

# ComEd CY2026 Evaluation Plan

Energy Efficiency and Demand Response Plan

Program Year 2026 (CY2026)

(1/1/2026 – 12/31/2026)

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**ComEd**



**Final**

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**Submitted to:**

ComEd  
2011 Swift Drive  
Oak Brook, IL 60523

**Submitted by:**

Guidehouse Inc.  
167 N. Green Street  
12th Floor  
Chicago, IL 60607

**Contact:**

Charles Maglione, Partner  
202.481.7352  
[cmaglione@guidehouse.com](mailto:cmaglione@guidehouse.com)

Adam Knickelbein, Director  
303.493.5483  
[adam.knickelbein@guidehouse.com](mailto:adam.knickelbein@guidehouse.com)

Jeff Erickson, Director  
608.616.4962  
[jeff.erickson@guidehouse.com](mailto:jeff.erickson@guidehouse.com)

Neil Curtis, Director  
802.526.5119  
[neil.curtis@guidehouse.com](mailto:neil.curtis@guidehouse.com)

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# 1 Introduction

## 1.1 Overview

This document outlines the Evaluation Plan for ComEd's CY2026 energy efficiency and demand response program activities. The evaluation's goals include:

- **Evaluation, measurement, and verification (EM&V) of energy efficiency programs.**
  - Program evaluations will meet the requirements of the Climate and Equitable Jobs Act (CEJA), the Future Energy Jobs Act (FEJA), the Clean & Reliable Grid Affordability Act (CRGA), and Section 8-103B(g)(6) of the Illinois Public Utilities Act (PUA), which states the utility shall provide for an annual independent evaluation of the performance of the cost-effectiveness of the utility's portfolio of programs, a review of the 4-year results of the broader net program impacts, and adjustment of the measures on a going forward basis as a result of the evaluations.
  - Our general approach is to prioritize programs that require deeper analysis. We will continue to conduct thorough, high quality annual impact evaluations for ComEd's largest energy efficiency programs and those undergoing significant changes without over-evaluating any energy efficiency program.
  - We plan to work with utility evaluators, government, and public interest parties, including the Illinois Stakeholder Advisory Group (SAG) and the Illinois Commerce Commission (ICC) Staff, to ensure issues and topics relevant to EM&V are addressed in an efficient manner.
- **EM&V oversight and support that provides continuous improvement of ComEd's energy efficiency programs, pilots, and processes.** Guidehouse has planned activities that provide program-level feedback throughout the year to ComEd's team to improve savings accuracy and results. The Evaluation Plan is structured to support ComEd's continuous improvement process by identifying the program's actual performance, showing how this performance differs from the planned performance, and identifying opportunities to improve the program processes over time.

## 1.2 Evaluation Plan Structure

This document is structured as follows.

- **Introduction** provides an overview of the overall Evaluation Plan.
- **Portfolio Schedule** discusses the overall schedule governing most individual program evaluation efforts.
- **Program-specific Activities and Schedules** describes the evaluation approaches we will take to evaluate individual programs and pilots. The program-specific and pilot-specific impact evaluation sections provide an overview of key evaluation activities and more detailed schedules. For programs or pilots where there are detailed nuances to the evaluation design or analysis approach that would benefit from stakeholder input, Guidehouse will prepare memos to describe those nuances.

- **Comprehensive Evaluation Framework and Cross-Program Research** covers evaluation activities that cut across programs, including summary reporting, non-energy impacts, cost-effectiveness research and cross-cutting research activities.
- **Evaluation Approaches** defines the evaluation approaches we will use to evaluate individual programs and pilots. This section details the evaluation approaches referenced in the Section 3 individual program and pilot plans so that definitions are included once in this document instead of repeatedly throughout the individual plans.

## 2 Portfolio Schedule

### 2.1 Impact Evaluation and Cost Effectiveness Reporting Schedule

ComEd will provide Guidehouse their CY2026 final data by January 30, 2027. Guidehouse will deliver the final first draft of the program-specific impact reports on a rolling basis by March 15, 2027; the final reports, including the summary report, will be delivered by April 30, 2027. Draft and final reports will be delivered concurrently to ComEd and SAG for review.

First draft reports will be provided to ComEd and ICC Staff and the SAG for review. Reviewers have 15 business days to review the first draft of the program-specific impact reports and 5 business days to review the second draft.

The draft cost-effectiveness report and the economic and societal impact reports will be submitted to ComEd, ICC Staff and the SAG by May 14, 2027, and the final by July 1, 2027, using best efforts.

Table 2-1 summarizes key impact reporting dates.

**Table 2-1. Portfolio Impact Evaluation and Cost Effectiveness Reporting Schedule**

Task	Responsibility	Milestone Date
End of Year data delivery	ComEd	January 30, 2027
<b>Program-Specific Impact Reports</b>		
Draft final reports	Guidehouse	Rolling, March 1 – March 15, 2027
Draft final report review	ComEd and Stakeholders	Rolling, March 1 – April 3, 2027 (15 business days)
Draft final report edits	Guidehouse	Rolling, March 23 - April 10, 2027 (5 business days)
Draft final report edits review	ComEd	Rolling, March 30 – April 23, 2027 (5 business days)
Final reports submitted to SAG/ICC	Guidehouse	April 30, 2027
<b>Summary Report</b>		
Draft Summary Report	Guidehouse	March 23, 2027
Draft Summary Report review	ComEd and Stakeholders	April 7, 2027 (10 business days)
Summary Report Second Draft	Guidehouse	April 28, 2027
Summary Report final submitted to SAG/ICC	Guidehouse	April 30, 2027
<b>Cost Effectiveness Report</b>		
Draft Cost Effectiveness Report	Guidehouse	May 14, 2027
Final Cost Effectiveness Report	Guidehouse	July 1, 2027
<b>Societal Non-Energy Impact Report</b>		
Draft Societal NEI Report	Guidehouse	May 14, 2027
Final Societal NEI Report*	Guidehouse	July 1, 2027
<b>Economic Impact Report</b>		
Draft Economic Impact Report	Guidehouse	May 14, 2027
Final Economic Impact	Guidehouse	July 1, 2027

\* Final Cost Effectiveness, Societal, and Economic NEI Impact Reports will be submitted by July 1, 2027, given ComEd delivers required data sets by April 1, 2027.

## 2.2 Net To Gross Reporting Schedule

Program-specific free ridership and spillover (as applicable) results will be delivered in draft memos as the research is completed. The evaluation team will deliver all draft NTG memos to ComEd by August 3, 2026.

The evaluation team will deliver the complete set of draft CY2027 NTG ratios to the SAG by September 1, 2026, and the final recommended values by October 1, 2026. Additionally, the evaluation team will present the recommended results to the SAG and participate in SAG meetings in September 2026 to finalize the CY2027 NTG values. Table 2-2 summarizes key NTG reporting dates.

**Table 2-2. Portfolio Net to Gross Reporting Schedule**

Task	Responsibility	Milestone Date
Draft program research memos	Guidehouse	August 3, 2026
Draft program research memo review	ComEd	August 17, 2026 (10 days)
Draft NTG ratios to SAG	Guidehouse	September 1, 2026
SAG NTG Meetings	Guidehouse and Stakeholders	September, 2026
Final recommended NTG values to SAG	Guidehouse	October 1, 2026

All other research activities will follow a schedule unique to each program activity, to meet the portfolio’s reporting milestones.

Guidehouse will build detailed schedules for each evaluation activity and share them with ComEd and interested parties once this plan is approved.

### 3 Program-specific Activities and Schedules

This section provides a comprehensive overview of the evaluation activities and schedules tailored to each specific program. Each program summary is designed to describe the methodologies, timelines, and key milestones associated with the evaluation process. By outlining the unique aspects of each program, the section ensures that stakeholders understand the evaluation framework and the steps involved in assessing program effectiveness. This structured approach facilitates transparency and accountability, enabling informed decision-making and continuous improvement. The sections are broken down by sector:

- Business/Public Sector
- Residential/Income Eligible (IE)
- Market Transformation Programs
- Pilots
- Cross-sector

The evaluation activities that are specifically tailored to each program in this section are further defined in Section 5: Evaluation Approaches.

### 3.1 Business/Public Sector

This section summarizes Guidehouse’s evaluation approach to the Business / Public Sector. Individual evaluation activities are defined in Evaluation Approaches. Key milestones and timelines are established to track progress and facilitate regular stakeholder engagement, ensuring that findings inform ongoing program improvements.

The Business/Public Sector is comprised of seven individual programs. Guidehouse’s evaluation strategies are tailored to reflect each program’s measures and implementation approaches. The programs are:

- Small Business
- Incentives (Standard, Custom)
- Targeted Systems (RCx, Industrial Systems, VCx)
- Midstream/Upstream (Instant Discounts)
- Commercial Food Service
- Behavior – Bus/Pub (Strategic Energy Management)
- Business Energy Analyzer
- New Construction – Bus/Pub

#### 3.1.1 Small Business

**Table 3-1. Small Business Program Description**

Topic Area	Description
Program Description	The Small Business program will provide energy efficiency (EE) assessments and incentives for the purchase and installation of energy-efficient equipment to small businesses and public facilities. A closed network of Small Business Program service providers will conduct comprehensive energy assessments, at no cost to the customer, to identify a list of recommended EE improvement opportunities for eligible private and public customers. Service providers will also submit pre-applications on behalf of customers to reserve incentive funding for projects, install the energy-saving measure(s) in the customer’s facility, and bill the customer for their share (if any) of the project cost after incentives have been applied.
Measures	Efficient lighting and controls, HVAC, compressed air, refrigeration, and building envelope
Collaboration	None
Participant Engagement	The program educates participants about energy efficiency opportunities through no-cost on-site energy assessments conducted by authorized, specially trained energy efficiency service providers (EESPs) and installs energy saving measures in the customer’s facility.
Data	End use customer-level tracking data

**Table 3-2. Small Business Program Evaluation Description**

Topic Area	Description
Evaluation Approach	Impact evaluation
Evaluation Methodology	<p>The evaluation team will conduct a review of the CY2026 program measure workpapers in Fall 2025, ahead of the program year kick off.</p> <p>The evaluation team will conduct a Preliminary Savings Feedback analysis that will include a due diligence review of the ex ante tracking data to-date as well as the program measure workbook, followed by a savings impact evaluation of the mid-year dataset. Findings and recommendations for the tracking data, measure workbook, and savings review activities will be documented together in a spreadsheet deliverable. This will outline any issues ComEd may address to inform the final year-end dataset impact evaluation. The evaluation team will conduct a final Year-End Impact analysis on the full set of calendar year data. Findings and recommendations can inform discrepancies for the next evaluation year. The evaluation team will utilize the applicable version of the Illinois Technical Reference Manual, and errata when published, along with the program workpapers to calculate verified savings for both the Preliminary Savings Feedback and Year-End Impact analyses.</p>

**Table 3-3. Small Business Program Evaluation Activities and Schedule**

Activity	Task	Responsible	Target Date
Savings Calculator/Workpaper Review	Deliver calculators/workpapers	ComEd	October 01, 2025
Savings Calculator/Workpaper Review	Provide feedback and finalize calculators/workpapers	Evaluation Team	November 15, 2025
Preliminary Savings Feedback	Deliver data	ComEd	June 01, 2026
Preliminary Savings Feedback	Deliver results (findings and recommendations)	Evaluation Team	September 30, 2026
Year-End Impact Analysis	Deliver year-end data	ComEd	January 30, 2027
Year-End Impact Analysis	Deliver results and draft report	Evaluation Team	March 15, 2027
Year-End Impact Analysis	Deliver results and final report	Evaluation Team	April 30, 2027

*Note: The year-end impact analysis schedule shows the dates required by policy and law. The dates will be adjusted based on the characteristics of the program as we approach the end of year.*

### 3.1.2 Incentives (Standard, Custom)

**Table 3-4. Incentives Program Description**

Topic Area	Description
Program Description	<p>The Incentives program will provide monetary incentives to business and public sector customers installing qualified EE improvements in their facilities. The incentives will be offered on either a fixed per-unit basis (“standard”) or determined based on the calculated annual energy savings (“custom”).</p> <ul style="list-style-type: none"> <li>• <b>Standard measures</b> have savings algorithms based on the IL-TRM.</li> <li>• <b>Custom measures</b> are not in the IL-TRM and are identified and implemented based on site-specific factors.</li> </ul> <p>Technical assistance for select projects will be provided to assist in the evaluation and implementation of custom EE projects.</p>
Measures	<p>Lighting, lighting controls, commercial appliances, HVAC, refrigeration, compressed air equipment, motors, water heating, Energy Management Systems (EMS), industrial measures, and other end-use areas</p>
Collaboration	<p>None</p>
Participant Engagement	<p>The <b>Standard Program</b> offers prescriptive financial incentives and a streamlined application to facilitate the implementation of energy efficiency improvements for non-residential (commercial, industrial, and public) customers and market segments through a combination of EESPs in the program network, customers who install the equipment themselves, and contractors outside of the program network.</p> <p>The <b>Custom Program</b> provides custom incentives to commercial, industrial, and public sector customers for less common or more complex energy-saving measures that are not included in the Standard offering.</p>
Data	<ul style="list-style-type: none"> <li>• End use customer-level tracking data</li> <li>• Project-specific documentation for sampled projects</li> <li>• Billing data for specific sampled projects (e.g., EMS projects)</li> </ul>

**Table 3-5. Incentives Program Evaluation Description**

Topic Area	Description
Evaluation Approach	Impact Evaluation, NTG Research (Custom Only)
Evaluation Methodology	<p>For the <b>Standard Program</b>, the evaluation team will perform a review of the program’s measure workpapers in Fall 2025, ahead of the program year kick off. A detailed review of the program tracking database and a measure-level review of deemed savings will be conducted to confirm that the implementer and supplemental eTrack+ (eTP) processes have applied the correct IL-TRM methodology. The evaluation team will also conduct a mid-year impact sampled analysis over two waves. For each wave, the team will use a stratified random sampling approach to select the gross impact sample with the projects grouped into three cohorts (EMS, lighting, and non-lighting measures). For each sampled project, the evaluation team will perform a desk file review using the core review activities of the measure-level deemed savings review. For a subset of the sampled projects, the desk reviews will be supplemented by onsite verification and/or survey, phone, or virtual verification.</p> <p>For the <b>Custom Program</b> evaluation, the team will conduct a mid-year impact sampled analysis over two waves. For each wave, the evaluation team will review the program tracking data and stratify the participant population into three strata by ex ante gross savings to select the gross impact sample. Each project in the selected sample will receive a custom savings review. For a subset of the sampled projects, the project reviews will be supplemented by onsite verification and/or survey, phone, or virtual verification.</p> <p>For the <b>Custom Program</b>, the evaluation team will also conduct a NTG study to research free ridership and participant spillover, and triangulate survey results using methods defined in the IL-TRM. The evaluation team will recommend a researched NTG value in September 2026 which will be applicable for program year CY2027. The evaluation team will also be available to conduct up to 5 pre-NTG interviews over the course of the program year if requested by the implementation/program team.</p>

**Table 3-6. Incentives Program Evaluation Activities and Schedule**

Component	Activity	Task	Responsible	Target Date
Standard	Savings Calculator/Workpaper Review	Deliver calculators/workpapers	ComEd	October 1, 2025
Standard	Savings Calculator/Workpaper Review	Provide feedback and finalize calculators/workpapers	Evaluation Team	November 15, 2025
Standard	Program Tracking Data Review	Deliver data request	Evaluation Team	April 27, 2026
Standard	Program Tracking Data Review	Deliver data	ComEd	May 15, 2026
Standard	Program Tracking Data Review	Deliver results	Evaluation Team	June 12, 2026
Standard	Measure-Level Deemed Savings Review	Deliver results	Evaluation Team	June 12, 2026
Standard	Mid-Year Impact Sampled Analysis	Deliver wave 1 data request	Evaluation Team	July 1, 2026
Standard	Mid-Year Impact Sampled Analysis	Deliver wave 1 data	ComEd	July 31, 2026

Component	Activity	Task	Responsible	Target Date
Standard	Mid-Year Impact Sampled Analysis	Deliver wave 1 results (excluding EMS and site visit projects)	Evaluation Team	September 30, 2026
Standard	Mid-Year Impact Sampled Analysis	Deliver wave 1 site visit project results	Evaluation Team	October 30, 2026
Standard	Mid-Year Impact Sampled Analysis	Deliver wave 2 data request	Evaluation Team	November 2, 2026
Standard	Mid-Year Impact Sampled Analysis	Deliver wave 2 data	ComEd	November 30, 2026
Standard	Mid-Year Impact Sampled Analysis	Deliver wave 2 results	Evaluation Team	December 29, 2026
Standard	Mid-Year Impact Sampled Analysis	Deliver wave 2 site visit project results	Evaluation Team	February 12, 2027
Standard	Mid-Year Impact Sampled Analysis	Deliver wave 1 and wave 2 EMS project results	Evaluation Team	February 19, 2027
Custom	Mid-Year Impact Sampled Analysis	Deliver wave 1 data request	Evaluation Team	July 6, 2026
Custom	Mid-Year Impact Sampled Analysis	Deliver wave 1 data	ComEd	July 20, 2026
Custom	Mid-Year Impact Sampled Analysis	Deliver wave 2 data request	Evaluation Team	November 2, 2026
Custom	Mid-Year Impact Sampled Analysis	Deliver wave 2 data	ComEd	November 16, 2026
Both	Year-End Impact Analysis	Deliver year-end data	ComEd	January 30, 2027
Both	Year-End Impact Analysis	Deliver results and draft report	Evaluation Team	March 15, 2027
Both	Year-End Impact Analysis	Deliver results and final report	Evaluation Team	April 30, 2027
Custom	Net Savings Research	Deliver survey instrument for approval	Evaluation Team	February 15, 2026
Custom	Net Savings Research	Start fielding surveys	Evaluation Team	March 30, 2026
Custom	Net Savings Research	Deliver results and draft memo	Evaluation Team	August 01, 2026
Custom	Net Savings Research	Deliver results and final memo	Evaluation Team	September 30, 2026

*Note: The year-end impact analysis schedule shows the dates required by policy and law. The dates will be adjusted based on the characteristics of the program as we approach the end of year.*

### 3.1.3 Targeted Systems (RCx, Industrial Systems, VCx)

**Table 3-7. Targeted Systems Program Description**

Topic Area	Description
Program Description	Targeted Systems will provide a fully funded engineering study to help optimize operations of existing building and industrial systems and identify low-cost and no-cost measures for systems and processes. The program also will offer Building Operator Certification.
Measures	Low-cost energy conservation measures that have an average simple payback of 18 months, capital investments, and operational adjustments, such as optimizing operating parameters, properly matching equipment to load, and installing controls that improve system efficiency. Applicable systems include compressed air, process cooling, industrial refrigeration, building HVAC systems, water and wastewater treatment, and process efficiency for heating and cooling in production.
Collaboration	ComEd coordinates the Retro-Commissioning component of this program with Nicor Gas when applicable.
Participant Engagement	<p>The <b>RetroCommissioning (RCx) Program</b> offers technical assistance and financial incentives to pursue energy savings by restoring building HVAC systems and optimizing controls to meet the needs of the current building occupants. The Building Operator Certification (BOC) is a training and certification for commercial building operators; the program offers up to full participant tuition reimbursement for ComEd customers who complete the curriculum and labor incentives depending on eligibility.</p> <p><b>Industrial Systems</b> offers a combination of technical assistance and financial incentives, performing industrial systems studies that assess the performance of the facility's industrial compressed air system, process cooling system, refrigeration system, process efficiency or wastewater treatment plant to ensure efficient, economical operation.</p> <p><b>Virtual Commissioning (VCx)</b> is an energy efficiency pathway that provides qualified ComEd business customers with energy management information services and works with them to identify low- and no-cost energy-saving operational changes.</p>
Data	<ul style="list-style-type: none"> <li>• End use customer-level tracking data</li> <li>• Project-specific documentation for sampled projects</li> <li>• Billing data for specific sampled projects (if requested)</li> <li>• Advanced metering infrastructure (AMI) data for VCx projects</li> </ul>

**Table 3-8. Targeted Systems Program Evaluation Description**

Topic Area	Description
Evaluation Approach	Impact evaluation, NTG (Industrial Systems Only)
Evaluation Methodology	<p><b>RCx Program evaluation:</b> the team will conduct a mid-year impact sampled analysis over three waves. For each wave, the evaluation team will review the program tracking data and stratify the participant population into six strata based on the level of ex ante kWh savings and presence or absence of therms savings to select the gross impact sample. Each project in the selected sample will receive a custom savings review. For a subset of the sampled projects, the project reviews will be supplemented by onsite verification and/or survey, phone, or virtual verification.</p> <p><b>Industrial Systems Program evaluation:</b> the team will conduct a mid-year impact sampled analysis over two waves. For each wave, the evaluation team will review the program tracking data and stratify the participant population into three strata by ex ante gross savings to select the gross impact sample. Each project in the selected sample will receive a custom savings review. For a subset of the sampled projects, the project reviews will be supplemented by onsite verification and/or survey, phone, or virtual verification.</p> <p>The team will also continue to conduct in-depth NTG interviews and web surveys with CY2025 participants in 2026 and will coordinate with ComEd and the IC to determine the NTG research plan for future years as necessary.</p> <p><b>VCx Program evaluation:</b> methodology will vary depending on participant size:</p> <ul style="list-style-type: none"> <li>• <b>Sites under 8 GWh of annual energy use:</b> the evaluation will employ the deemed savings approach outlined in the Illinois TRM v14, Section 4.9.25. The team will review the baseline and reporting period data to confirm previously established model fitness and savings uncertainty metrics tests and ensure the projects qualify for the deemed savings approach. The team will also verify the methodology used for weather normalizing the baseline annual energy use and that projects are bucketed into the correct change type category (e.g., annual impact, cooling only, heating only, cooling &amp; heating).                     <ul style="list-style-type: none"> <li>○ This methodology will remain the same for both mid-year and year-end impact analysis. However, the results may differ as the mid-year analysis will only include partial data for CY2026. The mid-year results will be provided for reference, but verified results will be based entirely on the full year-end data.</li> </ul> </li> <li>• <b>Sites with annual energy use of 8 GWh or over:</b> the team will use baseline and reporting period AMI data to estimate changes in electricity usage attributable to operational improvements via a regression model. This daily regression model adjusts for factors like seasonality and non-routine events (NREs) to isolate program-induced savings.</li> </ul>

**Table 3-9. Targeted Systems Program Evaluation Activities and Schedule**

Component	Activity	Task	Responsible	Target Date
RCx	Mid-Year Impact Sampled Analysis	Deliver wave 1 data request	Evaluation Team	May 28, 2026
RCx	Mid-Year Impact Sampled Analysis	Deliver wave 1 data	ComEd	June 11, 2026

Component	Activity	Task	Responsible	Target Date
RCx	Mid-Year Impact Sampled Analysis	Deliver wave 1 results	Evaluation Team	August 20, 2026
RCx	Mid-Year Impact Sampled Analysis	Deliver wave 2 data request	Evaluation Team	August 27, 2026
RCx	Mid-Year Impact Sampled Analysis	Deliver wave 2 data	ComEd	September 10, 2026
RCx	Mid-Year Impact Sampled Analysis	Deliver wave 2 results	Evaluation Team	November 19, 2026
RCx	Mid-Year Impact Sampled Analysis	Deliver wave 3 data request	Evaluation Team	November 16, 2026
RCx	Mid-Year Impact Sampled Analysis	Deliver wave 3 data	ComEd	November 25, 2026
RCx	Mid-Year Impact Sampled Analysis	Deliver wave 3 results	Evaluation Team	February 4, 2026
Industrial Systems	Mid-Year Impact Sampled Analysis	Deliver wave 1 data request	Evaluation Team	June 1, 2026
Industrial Systems	Mid-Year Impact Sampled Analysis	Deliver wave 1 data	ComEd	June 15, 2026
Industrial Systems	Mid-Year Impact Sampled Analysis	Deliver wave 2 data request	Evaluation Team	November 2, 2026
Industrial Systems	Mid-Year Impact Sampled Analysis	Deliver wave 2 data	ComEd	November 16, 2026
VCx	Mid-Year Impact Sampled Analysis	Deliver data request (subject to data availability)	Evaluation Team	May 14, 2026
VCx	Mid-Year Impact Sampled Analysis	Deliver data	ComEd	May 28, 2026
VCx	Mid-Year Impact Sampled Analysis	Deliver results (for projects using the deemed savings approach)	Evaluation Team	August 6, 2026
All	Year-End Impact Analysis	Deliver year-end data	ComEd	January 30, 2027
All	Year-End Impact Analysis	Deliver results and draft report	Evaluation Team	March 15, 2027
All	Year-End Impact Analysis	Deliver results and final report	Evaluation Team	April 30, 2027
Industrial Systems	Net Savings Research	Start fielding surveys	Evaluation Team	February 23, 2026

Note: The year-end impact analysis schedule shows the dates required by policy and law. The dates will be adjusted based on the characteristics of the program as we approach the end of year.

### 3.1.4 Midstream/Upstream (Instant Discounts)

**Table 3-10. Midstream/Upstream Program Description**

Topic Area	Description
Program Description	This program offers instant discounts to C&I customers or their service providers for opting to purchase (i) high efficiency lighting, (ii) high-efficiency HVAC equipment (including heat pumps), and (iii) forklift chargers or electric fork trucks.
Measures	Industrial (forklift) battery chargers, electric fork trucks, and rooftop HVAC systems.
Collaboration	None
Participant Engagement	Instant discounts at the point of sale for high efficiency products
Data	Program tracking data containing end-use customer and contractor information collected by the distributors participating in the program. This should include key measure information including some baseline information to classify electrification projects and other building or facility type information to support evaluation efforts.

**Table 3-11. Midstream/Upstream Program Evaluation Description**

Topic Area	Description
Evaluation Approach	Impact evaluation
Evaluation Methodology	The evaluation team will conduct a Preliminary Savings Analysis that will include a due diligence review of the ex ante tracking data to-date followed by a savings impact evaluation of the submitted mid-year dataset. Findings and recommendations from the tracking data and savings review activities will be documented together in a spreadsheet deliverable. This will outline any issues ComEd may address to inform the final year-end dataset impact evaluation.

**Table 3-12. Midstream/Upstream Program Evaluation Activities and Schedule**

Activity	Task	Responsible	Target Date
Preliminary Savings Analysis	Deliver Data	ComEd	July 15, 2026
Preliminary Savings Analysis	Deliver results (findings and recommendations)	Evaluation Team	September 04, 2026
Year-End Impact Analysis	Deliver year-end data	ComEd	January 30, 2027
Year-End Impact Analysis	Deliver results and draft report	Evaluation Team	March 15, 2027
Year-End Impact Analysis	Deliver results and final report	Evaluation Team	April 30, 2027

*Note: The year-end impact analysis schedule shows the dates required by policy and law. The dates will be adjusted based on the characteristics of the program as we approach the end of year.*

### 3.1.5 Commercial Food Service

**Table 3-13. Commercial Food Service Program Description**

Topic Area	Description
Program Description	This program offers instant discounts to C&I customers or their service providers for opting to purchase high-efficiency food service equipment, such as cooking equipment, refrigerators, and ice makers.
Measures	High-efficiency commercial cooking equipment.
Collaboration	Nicor Gas and Peoples Gas/North Shore Gas
Participant Engagement	Instant discounts at the point of sale for high efficiency products
Data	Program tracking data containing end-use customer and contractor information collected by the distributors participating in the program. This should include key measure information including some baseline information to classify electrification projects and other building or facility type information to support evaluation efforts.

**Table 3-14. Commercial Food Service Program Evaluation Description**

Topic Area	Description
Evaluation Approach	Impact evaluation
Evaluation Methodology	<p>The evaluation team will perform a review of the CY2026 program calculators in Fall 2025, ahead of the program year kick off.</p> <p>The evaluation team will conduct a Preliminary Savings Analysis that will include a due diligence review of the ex ante tracking data to-date followed by a savings impact evaluation of the submitted mid-year dataset. Findings and recommendations from the tracking data and savings review activities will be documented together in a spreadsheet deliverable. This will outline any issues ComEd may address to inform the final year-end dataset impact evaluation.</p>

**Table 3-15. Commercial Food Service Program Evaluation Activities and Schedule**

Activity	Task	Responsible	Target Date
Savings Calculator/Workpaper Review	Deliver calculators/workpapers	ComEd	November 11, 2025
Savings Calculator/Workpaper Review	Provide feedback and finalize calculators/workpapers	Evaluation Team	December 5, 2025
Preliminary Savings Analysis	Deliver Data	ComEd	July 15, 2026
Preliminary Savings Analysis	Deliver results (findings and recommendations)	Evaluation Team	September 04, 2026
Year-End Impact Analysis	Deliver year-end data	ComEd	January 30, 2027
Year-End Impact Analysis	Deliver results and draft report	Evaluation Team	March 15, 2027
Year-End Impact Analysis	Deliver results and final report	Evaluation Team	April 30, 2027

*Note: The year-end impact analysis schedule shows the dates required by policy and law. The dates will be adjusted based on the characteristics of the program as we approach the end of year.*

### 3.1.6 Behavior – Bus/Pub (Strategic Energy Management)

**Table 3-16. Behavior – Bus/Pub Program Description**

Topic Area	Description
Program Description	This program will assist customers from various sectors to identify and implement operational and behavioral energy-saving improvements in their industrial and commercial properties. Under the Strategic Energy Management (SEM) component, a customer will join a cohort of similar customers to participate in workshops, training, and on-site activities designed to promote more energy efficient behaviors within a facility.
Measures	All measures are eligible. The program focuses on operational and behavioral measures to improve ongoing operational EE.
Collaboration	Nicor Gas and Peoples Gas/North Shore Gas, when applicable.
Participant Engagement	The SEM Program provides training and tools to help participants identify and install low-cost and no-cost measures at their sites.
Data	<ul style="list-style-type: none"> <li>End use customer-level tracking data</li> <li>Project-specific documentation for sampled projects. This should include regression spreadsheet models with key model parameters - historic participant consumption data and key indicator variables. Narrative summary of the nature and scope of installed measures and implementation dates.</li> </ul>

**Table 3-17. Behavior – Bus/Pub Program Evaluation Description**

Topic Area	Description
Evaluation Approach	Impact evaluation
Evaluation Methodology	<p>The evaluation team will review the year-end program tracking data and stratify the participant population into strata based on the level of ex ante kWh savings and program pathway (Traditional SEM vs SEM Express) to select the gross impact sample. Each sampled project will receive a custom savings review. For the <b>Traditional SEM projects</b>, the evaluation team will use the program-provided site-level statistical energy models informed by billing data. For the <b>SEM Express projects</b>, the team will rely on engineering and TRM-based savings calculations.</p> <p>The team may also conduct a mid-year impact sampled analysis for this program subject to data availability. Guidehouse will be available throughout the program year to provide early feedback or conduct parallel project reviews if the implementation/program team requests it.</p>

**Table 3-18. Behavior – Bus/Pub Program Evaluation Activities and Schedule**

Activity	Task	Responsible	Target Date
Year-End Impact Analysis	Deliver data request (subject to data availability)	Evaluation Team	November 2, 2026
Year-End Impact Analysis	Deliver year-end data	ComEd	January 30, 2027
Year-End Impact Analysis	Deliver results and draft report	Evaluation Team	March 15, 2027
Year-End Impact Analysis	Deliver results and final report	Evaluation Team	April 30, 2027

*Note: The year-end impact analysis schedule shows the dates required by policy and law. The dates will be adjusted based on the characteristics of the program as we approach the end of year.*

### 3.1.7 Business Energy Analyzer

**Table 3-19. Business Energy Analyzer Program Description**

Topic Area	Description
Program Description	The Business Energy Analyzer (BEA) program consists of a free, opt-in tool that enables commercial and industrial customers to leverage their energy usage information to gain greater insight and control over their electricity use. The tool serves an important customer education function by providing customers with access to interval data and analytic tools to track their energy usage, optimize energy consumption, and identify immediate low-cost and no-cost energy saving opportunities.
Measures	All measures are eligible. The program focuses on operational and behavior measures to improve ongoing operational energy efficiency.
Collaboration	BEA data analytics may recommend that a participating customer explore a program that is joint with Nicor Gas, Peoples Gas, or North Shore Gas, depending on which company serves their account.
Participant Engagement	The BEA tool provides interval meter-collected (AMI), or automated meter reading (AMR) energy usage information to customers via an individualized, cloud-based web platform. Customers use these data to gain greater insight and control over their electricity use, improve their energy efficiency, and reduce their utility bills.
Data	<ul style="list-style-type: none"> <li>• BEA Login Data</li> <li>• Participant Daily Usage Data</li> <li>• Non-participant Daily Usage Data</li> <li>• NAICS/Business Type Data</li> </ul>

**Table 3-20. Business Energy Analyzer Program Evaluation Description**

Topic Area	Description
Evaluation Approach	Impact evaluation
Evaluation Methodology	<p>The BEA evaluation will vary slightly depending on participant size:</p> <ul style="list-style-type: none"> <li>• For <b>participants below 15 MWh</b> of average daily consumption, the evaluation will utilize a matched comparison group and lagged dependent variable (LDV) regression model to estimate savings.</li> <li>• For <b>participants at or above 15 MWh</b> of average daily consumption, the evaluation will utilize a customer specific pre-post regression model to estimate savings.</li> </ul> <p>This methodology will remain the same for both mid-year and year-end impact analyses. However, the results will likely differ as the mid-year analysis will only include a partial year of 2026 data. Mid-year results will be provided for reference, but verified results will be based entirely on the full year-end data.</p>

**Table 3-21. Business Energy Analyzer Program Evaluation Activities and Schedule**

Activity	Task	Responsible	Target Date
Mid-Year Impact Analysis	Deliver mid-year data request	Evaluation Team	July 11, 2026
Mid-Year Impact Analysis	Deliver mid-year data	ComEd	July 25, 2026
Mid-Year Impact Analysis	Deliver mid-year results	Evaluation Team	October 4, 2026
Year-End Impact Analysis	Deliver year-end data request	Evaluation Team	November 1, 2026
Year-End Impact Analysis	Deliver year-end data	ComEd	January 30, 2027
Year-End Impact Analysis	Deliver results and draft report	Evaluation Team	March 15, 2027
Year-End Impact Analysis	Deliver results and final report	Evaluation Team	April 30, 2027

*Note: The year-end impact analysis schedule shows the dates required by policy and law. The dates will be adjusted based on the characteristics of the program as we approach the end of year.*

### 3.1.8 New Construction – Bus/Pub

**Table 3-22. New Construction – Bus/Pub Program Description**

Topic Area	Description
Program Description	<p>The New Construction program offers financial incentives for commercial buildings that exceed minimum energy code requirements, with a focus on electrification. Bundled energy conservation measures and custom or prescriptive approaches for specific building types will be designed to achieve significant energy savings over the current Illinois energy code.</p> <p>This program will provide technical assistance and incentive funding to building developers for construction or major renovation of commercial and industrial buildings for both private and public customers.</p>
Measures	<p>Energy savings and incentives will be based on achievement of whole building performance targets above minimally code-compliant baseline conditions, with a focus on energy-efficient electrification technologies. Energy-efficient building practices emphasized under the program may include high insulation levels, air sealing, controlled ventilation, high-efficiency HVAC systems including heat pumps, and energy efficient appliances.</p>
Collaboration	<p>Nicor Gas</p>
Participant Engagement	<p>The program will be marketed to building owners, design professionals, builders, and contractors through outreach and education. Marketing will be coordinated and aligned to provide a single message to targeted customers. Tactics may include (i) direct outreach and marketing to architects, engineers, design teams, and developers, (ii) formal education and training events, and (iii) development of partnerships with professional organizations.</p>
Data	<ul style="list-style-type: none"> <li>• End use customer-level tracking data</li> <li>• Project-specific documentation for sampled projects</li> </ul>

**Table 3-23. New Construction – Bus/Pub Program Evaluation Description**

Topic Area	Description
Evaluation Approach	Impact evaluation
Evaluation Methodology	The evaluation team will conduct a mid-year impact sampled analysis. For each wave, the evaluation team will review the program tracking data and stratify the participant population into strata based on the level of ex ante savings to select the gross impact sample. Each project in the selected sample will receive a custom savings review. The custom savings review will include a desk review of all project documentation, including reviewing and, if needed, revising building energy simulation models. For a subset of the sampled projects, if deemed necessary, the project desk reviews will be supplemented by onsite verification and/or survey, phone, or virtual verification.

**Table 3-24. New Construction – Bus/Pub Program Evaluation Activities and Schedule**

Activity	Task	Responsible	Target Date
Mid-Year Impact Sampled Analysis	Deliver data request	Evaluation Team	July 11, 2026
Mid-Year Impact Sampled Analysis	Deliver data	ComEd	July 25, 2026
Mid-Year Impact Sampled Analysis	Deliver results	Evaluation Team	October 4, 2026
Year-End Impact Analysis	Deliver year-end data	ComEd	January 30, 2027
Year-End Impact Analysis	Deliver results and draft report	Evaluation Team	March 15, 2027
Year-End Impact Analysis	Deliver results and final report	Evaluation Team	April 30, 2027

*Note: The year-end impact analysis schedule shows the dates required by policy and law. The dates will be adjusted based on the characteristics of the program as we approach the end of year.*

### 3.2 Residential/Income Eligible (IE)

This section summarizes Guidehouse’s evaluation approach to the Residential / Income Eligible (IE) Sector. Individual evaluation activities are defined in Evaluation Approaches. Key milestones and timelines are established to track progress and facilitate regular stakeholder engagement, ensuring that findings inform ongoing program improvements.

The Residential / IE Sector is comprised of eight individual programs. Guidehouse’s evaluation strategies are tailored to reflect each program’s measures and implementation approaches. The programs are:

- Behavior – Res (Home Energy Reports)
- Home Energy Products (IE and MR Retail, EE Kit Distribution)
- Single-Family Home Energy Savings (IE SF Home Energy Assessments, Products and Retrofits)
- Multi-Family Energy Savings (IE MF and Public Housing Energy Assessments, Products and Retrofits)
- Contractor/Midstream Rebates
- New Construction (Affordable Housing New Construction, Electric New Construction)
- Whole Home Electric (IE SF and MF Retrofits)

### 3.2.1 Behavior – Res (Home Energy Reports)

**Table 3-25. Behavior – Res Program Description**

Topic Area	Description
Program Description	Behavior – Res is an opt-out only, behavioral-based program that will provide residential customers with information on how their households use energy and leverage social norms to drive customer adoption of energy-efficient behaviors. Customers will receive up to six paper and/or twelve-monthly emailed Home Energy Reports a year. Both paper and emailed reports will include neighbor comparison information, personalized EE tips, and information on additional ComEd EE program offerings. All ComEd customers will be encouraged to visit <a href="http://www.ComEd.com/MyAccount">www.ComEd.com/MyAccount</a> to access additional online energy management tools, including the option to receive alerts and notifications like a High Bill Alert sent based on a pre-established threshold, or a Weekly Usage Report that provides insights by comparing the current and previous week’s usage to highlight the days and hours when a customer uses the most energy.
Measures	Home Energy Reports will provide residential customers with information on how they use energy within their households. The report may display usage analytics such as a recent 2-month neighbor comparison, a 12-month neighbor comparison, a personal comparison that illustrates the customer’s usage from the same time last year, and specific energy tips that are based on the characteristics and usage of the household. The types of measures undertaken by customers will be primarily behavioral in nature and may include turning off lights, adjusting air conditioning temperature set-points, and turning off/unplugging electronic equipment when not in use. Given the design of the program and the method of measuring energy savings (which relies on the customer’s monthly energy consumption versus a control group), the breadth of measures undertaken is not known.
Collaboration	None
Participant Engagement	Paper and emailed reports
Data	Program and baseline year billing data for all HER participants and control customers.

**Table 3-26. Behavior – Res Program Evaluation Description**

Topic Area	Description
Evaluation Approach	Impact evaluation
Evaluation Methodology	The evaluation will utilize the RCT experimental design and a lagged dependent variable (LDV) regression model to estimate unadjusted savings via billing data analysis. The evaluation team will adjust savings to account for uplift savings attributable to other programs. The evaluation team will also apply persistence adjustments in accordance with the IL TRM to account for savings attributable to prior years and savings decay for CPAS.

**Table 3-27. Behavior – Res Program Evaluation Activities and Schedule**

Activity	Task	Responsible	Target Date
Mid-Year Data Review	Data Request	Evaluation Team	May 15, 2026
Mid-Year Data Review	Data Delivery	ComEd	May 29, 2026
Mid-Year Data Review	First Draft Memo	Evaluation Team	August 7, 2026
Mid-Year Data Review	First Draft Memo Comments	ComEd	August 21, 2026
Mid-Year Data Review	Final Memo	Evaluation Team	September 5, 2026
Year-End Impact Analysis	Deliver year-end data	ComEd	January 30, 2027
Year-End Impact Analysis	Deliver results and draft report	Evaluation Team	March 15, 2027
Year-End Impact Analysis	Deliver results and final report	Evaluation Team	April 30, 2027

*Note: The year-end impact analysis schedule shows the dates required by policy and law. The dates will be adjusted based on the characteristics of the program as we approach the end of year.*

### 3.2.2 Home Energy Products (IE and MR Retail, EE Kit Distribution)

**Table 3-28. Home Energy Products Program Description**

Topic Area	Description
Program Description	<p>The Home Energy Products program will offer residential customers discounts and rebates on select energy efficient appliances and products for the home. Instant discounts and coupons will be available on qualifying products at participating retailers. Rebates will be available for purchases of eligible ENERGY STAR appliances and other home products and can be made at any physical or online retailer that sells the qualifying appliances and home products. Within Home Energy Products, a portion of the budget will be dedicated to IE customers by offering higher rebates to IE customers and instant discounts at participating retailers on select products in targeted geographic areas (e.g., IE zip codes with 60% density), making energy-saving products more affordable for these customers. In addition, select energy-saving home products will be made available, in partnership with Nicor Gas, People’s Gas, and North Shore Gas, at no cost to IE customers through participating local food banks, food pantries, and similar organizations serving that customer segment. Low- or no-cost energy-saving products may also be offered to targeted residential customer segments through limited time offers (“LTOs”) or other, similar distribution channels School kits containing select energy-saving products will also be available to elementary schools in Market Rate zip codes.. The Home Energy Products program also includes participation in the ENERGY STAR Retail Products Platform (ESRPP) which is a collaborative midstream initiative where ComEd provides incentives to participating retailers to change their inventories by increasing the stocking and sale of select ENERGY STAR products</p>
Measures	<p>A variety of ENERGY STAR-certified appliances and other energy-efficient home products including, but not limited to, air purifiers, all-in-one clothes washer and dryers, ceiling fans, clothes washers, dehumidifiers, electric and heat pump clothes dryers, induction cooktops, low-flow showerheads, room air conditioners, advanced power strips, heat pump water heaters, weatherization products, LED nightlights, smart sockets and smart thermostats. ComEd may revise eligible measures and incentive amounts as needed in accordance with current market conditions, technology development, evaluation results, and program implementation experience.</p>
Collaboration	<p>ComEd will partner with Nicor Gas to distribute school kits to elementary schools in Market Rate zip codes. The ENERGY STAR Retail Products Platform transforms the market through a collaborative midstream initiative in which ComEd is a program sponsor.</p>
Participant Engagement	<p>Via participating (physical or online) retailers, using rebates, discounts, and limited time offers, and via participating local food banks, food pantries, and similar organizations.</p>
Data	<p>Program tracking data including end user information for coupon and rebate participants and retailer information for all retail sales. The ENERGY STAR Retail Products Platform data will be pulled from ICF portal sale data.</p>

**Table 3-29. Home Energy Products Program Evaluation Description**

Topic Area	Description
Evaluation Approach	Impact evaluation. Market Transformation evaluation for ESRPP.
Evaluation Methodology	<p><b>Impact Evaluation:</b> The impact evaluation consists of savings estimates and verification based on guidance from the IL TRM. Prior evaluation of program impacts, Guidehouse will review ComEd’s savings calculator ahead of the program year to confirm the implementation team is collecting the data points that are needed and using the correct savings algorithm in accordance with the TRM. During mid-year, Guidehouse will review program tracking data, and conduct a preliminary savings review to provide ComEd initial feedback. The final savings review will involve a measure-level verification of savings using an R-based analysis that aligns with the TRM.</p> <p><b>Market Transformation Evaluation:</b> and sales quantities for each product category to measure net market lift relative to the Energy Savings Forecasts. Guidehouse will then subtract Rebate Application Program savings and quantities for equivalent measures from the sales-weighted per-unit savings and sales quantities.</p> <p><b>NTG Research:</b> NTG research will be conducted for new and existing measures without a researched NTG or for measures where additional research is needed based on Guidehouse recommendations. NTG research will be conducted via web surveys for measures with known customer information. Measures incentivized through instant discounts will be informed by in-store intercept and follow-up web surveys. Only spray foam and caulking measures are slated for in-store intercept NTG research in CY2026.</p>

**Table 3-30. Home Energy Products Program Evaluation Activities and Schedule**

Activity	Task	Responsible	Target Date
Savings Calculator Review	Deliver Documentation	ComEd	November 2025
Savings Calculator Review	Deliver Results	Evaluation Team	November 2025
Program Tracking Data Review	Deliver Data	Evaluation Team	November 2025
Program Tracking Data Review and Preliminary Savings Feedback	Deliver results (findings and recommendations)	Evaluation Team	August 2026
Year-End Impact Analysis	Deliver year-end data	ComEd	January 30, 2027
Year-End Impact Analysis	Deliver results and draft report	Evaluation Team	March 15, 2027
Year-End Impact Analysis	Deliver results and final report	Evaluation Team	April 30, 2027
In-Store Intercept Instrument Review	Deliver Documentation	ComEd Team	December 2025
In-Store Intercept Survey Fielding	Survey Fielding	Evaluation Team	January 2025
Verification and NTG Web Survey Development	Deliver Documentation	Evaluation Team	January 2026
Verification and NTG Web Survey Review	Deliver Documentation	ComEd	February 2026
Verification and NTG Web Survey Feilding	Survey Feilding	Evaluation Team	March 2026
NTG and Gross Impact Analysis	Deliver Results	Evaluation Team	May 2026
Monthly Report (Delivered on a two-month lag, e.g. August Monthly Report is delivered in October)- ESRPP	Deliver Monthly Model Matching	Implementer	First Week of Each Month
	Calculate Market Share Estimate and Units	Evaluation Team	Second Week of Each Month
Ad Hoc Research- ESRPP	Review Updated Natural Market Baselines	Evaluation Team	As Needed
	Support Addition of New Measures	Evaluation Team	As Needed
	Review New Natural Market Baselines	Evaluation Team	As Needed
Year End Model Matching-ESRPP	Deliver Year End Model Matching	Implementer	January 30, 2027

*Note: The year-end impact analysis schedule shows the dates required by policy and law. The dates will be adjusted based on the characteristics of the program as we approach the end of year.*

### 3.2.3 Single-Family Home Energy Savings (IE SF Home Energy Assessments, Products and Retrofits)

**Table 3-31. Single-Family Home Energy Savings Program Description**

Topic Area	Description
Program Description	The Single-Family Home Energy Savings program will provide IE single-family residential customers with home energy assessments that include free products to help customers save energy and water. Participants will also be considered for a more comprehensive retrofit that includes air sealing and weatherization.
Measures	Programmable and smart thermostats, advanced power strips, faucet aerators, low-flow showerheads and pipe insulation. Qualifying customers may also be served with air sealing, duct sealing, and attic and wall insulation. In some cases, appliances, furnaces, water heaters, boiler tune-ups and replacements, and central air conditioning will also be available. ComEd will not provide incentives for early replacements of single-family air conditioners, gas furnaces, gas boilers or gas water heaters, except in cases of emergency and/or H&S needs, or in the IHWAP-braided portion of the program element. Health and safety measures will also be offered, as budget allows.
Collaboration	It is ComEd’s intent that, to the extent possible, it will offer this program jointly or in coordination with Nicor Gas, Peoples Gas, and North Shore Gas. ComEd also intends to work with Community Action Agencies (“CAAs”) and leverage IHWAP to braid utility dollars with state and federal dollars.
Participant Engagement	An implementation contractor will manage all components of this program, including in-home energy assessments and direct installation or delivery of measures, weatherization retrofits, and braided work delivered through IHWAP.
Data	Program tracking data includes end use customer information.

**Table 3-32. Single-Family Home Energy Savings Program Evaluation Description**

Topic Area	Description
Evaluation Approach	Impact evaluation, NTG
Evaluation Methodology	Guidehouse will review ComEd’s savings calculator ahead of the program year to confirm the implementation team is collecting the data points that are needed and using the correct savings algorithm in accordance with the TRM. During mid-year, Guidehouse will review program tracking data, and conduct a preliminary savings review to provide ComEd initial feedback. The final savings review will involve a measure-level verification of savings using an R-based analysis that aligns with the TRM.

**Table 3-33. Single-Family Home Energy Savings Program Evaluation Activities and Schedule**

Activity	Task	Responsible	Target Date
Savings Calculator Review	Deliver Documentation	ComEd	November 2025
Savings Calculator Review	Deliver Results	Evaluation Team	November 2025
Program Tracking Data Review	Deliver Data	ComEd	June 2026
Program Tracking Data Review and Preliminary Savings Feedback	Deliver results (findings and recommendations)	Evaluation Team	August 2026
Year-End Impact Analysis	Deliver year-end data	ComEd	January 30, 2027
Year-End Impact Analysis	Deliver results and draft report	Evaluation Team	March 15, 2027
Year-End Impact Analysis	Deliver results and final report	Evaluation Team	April 30, 2027

*Note: The year-end impact analysis schedule shows the dates required by policy and law. The dates will be adjusted based on the characteristics of the program as we approach the end of year.*

### 3.2.4 Multi-Family Energy Savings (IE MF and Public Housing Energy Assessments, Products and Retrofits)

**Table 3-34. Multifamily Energy Savings Program Description**

Topic Area	Description
Program Description	Multi-Family Energy Savings is a single comprehensive program that will provide a range of EE services to qualifying property owners, managers, public housing authorities, and tenants. These services will include EE assessments, energy-saving products, and incentives for larger capital projects, and EE measures installed by a participating EE service provider. The program also will provide technical assistance to support implementation. These services will be available to IE properties, as well as buildings owned or managed by Public Housing Authorities.
Measures	Programmable and smart thermostats, advanced power strips, faucet aerators, low-flow showerheads, and pipe insulation. Incentives for appliances, furnaces, cooling equipment, water heaters, boiler tune-ups and replacements, air sealing, and attic and wall insulation will also be available, as well as H&S measures as budget allows.
Collaboration	It is ComEd's intent that, to the extent possible, it will offer this program jointly or in coordination with Nicor Gas, Peoples Gas, and North Shore Gas. ComEd also intends to work with CAAs and leverage the IHWAP to braid utility dollars with state and federal dollars.
Participant Engagement	Free multifamily building energy assessments, implementation contractor or service provider installation of free energy-saving products in tenant spaces and common areas, free or deeply discounted larger capital projects, technical assistance to support implementation, and, as needed, resolution of health and safety issues.
Data	Program tracking data includes end use customer information.

**Table 3-35. Multifamily Energy Savings Program Evaluation Description**

Topic Area	Description
Evaluation Approach	Impact evaluation, NTG
Evaluation Methodology	Guidehouse will review ComEd’s savings calculator ahead of the program year to confirm the implementation team is collecting the data points that are needed and using the correct savings algorithm in accordance with the TRM. During mid-year, Guidehouse will review program tracking data, and conduct a preliminary savings review to provide ComEd initial feedback. The final savings review will involve a measure-level verification of savings using an R-based analysis that aligns with the TRM. If there are custom projects in the sample, Guidehouse will conduct detailed engineering reviews for a census or sample of custom projects. Additionally, Guidehouse may conduct follow-up phone or virtual verification for custom projects to improve certainty of the verified savings.

**Table 3-36. Multifamily Energy Savings Program Evaluation Activities and Schedule**

Activity	Task	Responsible	Target Date
Savings Calculator Review	Deliver Documentation	ComEd	November 2025
Savings Calculator Review	Deliver Results	Evaluation Team	November 2025
Program Tracking Review	Deliver Data	ComEd	June 2026
Program Tracking Review and Preliminary Savings Feedback	Deliver results (findings and recommendations)	Evaluation Team	August 2026
Year-End Impact Analysis	Deliver year-end data	ComEd	January 30, 2027
Year-End Impact Analysis	Deliver results and draft report	Evaluation Team	March 15, 2027
Year-End Impact Analysis	Deliver results and final report	Evaluation Team	April 30, 2027

*Note: The year-end impact analysis schedule shows the dates required by policy and law. The dates will be adjusted based on the characteristics of the program as we approach the end of year.*

### 3.2.5 Contractor/Midstream Rebates

**Table 3-37. Contractor/Midstream Rebates Program Description**

Topic Area	Description
Program Description	The Contractor/Midstream Rebates program will provide midstream incentives on energy-efficient air source heat pumps and ductless mini-split heat pumps installed in ComEd residential customers’ homes. A discount will be applied directly at the point of sale from approved distributors. The program will also offer downstream incentives via authorized geothermal EE service providers installing eligible geothermal heat pumps at residential customers’ homes. Intercepting end users and heat pump-trained contractors/geothermal EE service providers at their common product purchasing channel provides a convenient and simple process for receiving incentives for higher efficiency HVAC equipment.
Measures	Air source heat pumps, ductless mini-split heat pumps, geothermal (ground source) heat pumps and smart thermostats when paired with heat pumps. ComEd may revise eligible measures and incentive amounts as needed in accordance with current market conditions, technology development, evaluation results, and program implementation experience.
Collaboration	None
Participant Engagement	Distributors and heat pump-trained contractors/geothermal EE service providers.
Data	Tracking data for air source heat pumps & ductless mini split heat pumps will contain end user customer and contractor information Tracking data for geothermal heat pumps will contain end user customer information

**Table 3-38. Contractor/Midstream Rebates Program Evaluation Description**

Topic Area	Description
Evaluation Approach	Impact evaluation, NTG
Evaluation Methodology	<p>Guidehouse will review ComEd’s savings calculator ahead of the program year to confirm the implementation team is collecting the data points that are needed and using the correct savings algorithm in accordance with the TRM. During mid-year, Guidehouse will review program tracking data, and conduct a preliminary savings review to provide ComEd initial feedback. The final savings review will involve a measure-level verification of savings that align with IL TRM v14.</p> <p>Similar to CY2025, Guidehouse will complete an analysis to determine an income-eligible electrification savings percentage to be applied to this contractor midstream programs and to the instant discounts business program. If available, low-income discount (LID) data will be incorporated. If a different analysis approach is taken, budget and timeline adjustments will need to be scoped.</p>

**Table 3-39. Contractor/Midstream Rebates Program Evaluation Activities and Schedule**

Activity	Task	Responsible	Target Date
Savings Calculator Review	Deliver Documentation	ComEd	November 2025
Savings Calculator Review	Deliver Results	Evaluation Team	November 2025
Program Tracking Review	Deliver Data	ComEd	June 2026
Program Tracking Review and Preliminary Savings Feedback	Deliver results (findings and recommendations)	Evaluation Team	August 2026
Year-End Impact Analysis	Deliver year-end data	ComEd	January 30, 2027
Year-End Impact Analysis	Deliver results and draft report	Evaluation Team	March 15, 2027
Year-End Impact Analysis	Deliver results and final report	Evaluation Team	April 30, 2027

*Note: The year-end impact analysis schedule shows the dates required by policy and law. The dates will be adjusted based on the characteristics of the program as we approach the end of year.*

### 3.2.6 New Construction (Affordable Housing New Construction, Electric Homes New Construction)

**Table 3-40. New Construction Program Description**

Topic Area	Description
Program Description	<p>The New Construction Program will offer financial incentives for new construction or major renovation of housing that exceeds minimum energy code requirements, with a focus on electrification. Bundled energy conservation measures and custom or prescriptive approaches for specific building types will be designed to achieve significant energy savings over the current Illinois energy code.</p> <p>The Affordable Housing New Construction sub-program is designed for income eligible housing – including single-family, low-rise, mid-rise, and high-rise multifamily buildings. This offering will provide technical assistance and incentives to developers to incorporate energy-efficient building practices into the moderate rehab, major renovation, and new construction of single-family units in multi-family low-rise and mid-rise buildings. The residential offering may transition to ENERGY STAR or another national standard to align with federal tax incentives.</p> <p>The Electric Homes New Construction sub-program is designed for single-family homes, 2–4 flats, and small multifamily buildings, and provides incentives to builders who meet comprehensive all-electric requirements.</p>
Measures	<p>Energy savings and incentives will be based on achievement of whole building performance targets above minimally code-compliant baseline conditions, with a focus on energy efficient electrification technologies. Energy-efficient building practices emphasized under the program may include high insulation levels, air sealing, controlled ventilation, high-efficiency HVAC systems including heat pumps, and energy efficient appliances.</p>
Collaboration	<p>The affordable housing sub-program is offered in coordination with Nicor Gas.</p>
Participant Engagement	<p>Outreach and education to builders and developers</p>
Data	<p>Program tracking data includes end use customer information. Application documents and calculator workbooks for sampled projects</p>

**Table 3-41. New Construction Program Evaluation Description**

Topic Area	Description
Evaluation Approach	Impact evaluation
Evaluation Methodology	Guidehouse will perform a mid-year calculator review. This will include a review of a sample of projects and will focus on reviewing and validating the program savings calculator. Findings and recommendations from the mid-year review will be documented together in a spreadsheet deliverable to outline issues ComEd may address to inform the final year-end dataset. For Affordable Housing New Construction, the year end evaluation will be a custom savings review, including desk reviews of all projects completed during the program year. For Electric Homes New Construction, Guidehouse will conduct desk reviews for a sample of projects to ensure consistency with the IL-TRM v14.0.

**Table 3-42. New Construction Program Evaluation Activities and Schedule**

Activity	Task	Responsible	Target Date
Savings Calculator Review	Deliver Documentation	ComEd	May 15, 2026
Savings Calculator Review	Deliver Results	Evaluation Team	August 7, 2026
Year-End Impact Analysis	Deliver year-end data	ComEd	January 30, 2027
Year-End Impact Analysis	Deliver results and draft report	Evaluation Team	March 15, 2027
Year-End Impact Analysis	Deliver results and final report	Evaluation Team	April 30, 2027

*Note: The year-end impact analysis schedule shows the dates required by policy and law. The dates will be adjusted based on the characteristics of the program as we approach the end of year.*

**Table 3-43. Electric Homes New Construction Program Description**

Topic Area	Description
Program Description	The Electric Homes New Construction program will offer financial incentives for new construction and major renovations that exceed minimum energy code requirements, with a focus on electrification. The program is designed for single-family homes, 2–4 flats, and small multifamily buildings, and provides incentives to builders who meet comprehensive all-electric requirements. Bundled energy conservation measures and custom or prescriptive approaches for specific building types will be designed to achieve significant energy savings over the current Illinois energy code.
Measures	Energy savings and incentives will be based on achievement of whole building performance targets above minimally code-compliant baseline conditions, with a focus on energy efficient electrification technologies Energy-efficient building practices emphasized under the program may include high insulation levels, air sealing, controlled ventilation, high-efficiency HVAC and DHW systems including heat pumps, HVAC Controls, high-performance interior and exterior lighting, hot water conservation, and energy efficient appliances.
Collaboration	None
Participant Engagement	Outreach and education to builders and developers
Data	Program tracking data includes builder information Application documents and calculator workbooks for sampled projects

**Table 3-44. Electric Homes New Construction Program Evaluation Description**

Topic Area	Description
Evaluation Approach	Impact evaluation
Evaluation Methodology	Guidehouse will perform a mid-year calculator review. This will include a review of a sample of projects and will focus on reviewing and validating the program savings calculator to ensure alignment with the IL-TRM v14.0. Findings and recommendations from the mid-year review will be documented together in a spreadsheet deliverable to outline issues ComEd may address to inform the final year-end dataset. Guidehouse will review the end of year data again to ensure consistency with the IL-TRM v14.0 and provide findings and recommendations to inform future updates to the calculator.

**Table 3-45. Electric Homes New Construction Program Evaluation Activities and Schedule**

Activity	Task	Responsible	Target Date
Savings Calculator Review	Deliver Documentation	ComEd	May 15, 2026
Savings Calculator Review	Deliver Results	Evaluation Team	August 7, 2026
Year-End Impact Analysis	Deliver year-end data	ComEd	January 30, 2027
Year-End Impact Analysis	Deliver results and draft report	Evaluation Team	March 15, 2027
Year-End Impact Analysis	Deliver results and final report	Evaluation Team	April 30, 2027

*Note: The year-end impact analysis schedule shows the dates required by policy and law. The dates will be adjusted based on the characteristics of the program as we approach the end of year.*

### 3.2.7 Whole Home Electric (IE SF and MF Retrofits)

**Table 3-46. Whole Home Electric Program Description**

Topic Area	Description
Program Description	The Whole Home Electric program will upgrade IE single-family and multi-family homes and buildings with comprehensive measures, including electrification technologies. Offerings will replace fossil-fueled appliances and heating and cooling systems with electric appliances and systems and convert IE homes and buildings using inefficient electric resistance heating systems to efficient heat pump technologies. Weatherization will also be available through the program if the home or building has not been previously weatherized.
Measures	Air source heat pumps (ducted and ductless), heat pump water heaters, induction stoves, heat pumps and high-efficiency electric clothes dryers, air sealing, and weatherization. Health and safety measures will also be offered, as the budget allows.
Collaboration	ComEd is interested in collaborating with external funding sources to braid dollars in an effort to serve more customers and bring down project costs.
Participant Engagement	Program marketing and outreach activities, assessments, and EE upgrades
Data	Program tracking data includes end use customer information

**Table 3-47. Whole Home Electric Program Evaluation Description**

Topic Area	Description
Evaluation Approach	Impact evaluation
Evaluation Methodology	Guidehouse will review ComEd’s savings calculator ahead of the program year to confirm the implementation team is collecting data needed for the evaluation and it aligns the IL – TRMv14.0. During the mid-year analysis, Guidehouse will review program tracking data and conduct a preliminary savings review to provide ComEd with initial feedback regarding SF and MF WHE measures. During the final savings review, Guidehouse will conduct a measure-level verification of savings using an R-based analysis that aligns with IL TRM v14.0.

**Table 3-48. Whole Home Electric Program Evaluation Activities and Schedule**

Activity	Task	Responsible	Target Date
Savings Calculator Review	Deliver Calculator and Documentation	ComEd	November 2025
Savings Calculator Review	Deliver Results and Feedback	Evaluation Team	November 2025
Program Tracking Data Review	Deliver Data	ComEd	June 2026
Program Tracking Data Review and Preliminary Savings Feedback	Deliver results (findings and recommendations)	Evaluation Team	August 2026
Year-End Impact Analysis	Deliver year-end data	ComEd	January 30, 2027
Year-End Impact Analysis	Deliver results and draft report	Evaluation Team	March 15, 2027
Year-End Impact Analysis	Deliver results and final report	Evaluation Team	April 30, 2027

*Note: The year-end impact analysis schedule shows the dates required by policy and law. The dates will be adjusted based on the characteristics of the program as we approach the end of year.*

### 3.3 Market Transformation Initiatives

ComEd continues to explore opportunities to advance Market Transformation Initiatives (MTIs) as part of its broader energy efficiency and demand response portfolio. MTI programs are designed to influence market behavior and accelerate adoption of energyefficient technologies and practices. At this time, three MTIs have been identified for CY2026:

- Advanced Codes and Building Performance Standards (BPS),
- ENERGY STAR Retail Products Platform (ESRPP)
- Luminaire Level Lighting Controls (LLLC).

ComEd recognizes that market conditions can evolve rapidly. Therefore, while this plan includes MTIs currently known and scoped, it remains flexible to incorporate additional MTIs during CY2026 as new opportunities emerge. MTIs are launched throughout the program year; Guidehouse develops evaluation plans for these efforts when our understanding of the design and implementation has advanced to the point where we can plan for specific evaluation activities.

When appropriate, Guidehouse conducts impact evaluations for MTIs in a similar manner to the programs in the portfolio. Market Transformation Initiatives will be evaluated consistently with the guidelines of the IL-TRM Attachment C. Advanced Codes and Building Performance Standards

The Advanced Codes and Building Performance Standards are a pair of related but distinct market transformation initiatives where ComEd seeks to influence municipalities to adopt stretch codes as defined in the Climate and Equitable Jobs Act (CEJA) and to adopt Building Performance Standards (BPS). These two initiatives also seek to influence market actors to have high compliance rates with the CEJA stretch code where the stretch code is adopted.

The Evaluation Plan for this initiative will be developed as a standalone document and presented to ComEd along with the SAG MT working group.

### 3.3.1 Luminaire-level Lighting Controls (LLLC)

**Table 3-49. Luminaire-level Lighting Controls Program Description**

Topic Area	Description
Program Description	ComEd’s Luminaire Level Lighting Controls (LLLC) MTI aims to accelerate the adoption of advanced networked lighting controls, where each fixture is equipped with its own sensor and can be individually programmed. The program seeks to drive energy savings, improve lighting quality, and simplify maintenance by engaging a broad range of participants. This includes property owners, managers, distributors, installers, designers, and contractors. LLLC is still in the design phase and as a result a more detailed Evaluation Plan is needed, Guidehouse will draft a standalone document to support its implementation and evaluation.
Measures	To be determined later.
Collaboration	Guidehouse can participate in reviewing LLLC program design documents when requested.
Participant Engagement	To be determined later
Data	To be determined later

**Table 3-50. Luminaire-level Lighting Controls Program Evaluation Description**

Topic Area	Description
Evaluation Approach	To be determined
Evaluation Methodology	Guidehouse will evaluate LLLC consistent with the guidelines of Attachment C in the ILTRM.

**Table 3-51. Luminaire-level Lighting Controls Program Evaluation Activities and Schedule**

Activity	Task	Responsible	Target Date
SAG Working Group	Attend SAG working group calls specific to LLLC	Evaluation Team	2026-2027
MTI Document Review	Review program design documents	Evaluation Team	2026-2027

### 3.4 Pilots

In CY2026, ComEd will continue to explore innovative pilot initiatives that support portfolio evolution. Guidehouse anticipates conducting evaluation activities for four pilots during CY2026:

- Heat Pump Roof Top Unit (RTU)
- Window-Mount Heat Pumps
- Virtual Energy Coach
- Aerosol Exterior Sealing

While these pilots form the core of our planned efforts, we acknowledge that the ad hoc nature of R&D innovation may result in additional pilots being introduced or prioritized for evaluation throughout the year. To ensure flexibility and responsiveness, we allocated a dedicated budget for ad hoc pilot evaluation support. This approach enables Guidehouse to adapt quickly to emerging needs, maintain alignment with program objectives, and deliver timely, high rigor insights for any new pilots.

#### 3.4.1 Heat Pump Roof Top Unit (RTU)

**Table 3-52. Heat Pump RTU Pilot Description**

Topic Area	Description
Program Description	The pilot aims to test the performance and customer experience of heat pump rooftop units in commercial buildings. It explores the potential of RTUs to reduce energy costs and emissions while addressing market adoption challenges. These units can replace existing rooftop systems, supporting electrification and decarbonization goals.
Measures	ComEd will incentivize heat pump units. The specific pieces of equipment are site specific and will be confirmed once participation in the program is confirmed.
Collaboration	Guidehouse will coordinate with IL evaluators to align methodology and consistency in the energy savings analysis.
Participant Engagement	Onsite assessments and training
Data	The M&V plan indicates that primary data will include onsite observations, measurements, and remote monitoring of installed RTUs. Data will be analyzed to assess energy, emissions, and cost impacts. End use customer-level tracking data Project-specific documentation Billing data for specific projects Advanced metering infrastructure (AMI) data

**Table 3-53. Heat Pump RTU Pilot Evaluation Description**

Topic Area	Description
Evaluation Approach	Engineering Desk Reviews
Evaluation Methodology	<p>The pilot is designed to test the performance units in commercial buildings, supporting electrification and reducing emissions. Guidehouse will complete engineering desk reviews of all projects completed during the program year.</p> <p>Guidehouse will leverage data collected through the M&amp;V plan to analyze site specific performance of the baseline and efficient conditions.</p> <p>Data includes in-person observations, measurements, and remote monitoring, which will be used to assess energy, emissions, and cost impacts. Specific measures and participant engagement details were be provided once projects are confirmed to be participating.</p>

**Table 3-54. Heat Pump RTU Pilot Evaluation Activities and Schedule**

Activity	Task	Responsible	Target Date
Savings Calculator Review	Deliver Review	Evaluation Team	2026
M&V Plan	Site Specific M&V Review	Evaluation Team	2026
Desk Reviews	Deliver year-end data	ComEd	TBD
Desk Reviews	Deliver analysis and report	Evaluation Team	TBD

### 3.4.2 Window-Mount Heat Pumps

**Table 3-55. Window-Mount Heat Pumps Pilot Description**

Topic Area	Description
Program Description	The pilot aims to accelerate adoption of window-mounted heat pumps as a cost-effective, non-intrusive retrofit for multifamily buildings, reducing reliance on fossil fuels and supporting electrification goals.
Measures	Window heat pumps will be offered and incentivized through this pilot.
Collaboration	Guidehouse will coordinate evaluation efforts between IL utilities if this pilot will be offered in the state.
Participant Engagement	ComEd will work directly with multifamily customers to encourage participation and follow up throughout the pilot
Data	<p>End use customer-level tracking data</p> <p>Project-specific documentation</p> <p>Billing data for specific projects</p> <p>Advanced metering infrastructure (AMI) data</p>

**Table 3-56. Window-Mount Heat Pumps Pilot Evaluation Description**

Topic Area	Description
Evaluation Approach	Impact and NTG
Evaluation Methodology	The evaluation will review pre- and post-installation data to establish baseline conditions and analyze performance metrics such as operating hours, capacity, and efficiency. Where site specific data is missing, IL TRM assumptions will be applied and documented. Gross and net savings will be calculated using TRM algorithms and pilot specific adjustments.

**Table 3-57. Window-Mount Heat Pumps Pilot Evaluation Activities and Schedule**

Activity	Task	Responsible	Target Date
M&V Review	Pilot Level M&V Review	Evaluation Plan	2026
Savings Calculator Review	Deliver Review	Evaluation Team	2026
Year-End Impact Analysis	Deliver year-end data	ComEd	January 30, 2027
Year-End Impact Analysis	Deliver results and draft report	Evaluation Team	March 15, 2027
Year-End Impact Analysis	Deliver results and final report	Evaluation Team	April 26, 2027

*Note: The year-end impact analysis schedule shows the dates required by policy and law. The dates will be adjusted based on the characteristics of the program as we approach the end of year.*

### 3.4.3 Virtual Energy Coach

**Table 3-58. Virtual Energy Coach Pilot Description**

Topic Area	Description
Program Description	The ComEd Virtual Energy Coach pilot is designed to help non-residential customers identify and implement low and no cost operational, maintenance, and behavioral (OM&B) energy efficiency measures. The program leverages advanced metering infrastructure (AMI) data and remote coaching to guide participants through energy management best practices, with the goal of reducing facility energy consumption and supporting continuous improvement in energy performance.
Measures	All measures are eligible. The program focuses on operational and behavioral measures to improve ongoing operational EE.
Collaboration	Ameren
Participant Engagement	This pilot provides training and tools to help participants identify and install low-cost and no-cost measures at their sites.
Data	<ul style="list-style-type: none"> <li>End use customer-level tracking data. The data expected for evaluation capture both customer engagement and energy performance at the facility level. AMI interval data to calculate whole building savings, records of virtual coaching sessions and implemented measures will be requested by Guidehouse. We also anticipate documentation of baseline and post implementation conditions, measure level details for any operational changes, and participation metrics.</li> <li>Project specific documentation for all projects. This should include regression spreadsheet models with key model parameters such as historic participant consumption data and key indicator variables. Narrative summary of the nature and scope of installed measures and implementation dates.</li> </ul>

**Table 3-59. Virtual Energy Coach Evaluation Description**

Topic Area	Description
Evaluation Approach	Impact evaluation
Evaluation Methodology	<p>Each Virtual Energy Coach project will be evaluated individually. The evaluation team will review year end program tracking data and assess each participant’s savings. The evaluation team will use provided site level energy models, informed by AMI interval or billing data, to estimate savings. Guidehouse will be available throughout the program year to provide early feedback or conduct parallel project reviews if requested by the implementation or program team.</p> <p>The evaluation team will determine later if surveys are needed. Participant surveys will be used to gather qualitative and quantitative feedback on engagement, measure implementation, and satisfaction. Survey findings can provide valuable context for interpreting savings results, help identify barriers or drivers to energy savings.</p>

**Table 3-60. Virtual Energy Coach Evaluation Activities and Schedule**

Activity	Task	Responsible	Target Date
Data Requests	Request and receive participant data	Evaluation Team	December 1, 2026
Year-End Impact Analysis	Deliver year-end data	ComEd	January 30, 2027
Year-End Impact Analysis	Finalize impact analysis and reporting	Evaluation Team	April 30, 2027
Survey Instruments for Review	Develop and review participant surveys	Evaluation Team	June 15, 2026
Survey Fielding	Fielding participant surveys	Evaluation Team	October 15, 2026

*Note: The year-end impact analysis schedule shows the dates required by policy and law. The dates will be adjusted based on the characteristics of the program as we approach the end of year.*

### 3.4.4 Aerosol Exterior Sealing

**Table 3-61. Aerosol Exterior Sealing Pilot Description**

Topic Area	Description
Program Description	This pilot tests a new exterior envelope sealing approach designed to reduce air leakage in multifamily buildings by applying an aerosolized sealant from the attic or other adjacent unconditioned spaces. The method depressurizes the apartment unit while a sealant fog is released into the attic, allowing particles to be pulled through gaps and seal leaks.
Measures	Aerosol based sealing measures will be offered. These measures will be used on exterior envelope leakage pathways between apartment units and the attic or other unconditioned spaces.
Collaboration	Guidehouse will coordinate with Illinois evaluator to ensure consistency in data collection, measurement approaches, and analysis for similar pilots.
Participant Engagement	Participants include owners and residents of multifamily buildings where up to 20 units across several buildings will receive the exterior aerosol sealing treatment. Engagement activities include occupant surveys, interviews with building managers, and contractor feedback to understand comfort impacts, process challenges, and market perceptions.
Data	The data sources for this pilot will establish unit level blower door measurements collected before and after the sealing treatment to quantify changes in air leakage, along with building characteristics and documentation of the sealing protocols. Additional data will include participant and contractor feedback used to understand comfort impacts and implementation considerations.

**Table 3-62. Aerosol Exterior Sealing Evaluation Description**

Topic Area	Description
Evaluation Approach	The evaluation will assess the pilot’s effectiveness in reducing envelope leakage, improving occupant comfort, and informing the feasibility of broader market adoption. The approach includes engineering analysis of measured leakage reductions, comparisons across building types, and qualitative assessments of contractors’ and participants’ experiences.
Evaluation Methodology	The evaluation will rely on engineering analysis to assess the performance of the aerosol pilot. This analysis will use pre and post sealing blower door test data to quantify unit level leakage reductions. Engineering calculations will translate measured changes in infiltration into expected heating and cooling load impacts, allowing the evaluation to characterize the technical effectiveness of the exterior aerosol sealing method.

**Table 3-63. Aerosol Exterior Sealing Evaluation Activities and Schedule**

Activity	Task	Responsible	Target Date
M&V Review	Pilot Level M&V Review	Evaluation Plan	2026
Savings Calculator Review	Deliver Review	Evaluation Team	2026
Year-End Impact Analysis	Deliver year-end data	ComEd	January 30, 2027
Year-End Impact Analysis	Deliver results and draft report	Evaluation Team	March 15, 2027
Year-End Impact Analysis	Deliver results and final report	Evaluation Team	April 26, 2027

*Note: The year-end impact analysis schedule shows the dates required by policy and law. The dates will be adjusted based on the characteristics of the program as we approach the end of year.*

### 3.5 Cross-Sector

This section summarizes Guidehouse’s evaluation approach to Cross-Sector activities. These evaluations are conducted on ComEd’s activities which are outside of the formal Residential/IE and Business/Public Sector programs. Individual evaluation activities are defined in Evaluation Approaches. Key milestones and timelines are established to track progress and facilitate regular stakeholder engagement, ensuring that findings inform ongoing program improvements.

Cross-Sector evaluation activities are included for:

- Voltage Optimization
- Nicor Gas Air Sealing & Insulation

### 3.5.1 Voltage Optimization

**Table 3-64. Voltage Optimization Program Description**

Topic Area	Description
Program Description	VO is a combination of Conservation Voltage Reduction (“CVR”) and Volt-VAR Optimization (“VVO”). The CVR approach is designed to directly control the voltage of electricity supplied to end-use customers using transformer load tap changers, voltage regulators, and capacitors. The VVO approach coordinates capacitor bank operations to flatten reductions across an entire feeder or network of feeders.
Measures	VO will be deployed on distribution class substations where the benefit of reduced customer energy consumption is expected to outweigh the cost of deployment. Delivery system work on feeders and substations will be prioritized insofar as practical in order of cost-effectiveness, along with selected smart substations upgraded or installed as part of ComEd’s Energy Infrastructure Modernization Act grid modernization efforts.
Collaboration	None
Participant Engagement	VO does not require consumers to change energy-utilization habits or purchase additional equipment to be effective. ComEd plans to work internally through its Project Management, Smart Grid and Capacity Planning, Transmission and Substation, and Distribution Operation teams to plan, manage, engineer, construct, test, and activate the VO system on the substations and feeders in the project plan.
Data	<ul style="list-style-type: none"> <li>• Feeder level voltage and energy usage</li> <li>• Weather data</li> <li>• Substation and feeder characteristics</li> <li>• VO on-off status log</li> </ul>

**Table 3-65. Voltage Optimization Program Evaluation Description**

Topic Area	Description
Evaluation Approach	Impact evaluation
Evaluation Methodology	The evaluation team will use the approach specified in the Illinois Technical Reference Manual version 14.0 (IL-TRM v14.0) measure 6.2.1 to estimate the VO program’s energy and demand savings. The IL-TRM relies on a conservation voltage reduction factor (CVRf), which is deemed at 0.8, and multiplies the energy baseline, the CVRf, and the direct measure of percentage reduction in voltage together to get energy savings. The energy baseline is extrapolated from data when VO is off throughout the evaluation period, and the voltage reduction is estimated from the voltage during times when is VO on and off throughout the evaluation period.

**Table 3-66. Voltage Optimization Program Evaluation Activities and Schedule**

Activity	Task	Responsible	Target Date
Impact Evaluation	Data Transfers	ComEd	Monthly from July 2026 to February 2027
Impact Evaluation	Data QA/QC Memos	Evaluation Team	Monthly from July 2026 to February 2027
Impact Evaluation	Annual Calibration	Evaluation Team	November 20, 2026
Impact Evaluation	Deliver year-end data	ComEd	January 30, 2027
Impact Evaluation	Deliver results and draft report	Evaluation Team	March 15, 2027
Impact Evaluation	Deliver results and final report	Evaluation Team	April 30, 2027

*Note: The year-end impact analysis schedule shows the dates required by policy and law. The dates will be adjusted based on the characteristics of the program as we approach the end of year.*

### 3.5.2 Nicor Gas Air Sealing & Insulation

**Table 3-67. Nicor Gas Air Sealing & Insulation Program Description**

Topic Area	Description
Program Description	ComEd has agreed to purchase kWh savings from Nicor Gas resulting from Nicor Gas’ Air Sealing and Insulation (ASI) component offerings. Qualifying measures must be installed in single-family homes of two units or less or multi-family buildings with three units or more, all of which must use natural gas as the primary heating source.
Measures	Air sealing, duct sealing, attic insulation, exterior wall insulation, and foundation sidewall insulation
Collaboration	Nicor Gas
Participant Engagement	The Implementation Contractor and Guidehouse will assist in data delivery between Nicor Gas and ComEd. Participants will be from Nicor Gas’ ASI components of the Home Energy Savings (HES) program, which helps customers complete comprehensive retrofits in existing single-family buildings, and the Multi-Family program.
Data	End use customer-level tracking data

**Table 3-68. Nicor Gas Air Sealing & Insulation Program Evaluation Description**

Topic Area	Description
Evaluation Approach	Impact evaluation
Evaluation Methodology	Guidehouse will conduct an analysis on measure savings during a mid-year preliminary savings review and end-of-year final evaluation. The evaluation team will review measure savings calculators, TRM deemed inputs, and any other supplemental site-specific data. Guidehouse will calculate total net kWh savings using the appropriate Nicor Gas program- or measure-level deemed NTG value. Guidehouse will compare reported ASI program projects to ComEd’s joint Single Family Upgrades and Multifamily Upgrades programs projects to confirm the ASI projects are not double counted. Guidehouse will develop a memo that describes the ASI kWh results, summarizes the evaluation methods, and presents a cumulative persisting annual savings table that shows the ASI measure savings and measure life. Guidehouse will report ASI savings in the ComEd Summary Report, they will be included in the total portfolio savings but not rolled into any individual programs or sectors.

**Table 3-69. Nicor Gas Air Sealing & Insulation Evaluation Activities and Schedule**

Activity	Task	Responsible	Target Date
Preliminary Savings Feedback	Deliver data	ComEd	July 1, 2026
Preliminary Savings Feedback	Deliver results (findings and recommendations)	Evaluation Team	September 30, 2026
Year-End Impact Analysis	Deliver year-end data	ComEd	January 30, 2027
Year-End Impact Analysis	Deliver results and draft report	Evaluation Team	March 15, 2027
Year-End Impact Analysis	Deliver results and final report	Evaluation Team	April 30, 2027

*Note: The year-end impact analysis schedule shows the dates required by policy and law. The dates will be adjusted based on the characteristics of the program as we approach the end of year.*

## 4 Comprehensive Evaluation Framework and Cross-Program Research

This section delves into the evaluation activities that span across multiple programs, providing a holistic view of the evaluation framework, the methodologies employed, and the continuous improvement efforts that underpin ComEd's energy efficiency initiatives. This section is intended for readers who seek to understand the overarching evaluation methodologies and the comprehensive approach taken to ensure the effectiveness and efficiency of ComEd's energy efficiency programs.

It covers the Annual Summary Report, which provides a detailed program-by-program and portfolio-level summary of key impact evaluation results, including energy and demand impacts, savings by sector, and program costs. Additionally, it discusses Cost-Effectiveness Research, which calculates program and portfolio Illinois Total Resource Cost (TRC) tests. The section also includes information on cross-cutting research initiatives, such as the Illinois TRM Measure Updates and various evaluation research activities aimed at improving program performance and savings.

### 4.1 Annual Summary Report

Guidehouse will produce an annual summary report providing a program-by-program and portfolio-level summary of key impact evaluation results. The report will consist mostly of tables and figures illustrating the energy and demand impacts produced from the ComEd programs. The tables will include the following:

- Ex post savings template tables agreed to by the SAG, which will be provided in the summary report and in an accompanying spreadsheet
- Portfolio total and program-specific ex ante gross, verified gross, and verified net savings for energy and peak demand
- Savings by sector (Residential, Business, and Pilots) and specific to Income Eligible participants
- Savings spread over time based on measure-specific effective useful life (EUL) and the calculation of cumulative persisting annual savings (CPAS)
- Savings from energy efficient electrification, secondary water savings, and carryover savings, while accounting for potential adjustment from electric heating penalties
- Calculation of the weighted average measure life (WAML)
- Fuels other than electricity and water-related energy savings converted to electricity in total and the amount that ComEd can claim
- Estimation of the portfolio Applicable Annual Total Savings (AATS) achieved
- Estimation of applicable annual incremental goal (AAIG) savings achieved by ComEd
- Savings by end-use type (broad measure categories such as lighting, HVAC, refrigeration, etc.)
- Table listing the high impact measures (those with the largest savings across the portfolio)
- Program costs
- Table listing programs and measure impact savings from disadvantaged communities affected by the DAC NTG policy

- Income Qualified Multi-Family<sup>1</sup> and Single-Family Equity and Affordability<sup>2</sup> Reporting Metrics per SAG approved utility reporting metrics.

Guidehouse will summarize program tracking data to estimate the total number of customers participating in ComEd’s programs. The approach will vary by program depending on the nature of the data as described below.

- When the program tracking data has an account number and those numbers generally correspond to single customers, the evaluation will use unique account numbers as a proxy for customer counts. We will calculate and aggregate unique customers for programs meeting these criteria, applying this method to most Residential and Business programs. Totals will be reported by program, sector, and for the entire portfolio.
- For programs targeting multifamily dwellings, sometimes buildings have a single account for the building and sometimes each dwelling unit has an account. When the program tracking data has a field with the number of dwelling units, we will use that as a proxy for customers and report it within the sector and portfolio number of customers. If the program tracking data does not have a field with the number of dwelling units (or it is not adequately populated), we will have no way to calculate the number of individual dwelling units and will only include the number of accounts in the sector and portfolio totals. This approach may undercount the actual number of customers.
- The program tracking data does not include account numbers for the programs shown in Table 4-2. Typically, these are midstream programs where the actual end user is not known. As a result, the evaluation cannot create customer counts for these programs. Table 4-3 presents counts of measures installed for these programs.

The Summary Report will present the results in a table patterned after the following prototype.

**Table 4-1. Number of Accounts Participating in ComEd’s Programs**

Program *	Number of Unique Accounts	Notes
<b>Residential</b>		
Program a	###	Number of unique accounts
Program b	###	Number of unique accounts
Program c (multifamily)	###	When the data includes the number of dwelling units then this count uses that number. For all other records it counts each unique account number. The evaluation cannot eliminate double-counting for dwelling units that do not have account numbers from the counts coming from other programs.
<b>Residential Total</b>	###	Number of unique accounts, not the sum of the program counts.

<sup>1</sup> [https://www.ilsag.info/wp-content/uploads/IQ-Multi-Family-Reporting-Metrics\\_FINAL-Clean-6-20-2024\\_v2.pdf](https://www.ilsag.info/wp-content/uploads/IQ-Multi-Family-Reporting-Metrics_FINAL-Clean-6-20-2024_v2.pdf)

<sup>2</sup> [https://www.ilsag.info/wp-content/uploads/Equity-and-Affordability-Reporting-Policy-Metrics\\_FINAL-Clean-6-20-2024.pdf](https://www.ilsag.info/wp-content/uploads/Equity-and-Affordability-Reporting-Policy-Metrics_FINAL-Clean-6-20-2024.pdf)

Program *	Number of Unique Accounts	Notes
<b>Business</b>		
Program d	###	Number of unique accounts
Program e	###	Number of unique accounts
Commercial Food Service	###	Account numbers are only available for a portion of the participants, so this understates the actual number.
<b>Business Total</b>	###	Number of unique accounts, not the sum of the program counts.
<b>Portfolio Total</b>	###	Number of unique accounts, not the sum of the program counts.

\* The actual program names will be used instead of the placeholders used here.

The programs and program components that are NOT included in the table above are shown in the following table.

**Table 4-2. Programs Where Customer Counts Are Not Available**

Program	Notes
<b>Residential</b>	
Contractor/Midstream	Customer account numbers are not available.
Retail/Online	Customer account numbers are not available.
<b>Business</b>	
Midstream/Upstream	Customer account numbers are not available.
<b>Market Transformation</b>	
Codes and Standards	This should be a point of discussion as the program develops.
Energy Star Retail Products	This program, a component of the Home Energy Products program, does not identify specific participants.
<b>Voltage Optimization</b>	Voltage Optimization produces savings for every customer on the controlled feeders.

**Table 4-3. Measure Counts Where Customer Counts Are Not Available**

Program *	End Use Type	Quantity Installed †
<b>Residential</b>		
Program a	<type>	###
Program a	<type>	###
Program b	<type>	
Program b	<type>	###
<b>Business</b>		
Program c	<type>	###
Program c	<type>	###
Program d	<type>	###
Program d	<type>	

\* The actual program names will be used instead of the placeholders used here.

† The units represented by the quantity may vary within a given measure type.

## 4.2 Non-Energy Impacts

Guidehouse researches non-energy impacts (NEIs) in accordance with CEJA with the goal to include monetized values in ComEd’s cost-effectiveness analyses and to report the economic and employment impacts associated with ComEd’s EE portfolio. Societal public health NEIs accrue to society and include improvements to the environment, and the health, safety, and comfort of citizens and include reduced morbidity and mortality associated with reduced air pollution. Economic and employment NEIs accrue to the citizens and industries affected by the economic activities of the energy efficiency portfolio and include job creation and other economic benefits. Participant NEIs accrue to participants living in homes that received energy efficiency upgrades through comprehensive IE programs and include decreased symptoms and medical costs associated with asthma, arthritis, and thermal stress. Participant NEIs also accrue to building owners and property managers of multifamily buildings and include reduced tenant turnover and reduced tenant comfort complaints.

Beginning in CY2020, we included societal NEIs in ComEd’s TRC values, reporting the TRCs with and without the societal NEIs. We reported the economic and employment impacts of ComEd’s EE portfolio on the Illinois economy. Our IE participant NEI research is ongoing with results expected for ComEd’s single family IE program channels in CY2027 and IE multifamily program channels in CY2027 or CY2028.

### 4.2.1 Assessing Economic and Employment NEIs

Guidehouse estimates economic and employment impacts associated with ComEd’s EE programs on the Illinois economy annually. The assessment of the economic and employment impacts includes:

- Preliminary Economic NEI Analysis
- Final Economic NEI Analysis
- Annual Report

This assessment is based on the portfolio of programs implemented during the program year with impacts occurring over the life of each measure – up to 30 years. The impacts are both positive (e.g., net bill savings) and negative (e.g., bill surcharges) and involves a 3-step process which is documented annually in a memo:

1. Data Collection
2. Economic Modeling
3. Analysis of Findings

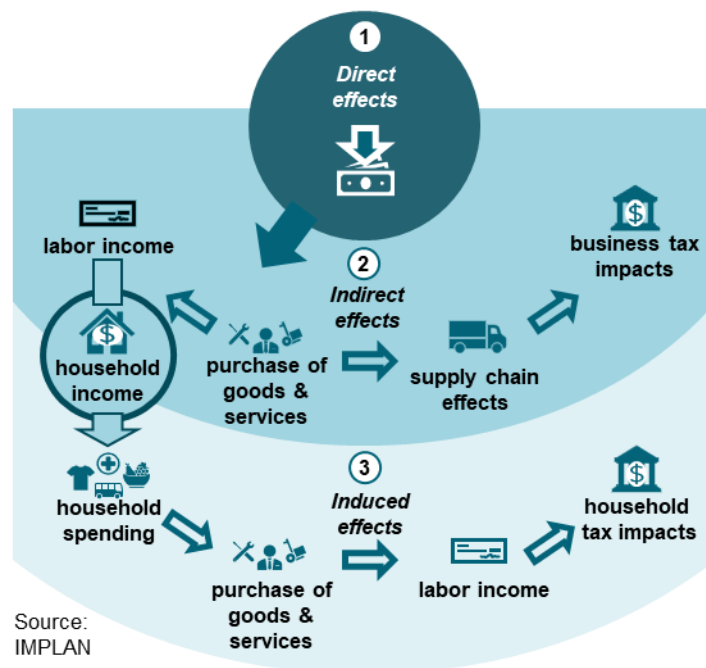
The impacts are based on the changes in household and business spending patterns due to changes in bill surcharges, bill savings, incentives and rebates, and changes in spending via net incremental costs, fuel/transportation services, and program administration.

This assessment uses input-output analysis models that show how money flows through the economy based on supply chain relationships; the effects are categorized into direct, indirect, and induced (Table 4-4). Direct impacts results from changes in demand for industries/commodities, households, or spending patterns. Indirect impacts are due to changes in supplier purchases, and induced impacts are generated from changes in household spending from changes in labor income (Figure 4-1).

**Table 4-4. Description of Economic Impacts**

Type of impact	Example
<b>Direct Effects</b> resulting from direct spending	Net Incremental Costs, Program Administration, and changes in Household and Business Spending
<b>Indirect Effects</b> resulting from industries purchasing from each other	Spending on materials, components, and services
<b>Induced Effects</b> resulting from household spending of labor income	Spending on housing, healthcare, transportation, food, retail and entertainment by workers

**Figure 4-1. Example of changes in spending via Direct, Indirect, and Induced Impacts**



This assessment uses four types of economic metrics to reflect changes in the economy:

1. **Jobs:** Employment
2. **Labor Income:** Total Compensation
3. **Gross Domestic Product (GDP) (Value Added):** Premium created from each stage of the supply chain (Business Sales – Inputs)
4. **Business Sales:** Sales of goods and services across the supply chain

The economic modeling includes the use of IMPLAN, a regional economic analysis software application to estimate the ripple effects of a given economic activity through the implementation of an Input-Output (I/O) model. The following assumptions regarding the I/O model include:

1. **Constant Returns to Scale:** Same quantity of inputs needed per unit of output.
2. **Fixed Input Structure / No Substitution Effects:** Same recipe of inputs always will be used to create the output.
3. **Industry Homogeneity:** All firms within an industry are characterized by a common production process
4. **No Supply Constraints:** No restrictions to inputs, raw materials, and employment.
5. **Technology Assumption:** An industry and production of commodities uses the same technology to produce each of its output
6. **Constant Byproducts:** Industry byproduct coefficients are constant
7. **Static Model:** Prices remain constants and data/relationships are not affected by impact runs
8. **Backward Linkages:** Type I multipliers measure on the upstream effects
9. **Time Dimension:** Length of time for economy to settle at new equilibrium after an initial change in economic activity is unclear

#### 4.2.2 Quantifying and Monetizing Societal NEIs

The Societal NEI research objective is to quantify and monetize societal NEIs associated with ComEd's portfolio.

The research will seek to answer the following key researchable questions:

- How many deaths, hospital admissions, non-fatal heart attacks, cases of acute bronchitis, for example, will be avoided?
- How much work loss will be avoided?
- What is the dollar value of associated costs avoided by society?

The evaluation of this program will include the following activities:

- AVOIDed Emissions and geneRation Tool (AVERT) analysis
- CO-Benefits Risk Assessment (COBRA) analysis
- Generate societal NEI values for cost effectiveness analysis
- Annual report

Guidehouse developed a modeling strategy to utilize the EPA's AVERT model and COBRA to quantify the avoided emissions and health benefits of ComEd's programs. Guidehouse will pull energy efficiency program evaluation MW and MWh savings results to use as inputs for AVERT. AVERT produces an estimate of PM<sub>2.5</sub>, SO<sub>2</sub>, NO<sub>x</sub>, VOCs, Ozone (O<sub>3</sub>), and CO<sub>2</sub> avoided emissions within the Great Lakes / Mid-Atlantic Region defined in the EPA's eGrid tool.

The avoided emissions estimates will be an input to the COBRA tool, which calculates the changes in ambient particulate matter and ozone in the region.

Guidehouse will use AVERT and COBRA to monetize health impacts from reduced emissions in the following categories:

- Avoided death
- Hospital admissions for respiratory, cardiovascular, Alzheimer's disease, Parkinson's disease, stroke, lung cancer, and incidence of hay fever/rhinitis.
- Non-fatal heart attacks
- Acute bronchitis
- Upper and lower respiratory symptoms
- Asthma emergency room visits

- Minor restricted activities
- Work loss
- Asthma onset and exacerbation

### 4.2.3 Quantifying and Monetizing Participant NEIs

The Participant NEI research objective is to quantify and monetize NEIs related to participants in comprehensive ComEd's IE single-family and multifamily energy efficiency programs for ComEd to include in future cost effectiveness tests. These research activities are based on the Stipulation and Future Energy Jobs Act (FEJA) legislation. This research started in CY2018 and will continue data collection and reporting through the end of 2027.

The research will seek to answer the following key researchable questions:

- Do IE ComEd program participants experience reductions in medical visits, missed days of school and/or work?
- Do building owners and property managers of multifamily buildings that receive energy upgrades through ComEd programs experience reductions in costs associated with maintenance, tenant complaints, and tenant turnover?

The evaluation of this program will include the following activities:

- Participant surveys
- Building owner and property manager interviews
- Monetize Quantified NEIs
- SAG Working Group presentation

Guidehouse developed a survey instrument in conjunction with ODC to quantify NEIs associated with IE program participation. Surveys will be distributed to IE single-family and multifamily participants as a pre-survey at the time of their weatherization and HVAC energy upgrades, and as a post-survey 12 months after receiving upgrades. The 12-month lag between surveys is intended to allow time for changes to participant health from their energy upgrades.

Guidehouse will quantify the following NEIs based on feedback from participants:

- Reduced medical visits due to reduced asthma symptoms
- Reduced medical visits due to reduced arthritis symptoms
- Reduced missed days of school
- Reduced missed days of work
- Reduced need for heating assistance

We will collect data from income-eligible single-family and multi-family participants until we achieve quotas of 80 incidences each of asthma and arthritis.

Guidehouse will interview multi-family building owners and property managers to quantify:

- Reduced vacancy
- Reduced equipment maintenance

- Marketability
- Reduced tenant turnover
- Home improvements
- Durability of property
- Reduced tenant complaints

The income-eligible single-family pre-survey is fielded January 2021 through January 2026 (or until we achieve quotas). The post-survey will be fielded through January 2027 (or longer if we needed to extend the pre-survey to achieve quotas).

The income-eligible multifamily pre-survey will be fielded July 2022 through June 2026 (or until we achieve quotas). The post-survey is anticipated to be fielded through June 2027 (or longer if we needed to extend the pre-survey to achieve quotas).

Following the conclusion of the primary research, we will monetize the quantified NEIs using Illinois-specific medical costs and other monetized Illinois-specific values. We will document the monetized values to be used in the TRC analyses and present our findings to the SAG NEI WG.

### 4.3 Cost-Effectiveness Research

Guidehouse will calculate program and portfolio Illinois Total Resource Cost (TRC) tests, which will include monetized NEIs.

As part of Guidehouse's evaluation of ComEd energy efficiency and demand response programs, we will develop a cost model and resulting TRCs, as well as joint TRCs for programs that are jointly implemented by ComEd and at least one of the gas utilities (Nicor Gas, Peoples Gas, and North Shore Gas). The joint TRC calculations will be completed after each utility completes its relevant cost-effectiveness analysis; the joint analysis will focus on the joint programs between the companies.

The primary objective of the cost-effectiveness research and calculations is to comply with the Illinois legislative requirement that all energy efficiency portfolios be shown to be cost-effective. The key tasks of the cost-effectiveness analysis are to:

- Develop a cost model reflecting ComEd's costs by program
- Evaluate the assumptions provided by ComEd and included in Guidehouse's cost model
- After agreement on the cost model and inputs, develop the TRCs for each program
- Provide a report with any recommended improvements and comments on the costs and the resulting TRCs

The final TRCs are used to validate the statutory requirement and in the related ICC proceeding to show that ComEd's portfolio has adhered to state law and regulations. We anticipate the TRC assumptions review will support EM&V and regulatory reporting objectives for ComEd and will also inform future ComEd planning efforts.

The evaluation team will work with ComEd to establish that the appropriate data is available for the modeling and evaluation. We will apply the most recent Illinois cost-effectiveness methodology and ICC rulings in reviewing the TRC test calculations. For programs that are jointly implemented by ComEd and one or more Illinois gas utilities

(including Nicor Gas, Peoples Gas, and North Shore Gas), only the electric portion of the program savings and cost-benefit calculations will be included. The combined joint calculations for the joint programs will be included in a separate memo attached as an appendix to the report.

Guidehouse will comply with the Illinois Energy Efficiency Policy Manual v3.0, Section 8, or any other future relevant Policy Manual sections. The Illinois TRC test is defined in the Illinois Power Agency Act (see 20 ILCS 3855/1 – 10) and shown in Figure 4-2.

**Figure 4-2. Total Resource Cost Test Definition**

*“Total resource cost test” or “TRC test” means a standard that is met if, for an investment in energy efficiency or demand-response measures, 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 program to the net present value of the total costs as calculated over the lifetime of the measures. A total resource cost test compares the sum of avoided electric utility costs, representing the benefits that accrue to the system and the participant in the delivery of those efficiency measures and including avoided costs associated with reduced use of natural gas or other fuels, avoided costs associated with reduced water consumption, and avoided costs associated with reduced operation and maintenance costs, as well as other quantifiable societal benefits, to the sum of all incremental costs of end-use measures that are implemented due to the program (including both utility and participant contributions), plus costs to administer, deliver, and evaluate each demand-side program, to quantify the net savings obtained by substituting the demand-side program for supply resources. In calculating avoided costs of power and energy that an electric utility would otherwise have had to acquire; reasonable estimates shall be included of financial costs likely to be imposed by future regulations and legislation on emissions of greenhouse gases. In discounting future societal costs and benefits for the purpose of calculating net present values, a societal discount rate based on actual, long-term Treasury bond yields should be used. Notwithstanding any to the contrary, the TRC test shall not include or take into account a calculation of market price suppression effects or demand reduction induced price effects.*

Source: See Sections 1-10, Definitions of the IL Power Agency Act:  
<http://www.ilga.gov/legislation/ilcs/ilcs5.asp?ActID=2934&ChapterID=5>

The Illinois TRC test differs from traditional TRC tests in its requirement to include a reasonable estimate of the financial costs associated with future regulations and legislation on the emissions of greenhouse gases (GHGs) and the use of the societal discount rate. These differences add an additional benefit to investments in efficiency programs that are typically included in the societal cost test in other jurisdictions.

### 4.3.1 Illinois TRC Equation

The equation that will be used to calculate the Illinois TRC is presented as follows:

**Equation 4-1. Illinois TRC**

$$BCR_{ILTRC} = B_{ILTRC} / C_{ILTRC}$$

Where,

<b>BCR<sub>ILTRC</sub></b>	=	Benefit-cost ratio of the Illinois TRC test
<b>B<sub>ILTRC</sub></b>	=	Present value of benefits of an Illinois program or portfolio
<b>C<sub>ILTRC</sub></b>	=	Present value of costs of an Illinois program or portfolio

The benefits of the Illinois TRC are calculated using the following equation:

**Equation 4-2. Illinois TRC Benefits**

$$B_{ILTRC} = \sum_{t=1}^N \frac{UAEP_t + UATD_t + UAA_t + EB_t + RC_t + SNEI_t}{(1 + d)^{t-1}} + \sum_{t=1}^N \frac{UAC_{at}}{(1 + d)^{t-1}}$$

The costs of the Illinois TRC are calculated using the following equation:

**Equation 4-3. Illinois TRC Costs**

$$C_{ILTRC} = \sum_{t=1}^N \frac{PNIC_t + IMCN_t + UIC_t}{(1 + d)^{t-1}}$$

Where benefits are defined as:

<b>UAEP<sub>t</sub></b>	=	Utility avoided electric production costs in year t
<b>UATD<sub>t</sub></b>	=	Utility avoided transmission and distribution costs in year t
<b>UAA<sub>t</sub></b>	=	Utility avoided ancillary costs in year t
<b>EB<sub>t</sub></b>	=	Environmental benefits in year t
<b>UAC<sub>at</sub></b>	=	Utility avoided supply costs for the alternate fuel in year t
<b>RC<sub>t</sub></b>	=	Replacement costs of incandescent equivalents in year t
<b>SNEI<sub>t</sub></b>	=	Societal NEI in year t

And costs are defined as:

<b>PNIC<sub>t</sub></b>	=	Program non-incentive costs in year t
<b>IMCN<sub>t</sub></b>	=	Net incremental costs in year t
<b>UIC<sub>t</sub></b>	=	Utility increased supply costs in year t
<b>d</b>	=	Societal discount rate

### 4.3.2 Program Administration Cost Test Equation

The program administration cost test (PACT), a subset of the program administrator cost test, approaches cost-effectiveness from the perspective of the utility. It determines whether the energy supply and capacity costs avoided by the utility exceed the overhead and cost outlays that the utility incurred to implement energy efficiency programs. The structure of the calculation is similar to the TRC, with a few key changes. Because 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 in place of incremental or participant costs. Additionally, because non-energy benefits accrue to society rather than to the utility implementing energy efficiency programs, these benefits are not included in the PACT formula.

Using the equation terms previously defined for the TRC equation, the PACT equation that will be used is defined as follows:

**Equation 4-4. PACT**

$$BCR_{PACT} = B_{PACT} / C_{PACT}$$

Where,

- BCR<sub>PACT</sub>** = Benefit-cost ratio of the PACT
- B<sub>PACT</sub>** = Present value of benefits to a utility of a program or portfolio
- C<sub>PACT</sub>** = Present value of costs to a utility of a program or portfolio

The benefits of the PACT are calculated using the following equation:

**Equation 4-5. PACT Benefits**

$$B_{UCT} = \sum_{t=1}^N \frac{UAEP_t + UATD_t + UAA_t}{(1 + d)^{t-1}} + \sum_{t=1}^N \frac{UAC_{at}}{(1 + d)^{t-1}}$$

The costs of the PACT are calculated using the following equation:

**Equation 4-6. PACT Costs**

$$C_{ILTRC} = \sum_{t=1}^N \frac{PNIC_t + UIC_t + PIN_t}{(1 + d)^{t-1}}$$

Where the new term, **PIN<sub>t</sub>**, is defined as the program incentives provided by the utility in year *t*.

### 4.3.3 Cost-Effectiveness Data Requirements

The data points needed to conduct the TRC test are provided in Table 4-5 and are divided into generic and program-specific categories. The program-specific data points are further subdivided into those provided by ComEd versus those that are a result of Guidehouse’s evaluation activities.

**Table 4-5. Cost-Effectiveness Analysis: Data Requirements and Sources**

Category	Data Point	Source
Generic	<ul style="list-style-type: none"> <li>• Avoided energy costs (\$/kWh)</li> <li>• Avoided capacity costs (\$/kW-year)</li> <li>• Avoided T&amp;D electric (\$/kWh)</li> <li>• Avoided gas production (\$/Therm)</li> <li>• Discount rate</li> <li>• Escalation rates</li> <li>• Avoided GHG emission costs</li> </ul>	ComEd and relevant joint program gas company costs

Category	Data Point	Source
Program-Specific	<ul style="list-style-type: none"> <li>Participants / measure count</li> <li>Verified ex post energy savings (kWh)</li> <li>Verified ex post capacity savings (kW)</li> <li>Realization rate</li> <li>NTG ratio</li> <li>Measure life</li> <li>Incremental measure costs</li> <li>NPV replacement costs</li> <li>Societal NEI benefit (\$/kWh)</li> </ul>	<b>Guidehouse</b> and relevant joint program gas company costs
	<ul style="list-style-type: none"> <li>Non-incentive costs</li> <li>Utility incentive costs</li> <li>Direct install costs</li> <li>Incremental measure costs</li> </ul>	<b>ComEd</b> and relevant joint program gas company costs

Our cost model will build up from the measure-level and project-level cost detail by program, which will roll up into a portfolio-level cost analysis. That cost analysis will be used to run the TRCs for each program to arrive at final program TRCs and finalize a portfolio-level TRC.

#### 4.3.4 Custom Program Cost Method

Custom programs may contain a mix of retrofit and replace-on-burnout measures in one project or across projects. In most cases, the project invoices will contain full costs of installations and maybe additional non-energy-related costs. Because the program does not require the implementer (or the installation contractor) to do a detailed incremental cost analysis for each measure installed or a detailed line-item invoice as a part of the program, the fully encumbered project costs tracked for the program will not represent the true incremental cost.

The savings calculation for replace-on-burnout measures will be incremental to the standard (industry standard practices or equipment code baseline efficiency). The incremental cost calculations will vary for each project as there is no common approach that can be applied to all Custom projects. Guidehouse is recommending doing a preliminary TRC test using the actual project costs, which would lead to a conservatively low TRC value because the actual project costs will either be equal or greater than the incremental measure costs. Guidehouse only recommends a detailed incremental cost analysis for a sample of projects in the program to develop a program-level incremental cost estimate (\$/kWh) or if the program fails the initial TRC test performed using conservative cost assumptions.

Therefore, for the Custom programs (i.e., Industrial Systems, Custom, Retrocommissioning), we recommend the following steps for assessing appropriate measure costs for a program:

- Use the documented invoices for the program's measure costs
- Calculate the TRC

- If the TRC is less than 1.0, then:<sup>3</sup>
- Sample project invoices and project measures to reassess if the cost represents incremental or other services
- Calculate the \$/kWh saved for all projects and troubleshoot the high and low values for reasonableness

As a result, the overall documented measure costs should be aligned with the Illinois Energy Efficiency Policy Manual guidance and result in a more accurate assessment of the cost-effectiveness.

### 4.3.5 Cost Effectiveness Reporting

Guidehouse will strive to provide timely delivery of the results outlined above, but all are contingent on ComEd delivering timely cost detail and proper backup assumption detail to the evaluation team.

**Table 4-6. Evaluation Research Tasks – Cost Analyses**

Research Task	Description
Annual ComEd cost-effectiveness analysis and report	Analyze costs and benefits associated with the TRCs and PACTs. Produce draft and final results.
Annual joint utility cost-effectiveness analysis and report	Analyze costs and benefits associated with the TRCs and PACTs for programs jointly offered by ComEd and gas utilities. Produce draft and final results.

## 4.4 Cross-Cutting Research

Cross-cutting evaluation research includes initiatives that contribute toward calculating CPAS, such as EUL and measure persistence research, NTG research, NEI research, and working with the SAG and the TRM administrator to update the TRM. Evaluation research is coordinated statewide with the evaluators for Ameren Illinois, Nicor Gas, Peoples Gas, and North Shore Gas. A list of current activities is included in Table 4-7 below.

### 4.4.1 Illinois TRM Measure Updates

All evaluators in Illinois, including Guidehouse, are part of the Illinois SAG Technical Advisory Committee (TAC) and are charged with providing materials to continually update and improve the TRM to provide the most accurate input parameter assumptions and impact evaluation methodology. We will continue to participate in the TAC proceedings in Plan 7 and be involved with TRM working groups as applicable.

The goal of the TRM measure updates process is to improve TRM input parameter assumptions and formulas. Each year, Guidehouse reviews current TRM measures and priority recommendations from the TAC to inform updates based on energy savings, historical realization rate, variability and uncertainty in measure impacts, feasibility to update, relative contributions of measures, and planned future use, among others. In addition, we may develop research for high priority measures identified by the TRM subcommittee and measures with high portfolio impact or outdated references. The evaluation team plans to revisit this list on an ongoing basis as, for example, the SAG releases new updates on TRM research priorities and the ComEd portfolio measure mix shifts over time. This

<sup>3</sup> There may be a need to do further analysis even if the program TRC exceeds 1.0. If the overall portfolio is not cost-effective, a deeper review of the custom programs may be necessary to help bolster the portfolio.

ongoing review will enable Guidehouse’s participation to focus on the most important topics for ComEd and SAG stakeholders.

As new measures are proposed to the TRM, Guidehouse will conduct secondary research in coordination with the TRM administrator to determine whether the measure has been evaluated in other locations (e.g., reviewing TRMs from other states). Working with stakeholders, we will analyze a range of savings values for a particular measure if such values are known.

#### 4.4.2 Evaluation Research Activities

The purpose of evaluation research is to inform updates to the TRM or to ComEd’s go-to-market strategies for increasing program participation. Table 4-7 summarizes evaluation research tasks underway or in the planning stages. The evaluation team will revisit this list on an ongoing basis as, for example, the SAG releases new updates on TRM research priorities and the ComEd portfolio measure mix shifts over time. This regular review will enable Guidehouse’s research to focus on the most important topics for ComEd’s evaluation and SAG stakeholders. New research plans will be developed over the course of Plan 7 as new needs arise.

**Table 4-7. Cross-Cutting Evaluation Research**

Research Task	Description
Income Eligible Program Participant NEIs	Research to estimate participant (residents and multifamily building owner and operators) NEIs from income eligible program measures to include in annual cost-effectiveness tests
Societal NEIs	Conduct analysis to estimate societal NEIs associated with ComEd’s portfolio to include in annual cost-effectiveness test results
Economic and Employment NEIs	Conduct analysis to estimate economic and employment NEIs associated with ComEd’s portfolio

### 4.5 PJM Reporting

Guidehouse has historically supported ComEd’s annual portfolio capacity resource reporting to PJM. This support included compiling the peak demand reductions from ComEd’s portfolio, transforming the data to align with PJM’s reporting formats, applying current year evaluation factors to the data, and preparing the updated reports for PJM.

In September 2024, PJM submitted a tariff filing with the Federal Energy Regulatory Commission (FERC) to end compensation for EE Resources.<sup>4</sup> FERC subsequently approved the filing in November 2024, thus ending the participation of EE Resources in future capacity auctions, starting with the Base Residual Auction (BRA) for the 2026/2027 delivery year (DY).

In May 2025, Guidehouse produced a Post-Installation M&V (PIMV) Report documenting ComEd’s anticipated EE Resource for the 2025/2026 DY - the last DY for which PJM will accept EE Resources. As is typical for the PIMV report, PJM’s reporting timeline required Guidehouse to forecast a small portion of the EE Resource for 2025/2026

<sup>4</sup> See FERC Docket [ER24-2995](#) for more information.

DY. In 2026, Guidehouse will update the existing PIMV report for the 2025/2026 DY to reflect the actual EE Resource. This will be Guidehouse's final PJM-related deliverable.

## 5 Evaluation Approaches

This section outlines the Measurement and Verification (M&V) methodologies that Guidehouse will employ to assess ComEd's Plan 7 programs. It consolidates the evaluation approaches referenced in individual program plans, as described in the Program-specific Activities and Schedules section, to ensure definitions are presented once within this document rather than repeated throughout the individual plans.

Guidehouse will prepare annual evaluation reports for each program to deliver verified net savings, applying an appropriate combination of these methods. For programs or pilots where the evaluation design or analytical approach includes nuanced elements that would benefit from stakeholder input, Guidehouse will develop detailed memoranda to clearly articulate those considerations.

### 5.1 ComEd Staff and Implementer Engagement

The evaluation team will maintain structured, ongoing collaboration with ComEd's program team and implementation contractors to ensure a comprehensive and current understanding of program operations. This engagement will occur on a regular cadence, with discussions anticipated every one to two months. These interactions will focus on key aspects of program implementation, the rationale behind critical assumptions, identification of areas of strong performance, and opportunities for improvement. By integrating these touchpoints into the evaluation methodology, the team will foster transparency, strengthen alignment across stakeholders, and enable timely incorporation of insights into evaluation activities. This proactive approach ensures that findings are informed by real-time program developments, supports continuous improvement, and enhances the overall effectiveness and credibility of the evaluation process.

### 5.2 Sampling

For certain programs, the evaluation team will implement Measurement and Verification (M&V) activities using a statistically valid sample of projects rather than a full census. This sampling approach enables the team to draw reliable inferences about the entire program population based on a carefully selected subset of projects. Sampling designs will be developed to meet agreed-upon confidence and precision requirements, ensuring that results are statistically significant and representative of the broader population. By reducing the number of projects evaluated, resources can be strategically allocated to increase the rigor and depth of analysis for sampled projects, including enhanced data collection and verification procedures. This methodology optimally balances the need for statistical certainty with the practical constraints of measurement uncertainty and resource availability. Detailed sampling strategies, including sample sizes, confidence levels, and precision targets, are outlined in the program-specific Evaluation Plans within the Program-specific Activities and Schedules section. Programs not employing sampling will typically follow a census approach to achieve comprehensive coverage.

## 5.3 Impact Evaluation

The impact evaluation determines verified energy and demand savings for each program component using methods that align with the IL TRM, the Policy Manual, the Income Qualified Metrics requirements of the CEJA, CY2026 Stipulation Agreement, Section 8-103B of the Illinois PUA, and the International Performance Measurement and Verification Protocol (IPMVP).<sup>5</sup> Once results are confirmed as final for each component, the evaluation team will conduct rollup calculations to compile program- and portfolio-level verified savings. Guidehouse will document and deliver these impact evaluation results according to the established reporting requirements.

### 5.3.1 Elements of Impact Evaluation

The evaluation of any given program may include several of the discrete tasks or elements that comprise impact evaluation. The impact evaluation of any one program will be made of some, but not all, of the elements described in this section. Some of these elements will be done at various points throughout the annual cycle and some will mostly be incorporated in the final, end-of-year evaluation.

End of year impact evaluation results for each program will be delivered in a report filed with the ICC, and separate program-level memorandum and Excel spreadsheet with detailed savings tables, findings, and recommendations delivered to ComEd.

#### 5.3.1.1 Savings Calculator/Workpaper Review

Guidehouse will review ComEd's savings calculator/workpaper tools annually. The savings calculator/workpaper review will be a stand-alone activity that generally occurs before the beginning of each program year to provide feedback to ComEd and the implementation team ahead of rolling out program changes. For CY2026, the evaluation team will review the savings algorithms for IL TRM v14 and:

- Confirm the implementation team is using and collecting the data points needed to calculate savings.
- Confirm the savings algorithms used to calculate and report savings align with the TRM algorithms that will be applied to verify savings.

Savings calculation review of different measure permutations (such as sizes, efficiencies, capacities, etc.) will be integrated into the Preliminary Savings Feedback activity and end of year evaluation reporting.

Guidehouse has planned for the following:

- It is common to expect measure updates, potential changes in the IL TRM, IL TRM Errata, and policy and regulatory updates during the program year. Guidehouse expects ComEd to document these changes in the savings calculators and any supporting review documents and request evaluator review of these updates to ensure the program assumptions are current.
- Guidehouse will provide deliverables commensurate with the submitted savings calculator documentation. Often, Guidehouse will provide in-line comments directly in the submitted Excel spreadsheet calculators.

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<sup>5</sup> International Performance Measurement & Verification Protocol (IPMVP): <https://www.nrel.gov/docs/fy02osti/31505.pdf>

### 5.3.1.2 Program Tracking Data Review

The evaluation team will conduct a tracking database analysis of the gross ex ante savings for all measures included in the tracking system. The data review establishes that the fields provided in the tracking data are sufficient for the team to calculate savings for the targeted measures and the fields contain data within expected parameters. This analysis will serve as an initial step for all verification activities.

The tracking data review for programs that are largely based on measures in the IL TRM will verify approaches, algorithms, and assumptions used to estimate ex ante gross savings at the measure level.

The tracking data review for programs that have custom savings calculations will concentrate on establishing the data is complete and provides the data needed to support accurate program and evaluation calculation of savings. This effort will typically not include checking the accuracy of the ex ante savings estimates as that work is done through other methods discussed in other sections in this plan.

In instances where the previous year's realization rate is applied to reported savings, the evaluation team will confirm the program tracking data is consistent with the previous year and calculate verified net savings applying the previous year's realization rate to the Program Tracking Data Review results. If the program tracking data is inconsistent (for example, due to a substantial savings calculation change or new measure added to the program) the evaluation team may adjust the plan to re-evaluate the identified discrepancy (at the measure, end use, or program level, as appropriate based on the program and portfolio savings impact).

### 5.3.1.3 Estimating Gross Realization Rates

The evaluation team calculates gross savings realization rates to adjust ex ante savings based on verified gross savings estimates. The realization rate is defined as the percentage of ex ante gross savings achieved as determined through the independent evaluation review. A realization rate of 1.0, or 100%, indicates no difference between the ex ante gross and verified gross savings for a particular measure. Realization rates are determined by certain attributes relative to one of three measure types.

- **Deemed measures** have fully stipulated energy and demand savings in the TRM. For deemed measures, realization rates are driven primarily by differences in the number of installed measures and by errors in the ex ante savings calculations and assumptions.
- **Partially deemed measure**<sup>6</sup> realization rates are driven by differences in the installation rate and differences in the open variable inputs as specified in the TRM.
- **Custom measure** realization rates are driven by differences in the installation rate, equipment capacity and efficiency, and equipment operating profile as determined by the evaluation team as it examines all input assumptions and calculations.

### 5.3.1.4 Measure-Level Deemed Savings Review

Guidehouse will conduct a measure-level deemed savings review for all sampled measures and projects with project-specific documentation.

Core review activities will include the following:

- Engineering examination of ComEd workpapers and tracking system calculations of claimed savings.

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<sup>6</sup> IL TRM measures with both stipulated values and open variables.

- Engineering review of measure-level project documentation for a sample of projects to verify participation and tracking system entries, check documentation of invoiced quantities and installed measure characteristics, confirm compliance with eligibility, and confirm deemed input values.

The gross savings impact approach will review the ex ante measure type to determine whether it is covered by the IL TRM or it is a non-deemed measure that is subject to retrospective per-unit savings adjustment of custom variables. The measure type, deemed or non-deemed, will dictate the savings verification approach, which are as follows:

- Measures with per-unit savings values deemed by the IL TRM v14.0:
- Verified gross savings will be estimated by multiplying deemed per-unit savings (kWh and kW) by the verified quantity of eligible measures installed.
- Eligible deemed measures must meet all physical, operational, and baseline characteristics required to be assigned to the deemed value as defined in the IL TRM.<sup>7</sup>
- Measures with custom or partially deemed savings values:
- Ex ante savings inputs will be subject to retrospective evaluation adjustments to gross savings on custom variables.
- IL TRM algorithms and deemed parameter values will be used where specified by the IL TRM, and evaluation research will be used to verify or adjust custom variables.

The measure-level realization rates will be extrapolated to the program population using a ratio estimation method to yield ex post evaluation-adjusted gross energy savings. Gross realization rates will be developed for energy and demand savings.

#### 5.3.1.5 Custom Savings Review

Guidehouse will use custom analysis to verify savings estimates for programs whose measures are not covered by the IL TRM, particularly for programs with complex projects and large savings impacts but also covering programs with smaller projects whose savings are by nature not amenable for inclusion in the IL TRM. The custom analysis may take several forms as described below. The evaluation for any given program or project will not necessarily include all of the methods described in this section. Rather, the approaches will be tailored to the specifics of the program, project, and data available.

The evaluation team will verify custom measure savings estimates with an approach grounded in site-specific data using engineering models and analyses. Core activities will include the following:

- Request and collect pre-metering and post-installation interval data from the program implementers for the sampled projects, if available. The evaluators will also request all available production data and other pertinent records and files from the implementers for all projects selected in the sample.
- Perform engineering desk reviews to complete the ex post analysis. Desk reviews involve review of project documentation provided by the program, an engineering review of the algorithms, and an audit of ex ante calculation models used by the program to estimate energy savings. The engineering audit of program calculations determines if the inputs that feed the program calculations are reasonable and acceptable or

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<sup>7</sup> Illinois Statewide Technical Reference Manual for Energy Efficiency Version 14, available at: <http://www.ilsag.info/technical-reference-manual.html>

need revision based on evaluation findings. Also, we will request production data for measure(s) installation detail from the site contact(s). The savings will be adjusted as needed based on all the available information.

- As needed, complete custom measure analysis with onsite verification visits or survey, phone, or virtual customer verification surveys. Evaluators will sample and select these projects for metering so that evaluation metering efforts can contribute significantly to developing ex post results.

We will perform a site-specific engineering analysis for the sampled projects. The engineering analysis methods will vary from project to project depending on the complexity of the measures installed, the size of the associated savings, and the availability and reliability of existing data. Gross impact calculation methodologies are generally based on IPMVP protocols, Options A through D. The measure-level engineering review will verify documentation and installed measure inventory and characteristics, hours of operation, modes of operation, and characteristics of replaced equipment. Any measured values obtained during onsite M&V audits will also be used to revise algorithm assumptions as appropriate.

We will calculate the gross realization rate for each site and for the sample. Typically, for each site in the sample, a site-specific report detailing evaluation findings will be prepared. ComEd will have an opportunity to review and comment on the site-specific reports prior to each being finalized. Site-level gross impact realization rates from the sample will then be extrapolated based on kWh savings to the program population using a ratio estimation approach to calculate program-level gross impact estimates. Any therm or water savings identified will be converted to kWh savings. Gross realization rates will be developed for energy and demand savings for the population.

### **Modeling**

The ex ante and ex post savings for some programs and projects are calculated using modeling software that is typically created by external third parties. For example, building simulation models that calculate whole building energy consumption are commonly used for new construction projects. Where possible and appropriate, the evaluation will use the same modeling software used by the program to estimate savings. On occasion, the evaluation will choose different software when the program's software is proprietary or the evaluation concludes different software will produce a more accurate result.

The evaluation team will request data to verify or update the assumptions that feed into the energy model for each site. This data may include program tracking data and supporting documentation (project specifications, invoices, etc.), utility billing and interval data, building automation system trend logs, and production data. The evaluation will also look for evidence that major changes have occurred at the site during or after the program activities and will incorporate them into the model. The changes that could affect the model savings include but are not limited to:

- Changes in hours of operation
- Changes in employees
- Changes in production
- Other measures installed at the site that were implemented through other utility energy efficiency or demand response programs or outside of ComEd.

Results from modeled project-specific results are rolled up to the population using the same methods described previously.

### **Weather Data**

Programs and pilots that use custom analysis to verify savings estimates for weather-dependent measures that are not covered by the IL TRM require weather data to accurately calculate energy usage and savings for these energy saving projects. Historically, the evaluation team has used the TMY3 weather dataset for this purpose. A TMY is a constructed dataset that comprises weather conditions for each hour of the year, where each month corresponds to actual weather data from that month in the year when the weather is considered most typical. The NREL first published TMY datasets in 1978 based on historical weather data from 1952 to 1975. However, recognizing that weather and climate change over time, the NREL updated the TMY dataset by publishing TMY2 in 1994 based on historical weather data from 1961-1990 and TMY3 in 2007 based on historical weather data from 1976-2005. TMY data is necessary for building simulation software and the evaluation team also utilizes the TMY data in other forms of the custom analyses as well, such as to construct 5F bin data (number of hours per year which occur in each 5F bin, e.g., hours per year in which the temperature is between 51-55F, 56-60F, etc.) for use in bin analyses.

Given the NREL is no longer updating TMY datasets and recognizing that weather patterns are changing over time, and particularly since these changes are accelerating due to climate change, the evaluation team will use the TMYx 2007-2021<sup>8</sup> weather data representative of the location of the project being evaluated to derive savings estimates when possible. This will ensure that the weather data used for these analyses is up-to-date and reflects current weather patterns.

#### *5.3.1.6 Electrification (Fuel Switch) Savings Review*

Consistent with the requirements of Section 8-103B(b-27), the evaluation team will review all qualified electrification measures implemented by ComEd programs in CY2026, review the tracking data fields of savings inputs and verify the program claimed savings from electrification that reduce total fossil fuel consumption at the premises. The electrification savings verification follows the policy manual directive on counting interactive effects when a project includes both electrification and energy efficiency upgrades. While creating the Summary Report, the evaluation team will roll up verified program-level electrification savings results to the portfolio level to no more than 10% of savings counted towards AATS goal, while ensuring that the savings include a minimum of 25% from customers in income eligible housing.

#### *5.3.1.7 Survey, Phone, or Virtual Verification*

The evaluation team will conduct online survey, phone, or virtual verifications for a sample of projects reviews to gather additional information and verify installation. The verification consists of interviewing customers about their project, including, as appropriate, the quantities and type of each measure installed, the operating status of the measures, equipment nameplate data, operating schedules, a careful description of site conditions, and overall verification of the information contained in the tracking system or project files.

We will recalculate project savings as informed by the customer's responses. In the case where a participant clearly states a reported measure was not installed or purchased or a different quantity was installed, the measure variable

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<sup>8</sup> [https://climate.onebuilding.org/WMO\\_Region\\_4\\_North\\_and\\_Central\\_America/USA\\_United\\_States\\_of\\_America/index.html#IDIL\\_Illinois-](https://climate.onebuilding.org/WMO_Region_4_North_and_Central_America/USA_United_States_of_America/index.html#IDIL_Illinois-)

will be adjusted in accordance with the IL TRM. In the case where a customer confirms measures were installed but they are unsure of the specific quantity or product details (such as size or efficiency rating), the implementer's reported measure variables from the project documentation or the tracking database will be retained.

#### 5.3.1.8 *Onsite Verification*

Onsite visits verify the installation and operation of installed measures within each sampled project. The specific verification activities confirm the measures' relevant parameters and assumptions sourced from the IL TRM or project documentation to calculate savings. Verification activities also confirm the presence of other equipment that interacts with measures. Onsite verified variables will be used to calculate ex post savings in the case of a discrepancy between reported variables and onsite verified variables.

Prior to onsite verification, the evaluation team will create a site-specific M&V plan that specifies which data is required for verification and collection while onsite. Guidehouse will communicate the evaluation M&V approach to ComEd for the implementation team before conducting the site visit. The data gathered onsite will be used to independently estimate verified gross savings based on the data collected, the requirements of the IL TRM, or the appropriate custom calculation methodology. Onsite verification is used in instances where virtual verification cannot obtain the same quality of data collection.

Onsite M&V will include participant interviews, baseline assessment, installed equipment verification, and performance measurement. Measurement may include spot measurements, runtime hour data logging, review of participant energy management system trend data, and post-installation interval metering. The evaluation team uses common meter types including state (on/off), current, and power loggers to measure runtimes (e.g., lighting hours of use) or power consumption of equipment of interest (e.g., chillers or motors). Our approach to selecting M&V strategies follows the IPMVP; Option A or Option B is typically selected.

#### 5.3.1.9 *Population-Level Consumption Data Analysis*

Guidehouse will conduct billing analyses for impact evaluation using econometrics-based methods. The evaluation team will use billing analysis when sufficient pre- or post-installation data is available, and the impact of the load is likely be visible above any noise in the data. Using billing analysis facilitates accurate evaluation while keeping costs and customer fatigue low by reducing the need for onsite metering.

Specifically, we will validate the randomized control trial (RCT) for new Home Energy Report (HER) waves launched in the Behavior Program during Plan 7. The validation confirms the recipient and control groups within a wave have balanced usage in the 12 months prior to that wave's launch. If the two groups are comparable during this period within statistical reason, then the RCT is valid and the econometric analysis is also valid. The evaluation team will complete this process for all new waves prior to considering regression analysis.

To confirm savings are properly attributed, specifically for the HER component of the Behavior Program, the evaluation team will conduct an additional double counting analysis to adjust for participation in other energy efficiency programs. When participation in these other programs is affected by HER receipt, total savings is adjusted net of downstream program participation via the double counting analysis. Differences in participation rates in additional programs and deemed savings values determine the adjustment value for each wave.

Our approach to persistence calculations and estimating demand impacts will follow the IL TRM.

### 5.3.1.10 Calculation of CPAS and Annual Savings

As required by CEJA and stipulations, each impact report will include a calculation of electric savings, gas savings, secondary savings from water, savings from electrification measures, total CPAS, and when relevant, non-electric fuel savings. For measures that achieve gas savings, Guidehouse will convert gas savings to electric savings and include that in a calculation of total CPAS. The evaluation team will calculate the WAML for each measure and each program. The team will roll up the program-level CPAS results to the portfolio level when creating the summary report and determine the applicable annual total savings (AATS) and the applicable annual incremental goal (AAIG) achieved by the program.

## 5.3.2 Mid-Year Evaluation Activities

The evaluation of any given program may include several of the elements discussed in the previous section. Some of those elements are only included in the end of the year analysis. When the elements are included in efforts at one or more point throughout the year, they are usually combined in one of two groupings, which we have labeled:

- Preliminary Savings Feedback
- Mid-Year Impact Sampled Analysis

The program-specific plans included in the body of this plan may include those two terms in the table of activities. Preliminary Savings Feedback and Mid-Year Impact Sampled Analysis are standalone mid-year reviews that will include some of the Impact Evaluation Elements described in Section 0. Impact Elements will be tailored to each program's implementation methodology as identified in the relevant Program-specific Activities and Schedules sub-sections. The following defines the two groupings.

### 5.3.2.1 Preliminary Savings Feedback

In the spirit of providing useful and actionable feedback to ComEd implementation contractors to improve year-end realization rates, the evaluation team will conduct a mid-year review of program performance to date. Typically, the **Preliminary Savings Feedback** analysis will follow some or all of the steps that will be performed after the end of the year to calculate full program savings. The implementation team may use the Preliminary Savings Feedback to adjust the program's reported data and savings calculations.

The Preliminary Savings Feedback activity will be tailored to each program, depending on the program's design and available data. Preliminary Savings Feedback is intended to confirm:

- Program tracking data fields provided are sufficient for the team to calculate savings for the targeted measures and the fields contain data within expected parameters,
- Project savings calculator fields are appropriately populated,
- Measure algorithms and values are appropriately applied,
- Specification sheets, site reports, and invoices confirm installed quantities.

As this task is focused on providing actionable feedback and, reflecting its mid-year timing, this task specifically **excludes**:

- Program level, measure-specific and total ex-post gross and net savings for the program,

- Cumulative Persisting Annual Savings (CPAS), and
- Weighted average measure life.

The final end-of-year evaluation activity will be conducted independently from the Preliminary Savings Feedback. While the end-of-year evaluation will consider the Preliminary Savings Feedback findings and recommendations, the final impact evaluation will be based on the final program data and project file submissions.

In instances where the evaluation applies the previous year's realization rate to calculate verified savings, the Preliminary Savings Feedback will confirm the program tracking data is consistent with the previous year to allow applying the previous year's realization rate to the program tracking data. If the program tracking data is inconsistent (for example, due to a substantial savings calculation change or new measure added to the program) the evaluation team may adjust the evaluation plan to re-evaluate the identified discrepancy (at the measure, end use, or program level, as appropriate, based on the program and portfolio savings impact).

Draft Preliminary Savings Feedback results will be delivered in a spreadsheet format for the ComEd team's review and feedback. Guidehouse will finalize Preliminary Savings Feedback results following discussion with, and input from, the implementation team.

#### 5.3.2.2 *Mid-Year Impact Sampled Analysis*

For programs where evaluating the entire population of projects is not practical, the evaluation team will conduct Mid-Year Impact Sampled Analysis to provide feedback on sampled projects. The evaluation team will draw samples of projects in multiple waves throughout the year as project data becomes available. This will enable the evaluation team to provide useful feedback to the implementation contractor and the utility and reduce evaluation burden during the end of year final evaluation. The results of the sampled projects will be used to develop the final population results. If the implementation contractor or ComEd make changes to the sampled projects after they are selected and verified, those changes will not be reflected in the end of year final evaluation. The implementation contractor and ComEd can make changes to projects that are not part of the sample and update the data before the next wave of sample is drawn. The results of the sampled projects will be incorporated in the end of year final evaluation.

## 5.4 Net Savings Research

Deemed NTG ratios are determined in an annual SAG deliberation process documented in the Policy Manual.<sup>9</sup> Guidehouse will perform customer, provider, and market research to propose free ridership, participant spillover, nonparticipant spillover, and NTG values for the SAG annual deliberation. For that research, we will follow the NTG protocols outlined in the IL TRM, which specifies survey designs (in broad terms) and calculation approaches (in a more detailed manner). When the IL TRM does not specify a protocol appropriate for a given program or when Guidehouse believes a protocol should be modified significantly to be appropriate for a given program, we will present proposed modifications in a deviation memo to the statewide NTG Working Group for deliberation and approval.

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<sup>9</sup> Illinois Energy Efficiency Policy Manual available at <https://www.ilsag.info/policy/illinois-ee-policy-manual/>

The evaluation team will use survey methods appropriate for a given program and target, including online, phone, and in-person surveys. When appropriate, we will include interviews with program representatives and participating equipment vendors or influential facility assessment representatives to support the analysis. In other cases, we will include secondary research on standard industry practices, if needed.

In CY2023, the Policy Manual was updated to deem a 1.0 NTG value for measures installed or sold within Disadvantaged Communities (DAC)<sup>10</sup>. ComEd will provide Guidehouse with DAC zip codes for their jurisdiction. Guidehouse will identify eligible projects using the DAC zip codes and apply the NTG value accordingly<sup>11</sup>. Trade ally programs located within DACs receive a 1.0. For detailed information on Guidehouse's approach to DAC policy, please see the Appendix NTG Disadvantaged Areas Policy Operation and Approach.

Guidehouse will continue to participate in the NTG Working Group as it seeks to improve the IL TRM NTG methodologies. In the upcoming year, Guidehouse will serve as the NTG Working Group facilitator, with the aim of improving structure and processes of the working group to increase efficiencies of reviewing the IL TRM Attachment A and NTG methodologies. Guidehouse as a lead evaluator will also have a decision-making representative on the working group. We will present the results of our research and facilitate working meetings to deliberate on translating our research results into specific improvements to the methodology. As in previous years, we will solicit other proposals for improvements from the NTG Working Group, facilitate discussions on these proposals, and manage the proposed updates to the IL TRM.

## 5.5 Process Evaluation

Process evaluations gather primary and secondary data to assess program performance or research opportunities to improve program performance. The process methodologies will vary depending on program design and customers served, as well as stakeholder input.

As with any multiyear evaluation, process evaluation research topics will continuously emerge throughout Plan 7. The methods and frequency Guidehouse will use to conduct the ongoing process evaluation research will vary depending on research goals, budget, timeline, and sample availability. The evaluation team will seek to address the topics most relevant to ComEd staff and customers and to support continuous program improvement throughout Plan 7 for the:

- Portfolio as a whole
- Programs
- Components
- Engagement pathways

Throughout Plan 7, we will document ongoing process evaluation results that may have an impact on portfolio success in feedback memos to the ComEd program management team. Where appropriate, we will implement

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<sup>10</sup> [Illinois Energy Efficiency Policy Manual Version 3.0 \(Final\)](#)

<sup>11</sup> The procedures we will follow are documented in Section 7: Appendix NTG Disadvantaged Areas Policy Operation & Approach

process evaluation research in tandem with the impact evaluation efforts to minimize respondent fatigue. At other times, the research will be done on its own timeline rather than being tied to the annual impact evaluation.

This section describes some of the process evaluation approaches Guidehouse expects to employ. These approaches include surveys and interviews. Other methods may be appropriate for certain components, measures, or delivery channels and will be employed as needed.

Specific timelines and approaches for individual process evaluation activities will be tailored to the needs of individual projects and detailed in stand-alone project plans.

### 5.5.1 Research Surveys

Participant, nonparticipant, and market actor surveys will be developed to explore experiences, participation motivators and barriers, and satisfaction with implementation services, measures, and incentives. Guidehouse will send all survey instruments to ComEd and any interested stakeholders for review ahead of fielding the survey.

### 5.5.2 Research Interviews

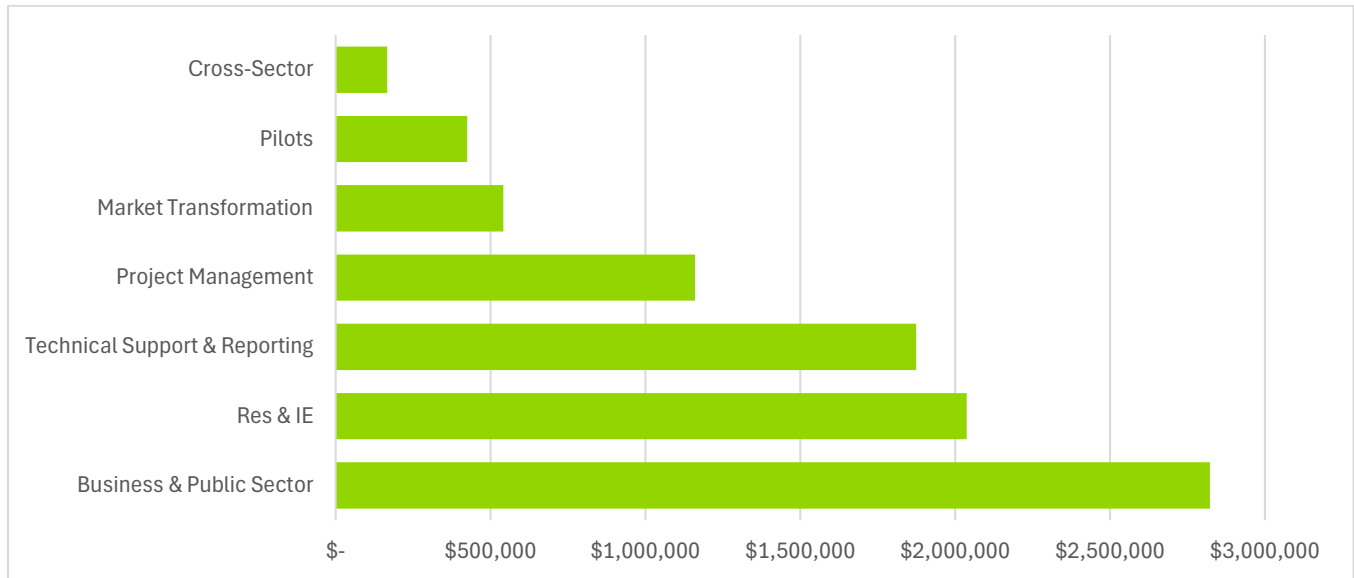
Guidehouse will conduct stakeholder interviews to gain in-depth insights in program participation barriers and motivators. Stakeholders may be program participants, energy efficiency service providers (EESPs), or representatives of a particular group of participants (for example, multifamily building managers). Subject matter experts may be included in interviews to represent a particular set of technical or implementation expertise to provide a more detailed understanding of the topic.

The evaluation team will send all data collection instruments to ComEd and relevant stakeholders for review.

## 6 Appendix: Budgets

The evaluation budget for the work represented in this Evaluation Plan is presented in Figure 6-1 and Table 6-1.

**Figure 6-1: CY2026 Evaluation Budget by Category**



**Table 6-1: CY2026 Evaluation Budget Summary**

Category	Total	Percent
Business & Public Sector	\$2,822,178	31%
Res & IE	\$2,037,102	23%
Technical Support & Reporting	\$1,873,722	21%
Project Management	\$1,160,513	13%
Market Transformation	\$541,499	6%
Pilots	\$424,114	5%
Cross-Sector	\$165,872	2%
<b>Total</b>	<b>\$9,025,000</b>	<b>100%</b>

## 7 Appendix: NTG Disadvantaged Areas Policy Operation and Approach

**To:** Erin Daughton, Kim Brown, ComEd Randy Opdyke, Nicor Gas  
Erin Stitz, Applied Energy Group (for Peoples Gas/North Shore Gas)

**CC:** Elizabeth Horne, David Brightwell, ICC Staff  
Neil Curtis, Nishant Mehta, Charles Ampong, Guidehouse Zach Ross, ODC

**From:** Christopher Frye, Jeff Erickson, Laura Agapay-Read, Guidehouse

**Date:** February 14, 2025

**Re:** NTG Disadvantaged Areas Policy Operation and Approach

### Introduction

This memo describes how Guidehouse will implement the addition to the Illinois Energy Efficiency Policy Manual (hereafter “Policy Manual”), Version 3.0, of Section 7.4 on the Net-to-Gross (NTG) ratio to be used for “economically-disadvantaged areas”, which are defined as “disadvantaged neighborhoods” and “disadvantaged municipalities”. There are nuances for how the evaluation will implement this policy that need to be spelled out for all to see.

This memo contains the following sections:

- A discussion of sampling for NTG surveys given the policy
- The Proposed Policy Application: Program Tracking Data section provides our considerations associated with the collection of specific program tracking data to ensure correct application of this policy.
- The Proposed Policy Application by Sector & Premise Location section provides information on how this policy will be applied based on various scenarios.
- Appendices provide a list of applicable programs and program tracking zip code or census tract availability (depending on utility), and the policy itself, as included in the latest Policy Manual (Appendix D).

## Change Log

Date Released	Change Description
11/15/2023	Original Memo
12/14/2023	Response to comments
1/05/2024	Minor revisions
3/18/2024	Revised Midstream/Upstream Section
8/21/2024	Add Business new construction, flow chart
10/14/2024	Section on sampling, minor edits
12/20/2024	Distinguish between “disadvantaged neighborhood” and “disadvantaged municipality” in the approach. Removed some superfluous text.
2/14/2025	Added flow charts and clarified treatment of public sector customers in section 5. Determined that the treatment of non-residential midstream programs should be consistent with other non-residential programs and therefore eliminated the midstream section. Various minor clarifications and simplifications.

## Sampling for Net-to-Gross Research

Pursuant to Section 7.4 of the Policy Manual, which states the following (emphasis added):

*“It is expected that, though Customers in disadvantaged areas are currently underrepresented in evaluation research due to lower participation levels, going forward, this policy **will require that research to establish NTG ratios for Program activity explicitly sample Customers in non-disadvantaged areas.** Any NTG research targeting Customers in disadvantaged areas will fall under Section 7.3 of the Policy Manual.<sup>1</sup>”*

Our interpretation of the bold section above is that research that establishes NTG ratios for Program activity *explicitly exclude from the sample Customers in disadvantaged areas*. This policy directive ensures our researched NTG value is appropriate for participants who are NOT in disadvantaged areas. The participants residing in a disadvantaged neighborhood<sup>2</sup> will receive an NTG of 1.0. General delivery service municipal, public school and local government customers in disadvantaged municipalities will receive an NTG of 1.0. The participants outside these areas need to have their NTG value informed by research and therefore the sample employed to create that NTG value must be appropriate and only representative of those outside disadvantaged areas. The program-level free ridership value will be somewhere between 1.0 and the researched free ridership value.

## Proposed Policy Application: Program Tracking Data

The following provides our assumptions on data Guidehouse will receive from ComEd, Nicor Gas, and Peoples Gas/North Shore Gas with final end-of-year data delivery (or sooner).

<sup>1</sup>Section 7.3: NTG Ratio for Income Eligible Programs.

<sup>2</sup>With the added requirement of meeting rate or annual consumption eligibility among business customers.

- Program tracking data will, where possible, include measure installation location census tract, zip code, and/or municipality for participants (depending on whether the utility chooses to identify disadvantaged neighborhoods by tract or zip code), whether in business programs or residential programs. Business program data will also include the customer's rate class or annual consumption when possible, and business type or flag to indicate that the customer is a general delivery service municipal, public school, or local government customer.
- When the program delivers or installs measures through trade allies or businesses that act as program intermediaries (e.g., midstream or upstream distributors), the tracking data will also include the trade ally name at the project-level. It will also indicate the census tract or zip code of the trade ally either in the project-level data or in a separate dataset.
- A list of zip codes or census tracts that define disadvantaged neighborhoods and Municipalities that meet the policy criteria. Guidehouse assumes that the development of designated disadvantaged neighborhoods and disadvantaged municipalities within the respective service territories aligns with the establishment of economically-disadvantaged areas designated by the policy.

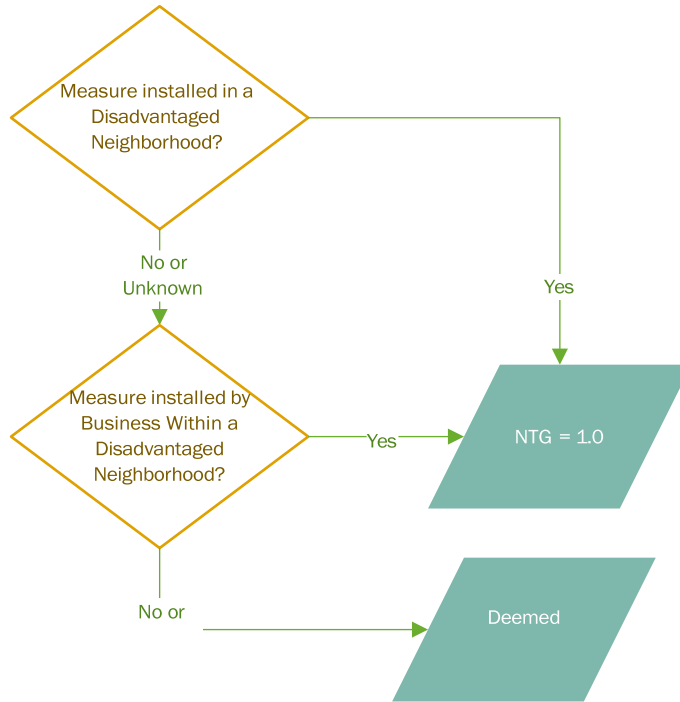
## Proposed Policy Application by Sector & Premise Location

This section provides an overview of how the evaluation will apply the policy. Subsequent sub-sections put this overview into words.

Figures 1 through 3 illustrate how decisions will be made on which NTG value to assign to individual customers. The flow is different for residential programs and nonresidential programs primarily because of the rate class or energy consumption criteria applied to nonresidential programs. The third figure illustrates the decisions for general delivery service municipal, public school, and local government customers who are in Disadvantaged Municipalities.

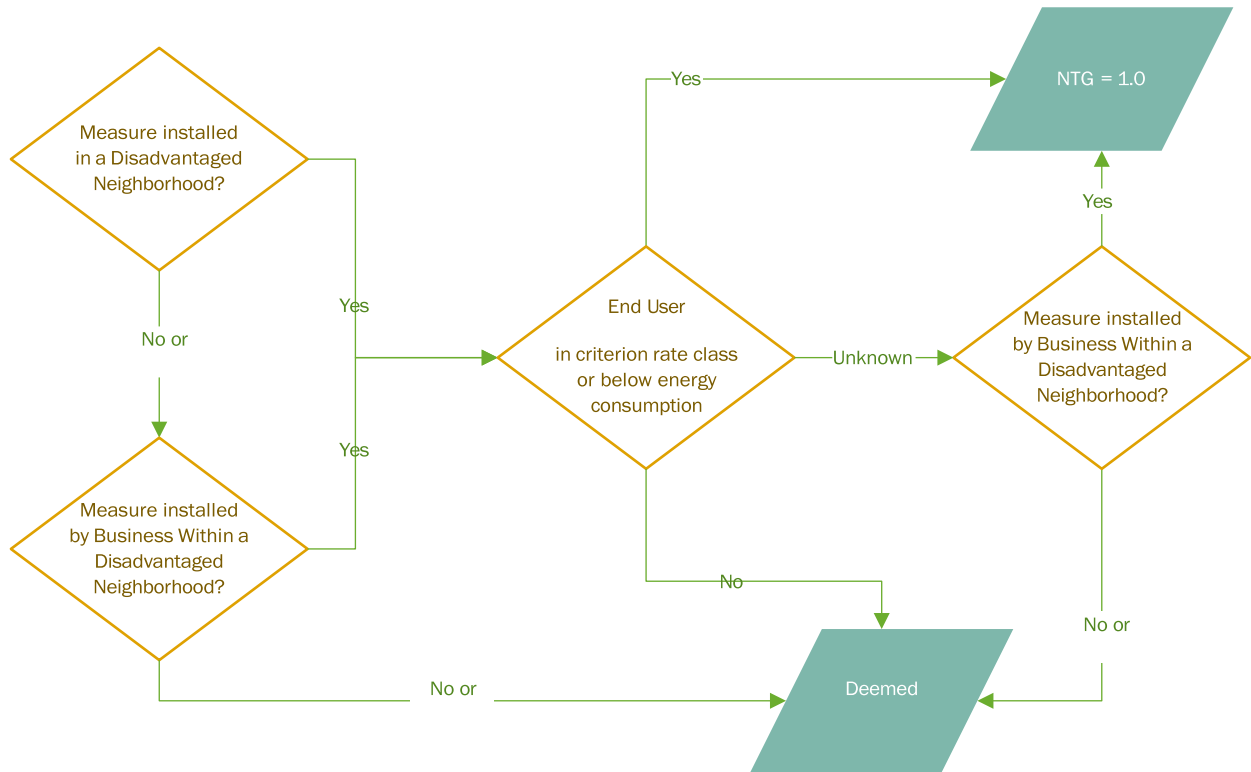
The tables following the flow charts provide the same information but in a table format. Our goal was that the decision trees and the tables are consistent with each other. However, any uncertainty about which rows in a table take precedence will hopefully be clarified by the decision trees.

**Figure 1. Residential Decision Tree**

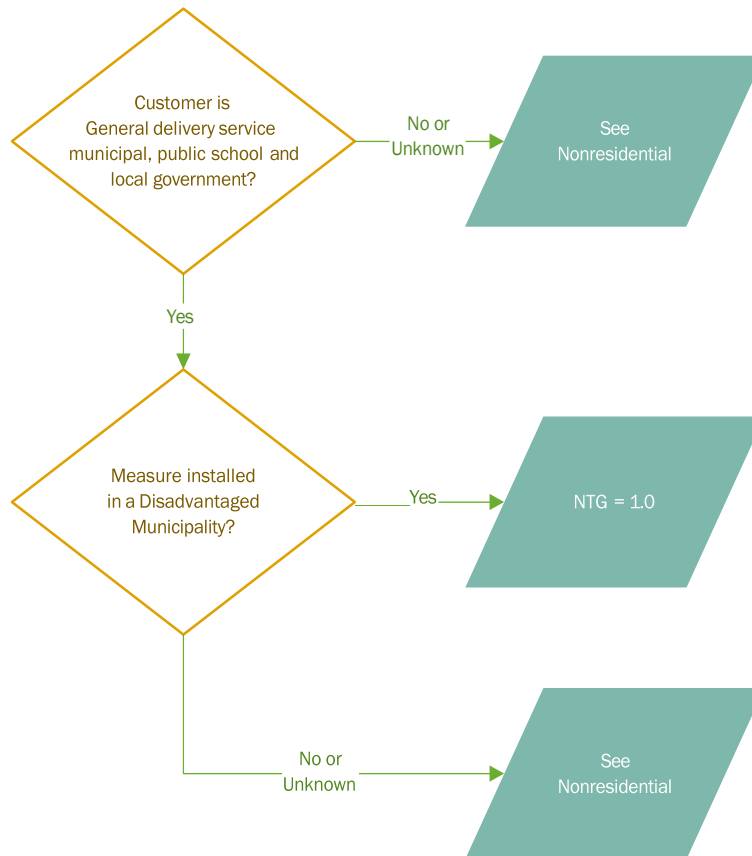


**Figure 2. Nonresidential Decision Tree<sup>3</sup>**

<sup>3</sup> For non-residential new construction programs, we will use the area threshold for the criteria of eligibility as detailed in Appendix E.



**Figure 3. Municipality Decision Tree**



**Table 1: Application of NTG Values to Economically-Disadvantaged Neighborhoods**

Sector	PREMISE LOCATION OF INSTALLED MEASURE		
	Within a Disadvantaged Neighborhood	Outside a Disadvantaged Neighborhood	Unknown
<b>Residential Customers</b>			
Measure Supplied by Business that is in a Disadvantaged Neighborhood	NTG 1.0	NTG 1.0	NTG 1.0
Measure Supplied by Business that is <b>outside</b> a Disadvantaged Neighborhood or Unknown	NTG 1.0	Deemed NTG	Deemed NTG
<b>Non-Residential Customers †</b>			
End User Meets Criteria of Eligibility ‡	NTG 1.0	See next row	See Next row
Measure Supplied by Business <b>within</b> a Disadvantaged Neighborhood AND End User Meets Criteria of Eligibility ‡	NTG 1.0	NTG 1.0	NTG 1.0
Measure Supplied by Business within a Disadvantaged Neighborhood AND Do not have end user’s rate class	NTG 1.0	NTG 1.0	NTG 1.0
Otherwise	Deemed NTG	Deemed NTG	Deemed NTG

† Includes public and private customers.

‡ ComEd: Either Small Load Delivery Class (<100 kW) or Annual Consumption of <750,000 kWh/year; Nicor Gas and Peoples Gas/North Shore Gas: Annual Consumption of <35,000 therms/year. In the case of projects jointly delivered, eligibility is based on meeting either the electric or gas thresholds. For non-residential new construction programs, we will use the area threshold for the criteria of eligibility as detailed in Appendix E.

**Table 2: Application of NTG Values to Economically-Disadvantaged Municipalities**

Sector	PREMISE LOCATION OF INSTALLED MEASURE		
	Within a Disadvantaged Municipality	Outside a Disadvantaged Municipality	Unknown
General delivery service municipal, public school and local government customers	NTG 1.0	Subject to Table 1 Criteria	Subject to Table 1 Criteria

## Residential Customers

- End use customers located within a disadvantaged neighborhood will receive a NTG of 1.0.
- Measures that are sold or distributed at no cost by businesses that are located within a disadvantaged neighborhood (including retailers and distributors) will receive a NTG of 1.0, whether or not the end use customer is in a disadvantaged neighborhood.
- The evaluation will treat the policy-defined NTG of 1.0 as a floor, not a ceiling on the NTG value. This is relevant in (at least) these two scenarios:
  - When a previous SAG deemed consensus assigns a measure-level or program-level NTG of greater than 1.0, the evaluation will use that (greater) deemed value (i.e., the evaluation will NOT substitute the policy-defined NTG of 1.0).
  - When a previous SAG deemed consensus assigns a spillover value that is to be applied at a sector level and the resulting program-level NTG value is less than one, the evaluation will assign participants located within a disadvantaged neighborhood the policy-defined NTG of 1.0. If the resulting program-level NTG value is greater than one, the evaluation will assign the (greater) program-level NTG value to all participants.

## Municipal, Public School and Local Government Customers

Measures installed at “any general delivery service municipal, public school and local government customers” in a disadvantaged municipality shall receive a NTG of 1.0. If they are in a disadvantaged neighborhood and meet the rate class requirements they shall receive a NTG of 1.0.

## Non-Residential Customers

- Measures installed in a premise located within a disadvantaged neighborhood for a customer that meets the size eligibility criteria shall receive a NTG of 1.0.
- If either the contractor *or* distributor selling products or services through a program is **located in a disadvantaged neighborhood** and the end user meets the size eligibility criteria then all resulting projects will get a NTG of 1.0.

## Non-Residential New Construction Area Thresholds

This section addresses the non-residential customer consumption size criteria of the policy.

The policy does not define a size criteria for general delivery service municipal, public school and local government customers in a disadvantaged municipality. As a result, such projects will be assigned a NTG of 1.0.

The size criteria for all other non-residential new construction projects will be assessed according to the following method.

Non-residential new construction programs will have addresses for new construction projects that can be used to determine if the building is in a disadvantaged neighborhood. However, the rate class and energy consumption of the building when it is occupied and fully operational may not be known in time to support applying the policy for calculating savings for a given program year. As a result, instead of using rate class or direct energy use as defined in the economically-disadvantaged areas policy, the evaluation will use an area threshold value. This area threshold is

the expected building size that would result in energy consumption values exceeding 750,000 kWh or 35,000 therms per year, which are the consumption values specified in the policy. The area threshold by building type is shown below and is described in greater detail in Appendix E.

**Table 3: Area Thresholds (square footage) by Building Type**

Building Type	Area Threshold (sq. ft.)
Office	85,000
Retail	90,000
Education	90,000
Medical	40,000
Lodging	75,000
Warehouse (non-refrigerated)	275,000
Refrigerated Warehouse	0
Food Service	10,000
Multifamily Residential	90,000
Industrial	0
Other	85,000

In summary:

- If the zip code or census tract is in a disadvantaged neighborhood and the building area is less than the area threshold for the building type NTG = 1.0.
- If the zip code or census tract is NOT in a disadvantaged neighborhood OR the building area is greater than the area threshold for the building type NTG = regular program or measure-level NTG value.

### All Others

- All market rate program components that do not include residential end-user customer zip codes, and not covered above, will use existing deemed NTG values (i.e., those approved during the annual review process in September).

**Note: The appendices included in the NTG Disadvantaged Areas Policy Operation and Approach memo are not reproduced here.**

Appendix A. ComEd Program Applications

Appendix B. Nicor Gas Program Applications

Appendix C. Peoples Gas/North Shore Gas Program Applications

Appendix D. Net-to-Gross for Disadvantaged Areas Policy

Appendix E. Non-Residential New Construction Threshold Analysis