

Illinois EE Stakeholder Advisory Group Market Transformation (MT) Savings Working Group Meeting

Wednesday, October 25, 2023
10:00 am – 12:00 pm
Teleconference

Attendees and Meeting Notes

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Meeting Materials

Meeting materials are posted on the [October 25 meeting page](#):

- [Ameren Illinois Presentation: Luminaire Level Lighting Controls MT Initiative Business Plan Summary](#)
- [Slipstream and MEEA Presentation: Stretch Energy Codes & Building Performance Standards](#)
- [Nicor Gas Presentation: High Performance Windows](#)
 - [High Performance Windows Logic Model](#)
 - [High Performance Windows Market Progress Indicator Table](#)

Attendees

Celia Johnson, SAG Facilitator
Caty Lamadrid, Inova Energy Group (SAG Meeting Support)
Adriana Kraig, Opinion Dynamics
Alison Lindburg, MEEA
Allen Dusault, Franklin Energy
Andrey Gribovich, DNV
Andy Vaughn, Leidos
Anna McCreery, Guidehouse
Bahareh van Boekhold, ILLUME Advising
Brady Nemeth, Resource Innovations
Brent Nakayama, Leidos
Chris Neme, Energy Futures Group, representing NRDC
Corey Grace, Resource Innovations
David Brightwell, ICC Staff
Diana Fuller, Walker-Miller Energy Services
Elizabeth Horne, ICC Staff
Ellen Rubinstein, Resource Innovations
Erin Stitz, Applied Energy Group
Hannah Collins, Leidos
Hannah Howard, Opinion Dynamics

Isabella Gross, MEEA
Jane Colby, Apex Analytics
Jeannette LeZaks, Slipstream
Jim Fay, ComEd
John Lavalley, Ameren Illinois
Jonathan Skarzynski, Nicor Gas
Jeff Harris, NEEA
Kegan Daugherty, Resource Innovations
Kevin Grabner, Skytop Consulting
Maddie Koolbeck, Slipstream
Maddie Liput, MEEA
Mark Milby, ComEd
Matt Armstrong, Ameren Illinois
Michael Brandt, Elevate
Molly Graham, MEEA
Nicholas Crowder, Ameren Illinois
Nick Leritz, NEEA
Nick Warnecke, Ameren Illinois
Philip Mosenthal, Optimal Energy, representing IL AG and NCLC
Rick Tonielli, ComEd
Randy Opdyke, Nicor Gas
Rita Siong, Resource Innovations
Seth Craigo-Snell, SCS Analytics
Shane Perry, Ameren Illinois
Stu Slote, Guidehouse
Tim Dickison, Ameren Illinois
Tina Grebner, Ameren Illinois
Victoria Nielsen, Scott Madden
Wayne Leonard, Guidehouse
Zach Ross, Opinion Dynamics
Zack Tyler, Opinion Dynamics

Opening & Introductions

Celia Johnson, SAG Facilitator

Purpose of the meeting:

1. To educate participants on progress of the Luminaire Level Lighting Controls MT initiative;
2. To educate participants on progress of the MT code initiatives; and
3. To educate participants on the high performance windows MT initiative.

Luminaire Level Lighting Controls (LLLC) Update

Nic Crowder, Ameren Illinois

- **Purpose:** To educate participants on progress of the Luminaire Level Lighting Controls (LLLC) Market Transformation (MT) initiative.
- **Materials:** [Ameren Illinois Presentation: Luminaire Level Lighting Controls MT Initiative Business Plan Summary](#)
- Presentation covers progress made in the development of a business plan for MT for LLLCs.

- Slide 5 – Newly framed supporting documents and components of MT initiative. We will discuss what has been done so far for this effort and where it is headed.
- Slide 8 – Program plan or market transformation hypothesis or program theory of change. All terms have equal meaning and serve the objective of determining how interventions lead to change in the market. Barriers to adoption are identified, as well as activity outcomes, and metrics to measure progress.
- Slide 9 – Describes program theory of change and three barriers that have been identified.

Chris Neme: Have you developed a market assessment of what the baseline is that also feeds into market barriers?

Nick Crowder: Yes. Our evaluator conducted a baseline survey, and we also leveraged other regional research performed by various energy efficiency organizations to identify these barriers. The barriers identified are a combination of regional survey responses and national research.

Chris Neme: Is this focused on Ameren's territory?

Nick Crowder: Yes, but it could be expanded in the future. For now, the calculations used take into consideration the make-up of Ameren's service territory.

- Slide 10 – Desired market outcomes include increased awareness of LLLCs on the target market, increased installation of equipment, leading to increased stocking from distributors and accelerated adoption.
- Slide 11 – Logic model

Chris Neme: How do you define "awareness"?

Nick Crowder: Awareness is the knowledge that the equipment exists. Familiarity is a higher level of information and understanding of how the equipment works and how it saves energy. These are two categories of understanding.

- Slide 12 – Awareness is increased, then customers asking about it, then installers ask about it, then we offer training to increase familiarity. If installers are familiar with LLLCs, then they can recommend equipment and make customers aware as well. Familiarity is a necessary step for ultimate installation and adoption.

Chris Neme: Is this limited to LLLCs, or does this include Network Lighting Controls for additional non-energy benefits (NEBs)?

Nick Crowder: I agree network lighting controls can provide additional benefits, but right now this effort seeks only to address LLLCs. We might consider expanding down the road. In our trainings we cover different functions and features beyond energy savings, for example energy tracking, data logging, asset tracking etc. Not all LLLCs do all of these things, but we do train on all of it.

Jeff Harris: In terms of non-energy benefits, it seems it is an important component of helping the market overcome first-cost barrier. I would suggest that if this is an important part of the logic, that it be more explicitly described.

Nick Crowder: I agree that is an important piece, but it feels that that value proposition might fit better in the implementation side as opposed to the logic model. Let's keep discussing and we'll take feedback on the business plan.

Jeff Harris: The NEBs are a critical part of sale to the market and that training, education, and sales materials should highlight it. I think if that is a key point of what would help break market barriers, it should be articulated as part of Program Theory of Change.

Nick Crowder: In our surveys we also found that there are other customers that are focused solely on the energy benefits. However, we end up writing it in the business plan, we want to do it in a way that does not leave out that market.

Chris Neme – via chat: I completely agree with Jeff Harris' point. About calling out more specifically in the logic model the importance of familiarity with both (1) energy impacts and (2) non-energy benefits.

Chris Neme: I saw a score for 3.5/5 for awareness but I wonder if in the near term strategy, it makes more sense to strive for a higher level of familiarity from a few contractors, rather than moderate familiarity from every contractor.

Nick Crowder: This will likely evolve. Not sure it is worth spending time down in the weeds and determining what this number looks like when it is four years down the road.

Chris Neme: Should the goal be a handful of distributors spread out across the service territory that are highly familiar? It's a different type of goal.

- Slide 14 – Energy Saving Framework. LLCs are used in a diverse ways, but we have to have weighted numbers to have a single representation. Using the 20202 Ameren Illinois Market Potential study we came up with building prevalence of multiple building types and used this to come up with a TRM equation for savings.
- Slide 21 and 22 – Evaluation Plan is focused on both process and impact. We do have a review of market baseline, estimation of savings, and other activities.
- Slide 24 – Algorithms that evaluators proposed to use to estimate savings.

Chris Neme: it looks like you are forecasting a market uplift of 0.02% in 2025 and 0.6% in 2023. Is this aggressive enough for a market that does not have a lot of traction right now? uplifting the market by less than 1% seems minimal. Can you comment on how you developed your forecast of market uplift.

Nick Crowder: These are conservative goals. There are some variables detailed in the slide deck and they are conservative. It's hard to say what is going to happen 15 years down the road, so we try to figure out what that range is with a minimum and a maximum. I think this is one of those things that we need to keep looking at and evaluate.

Chris Neme: It might be worth looking at other states with aggressive efforts to promote LLCs and see what they have accomplished.

Nick Crowder: I will take it back to the team and we'll review the conservative variables again. We'll adjust before we release the business plan to the group for review.

Phil Mosenthal: Second Chris' comments. I think the projections are low and the baseline projections are also low. I suspect the market will evolve faster than that. Look at CT because they recently started promoting higher incentives for prescriptive lighting with LLCs and they are getting about 50% of lighting adopted with Network Lighting Controls.

Seth Craig Snell - via chat: Nicholas, Great job moving your way through this material. I encourage SAG participants to take a deep dive into the materials that Ameren is providing and engage further with this effort. A lot of coordinated work has gone into this effort across the implementation team and the evaluation team using Attachment C of vol. 4 of the IL TRM as firm guidance for the process.

Rita Siong – via chat: Chris thank you for those reference points. we did look at those and if you have additional ones, please point those our way.

Chris Neme – via chat I might also suggest talking to my EFG colleague Dan Mellinger who has been working on LLC and NLC for years and may have other examples of ramp up that are potentially useful references. Also want to say that I'm really happy to see Ameren pursuing MT for LLC and for doing a good job on developing an MT framework for it. My comments are only intended to support fine-tuning of the focus of the effort and to suggest that the initiative should be more ambitious.

Stretch Codes and Building Performance Standards Update

Jeannette LeZaks, Slipstream and Alison Lindburg, Midwest Energy Efficiency Alliance

- **Purpose:** To educate participants on progress of the MT code initiatives.
- **Materials:** [Slipstream and MEEA Presentation: Stretch Energy Codes & Building Performance Standards](#)
- Two types of advanced building policies, one is stretch codes and another one is Building Performance Standards (BPS). For IL there will be a statewide stretch energy code that will be adopted starting next summer, we've been working for this. For BPS we have a couple municipalities that have benchmarking which is a precursor to BPS.
- As background, Slipstream/MEEA are contracted through joint-utilities to engage municipalities to adopt and implement these two advanced bulging policies and train them. Work has been ongoing since 2018.
- A task force has been created through the Metropolitan Mayors Caucus. We have been having quarterly meetings and doing one-on-one work with some municipalities. We also give feedback and guidance to utilities from what the municipalities say.
- These are policies that need to be adopted at municipal level, so in some ways we are reliant on the municipalities' goals and desire to take policies to next steps but it does not mean utilities cannot take a role. There are two ways utilities can support these policies. The role can be to provide incentives and make sure municipalities have tools they need to share with their constituents.
- Because there are long-term implications with long-term horizons, we are assuming this is a MT framework.
- MEEA/Slipstream are working on energy savings framework and logic model while Guidehouse is working on Program Evaluation plan. Our goal is to present these in early 2024 to the Working Group (February).

- We are at the tail end of process for data collection to produce a market baseline and Energy Savings Framework (ESF). We have completed interviews and surveys with municipalities to understand the impact of utility assistance on adoption.
- Natural market baseline should be measured in terms of total square footage building to stretch code or BPS.
- Intent of data collection is to estimate the natural market factors and utility interventions that impact a municipalities decision to adopt.
- Perceived barriers are cost concerns in terms of adoption as well as education needs, and there is also a perceived lack of benefit, and some municipalities are experiencing stakeholder pushback.
- Many municipalities feel like this is not in their near-term horizon, so we are focusing our efforts on seeing how utilities and step in here and help move this.
- Our next step is to finalize data collection and final feedback and then we'll work internally on natural market baseline calculations by end of year and the program logic model.

High Performance Windows Update

Randy Opdyke, Nicor Gas

- **Purpose:** To educate participants on the high performance windows (HPW) MT initiative.
- **Materials:** [Nicor Gas Presentation: High Performance Windows](#)
 - [High Performance Windows Logic Model](#)
 - [High Performance Windows Market Progress Indicator Table](#)
- We are going to share two components of TRM energy savings framework.
- HPW design, we have specifications of what new design ENERGY STAR v7 performance windows looks like across the climate zones in IL.
- Focusing on HPW now because most homes windows are the weakest part of building envelope which results in poor building performance and energy use. Current code compliant windows are around R3 factor and this has not changed in two decades. There are many market barriers to adoption of high-performance windows, including that they are expensive products. Market penetration right now for these HPW is only 2%.
- In the TRM there is a savings protocol process. We are in the early phase of research to figure this out for HPW and trying to finish logic model and market progress indicators.
- The IL TRM HPW workpaper has recently been updated. We invite stakeholders to look at it and provide feedback.

Chris Neme: For Illinois baseline conditions I would assume that the U value is worse for existing buildings, I think you are assuming new buildings.

Randy Opdyke: I believe the TRM lists something different for new construction and for existing. Need to confirm.

Brady Nemeth: I agree, I think there are some weird quirks about the IL TRM that we got pushback on from TRM Administrator. Recommend this be followed-up on in [a future] TRM discussion.

- Logic model was started in 2021 and developed in partnership with several utilities and organizations. This logic model is shared as part of meeting materials.

Chris Neme – via chat: High performance windows also make homes much quieter (less ability to hear street traffic, etc.).

- The logic model translates into short, medium, and long-term outcomes. The high impacts we are looking for is for ENERGY STAR v7 to be adopted by code, and expanding the market share of v8 windows.
- Market progress indicators are critical for the process. There are 23 total market progress indicators that connect to outcomes of logic model. This helps Guidehouse understand how to evaluate it, and us understand how to come up with natural market baseline without utility intervention. We are requesting feedback on this.
- Next steps to get to a final business plan is to get the energy savings framework and the evaluation plan. We are working with Guidehouse as we go into 2024.
- We plan to have the NMB and evaluation methodology for review in Q1 of 2024.

Chris Neme: Is this limited to Northern IL?

Randy Opdyke: In early efforts we had shared investment with ComEd and Ameren on market characterization. To me this is statewide, and covers both gas and electric. Nicor gas has done the majority of the investment to get the initiative going but open to partner and collaborate. MEEA has done a lot of work outside of IL.

Keagan Daugherty: To build open the partnership for advance windows solutions, we worked on identifying consistent program approaches and considerations but there was not a direct co-funding effort. This work that Randy presented is focused on the IL MT framework and are hopeful utilities work together in the future, because there is opportunity for everyone.

Brandy Nemeth – via chat: There are also some regional coordination efforts with MN CEE who have (very recently) gotten a handful of utilities in MN to include incentives for HPW in 2024.

Closing and Next Steps

Celia Johnson, SAG Facilitator

1. Nicor Gas requests feedback on two documents related to the High Performance Windows MT Initiative:
 - [High Performance Windows Logic Model](#)
 - [High Performance Windows Market Progress Indicator Table](#)
 - **Comments are due by Wednesday, November 8th**. Send comments to Randy Opdyke, Nicor Gas (rwopdyke@southernco.com) and CC me (Celia@CeliaJohnsonConsulting.com).
 - For additional background on this initiative, review the presentation from this morning: [Nicor Gas Presentation: High Performance Windows](#)
2. Ameren Illinois will share the Luminaire Level Lighting Controls MT Initiative Business Plan soon for Working Group feedback.
3. The next Working Group meeting date is TBD – options include December (if follow-up from the October meeting is needed) or Q1 2024