IL EE Stakeholder Advisory Group

Large Group Meeting **Tuesday, September 18, 2018** 10:00 am – 3:15 pm Midwest Energy Efficiency Alliance (MEEA) 20 N. Wacker Drive, Suite 1301, Chicago, IL

Attendee List and Meeting Notes

Attendees (in-person)

Celia Johnson, SAG Facilitator Nick Hromalik, MEEA, providing meeting support to SAG Facilitator Mark Szczygiel, Nicor Gas Chris Vaughn, Nicor Gas Jim Jerozal, Nicor Gas Anne Mitchell, on behalf of Nicor Gas Nebojsa Kisic, ComEd Todd Thornburg, ComEd Julie Hollensbe, ComEd Mike Brandt, ComEd Annette Beitel, Future Energy Enterprises Mary Johnson, Resource Innovations Brady McNall, DNV-GL Jim Heffron, Franklin Energy Christina Pagnusat, Peoples Gas & North Shore Gas Koby Bailey, Peoples Gas & North Shore Gas Omayra Garcia, Peoples Gas & North Shore Gas Brady McNall, DNV-GL Jim Heffron, Franklin Energy Julia Friedman, Oracle Randy Gunn, Navigant Audrey Gribovich, DNV-GL Bryan McDaniel, Citizens Utility Board (CUB) Briana Parker, Elevate Energy Noelle Gilbreath, Community Investment Corp. Theo Okiro, Future Energy Enterprises Karen Lusson, IL Attorney General's Office David South, West Monroe Partners Allen Dusault, Franklin Energy Cheryl Miller, Ameren Illinois Kristol Simms, Ameren Illinois Jennifer Moore, Ameren Illinois Ashley Palladino, Resource Innovations Leah Scull, MEEA Laura Goldberg, Natural Resources Defense Council (NRDC) Rob Neumann, Navigant Bryan Tillman, 350 Energy Group Elena Savona, Elevate Energy

Pastor Booker Vance, Elevate Energy Lauren Casentini, Resource Innovations Bill Burns, ComEd, Mark Hamann, ComEd Dan Schick, ComEd Mike Boss, ComEd

Attendees (by phone)

Juan Sebastian Arias, Enterprise Community Partners Lily Brown, Opinion Dynamics Erin Daughton, ComEd Jeff Erickson, Navigant Phil Flaherty, Bidgely Margie Gardner, Resource Innovations Kevin Grabner, Navigant Mary Ellen Guest, Chicago Bungalow Association Paul Higgins, Navigant Hannah Howard, Opinion Dynamics Cheryl Johnson, People for Community Recovery Larry Kotewa, Elevate Energy Ryan Kroll, Michaels Energy Chelsea Lamar, Navigant John Lavallee. Leidos Michael Li, U.S. DOE John Madziarczyk, Nicor Gas Michael Marks, Applied Energy Group Fernando Morales, Ameren Illinois Jennifer Morris. ICC Staff Phil Mosenthal, Optimal Energy, on behalf of IL Attorney General's Office Victoria Nielsen, Applied Energy Group Randy Opdyke, Nicor Gas Deb Perry, Ameren Illinois Zach Ross, Opinion Dynamics Julia Sander, Leidos Hardik Shah, Gas Technology Institute Jordana Temlock, Bidgely Evan Tincknell, Opinion Dynamics Angie Ziech-Malek, CLEAResult Vincent Gutierrez, ComEd Gary Ambach, Seventhwave Janice Boman, Embertec Brett Bridgeland, Seventhwave Kevin Dick, Delta Institute Stacy Gloss, University of Illinois Climate Research Jim Heffron, Franklin Energy Olivia Patterson, Opinion Dynamics

Meeting Notes

Next steps/action items are indicated in red. Questions that require follow-up are indicated in yellow.

Opening and Introductions

Celia Johnson, SAG Facilitator

Introduction to Industry Spotlight topic – this is intended to be an informal discussion.
Encouraged participants to remove their "SAG hats" and provide feedback/comments.

Industry Spotlight: "Equity in Energy Efficiency"

Jim Jerozal, Nicor Gas; Kristol Simms, Ameren Illinois; Lauren Casentini, Resource Innovations

- Current studies and research:
 - ACEEE paper by Lauren and Kristol is available on SAG website: <u>http://www.ilsag.info/mm_2018_9-18.html</u>
 - Urban Energy Justice Lab (Univ of Michigan) conducted study and found that people of color have a greater energy burden (% of income). We need to better understand the intersection of race not just urban vs rural.
 - Gulf Coast Center for Law and Policy- rebuilding after Hurricane Katrina but without working or speaking with the communities impacted.
 - IUBDC formed in 2015 in IL to increase opportunities for supplier diversity.
 - The EE industry needs to examine this issue and keep the national discussion going, as well as here in the Midwest.
- Barriers and challenges brainstorm with SAG participants:
 - Collections departments need to improve trust and flexibility.
 - Need better coordination between programs (i.e. customers with bills issues should be able to better access EE programs).
 - SAG culture and conversation needs to be broadened and made more accessible, change mentality, increase diversity of SAG participants.
 - Lack of appropriate metrics, for example we need to setup metrics of who is in the workforce and track how it changes over time; SAG could create a committee to determine metrics.
 - Energy Efficiency for All (EEFA)- multifamily EE, coalition of partners, NewWave is a group focused on health, water, and energy.
 - Utilities required to submit supplier diversity reports, focus on businesses, but SAG utility participants could do more to help support diversity and local jobs.
- Feedback
 - Need to consider how utilities deploy programs, some areas are difficult to deploy in.
 - Need to be thoughtful in the process, can't let contractors just do "business as usual" and check the box of deploying the funding.
 - Need to examine how we measure our goals. What if we changed our metrics? Change the goals/dynamics in order to accomplish new goals, which means we need different metrics.
 - Last week ComEd hosted meetings about the barriers to market transformation. The conversation focused on identifying barriers and designing intervention strategies, and then tracking progress against a baseline. Change won't happen on its own, needs to have a longer timeframe for benefit. This is a potential way to approach lasting change for supplier diversity.

Discussion

What is the vision for EE delivery?

- Realign our goals: what are our goals beyond EE cost effectiveness and savings?
- The goals need to be shaped by local communities and the people of Illinois.
- Perhaps need to revisit the goals in EE Plan Final Orders.
- Need to be committed from a policy perspective and incentivize just as we do savings goals.
- Need to make sure that low income people are not paying for benefits that are not going to them (low hanging fruit tends to go to more affluent communities).
- Look at gaps of diverse workforce across all levels (entry level, middle management, and leadership/ownership).
- Need to track the progress, potentially this work could be happening already to a certain degree.
- Find ways to couple with other industries (health care, housing) and their benefit goals, and then tap into new funding streams.
 - Green and Healthy Homes Initiative, streamlining services and building nexus, they should come and present to SAG.
- There is a lot of Non Energy Benefits research occurring that could lead to new goals.

How do we use existing tools in Illinois to achieve these goals?

- Look toward: policy gatherings, ad-hoc groups like SAG, upcoming EE Plan filings.
- There are diversity groups that already exist within each utility they should meet and come up with different solutions and insights; have the entire room be diverse but with a utility perspective.
- MEEA is working in this space: started an initiative looking at how do they 1) themselves be diverse and inclusive and 2) conducting a survey and having a conversation as a regional business sector. MEEA could be a venue for a broader, regional conversation.
- Need to listen more and rethink how these conversations are facilitated.
- Utilities need make sure the companies they are working with share the vision and take initiatives, not just doing what is needed to receive the incentive (payments).
- RFPs are a strong tool and message that could be used to push out new goals.
- Independent evaluators could staff their projects in a more diverse way.
- Establish participant metrics and then establish pipelines for each participant. Need to create lots of new entry points.
- You eliminate a lot of diverse people from participating even when using the RFP process (i.e. people that do not know the details of successful RFP writing), perhaps help people with RFP writing and "help people get in where they fit in."

Anonymous Suggestions on Equity in EE

• Participants were asked to answer two questions anonymously (#4 and #5 from the agenda, listed below) on paper. Papers were collected and redistributed – participants read someone else's response out loud. All responses are listed below.

Question 4: What do you want to see done over the next 5 years to support job development in disadvantaged communities?

- Change Trade Ally requirements.
- Create strategic plan with defined goals; allow true participation in SAG meetings; address new low income barriers.

- Defined goals and metrics for utilities, implementers, contractors. Accepting / spending ratepayer funds on things other than energy savings.
- New metrics beyond savings and energy goals.
- Develop a list of opportunities through SAG participation even reaching out to those who may not currently participate in SAG. Prioritize that list and then determine whether these opportunities can be made real thru Policy Manual, legislative change, etc.
- Programs that are designed and implemented based on direct feedback and interaction with the communities they target.
- Training; work path development; continuing education.
- Develop local technical forums at local schools to level up EE implementation skills.
- Develop town and municipal EE program integration efforts to engage entire communities.
- Specific goals set for each part of the EE industry in IL around expected job development in disadvantaged communities.
- I would like to see more of a focus on delivering benefits to disadvantaged communities and less focus on traditional goals.
- Labor union integration; increased diversity.
- Publicize resources and opportunities (such as bidding opportunities) much more effectively so that CBOs / diverse vendors can more readily access them.
- Better outreach and education on what EE is communities are in the dark about these opportunities and how it benefits them.
- Start with what is your organization; your department; your team doing to implement equitable hiring, retention, and promotion practices.
- Engage local communities move away from stereotypes to issues. Stereotype #1 diversity is defined by race, ethnicity and gender.
- Utilities establishing outreach programs and incentives for low income communities and businesses working in those communities. Work with organizations that work within these communities build trust through the messenger.
- Mentorship programs; vendor development.
- Inclusion of people with disabilities (learning, physical, etc.) be included and discussed for supplier diversity initiatives.
- Facilitate coordination between local schools, workforce re-entry programs, and businesses to establish mentorship programs.
- Support from stakeholders, regulators, etc. for greater utility / EE financial investment in training, certifications, outreach, etc. for CBOs and small businesses to find and qualify candidates.
- Create a coordinated effort / channel to connect candidates with industry jobs in their community.
- Shared stakeholder / ratepayer investment in job development activities.
- A change in policy to incentivize job creation for residents within these communities. Also would like to see established training -> project -> career pipelines.
- Change "EE" to energy services so that ancillary values / benefits are part of delivery, not just external.
- Improve metrics + clarify the priority of metrics. Can this provide greater flexibility to utilities by better aligning metrics / objectives with requirements.
- More specific goals around job development in disadvantaged communities (similar to what is in FEJA on the solar side) + reporting metrics.
- Partnering with low income community groups.
- More flexible RFP timelines.

- Better coordination between solar and EE jobs + trainings.
- NEBs, that includes jobs in low income communities.
- Handholding and financial resources to connect low income community members and businesses to jobs. \$ support to get them to job trainings, fill out applications.

Question 5: How can SAG support these efforts?

- Develop policies across utilities that make it easier for diverse contractors, etc. to work with utilities.
- Be a think tank and have authentic outreach efforts to low income communities.
- Put them into writing in TRM and Policy Manual.
- Help engage more discussions and insights; more events like today's.
- Facilitate the efforts but also reach out to those who may not be participating especially diverse entities.
- Facilitated discussion among key stakeholders.
- Diversity the representation at SAG; culture conversation. The client is part of the conversation.
- Provide technical support.
- Provide a forum for community EE development.
- Provide metrics and leading indicators that we can all monitor and hold each other accountable.
- SAG can spend time dedicated to this regularly.
- Coordinate with IQ North and IQ South committees that are already discussing these issues.
- Understand who the trusted voices are in the community to help achieve and address #1 (better outreach/education on EE).
- Host webinars from outside experts, establish a work group, use SAG as a convening table to share steps and progress.
- Look at successful programs that work.
- Give visibility to ongoing efforts. Collect success stories and share best practices.
- Grow inclusive efforts for individuals with disabilities.
- Write policy supporting diversity requirements and implementing internal policies.
- Initiate discussions to shift goals.
- Venue to share ideas and best practices across utilities, stakeholders within Illinois and across the country.
- I like Kelly Shelton's idea of creating a diverse subgroup (within SAG / utilities?) that has regular discussions of issues we are talking about today.
- I also like Pastor Vance's point about addressing the problems and successfully responding to RFPs.
- Develop a consensus policy within the Policy Manual or the next EE Plan filings (to incentive job creation for residents within communities).
- Incorporate metrics into next filing, Policy Manual, etc. Ensure utility requirements / metrics align with true intended benefits.
- By learning about best practices.
- By inviting low income community partners to share their work.
- By making these meetings more inclusive.
- By leveraging the IQ meetings.
- By helping these priorities get integrated into future EE Plan filings.

Next steps:

- Celia will review feedback to develop future action items for SAG; incorporate into the 2019 SAG Plan.
- Celia will follow-up with Industry Spotlight presenters on next steps for this topic.

Peoples Gas – North Shore Gas Research & Development Program

Christina Pagnusat, Peoples Gas & North Shore Gas; Allen Dusault, Franklin Energy

- IL Institute of Technology project:
 - Need to engage the youth especially with income eligible programs.
 - How do we make our programs more effective? Asked grad students to engage and come up with a solution.
 - Focus on small business, multifamily, and schools.
 - Findings:
 - Not a lot of trust of information from the source (utility), don't believe they want to benefit me (the customer).
 - Lumping in electricity and gas together.
 - Need to reframe the problem.
 - Think long term and build trust in the community.
 - Build programs for the customer's lifestyle, make it easy for customer to be energy efficient.
 - Make data your friend, show efficiency and progress.
 - Demonstrate accountability.
 - Students developed software so that building managers could benchmark energy use, "overspending" notice, feedback feature to implementation contractor, communication with energy advisors and trade allies to allow for timely responsiveness.
- Art Institute of Chicago:
 - Optimizing dehumidification using machine learning.
 - Over cooling and reheating was wasting energy.
 - Created a machine learning system via a Microsoft grant and worked in two galleries and found significant room for savings.
- Open Source Building Sensors (OSBS):
 - Low cost sensor/control platform for buildings that lack automation systems.
 - Developed inexpensive sensor nodes that are easy to deploy and that do not require internet access, and integrates with existing off-the-shelf thermostats and equipment.
 - Projected 10-30% savings annually.
 - Started on IIT Campus building, looking to expand to a broader set of buildings if cost effective.
- Venturi Steam Trap:
 - This type of steam trap tends not to fail, no moving parts.
 - Europeans use them a lot, but not as much in the US (mainly because not many studies in US showing they work).
 - GTI lab tested Venturi to see if they save energy.
 - Results indicated there is promise if sized correctly, even under a range of pressures.
- Upstream Commercial Food Service (CFS):
 - Partnering with other utilities.
 - Phase I determining baseline and measures.

- Phase II pilot program, likely starting later this year or early 2019.
- Utilization Technology Program (UTD):
 - Gas utility-funded research program with national/international participation.
 - Make funding commitments for projects.
 - BEI heat sponge economizers for boilers and ozone laundry project were funded and completed (can then lead to inclusion in TRM).

ComEd LED Street Lighting Program

Bill Burns, ComEd

- Benefits of LED street lighting:
 - Decreased energy use and cost (significant over current technology);
 - Reduced maintenance costs due to longer product life (15-20yrs without needing service);
 - o Provides enhanced visibility which improves safety; and
 - Provides light where you want it and decreases light pollution.
- Usually ComEd-owned street lights are mounted on wood polls.
- Chicago has 300,000 streetlights, all unmetered.
- ComEd has 150,000 streetlights unmetered serving municipalities.
- Unmetered fixtures are billed based on reported lamp wattage from dusk to dawn hours of operation, while fixtures behind the meters are billed based on actual usage.
- Bensenville and Lombard deployed ComEd smart meters.
- Benefit utility knows if they are on or not (no call needed).
- Municipalities knew there would be complaints, but overall responses are positive and municipalities are very happy with the cost savings.
- PY08 and PY09:
 - Significant change in years on savings due to what municipalities wanted (5,978 MWh to 4,497 MWh).
 - 10,077 fixtures and 6,536 fixtures converted (08 and 09 prospectively).
- PY09 Bridge period created additional challenges- on June 1, 2017 ComEd took over the Public Sector LED street lighting program.
 - Difficulty finding some fixtures (esp parks) when you only have an address.
 - One change was to require municipalities to provide GIS data (latitude and longitude).
 - o 12,955 MWh savings, 14,303 fixtures converted, a really good year.
- Total savings:
 - \$38 million and 93K fixtures (ComEd).
 - \$53 million 446K fixtures (public sector).
- Current Year Update (CY18):
 - On track to meet goal of 24,000 fixtures, but many will come at end of December.
- State of IL selected 3 vendors for a master contract to supply smart street lighting fixtures and services to IL municipalities; do not need to normally bid the project.
 - Benefits: Vetted contractors, streamlined procurement process, favorable pricing (depending on who you choose), varying financing options, can also choose smart lighting technology.
- Challenges:
 - Some municipalities are waiting and not participating, hoping for increased incentives (\$0.70/watt versus \$1.47/watt).
 - Identify the correct accounts associated with lighting replacement (unmetered), but difficult when a municipality has mix of metered and unmetered.

 Limited municipal money as there is more of a focus on water projects due to greater savings.

ComEd Voltage Optimization Program

Dan Schick and Mike Boss, ComEd

- Use capacitor banks to maintain the voltage to customer.
- VO Program designed to reduce customer energy consumption by reducing circuit voltage.
- Use a Benefit to Cost Ratio (BCR) by substation.
- Some stations are more advantageous then others based on the BCR ratio.
- Aiming to have most of ComEd's service territory covered by VO by 2023 (or later)
- Q: Was low income looked at?
 - A: The feeders cross so many demographics that it is not a factor.
- Q: How many years does the VO last?
 - A: 30-40 years, comparable life cycle to our other equipment.

Closing and Next Steps

Celia Johnson, SAG Facilitator

- SAG Items in development:
 - Innovative Proposal Template
 - New Idea Process for IL-TRM Version 8.0
 - EM&V Subcommittee Plan for 2019
- Upcoming Meetings:
 - Policy Manual Subcommittee kick-off, September 19
 - o IL-TRM TAC call to discuss Evaluation Priorities, September 26
 - SAG call to follow-up on Policy Proposal comments, September 26
 - Annual Report Template Working Group, early October
 - Wednesday, November 7: Large Group SAG Meeting