

**Illinois Energy Efficiency Stakeholder Advisory Group  
Large Group Meeting  
Friday, September 25, 2020  
10:00 am – 12:00 pm**

**Teleconference Meeting:  
Annual Net-to-Gross (NTG) Update Process: NTG Meeting #4**

**Meeting Notes**

*Information about this year's NTG update process can be found on the [2021 NTG page](#).*

**Attendees (by webinar)**

Celia Johnson, SAG Facilitator  
Greg Ehrendreich, Midwest Energy Efficiency Alliance (MEEA) – Meeting Support  
Matt Armstrong, Ameren Illinois  
Tyler Barron, Environmental Law & Policy Center  
Bob Baumgartner, Leidos  
Kathia Benitez, Franklin Energy  
Rick Berry, Guidehouse  
Barry Bragger, Bidgely  
David Brightwell, ICC Staff  
Amy Buege, Verdant Associates  
Ben Campbell, Energy Resources Center, UIC  
Jane Colby, Apex Analytics  
Salina Colon, CEDA  
Erin Daughton, ComEd  
Larry Dawson, IL Association of Community Action Agencies  
Leanne DeMar, Nicor Gas  
Gabe Duarte, CLEAResult  
Deb Dynako, Slipstream  
Jeff Erickson, Guidehouse  
Jennifer Fagan, Verdant Associates  
Jim Fay, ComEd  
Jason Fegley, Ameren Illinois  
Scott Fotre, CMC Energy  
Michael Freed, Guidehouse  
Omayra Garcia, Peoples Gas & North Shore Gas  
Kevin Grabner, Guidehouse  
Andrey Gribovich, DNV-GL  
Randy Gunn, Guidehouse  
Vince Gutierrez, ComEd  
Cliff Haefke, Energy Resources Center, UIC  
Hannah Howard, Opinion Dynamics  
Michael Ihesiaba, ICF  
Jim Jerozal, Nicor Gas  
Haley Keegan, Resource Innovations  
Larry Kotewa, Elevate Energy  
Ryan Kroll, Driftless Energy  
John Lavalley, Leidos

Bruce Liu, Nicor Gas  
Marlon McClinton, Utilivate  
Nishant Mehta, Guidehouse  
Cheryl Miller, Ameren Illinois  
Abigail Miner, IL Attorney General's Office  
Jennifer Morris, ICC Staff  
Phil Mosenthal, Optimal Energy, on behalf of IL Attorney General's Office  
Sharon Mullen, Guidehouse  
Rob Neumann, Guidehouse  
Victoria Nielsen, Applied Energy Group  
Carly Olig, Guidehouse  
Randy Opdyke, Nicor Gas  
Christina Pagnusat, Peoples Gas & North Shore Gas  
Katie Parkinson, Apex Analytics  
Deb Perry, Ameren Illinois  
Michael Pittman, Ameren Illinois  
Adam Roche, Franklin Energy  
Zach Ross, Opinion Dynamics  
Kristol Simms, Ameren Illinois  
Ramandeep Singh, ICF  
Milos Stefanovic, ComEd  
Jacob Stoll, ComEd  
Evan Tincknell, Opinion Dynamics  
Andy Vaughn, Leidos  
Chris Vaughn, Nicor Gas  
Ted Weaver, First Tracks Consulting, on behalf of Nicor Gas  
Joel McManus, TRC Companies  
Patricia Plympton, Guidehouse

### **Meeting Notes**

Follow-up items identified **in red**.

### **Opening & Introductions**

*Celia Johnson, SAG Facilitator*

**Purpose of Meeting:** To discuss follow-up on evaluator Net-to-Gross (NTG) recommendations for the 2021 program year and finalize consensus resolution on open NTG values.

## **Follow-up on Open NTG Values**

### **ComEd Follow-up on NTG Values**

*Jeff Erickson, Guidehouse*

#### **C&I Standard**

- Lighting: We have added 2% spillover since 2018. In first draft, neglected to add that back in. This is error correction to add that 2% NP spillover.
- Non-Lighting: Same add-back as for lighting.
  - [Erin Daughton] ComEd accepts those values.

## C&I Custom

- There were a few issues with the analysis so we looked for an independent evaluation of the analysis. Key changes to the analysis – pull out a large legacy DCEO project that was not, given the management change, no longer appropriate to include. Separated streetlighting – the NTG recommended here is the number that we are using and deemed last year for streetlighting program. Because it is so big and different, ought to be its own row and its own analysis and not mixed with the other custom projects. As a result of those changes, that changed the sample frame and changed the weighting, so fixed that process. Fewer sample points than really comfortable with for defining public and private sector NTG, so also created a combined version that is row 6. All but street lights and data centers. Either need to move forward with 0.51 for this custom or with the public and private numbers but not both.

*[Phil Mosenthal] The 0.51 is a weighted average? If so, I'm fine with that.*

*[A: Yes]*

*[Erin Daughton] ComEd has concerns about the quality of the analysis which is why we asked that it be independently reviewed. That person made several recommendations that would require another look at the analysis. We don't know if the final NTG values out of that revised analysis would be the same as these values.*

*[Jeff Erickson] That is correct. One of the recommendations was re-weighting. We couldn't get that done in time for today's call therefore it is an unknown.*

*[Erin Daughton] Given that these are not 'final' NTG values that Guidehouse is comfortable with and we have a deadline next week, I would like to propose that instead of adopting these values for 2021, we carry over the value from 2020 into next year and do new research next year.*

*[Phil Mosenthal] What is the 2020 NTG value?*

*[Erin Daughton] It is 0.70.*

*[Phil Mosenthal] I have a concern with that. We try to use new information and we don't have agreement, so it should be the evaluator recommendation that is used.*

*[Erin Daughton] But as Jeff explained, they would need more time to come up with a final recommendation based on the new analysis and we would have to get that done and reviewed by Oct. 1*

*[David Brightwell] Can you explain the criticisms of the evaluation you already performed?*

*[Jeff Erickson] Yes, there are some weighting issues. Small, medium and large projects weighted up to the population, with some errors. When the big projects were removed as previously noted, should have been reweighted to reflect how the projects really were in the sample.*

*[Phil Mosenthal] I thought you said you reweighted it after removing the DCEO project?*

*[Jeff Erickson] Yes, using the existing 'buckets' but the recommendation was to re-bucket the projects and reweight.*

*[Phil Mosenthal] You just scaled the existing weights up to 100%?*

*[A: Yes]*

*[Jeff Erickson] The new analysis would take a few days and we would need to have another discussion/provide time for review.*

*[Jennifer Morris] For Ameren IL, we already agreed to use values from an analysis that hasn't been performed yet, there could still be time to make sure the recalculation is accurate and use that value for 2021 similar to that agreement.*

*[Erin Daughton] Ameren doesn't have a value but there is an agreement to use the value that is developed?*

*[Jennifer Morris] Yes, Midstream Lighting seemed pretty high and Ameren and eval team agreed to move up some research and use the value that comes out of that, to be completed before end of year. The historical value here seems very different from these interim results and we could presumably get a better value this year if we just allowed the evaluators a little more time.*

*[Erin Daughton] Would the additional time allow ComEd to review and comment?*

*[Jennifer] Yes, that's what's going to happen on the Ameren side as well.*

*[Jeff Erickson] Are you suggesting we TBD this even as of Oct 1?*

*[Zach Ross] Yes, it is TBD for Midstream Lighting for Ameren and my feeling is that we have reached consensus that the updated value will be used from the research even though the output isn't available yet.*

*[Erin Daughton] I think that we would be comfortable with a final draft based on the feedback, assuming everything in the findings memo can be addressed. We are concerned there are very few unique projects that made up the poll. Not sure that can be remedied this late in the game.*

*[Jeff Erickson] There is no time to add samples to the process. That would require surveying more people.*

*[Jennifer Morris] How is it that on the Ameren side they can do a whole new analysis before the end of the year and we can't do that to just add a few more surveys for ComEd?*

*[Jeff Erickson] The Ameren research has been in process for a while. We would have to spin it up and do more sampling.*

*[Zach Ross] We will be sharing our draft survey instrument with Ameren next week and we have a sample under development. The research doesn't require a stratified sample and we are confident we could do it in 1.5 months.*

*[Phil Mosenthal] In this case isn't it just picking more customers to call?*

*[Jennifer Fagan] I think that as long as we can reach people, we can add some sample points and re-stratify with those large projects taken out, redraw the strata boundaries and add additional sample to fill in. We are in a pandemic and so a challenge with this is stopping the dialing process in mid-April when we were told to stop. We can do our best to add some more sample points. The large projects taken out, so our stratum 1 will have more in it because the boundary will be lower.*

*[Phil Mosenthal] Given that you lost all the large projects it would be good to sample more large customers.*

*[Jennifer Fagan] And those were all public sector which has an impact as well.*

*[Q:] What caused you to lose all the large projects? Was it a change from not being part of the program?*

*[Jennifer Fagan] They are included in our historical reporting but removed from the deeming process because it is a legacy DCEO project and not valid for the future*

*[David Brightwell] If you don't have those large projects, do you really need stratified sampling? If you can't get a larger sample size, can you still make inferences whether you have appropriate NTG based on confidence intervals?*

*[Jennifer Fagan] Yes. It's when we parse things by segments, we get nervous about those results, but we can pick projects to fill up those segments.*

*[David Brightwell] If you can't get any more samples, can you still have an estimate that "X" and ComEd feels the default of 0.8 is better but that isn't in the confidence interval, does that provide evidence that 0.8 isn't appropriate and this is still a better estimate?*

*[Jennifer Fagan] What we have now for Row 6 where we have removed those big projects, yes. Removal has a big impact on the precision and confidence interval. We can definitely give an answer on that.*

*[Erin Daughton] Would it be possible in getting additional projects to make sure they are unique projects and not other phases of the same customer?*

*[Jennifer Fagan] Yes. It's a complex issue. We're not deliberately selecting, it's just random sample and that's what ends up in our sample. At the program level. The private/public demarcation is since FEJA and is new.*

*[Erin Daughton] We've been discussing that internally. Since FEJA and we had those legacy DCEO projects didn't make sense going forward. That's the last one, I think. If that's the case, then we just need a single custom NTG going forward I think.*

*[Jennifer Fagan] We can maybe redraw the size boundaries if that is worth doing and then pull in additional sample, you are okay with a single set of values without private/public?*

*[Erin Daughton] Yes, it doesn't make sense to differentiate going forward.*

*[Jennifer Morris] Do you provide the same incentives for public/private?*

*[Erin Daughton] Andrey- I think that is correct, can you confirm?*

*[Andrey Gribovich] Yes, we treat it the same. There are some wastewater treatment incentives available but for very specific projects.*

*[Erin Daughton] That's the only time there is a difference between public and private incentives.*

*[Andrey Gribovich] Yes because those are mostly public. But it's for very specific projects. There has not been large participation this year. Mostly it was old DCEO projects. Those do tend to be large because it is a large upgrade to their aeration system with dissolved oxygen controls.*

*[Jennifer Fagan] What would be the rough timeframe? Would we have until Dec. 1, or what would be reasonable?*

*[Jennifer Morris] I think that would be reasonable.*

*[Jennifer Fagan] We have email addresses generally from ComEd and will ask for where we don't have them since people are not answering work phone numbers. We will work with Erin on helping with recruiting if we need it.*

*[Erin Daughton] Once you have selected projects, we will want to notify them you will be contacting them.*

*[Jennifer Fagan] When our NTG sample is selected, we try to nest it inside the gross sample and that's what we'll try to do here. Sometimes there is a refusal. We'll probably start with that and see how close we can get.*

*[Celia Johnson] Is this for all custom NTG values?*

*[Jeff Erickson] I think Row 6, and drop 7-8 from consideration.*

*[Phil Mosenthal] It's really just a weighted average of 7-8.*

*[Jennifer Morris] Data centers is still separate?*

*[A: Yes]*

*[Erin Daughton] I need to follow-up with the ComEd team before confirming we are comfortable with this follow-up. There are some concerns that if we wait until December 1 it might be a challenge for planning.*

*[Jennifer Fagan] We will try to get results to you as early as we can. Maybe Nov 1 would work. We would need to be successful at reaching people. The whole review process would have to be committed to being thorough and efficient.*

*[Celia Johnson] Are there any remaining questions or concerns about ComEd NTG values (except for advanced t-stats and air sealing, which will be discussed at the end of the meeting)?*

*[No comments or questions]*

*[Andy Vaughn] I want to comment on Ameren agreeing on the midstream approach, I don't think it is a good precedent to set to establish NTG values after the Oct 1 deadline. It's going to put stress on the planning process. It's a bad precedent to set to have values that aren't updated in the current timeframe.*

*[Jeff Erickson] Completely agree.*

*[Zach Ross] Agree very much as well.*

*[Jennifer Morris] I understand, we can pay closer attention when we do annual evaluation planning process to prioritize the uncertain NTG values earlier in the year with a focused effort to avoid this in the future.*

### **Ameren Illinois NTG Follow-up**

*Zach Ross, Opinion Dynamics*

- Core standard, SBDI, SM refrigeration – ICC Staff raised a question about this research in meeting #3. We are still in the field and haven't completed analysis. We will discuss researched values in next year's NTG process.
  - *[Jennifer Morris] Ok with evaluator values for now.*
- Appliance values for retail products – initial recommendation based on quick turnaround research from earlier this year. Discussed with Ameren. We have some concerns about applicability to 2021. Research showed very high free-ridership for fridge, freezer, washer, dryer. Standard program similar to ComEd with very different results. Probably these results have substantial COVID-related effects in them – supply chain, implementation, etc. Recommend a deferred update to next year with additional data collection and maintain the 2020 recommendations based on very recent ComEd research.
  - *[No comments or questions]*
- The other outstanding non thermostat or air sealing item is Residential HVAC. Memo is finalized now and those values are what we are recommending. In consensus with Ameren on those. Minor tweaks to spillover.
  - *[Phil Mosenthal] That was rows 73-74? I'm fine with that.*
- *[Celia Johnson] Are there any remaining questions or concerns about Ameren Illinois NTG values (except for advanced t-stats and air sealing, which will be discussed at the end of the meeting)?*
  - *[No comments or questions]*

### **Nicor Gas and PG & NSG NTG Follow-up**

*Kevin Grabner, Guidehouse*

- No updates to Nicor Gas, Peoples Gas & North Shore Gas NTG values since NTG meeting #3, except for advanced t-stats and air sealing.
- *[Celia Johnson] Are there any remaining questions or concerns about Nicor Gas, Peoples Gas & North Shore Gas NTG values (except for advanced t-stats and air sealing, which will be discussed at the end of the meeting)?*
  - *[No comments or questions]*

### **Advanced Thermostat and Air Sealing NTG Follow-up**

*Joint Presentation from Guidehouse and Opinion Dynamics*

*Zach Ross, Opinion Dynamics*

- These items, with one exception, are all interrelated. Please understand that we have tried to be consistent in our recommendations on how to treat these measures. We will present our best recommendations and we are open to discussion.

### **Residential Cooling**

- We think everyone should be on consensus on these. Characterized in TRM 9 based on econometric study and E-STAR analysis. “Quasi-experimental design” makes these gross with respect to free-ridership but should capture participant spillover. We have to make an adjustment for free ridership and could adjust for NP spillover.

### **Residential Heating**

- Both electric and gas heating impacts are based on a 2015 Navigant study with matching to non-participants instead of future participants like cooling. This is “somewhere between” net and gross. Net for participant spillover, gross for NP spillover. No way we can empirically identify the basis for which free-ridership is incorporated.

### **Residential Advanced Thermostat Cooling Recommendation**

- We recommend using the default NTG (0.8). There is some recent research and secondary research but we don’t think those values are perfect. The programs have changed. We think the Policy Manual default is more appropriate. We have directional evidence it is in the right ballpark. We will commit to doing research in 2021 to update this assumption.

### **Residential Advanced Thermostat Heating Recommendation**

- We recommend 0.9 for market rate and 1.0 for low income. This recommendation is based on evaluator judgment, not data-driven. We do not think this value should be precedent. Needs more discussion next year. This is an acceptable compromise we think.

*[Jennifer Morris] Can you walk through the 0.9 calculation?*

*[Zach Ross] 0.9 is essentially a midpoint of free ridership based on free ridership from SAG default value. Essentially the midpoint between no free ridership and that value. If we land somewhere between those we are in the ballpark.*

*[Jennifer Morris] Programs have significantly changed since 2018 – are cheaper thermostats being incented?*

*[Zach Ross] Yes, in 2018 when we did the research, they were primarily Nest and Ecobee with a substantial incentive but a high end-user cost still. As of now, they are incenting a lot of other thermostats including Emerson, Honeywell, Green Light with a much lower participant cost. I believe that will change customer decision making and don’t think that 2018 value will be applicable.*

*[Phil Mosenthal] Are the Nest and Ecobee still a significant portion?*

*[Zach] I don’t know. There is a substantial number of non-Next/Ecobee that we have seen in 2020.*

*[Phil Mosenthal] And is the rebate less?*

*[Zach] I don't think so. The end cost to the user is lower but I think the rebate remains the same.*

*[Phil Mosenthal] We did a weighted average on the TRM to adjust for thermostats. Thought 80% were Ecobee and Nest.*

*[Kristol Simms] There are new, more cost-competitive products from Nest and Ecobee as well.*

*[Cheryl Miller] I don't have the actual numbers but I know from looking at the data weekly, Ameren is incenting a lot of manufacturers. All Energy Star t-stats. Some have multiple models. Google has a few. Honeywell has 4-5 of them. Manufacturer incentives coupled with our incentives can make it very affordable for the customer. Manufacturer incentives vary throughout the year. The total customer incentive fluctuates.*

*[Kristol Simms] I don't believe 80% of them are at that \$250 value point anymore.*

*[Cheryl Miller] Yes, and over two years the costs for those models has come down substantially.*

*[Zach Ross] That's why we think the cooling side default value is more appropriate and we can use 2021 research going forward.*

*[Carly Olig] The TRM default is meant to capture all the components of NTG and not just free ridership. There is NP spillover not being captured.*

*[Ted Weaver] This is complicated and hard to keep track of. I think that you are saying that under certain conditions it could be gross and in others it could be net, so you have picked something halfway between. In what conditions would it be closer to 1 and in what conditions closer to 0.8?*

*[Carly Olig] The bounds on this are the other types of consumption data analysis. (ref slide #14). RCT gets closer to 1. Future participants, most people didn't have one before they got a rebate, most aren't replacing them yet. In that case the matched group has no smart thermostats and capturing the whole savings compared to no adoption and no free-ridership so that's gross. Matching to non-random, non-participants, there are selection biases in who chooses to buy a thermostat. In assessing that, surveys of NP group, specific matched NPs, to find out what type of thermostat they have – we could add that to future research. That isn't in the studies that have been done. Doing that retrospectively would not be productive research. We have very little information other than trying to guess the naturally occurring free ridership which is the problem.*

*[Ted Weaver] So it's all about the control group. If the control group has no smart thermostats then it is gross. If the control group has the same adoption rate as the treatment group then it is net. (A: Yes) And you have no idea, so you are picking a number in the middle.*

*[Carly Olig] We are saying it is somewhere in between and rather than picking gross as 0.8 or the values that we do have, or picking 1.0 which is fully net, so we are saying the midpoint avoids being too conservative or generous in the estimation.*

*[Zach Ross] That's where we ended up landing. The goal of the TRM isn't to provide a conservative estimate, but one that is defensible in either direction. But to be very clear this is based on judgement, not data.*

*[Kevin Grabner] Zach do you want to mention the thermostat optimization component from TRM 9 – it has the same partial free-ridership issue.*

*[Zach Ross] Yes, thank you. What Kevin is referencing is that when we say that heating savings were characterized using the 2015 Navigant study, that is also with the adjustments that we have made. Optimization has the same set of issues and treating it the same is reasonable.*

### **Non-Residential Cooling**

- Essentially, the challenge is that these are all in the same buckets as on the res side. Same caveats apply. The recommended value is somewhere in the middle with respect to free ridership.

### **Non-Residential Heating**

- One step further away – uses 2015 study from res side as a proxy because we have no specific study. Same caveats apply.

### **Non-Residential Thermostat NTG Recommendations**

- We have up-to-date research that represents the current programs. But we have no data driven basis to determine the degree of free ridership. Will show the Ameren Illinois spreadsheet. Using approach that uses 50% of our researched free-ridership value. We are suggesting we can compute an NTG ratio taking half of researched free ridership plus PN spillover.

*[Ted Weaver] That's measure-specific free ridership?*

*[Zach Ross] Program-specific free ridership for Ameren, and we are recommending we pull half of the free ridership out essentially to account for the effect we have been discussing. Recommend 88% NTG.*

*[Ted Weaver] So very close to the same 90% but more precise because you do have a number to base it on.*

*[Zach Ross] Yes, we are using an actual researched free ridership value. That applies to both heating and cooling recommendations for Non-Res Adv. Thermostats.*

*[Phil Mosenthal] I think what you described for standard makes sense and I'm fine with that. Wondering if the midstream instant incentives would be similar or the same as retail products and why wouldn't we adopt that there?*

*[Zach Ross] Residential vs non-residential.*

*[Phil Mosenthal] Okay, that makes sense.*

*[Jeff Erickson] For ComEd we could consider that we could add a number for the specific product but for the moment it just gets the program level NTG that all measures in the program get.*

## Air Sealing

- This is the most complex one of these topics. Savings are characterized from engineering algorithm to generate gross, plus a consumption analysis factor from a 2018 study. Accounts for insulation and air sealing interactive effects ignored by the engineering algorithms. It is again between net and gross for free ridership, and net for participant spillover and gross for NP spillover. Where adjustment factor applies (market rate air sealing installed at the same time as insulation) we recommend the same approach as for non-res adv. Thermostats- take half of researched free ridership and add NP spillover.

*[Phil Mosenthal] That seems reasonable.*

*[Zach Ross] In previous TRM, there was an assumption that all consumption analysis was net to free ridership. There is a term called "IENetCorrection" that is there to undo the adjustment factor for IQ participants where SAG agrees no NTG adjustment should be made. So you add back in 10% for IQ participants. That assumes that savings adjustment factors have an NTG of about 0.9 built in. Could do a utility-specific table in the TRM to align it perfectly, but we don't think there is a TRM change needed. This adjustment is, we think, very close to what we would need to make.*

*[Phil Mosenthal] You are referring to IQ?*

*[Zach Ross] Again, there is an adjustment factor for cases with air sealing and insulation together. The engineering overstates savings because they don't capture interactive affects. So, we use the adjustment factor to calculate that away. But for IQ there is some NTG already incorporated into that, so there is this undo adjustment factor for IQ. We think the magnitude of that, to our best judgment, is about the degree of free ridership captured in the adjustment factor and we don't think changes are necessary.*

*[Jennifer Morris] Isn't this just a TRM issue for that cycle?*

*[Zach Ross] Yes but we wanted to mention it because it is connected to these. We wanted to show we aren't being inconsistent here and there won't be an errata or anything necessary.*

*[Jeff Erickson] So spreadsheets aren't showing this?*

*[Zach Ross] The only change for this actually occurs for Ameren Illinois – others already reflected this.*

*[Vince Gutierrez] Are we saying that for ComEd, there is no change to our previous understanding?*

*[Jeff Erickson] That is correct – for income eligible nothing is changing.*

*[Jennifer Morris] Thanks to the evaluators for this clear presentation and methodology – I have no objections.*

*[Kristol Simms] Ameren has no objections.*

*[Jeff Erickson] ComEd spreadsheet if you are looking at it does not show these changes yet.*

*[Zach Ross] Ameren spreadsheet does capture the changes already.*

*[Jennifer Morris] Clarification on ComEd, you said you use the program NTG rather than product specific, so you would just take that program level one and 50% of that?*

*[Jeff Erickson] On Residential side would do residential thermostats, would do as we talked about here for cooling and heating as Zach described. We asked ComEd if they can track that separately.*

*[Jennifer Morris] Initially evaluation team had recommended that Ameren Missouri study, is there concern with that value now or do you think default would be better?*

*[Jeff Erickson] We would toss out that Ameren Missouri number and use the values we are talking about here. And that would hold on the ComEd side.*

*[Jennifer Morris] When we were initially discussing, there was some concern for contractor-driven programs. Are you saying 0.8 would be used for all those types of programs?*

*[Zach Ross] For two Ameren adv thermostat market rate programs – recommend values from today for both of those. For IQ recommend 1.0.*

*[Jeff Erickson] For ComEd there are three programs that use thermostats and we would use these for all those programs. 0.8 for cooling and 0.9 for heating.*

*[Phil Mosenthal] IL AG is in agreement on this. One question that I think you implied – we talked about it in the context of Ameren’s spreadsheet but I assume that applies to all the utilities?*

*[A: Yes]*

*[Kevin Grabner] The gas utility spreadsheets have been updated. Air sealing with attic insulation came out at NTG of 0.88 for air sealing and 0.89 for the insulation component. Spreadsheet shows why there is a slight difference there. Small business thermostats is 0.91 for adv thermostat. For C&I program thermostats is 0.92. [Etc. Reading out spreadsheet values for measures for each of the gas utilities.] That reflects the 50% of free-ridership plus NP spillover.*

*[Jeff Erickson] Same numbers for ComEd.*

*[Zach Ross] To follow-up on a previous question, we looked at rebate data for Ameren. Nearly 90% of thermostats are not Nest or Ecobee in 2020. This year 89% is not those two. Program has shifted very heavily toward lower cost adv thermostats.*

*[Jeff Erickson] For business thermostats for ComEd, we apply a single NTG value for the programs because we don’t have measure specific NTG for the other measures. We could add a thermostat number that is in there and then everything else could get the program number, curious to see what people think of that. We would not be using the thermostat NTG that Ameren uses because we would be using the program level.*

*[Phil Mosenthal] ComEd considers midstream thermostats part of the standard program?*

*[Jeff Erickson] If ComEd has plans for including them another way, we would have to include that, but right now I don't think we need to.*

*[Phil Mosenthal] If surveys on standard included the midstream then it makes sense to stay with the program number.*

*[Celia Johnson] I did not hear any objections to the updated advanced t-stat or air sealing values. Are there any additional comments or concerns?*

*[Jacob Stoll] For commercial thermostat standard NTG value, ComEd would like to touch base with the implementation team before responding.*

- Additional follow-up will be communicated via email.
- [No comments or questions from other parties]
- [Celia Johnson] Let's go back to the remaining follow-up item for ComEd custom – potential additional analysis / surveying, proposed to be completed this fall.
  - [Erin Daughton] The issue is whether ComEd agrees with the 0.51 program NTG on the table or do the additional research. The issue is about whether we will know before November/December which may have an impact on planning and budgeting. ComEd would like more time to discuss internally. We will aim to provide an update by EOD on Monday.
    - Follow-up from ComEd on 9/28: ComEd will accept the Guidehouse recommendation for 0.51 for the Custom program for 2021.

## **Closing & Next Steps**

*Celia Johnson, SAG Facilitator*

All NTG values for 2021 are consensus, except for one follow-up item for ComEd, with responses to be shared with interested parties before Oct. 1<sup>st</sup>:

- Whether ComEd agrees with the commercial t-stat [standard program] NTG value.

Evaluators will prepare final spreadsheets on or before October 1<sup>st</sup>. Final NTG spreadsheets will be posted on the SAG website and circulated to SAG.