Illinois Energy Efficiency Stakeholder Advisory Group Large Group Meeting Friday, September 18, 2020 10:00 am - 12:00 pm

Teleconference Meeting: Annual Net-to-Gross (NTG) Update Process: NTG Meeting #3

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 Jennfer Alvarado, Franklin Energy Matt Armstrong, Ameren Illinois Bob Baumgartner, Leidos Charles Bicknell, Nexant David Brightwell, ICC Staff Amy Buege, Verdant Associates Jason Christensen, Cadmus Group Salina Colon, CEDA Erin Daughton, ComEd Leanne DeMar, Nicor Gas Gabe Duarte, CLEAResult Deb Dynako, Slipstream Jeff Erickson, Guidehouse Jennifer Fagan, Verdant Associates Jim Fay, ComEd Scott Fotre, CMC Energy Michael Freed, Guidehouse Omayra Garcia, Peoples Gas & North Shore Gas Kevin Grabner, Guidehouse Andrey Gribovich, DNV-GL Walid Guerfali, ICF Randy Gunn, Guidehouse Vince Gutierrez, ComEd Mark Hamann, ComEd Ashley Harrington, ComEd Amalia Hicks, Cadmus Group Travis Hinck, GDS Associates Hannah Howard, Opinion Dynamics Michael Ihesiaba, ICF Jeff Ihnen, Michaels Energy Jim Jerozal, Nicor Gas Lalita Kalita, ComEd Haley Keegan, Resource Innovations Mike King, Nicor Gas Larry Kotewa, Elevate Energy

Rvan Kroll, Driftless Energy John Lavallee, Leidos Bruce Liu, Nicor Gas Molly Lunn, ComEd Sharon Madigan, ComEd Tonya Maxey, DNV-GL Marlon McClinton, Utilivate Brady McNall, DNV-GL Rebecca McNish, ComEd Nishant Mehta, Guidehouse Bruce Montgomery Fernando Morales, Ameren Illinois Jennifer Morris, ICC Staff Phil Mosenthal, Optimal Energy, on behalf of IL Attorney General's Office Sharon Mullen, Guidehouse Denise Munoz, ComEd Lorelei Obermeyer, CLEAResult Randy Opdyke, Nicor Gas Christina Pagnusat, Peoples Gas & North Shore Gas Katie Parkinson, Apex Analytics 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 Mark Szczygiel, Nicor Gas Evan Tincknell, Opinion Dynamics Robert Travis, Cascade Energy Andy Vaughn, Leidos Chris Vaughn, Nicor Gas Ted Weaver, First Tracks Consulting, on behalf of Nicor Gas Jessica Williams, Green Home Experts Grace Wroblewski, Applied Energy Group Jim Dillon, Ameren Illinois Joel McManus, TRC Companies Arvind Singh, DNV-GL

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 recommendations for the 2021 program year, identified during the first two NTG meetings (Sept. 3 and Sep. 11, 2020).

Follow-up on Open NTG Values

ComEd Follow-up on NTG Values

Jeff Erickson, Guidehouse

ComEd C&I Standard NTG Values

- There are outstanding questions and analysis; will discuss in NTG meeting #4.
- [Phil Mosenthal] Is it related to lighting or non-lighting?
 - o [Erin Daughton] Both. Two groups were surveyed and it pertains to both.
 - Follow-up on C&I standard NTG values in meeting #4.

ComEd C&I Custom NTG Values

 For the SAG values shown in the table, made adjustments to the 2019 researched results. For the custom projects for public sector removed a legacy DCEO wastewater project that is no longer relevant to future projects. That resulted in a public sector NTG of 0.80. We also, in consultation with ComEd, decided to smooth out the volatility by using a savings-weighted average of 2018-2019 results for both public and private sector. 0.5 NTG for private sector and 0.75 for public sector.

[Erin Daughton] We have been working with Guidehouse for additional guidance. We received an updated memo and would like until next week's meeting to review.

[Jennifer Fagan] The data center subcomponent of custom was standalone until this year. It is now combined with custom. We also decided to make a change, there had been three categories of reporting that two were tied to colocation and one was new construction and the other was retrofit, and then we had a retrofit only category. The number of projects in the two retrofit categories was small and we combined them. So now there is only one retrofit value collapsed into other.

[Erin Daughton] Since the data center values are included in the updated custom report, we will hold comments until next week.

Follow-up on C&I custom and data centers NTG values in meeting #4.

ComEd BILD (Business Instant Discounts) Midstream NTG Values

- Values are an average of research in CY18-19. For screw in LED, linear fluorescent, and linear LEDs. Research was completed with end users and distributors. Results are average of two years of end users; distributors were used to back up those results. Weighted averages from those two years. [Values shown in file]. There was an issue, and we used 2019 spillover to calculate the NTG for 2018. There was an issue with 2018 linear fluorescent and used PY9 value for that. Making some changes to the 2020 instrument and will do a blended 20-21 NTG as well. Will be dropping linear fluorescents because that is shrinking and will instead include LED fixtures. 0.8 default is used for that when no research has been conducted yet and is being used for exit signs and battery chargers.
- Numbers haven't changed, but the label for LED fixture changed. Removed "lamp and" in the description line as a clarification. Changed the text in the free ridership source as the TRM default.

[Erin Daughnton] ComEd's concern is that it doesn't reflect nonparticipant spillover. We did a large marketing campaign in 2019 and have heard throughout the program that people will buy more fixtures or lamps, online or through a pro desk that isn't part of that network. We recommend a 5% nonparticipant spillover, similar to residential lighting program.

[Phil Mosenthal] Do you know share of retailers that isn't participating?

[Andrey Gribovich] We don't. We believe we are covering the majority. But there are some that don't fit the definition of the program. Hard to get a number though.

[Erin Daughton] Background on advertising, in 2018 had to use bonuses to reach goal. In 2019 without bonuses increased savings 7 GWh. Increased participation and we believe nonparticipant participation as well.

[Phil Mosenthal] A reasonable issue and a reasonable number in the absence of any information. Practice is to not include nonparticipant if we haven't studied it, generally?

[A:] These do not include any nonparticipant spillover at this time. We didn't talk to nonparticipants. Tracking data only has participants. Unless distributors can give us names of nonparticipants.

[Jennifer Fagan] Actual data to support this would be better but we think the 5% is fair.

[Phil Mosenthal] Do we have any policy about this in IL?

[Jeff Erickson] No policy that I'm aware of, but there is a precedent to look at arguments like this and determine it is valid and choose a number. We do have some nonparticipant spillover numbers for other programs.

[Phil Mosenthal] I would be okay adding that in. Overall, 0.7 is reasonable. NEMA says around 30% market share.

[Jennifer Morris] There is a policy related to spillover in Section 7.4 of the Policy Manual. It mentions that looking at other programs, which it sounds like is what ComEd did, should be considered.

[Zach Ross] Would this apply to all of BILD or just one measure?

[Phil Mosenthal] I assumed just linear LEDs here. I would also note that while I think there is spillover happening, it's a survey that is two-years-old and the market share has increased over those two years. So free ridership could go up, but I'm willing to wait on that.

[Erin Daughton] We thought it would apply to all the lighting measure categories, not to battery chargers though.

[Phil Mosenthal] I think I would be okay with that.

[Q:] Was your request to add 5% on top of these values for nonparticipant?

[A: Yes]

[Q:] I think it is reasonable for screw in fluorescents and LEDs. What about LED fixtures?

[Erin Daughton] I was assuming that would stay the same, since it's an unknown right now.

[Amy Buege] As I mentioned we are doing distributor interviews and we will use those to source estimates for nonparticipant spillover. Not capturing channels outside – could go to nonparticipating distributors but would need to work with implementer.

[Erin Daughton] We could work with you on that, Amy. Non-participant spillover should be added to all lighting categories except LED fixtures since that is just assuming 0.8 for this year.

[Phil Mosenthal] I would suggest we don't apply to exit signs. Same issue as with fixtures since it is using the default value.

[Erin Daughton] Agreed, don't apply non-participant spillover to any of the default values, which would take out LED fixtures and exit signs. It would apply to linear fluorescent, linear LED, and screw in LED. Is everybody okay with that?

[No comments or objections – SAG Facilitator updated NTG spreadsheet]

ComEd Thermostat NTG Values

 There are a couple of things going on with thermostats. TRM changed such that the savings are somewhere between gross and net, given how the analysis was done. In the past we have said it's a consumption-based analysis and bakes in NTG. With the TRM change that is no longer correct. Secondary research on TRM values, sent a memo to ComEd. Change here is putting the numbers into the spreadsheet that were covered in that memo. Secondary research from Missouri.

[Jennifer Morris] Would this apply for electric heating savings? Or just electric cooling savings? What would be used there?

[Jeff Erickson] We discussed that internally, and I have forgotten the answer.

[Zach Ross] I can speak to it. The heating value should remain N/A or 1.0 depending on how you think of it. The cooling value should reflect what Jeff is showing here.

[Jennifer Morris] Is that going to be difficult for the utilities to calculate and track, and the evaluators?

[Zach Ross] Can't speak to the utilities, there is another measure with a similar structure, weatherization maybe. It's a good question.

[Phil Mosenthal] Possible solution would be to use a weighted average for the measure, by the heating and cooling savings.

[Jeff Erickson] I'm hesitant to commit from the evaluation side, unless we talk to the folks doing that calculation.

[Vince Guiterrez] The TRM has two calculations for each. When we provide values to Guidehouse we provide gross values and it's a single value.

[Phil Mosenthal] So Guidehouse doesn't have data that breaks out by end use, is that correct?

[Vince Guiterrez] This is not a large percentage of the savings have electric heating. I have some questions about the value itself. The Ameren Missouri study is strictly a retail program. Lines up with our appliance program. There are also two DIY programs here. Does that study apply to those programs or should there be a different value?

[Jeff Erickson] That's a good question. Normally we would expect a different number between those two. May be in a hard place. A number from one study, and no actual direct install.

[Phil Mosenthal] If we did them separately, the practice would be to use the default for the direct install, which is almost the same. Having said that, I would be okay with having a separate DI number of 0.8.

[Q:] In the table sent Guidehouse included a mixed DI/Self install from Indiana. Does look like we have some NTG results from DI programs in the secondary research.

- Wasn't that a program NTG and not a thermostat NTG?
- Not sure. Maybe Guidehouse can look back and get back to us by the next call to see if there are any values available.

[Jeff Erickson] We can do that.

[Vince Guiterrez] Another question, there is nonparticipant spillover. Would that apply? How would or should it apply?

[Jeff Erickson] Consumption analysis does include spillover in that calculation of particular types. Can any one address the difference that is delt with in the thermostat values?

[Phil Mosenthal] Do you mean the secondary research in Missouri?

[Jeff Erickson] No, the TRM is somewhere between net and gross and includes some spillover.

[Kevin Grabner] Includes participant spillover but doesn't include nonparticipant spillover.

[Phil Mosenthal] I'm confused about whether we have a value or not that can be included.

[Jeff Erickson] The value in the TRM is net with regard to participant spillover, gross to nonparticipant, and more or less gross to free riders. It's all explained in the appendix.

[Phil Mosenthal] I think the incremental cost on an LED might be a dollar or two, people are still likely to buy at nonparticipant stores. The rebates and costs on these however, are more substantial. Not sure people would be buying them if they aren't sure they are getting the rebate.

• Follow-up on advanced t-stats in meeting #4.

Income Eligible Lighting – Big Box Stores

- [Vince Guiterrez] Discussed internally the NTG for the IE lighting at big box stores. I would like to flag for follow-up next week. I'm trying to find out how we came up with those numbers and how they were applied, compared to what we may have done with the program since then.
 - \circ $\,$ Follow-up on IE big box lighting in meeting #4.

Ameren Illinois NTG Follow-up

Zach Ross, Opinion Dynamics

Ameren IL Standard and Small Business Direct Install Research

• Research will be concluded by the end of September but won't have review time. Will defer that update to next year, so we can use them comfortably. This is for Standard and Small Business DI. Surveys are just about to wrap up. Core wraps this week, SBDI next week. We do not think there will be enough time to review/discuss in this year's NTG process.

[Zach Ross] We have this annual NTG process to go through this research. Phil raised concerns about the value for instant incentives and that market is evolving rapidly. That is older than the standard research. Would be happy to discuss.

[Phil Mosenthal] It says standard, but then it says midstream. Can you explain more?

[Zach Ross] All of the prescriptive measures are in Standard. Then we have the subcategories. Sort of different programs but it's mostly difference in nomenclature between how ComEd does it.

[Zach Ross] Research that is completing in September is for Core and Small Business Direct Install (SBDI). We have accelerated the timeline on Instant Incentives because of those value concerns but this one didn't have those concerns.

[Phil Mosenthal] I was looking at the wrong column. What you are proposing is we wait until the research is done and add it as an errata?

[Zach Ross] I want to be careful here. On prior calls we have said we would have core and SBDI done in September, but there won't be time to review results, so we are deferring Core Standard and SBDI for next year. For Instant Incentives, which will start soon and will update as an errata for those midstream lighting measures outside of this because Phil wasn't comfortable with that 0.91 we had there. We are going to have that completed by no later than mid-November, a month-and-a-half ahead of what we had planned for. Will circulate that research. Agreement is that those values will be used for 2021 even though they are coming later because we don't have an alternative agreement.

[Phil Mosenthal] I'm okay with that. Basically, we will live with what the research comes up with unless we have real issues with the research.

[Jennifer Jennifer] I guess for Standard I want to think about it more and see what the results are, if those are drastically different it will be a problem. But if it consistent and stabile then I wouldn't have a problem with waiting.

[Zach Ross] If there is something drastically different, we have to think about what that means with regard to the COVID environment. A longer conversation that we need to have than getting a memo out next week with two days to talk about it.

[Phil Mosenthal] I expect it will be drastically different than what we have been using. Market has changed a lot since 2017. Likely to come down quite a bit.

[Zach Ross] The only portion we will be using new research numbers for for 2021 will be the midstream lighting.

[Phil Mosenthal] I'm comfortable with SBDI. Core program lighting, I think the overall lighting market is transforming. Tubular ones more so. Generally, a strong move toward LEDs. So would like to leave open the possibility of reconsidering Core lighting one.

[Zach Ross] Is it COVID related, is it market related? Lots of other parts besides just those lamps. Lots to capture and discuss there.

[Jennifer Morris] Same issues would apply to all of those in that.

[Zach Ross] It's questionable whether Green Nozzles have any projects in the sample. Can highlight those too. I guess if there was a change in the SBDI number we would use those there... I can't promise these results before meeting 4, but will do our best to get it out for discussion in advance if the research is ready.

• Follow-up in meeting #4, if needed.

Ameren IL Online Store

- Based on updated TRM values for nonresidential advanced thermostats, we think those are reasonably considered gross. We circulated a memo from an exploratory study we did in 2019. We feel good about this number. Also recommend we apply it to any midstream advanced thermostats. Not a perfect match but the best available number to reflect Ameren Illinois customers. Any questions about those recommendations?
 - [Phil Mosenthal] I'm in support of those, and they are consistent with what has been found in ComEd territory.

Ameren IL Residential Advanced Thermostats

• Recommend not to apply an NTG for advanced thermostats. Talked about the heating value. Agreed that it continues to not apply an NTG to that value. Going to leave that alone on the gas side unless there are more questions?

[Jennifer Morris] Can you clarify between electric and gas heating?

[Zach Ross] Same research and the treatment of those is the same.

[Jennifer Morris] We just discussed on ComEd side that we may or may not apply NTG to electric heating?

[Zach Ross] That was a feasibility discussion of whether they could apply separate values for heating and cooling. I think we agreed it was appropriate to not apply an NTG for heating but that it was possible.

[Phil Mosenthal] Math still works I think if we simply calculated a weighted average. That's an easy calculation. Then the evaluators get a single gross number that's equivalent of applying different NTG for heating and cooling.

[Zach Ross] So we're talking about how to operationalize it, but not the actual values. On the electric side we recommended no NTG adjustment. Jennifer wanted us to reconsider. We are going to retain that recommendation. The value in the TRM draft is the 8% value used in prior years. We have discussed in SAG. Don't see any methodological justification to change that now. Nothing is going to help us parse out what is a net effect or a gross effect. There isn't a methodology available to make us reconsider that. Unless there is a specific proposal.

[Jennifer Morris] I still have concerns. Proposal would be to apply the 0.77 value from Ameren Missouri. Please note that Staff has concerns on this, and it could be litigated in the docket in the future.

[Phil Mosenthal] I support that. It's an Ameren study, even with a different state. Hopefully will resolve whether Ameren will use new study.

[Zach Ross] If Ameren were to use the ComEd values, we are clear that they would have to do an NTG and we know what that would be. We have Ameren specific research that we haven't finalized. If we did need to do a value, we would do so. The value in the TRM, it's not clear how you could adjust that.

[Jennifer Morris] Thanks for the heads up that you will have Ameren Illinois research. Might be more appropriate than Ameren Missouri. Is that DI?

[Zach Ross] It's for retail products only. Also have data, not analyzed, for HVAC program delivered thermostats. But right now, we don't think it is appropriate to adjust based on that.

[Jennifer Morris] I would like to see that data.

[Zach Ross] It's possible we can get some. HVAC too, will see when we can get that.

[Phil Mosenthal] If Ameren adopted ComEd study results, this would be somewhat moot. The other value I recall it was based on reviewing other studies, which reflected what utilities were using as gross savings. The fact it is consistent but slightly higher than the results from new evaluations, seems like we ought to be using a reasonable NTG. This measure is so new, if those studies were looking at 2-3 years ago the NTG would have been higher. May not be capturing current NTG.

[Zach Ross] That value came out of multiple studies and sort of felt right. Would love to be more precise. In early years, there were early adopters. You could point out that programs were heavily focused on more expensive products than programs are now rebating. So, consumer cost is lower and that could change free ridership. We simply can't have a substantive conversation because that 8% number doesn't let us track back to measures delivered, incentive levels, and timeframes. It's just a value we looked at and agreed on. We haven't learned anything since then to change that position.

[Phil Mosenthal] Can't mathematically track what is net or gross from that. Given that, sort of partial net partial gross, common sense would be that if we're sticking with the plug value of 0.8 not from an Illinois study, then we ought to apply the same NTG. It would still give them higher savings than the current results.

[Zach Ross] That conversation should have been part of the TRM calls. I hear what you are saying.

[Jennifer Morris] This process is to try to reach SAG consensus, even if it disagrees with the recommendation. Is there any non-evaluator that disagrees with the objection?

[Andy Vaughn] Source of the 8% was discussed and agreed upon in previous years with no NTG. I agree there should not be a NTG applied on the 8% value.

[Jennifer Morris] So just ignore the new research?

[Andy Vaughn] There is no new research on the thermostat saving value. There's no proof of any difference between now and then.

[Phil Mosenthal] Since we don't know how much of the 8% is net or gross, we're essentially choosing the 0.8 default. Why are we erring on the side of "it's almost all gross" if we know that's it a mix? Why don't we err on the side of net? If there is no Ameren study and they won't adopt the 0.77 then we should just use default?

[Zach Ross] Last year, advanced thermostat research study statewide. For both ComEd and Ameren. Participant study with Ameren customers, on SAG website. As part of that, we collected some free ridership information for Ameren advanced thermostats. We have data but haven't analyzed or published. But will try to get it to Jennifer as soon as we can so she can take a look at it.

[Phil Mosenthal] Because we know that the 8% is somewhere between net and gross but we don't know where, we have to consider that default of 0.8 as an average. We also know it's higher than what we're finding now for savings [for ComEd] which implies that there is a lot of gross in there too.

[Zach Ross] We discussed this at great length a few years ago and consensus was that we should not apply an adjustment.

[Phil Mosenthal] But we didn't have that 0.7 value or more research at that time. And that was contentious and that's why we had a settlement and a new evaluation. If we really don't have a value, we should be using 0.8 and not 1.0.

[Zach Ross] We are happy to discuss in Meeting 4. It feels like we are just simply trying to nudge the net savings down to align with some notion of what we think the savings might be.

[Jennifer Morris] For almost all measures, the default is that NTG would apply. Savings in IL are supposed to be net. We don't necessarily know what is behind all the numbers. Some studies are better than others. We want to see consistency.

[Phil Mosenthal] I feel like your recommendation is still taking a position that we're going to pretend it all is gross even if we don't know. Practice is to use the 0.8 default. That would be better considering the uncertainty. Maybe we should all think about it since we have another meeting anyway.

[Jennifer Morris] The TRM will be finalized next week too.

[Zach Ross] That will certainly help clarify this conversation. I appreciate the discussion. We will do our best to get the information to Jennifer we talked about if that is possible.

[Celia Johnson] Any other thoughts or input on this before we move on?

[No comments]

[Zach Ross] One more clarifying question: Have we reached consensus on the heating value or should we leave that open?

[Jennifer Morris] I think that one is fine, we can see if it needs to be brought up next week.

Ameren IL Residential Retail Products Appliance & HVAC

• Postponing to meeting 4 because of review of draft results.

Nicor Gas and PG & NSG NTG Follow-up

Kevin Grabner, Guidehouse

• During NTG Meeting #3, we discussed whether to apply an NTG on the small business thermostat measure. Conclusion we have reached was that those values are gross, and we are applying an NTG related to the program they are rebated through. Mostly the small business program, or the BEER program for Nicor. It's interpreted as a gross.

[Phil Mosenthal] Aren't the gas utilities counting the gas savings from ComEd's thermostat program?

[Kevin Grabner] These are separate rebated items. On the residential side there has been some rebate process sharing. On the business side this is just through the gas utilities. Recommendation again is that the number in the TRM is a gross value on the C&I side.

[Katie Parkinson] Not involved on the TRM side, and that comes into play here. My understanding the SB advanced thermostat was based off of the residential advanced thermostat calculation which we have currently determined to be a net number.

[Phil Mosenthal] Not sure that's clear on the business side.

[Katie Parkinson] It's using the same data.

[Phil Mosenthal] Then I would have the same issues as we previously discussed, and I hope evaluators will let us know what they think next meeting.

[Kevin Grabner] We interpret the 7% as an engineering judgment on what the savings would be. In support of that 7% savings, the residential advanced thermostats study was cited. We have been applying a NTG for that number through the small business or regular business program. We have been applying a value. Value is 0.86 for Nicor gas for business and something similar for small business.

[Phil Mosenthal] For Midstream/Upstream joint effort with electric utilities, do we assume some fraction of those are being bought by businesses?

[Kevin Grabner] Savings there are all based on residential for the ComEd processed rebates

[Phil Mosenthal] Seems likely that small businesses are taking advantage of that as well.

[Jennifer Morris] If we want to do that, we should do that for the TRM next year.

[Phil Mosenthal] I'm okay with that.

[Ted Weaver] Can we go back to why we are applying an NTG to something that comes from a study that is clearly net? On the Nicor side we're not clear there.

[Kevin Grabner] It is a net savings number, but its applicability is when it is used in residential. On the commercial side there was a previous algorithm. When coming up with a new value, a value of 7% was chosen as a bounding of the engineering judgment.

[Ted Weaver] So if we don't know for business and we use residential and that's net then it's a net number.

[Phil Mosenthal] If our concern is that that 8% for cooling is somewhere between a net and gross, then that would apply for the heating side as well if it came from the same set of studies. Sounds like this engineering calculation makes the evaluators think this is more like gross.

[A:] That was from the Peoples and Nicor Guidehouse study that was done a number of years back. It was from the results of that study.

[Kevin Grabner] On SB thermostat, it is coming up on the next TRM TAC call and would resolve the question. That's based on engineering judgment, not citing any study, then a NTG should be applied. If TRM TAC says they intended that to be a net value, then we wouldn't apply an NTG. Our feeling is that it is a net number for the residential sector, but our interpretation is that they didn't intend it to be a net number on the commercial side. They intended to pick 7% savings as a reasonable estimate.

[Ted Weaver] Seems clear to me. It cites the residential study.

[Phil Mosenthal] I would support the evaluator's interpretation, but we don't have a resolution on how we are treating residential. Can we table this until that is resolved?

[Phil Mosenthal] The BEER program 0.86, is that an overall program result? When there were advanced thermostats in the program?

[A: Yes. Thermostats are a measure in the BEER program and the 0.86 reflects the whole program.]

[Ted Weaver] If we apply a program NTG on top of the evaluation, then we are double counting free riders by doing NTG twice. If the analysis already has net savings, then you would be double counting.

[Jennifer Morris] Are the gas utilities rebating programmable thermostats?

[A: No, or very few]

[Phil Mosenthal] Is that savings estimate compared to a manual thermostat baseline?

[Kevin Grabner] It's a blended baseline about 50/50 from the residential study. The text in the measure says it should be applied to a manual baseline and then the eligible thermostats can be advanced or non-advanced. It's really a mix and match.

[Phil Mosenthal] But it's based on a residential split and I would expect business to weight more heavily to programmable.

• Follow-up on commercial advanced thermostats in meeting #4.

Nicor Gas, Peoples Gas & North Shore Gas Virtual Commissioning

- [Kevin Grabner] It's identical for both utilities. It's a ComEd program targeted at hard to reach customers. Uses interval data to analyze customer bills and come up with low- and no-cost measures. Gas utilities currently not part of that. If they were in the future to have a virtual commissioning program or join with ComEd then we would recommend using the same ComEd NTG value.
- No comments.

Closing and Next Steps

Celia Johnson, SAG Facilitator

• The final NTG meeting is scheduled Fri, Sept. 25.

Summary of follow-up items:

ComEd:

- 1. C&I Standard
- 2. C&I Custom and Data Centers
- 3. Income Qualified Big Box Retail Stores

Ameren Illinois:

- 1. Discuss results from HVAC and Retail Products research
- 2. Timing for standard Program and Small Business Direct Install NTG research
- 3. Instant Incentive values: Will be updated later in 2020 once research is completed (anticipated in mid-November)

Thermostat Follow-up (all utilities):

- 1. *Commercial and Programmable Advanced Thermostats:* For the advanced t-stat heating reduction values, does there need to be a separate NTG applied?
- 2. *Residential Advanced Thermostats:* For the advanced t-stat heating reduction values, does there need to be a separate NTG applied?