



CY2025 ComEd Evaluation Plan

PRESENTATION TO SAG
DECEMBER 3, 2024

Agenda

Introduction

- Evaluation Plan Schedule
 - Budget
-

Residential and Income Eligible (IE) Programs

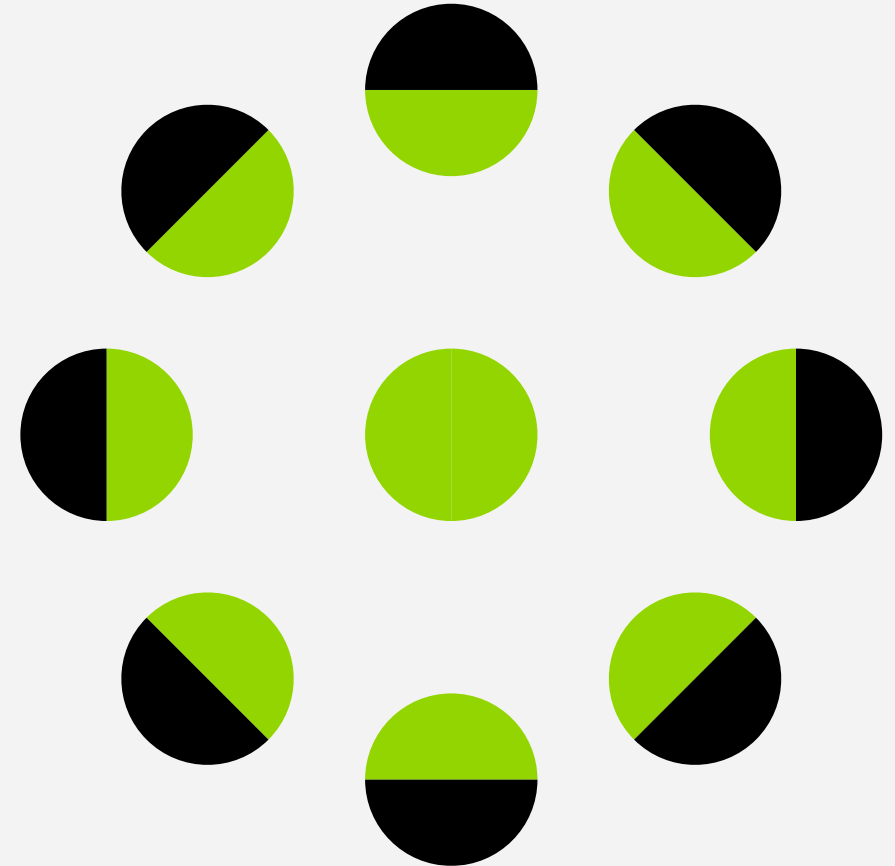
Business Programs

Special Topics

- Non-Energy Impacts
 - PJM
 - DAC NTG Policy
-

Evaluation Approaches and Timeline

- Evaluation Coordination
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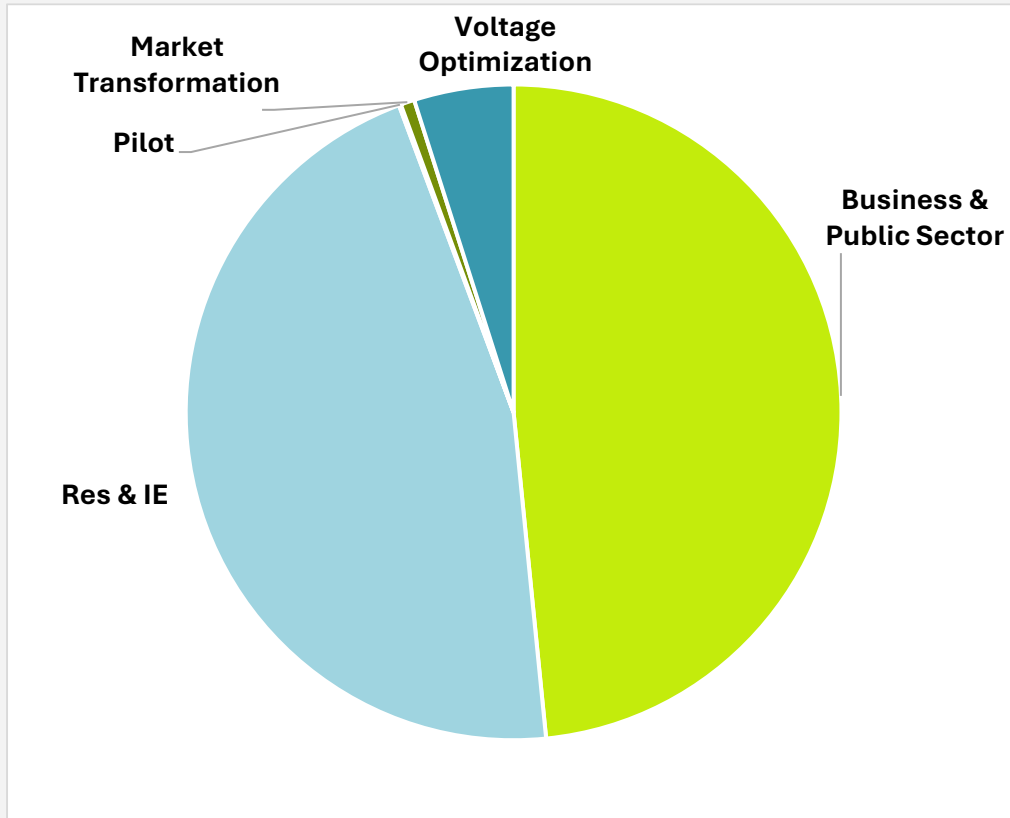
Introduction

Evaluation Plan Schedule

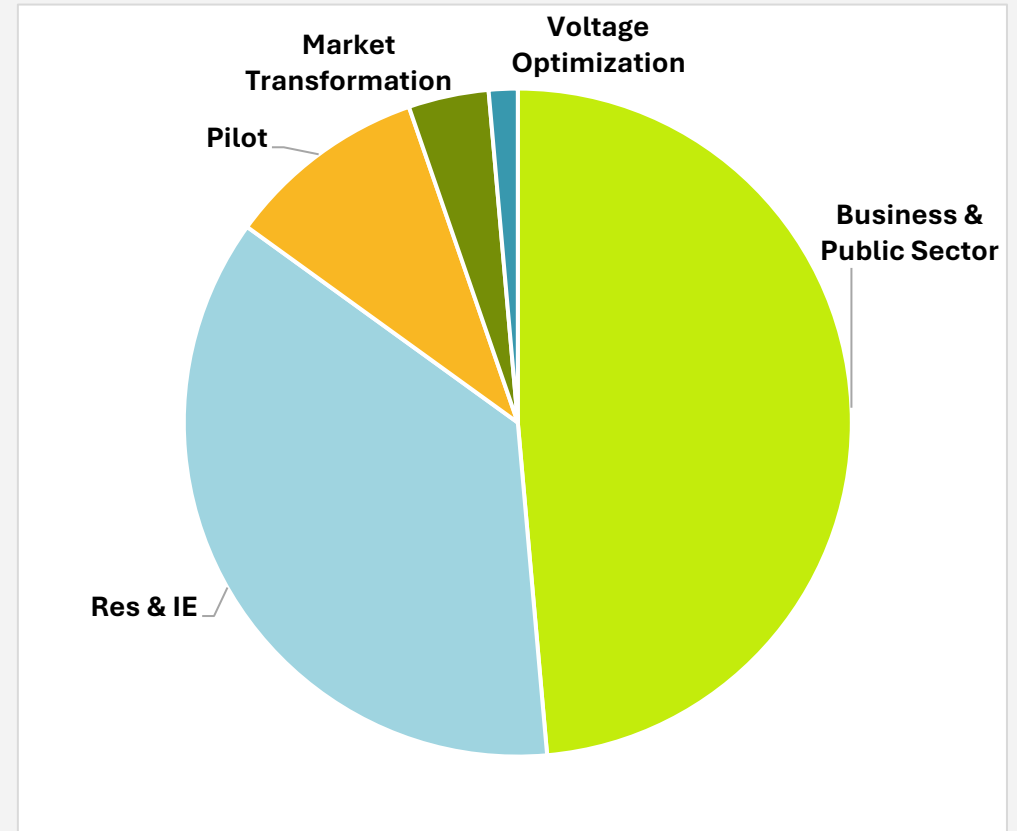
Step	Date
First Draft	November 26
Presentation to SAG	December 3
Comments Due on Evaluation Plan	December 20
Second Draft	January 6
Comments Due on Second Draft	January 20
Final	January 27

Evaluation Budget vs 2023 kWh Saved

CY2023 Net kWh Saved

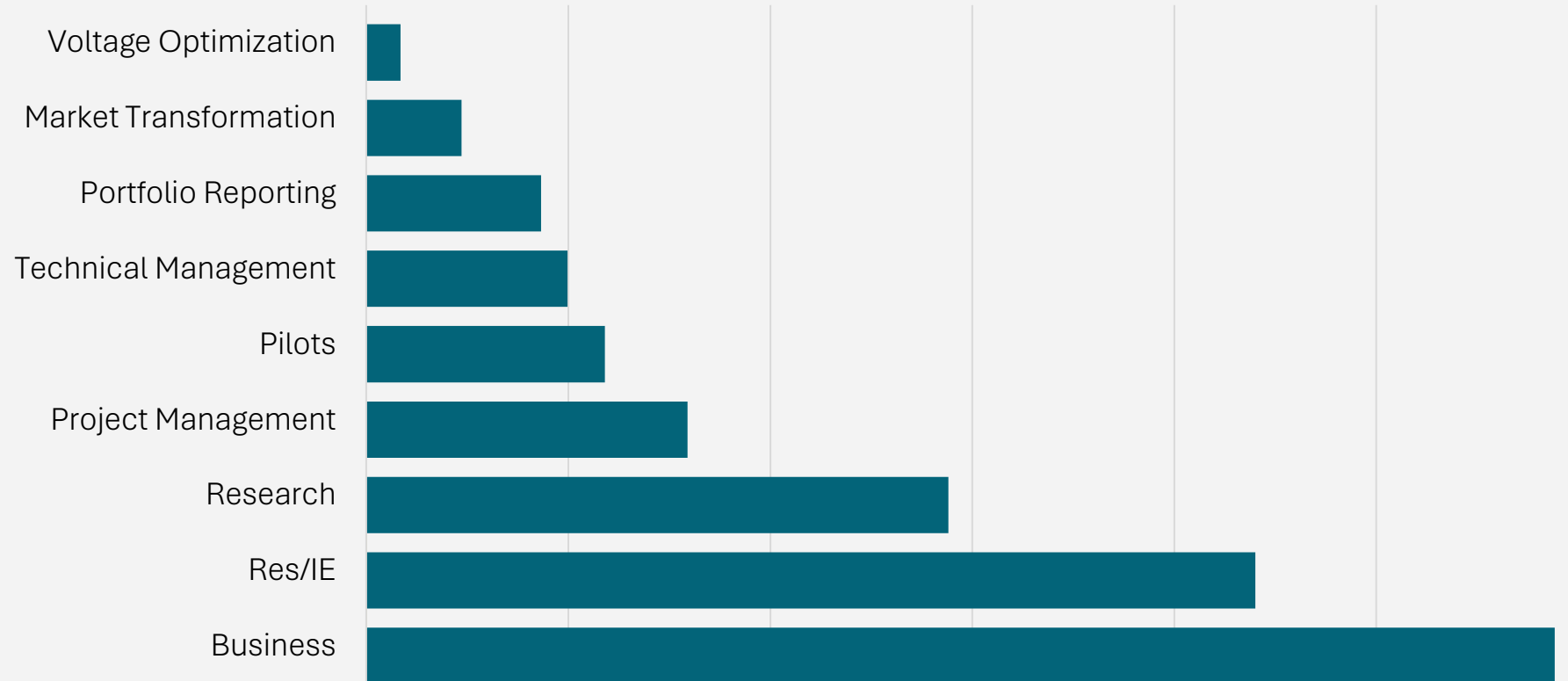


CY2025 Evaluation Budget (Programs only)



Source: Budget: 2024 Evaluation plan. kWh: 2023 Impact Report

CY2025 Evaluation Budget





Residential and IE Programs

Structure of the Evaluation – Residential Sector Programs

Program Type	Plan 6 Program
Direct to Consumer	Single-Family Upgrades
	Multifamily Upgrades
	Behavior - Res/IE
Channels	Retail/Online
	Product Distribution
	New Construction – Income Eligible
	Electric Homes New Construction
	Contractor/Midstream Rebates

- Promoted broadly as the ComEd Energy Efficiency Program
- Income Qualified services are embedded into ComEd’s Plan 6 Residential program
- Evaluation reports differentiate between market rate and IE results

Residential Sector Program Components

Income Eligible
Market Rate
Income Eligible and Market Rate
Additional compared to CY2023

Program Type	Program	Program Component
Direct to Consumer	Single-Family Upgrades	Market Rate Home Energy Assessment (MR HEA, also known as the Self Assessment Portal or SAP)
		Income Eligible HEA (IE HEA), which may include three sub-components: in-home, virtual, and IE SAP
		Retrofits, which combines savings from non-braided Retrofits (aka Income Eligible Single Family) and the single-family braided Illinois Home Weatherization Assistance Program (IHWAP).
	Multifamily Upgrades	Market Rate Multifamily
		Income Eligible Multifamily (which combines savings from IEMF and the Illinois Home Weatherization Assistance Program (IHWAP)),
		Public Housing
	Whole Home Electrification	Single-Family
		Multifamily
Behavior - Res/IE	Home Energy Reports	
Channels	Retail/Online*	Income Eligible Retail
		Lighting
		ComEd Marketplace
		Appliance Rebates
		ENERGY STAR Retail Product Platform
	Product Distribution	School Kits
		Income Eligible Kits
		Food Bank
	New Construction - IE	Affordable Housing New Construction
	Electric Homes New Construction	Electric Homes New Construction
	Contractor/Midstream Rebates	Contractor/Midstream Rebates

Plan 6 Evaluation Structure – Residential Sector Programs

Program Type	Plan 6 Program	Impact Evaluations			
		CY2022	CY2023	CY2024	CY2025
Direct to Consumer	Single-Family Upgrades	✓	Δ	✓	Δ
	Multifamily Upgrades	✓	Δ	✓	Δ
	Whole Home Electrification	n/a	n/a	✓	Δ
	Behavior - Res/IE	✓	✓	✓	✓
Channels	Retail/Online	✓	✓	✓	✓
	Product Distribution	✓	✓	✓	✓
	New Construction – IE	✓	Δ	✓	Δ
	Electric Homes New Construction	✓	✓	✓	Δ
	Contractor/Midstream Rebates	✓	Δ	✓	Δ

Additional compared to CY2023

Δ Prior year’s realization rate applied at the measure and program component level.

Residential and IE NTG Evaluation Draft Timeline

Program	Component	Net Savings Research Tasks	CY2022	CY2023	CY2024	CY2025
Contractor Midstream Rebates	N/A	Contractor Free Ridership Survey		✓		
Contractor Midstream Rebates	N/A	Contractor Spillover Survey		✓		
Multifamily Upgrades	MR Multifamily	Customer Free Ridership Survey		✓		
Multifamily Upgrades	MR Multifamily	Customer Spillover Survey		✓		
Retail/Online	Appliance Rebates	Customer Free Ridership Survey		✓		✓
Retail/Online	Appliance Rebates	Customer Spillover Survey		✓		✓
Retail/Online	ComEd Marketplace	Customer Free Ridership Survey		✓		✓
Retail/Online	ComEd Marketplace	Customer Spillover Survey		✓		✓
Single Family Upgrades	MR Single Family (HEA)	Customer Free Ridership Survey			✓	✓
Single Family Upgrades	MR Single Family (HEA)	Customer Spillover Survey			✓	✓
Electric Homes New Construction	N/A	Customer/Trade Ally Free Ridership Survey				✓

Note: Timeline reflects the **calendar year** that new recommendations will be presented to SAG.

Residential Pilots and Market Transformation Programs

- **CY2025 Evaluation Support**
 - **Advanced Codes and Building Performance Standards**
 - Guidehouse will continue attending working group meetings to review documents when requested. Guidehouse will also conduct an expert judgment panel to potentially increase the rigor of program assumptions and refine the energy savings framework. ComEd plans to begin offering stretch codes to municipalities in CY2025.
 - **Market Transformation for Electric Homes New Construction**
 - Guidehouse and ComEd will coordinate evaluation activities throughout CY2025

Additional Residential and Income Eligible Research

Plan 6 Stipulation Agreement and/or SAG Required Research

1. Process Evaluation of the Income Eligible Multifamily Program | Jan-Nov 2025

- Identify opportunities to increase income eligible program participation from community stakeholders
 - Background research on multifamily programs
 - Benchmark peer utilities for best practices
 - Interview income eligible multifamily community stakeholders and champions
- Understand existing barriers to participation from non-participating income eligible multifamily stakeholders.
 - Interview non-participating income eligible building owners and managers
- Make recommendations regarding program design elements that would increase ComEd's income eligible program offerings.

Additional Residential and Income Eligible Research

Plan 6 Stipulation Agreement and/or SAG Required Research

2. Process Evaluation of Mapping Assistance Needs and Targeting Delivery of Weatherization Services | Jan-Dec 2025

- Analyze the current program structure to assess the effectiveness of identifying and targeting customers in need of financial assistance and weatherization services.
 - Review ComEd filed data for participation analysis
 - Review program design and process
 - Conduct participant surveys
- Examine the data collection and mapping methods ComEd employs to determine if financial assistance and weatherization services are reaching intended areas.
 - Identify key metrics to evaluate program success and impact

Additional Residential and Income Eligible Research

Plan 6 Stipulation Agreement and/or SAG Required Research

3. Impact & Process Evaluation of the pilot to connect customers with payment trouble to energy efficiency | Jan-Nov 2025

- Compare the program design and best practices with similar programs offered by other utilities.
- Evaluate the implementation of the Catch Up and Save Pilot to assess how effectively it reached eligible customers and delivered intended support.
- Quantify the impact the Catch Up and Save pilot had on participants' ability to pay for energy services (such as amount in arrearages, disconnects, late payments, etc.).
- Conduct a pre and post comparison amongst customers participating in Catch Up and Save and analyze a difference-in-difference effect by looking across other customers with similar arrearages who did not participate in the program.



Business Programs

Business Sector Program Components

Program	Program Components	Joint Program
Small Business	Small Business	
Incentives	Standard	
	Custom	
Targeted Systems	RCx [includes Building Operator Certification (BOC)]	Yes
	Industrial Systems	
	Virtual Commissioning (VCx)	
Midstream/Upstream	Instant Discounts	
	Commercial Food Service (CFS)	Yes
Behavior Bus/Pub	Strategic Energy Management	
New Construction - Bus/Pub	Non-Residential New Construction	Yes
Business Energy Analyzer	Business Energy Analyzer	

NTG Evaluation Draft Timeline – Business 1

Program	Component	Tasks	CY2022	CY2023	CY2024	CY2025
Midstream/Upstream	Instant Discounts	Net Savings Research – Customer Free Ridership Survey – Two Waves		✓		✓
Midstream/Upstream	Instant Discounts	Net Savings Research – Customer Spillover Survey – Two Waves		✓		✓
Midstream/Upstream	Instant Discounts	Net Savings Research – Trade Ally Free Ridership Survey		✓		✓
Midstream/Upstream	Instant Discounts	Net Savings Research – Trade Ally Spillover Survey		✓		✓
Midstream/Upstream	CFS	Net Savings Research – Customer Free Ridership Survey				✓
Midstream/Upstream	CFS	Net Savings Research – Customer Spillover Survey				✓
Midstream/Upstream	CFS	Net Savings Research – Trade Ally Free Ridership Survey				✓
Midstream/Upstream	CFS	Net Savings Research – Trade Ally Spillover Survey				✓
Incentives	Custom	Net Savings Research – Customer Free Ridership Survey	✓	✓	✓	✓
Incentives	Custom	Net Savings Research – Customer Spillover Survey	✓	✓	✓	✓

Note: The timeline reflects the **calendar year** that new recommendations will be presented to SAG.

NTG Evaluation Draft Timeline – Business 2

Program	Component	Tasks	CY2022	CY2023	CY2024	CY2025
Incentives	Standard	Net Savings Research – Customer Free Ridership Survey			✓	
Incentives	Standard	Net Savings Research – Customer Spillover Survey			✓	
Incentives	Standard	Net Savings Research – Trade Ally Free Ridership Survey			✓	
Incentives	Standard	Net Savings Research – Trade Ally Spillover Survey			✓	
Targeted Systems	Industrial Systems	Net Savings Research – Customer Free Ridership Survey			✓	
Targeted Systems	Industrial Systems	Net Savings Research – Customer Spillover Survey			✓	
New Construction - Bus/Pub	Non-Residential New Construction	Net Savings Research - Customer Free Ridership Survey		✓		
Small Business	Small Business	Net Savings Research – Customer Free Ridership Survey		✓		
Small Business	Small Business	Net Savings Research – Customer Spillover Survey		✓		
Small Business	Small Business	Net Savings Research – Trade Ally Free Ridership Survey		✓		
Small Business	Small Business	Net Savings Research – Trade Ally Spillover Survey		✓		
Targeted Systems	RCx	Net Savings Research – Customer Free Ridership Survey			✓	
Targeted Systems	RCx	Net Savings Research – Customer Spillover Survey			✓	
Targeted Systems	RCx	Net Savings Research – EESP Free Ridership Survey			✓	
Targeted Systems	RCx	Net Savings Research – EESP Spillover Survey			✓	

Note: The timeline reflects the **calendar year** that new recommendations will be presented to SAG.

Business Pilots and Market Transformation Programs

Pilots and MT Programs with <u>Expected Savings in 2025</u>	Pilot	MT Program
Automated System Optimization	✓	
Advanced Refrigeration Controls*	✓	
Very High Efficiency HVAC Retrofit	✓	
Energy Management Systems (EMS) for Small Business	✓	
Virtual Energy Coach	✓	
Heat Pump Roof Top Units	✓	
Pilots and MT Programs with <u>Evaluation Support</u>	Pilot	MT Program
All Sectors		
Advanced Codes and Building Performance Standards		✓

* Savings to be claimed through existing Targeted Systems program

Business Research

Compressed Air Leak Repair Effective Useful Life (EUL) Research | Q4 2021–Q4 2025

- **Joint study between ComEd and Ameren Illinois**
- **Key Objective:** Determine the EUL for compressed air leak repairs with intent to update the TRM
- **Research Approach:** Longitudinal study to examine air leak repair failure rates over the course of 30+ months



Special Topics

Non-Energy Impacts

Economic and Employment Impacts

- Report produced annually by April 30 per CEJA
- Includes indirect and direct economic impacts and job-years
- Conducted since CY2018, methodology uses IMPLAN and program year cost and savings data

Societal Health Impacts

- Analysis conducted annually to produce values for the TRC report due to ComEd and ICC by June 28
- Report on Societal NEIs produced annually in June
- Conducted since CY2020, methodology uses EPA tools AVERT and COBRA and portfolio savings data
- Analysis tools will be revised in accordance with AVERT and COBRA updates

Participant Impacts

- Research underway with residents of single-family homes and multifamily buildings
- Research completed with building owners and property managers of multifamily buildings
- Monetized NEI results associated with single-family and multi-family residents expected by Q2 2026
- Monetized NEI results associated with managing multifamily buildings expected by Q1 2025

PJM

Objective: Support ComEd's annual portfolio capacity resource reporting to PJM

Approach:

1. Compile the PJM-compliant peak demand reductions from ComEd's portfolio
2. Transform the data to match PJM's reporting requirements
3. Apply current year evaluation factors to the data
4. Prepare the updated reports for PJM

Timing:

- Follow the PJM-defined schedules for reporting
- Typically, January to July on an annual basis
- Note: Per Recent FERC ruling, EE Resources disallowed from participating in future auctions

NTG Policy for Disadvantaged Areas

ComEd data will have project- or customer-level on

- Zip Codes
- Municipality
- Customer type flag identifying general delivery service municipal, public school and local government customers
- Energy consumption level or a flag for Small Load Deliver Class (<100 kW)

Guidehouse will use that data to determine projects eligible for a NTG of 1.0 based on the Disadvantaged Areas NTG policy

Applying DAC NTG Policy

Customer Type	Projects receiving NTG 1.0 based on criteria
Residential Customers	Residential customer in a disadvantaged neighborhood based on zip code
	Measure supplied by Business within a disadvantaged neighborhood [†]
C&I Customers, Private Projects	Customer is in a disadvantaged neighborhood, based on zip code and meeting size criteria
	Measure supplied by business within a disadvantaged neighborhood, based on zip code and meeting size criteria [†]
C&I Customers, general delivery service municipal, public school and local government	Customer is in a disadvantaged municipality

[†] Applies to Midstream/Upstream programs



Evaluation Approaches

Summary of 2025 Evaluation Activities and Timelines

Evaluation Activities Timeline Overview

Impact

- Waves of impact research throughout the year
- Final program data available January 30 of each year
- Final impact report, economic and employment impacts, and summary report due April 30 of each year
- TRC report is due June 30 of each year

Net to Gross

- Memos delivered as research is completed
- Draft recommendations September
- Final values October 1

Research

- Results presented as research is completed
- TRM, non-energy impacts, and other studies are ongoing

Impact Evaluation Approaches

Basic Approach

- TRM-based (majority of residential programs)
- Custom and model-based (majority of business programs and pilots)
- Population-level consumption data analysis (Home Energy Reports)

Components

- Savings Calculator and Workpaper Review
- Program Tracking Data Review
- Survey, Phone, or Virtual Verification
- Onsite Verification
- Impact Analysis in Waves

Evaluation Coordination

The ComEd EM&V Team coordinates with the other utilities and their evaluation teams on an ongoing basis

ComEd, Nicor Gas, Peoples Gas and Northshore Gas Joint Programs

- Some jointly delivered programs are evaluated by a single-team, some separately
- Evaluators calculate and report joint TRCs
- Nicor Gas is selling kWh to ComEd. We coordinate to do some of the eval on the gas side and some on the ComEd side.

Coordination on Process, NTG, 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

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)

2025 Statewide Research:

- Compressed Air Leak Repair EUL
- Statewide Midstream Food Service NTG

Questions, Feedback



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