



# 2023-2025 Peoples Gas and North Shore Gas Evaluation Plan

Presentation to SAG

December 7, 2022

# Agenda

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

# Introduction

**2023 to 2025 Portfolio Evaluation**

# The PGL and NSG Portfolios, 2023

Sector / Program	Peoples Gas (PGL)		North Shore Gas (NSG)	
	Program Budget	Net Therms	Program Budget	Net Therms
<b>Income Eligible</b>				
• Single Family	21%	9%	9%	3%
• Multi-Family	22%	9%	7%	2%
<b>Residential</b>				
• Single Family	9%	12%	31%	31%
• Multi-Family	13%	23%	5%	5%
<b>Small / Mid-size Business</b>	10%	17%	11%	11%
<b>C&amp;I Sector</b>	14%	24%	24%	43%
<b>Public Sector</b>	10%	6%	11%	3%
<b>Commercial Food Service</b>	1%	1%	2%	2%
<b>Program Total</b>	<b>\$23,672,525</b>	<b>9,083,594 Net Therms</b>	<b>\$3,343,155</b>	<b>1,700,096 Net Therms</b>

# Introduction to 2023-2025 Evaluation

Program-Level Research	Portfolio-Level Research and Activities	Key Activities for 2023
<p><b>Gross Impact Research</b></p> <ul style="list-style-type: none"><li>• Conducted annually, all programs</li></ul> <p><b>Net-to-Gross (NTG) Research</b></p> <ul style="list-style-type: none"><li>• Conducted once per cycle for most programs</li></ul> <p><b>Process Research</b></p> <ul style="list-style-type: none"><li>• Conducted based on program need, cost, and joint opportunities</li></ul> <p><b>Market Transformation (MT)</b></p> <ul style="list-style-type: none"><li>• Advise statewide efforts</li><li>• Research and verification of implemented initiatives</li></ul> <p><b>Income Eligible</b></p> <ul style="list-style-type: none"><li>• Explore joint research opportunities targeting program outreach and delivery</li><li>• Conduct research</li></ul>	<p><b>TRM Update Support</b></p> <ul style="list-style-type: none"><li>• TRM v12, Q1 through Q3</li><li>• Prioritize support for future updates</li><li>• Refine NTG and MT protocols</li></ul> <p><b>Non-Energy Impacts (NEIs)</b></p> <ul style="list-style-type: none"><li>• Joint research on Societal, Utility, and Participant NEIs</li></ul> <p><b>Annual Reporting</b></p> <ul style="list-style-type: none"><li>• Verified savings and TRC</li><li>• Economic impacts</li></ul> <p><b>Collaboration</b></p> <ul style="list-style-type: none"><li>• With ComEd on joint programs and research</li><li>• Statewide</li></ul>	<p><b>Program-Level</b></p> <ul style="list-style-type: none"><li>• Gross impact on all 2023 programs, starting mid-year, custom sampling 2023 Q3/Q4, End-of Year in 2024 Q1/Q2</li><li>• NTG for selected programs starting 2022 Q4</li><li>• Small research project for Non-Res New Construction NTG</li><li>• Income Eligible survey ongoing</li></ul> <p><b>Portfolio-Level/Statewide</b></p> <ul style="list-style-type: none"><li>• Finish 2021 and 2018-2021 reporting</li><li>• 2023-2025 Planning</li><li>• TRM v12 update participation</li><li>• Other research is under consideration and could begin 2023</li></ul>

# Program-Level Research

**Summary of 2023-2025 evaluation activities  
and timelines**

# Overview of 2023-2025 Evaluation

Program-Level Research		
Gross Impact Evaluation Research	NTG Research	Process and Other Research
<p><b>Timing</b></p> <ul style="list-style-type: none"> <li>• End-of-Year on all programs</li> <li>• Larger programs and new measures receive mid-year review</li> <li>• Parallel path / early review for large or complex custom projects</li> </ul> <p><b>Methodology</b></p> <ul style="list-style-type: none"> <li>• TRM-based measures verification</li> <li>• Custom projects M&amp;V protocols</li> <li>• Consumption data regression</li> </ul> <p><b>Approach</b></p> <ul style="list-style-type: none"> <li>• <u>TRM measures</u>: Census review</li> <li>• <u>Custom Projects</u>: File review on a sample, site M&amp;V for a subset</li> <li>• <u>Consumption Data Regression</u>: single project or population</li> </ul>	<p><b>Timing</b></p> <ul style="list-style-type: none"> <li>• Once per cycle for most programs</li> <li>• Change in program or market</li> <li>• Prioritize need</li> </ul> <p><b>Methodology</b></p> <ul style="list-style-type: none"> <li>• Apply statewide protocol in TRM</li> </ul> <p><b>Approach</b></p> <ul style="list-style-type: none"> <li>• On-line survey and / or telephone</li> <li>• Free-Ridership survey close to participation, rolling interviews</li> <li>• Spillover survey 12+ months after participation to allow for actions</li> </ul> <p><b>Target</b></p> <ul style="list-style-type: none"> <li>• Participating Customers</li> <li>• Trade Allies</li> <li>• Non-Participants</li> </ul>	<p><b>Timing</b></p> <ul style="list-style-type: none"> <li>• Conduct based on program need, cost, and joint opportunities</li> <li>• Can combine with NTG surveys</li> </ul> <p><b>Methodology</b></p> <ul style="list-style-type: none"> <li>• Evaluation best practices</li> </ul> <p><b>Approach</b></p> <ul style="list-style-type: none"> <li>• Review program materials</li> <li>• Often use survey research, on-line and / or telephone</li> <li>• Interviews and focus groups</li> <li>• Benchmarking</li> <li>• Secondary research</li> </ul> <p><b>Target</b></p> <ul style="list-style-type: none"> <li>• Program managers, contractors</li> <li>• Customers and Trade Allies</li> <li>• Non-Participants</li> </ul>

# Impact Evaluation Timeline, 2023 Programs

Activity	Target	2023				2024			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Interim Impact Review and Reporting	TRM-Based Measures			Interim Data					
	Sampled Custom Projects			Wave 1	Wave 2				
Annual Impact Evaluation and Reporting	Program-Level Impacts					2023 End of Year			
	Verified Portfolio Cost and Savings Results							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
<b>Income Eligible Programs</b>				
<b>Single-Family</b>				
SF Retrofits	√	--	--	TRM
Energy Education Kits	√	--	--	TRM
Home Energy Assessment	√	--	--	TRM
Income Eligible Kits	√	--	--	TRM
<b>Multi-Family</b>				
MF Retrofits	√	√	If Requested	TRM
MF Partner Trade Ally (PTA)	√	--	--	TRM
Income Eligible Kits	√	--	--	--
<b>Residential Programs</b>				
<b>Energy Education &amp; Outreach</b>				
Energy Education Kits	√	--	--	TRM
<b>Home Energy Jumpstart</b>				
Assessments and DI	√	--	--	TRM
Advanced Thermostats	√	--	--	TRM
<b>Home Energy Rebates</b>				
Space & Water Heating Rebates	√	--	--	TRM
Weatherization Rebates	√	--	--	TRM
Advanced Thermostats	√	--	--	TRM
<b>Multi-Family Program</b>				
Assessments and DI	√	--	--	TRM
Rebates: Prescriptive	√	--	--	TRM
Rebates: Partner Trade Ally	√	--	--	TRM
Rebates: Custom	--	√	If Requested	Q3, Q4 Samples
Gas Optimization	--	√	If Requested	Q3, Q4 Samples

Program / Market Offering	TRM-Based Verification	Custom M&V	Custom Project Parallel Path Review	Interim Review Type
<b>Business and Public Sector Programs</b>				
<b>Small/Mid-Size Business</b>				
Assessments and DI	√	--	--	TRM
Rebates: Prescriptive/PTA	√	--	--	TRM
Rebates: Custom	--	√	--	Q3, Q4 Samples
<b>C&amp;I Programs</b>				
Prescriptive Rebates	√	--	--	TRM
Custom Rebates	--	√	If Requested	Q3, Q4 Samples
Gas Optimization	--	√	If Requested	Q3, Q4 Samples
Strategic Energy Management	--	√	If Requested	--
Coordinated Retro-Commissioning	--	√	--	Qrtly Sample
Coordinated New Construction	--	√	--	Q3 Sample
<b>Public Sector Programs</b>				
Prescriptive Rebates	√	--	--	TRM
Custom Rebates	--	√	If Requested	Q3, Q4 Samples
Gas Optimization	--	√	If Requested	Q3, Q4 Samples
Strategic Energy Management	--	√	If Requested	-
Coordinated Retro-Commissioning	--	√	--	Quarterly Sample
Coordinated New Construction	--	--	--	Q3 Sample
<b>Commercial Food Service</b>				
	√	--	--	TRM

# NTG Evaluation Timeline – Wave 1

Activity	Timing	2022						2023												2024	
		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

Program (s)	Target/Measures	Research	2022				2023				2024				2025				2026				
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1				
Home Energy Jumpstart	Direct Install	FR, PSO			Blue	Orange	Orange	Yellow	Yellow		EFF												
Residential	Advanced Thermostats	FR, PSO			Blue	Orange	Orange	Yellow	Yellow		EFF												
Multi-Family	Partner Trade Allies	FR, PSO			Blue	Orange	Orange	Yellow	Yellow		EFF												
Non-Res New Constr.	All C&I and Public Sector	FR, PSO			Blue	Orange	Orange	Yellow	Yellow		EFF												
Residential Sector	All Non-IE Non-Participants	NPSO				Blue	Orange	Yellow	Yellow		EFF												
Home Energy Rebates	HVAC, Water Htg	FR, PSO							Blue	Orange	Orange	Yellow	Yellow		EFF								
Home Energy Rebates	Weatherization	FR, PSO								Blue	Orange	Orange	Yellow	Yellow		EFF							
Comm. Food Service	Rebates	FR, PSO									Blue	Orange	Orange	Yellow	Yellow		EFF						
Multi-Family	Prescr./Custom Rebates	FR, PSO										Blue	Orange	Orange	Yellow	Yellow		EFF					
C&I Programs	Custom Rebates	FR, PSO											Blue	Orange	Orange	Yellow	Yellow		EFF				
Coordinated RCx	All C&I and Public Sector	FR, PSO												Blue	Orange	Orange	Yellow	Yellow					
Small/Mid-Size Bus.	Rebates	FR, PSO													Blue	Orange	Orange	Yellow	Yellow	EFF			
C&I Programs	Prescriptive/PTA Rebates	FR, PSO														Blue	Orange	Orange	Yellow	Yellow	EFF		
Public Sector	Prescriptive/Custom Rebates	FR, PSO															Blue	Orange	Orange	Yellow	Yellow	EFF	
Gas Optimization	All MF, C&I and Public Sector	FR, PSO																Blue	Orange	Orange	Yellow	Yellow	EFF
<b>Net-to-Gross Key</b> FR= Free-rideship PSO = Participant Spillover NPSO=Non-Participant Spillover		Survey Design/Sample Prep	Blue																				
		Fielding	Orange																				
		NTG Analysis and Reporting	Yellow																				
		Year NTG Effective	EFF																				

# Market Transformation

1. **The Evaluator's role in MT depends on the maturity of the initiative and the Companies' 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. **PGL and NSG are engaged in**
  - Building Performance Standards
  - Stretch Energy Codes
3. **MT is coordinated with Nicor Gas, ComEd, Ameren Illinois, Third-Parties, SAG**
  - Other initiatives are being developed, led by other parties
  - Coordination is within Illinois and Nationally
  - Evaluation for PGL and NSG 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

- Prioritize by need, impact, and cost
- Water heater temperature set back
- Income eligible measures
- Additional evaluation priorities are being considered: modest scope and budget, meaningful impact

### Other Research Under Consideration

#### Opportunities to conduct joint research with ComEd, Ameren, Nicor Gas

- NEIs: Research on Societal, Utility, and Participant NEIs
- Non-Participant Spillover: Residential, Non-Residential
- Program-Specific Topics
- 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, CO<sub>2</sub> 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

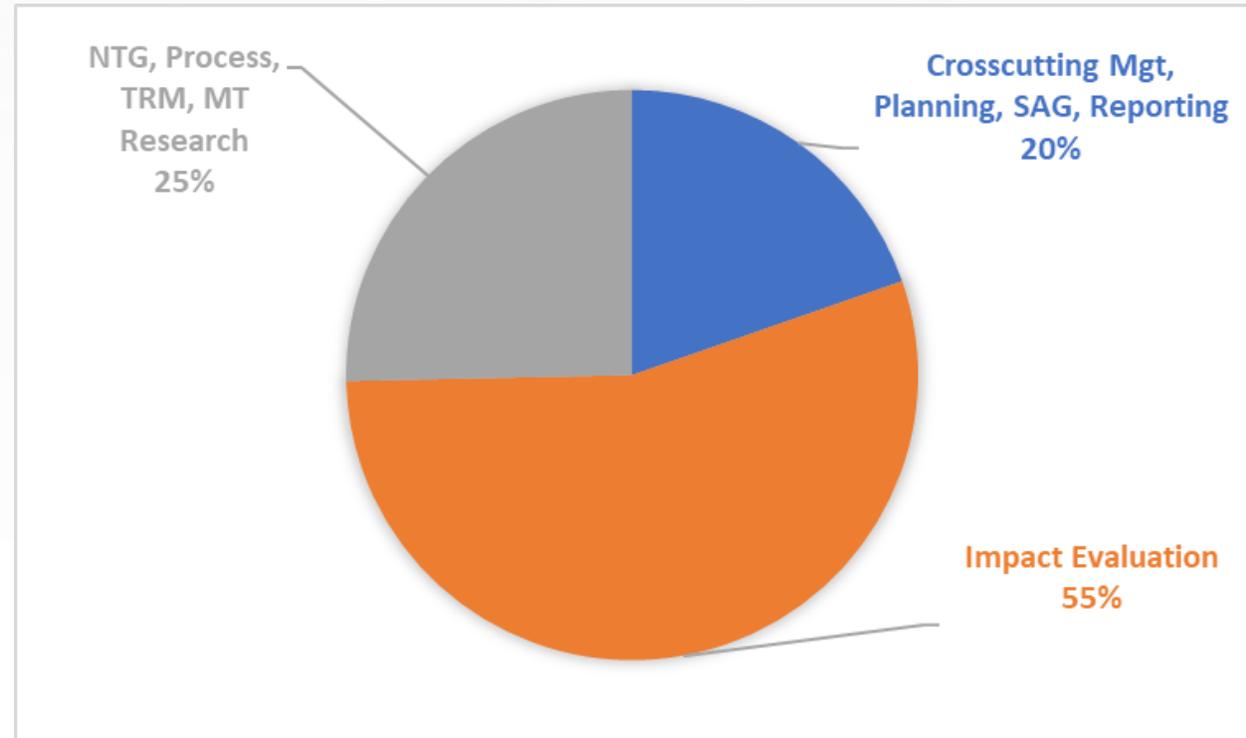
# Evaluation Budget

## 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

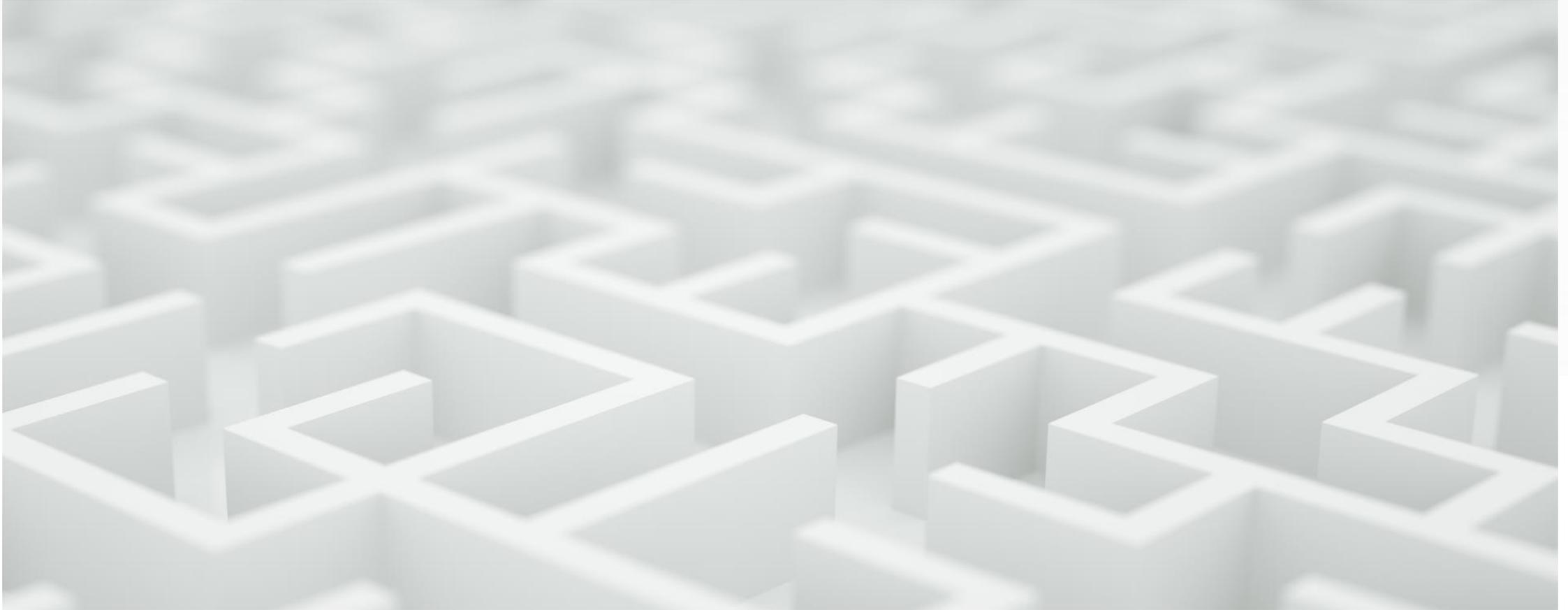


**Evaluation Budget – 4 Year: \$3,774,373**  
Per Program Year: \$943,593

# Evaluation Coordination

1. **Guidehouse coordinates with the other utilities and their evaluation teams on an ongoing basis – this includes Ameren, ComEd, and Nicor Gas**
2. **Gas / Electric Joint Program Evaluations**
  - Some jointly delivered programs are evaluated by a single-team, producing a single report
  - 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



# Contacts

**Laura Agapay-Read**

**Associate Director**

Laura Agapay-Read

[laura.agapay.read@guidehouse.com](mailto:laura.agapay.read@guidehouse.com)

312.583.4178

---

**Stu Slote**

**Director**

[stu.slote@guidehouse.com](mailto:stu.slote@guidehouse.com)

802.526.5113

---

**Ed Balbis**

**Partner**

[ebalbis@guidehouse.com](mailto:ebalbis@guidehouse.com)

561.644.9407

---