

**Illinois EE Stakeholder Advisory Group
Large Group SAG Meeting**

**Tuesday, December 3, 2024
9:30 am – 12:00 pm
Teleconference**

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Meeting Materials

- [Tuesday, December 3 SAG Evaluation Plan Meeting Agenda](#)
- [Opinion Dynamics Presentation: Ameren Illinois 2025 EE Portfolio Evaluation Plan](#)
- [Guidehouse Presentation: ComEd 2025 EE Portfolio Evaluation Plan](#)

Attendees

Name	Company or Organization
Celia Johnson	SAG Facilitator (Celia Johnson Consulting)
Jane Anderson	SAG Meeting Support (Inova Energy Group)
Abigail Miner	IL Attorney General's Office
AJ Young	U.S. Greenlink
Alan Elliott	Opinion Dynamics
Amy Populorum	ComEd
Andrey Gribovich	DNV
Andy Vaughn	Leidos
Anu Shree	Bidgely
Babette Washington	Ameren Illinois
Bobbi Fey	ICF
Brent Nakayama	Leidos
Cassidy Kraimer	Community Investment Corp.
Chad Balthazor	Cascade Energy
Charles Schreier	Go Sustainable Energy, representing IL AG
Christopher Frye	Guidehouse
Courtney Golino	Guidehouse
Dave Kilgore	Ameren Illinois
Deb Dynako	Slipstream
Dena Jefferson	Franklin Energy

Name	Company or Organization
Ebony Buchanan	CEDA
Elizabeth Horne	ICC Staff
Erin Daughton	ComEd
Erin Stitz	Applied Energy Group
Evan Tincknell	Opinion Dynamics
Gregory Norris	Aces 4 Youth
Hannah Howard	Opinion Dynamics
Hassan Khurshid	DNV
Jamey Neal	Ameren Illinois
Jason Fegley	Ameren Illinois
Jeff Erickson	Guidehouse
John Carroll	Ameren Illinois
John Lavallee	Ameren Illinois
John Yi	CEDA
Josh Schreck	The JPI Group
Josh Sharon	ComEd
Kanchan Swaroop	Resource Innovations
Kari Ross	NRDC
Kathryn Brewer	CLEAResult
Keely Hughes	The JPI Group
Ken Parker	Community Investment Corp.
Ken Walczak	DarkSky International
Kim Brown	ComEd
Kim Swan	ComEd
Lance Escue	Ameren Illinois
Laura Agapay-Read	Guidehouse
Laura Pettersen	Cascade Energy
Lee Ringo	Energy Infrastructure Partners
Louis	No Organization Identified
Marlon McClinton	Utilivate
Mike King	Nicor Gas
Minya Coleman	ComEd
Murtaza, Danish	Peoples Gas & North Shore Gas
Natasha Herring	Guidehouse
Neil Curtis	Guidehouse
Nic Crowder	Ameren Illinois
Nicholas Burstein	CMC Energy
Nick Warnecke	Ameren Illinois
Nicole Popejoy	IACAA
Nikki Pacific	Walker-Miller
Nishant Mehta	Guidehouse
Oxana Petritchenco	Guidehouse

Name	Company or Organization
Randy Opdyke	Nicor Gas
Rashaan Keeton	Center for Energy & Environment
Roger Pavey	IACAA
Rose Williamson	Opinion Dynamics
Ryan Wall	Guidehouse
Sagar Phalke	Guidehouse
Salina Colon	CEDA
Sam Lamos	Gradient Comfort
Sara Castleberry	Resource Innovations
Seth Craigo-Snell	SCS Analytics
Stacia Dreyer	Opinion Dynamics
Ted Weaver	First Tracks Consulting, representing Nicor Gas
Thomas Ketchum	South Suburban Action Conference
Tina Grebner	Ameren Illinois
Tori Woolbright	Metropolitan Mayors Caucus
Tyler Sellner	Opinion Dynamics
Wade Morehead	Morehead Energy
Zach Ross	Opinion Dynamics

Meeting Notes

See **red text** for follow-up items.

Opening and Introductions

- Purpose of the December 3rd meeting: For independent evaluators for Ameren Illinois and ComEd to provide an overview of and request feedback on draft evaluation plans (EM&V work plans) for the 2025 program year.
 - This annual process is required by Illinois Energy Efficiency Policy Manual Section 10.1, EM&V Work Plans.
 - SAG will also meet on Wednesday, December 4th to discuss draft evaluation plans for Nicor Gas, Peoples Gas & North Shore Gas.
- [SAG Facilitator Introduction: Purpose of Annual Evaluation Plan Meetings](#)

Ameren Illinois 2025 Draft Evaluation Plan

Zach Ross, Alan Elliott, Tyler Sellner, and Stacia Dreyer from Opinion Dynamics

Agenda

- Overview of 2025 evaluation approach
- 2025 evaluation activities planned by area
 - Program-specific evaluation activities
 - Portfolio-level evaluation activities
- Evaluation budget overview

Overview of 2025 Evaluation Approach

*Note: Expected written plan to be available by December 15

Key Annual Evaluation Objectives

- Impact Evaluation to assess energy savings that result from the portfolio’s activities
- Process Evaluation and Market Research
- Non-Energy and Employment Impacts
- Verified Cost-Effectiveness Analysis
- TRM Research to support the portfolio more broadly and IL TRM

Overarching Approach and Guiding Principles

- Three Major Components
 - Market Research: Understand changes to and opportunities within the market
 - Process Evaluation: Understand and improve program performance
 - Impact Evaluation: Calculate and document program energy-saving achievements
- Our budget is allocated between initiative-specific evaluation activities and other efforts
- We typically devote more evaluation resources and a higher degree of rigor to evaluation activities relating to initiatives with higher savings targets and larger contributors to the Ameren portfolio
- We drafted 2025 scopes at a high level as part of the multi-year planning process and have used that as a starting point, but have refined and refocused

NTG Research Results Expected in 2025

- 2025 is a light NTG research year
- Residential Program
 - None
- Business Program
 - CHP NTG interviews – ongoing
 - Small Business Direct Install (SBDI) Free Ridership – Q1
 - SBDI TA SO follow-up – Q3
 - Midstream Food Service (statewide study) – Q2

Evaluation Collaboration

- Ongoing collaboration occurs between the Illinois evaluation teams:
 - Monthly evaluation coordination meetings keep the teams connected and up to date
- SAG meetings and Working Groups provide a framework for formal methodological collaboration
- 2025 collaborative research planned
 - Compressed Air Leak Repair EUL Study
 - Statewide Midstream Food Service NTG Research

Abigail Miner: Looking at Q3 TA spillover follow up, will results be finalized in time for Sept 2025 NTG process?

- *Zach Ross: Yes.*

Program-Specific Evaluation Activities

2022-2025 Ameren Illinois Portfolio Overview

- We organize our evaluation activities to most effectively use evaluation resources, minimize customer touchpoints, and provide research insights while considering the delivery strategy and unique characteristics of each AIC offering
- Looking at both electric and gas impacts, Ameren is the only dual fuel program in IL
- Programs
 - Voltage Optimization Program
 - Residential Program Initiatives
 - Market Rate SF
 - Market Rate MF
 - Direct Distribution
 - Retail Products
 - Income Qualified
 - Public Housing
 - Electrification
 - Market Transformation
 - Business Program Initiatives
 - Standard
 - Small Business
 - Midstream
 - Custom
 - Retro-Commissioning
 - Streetlighting
 - Market Transformation

Organization of Evaluation Plan

- Program evaluations split into five groups
 - Market Rate and Kits
 - Income Qualified and Multifamily
 - Business
 - Pilots and Emerging
 - Voltage Optimization
- Also conduct cross-cutting research and compliance and stakeholder engagement activities

Market Rate and Kits – 2025 Evaluation Highlights

- Initiative (Channel) – process evaluation includes research included staff interviews, materials and data review, and gross impact analysis; but no NTG Research planned
 - Retail Products (Downstream, Point of Purchase, Online)
 - Market Rate Single Family (Midstream HVAC)
 - Market Rate Single Family (Home Efficiency)
 - Income Qualified (Community Kits)
 - Direct Distribution (School Kits, High School Innovation)
- Focus for 2025 is cross-cutting customer research to broadly support AIC's delivery of heat pump incentives to market rate customers

Abigail Miner: To clarify, looking at NTG research column, does N/A means there's no research in 2025?

- *Alan Elliot: We put none because there are NTG ratios that are applied to these initiatives. For the IQ, we apply NTG ratio of 1.000, so N/A is not applicable. For school*

kits, those channels primarily serve IQ communities, and 40% or more of student population needs to qualify.

- *Abigail Miner: So the entire school kits and high school innovation channels are assumed to be IQ. Can you repeat why retail and market rate is none?*
- *Alan Elliot: Because there are NTG ratios different than 1.000, however in 2025 we are not planning on doing any NTG research.*

Heat Pump Incentive and Program Design Study

- Evaluation Context
 - Increasing role of heat pumps for HVAC and water heating across multiple initiatives
 - Prior research suggests high level of variability in how customers approach these purchase and installation decisions, and raises question of how to optimize incentive levels and implementation approach
- Key Research Objectives
 - Identify optimal heat pump incentives to maximize influence and minimize free ridership
 - Assess the potential impact of other design changes on customer adoption
 - Understand heat pump purchase decisions, installation process, and fuel switching tendencies
- Evaluation Approach
 - Customer survey with residential customers
 - Choice-based conjoint to quantify willingness-to-pay and relative importance of other key considerations (prior equipment type, incentive format, heat pump knowledge, efficiency levels/energy costs, etc.)
 - Have used conjoint surveys for smart thermostats in the past
 - Heat pump knowledge, interest, and experience (if any)
 - Customer decision-making and contractor influence
 - Implications of fuel switching
 - Will have customers do some self-reporting as well to dig deeper into certain areas

Cassidy Kraimer (via chat): Does the survey include post-installation feedback on upkeep/maintenance?

- *Alan Elliot (via chat): It's not a primary goal, but we anticipate that we'll naturally capture some customers who have recently installed heat pumps. We might have an opportunity to ask a few of those kinds of questions. Definitely under consideration!*

Income Qualified and Multifamily – 2025 Evaluation Highlights

- Initiative (Channel) – staff interviews, materials and data review and gross impact analysis planned for all the channels
 - Single Family Whole Building (SF, CAA, Joint Utility)
 - Provide no cost energy audits, direct install, H&S evaluations
 - Joint Utility – partnership between Ameren and Nicor Gas
 - Smart Savers
 - Provides advanced thermostat technology and insulation who reside in zip codes with high % of IQ customers
 - Mobile Homes
 - Delivers EE and H&S improvements
 - Healthier Homes

- Partners with healthcare providers and local community orgs to provide households with asthma and other issues with improvements
 - Accessibility Pilot
 - Provides smart homes devices, smart speakers, doorbells, advanced thermostats
 - Multifamily (MF, Public Housing, Market Rate)
 - Comprehensive property assessments, deeper energy savings weatherization and HVAC measures, etc.
- Process research for Smart Savers, Healthier Homes, and Accessibility Pilot
- Research to assess interactions between IQ Initiative and AIC credit & collections department
- Research to support AIC IQ electrification efforts

IQ Initiative – Process Evaluation

- Smart Savers
 - Planning to conduct a participant survey
 - In addition to monitoring participant satisfaction with the channel over time, recent modifications to the channel's implementation necessitate updated participant survey research.
 - Channel optimization: transition from AIC mass marketing to a Program Ally-led marketing strategy, shift to a Program Ally-only installation model, and enhanced focus on participant education on how to use their advanced thermostats
- Healthier Homes and Accessibility Pilot
 - Planning to conduct in-depth interviews to identify opportunities for improvement, increase participation and overall satisfaction
 - Understand the implementation strategy and early challenges and successes through interviews with delivery partners (HH and AP) and participant interviews (AP)

IQ Electrification Targeting and Barriers Study

- Evaluation Context
 - AIC has not seen the desired level of uptake in their electrification offerings
 - They would like to better understand the impact that marketing and outreach efforts, and targeting are having on the level of program performance
 - Target customer = propane customers
- Key Research Objectives
 - Review current approach for identifying propane customers and identify any recommendations for improvement in targeting
 - Understand barriers to electrification efforts to increase program participation and optimize marketing and outreach efforts
- Research Activities
 - Staff interviews
 - Non-Participant Research
 - Peer Utility Research

IQ Credit and Collections Study

- Proposing this in 2025 and can coordinate with Guidehouse if doing so for ComEd
- Evaluation Context – One-Time Study Report

- AIC aims to refer customers with bills sent to collections or those negotiating payment plans to its IQ energy efficiency offerings to mitigate arrearages and service shutoffs.
- From Reporting Metrics: “This study will assess the level and consistency of cross referrals made by credit and collections departments to IQ EE programs, and what portion of customers receiving referrals subsequently participate in an IQ whole building program.”
- Key Research Objectives
 - Identify how frequently and consistently the AIC credit and collections department refers customers to AIC’s IQ energy efficiency offerings.
 - Understand what portion of customers who receive referrals go on to participate in an IQ whole-building offering.
- Research Activities
 - Credit and Collection Department Staff Interviews
 - Tracking Data Review/Analysis
 - Customer Survey
 - With Ameren customers who have interacted with or received communications with credit and collections department

Abigail Miner: I’m seeing a disconnect with customers who have a rear and customers in a whole building offering.

- *Stacia Dreyer: Differentiate between receiving a thermostat in smart saving channel, will discuss with research team.*
- *Abigail Miner: This request to have improvement by referring customers who have payment issues came from stakeholder negotiation process, but want to make sure that it’s available to all IQ customers, not just those who live in SF homes.*

Cassidy Kraimer (chat): I’m also wondering if there will be interviews or surveys with building owners for multifamily programs more broadly?

- *Stacia Dreyer: No, we just conducted a MF property manager survey in 2024, so don’t have MF property manager research plan in 2025. That research will be available in Q1 2025.*
- *Zach Ross: We can make sure we get that information over to you.*
- *Seth Craigo-Snell (via chat): Cassidy, here is some depth interview research that Opinion Dynamics completed with MF Property Managers for Ameren Illinois back in 2022: [AIC-2021-Multifamily-Initiative-Property-Manager-Interview-Process-Memo-FINAL-2022-07-25.pdf](#)*

Business Program Structure

- Business Programs
 - Prescriptive Offerings
 - Standard – catch all providing downstream rebates for certain measures
 - Small business – increased incentives for small business for certain measures
 - Midstream
 - Streetlighting
 - Custom Offerings
 - Custom – provides incentives for equipment not covered in prescriptive channel (highly specialized equipment for industrial, energy management systems)

- Retro-Commissioning – helps customers identify and implement low and no cost optimization opportunities, system tune-ups, scheduling, operational improvements with goals of energy savings
- Modeling-Based Offerings
 - Virtual-Commissioning – target low and no cost energy savings measures
 - Virtual SEM target low and no cost energy savings measures
- Information-Based Offerings – also called pipeline channels; no direct produced energy savings, but provide customers with info, data and resources to scope plan and obtain funding for EE projects
 - Strategic Energy Management
 - Feasibility Studies
 - Metering and Monitoring
 - Building Energy Assessments
 - Process Energy Advisory Assessments
 - Staffing Grants

Business – 2025 Evaluation Highlights

- Focus for 2025 is cross-cutting “pipeline channel” process evaluation to holistically support
- Initiative (Channel) – for all we do staff interviews, materials and data review, and gross impact analysis. NTG research is done for custom and small business
 - Standard (Core, Online Store, BOC)
 - Custom
 - NTG Research: Plan to continue research started in 2024 with combined heat and power participants. Goal is to develop CHP NTG specific recommendation
 - Small Business
 - Scoped followed up work for SBDI research in 2024, goal is to take second look at results from 2024 study. Were some concerns from stakeholder about persistence of spillover
 - Midstream (Lighting, HVAC, Food Service)
 - Retro-Commissioning (Core, VCx, VSEM)
 - Streetlighting

Abigail Miner: So those checkmarks in the table means “yes NTG research is happening next year.”

- *Tyler Sellner: Yes.*

Pipeline Channels Process Evaluation

- Intended to provide info and data to customers to scope EE projects. Channels have been central to strategic direct of the program in recent years. The idea is if you arm enough customers with this info, a continuous and organic pipeline of projects will follow, rather than have to recruit from scratch at the beginning of each year.
- Historic Conversion Analysis
 - Provide insights into the success of each of these pipeline channels to-date.
 - How many projects have been produced? Which types of projects?
- Cost-Efficiency Analysis
 - If you spread the cost of the pipeline channel incentive across all the resulting projects, what is the cost per unit of energy savings?
- Staff Interviews

- Understand the details of how these channels are being administered.
- Explore the strategy behind each channel.
- Inform the development of customer journey maps.
- Customer Journey Mapping
 - Document the customer experience from recruitment, through participation, to project completion.
 - Goal: Build toward future customer research to explore the experiences of customers who did/did not go on to complete projects.
- Reporting
 - Recommendations for how the pipeline channels can best support the Business Program

Voltage Optimization – 2025 Evaluation Activities

- Evaluation Context
 - AIC is deploying several hundred VO circuits in 2024, which will start operating on January 1, 2025
 - VO represents a large share of AIC’s planned portfolio electric energy savings in 2025
- Key Research Objectives
 - Estimate energy and demand impacts from these circuits based on the IL-TRM V13.0 approach
 - Confirm ongoing operation of VO deployed in previous years
- Evaluation Approach
 - Review of pre-period and post-period AMI data
 - Verification that VO circuits deployed in previous years are still operational
 - IL-TRM based impact evaluation approach with multiple interim impact evaluations
- Research Activities
 - Data Requests, Material Reviews, Staff Interviews
 - Verification of QO Deployment to Date
 - IL-TRM V13.0 Application

Pilots and Emerging Areas

- Sector where efforts that don’t fit neatly into other ones
 - High-performance windows MT effort – have some scope in 2025 to help Ameren formally launch this as an initiative.
 - Luminaire-Level Lighting Controls

Luminaire-Level Lighting Controls Market Transformation Initiative

- Fully launched with a business plan in 2024
- Three-year evaluation cycle aligned with LLLC Business Plan
- “Rolling” evaluation efforts, coordinated between Opinion Dynamics, AIC, and implementation teams

Abigail Miner: Do the checkmarks mean the activities are happening in that year?

- *Zach Ross: Yes. Intent of table is to show that we have a same suite of activities happening every year.*
- *Abigail Miner: So you’re anticipating no changes in 2026, but stipulated agreement isn’t finalized.*

- *Zach Ross: Yes, consistent with business plan that was approved for this effort, but can change with the portfolio. Defining cadence of activities.*
- *Abigail Miner: What is the business plan? Can we talk offline about it?*
- *Zach Ross: Happy to talk about it offline.*

Portfolio-Level Evaluation Activities

Cross-Cutting Research

- Note: One things stakeholders asked for is non-energy impact research that we have planned. We do not have any NEI scope planned for 2025.

Cross-Cutting Research Summary

- Compressed Air Leak Repair EUL Study
 - Ongoing joint ComEd and Ameren IL study
 - Initial data collection to wrap in 2025; results in early 2026 likely.
 - Multiyear study
- Supplier Process Research
 - Ameren IL is interested in process evaluation around implementation partner contracting. Lots of discussion between Ameren and stakeholders, contracting partners, etc. and Ameren interested in getting perspective on being tier 1, tier 2 contractors.
 - More detailed scope in written evaluation plans
- Partial Displacement Heat Pump Metering Study

Partial Displacement Heat Pump Metering Study

- Scoped metering study for 2025 looking at partial displacement heat pumps in residential buildings.
- Research Question: What is the observed in situ switchover temperature between heating sources for air source heat pumps with backup fossil/electric resistance heat?
- Process:
 - Sampling and M&V Plan: Q2 2025
 - Recruitment: Q2-Q3 2025
 - Logger Install: Q3-Q4 2025
 - Logger Retrieval: Q2 2026
 - Analysis and Reporting: Q2 2026
- Research Outputs: Information to update IL-TRM measure characterization for partial displacement heat pump installations to refine savings estimates.

Cassidy Kraimer (via chat): Will this study focus on 1-4 unit buildings?

- *Zach Ross: Focus on single family homes primarily for ease of data collection.*

Compliance and Stakeholder Engagement

Compliance Activities as part of Evaluation work

- Gas Adjustable Savings Annual Goals Review
- Economic and Employment Impact Analysis
- Illinois TRM Support
- Cost-Effectiveness Analysis and Support
- Regulatory testimony
- SAG Participation and NTG Working Group Facilitation

Budget Overview - 2025 Draft Evaluation Budget Breakdowns

- Written evaluation plan provides more itemized budgets. These are draft numbers, but final numbers will be in written plan
- By Sector where the bulk of the spend occurs
- By Activity Type that shows what % of budget spending on process, NTG, impact, etc.

Cassidy Kraimer: Can you outline the proportions why the business sector might cost more than IQ?

- *Zach Ross: We try to do our best to have some alignment between impact of the program and energy savings. The business program provides a lot more energy savings than the IQ and MR residential individually. For business, the biggest driver is the custom impact evaluation work there where we can't leverage TRM. In terms of other areas like overarching and cross-cutting, driven by individual evaluation needs identified each year—differs year to year.*

ComEd 2025 Draft Evaluation Plan

Jeff Erickson, Guidehouse

Agenda

- Introduction
 - Evaluation Plan Schedule
 - Budget
- Residential and Income Eligible (IE) Programs
- Business Programs
- Special Topics
 - Non-Energy Impacts
 - PJM
 - DAC NTG Policy
- Evaluation Approaches and Timeline
 - Evaluation Coordination

Evaluation Plan Schedule

- ComEd does a four year evaluation plan. Very small revisions to this year. First Draft: November 26
- Presentation to SAG: December 3
- Comments Due on Evaluation Plan: December 20
- Second Draft: January 6
 - Celia does not circulate the second draft of the plan.
 -
- Comments Due on Second Draft: January 20
- Final: January 27

Evaluation Budget vs 2023 kWh Saved

- CY2023 Net kWh Saved by Sector
 - Most of the savings come from Res & IE and Business & Public Sector Programs
- CY2025 Evaluation Budget
 - Reflects spend only on specific programs
 - Pilots are expensive to evaluate relative to their energy savings

- There's a lot of upfront work on Market Transformation evaluation relative to the savings produced

CY2025 Evaluation Budget

- Fuller picture of the evaluation budget
- Bottom two bars show the chunk of the costs come from evaluating specific programs in Residential and business sectors
- Project
- Technical Management – working on the TRM, NTG Working Groups

Residential and Income Eligible (IE) Programs

Structure of the Evaluation – Residential Sector Programs

- Two program types
 - Direct to consumer: programs delivered directly to individual consumers
 - SF Upgrades
 - MF Upgrades
 - Behavior – Res/IE
 - Channels: Done through other sources such as retailers or distributors
 - Retail/Online
 - Product Distribution
 - New Construction – IE
 - Electric Homes New Construction
 - Contractor/Midstream Rebates
- Promoted broadly as the ComEd Energy Efficiency Program
- Income Qualified services are embedded into ComEd's Plan 6 Residential program
- Evaluation reports differentiate between market rate and IE results

Residential Sector Program Components

- Dark blue indicates IE programs
- Light blue indicates both IE and MR
- Electric homes and new construction should be grey, is a MR program
- AH New construction – IE program focused o
- ComEd Online
 - ENERGY Star Retail Product platform will be reported through the retail online program this year
- Behavioral – Res/IE
 - Home Energy Reports Program
 - Conduct analysis of that at the population level, household consumption
- Whole Home Electrification – new program
 - Come from a pilot program
 - Have been evaluation SF and MF, first time that savings will be evaluated as a standalone report

Plan 6 Evaluation Structure – Residential Sector Programs

- Illustrates evaluation approach to the different programs
- When doing impact evaluation, are conducting an impact evaluation of the portfolio programs, in some years have reused the realization rate from previous year for current year
 - Realization rate: reported savings divided by verified savings

- Do this because:
 - 1) these programs have had stable realization rates over course of evaluation years
 - 2) In terms of overall portfolio of savings, it's a small sliver.

Residential and IE NTG Evaluation Draft Timeline

- CY2024, did SF
- In 2025, going to finish the SF NTG research and report that to the SAG in August. Also doing work on retail online program and electric homes new construction.

Residential Pilots and Market Transformation Programs

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

Additional Residential and Income Eligible Research

- Plan 6 Stipulation Agreement and/or SAG Required Research
- 1. Process Evaluation of the Income Eligible Multifamily Program | Jan-Nov 2025 (final results in November 2025)
 - Identify opportunities to increase income eligible program participation from community stakeholders
 - Background research on multifamily IE programs
 - Benchmark peer utilities for best practices
 - Interview income eligible multifamily community stakeholders and champions
 - Understand existing barriers to participation from non-participating income eligible multifamily stakeholders.
 - Interview non-participating income eligible building owners and managers
 - Make recommendations regarding program design elements that would increase ComEd's income eligible program offerings.

Cassidy Kraimer: Does that first study include the evaluation of the one-stop-shop model?

- *Courtney Golino: I don't believe so.*
- *Cassidy Kraimer: Looking at IE reporting metrics agreed upon in the springtime, there is an aspect that requests evaluators to investigate barriers to participation and one-stop-shop model.*
- *Courtney Golino: We will talk with team. If language is in there then will include it in the research study.*

Kari Ross (via chat): How is Guidehouse planning on holding interviews? (e.g. phone, online, etc.)

- *Courtney Golino: Planning on doing interviews by phone.*

Additional Residential and Income Eligible Research

- Plan 6 Stipulation Agreement and/or SAG Required Research
- 2. Process Evaluation of Mapping Assistance Needs and Targeting Delivery of Weatherization Services | Jan-Dec 2025
 - Analyze the current program structure to assess the effectiveness of identifying and targeting customers in need of financial assistance and weatherization services.
 - Review ComEd filed data for participation analysis
 - Review program design and process
 - Conduct participant surveys
- Examine the data collection and mapping methods ComEd employs to determine if financial assistance and weatherization services are reaching intended areas.
 - Identify key metrics to evaluate program success and impact

Additional Residential and Income Eligible Research

- Plan 6 Stipulation Agreement and/or SAG Required Research
- 3. Impact & Process Evaluation of the pilot to connect customers with payment trouble to energy efficiency | Jan-Nov 2025
 - Compare the program design and best practices with similar programs offered by other utilities.
 - Evaluate the implementation of the Catch Up and Save Pilot to assess how effectively it reached eligible customers and delivered intended support.
 - Quantify the impact the Catch Up and Save pilot had on participants' ability to pay for energy services (such as amount in arrearages, disconnects, late payments, etc.).
 - Conduct a pre and post comparison amongst customers participating in Catch Up and Save and analyze a difference-in-difference effect by looking across other customers with similar arrearages who did not participate in the program.

Business Sector Program Components

- Seven main programs – some are standalone and some have multiple components. Report and results on the program level, but also provide findings and recommendations for implementors
 - Small Business
 - Incentives
 - Targeted System
- The program offerings are mostly the same as left year except for:
 - New offering for CY2025: Business Energy Analyzer
- Common to adopt a sampling approach, so throughout the year, pull samples from multiple days, use site visits.
- Prescriptive program offerings like small business – most data collection from tracking data
- Three joint programs
- Conducting impact evaluation for all of the programs

NTG Evaluation Draft Timeline – Business 1

- See slide 18 for table with details
- Two main programs
 - Midstream/Upstream
 - Incentives
 - Custom, NTG research is every year

NTG Evaluation Draft Timeline – Business 2

- See slide 19 for table with details
- Shows other programs of NTG research in the past, but not in 2025

Business Pilots and Market Transformation Programs

- Six pilot programs
 - Advanced Refrigeration Controls – ongoing from 2024 to 2025
 - Might see potential 2025 for high efficiency HVAC retrofit
- One MT program

Business Research

- Compressed Air Leak Repair Effective Useful Life (EUL) Research | Q4 2021–Q4 2025
 - Joint study between ComEd and Ameren Illinois
 - Key Objective: Determine the EUL for compressed air leak repairs with intent to update the TRM
 - Research Approach: Longitudinal study to examine air leak repair failure rates over the course of 30+ months

Special Topics

Non-Energy Impacts

- Economic and Employment Impacts
 - Report produced annually by April 30 per CEJA
 - Includes indirect and direct economic impacts and job-years
 - Conducted since CY2018, methodology uses IMPLAN and program year cost and savings data
- Societal Health Impacts
 - Analysis conducted annually to produce values for the TRC report due to ComEd and ICC by June 28
 - Report on Societal NEIs produced annually in June
 - Conducted since CY2020, methodology uses EPA tools AVERT and COBRA and portfolio savings data
 - Analysis tools will be revised in accordance with AVERT and COBRA updates
- Participant Impacts
 - Research underway with residents of single-family homes and multifamily buildings
 - Research completed with building owners and property managers of multifamily buildings
 - Monetized NEI results associated with single-family and multi-family residents expected by Q2 2026
 - Monetized NEI results associated with managing multifamily buildings expected by Q1 2025

PJM

- Objective: Support ComEd's annual portfolio capacity resource reporting to PJM
- Approach:
 - 1. Compile the PJM-compliant peak demand reductions from ComEd's portfolio
 - 2. Transform the data to match PJM's reporting requirements
 - 3. Apply current year evaluation factors to the data

- 4. Prepare the updated reports for PJM
- Timing:
 - Follow the PJM-defined schedules for reporting
 - Typically, January to July on an annual basis
- Note: Per Recent FERC ruling, EE Resources disallowed from participating in future auctions, so work will be ramping down but at a reduced level of effort

Elizabeth Horne: The capacity reporting is ending in 2025 or are there any activities going into 2026?

- *Christopher Frye: For PJM, EE Resources disallowed from participating in future auctions. We typically would produce a plan prior to options, and the other part of reporting is a post install report. We will still need to produce PINV report next May, and an additional one in May 2026—those are the last two. They cover installation periods identified MNV plans.*
- *Elizabeth Horne: So it will be potentially wrapped up in Q1 2026?*
- *Christopher Frye: The PINV reports are due in May, so Q2 of 2026.*

Nicole Popejoy IACAA (via chat): Did I miss what PJM is?

- *Christopher Frye (via chat): PJM is the independent system operator that covers ComEd's service territory.*
- *Jeff Erickson: ComEd bids their programs to a PJM auction to find out who will be delivering energy into the grid, and part of that ComEd and other utilities can bid to deliver it. PJM does the auction for the distribution of energy across PJM territory, a lot of it is in the east.*

NTG Policy for Disadvantaged Areas

- Have had a lot of conversation on this. Have written a memo, which has gone through several iterations. We tend to distribute it broadly.
- ComEd data will have project- or customer-level on
 - Zip Codes
 - Municipality
 - Customer type flag identifying general delivery service municipal, public school and local government customers
 - Energy consumption level or a flag for Small Load Deliver Class (<100 kW)
- Guidehouse will use that data to determine projects eligible for a NTG of 1.0 based on the Disadvantaged Areas NTG policy
- Analysis is done on a project by project level

Applying DAC NTG Policy

- For residential customers, if zip code is in disadvantaged neighborhood, have a NTG of one
- Business: if end use customer is in a disadvantaged neighborhood, get NTG of 1
- General delivery service: get NTG of 1 if is in a disadvantaged municipality
- ComEd has used Elevate to produce spreadsheets with zip codes that meet the policy criteria

Seth Craigo-Snell: I haven't seen the documentation you're talking about on work of interpreting disadvantaged areas for NTG. I have questions on how you're thinking about mid and upstream programs. Seems like significant deviation from policy to apply NTG of 1 to midstream businesses for the sales of products that they have generally speaking just because they are

located in disadvantaged area. Policy is clear it applies to residential, but the extent that businesses are selling to residential, seem to need some method to identify sales going to disadvantaged area customers. Just because a business is located in DAC, does not mean sales going to DAC customers.

- *Jeff Erickson: We have had lots of conversations on this on how to deal with midstream. Everyone felt it was likely true that some of the midstream customers were in the DAC neighborhoods, and talked about how do we determine who they are. Only piece of evidence is where the distributor or installer is located. The intent was to encourage utilities to target those areas, and part of targeting areas is targeting business operating in those areas, and the hope is to target end use customers in those areas. Policy is clear on some things, unclear on others. We interpreted the policy because of its intent. Policy is not explicit on business in DAC for midstream and how their customers get applied for DAC policy. Have chosen through conversations that it's reasonable to assume intent of the policy that sales by a business within DAC are going to customers*
- *Elizabeth Horne: If business is in DAC, the policy still applies. Don't have to necessarily know that the services or products are going to a DAC household. It's enough for the business to be located in DAC to have NTG apply. If business outside of DAC and customers in DAC and have no way of tracking it, still have to refine this to make a plausible assumption that the products are being installed in DAC area without having survey or concrete way to show that.*
- *Seth Craigo-Snell: To clarify, clearly the intent initially was about businesses, especially support for smaller businesses in DAC being a fundamental driver for this policy and any distributors in DAC seeking improvements for their own facilities would fit within this. Just midstream sales portion that isn't exactly nailed down. Hearing conflicting messages. It's an important question for us to consider on how exactly that gets applied.*
- *Jeff Erickson: The memo goes into more detail on the nuances of it.*
- *Seth Craigo-Snell: Was the memo provided for comment?*
- *Jeff Erickson: We have sent it out broadly but can't remember who exactly got it and who didn't. It went out a while ago and has had a lot of conversation from various parties.*
- *Seth Craigo-Snell: This is a significant issue to sort through and have consistent policy throughout the whole state.*
- *Jeff Erickson: ODC has commented on the policy, specifically on modifying language so it implies that it's for the whole state.*
- *Celia Johnson: I can send it out to the SAG for feedback, if needed.*

Evaluation Approaches—Summary of 2025 Evaluation Activities and Timelines

Evaluation Activities Timeline Overview

- Impact
 - Waves of impact research throughout the year
 - Final program data available January 30 of each year
 - Final impact report, economic and employment impacts, and summary report due April 30 of each year
 - TRC report is due June 30 of each year
- Net to Gross
 - Memos delivered as research is completed
 - Draft recommendations September
 - Final values October 1
- Research

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

Impact Evaluation Approaches

- Basic Approach
 - TRM-based (majority of residential programs)
 - Custom and model-based (majority of business programs and pilots)
 - Population-level consumption data analysis (Home Energy Reports)
- Components
 - Savings Calculator and Workpaper Review
 - Program Tracking Data Review
 - Survey, Phone, or Virtual Verification
 - Onsite Verification
 - Impact Analysis in Waves

Evaluation Coordination

- The ComEd EM&V Team coordinates with the other utilities and their evaluation teams on an ongoing basis ComEd, Nicor Gas, Peoples Gas and Northshore Gas Joint Programs
 - Some jointly delivered programs are evaluated by a single-team, some separately
 - Evaluators calculate and report joint TRCs
 - Nicor Gas is selling kWh to ComEd. We coordinate to do some of the eval on the gas side and some on the ComEd side.
- Coordination on Process, NTG, and TRM Research Studies
 - TRM measure research considered on a case-by-case basis
 - Process research is done jointly when it is beneficial to do so
- Coordination beyond specific programs occurs as follows
 - SAG meetings, Illinois-wide issues
 - Illinois NTG Framework and Protocol Working Group
 - Illinois TRM Technical Advisory Committee
 - Evaluator coordination calls (monthly)
- 2025 Statewide Research:
 - Compressed Air Leak Repair EUL
 - Statewide Midstream Food Service NTG

Closing and Next Steps

- The ComEd 2025 Draft Evaluation Plan was circulated to SAG for feedback on Monday, December 2. Comments are due Friday, December 20.
- The Ameren Illinois 2025 Draft Evaluation Plan will be circulated by December 15.
- Follow-up item for Opinion Dynamics: There is a pending MF study that is anticipated to be available in Q1; Opinion Dynamics will send the study to Community Investment Corp. per request during the meeting.