

2023-2025 Nicor Gas Evaluation Plan

Presentation to SAG

December 7, 2022



Agenda

- Introduction to 2023-2025 evaluation activities and timeline
 - Key evaluation activities in 2023
- Program-Level Research
 - Impact
 - Net-to-Gross (NTG)
 - Process
 - o Income Eligible / Income Qualified
 - Market Transformation
- Portfolio-Level Research
- Budget Allocation
- Coordination
- Q&A + feedback





Introduction

2023 to 2025 Portfolio Evaluation

The Nicor Gas 2023 Portfolio

Sector / Category	2023							
	Program Budget	Net Therms						
Income Eligible	28%	10%						
Residential	26%	38%						
Small Business	4%	8%						
C&I and Public Sector	20%	44%						
Portfolio Functions	21%	0%						
Portfolio Total	\$45,705,000	14,127,406						



Introduction to 2023-2025 Evaluation

Program-Level Research

Gross Impact Research

• Conducted annually, all programs

Net-to-Gross (NTG) Research

Conducted once per cycle for most programs

Process Research

 Conducted based on program need, cost, and joint opportunities

Market Transformation (MT)

- Advise statewide efforts
- Research and verification of implemented initiatives

Income Eligible

- Explore joint research opportunities targeting program outreach and delivery
- Conduct research

Portfolio-Level Research and Activities

TRM Update Support

- TRM v12, Q1 through Q3
- Prioritize support for future updates
- Refine NTG and MT protocols

Non-Energy Impacts (NEIs)

 Joint research on Societal, Utility, and Participant NEIs

Annual Reporting

- Verified savings and TRC
- Economic impacts

Collaboration

- With ComEd on joint programs and research
- Statewide

Key Activities for 2023

Program-Level

- Gross impact on all 2023 programs, starting mid-year, custom sampling Q3/Q4, End-of Year in 2024 Q1/Q2
- NTG for selected programs starting Q4
- Research projects for Non-Res New Construction NTG

Portfolio-Level/Statewide

- Non-Residential Non-Participant Spillover
- Finalize 2021 and 2018-21 reporting
- 2023-25 Planning
- TRM v12 update participation
- Other research is under consideration and could begin 2023





Program-Level Research

Summary of 2023-2025 evaluation activities and timelines

Overview of 2023-2025 Evaluation

Program-Level Research

Gross Impact Evaluation Research

Timing

- End-of-Year on all programs
- Larger programs and new measures receive mid-year review
- Parallel path / early review for large or complex custom projects

Methodology

- TRM-based measures verification
- Custom projects M&V protocols
- Consumption data regression

Approach

- TRM measures: Census review
- Custom Projects: File review on a sample, site M&V for a subset
- Consumption Data Regression: single project or population

NTG Research

Timing

- Once per cycle for most programs
- Change in program or market
- Prioritize need

Methodology

- Apply statewide protocol in TRM
 Approach
- On-line survey and/or telephone
- Free-Ridership survey close to
- Spillover survey 12+ months after participation to allow for actions

participation, rolling interviews

Target

- Participating Customers
- Trade Allies
- Non-Participants

Process and Other Research

Timing

- Conduct based on program need, cost, and joint opportunities
- Can combine with NTG surveys

Methodology

Evaluation best practices

Approach

- Review program materials
- Often use survey research, on-line and/or telephone
- Interviews and focus groups
- Benchmarking
- Secondary research

Target

- Program managers, contractors
- Customers and Trade Allies
- Non-Participants

Impact Evaluation Timeline, 2023 Programs

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Activity	Target	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Interim Impact Review and	TRM-Based Measures			Interim Data								
Reporting	Sampled Custom Projects			Wave 1	Wave 2							
Annual Impact Evaluation and	Program-Level Impacts					2023 End of Year						
Reporting	Verified Portfolio Cost and Savings Results					2		2023				
Parallel Path Review	Large or Complex Projects in Pre-App Stage	Reviews occur when program brings project to evaluators										



Impact Evaluation

Program / Market Offering	TRM- Based Verification	Custom M&V	Custom Project Parallel Path Review	Interim Review Type
Income Eligible Programs				
Single Family				
IHWAP	\checkmark			TRM
Contractor Channel and Healthy Home	\checkmark			TRM
Multi-Family Program				
IHWAP	\checkmark	$\sqrt{}$	If Requested	TRM
Contractor Channel and Healthy Home	\checkmark	$\sqrt{}$	If Requested	TRM
Public Housing Authority	\checkmark	$\sqrt{}$	If Requested	
Affordable Housing NC		$\sqrt{}$	If Requested	
Energy Saving Kits	\checkmark			TRM
Residential Programs				
Energy Education & Outreach				
Energy Education Kits	\checkmark			TRM
Energy-Saving Kits	\checkmark			TRM
Home Energy Reports		RCT Billing		
Home Energy Savings				
Assessments and DI	\checkmark			TRM
Advanced Thermostats	\checkmark			TRM
Weatherization Rebates	\checkmark			TRM
Home Energy Efficiency Rebates				
Space & Water Heating Rebates	$\sqrt{}$			TRM
Advanced Thermostats	\checkmark			TRM
Res. New Construction	\checkmark			TRM
Multi-Family Program				
Assessments and DI	√			TRM
Rebates: Prescriptive	√			TRM
Rebates: Custom		$\sqrt{}$	If Requested	Q3, Q4 Samples
Central Plant Optimization	$\sqrt{}$			TRM

Program / Market Offering	TRM-Based Verification	Custom M&V	Custom Project Parallel Path Review	Interim Review Type
Business and Public Sector Prog	rams			
Business Energy Efficiency Rebates				
Assessment and DI	$\sqrt{}$			TRM
Rebates	\checkmark			TRM
Business Optimization	$\sqrt{}$			TRM
Commercial Food Service	\checkmark			TRM
Coordinated New Construction		V		Q3 Sample
Business Custom				
Custom Rebates		$\sqrt{}$	If Requested	Q3, Q4 Samples
Combined Heat and Power		\checkmark	If Requested	-
Coordinated Retro-Commissioning		V		Quarterly Sample
Stand-Alone Retro-Commissioning		V	If Requested	Q3, Q4 Samples
Small Business				
Assessments and DI	\checkmark			TRM
Rebates: Prescriptive	\checkmark			TRM
Rebates: Custom		$\sqrt{}$		Q3, Q4 Samples
Strategic Energy Management		V	If Requested	-
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NTG Evaluation Timeline – Wave 1

Activity	Timing	Timing 2022					2023												2024	
	Timing	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan
Interview program staff, design survey instruments. Two months per program	September 1 to January 31																			
Prepare survey for fielding and launch. Field data collection lasts 4 weeks up to 5 to 6 months when rolling interviews are employed	January 1 to April 30																			
Evaluators analyze data and report NTG results	May 1 to July 15																			
Finalize all NTG research memos	July 15 to August 31																			
Evaluators present NTG recommendations to SAG and Utilities, best efforts to reach consensus	September 1 to September 30																			
Final consensus NTG ratios deemed	October 1																*			
New consensus NTG ratios in effect	January 1																			*



NTG Evaluation Draft Timeline

				20	22		2023					20	24				2026		
Program (s)	Target/Measures	Research	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
Residential Sector	All Measures	NPSO					EFF												
Home Energy Savings	Direct Install	FR, PSO									EFF								
Residential	Advanced Thermostats	FR, PSO									EFF								
Coordinated NRNC	All C&I and Public Sector	FR, PSO									EFF								
Non-Residential Sector	All Measures	NPSO									EFF								
Res New Construction	All Measures	FR, PSO													EFF				
Comm. Food Service	Rebates	FR, PSO													EFF				
Home Energy Savings	Weatherization	FR, PSO													EFF				
Multi-Family	All Measures and Offerings	FR, PSO													EFF				
BEER	All Measures	FR, PSO													EFF				
Coordinated RCx	All C&I and Public Sector	FR, PSO													EFF				
Nicor Gas RCx	All C&I and Public Sector	FR, PSO													EFF				
Home Energy Rebates	HVAC, Water Htg	FR, PSO																	EFF
Energy Saving Kits	All Measures	FR, PSO																	EFF
Small Business	Rebates	FR, PSO																	EFF
Coordinated NRNC	All C&I and Public Sector	FR, PSO																	EFF
Custom	All Measures	FR, PSO																	EFF
	Net-to-Gross Key	Survey Desigr	n/Samp	le Prep			П				1								
	FR= Free-rideship	Fiel	lding																
	PSO = Participant Spillover NPSO=Non-Participant	NTG Analysis	and Re	eporting															
	Spillover	Year NT (G Effect	tive	EFF														



Market Transformation

- 1. The Evaluator's role in MT depends on the maturity of the initiative and the Company's involvement
 - Company and stakeholders are engaged in MT concept and strategy development of an initiative
 - Evaluators provide "as needed" support to the effort
 - Evaluators advise on key elements of the MT savings protocol of promising initiatives
 - Program Theory and Logic Model, Natural Market Baseline, Savings per Unit / Gross Market Potential, Market Progress Indicators,
 Data Collection, Attribution and Allocation
 - Company implements an initiative and expects to claim savings
 - Evaluators conduct research and verification to estimate savings attributable to the Company following IL TRM
 Attachment C
- 2. Nicor Gas is engaged in
 - Advanced (thin triple-pane) Windows
 - Stretch Energy Codes
 - Building Performance Standards

- High Efficiency Rooftop Units
- Secondary Glazing Systems

- Gas Heat Pump Water Heater
- Gas Heat Pump Combination Units
- 3. MT is coordinated with Peoples & North Shore Gas, ComEd, Ameren Illinois, Third-Parties, SAG
 - Other initiatives are being developed, led by other parties
 - Coordination is within Illinois and nationally
 - Evaluation for Nicor Gas will be coordinated with other evaluation teams



Portfolio-Level Topics

Research, Budget, Coordination

Overview of 2023-2025 Evaluation

Portfolio-Level Topics

TRM Support and Research

TRM Update Support

- TRM v12, Q1 through Q3 2023
- Submit / review workpapers
- Participate in subcommittees
- Participate in late October "Evaluation Priorities" discussion led by TRM Administrator
- Refine NTG and MT protocols via Working Groups

TRM Research

- Energy Saving Kits In-Service Rate Follow Up Survey
- Air Source Heat Pumps
- Water Heater Temperature Setback
- Income Eligible Measure Update

Other Research Planned or Under Consideration

Opportunities to conduct joint research with ComEd, Ameren, Peoples & North Shore Gas

- Non-Res New Construction NTG Mock Interviews
- Non-Res Non-Participant Spillover Study
- NEIs: Research on Societal, Utility, and Participant NEIs
- Non-Participant Spillover: Residential, Non-Residential
- Commercial Food Service Process Research
- Stretch Energy Codes MT
- Building Performance Standards MT

If non-joint, ensure that natural gas related topics are considered if appropriate

Annual Reporting

Annual Reporting

- Verified savings and program costs
- Water savings, CO₂ reduction
- High Impact Measures for TRM
- Cost-effectiveness TRC / PACT
- Joint-program TRC
- Economic impacts

Timing

- Q3 each year, when final data is available
- Q2 / Q3 2026 four-year summary

Ad Hoc Reporting

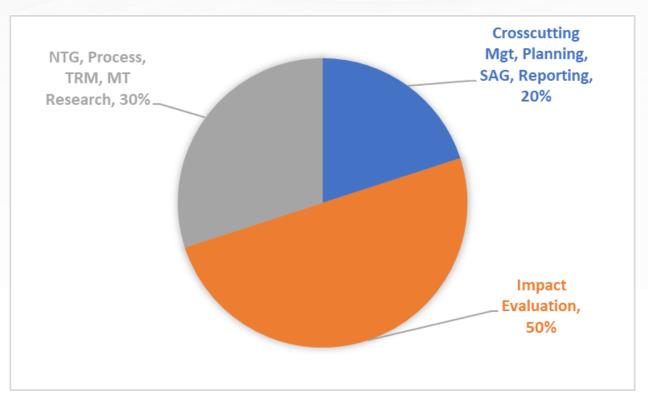
Evaluation Budget

1. Overall Budget is split between

- Impact Evaluation
- Crosscutting Activities (Management, Planning, and Reporting)
- Research (NTG, Process, MT, Other)

2. Prioritizing Resources

- Meet requirements for savings verification and reporting
- ICC Orders and SAG Input
- Program contribution to portfolio net savings
- Program / Implementer needs and effectiveness
- Opportunities to leverage joint research with other utilities



Evaluation Budget - 4 Year: \$5,483,359

Per Program Year: \$1,370,840

Evaluation Coordination

1. Guidehouse coordinates with the other utilities and their evaluation teams on an ongoing basis - this includes Ameren, ComEd, and Peoples & North Shore Gas

2. Gas / Electric Joint Program Evaluations

- Most jointly delivered programs are evaluated by a single team
- Joint or coordinated programs and measures are evaluated separately in some cases
- Evaluators calculate and report joint TRCs

3. Coordination on Process and TRM Research Studies

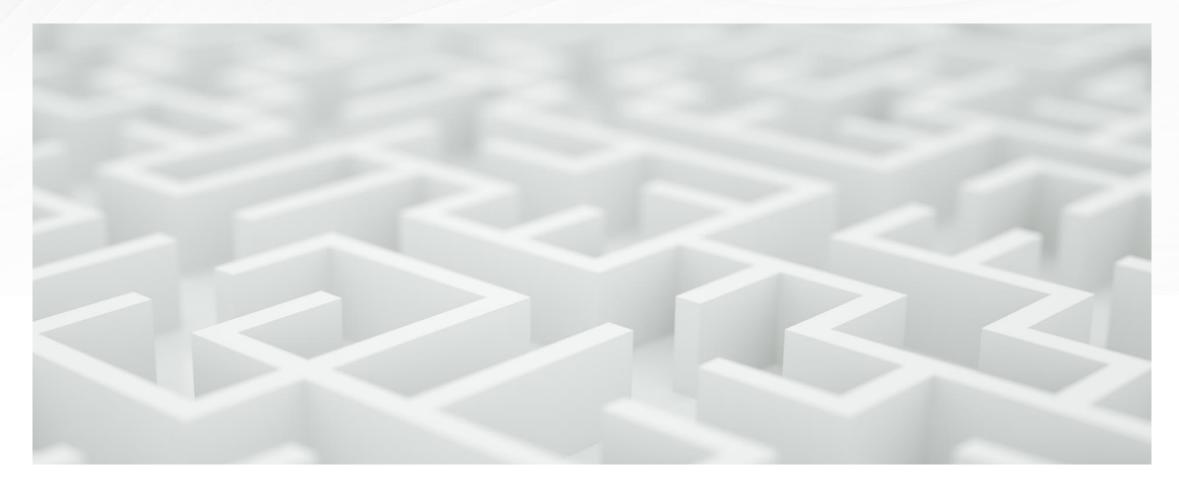
- TRM measure research considered on a case-by-case basis
- Process research is done jointly when it is beneficial to do so
- Statewide research

4. Coordination beyond specific programs occurs as follows

- SAG meetings, Illinois-wide issues
- Illinois NTG Framework and Protocol Working Group
- Illinois TRM Technical Advisory Committee
- Evaluator coordination calls (monthly)



Questions, Feedback



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