

**Illinois EE Stakeholder Advisory Group
Market Transformation Savings Working Group
Wednesday, July 22, 2020
10:30am to 4:00pm
Teleconference Meeting**

Attendees and Meeting Notes

Attendees (by webinar)

Celia Johnson, SAG Facilitator
Samarth Medakkar, Midwest Energy Efficiency Alliance (MEEA) – Meeting Support
Matt Armstrong, Ameren Illinois
Brett Bridgeland, Slipstream
Chris Burgess, MEEA
Lauren Casentini, Resource Innovations
Kegan Daugherty, Resource Innovations
John Davis, PSD Consulting
Leanne DeMar, Nicor Gas
Nick Dreher, MEEA
Julie Drennen, Center for Energy and Environment
Lucy Duarte, Ameren Illinois
Gabe Duarte, CLEAResult
Allen Dusault, Franklin Energy
Greg Ehrendreich, MEEA
Jim Fay, ComEd
Scott Fotre, CMC Energy
Margie Gardner, Resource Innovations
Alex Ghanem, PSD Consulting
Jean Gibson, Peoples Gas & North Shore Gas
Jon Gordon, Enervee
Molly Graham, MEEA
Randy Gunn, Guidehouse
Scott Hackel, Slipstream
Jeff Harris, Northwest Energy Efficiency Alliance (NEEA)
Jan Harris, Guidehouse
Amalia Hicks, Cadmus Group
Karen Horkitz, Cadmus Group
Hannah Howard, Opinion Dynamics
Laura James, Cadmus Group
Cheryl Jenkins, VEIC (IL-TRM Administrator)
Jim Jerozal, Nicor Gas
Kara Jonas, MEEA
Ross Kiddie, Cadmus Group
John Lavalley, Leidos
Nicholas Leritz, NEEA
Alison Lindburg, MEEA
Beth Littlehales, NEEA
Todd Malinick, Opinion Dynamics
Karianne McCue, Nicor Gas
Mark Milby, ComEd

Abigail Miner, IL Attorney General's Office
Jeff Mitchell, NEEA
Phil Mosenthal, Optimal Energy, on behalf of IL Attorney General's Office
Chris Neme, Energy Futures Group, on behalf of NRDC
Rob Neumann, Guidehouse
Randy Opdyke, Nicor Gas
Patricia Plympton, Guidehouse
Christina Pagnusat, Peoples Gas & North Shore Gas
Stacey Paradis, MEEA
Michael Pittman, Ameren Illinois
Reine Rambert, MEEA
Marci Sanders, Resource Innovations
Anthony Santarelli, SEDAC
Leah Scull, CLEAResult
Mark Szczygiel, Nicor Gas
Rick Tonielli, ComEd
Taso Tsiganos, IL Attorney General's Office
Ken Woolcutt, Ameren Illinois
Fred Wu, Aiqueous
Teresa Lutz, Michaels Energy
Chris Vaughn, Nicor Gas

Meeting Notes

Follow-up items are indicated **in red** and summarized at the end of the notes.

Opening and Introductions

Celia Johnson, SAG Facilitator

The purpose of the July 22nd meeting:

1. To hold a follow-up discussion on market transformation policies; determine next steps.
2. To provide an overview of the ComEd Retail Products Platform initiative.
3. To educate Working Group participants on the joint utility Stretch Codes and Building Performance Standards Project.
4. To educate Working Group participants on the Code Compliance Market Transformation Implementation Plan.

Market Transformation Process Overview

Celia Johnson, SAG Facilitator

- Working Group Purpose
 - Forum to discuss issues related to MT savings evaluation an estimation, opportunity to review specific initiatives and reach consensus on savings approaches for MT initiatives that may be included in the IL-TRM
- Consensus on Savings Protocols
 - We haven't had any savings approaches proposed yet
 - Will hear some savings options this afternoon for Code Compliance
 - Reminder on process to discuss savings protocols
- TRM V 9.0
 - Development coming to an end in August.
 - If there is a savings approach that needs to be included in TRM V9, we would need consensus no later than Sept. 1 2020.

- Reviewed Proposed edit to Attachment C
- Process for Consensus on Policy Issues
 - This process is in existence when the Policy Manual update process is inactive. Policy Manual Version 2 was approved in Dec. 2019.
- Where this is Working Group going in 2020?
 - One more meeting scheduled – later September
 - Does there need to be another meeting? To discuss plan for 2021? Interested in feedback.
 - Shared Tentative topics for future meetings

Market Transformation Policy Discussion

Margie Gardner, Resource Innovations

- At the last Working Group meeting [May]. a number of questions were asked about stakeholder involvement in proposing MT initiatives and understanding progression of group.
- The draft proposal to be discussed today will also be reviewed with the Midwest MT Collaborative – to inform stakeholders in other states in addition to Illinois.
- Margie will walk through the outreach strategy and the answer specific to questions raised by stakeholders.

Draft MW MT Outreach Strategy

- Understand goals of collaborative
- Instigate process for updating stakeholders over time
- Process for stakeholders to propose ideas

Engagement

- 3-prong approach
 - Q/3 or Q4 – webinar to brief stakeholders on collaborative updates and receive input (kick-start)
 - Repeat this meeting annually.
 - MT ideas submission – along the lines of SAG EE Ideas

Initiative Submission Process

- Modelled loosely on SAG call for ideas
- Set of tasks:
 - Set expectations
 - Understand intricacies of budget. Different budget cycles may limit coordination or utilities
 - Online Forum to submit ideas
 - Follow-up on clarifications
 - It's very hard for proposers to understand deeply the MT criteria
 - Proposals resented to MW Collaborative and make decisions
 - Whatever is the outcome, a review provided annually (via webinar)

[Discussion]

[Chris Neme]: Because this is a regional process, to some degree, wondering how: 1. Transparency on how decisions are made (proceed or not). How will it be made clear why decision was made. 2. Wondering how to integrate this with the IL portfolio planning process where stakeholders engage with utilities around their 4-year plans. Programs pursued under them. Don't want to hamstring the regional process, but on the other hand a little nervous about a regional process taking the ability to have prioritized discussions outside stakeholder group.

[Margie Gardner]: There are qualities that make a successful program: portfolio consideration, etc. The MT initiatives would have clear criteria for applying efficacy and budget. On transparency, if there's another meeting needed to review ideas and feedback, welcome to hold such a meeting

[Chris Neme]: So public documentation on rationale for yay or nay?

[Margie Gardner]: Haven't discussed this but confident that there would be a set of slides that would say why these proposals didn't progress.

[Chris Neme]: The devil is in the details. It's great that there's clear criteria, been around the block to know that it's impossible for everything to be approved. Are opportunity briefs open to stakeholders to review and comment?

[Margie Gardner]: Yes, they are public and yes there will be an opportunity to provide feedback. Keep in mind that there shouldn't be a lot of resources allocated to ideas that don't meet the mark.

[Chris Neme]: Agree that it's important to strike a balance.

[Margie Gardner]: Hopeful that once this process starts it will be less abstract and more tangible. On integrating with the SAG planning process; we want to connect or integrate via website that there's this MT process. Coordinate once every 4 years is too infrequent. Doesn't preclude anything in Illinois.

[Chris Neme]: We know that starting this fall, many will be in settlement discussions with the utilities. In past planning cycles it included discussion on stakeholder interested in certain programs. Is there something about this process that will effectively make it challenging to have conversations on MT initiatives? What if a decision was made 2 years ago and it's a done deal; understanding that MT decisions not driven by portfolio calendars, how do we structure a process that ensures that decision which initiatives we move forward with is consistent with the where the rest of the stakeholders are.

[Margie Gardner]: Sees the IL planning process driving the MT decisions. Utilities will be filing plans. Certain budgets will be allocated for MT. What may have to happen, you have to invest in something and allow breathing room to allow ideas to come up. Consider that budget openings are possible because of new info that may inform programs.

[Stacey Paradis]: If we have interest in 3 states, no one's on the same cycle – the opportunity in MI is that they have provided interest in MT through R&D money. Goal is if there's some money in the plan, we can plan for this better going forward. Right now, focus in IL, MI, MN.

[Kristol Simms]: There will be a line item for market transformation in the proposed Plan budget but because we're so early in the process that's is currently uncertain. As we decide on which MT efforts to move forward with, there will be opportunities to have those discussions. I don't think there's going to be defined MT efforts before March of next year. Next 4-year cycle, starting in 2026, may be more defined.

[Chris Neme]: Briefing discussion could resolve this as long as certain decisions about moving forward have not already been made.

[Margie Gardner]: There are some decisions that are evolving. Once you see which initiatives are in which state, it will help where things are.

[Stacey Paradis]: We still have to meet with the MT Collaborative to discuss this outreach proposal. Intention is to be transparent, present conversations to date, expand on what's been considered, why activities were a go or no go.

[Jeff Harris]: There may need to be some provision in the new idea intake process to protect confidential info.

[Margie Gardner]: When we post docs publicly, no proprietary info will be disclosed.

Illinois-Specific MT Considerations

Q: How will Non-utility stakeholders to provide feedback on initiatives?

- Stakeholder process similar to emerging tech.
- Begins with the funnel for bringing ideas
 - Phase 1: initial assessment using available info. Score ideas and take the top priority ideas and produce opportunity briefs. To convey what the MT play is here, how to get leverage out of this market, initial gleanings of opportunity brief
 - Decision 1: Which ideas are worth drafting opportunity briefs for?
 - Phase 2: Is it worth developing business plan; several have been offered but few have moved to business plan stage
 - Phase 3. Design and testing – collect data. Costs considerable amount of resources. This feeds into a full business plan. TRM Attachment C and Appendix B include MT items on business plans.
 - Decision 2: Worth scaling? If yes...
 - Move into implementation.
 - Decision 3: Continue to adapt or terminate?
- Likely the opportunity briefs are presented to SAG. At the point of decision 1, this would go to SAG. Then present business plan based on SAG's feedback. Business plan is the strategy and approach. Implementation is statement of work, schedule and budget. Written up more of utility work plan to get contracts in place.
- There were some legacy programs from DCEO. I.E. enhanced code compliance, IL Home Performance, commercial food service. They were in various stages of implementation. For example, so much was known about enhanced code compliance

that it moved all the way to phase 3. So not everything starts on the left. But there will be opportunity briefs produced for each so this will flow accordingly.

Q: Who will implement MT initiative?

- Proposing that phase 1 and phase 2 are developed together to coordinate among utilities. Proposal is funders of initiatives decide. It may be any number of utilities, but they will decide do we want to do everything together or parts independently. And what will be bid to. There may be times where pieces or the whole program contracted out.
 - How will non-utility stakeholders be allowed to provide feedback as initiatives evolve?
 - SAG meetings provide good opportunities to update on MT initiatives.
 - Annual MT Collaborative webinar proposal would also address this
 - How are the nat. market baselines – who and how?
 - Nat market baselines are integral in the business plan. One of the costs to develop a business plan.
 - In TRM, evaluators who will be involved in developing this.
 - Need to use the best data available; intent that evaluators should be consulted.
 - Assuming it passes this step, the plan would be brought to stakeholders along with natural market baseline.

[Discussion]

[Phil Mosenthal]: Doesn't explicitly include this but it could be implied that counting savings would be deemed and want to understand if that's in fact a part of the proposal or this independent on how we count savings.

[Margie Gardner]: Refer back to Attachment C – take total market units and subtract from that baseline. It's important to agree on baseline and that's why it's embedded in TRM.

[Phil Mosenthal]: You certainly can evaluate natural market baseline after the fact rather than just later. Are we locking in natural market baseline?

[Margie Gardner]: At the time of launch we make or best estimation of market baseline. If there are changes that need to be made, we can bring this info to make this change. Yes, there can be changes in the future.

[Question]: What if there is no consensus on baseline or savings per unit?

[Margie Gardner]: This is difficult. What we're proposing: a plan will be developed that is agreeable. It's important to have discussion whether the stakeholders can support the utilities moving forward. There was an alternative proposed: a panel of EE experts, but that idea hasn't been discussed a lot. It's difficult to have external experts to understand the discussion to date.

[Question]: What is the process for considering and adopting prospective modifications?

[Margie Gardner]: As info emerges in the world, this can be done by either utility for stakeholders raising it. Changes would be applied prospectively. For example, maybe

there's a substantial change in policy, i.e. codes or standards. This would slow or speed up code or standard adoption cycle. Another example: a program is taking longer to launch and the market is moving meanwhile.

[Question]: After budget is in place, what is the proves for significant budget change?

[Phil Mosenthal]: In the case of MT, you could be implementing program in 2020 that you could anticipate results for which in 2024. If in 2023 we decide there's a change in the natural market baseline, how is prospective change made?

[Margie Gardner]: This would impact 2024 and going forward. Not change the past.

[Jeff Harris]: We have had changes occur that are in many cases adjusting the NMB downwards. A lot of us are optimistic and assume that there's going to be market uptake and frequently we find that the NMB exceeds the market response. The question becomes in this case do you want to adjust savings retrospectively. Margie assumes this would be developed on an exception basis.

[Jeff Harris]: There should be a way of dealing with exceptions.

[Chris Neme]: We have to think through what this looks like. I don't think there is a mechanism for retroactive adjustments.

[Phil Mosenthal]: True based on a policy we all agreed on and that could be changed.

[Chris Neme]: if we're going to address Jeff's point, we need to discuss what that looks like. Currently there's a symmetry.

[Phil Mosenthal]: I want to make sure the utilities understand that this does present more risk than the traditional approach.

Public Availability of MT Documents

[Discussion]

[Celia Johnson]: You've laid out the three development stages for a market transformation initiative. Are these required steps or are there scenarios where a phase would be bypassed?

[Margie Gardner]: Certainly, exceptions may be made. For example, if a utility joins an existing initiative, there would be a melding of documents.

[Chris Neme]: For opportunity briefs; how does decision to draft brief get made and who does drafts it?

[Margie Gardner]: Early on we brought in the legacy programs. Later we asked the MT Collaborative for ideas. There was funding in the collaborative for 3 or 4 opportunity briefs.

[Stacey Paradis]: We have a full MT Collaborative meeting coming up in August. We're going to go through this external outreach strategy. Also going to raise a "2.0 version" of the MT Collaborative. This might change the role on who's lead. Something we're working with utilities on.

[Chris Neme]: You mentioned a set of criteria for screening. Is that going to be shown later?

[Margie Gardner]: This would be presented during the introduction outreach webinar [MT Collaborative].

[Leah Scull]: Question about soliciting process. Sounds like there are a lot of different opportunities for R&D ideas. ClearResult has a process, not technically MT, and it seems like these processes are solid but somewhat similar. Does anyone have thoughts on coordinating process for similar requests for ideas?

[Margie Gardner]: The R&D has slightly different screening criteria. Among utilities, if there are R&D projects happening, let's look at them with the MT lens.

[Leah Scull]: What about an MT idea that would be a better fit with R&D?

[Margie Gardner]: I would imagine that this decision would come through the utilities.

Next Steps: SAG Facilitator will send the draft outreach/process document to Working Group participants again for feedback and questions (10 Business Days).

Market Transformation Policy Resolutions Document

- Nick Dreher: Celia circulated the final draft policy resolutions document, discussed issues since fall of 2019 [last version discussed at the May Working Group meeting; no comments were received]. We would like to consider these policy resolutions more or less final.
- Celia Johnson: A few stakeholders raised concerns about finalizing market transformation policies previously discussed, without also finalizing the process questions.
- **Next Steps: SAG Facilitator to reach out to stakeholders and utilities about finalizing MT policy resolution.**

ComEd Retail Products Platform Update

Rick Tonielli, ComEd

- Will discuss:
 - Overview of Energy Star RPP
 - Barriers to Efficiency for RPP
 - Potential Strategies to Overcome Barriers
- Incentive to retailers does not need to be huge. Since retailer's margin is likely small, incentive will be substantial relative to margin.
- Combine efforts of program sponsors and retailers nationally:
 - Increase program scale
 - Influence standards, specifications and test procedures
 - Collect data to inform program
 - Develop product tiers

Overview of RPP

- MT initiative designed to encourage or influence retail product manufacturers to build EE into product design
- Developed and managed by NEEA
- Reviewed products currently included in RPP

Reviewed ESRPP Program Sponsors and How RPP Works

- Scope of ESRPP sponsors, with the addition of ComEd now encompasses 18.2% of US residential households.
- Retailer incentives are fundamental driver
 - In return, retailers share sales data
- Goal: Long-term, lasting change in market. Standards will get tighter and demand for EE products will increase.

Product Categories

- ComEd is targeting clothes washers and refrigerators
- Reviewed participating retailers (see slide for store names in ComEd footprint)

Retailer Requirements

- Full category sales data for each product, monthly
- Implementation plans to promote products
- Quarterly reports
- Interviews

Product Strategy

- Sales data
- Market trends and regulatory frameworks
- Look at long-time frames to adjust strategies

Product Strategy Options

- Midstream incentives (default for most products); don't have to be large (substantial relative to margin retailers make on the product)
- Specification advancement
- Standards
- Measurement and compliance. Input on measuring energy efficiency
- Emerging Tech. Identifying tech advancement opportunities

Product Strategy Logic – Refrigerators

- Available data identify EE products? – No, then pursue a measurement and compliance strategy, work with EPA on how EE product is defined.
- Available data identify EE products? – Yes, then what's the market look like? If high penetration of energy star fridges, then tighten definition of EE (specification).
- Or potentially advance standards. Steer long-term market.
- This is a long-term process. Assuming you're successful in making spec or standard tighter, then iterate this logic model.

Product Strategies in 2020 (figure)

- Reviewed logic behind why which strategy is employed for a certain product.

Reviewed Summary Slide

- Key takeaway: Long process, expensive. Savings realized late.

[Discussion]

[Phil Mosenthal]: It occurs to me that perhaps there could be more you can do with manufacturers instead of focusing on retailers. There may be opportunity for cost-share (manufacturer rebate, marketing, etc.) Is this a part of the program?

[Beth Hales]: We do some work with manufacturers around emerging technologies, but in general work through retailers via leverage. Influencing the larger group of manufacturers. With the retailers listed in the slides, a convergence of 70-80% for products in portfolio.

[Phil Mosenthal]: There could be opportunities in cooperative marketing approaches.

[Leah Scull]: What are the expectations from the retailer on implementer plan?

[Beth Hales]: Two parts. Quarterly process. Can take a different form for different retailers. Some focus on price promotions. Some on a loyalty program. Some on a social media strategy. NEEA believes that retailers know the best way to sell and support via incentives. Second part, they will report out each quarter about what they did. Very insightful data.

Next Step: An update on the RPP Pilot may be presented in a future Working Group meeting.

Stretch Codes and Building Performance Standards Project

Brett Bridgeland, Slipstream & Alison Lindburg, MEEA

Overview

- Investigated several months ago, actions that utilities can take to advance stretch codes and building performance standards.
- What are stretch codes?
 - Aka reach code; locally mandated code or alternative compliance path that defines a higher level of energy efficiency than the adopted base code. Consider as a future base code.
- Why stretch codes?
 - More municipalities are starting to adopt climate and energy codes. Stretch codes affect new construction. If adopted, it is then the mandatory minimum efficiency. Provides cost savings for residents and businesses. Opportunity to implement emerging tech and could inform future base codes. Helps gain market acceptance for future codes too.

Examples of Stretch Codes

- City of Boulder, CO (home rule)

- Have already done several iterations of the code to meet goal of reaching net zero energy construction through buildings and energy codes by 2031.
- Initially, Boulder started off with a green building standard, and EV ready/PV ready were included, so it's been added to the stretch code.
- Massachusetts
 - Added a stretch code component to the state code.

Reviewed Summary Slide

- Keep in mind that code officials need to be aware of these policies; resources to keep folks up-to-date

[Discussion]

[Phil Mosenthal]: Part of the Massachusetts stretch code's popularity is that it came with grants. Green community grants provided if jurisdiction adopted it. When state went to 2018 IECC, it didn't get adopted and became synonymous with the stretch code. So now they're in the process of passing a new code to improve code efficiency 20%. A process that makes the standard for stretch code adoption to be 20% more efficient might make this update process.

[Chris Neme]: I like the concept of promoting this. Is there a specific MT proposal related to stretch codes? Under consideration?

[Alison Lindburg]: This will be addressed by Brett.

Reviewed Building Performance Standards

- Builds off benchmarking ordinances; helps munis lower energy use and GHG emissions.
- Usually sets energy use or emissions thresholds.
- Property owners report consumption (frequency varies)
- BPS looks at specific thresholds, identifies the buildings that exceed threshold and help these buildings bring into compliance.
- Participation and compliance varies.
- Targets worst performing buildings first, then decides over time to adjust thresholds

Reviewed Examples of BPS

- Washington D.C.
- NYC

[Discussion]

[Phil Mosenthal]: Regarding NYC, are the buildings targeted to help meet standard?

[Alison Lindburg]: Assumed these would be targeted.

[Phil Mosenthal]: Often there's a market step to get to a full standard, like benchmarking.

[Chris Neme]: Strong interest in these MT models. Wanted to offer that there's other twists to BPS that we should consider. Rental energy ordinances. Targeted at MF

buildings. In different forms, they require different buildings leased to tenants to meet standards. Building structure standards. Had to meet the standard at the time of sale. Boulder, Berkeley and Memphis had these. Consider policies for MF buildings.

Reviewed Research and Pilot Initiative Timeline

- Phase 1 (June-Sept 2020): Developing resources, engaging property owners and city stakeholders. Tech potential study in context of portfolio, C/E and finish with a program concept (go no-go decision from individual utilities)
- Phase 2 (TBD): Drive adoption in 1—3 Munis

Municipal Engagement—Stretch Code

- Considerations; Focus on stakeholder engagement.

Key Policy/Evaluation Discussion Points

- Reviewed several options for determining ex ante kWh & therms.
- Influencing adoption and compliance.
- How to continue to engage with SAG as pilot progresses.

[Discussion]

[Margie Gardner]: The big difference between option 1 and 2 is that MT can count the savings in the market, so if the utilities are looking to show market change, you'd have to go with option 2.

[Phil Mosenthal]: If you went the program approach, the rest of the market is spill-over.

[Brett Bridgeland]: IL has a version of home rule.

[Phil Mosenthal]: Agrees with Margie, consider the whole market and appropriate attribution factor. In Mass for example, it was the state not the utilities that drove this. We quickly realized that this could create a disincentive for munis to adopt.

[Phil Mosenthal]: Codes amendments are an opportunity too. Mass just got 4 or 5 code amendments promulgated in the new state-wide code. Raised the lights/sqf

[Comment]: The most benefit for these programs, to the extent that they can influence the statewide code, it raises the floor for everybody.

[Phil Mosenthal]: Might also potentially influence IECC.

[Chris Neme]: Although that starts getting dicey in developing attribution. I offer two comments: First, the answer may in part depend on what the right program design is to get this done. Then look at the program design and ask which model lends best towards this. Also, don't think option 1 and 2 are mutually exclusive. When Boulder adopted their Building performance ordinance, they told building owners they had 10-year horizon for compliance, but then they had incentives for early adoption. Munis may be more comfortable with adoption if property owners have access to utility incentives. Could see a hybrid between 1 and 2, but first consider what the best program design for getting these policies adopted.

[Brett Bridgeland]: Consider timing, compliance timeline, access to general incentives in the immediate term, then a MT approach.

[Jim Jerozal]: You need resources to do these things. Before you put the money down do you need to know the terms?

[Chris Neme] Think this is an iterative process. Ask, with an ideal program design, how to you account savings in line with what the programs would actually produce. This will tell you enough to move forward.

[Phil Mosenthal]: Whole bunch of issues in counting savings. Mass and RI had similar models that are now diverging. On the codes and standards adoption front; RI said this stuff is hard and expensive to evaluate, potentially more than implementation. They're considering a dollar incentive. Mass is trying to move at single evaluation approaches that moves the whole market. Attribution is the really tricky one. If you're going to deem attribution factors, it's good to build in a formulaic way.

[Phil Mosenthal]: Certainly, it's possible that the City of Chicago is thinking about this on their own.

[Chris Neme]: Measuring attribution is harder than compliance.

[NEEA Comment]: Engagement on this around northwest has led to a settlement on measures adopted supported by NEEA with utility funding, in the context of a comprehensive code development program. There are ways to navigate the attribution process.

[Phil Mosenthal]: It may well be that utilities are the only ones assessing this opportunity, but there also could be a situation where advocates push hard for this. In RI and Mass, the utilities are involved in getting standards passed.

Next Step: Stretch Codes and Building Performance may be scheduled for discussion at a future Working Group meeting.

Code Compliance Market Transformation Implementation Plan

Alison Lindburg, MEEA

- Context (Stacey Paradis, MEEA): This is a legacy program, previously offered by DCO. ICC approved claim savings for this 6 or so years ago. Program was delayed by state budget issues. When the issues happened, utilities did some work on it, and worked to do a true baseline study. MEEA worked with implementers to do a statewide assessment of where we are in compliance. How does this fit into the MT framework? This is more of an implementation plan. Today, we'll present the study results and the potential.

Reviewed Opportunities for Claimed Savings

- Utilities have not signed on to this yet.
- This is for compliance with base code, not adoption. Utilities use the state code for baseline.

- We know from research across the US, there's no such thing as 100% code compliance. There are savings for non-compliance that are being missed. This is an opportunity for utilities to play a role. Not only to capture savings in achieving code. But also, resources are strapped for meeting code. Utilities can support here too.
- 100% compliance is rare. Compliance rates vary by state. Vary by locale and by region. MEEA has run a code compliance program in KY and MO. In KY saw good improvement Featured a circuit rider who becomes part of the community, attends meetings, has a progressive stance on engaging folks on code compliance. Compliance collaborative also yielded positive approach. Improvement to go beyond only training. Surveys in KY indicated that circuit rider and compliance collaborative were the most helpful.
- Codes Collaborative helps understand why compliance is lower.
- Compliance study highlighted what level of compliance is.

IL Code Compliance Study Methodology

- At the time, IL on 2015 IECC

Reviewed Summary of Residential Trends

- Biggest noncompliance were with ceiling, frame wall cavity insulation r-value.
- Duct systems are leaky.
- Heated basements typically not insulated properly.
- Some jurisdictions not enforcing the current state energy code.
- A circuit rider could help jurisdictions understand what is and isn't supposed to be enforced.

Reviewed Potential Residential Savings Slide

- Ranked according to savings potential

[Discussion]

[Chris Neme]: How did you measure the duct leakage?

[Chris Burgess]: The protocol from DOE is total leakage, not leakage to outside.

[Chris Neme]: Did you see a lot of ducts in unconditioned spaces?

[Alison Lindburg]: There weren't that many. Recalling that around 15%.

Reviewed Commercial Compliance Methodology + Biggest Opportunities for Improvement

[Discussion]

[Phil Mosenthal]: Did you take a straight average of the different prescriptive measures? (i.e. did not weight for energy use of measure?)

[Alison Lindburg]: Right, we did not weight for energy use. Residential, overall 55% compliance rate. 6% compliance with r-value insulation. Shows that taking straight averages, savings are to be had.

[Phil Mosenthal]: I think that that's what we should care about. For commercial buildings, we need to focus on the major energy saving measures.

Reviewed Reasons for Non-Compliance

- Lack of education and awareness.
- Lack of enforcement.
- Resource constraints – no one on staff who understands codes, translates to lack of compliance.
- Also learned that energy codes are not a priority for many jurisdictions.

[Discussion]

[Phil Mosenthal]: Is this true new construction or make changes in theory for complying with code?

[Jim Jerozal]: These savings would then be further sub divided by utility service territory?

[Alison Lindburg]: Yes, for the measure life for electric. Later on in the presentation, we'll see CPAS if they were to be counted that way.

[Chris Neme]: CPAS works in a way that you can count towards CPAS for the measure life.

Implementation Plan Activities + Reviewed Program Framework

- Code in Illinois updates every 3 years. Uncertain what's to come in terms of IL code adoption. Implementation plan may need to be reviewed accordingly.

Program Elements for Commercial and Residential

- Codes Collaborative
- Circuit rider – full time is important
- Trainings
- Resources; some resources are simply expensive
- Jurisdiction assistance services. Falls on the commercial
- Based on feedback from collaborative
 - Rebates and incentives would also be helpful but due to budget constraints, not included in this program.

Reviewed Target Market for Implementation Plan

- Important to look at how you're going to target the market in a concentrated way.
- Homebuilders - circuit riders can provide support here.
- Target Market 2: enforcement industry, could also include city sustainability managers
- Local and state chapters of the ICC

Reviewed Logic Model

- Includes units, addressing barriers, outputs – shorter term and longer-term outcomes
- See slide for greater detail
- This pertains to target market 1, this would be replicated for enforcement industry (tm2)
- Code compliance with baseline code

Reviewed Implementation Plan Budget

[Discussion]

[Phil Mosenthal]: Think carefully about what the barriers are and what's really going to have impact. I have not seen trainings of code officials, but if the jurisdiction has no money, you're not addressing the real barrier.

[Alison Lindburg]: It's important to work with local chapter of ICC (International Code Council), and take many angles to be effective.

[Chris Neme]: I wonder strategy wise, given that one of the challenges are lack of resources at the local level. Have you considered independent verification process as an alternative to be less costly for the jurisdiction? Cost on homebuilder?

[Alison Lindburg]: We discussed this. In Illinois, many code officials have a bad perception of HERS and RESNET. Uphill battle in education.

[Chris Neme]: I would suspect that the compliance rate was a lot higher.

Reviewed Energy Savings Attribution for Code Compliance

- Attribution Study approach 1 derived from Rhode Island. Not exactly like RI because some items don't have data.
- Estimate the changes to code in absence of program.

Reviewed Delphi Panel Results

- Internal review using Delphi process could be a way of looking at savings.
- Estimate what they thought could be moved from first year, to 2022 and 2025, according to compliance with 20218 IECC.
- Delphi panel brings stakeholders together. These results are what's possible. Typically, answers are shared with others in the Delphi panel. Based on that, there might be another Delphi panel. MEEA did this iteration to "flatten the curve" due to spikes. Looked at measures and type of programs and seeing if those activities could move the needle.
- One question that came up – whether we're not using our estimate and being too conservative. The TRM memo from June mentions if you aren't able to calculate attribution, you should err on the side of caution.

Internal MEEA Review of Measures

- Determined maximum percentage of compliance for each measure.
- TRM memo said be conservative, apply a declining savings credit, because it's difficult to assess NOMAD.
- How much of any program you're putting in place savings can be attributed to the program.
- Determined this to be 90% to be attributable to program.
- Right now, Illinois doesn't have targeting compliance program.

[Discussion]

[Chris Neme]: Do you mean that the energy savings produced relative to the nomad would be attributable to the program?

[Alison Lindburg]: We took gross tech potential, how much the needle could be moved, add nomad to savings and applied a declining credit, and so 90%.

[Phil Mosenthal]: I think you're using a similar methodology as Mass and RI. We think of attributable savings as a net-to-gross factor – what's attributable to the program plus nomad would be 100%.

Reviewed Estimated Attributable Savings Methodology

- Recommendation in TRM, is if consensus is not reached, 80% is appropriate.

2 different savings calculations:

1. First year savings for each of those years, this is the savings you'd have. The top graph includes declining savings of 1%. The next part is taking 90% of that. This is what would be available – what the utilities could claim. This would be allocated amongst the utilities at their discretion.
2. We did the same thing for commercial compliance. Program year for 4 years, savings for each year and then 90% of that would be available for utilities to claim.

Reviewed Estimated Cumulative Savings

[Discussion]

[Chris Neme]: You're showing achieving savings for commercial kWh is 2.9 million roughly, and next slide you're showing commercial savings as 39 mil kWh with a 30-year measure life.

[Alison Lindburg]: Not exactly because measures differ in how fast adoption rate. There's some math happening

[Chris Neme]: Confused by terminology of cumulative persisting. I think you mean annual savings.

[Alison Lindburg]: Yes this should be interpreted as annual savings.

Reviewed Potential Evaluation Approaches

- A baselines study would be completed every 6 years, with a Delphi panel every 3 years and then follow the Rhode Island model.

[Discussion]

[Phil Mosenthal]: I'm unclear exactly what it is we're commenting on. Is this a proposal of these numbers or just an example of the math concept? I'm concerned about agreeing to a 90% attribution proposal.

[Stacey Paradis]: This is a proposal and we want feedback so we can get to a larger plan. What would make sense is if we get feedback on the pieces of this plan. Let's circulate this plan for comment. In the next WG meeting we can address any concerns.

[Stacey Paradis]: MEEA was very conservative of what the savings potential is. Perhaps to our detriment so we'd like feedback on that.

[Chris Neme]: MEEA has laid out a program concept with merit. Laid out an estimate you think the savings will be able to get for utilities, then this is a planning forecast different from what they'd actually be able to claim. What was achieved vs. planned.

[Phil Mosenthal]: Same question, would these numbers get used? Or just for planned savings?

[Alison Lindburg]: Understand that these numbers are estimates, but we have to settle on a method on evaluation process, we can adjust numbers if needed. Comments on this will be helpful. i.e. reasonableness of numbers, proposed approach for evaluating actually achieved savings, etc.

[Chris Neme]: Interplay between topic of attribution and nomad. There are some issues around NOMAD we need to talk further to.

Closing and Next Steps

- **Market Transformation Outreach / Process Presentation:** Working Group participants are requested to share feedback and questions on the draft outreach/process document presented during the July 22 meeting. **Comments are due by Thursday, August 13.**
- **Market Transformation Policy Resolution:** SAG Facilitator to reach out to stakeholders and utilities about next steps for finalizing MT policy resolution, last discussed during the May Working Group meeting.
- The following MT initiatives may be scheduled for future Working Group discussion:
 - ComEd Retail Products Platform Pilot
 - Stretch Codes and Building Performance Standards Project
 - Code Compliance Implementation Plan