typically are included in the Societal Cost Test in other jurisdictions.

In contrast, the PACT approaches cost-effectiveness from the perspective of the utility as program administrator and determines the ratio of energy supply costs avoided by the utility to the overhead and cost outlays that the utility incurred to implement energy efficiency programs. Since the PACT is primarily focused on utility outlays, incentives paid by the utility to either participants or third-party implementers are included in the calculation, rather than incremental or participant costs. Additionally, since non-energy benefits accrue to society rather than to the utility implementing the energy efficiency programs, those benefits are not included in the PACT formula.

Incremental Measure Cost Approach

Incremental cost is the difference between the cost of the efficient measure and the cost of the most relevant baseline measure that would have been installed (if any) in the absence of the efficiency program. The Illinois Energy Efficiency Policy Manual⁸ instructs that installation costs (material and labor) and Operations and Maintenance (O&M) costs shall be included if there is a difference between the efficient measure and the baseline measure in O&M costs. In cases where the efficient measure has a significantly shorter or longer life than the relevant baseline measure, the avoided baseline replacement measure costs should be accounted for in the TRC analysis. The incremental cost input in the TRC analysis is not reduced by the amount of any incentives.

Data Assumptions in the Cost-Effectiveness Calculations

Guidehouse identified the following data points in Table 1 for conducting the Illinois TRC test. The data are divided into generic and program-specific categories. The program-specific data points are further subdivided into those (1) provided by the utility, (2) are a result of evaluation activities, and (3) from multiple sources.

⁸ Illinois Energy Efficiency Policy Manual, Version 3.0, available at: <https://www.ilsag.info/policy/>

Table 1. Data Points Needed to Conduct the Illinois TRC Test

Category	Data Point	Source
Generic	• Avoided Natural Gas Costs: Plan 4	Nicor Gas / ComEd
	• Avoided Electricity Costs	
	• Loss Factor (Unaccounted-for-Gas Factor)	
	• Plan 4 Non-Energy Impacts Additional Quantifiable Benefit	
	• Weighted Average Cost of Capital	
Generic	• Societal Discount Rate	Illinois TRM ⁹ and Energy Efficiency Stakeholders Advisory Group
	• Greenhouse Gas (GHG) Adder	
Program Specific	• Verified Participants / Measure Count	Final Evaluation Reports ¹⁰
	• Verified Gross and Net Energy Savings	
	• Realization Rate	
	• Net-to-Gross Ratio	
	• Non-Incentive Costs	Nicor Gas
	• Utility Incentive Costs	
	• Incremental Measure Costs	Nicor Gas / Guidehouse Evaluation / Illinois TRM / Other
	• Measure Life	
	• Water Savings in Gallons and Avoided Water Costs	
	• Electric Savings in kWh and Avoided kWh Costs	

Source: Evaluation Research

The following is a summary of the values for the generic data points that Guidehouse used in the cost-effectiveness calculations for all programs and the portfolio.

- For the TRC, a discount rate of 2.40% was applied, based on guidance in the IL TRM version 13.0.
- For the PACT, the discount rate was a weighted average cost of capital (WACC) for Nicor Gas of 6.96%.
- Natural gas avoided costs are based on Plan 4 values provided by Nicor Gas. Actual avoided costs were used in 2025. A GHG adder of \$0.310 per therm is included starting in 2025 and escalating thereafter.
- Additional Quantifiable Benefits (Non-Energy) are included based on research conducted by Guidehouse.¹¹

⁹ Illinois Statewide Technical Reference Manual (Illinois TRM). Available at: <https://www.ilsag.info/technical-reference-manual/>

¹⁰ Evaluation documents are available at: <https://www.ilsag.info/evaluation-documents/final-evaluation-reports/>

¹¹ Guidehouse Societal NEI Estimates for ILSAG, October 1, 2024.

The following points are noted for the program-specific data that Guidehouse used in the cost-benefit calculations.

Benefits

- Energy saving benefits represent natural gas sourced only from final evaluation verified results from 2025.
- For all joint and coordinated programs with ComEd or Ameren Illinois, the interactive energy effects (resulting in negative gas savings) and costs due to electric saving measures were not included in our analysis. We analyze the impact of electric interactive savings effects and costs separately and present in a joint electric-gas TRC memo. Coordinated or joint programs in the 2025 portfolio include:

Table 2. Summary of Coordinated or Jointly Implemented Programs

Program	ComEd	Ameren IL	Nicor Gas
Income Qualified Programs	√	√	√
Home Energy Assessment / Home Energy Savings / Home Energy Jumpstart	√	-	√
Multi-Family Retrofit	√	-	√
Elementary Energy Education	√	-	√
Coordinated Retro-Commissioning	√	-	√
Coordinated Non-Residential New Construction	√	-	√
Strategic Energy Management	√	-	√
Commercial Food Service	√	-	√
Business Energy Efficiency Rebates (Building Operator Certification)	√	-	√

Source: Guidehouse analysis

- For programs that are not joint with ComEd, some measures implemented by Nicor Gas have electricity savings that are not claimed by ComEd. In addition, Nicor Gas provides gas services to some municipalities that do not have ComEd as their electricity provider. During CY2025, the programs which included additional electric benefits were Business Energy Efficiency Rebates, Energy Savings Kits, Home Energy Efficiency Rebates, Multi-Family, Residential New Construction, Single Family, and Small Business. Electricity benefits also included secondary water kWh savings when those measures are also not eligible to be claimed by ComEd. These electricity savings are credited to the gas company in the TRC cost-effectiveness calculation as an “Other Benefit”. The impact of this benefit in the 2025 TRC calculation result is an increase of the total benefits by 3.5%, mostly generated from thermostats, weatherization measures, steam traps, and hot water measures.
- For early replacement measures, Guidehouse calculated the savings for the remaining life of the existing equipment and the savings for the remaining measure life per the dual

baseline algorithms deemed in the TRM. Dual baseline adjustments are only accounted for in the TRC analysis but not included in the programs or portfolio summary impacts reports as those reports only list the first-year savings for each measure for Nicor Gas annual savings targets. The dual baseline adjustments have a negligible impact on the Nicor Gas portfolio TRC.

- Water saving benefits from water saving measures rely upon the Illinois TRM and Nicor Gas analysis to estimate gallons of water saved per device. Water avoided costs were estimated using assumptions developed by Nicor Gas. Water savings account for about 3% of total TRC benefits and have a substantial impact to increase the benefits and TRC for programs that include water saving measures prominently, such as kit and direct installation programs, for the residential sector, and steam traps for the non-residential sector.

Costs

- Incentives and non-incentive program costs were provided by Nicor Gas.
- For joint programs with ComEd, the measure costs are the Nicor Gas share of full incremental costs. Incentive and non-incentive costs are Nicor Gas' share of costs.
- Guidehouse reviewed the IMC values provided by Nicor Gas. In most cases, after analyzing the tracking data measure costs, the measure specific IMC deemed by the TRM, and other IMC data, Guidehouse found that Nicor Gas assigned an appropriate IMC value to measures. The TRM or Guidehouse research was used in instances where Guidehouse disagreed with Nicor Gas IMC value or Nicor Gas did not provide an IMC.
- For coordinated kit, new construction, and retrocommissioning programs, Guidehouse leveraged measure or project level IMCs from ComEd and Nicor Gas project information to find actual costs for 2025 measures or projects.
- Since Guidehouse estimates some IMCs using TRM, planning, and secondary research, the IMC estimates may not include all relevant and up-to-date installation and equipment costs for some programs. Guidehouse set program incremental measure costs equal to incentives for income qualified programs when incentives paid were greater than the initial IMC estimate, except for the IHWAP programs. For IHWAP, incremental measure costs are twice the amount that Nicor Gas records as incentive costs, to account for the 50% contribution to total measure cost from non-utility IHWAP funding sources. This adjustment resulted in a minor increase in portfolio incremental costs.
- For early replacement measures, Guidehouse used the full measure installation cost for the first year IMC and calculated future avoided costs per the TRM. Future avoided replacement costs reduced net incremental costs for retrofit measures by a total of \$3.1¹² million for the portfolio.

¹² Value in 2025 dollars. Deferred replacement costs were discounted using the societal discount rate.