## IL EE Stakeholder Advisory Group Large Group SAG Evaluation Plan Meeting (Day 1)

Tuesday, December 6, 2022 9:30 am – 12:00 pm Teleconference

#### **Attendees and Meeting Notes**

#### Meeting Materials

- Posted on the <u>December 6 Meeting page</u>:
  - o Tuesday, December 6 SAG Evaluation Plan Meeting Agenda
  - o Opinion Dynamics Presentation: Ameren Illinois 2023-2025 Evaluation Plan
  - o Guidehouse Presentation: ComEd 2023-2025 Evaluation Plan

#### Attendees (by webinar)

Celia Johnson, SAG Facilitator Greg Ehrendreich, Midwest Energy Efficiency Alliance (MEEA) – Meeting Support Al Walker, Windsor Park Luterhan Church Alan Elliott, Opinion Dynamics Andrey Gribovich, DNV Andy Vaughn, Leidos Bob Baumgartner, Leidos Carina Paton, Frontier Energy Charles Ampong, Guidehouse Chester Kolodziej, Rockford Illinois EE Chris Healey, Enervee Chris Neme, Energy Futures Group, representing NRDC Christian Koch, MEEA David Brightwell, ICC Staff David Weaver, Citizens Utility Board Dena Jefferson, Franklin Energy Elizabeth Horne, ICC Staff Erika Dominick, Walker-Miller Erin Daughton, ComEd Gregory Norris, Aces 4 Youth Haley Keegan, Resource Innovations Hannah Collins, Leidos Hannah Howard, Opinion Dynamics Houston Dowen, Frontier Energy Jason Feglev, Ameren Illinois Jeff Erickson, Guidehouse John Carroll, Ameren Illinois John Lavallee, Leidos Jonathan Skarzynski, Nicor Gas Kalee Whitehouse, VEIC (IL-TRM Administrator) Karen Lusson, National Consumer Law Center (NCLC) Kathryn Brewer, CLEAResult Ken Woolcutt, Ameren Illinois

LaJuana Garrett, Nicor Gas Lance Escue, Ameren Illinois Laura Agapay-Read, Guidehouse Lawrence Kotewa, Elevate Lorelei Obermeyer, CLEAResult Martha White, Nicor Gas Mary Ellen Guest, Chicago Bungalow Association Matt Armstrong, Ameren Illinois Max Michelotti, Power Takeoff Meena Mathur, ICF Michael Brandt, Elevate Mike King, Nicor Gas Monique Leonard, Ameren Illinois Neil Curtis, Guidehouse Nicholas Crowder, Ameren Illinois Nick Lovier, Ameren Illinois Nishant Mehta, Guidehouse Pat Justis, Ameren Illinois Paul Wasmund, Opinion Dynamics Philip Halliburton, ComEd Philip Mosenthal, Optimal Energy, representing IL AG's Office and NCLC Rachel Marty, Guidehouse Randy Opdyke, Nicor Gas Rvan Kroll, Driftless Energy Sam Dent, VEIC (IL-TRM Administrator) Seth Craigo-Snell, SCS Analytics Sophia Palmer, Walker-Miller Steffen Canino, The Will Group Stephen Robinson, Northwest Austin Council Stu Slote, Guidehouse Sy Lewis, Meadows Eastside Community Resource Org Tamika Cole, Walker-Miller Taso Tsiganos, IL Attorney General's Office Thomas Drea, Ameren Illinois Thomas Manjarres, Peoples Gas & North Shore Gas Tim Dickison, Ameren Illinois Tina Grebner, Ameren Illinois Travis Hinck, GDS Associates Tyler Sellner, Opinion Dynamics Victoria Nielsen, Applied Energy Group Vincent Gutierrez, ComEd Vitaliy Ladimirov, Resource Innovations Wade Morehead, Morehead Energy Zach Ross, Opinion Dynamics

#### Meeting Notes

Follow-up indicated in red.

### **Opening & Introductions**

Celia Johnson, SAG Facilitator

**Purpose of the December 6th meeting:** For the Ameren Illinois and ComEd evaluators to provide an overview of and request feedback on draft evaluation plans (EM&V work plans) for the 2023 program year, including updates on 2023-2025 evaluation activities. The draft ComEd Plan will be circulated again for 1 week's feedback (the draft plan was previously circulated in October). The draft Ameren Illinois Plan will be provided December 15<sup>th</sup> and circulated to SAG for comments.

#### Ameren Illinois Evaluation Plan

Zach Ross, Opinion Dynamics

- High level overview of evaluation objectives. Conduct impact evaluation for the entire Ameren Illinois portfolio every year. Process evaluation, NEI and employment research, cost-effectiveness & TRM research.
- Anticipated 2023 Net to Gross Updates this was requested by ICC Staff and others this is what we expect to be proposing this coming year. Some were in process in the 2022 plan but not wrapped up. Expect a handful of residential updates and a significant number of business program initiatives and channels. Will talk more about these as we go through the slides.
  - Small Business Energy Performance channel some ongoing Policy Manual conversations about this that are relevant, so this update will be pending that conversation
- Evaluation collaboration: All the teams in IL evaluation are collaborating. Monthly coordination meetings. Formal collaboration in working groups and ad-hoc collaboration as needed on issues.
- Program Specific Evaluation Plans
  - 2022-2025 Portfolio high level perspective. Overview of how Ameren organizes their portfolio. Voltage Optimization, Residential and Business, subdivided into initiatives, and those subdivide into channels. Ameren Illinois is dual fuel, and most programs are evaluated as such. Evaluation activities are organized to effectively use resources and make it easier for customers and budgets. This means that we organize things from evaluation slightly different than the portfolio sometimes e.g., the multifamily all group together (low income, res, and comm).
  - Residential market rate segment
    - Expected electric and gas savings. Dominated by retail products on electric, more evenly split on gas but LI is almost half of gas savings.
    - Residential evaluation summary. 5 groups of programs retail products efficient choice tool, traditional retail products, market rate HVAC, market rate whole homes, and kits. Focusing on the more interesting evaluation, we won't walk through detail on all of these, but for all programs we conduct impact evaluation every year, we interview staff and update materials and dive in where appropriate. We also propose additional activities to help with the program, update TRM values, etc. Will talk about the "above and beyond" research this year. Retail products include

both income qualified and non-IQ, as do the kits, from an evaluation perspective.

[Karen Lusson] Does the Smart Saver Smart Thermostat program – free smart tstats for IQ – is that forecast savings under retail products or low income on the pie chart, and which portion of either is the t-stat savings?

- [Zach Ross] It falls in the IQ portion of the pie charts. Will follow-up. In those charts those are aligned with how we think about the programs so retail products does include the IQ portion of the retail products.
- Efficient Choice Tool Retail Products no incentives, just information for customers. 4<sup>th</sup> full year of implementation. Did extensive research and a TRM workpaper and NTG ratios last year. Custom, survey-based evaluation. Now we want to test a TRM-based deemed approach to estimate savings this year and reduce the effort required to evaluate. Will assess at the end of the year to see if that approach continues. Will also review staff interviews and materials.
- The other residential market rate program where we expect substantial activities is Market Rate Single Family Midstream HVAC. Continuing to explore additional broader market effects due to this. Will update SAG soon on where we are on the ongoing research. Moving forward with some testing. Attribution is still somewhat uncertain. Will be continuing to explore that and to refine the NTG research for the program. Did first round of distributor research, doing installer research this year.
- Another activity for 2023 is looking into the effects of the IRA tax credits on the program
   – outcomes and the effects in the attribution research how the external effects drive
   the market effects.
- Income Qualified Evaluation
  - IQ sector evaluation summary. This includes SF, low to moderate, and all the MF offerings. As shown, will do impact evaluations for all channels and a core set of process evaluations for everything. Beyond this we propose some additional research for several channels in single family and continued research to support the MF initiatives.
  - IQ Initiative major focus for Ameren Illinois and the evaluation. Continued innovation means continued work on evaluation. 2 new channels mobile home air sealing and healthy homes. CEJA requirements on health and safety. And how the new federal programs impact the initiative. Will interview staff and implementation partners. Additional research from program allies and other delivery partners e.g., hospitals. Purpose is to get early insights into performance to help make sure they are set up for success. CEJA requirements we will do site visits and understand the improvements being made and additional opportunities to provide more.

[Chris Neme] For health & safety, are you going to be doing any process evaluation to better understand how opportunities are identified – documenting how many are unaddressed, assessing what was done in retrospect, etc.

• A: We did site visits for SF a few years ago and focused on energy opportunities. We're going to do a similar approach here. Starting with in depth conversations with staff and implementers to determine how they decide what H&S measures to address. Then in homes looking for potential "missed opportunities" that were available in the list and not addressed, and other opportunities we see as a "remaining opportunity" that isn't in the list yet.

[Chris Neme] You have been working on quantifying the participant benefits from efficiency and H&S improvements – the NEIs. Is that continuing, where does that stand and as you look at H&S issues and talking to customers are you getting information from them on the health improvements and comfort improvements?

- A: We are wrapping up that study. Final round in Q1 2023. That study and research is focused on outcomes, more than on what was done. We're doing year-later interviews with participants largely not capturing any expanded H&S efforts that are now being made from CEJA. When we have the results, that will tell us what happened previously, but now if the program is expanded then we may need to update the research or consider the research as a lower bound instead of an upper bound. We hope to present the results ahead of the 2024 evaluation planning process and can talk about where it will lead then. Currently focused on SF.
- Multifamily includes three distinct sectors IQ MF channel, Public Housing, and Market Rate. For the past few years, evaluation has included assessment of the one-stop shop design that connects MF property managers to all the Ameren offerings. Goal is to provide MF property managers with info and support to do more than just the assessment and audit with direct install, and to move into broader efforts. Starting with staff and implementer interviews. Extra effort on one very large project. Switching between impact and process we're back to process this year. Will monitor PM participation experience and the OSS design. Another special focus is to get feedback from tenants themselves tenant survey for process topics like satisfaction with process, but also some impact related topics like verifying installation of measures and in-service rates, and some deep dive into how some equipment like heat pumps are used where end use behavior can affect savings. Example of property using both electric base boards and heat pumps, leading to counterproductive behavior.

#### [Chris Neme] Who are you focusing on - 2022 participants?

• A: 2022 and some early 2023 participants, expect we will be doing early 2023 property managers for IQ and public, maybe some market rate. Tenants will also be 2023 essentially – will do a census of tenants in any participating buildings in 2023.

[Chris Neme] Concern is that you may talk to folks before they get much experience with the systems in the wintertime – tenant perspective – and also missing landlord impacts with respect to turnover rates or other things due to customer improvements.

- A: Interesting point and will have to think about the timing could shift out to later in the year to give time with that. And could go back into the 2022 tenant population.
- [Chris Neme] If you are doing the work in 2023 and a good chunk is space heating, should focus on the customers who got it in 2022 and had a full winter with them.
  - A: Good point and please provide written comments to this effect as well. With property managers we might be able to do it differently, but with tenants I tend to agree with you. Could ask PMs whether the OSS is impactful to whether they will do more. There is some give and take with timing
- [Chris Neme] Interviewing 2023 PMs about the shift in focus and their experience dealing with the timing of projects and such. Won't get, however –

could do a year later survey and a time of installation – won't get the feedback they have heard from their tenants yet.

- A: From 2020 interviews we did get some documented feedback from tenants. That's the benefit of doing this research year over year for the next few years, gives us more opportunities. Really appreciate this discussion and hope for more in the written feedback.
- Business Program Evaluation
  - 2023 business program overview of savings. Big year for business in the amount of research we have planned. High level overview of the savings – six initiatives (Standard, Small Biz, Custom, Midstream, Streetlighting, RCx) and each has channels under it. Later will talk about some channel-specific research. From the charts, can see standard, small biz and custom drive portfolios and we have research planned on them.
  - Summary slides can be reviewed, won't go into details. Will focus on the research that goes beyond the typical scope. Will point out that for these we use a TRM prescriptive approach, but for Custom and RCx there is a more custom approach. There is a statistical approach for Virtual RCx.

[Chris Neme] In 2022, some of the large customers that were exempt are back in. Is there an effort to understand the customers who haven't opted-out? Are you going to try to understand the Ameren interactions with those customers who stayed in and how to address their opportunities and challenges?

- A: No specific research on the large customer re-engagement but it will be sprinkled into some of the other research like the custom research with program allies. There is general program ally research that will get at that some too. Some energy advisor research will also explore that topic. We will get at it but it may come from other channels. We received stakeholder feedback on this last year. We talked about some direct customer focus with these customers in 2022. Chose not to do that because we all expected pretty significant outreach and engagement on those customers from Ameren Illinois, and it's a small number of customers. Didn't want (from the evaluation perspective) to add to the customers' burden given the amount of research that Ameren has planned.
- For Standard will be doing net-to-gross research in 2023. Expected to the second largest initiative in 2023. Needs some refreshing on the research now. Will survey customers for free ridership and contractor spillover as allowed by the TRM. Attribution research will be the driver but will look at some process topics too like barriers and satisfaction.
- Small Business has two channels DI and Energy Performance. They are designed to
  holistically meet customer needs in this segment. Proposing a small business market
  study expecting the Small Business to be the largest savings in the business portfolio.
  Want to support implementation with some key process research, a bunch of topics with
  goal of exploring whether the market barriers are being addressed and are the same
  ones the customers say they are experiencing. Will also collect some other information
  like technical information for some TRM items, but driving factor is testing the program
  design. Also have NTG research for the Energy Performance channel tentative based
  on policy manual discussion on a deemed NTG proposal for disadvantaged communities
   may not have to conduct this research depending on that discussion.

[Chris Neme] Before we leave Small Business, there has been a lot of discussion over the past year about Small Business equity perspective. Economically disadvantaged communities for example. There is a Policy Manual proposal about that. How are you planning to address that in evaluation of the initiatives? Two cohorts – in those communities and not? Or process evaluation discussion about whether barriers are different, and so on?

- A: For the NTG specifically, that is going to depend on the channel for the market study we talked about how we can use the market study to build on the Empower Communities study from 2020 and the opportunity to separate results from disadvantaged and non-disadvantaged areas. When the NTG research comes back around we'll grapple with that as well.
- [Phil Mosenthal] Research will have to be segmented. In my experience small business direct install has very small free ridership and is typically very close to 1.0.
  - A: We haven't done the NTG for this channel SBEP yet was a pilot so we're applying the SBDI NTG for this channel and there has been interest from the team to look into it, which is why we scoped it. But we are looking at the policy manual discussion. It includes envelope and air sealing, not just typical DI measures. It feels like it is worth looking at from that perspective.
- Midstream HVAC is also new as of 2022 cycle. Now that we have a full year of implementation, should be able to develop Ameren-specific NTG ratios. Will do contractor and distributor interviews to estimate free ridership and spillover, and some process components to understand how the channel is operating.

#### [Phil Mosenthal] When was the last NTG for lighting?

- A: That's part of the 2022 scope and will be completed in time for the 2024 NTG recommendations.
- Midstream Food Service everything I said about HVAC is applicable here as well. Using the SAG default NTG want specific research. Will research with distributors and end customers, because of program design and who the decision makers are.
- Custom, we're planning a comprehensive process evaluation. Expected to be 2/3 of the business gas savings in 2023. Given the nature, there is more risk in custom and we've seen some declines in realization rates in the past few years. Looking at a process map to document the implementation approach. Will interview key stakeholders – staff, allies – specifically interested in development and management of program pipeline, ally support needs to execute their roles, barriers that currently exist.
- Virtual Commissioning more NTG research. For context, this launched as a pilot in 2020. In 2021, did preliminary attribution research. Didn't have the numbers needed to develop an NTG so have been relying on ComEd results. But have built up enough participation to do Ameren-specific research now, and will develop NTG recommendation for 2024 update.
- Non-Participant Spillover last conducted in 2018 so needs refreshing. The NTG
  recommendations we provide for business initiatives include an adder for NPSO, and we
  will update that and explore a limited number of process topics as well. It will be a survey
  approach of customers who haven't participated in the business program in the past
  three years. Expect to coordinate with at least one northern Illinois utility.
- Pilots and Emerging Areas

• We have just one pilot we will be doing a formal evaluation on – Luminaire Level Lighting Controls Other research that may come up but this is the focus at this point. Launched in 2022, goal is to make it a market transformation initiative. Not currently claiming any MT savings. Key research objectives are to continue to refine the program theory and logic model and the MPIs, and then do some MPI assessments and look at awareness among key customers. As this is an MT initiative, the program theory work is iterative, so we'll check in with implementation and utility teams. Will look a little different each year. Another thing next year we will be doing is develop baselines for different groups - end users and trade allies that are key for the initiative - through survey work. Goal is to develop surveys we can field periodically to see movement in those groups in terms of awareness and adoption. In addition, in 2022 assessing the effectiveness of the educational and outreach components with pre- and postsurveys on the trade allies that get trained, and then also so lighter touch outreach that is geared toward folks that are introducing and selling the technology in the market. Assessing satisfaction and the learning from the trainings. For the training participants, a follow-on interview about how they are applying the information from the training and the impact on how they discuss with customers, install the technologies, changing behavior. In addition, working with implementation team to refine the natural market baseline, making sure we have the right data sources and methods. Will be continuing to refine that next year. Some of the key things are those shorter MPI assessments, the surveys and interviews with training recipients, and the baseline surveys. As the initiative matures. we want to touch those groups each year and test if and how there is movement.

[Chris Neme] Great that Ameren has launched this and you are doing this research. I believe that the NEEA has an LLLC MT initiative. Are you tracking what they are doing and their logic model work?

- A: Short answer, yes. Longer answer is that we're talking about this in SAG and the Northwest is somewhat different but we are leveraging their lessons learned and data sources absolutely.
- [Chris Neme] One of the potential benefits of this technology is that it can provide significant NEIs like asset tracking that go beyond efficient lighting. Are you talking to vendors, trade allies, vendors about those NEIs, or the opportunities for NEIs in how they are being sold, the extent to which they are aware of them, etc.?
- A: Yes, also. Shorthand for awareness and familiarity is some of those NEIs. Are you aware of the tech, and are you aware of the NEIs these technologies offer. We're definitely trying to touch on that. Will have to tailor some of our interview approaches once we figure out the key segments this will be focused on and how we can pull out the NEIs relevant to those segments.
- [Chris Neme] ComEd has a significant focus on network lighting controls. I wonder whether as an MT initiative, there may be some differences in service territories. Are there any discussions between utilities about a statewide approach?
- A: We haven't had direct conversations we have a regular touchpoint but this is still pretty fresh. We've talked more in general about MT program evaluation.

- Celia Johnson: The SAG Network Lighting Controls Subcommittee will meet again in March.
- Voltage Optimization
  - VO is a little different. Consistent evaluation in 2023 compared to previous years. Major contributor to 2023 savings. Will use TRM approach to estimate savings and will do multiple impact evaluations. Will also run retrospective evaluation.

[Phil Mosenthal] Is there any aspect of this that is looking at an estimate of how accurate the TRM is?

- A: TRM is an algorithm with custom inputs a pre-period circuit load estimate, a conservation voltage reduction deemed parameter, and a measured voltage reduction that we measure with AMI data. We've talked at great length on that and right now everyone is comfortable with what we are doing there.
- 2023 IL-TRM Evaluation Activities
  - TRM TAC has been talking about air source heat pumps, expecting to do more research in 2023. Going to continue to pursue some IQ appliance baselines compared to the federal market baselines we normally use. Some limited opportunities for some parameter updates from the market study. A couple nonresidential lighting updates – updated workpaper for incremental costs, and characterizing mogul lighting. These evolve as needed throughout the year
- NEI Scopes
  - Already covered earlier in the presentation. Continue to look at timing and budget for updating societal NEIs – expect that in 2024. On the business side, no additional current NEI research planned.

[Chris Neme] On economic impact studies, interested in looking at the methodology.

- [Celia Johnson] Will add this as a discussion topic for 2023 in the NEI Working Group.
- 2023 Evaluation Budget
  - Split between initiative specific and portfolio. Tends to be driven by size of initiative. All budgets are split between electric and gas. Some is reserved for adhoc requests that emerge.
  - Graph of evaluation budget breakdown high level and tentative. Doesn't include VO which is budgeted and funded separately. Will have details in the written draft. As Tyler mentioned, this is a big year for the Business side. Cross-cutting bucket includes cost-effectiveness, SAG engagement, evaluation planning, budget holds for ad-hoc, etc.

## **ComEd Evaluation Plan**

Jeff Erickson, Guidehouse

- ComEd's evaluation schedule is running ahead of the Policy Manual schedule. The intiail draft was shared with SAG in late October. One more week will be provided for review. The second draft will be shared December 20<sup>th</sup>, with those who commented on the first draft.
- General overview of size of programs based on ComEd budgets and persisting MWh savings: Residential is about 33% of savings and business is 55%. VO is funded differently so no ComEd budget shown because it doesn't come from the EE budget.

- Overview of evaluation plan budget. Impact reporting for business and residential and IE is most of it. Research is similar to the cross-cutting in Ameren's presentation – effective useful life research, TRM cost-effectiveness analysis, some NTG work, some crosscutting impacts, etc. Some pilots separately and a variety of other things.
- Residential and Income Eligible Evaluation
  - The residential sector is broken out into 7 programs, and combines Income Eligible (IE) and market rate activities within those programs. ComEd thinks of it as direct to consumer and channels. In terms of SF and MF upgrades, that's auditors and evaluators in the field. Behavior is the home energy reports program. Channels set of programs is a little bit upstream of that – products at point of sale, product distribution through kits and food banks, new construction affordable housing, and finally the contractor/midstream program. Broadly referred to as the ComEd Energy Efficiency Program. All the IQ services are embedded within the 7 programs and the evaluation reports will differentiate and be transparent about market rate vs IE.
  - The next slide drills down deeper into the 7 programs and the components. Light green are the program components that support IE savings, and light blue is both IE and market rate users. What you can see is the SF and MF upgrades have several IE activities. In particular the MF upgrades has two broad based programs for IE and then public housing upgrades that will be disaggregated in the final reports. Retail online has a number of approaches including the efficient choice model that was already spoken to. In addition, a new midstream appliance recycling component purchasing used refrigerators from used appliance retailers before they are sold in low-income communities. Looking forward to evaluating that one.

[Chris Neme] Can you say more about the appliance recycling – going to retailers of second-hand refrigerators and buying them? What is getting sold instead? Is it coupled with supplying an efficient new refrigerator?

- A: Removing the inefficient used refrigerators.
- [Chris Neme] Is it testing those to determine which ones to remove?
- A: There is a protocol based on age and operation to determine whether it is a qualifying unit.
- [Chris Neme] Will follow up with ComEd on program design.

[Karen Lusson] There are stipulation reporting requirements on IE weatherization – to the extent that equity reporting requirements exist or are in development, there will be more tracking in this plan. Is that a role for the evaluators or in house by utilities, or by implementers?

- A: There will be some aspects where the evaluation is reporting in the impact reports we will separate out IE and market rate savings. Now, as to breaking it out finer, that will be on the ComEd side probably but we haven't had a lot of conversation about that. If things are needed beyond the impact reporting, that's still a conversation to be had.
- The next slide illustrates the plan for evaluating all the programs. The Plan 6 programs that have less share of savings will get a full impact evaluation every other year, will be using CY2022 realization rates in 2023 savings. That will allow us to allocate those funds to other research projects. That's why this is broken up as it is. For every year and every program, there will be a full program tracking database review – including SF and MF

programs – and confirm the values are within the bounds we expect. No thermostat with a MWh of savings or anything like that.

• For the NTG, you'll see in 2023 we are doing NTG for contractor midstream, MF and appliance recycling and appliance rebates and Efficient Choice component. Due to lighting smaller role going forward, not doing NTG on that right now.

#### [Phil Mosenthal] Does retail include NTG for smart thermostats?

- A: That will happen within retail discounts. Yes, there will be NTG smart t-stat research.
- [Phil Mosenthal] That's a high priority area because we are currently using defaults.
- A couple of points on SF program and MF program and new construction all include whole building Wx services. Where some of these programs have different implementation approaches, our evaluation approaches and sampling approaches are tailored to those component implementation plans.
- To the core/foundational programs, ComEd is implementing a number of pilots. Expect to be claiming and evaluating savings in 2023 for the ones shown. The electrification requirements and targets will get reported out in single family. I believe the intent is to report those in both SF and MF program based on building type.
- There is an additional research project on Co-Delivery of programs. This came from an IE program request about combining bill assistance with EE. This has grown to include DR, EVs, storage, etc. Doing background research with utility contacts and will be putting together a report to help with design choices.
- IE Multifamily Research project will start later in 2023, to meet the stipulation agreement. Will use a couple of methods to reach out to stakeholders, non-participating building managers, and best practices research. Want to understand where the gaps are and the best practices, we can dial in to improve those services.

# [Karen Lusson] As part of the research, would suggest you talk to folks at the LEAN network in Massachusetts. That program is really the gold standard nationwide in terms of outreach, successful completion of MF LI Wx.

- Business Program Evaluation
  - ComEd has consolidated to 7 main programs. From past years, some of the measures have been combined into existing programs or merged into a new program. Small business is one of the main programs, including Kits. Custom and Standard are offered as Incentives. Targeted systems is RCx and industrial. Midstream includes instant discounts and offered a new Commercial Food Service that was a pilot. Then there are the Behavior, New Construction and Assessments. Broad mix of how we will evaluate. Will do impact evaluation for all of these programs.
  - Breakdown of the components for each Program. Street Lighting is now under Standard. RCX, Industrial, BOX and VCx are all under targeted.
  - On Pilots and Market Transformation these are designed to test innovative technologies. Guidehouse will do evaluation on all pilot programs shown in 2023. Also will provide evaluation support on pilots and MT that aren't claiming 2023 savings will help identify the potential to claim savings in later years.

 NTG evaluation timeline – will report NTGs for everything except Targeted Systems in 2023. Those will be in 2024. Commercial food service will be in 2024 as well.

[Phil Mosenthal] Will there be research in the Standard program on lighting?

- A: We will doing the Standard research in Q2-Q3 2023 continuing into 2024. Depending on which lighting measures will be implemented.
  - Business Research two areas Compressed Air Repair EUL continuing; second is for the Business Energy Analyzer. Customers for BEA program research get energy use analysis and we want to understand what measures are implemented by the customers. The steps are shown on the slide.
- Special Topics Research
  - Non-Energy Impacts this has been ongoing. Economic & employment; Societal Health, Participant Impacts. Looking at reduced medical visits, missed work & school as part of identifying individual participant impacts. Tight timeline on the economic and employment impacts.
  - PJM Research support annual capacity resource reporting to PJM. Bidding and demonstrating savings. Demonstrate their savings to PJM and plan for future bidding.
- Evaluation Approaches
  - We do impact work of varying levels on every program every year. NTG is done in waves. Lots of ongoing research.
  - Impact evaluation approaches the basics for most programs. We've moved to a system for a number of years that will help implementers improve their tracking and projections and helps the realization rate.
  - Evaluation coordination Zach also presented this we work closely in conjunction where it makes sense and compare notes and approaches. We meet regularly, both individually and as part of SAG working groups.

#### [Phil Mosenthal] You mentioned TRM measure research – are there specifics?

- A: Will follow-up.
- [Phil Mosenthal] Might be worth a deep dive on heat pump performance and savings.
  - A: For heat pump performance we are reviewing work papers and it's on our radar but the exact nature of the work is still TBD.

# **Closing & Next Steps**

Celia Johnson, SAG Facilitator

- The ComEd Draft Evaluation Plan will be circulated for comments for 1 more week.
- The Ameren IL Draft Evaluation Plan will be shared for comment December 15<sup>th</sup>.