

Illinois DEA Case Study Work Group
Meeting #4: Develop DEA Metrics
October 9, 2024
Meeting Notes

Attendee List

Michael Thuis, Advanced Energy Group (AEG)
Agnes Mrozowski, Ameren Illinois
Bill Reany, Ameren Illinois
Peter Millburg, Ameren Illinois
Mark Minden, Ameren Illinois
Celia Johnson, Celia Johnson Consulting
Camille Minns, Clean Energy Works
Kyle Danko, ComEd
Theodora Okiro Quarles, EcoHealth Strategies
Amy Jewel, Elevate
MeLena Hessel, Elevate
Curt Stokes, Environmental Defense Fund (EDF)
Cheryl Watson, Equitable Resilience Sustainability
Cathy Lamadrid, Inova Energy Group
Jane Anderson, Inova Energy Group
Grey Staples, Mendota Group
Kit White, Midwest Energy Efficiency Alliance (MEEA)
Hannah Howard, Opinion Dynamics
Julia Friedman, Oracle
Darnell Johnson, Urban Efficiency Group
Boratha Tan, Vote Solar
Will Kenworthy, Vote Solar

Kevin Dick, 389NM, LLC

Meeting Recording

[IL DEA Case Study - Work Group Meeting #4 - Zoom](#)

WG = work group; the Illinois DEA Case Study Work Group

ICC = Illinois Commerce Commission

Welcome, Introductions, Background (Slides 2-8)

The project team introduced themselves and the team provided a recap of the project background, goals and objectives that were presented in the previous meetings.

Recap and Stage 4 Overview (Slides 9-17)

The project team shared an update on collaboration and data access with the two participating utilities – Ameren Illinois and ComEd – and data that is currently reported in each of their plans, respectively.

- **ComEd representative noted:** their data is prepared to share and the NDA is being finalized.

Slide 16

WG member asked: I was just curious, in reference to overlap with the BCA for the “Discrete” criterion consideration, I know it was stated that some things won’t be as heavily weighted. When talking about the cost-effectiveness of different programs, I have been a proponent to have a greater inclusion on that, just want to understand that logic.

- **WG member noted:** Just want to make sure as we are applying the DEA - BCA and non-energy benefits have always been a major sticking point for me, often the things that are of the greatest value to marginalized communities are energy burden or things that might not be factored into the benefit cost analysis.
- **Project team responded:** The DEA wouldn’t replace a BCA but is something to present alongside a BCA. In a DEA, we want to account for factors that wouldn’t be well addressed in a BCA. Non-energy benefits can vary by jurisdiction, it is ideal for jurisdictions to include those in the BCA though.
- **WG member noted:** I would support NEBs, even if they are conservatively identified. For example, beneficial electrification may provide a means to install solar and remove natural gas, as it may require panel and service upgrades. These then become quantifiable (on average) benefits that can be applied using a familiar net-to-gross approach. Even if we heavily discount them, they are there. I think it is short sighted to just look at quantifiable benefits.

- **WG member noted:** I think there is crossover. For example, a service upgrade that enables solar may reduce long term maintenance costs to the utility (while increasing them in the short term). It also may increase home value, make it easier to sell, and pass that upgrade onto a future homeowner. These are quantifiable benefits, or at least can be modeled. That's my 3 cents.
 - o **Project team noted:** Yes, there is a long list of non-energy benefits that can be considered in BCAs and DEAs. Whether they are included in DEA depends on whether the impacts vary between priority populations and other customers.

WG member asked: Not sure if this a full question or just a hesitancy – where does the perspective of the community come in? I am hearing that data comes from the utility, equity goals come from jurisdiction's policy, and it feels like something there is missing. But also, I don't think it is appropriate to go to communities and expect them to do a bunch of work each time.

- Other WG members agreed with the comment
- **Project team noted:** To some extent, our hands are tied with the data we have access to. In the process of doing this, we will identify things that could be addressed in further DEAs, how data might be streamlined and better targeted to address concerns from different stakeholders. And we have been reaching out to community-based organizations throughout this process and trying to have meetings to have more input throughout this process.
- **Project team noted:** As shown on Slide 10, community and stakeholder input is essential in each stage, at parts 6 and 7 especially, and this group is our attempt to facilitate that feedback
- **Project team noted:** And if anyone on this call wants to connect to discuss with this project team, we are open and willing to have those conversations asynchronously. We have a stipend amount to compensate community members to give that valuable perspective.
- **WG member noted:** I don't feel that I am a representative for community members, however I hear in my conversations with community members that there is a lot of interest in jobs and employment.
- **WG member asked:** Can you clarify what type of feedback from the community is being sought?
 - o **Project team responded:** Great question! We are open to any feedback relevant to the experience folks have with these utility programs and distributed energy resources.

WG member asked: Question about the “discrete” consideration. You mentioned that considering whether a metric is discrete is less important if you are not aggregating values. Can you please explain a bit further what you mean by aggregating in this context?

- **Project team responded:** There are situations where one could have a bunch of metrics for a DEA, and could combine them numerically, with weights, into a single number. In that type of approach, it can be difficult to have overlapping metrics, as then you could double count impacts when aggregating metrics together.

WG member noted: If using a BCA vs a societal cost analysis, there will be misalignment in terms of how those non-energy benefits are being valued and quantified.

- **Project team responded:** To be clear, when we use the term “BCA”, that can include a variety of cost-effectiveness tests, could include the Societal Cost Test, or Total Resource Cost Test that the utilities use.
- **WG member asked:** Will you be providing the models and which tests they use?
- **Project team responded:** Yes, we will start with the BCAs and the tests used by ComEd and Ameren for their programs.

WG member noted: I think the biggest economic benefit of beneficial electrification (at least in Chicago) is eliminating the Peoples Gas bill (currently \$50/month for residential before any consumption). This assumes replacing all natural gas appliances. So, for bill impacts, fuel switching is a metric. I also think reducing uncollectible accounts may be trackable if bills are lower.

Slide 17

WG member noted: Wondering about people who need to continue to have their energy service, because of health or medical issues. I think it is important to track that, the billing and things the utilities use. The utilities have a short reprieve for folks who have an illness and might need their energy service, or folks who need heat or cooling. I think a lot more thought needs to be put into that, what are you going to do in the long run so you don't have to advocate for those considerations.

- **Project team responded:** That is a critical concern. We are evaluating the EE and BE program. If the particular program we are evaluating can have an impact on that, that can be one of the distributional equity metrics. If the DER program doesn't have an impact on something, then it shouldn't be addressed in our DEA, that would be systemwide.
- **WG member noted:** With the impact of extreme heat because of climate change, this is going to be our new normal. Some things that got by in the past, and if we are moving to a new normal, the risk to those people is increasing.
- **Project team noted:** That is a great example of a non-energy benefit, customers can have warmer/cooler homes because of EE, that impact should be included in the BCA and the DEA.
- **WG member noted:** The people that need it the most, the people that benefit the most, aren't always participating in these.
- **WG member noted:** There is a bunch of extreme heat research going on now, raising the red flag. It takes renaissance thinking on anything we are developing now, to make sure anything we aren't currently worried about will be addressed, that impacts people's wellness and quality of life
- **Project team responded:** Participation is a metric we'll propose in a few minutes to respond to that and address those issues.
- **WG member asked:** Is there ever room to say - we think a program should impact x, y, or z? (If it doesn't [already impact it])

- **Project team responded:** Yes, if you have those expectations for a program, please raise it with us, but even if we don't analyze it because of lack of data, it can be something we recommend for future data and program design changes.
- **Project team responded:** Definitely and we want to highlight those recommendations as part of the reporting from these case studies.

WG member asked: Follow up question to [the project team]'s statement about warmer homes being a non-energy benefit – if a house is warmer, that is an energy benefit, but if they have a lower energy burden, then they have more money for other things that are not energy-related.

- **Project team responded:** Good point, I completely agree. The terminology used in BCA circles calls an impact a “non-energy” impact if it is not related to energy savings.
- **WG member noted:** End-users hear things in a practical sense, need to be clear. When we talk about cost association, when we say non energy benefits – in my experience with utilities, non-energy benefits are not traditionally a datapoint they collect, it is hard to talk about if there isn't data. When we talk about a varying demographic, priority populations, in IL legislation – low-income programs are not supposed to be cost effective, if we try to, we scale back resources for those programs, there has to be consistency with what legislation is stating and what the programs are doing.
- **Project team responded:** Agree completely. And to identify data gaps, so that utilities and others can collect. Other jurisdictions quantify nonenergy benefits.
- **WG member noted:** Non-energy benefits (NEBs) are essentially non-quantifiable electricity or natural gas reductions. However, there are many NEBs that have a follow-on effect of economic benefits that can be quantified. We just need to decide on which costs and benefits are in the analysis. Additionally, I would go further and look at benefits out beyond the “life of the measure” with a discount rate. Beneficial electrification of homes, while very costly up front, have a simple payback within 15 - 25 years, which is less than the life of the home. Imagine if we have spent money on water infrastructure instead of continuing to install lead service lines until 1986 - we should be looking at these benefits on a longer time frame (even if we are heavily discounting them).

WG member asked: Should #4 be changed to "percent change" in energy consumption like the others? Also, when we say "change in" what are we comparing it to? Maybe I'm not recalling how baselines are being set if we already discussed that.

- **Project team responded:** Yes "change" is better than reduction.

WG member asked: Does “Shutoffs” include uncollectible accounts? If not, I recommend it does as a separate metric. Most shutoffs do not become uncollectible accounts, but uncollectible accounts have a measurable cost on rates.

- **Project team responded:** We have been thinking of shutoffs that are done because of unpaid bills. It would be useful to hear what other reasons for shutoffs could be affected by EE or BE.
- **WG member noted:** Shutoffs generally happen if bills are unpaid for 60 - 90 days. Most customers that hit this level get their bills paid. A small percentage never pay their bills and become uncollectible accounts. These are added to rate increases to allow the utility to

recoup the loss. This becomes a potential benefit to all ratepayers, who bear that cost. One hypothesis is that reducing their bill down to just electricity would make uncollectible accounts less likely

- **Project team responded:** This information will be useful for us when we apply shutoffs as a metric. Today's discussion is whether to include it as a DEA metric. The consulting team recommends that we do include it
- **WG member responded:** Agreed - I think uncollectible accounts is a related and useful metric to know as well; just encouraging it be tracked.

Proposed Metrics (Slides 18-24)

Slide 19

Metric 1: Participation

WG member asked: Can you explain that "X" one more time? I didn't fully follow

- As shown on the slide
- ✓ means the metric meets this criterion reasonably well for the DER program being considered
- ? means the metric might meet the criterion or might not, e.g. depending on full set of DEA metrics or uncertainty in the data we will receive.
- X means the metric fails to meet the criterion
- **Project team responded:** X means that the metric fails to meet the criterion. In this case it was the wider definition of Equity Investment Eligible Communities (EIEC) that does not allow for desired data resolution

Slides 23-24

Ameren representative noted: Ameren's low-income discount rates for natural gas customers went into effect on October 1. The amount of discount varies based on customer's income relative to the federal poverty standard.

Slide 24

WG member asked: As we are going through, it would be helpful to provide what your recommendations are for each metrics.

- Project team walked through recommendations

WG member asked: You don't intend to include shutoffs for BE?

- **Project team responded:** Correct. We do not recommend shutoffs for BE because it is not clear how BE will affect bills and shutoffs. BE can result in increased electric bill and reduced gasoline bills.

Metrics not suggested for inclusion (Slides 25-27)

Summary of Proposed Metrics, Q&A, Polls (Slides 28-32)

Slide 29

WG member asked: Was access to charging considered as part of Ameren BE?

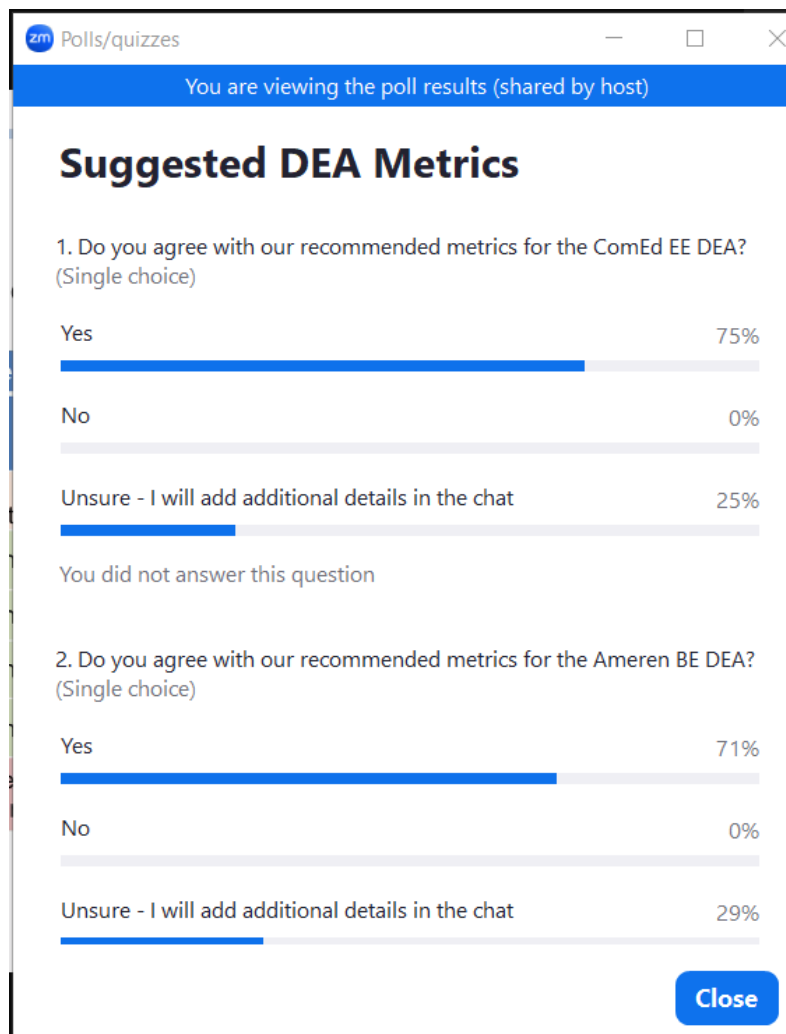
- **WG member asked:** We have not looked at access to existing charging. Data for Ameren's BE plan only has to do with whether charging is in an EIEC or not.
- **Project team responded:** And that will be important as we consider applications or metrics in next meeting.

Discussion on what metrics that should be a priority in the future:

- **WG member noted:** Just on the access to charging piece, I am not super familiar with the Ameren BE plan, I believe it is more than just household level charging installation which means there is access to charging – I hear a lot of folks that access to charging is an issue, that access to charging is an issue in the southern part of the state and even in low income areas in the city.
 - o **Project team responded:** Ameren's BE plans also include plans to implement public chargers and putting chargers in EIEC communities.
- **WG member asked:** And for employment and jobs, you focused on jobs and hours worked, seemed like you are trying to be particular about quantifying the jobs impacts and impacts to priority populations. What about metrics like EIEC contractors, or minority businesses?
 - o **Project team responded:** Good point. There are elements in job impacts that we might be able to account for – there might be programs that are linked to BE or EE programs, if those exist, we can identify and document the extent to which they might affect priority populations, might not be full analysis but could be built upon in future. We could have an offline conversation with some of you folks and see what programs and data we can include.
- **WG member asked:** For things like metrics #3 and #4 (Rates and bills and energy savings), are you looking at it from a proportional perspective (like energy savings per square foot or rate and bill impacts for priority populations as a percentage of overall bill)?
 - o **Project team responded:** Good question, the answer depends on what we can get for data. We will get average energy savings per customer. Calculating energy savings per square foot might require data we don't have. And we will do what we can in the case study, and going forward might create ideas for what can be collected for detail you want.

- **WG member noted:** For energy savings – if it is savings per customer, housing stock might look very different for priority populations because of differences in housing stock between areas. Having narrative around that would be helpful to describe that.
- **Project team responded:** The project team will follow up offline on some of these metrics and questions for folks who have input. And we are willing to accept emails after this meeting on your thoughts on these metrics.

Poll



WG member noted: I understand why GHG impacts are very difficult to include in this analysis. Just want to say one thing that I am struggling with is that BE programs largely come from a place of wanting to remove GHG emissions. Feels odd to exclude those impacts, maybe there is some other air quality proxy that could stand in? Or is it just that we have to look to the BCA analysis to really account for that aspect of this program?

- **Project team responded:** I think it is best addressed in BCA, it is so hard to break out the distributional piece of GHG emissions. It does feel like something is missing, especially if you were in a state where you have wildfires or something. In the DEA guide, we say you should look at the number you use in your BCA for GHG emissions, the numbers that are often used don't account for equity, you could account for GHG benefits by adding an additional adder value for equity in there.

Stage 3 Review – mapping tools (Slides 33-40)

Did not have time to discuss previous workgroup suggestions for mapping tools during this meeting – we plan to continue at the next meeting. We encourage folks to read these slides, feel free to follow up if you have questions.

Project Schedule and Next Steps (Slides 41-43)