Applying a Framework for Addressing Cost-Effectiveness and Distributional Equity in Distributed Energy Resource Investment Decisions

Illinois Work Group
Fourth Meeting

October 9, 2024

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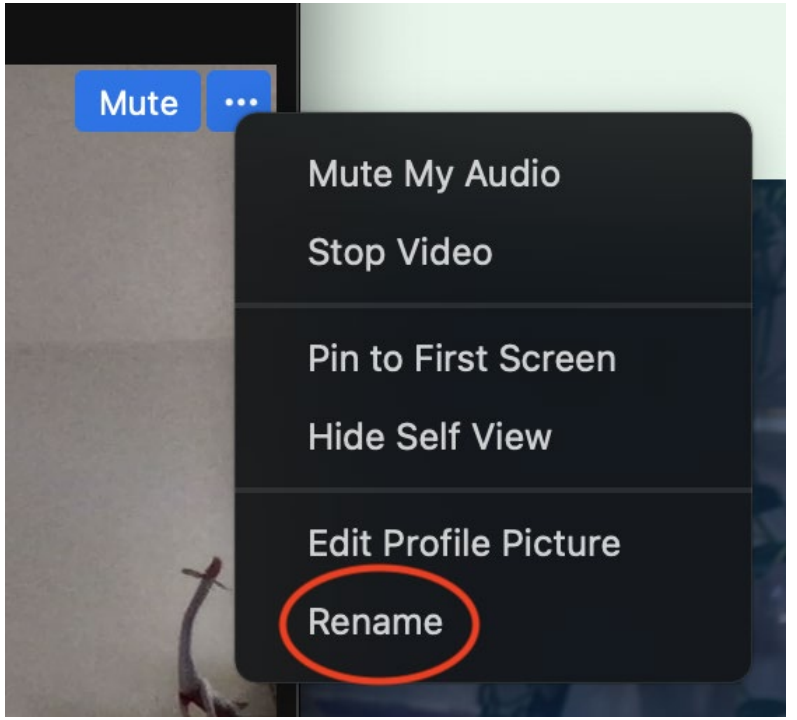
Housekeeping

- Please add your affiliations and pronouns to your Zoom name.
- Please mute yourself when you are not speaking.
- If you have a comment or question, please raise your hand or use the chat.
- We will be recording the session to share with DEA Work Group members that could not attend this call.



Agenda

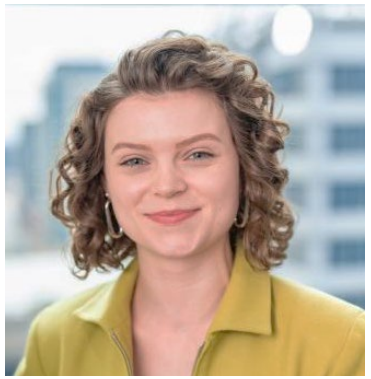
1. Introductions
2. Recap: project goals, the role of the DEA Work Group, and DEA
3. Stage 4 of DEA: Identify DEA metrics
   - Options and considerations for choosing DEA metrics
   - Data considerations
4. Follow-up on Stage 3 of DEA: Identify Priority Populations
   - Summarize approach for defining priority populations for each case study
   - Mapping tools: EJScreen & CEJST
5. Project schedule and next steps

Project Team

Midwest Energy Efficiency Alliance

Liaison and facilitation

Gregory Ehrendreich
Manager



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E4TheFuture

Project management

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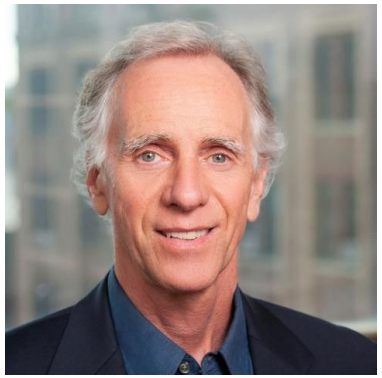

Tim Woolf
Senior VP

DEA Work Group – Going Into Meeting 4

First	Last	Organization
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Peter	Millburg	Ameren Illinois
Agnes	Mrozowski	Ameren Illinois
Brice	Sheriff	Ameren Illinois
Celia	Johnson	Celia Johnson Consulting
Andrew	Weuve	Champaign County Regional Planning Commission
Mary Ellen	Guest	Chicago Historic Bungalow Association
Sarah	Moskowitz	Citizens Utility Board
Kyle	Danko	ComEd
Jim	Fay	ComEd
Molly	Lunn	ComEd
Cassidy	Kraimer	Community Investment Corp (CIC) Chicago
Kenyatta	Parker	Community Investment Corp (CIC) Chicago
MeLena	Hessel	Elevate
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First	Last	Organization
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Chris	Neme	Energy Futures Group (for NRDC)
Fahad	Rashid	EPE Consulting
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Selena	Worster Walde	Erthe Energy Solutions
Neil	Curtis	Guidehouse
Mark	Mandolini	Honeywell
Roger	Pavey	Illinois Association of Community Action Agencies
Elizabeth	Horne	Illinois Commerce Commission
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Susan	Satter	Office of the Illinois Attorney General
Shelby	Smith	Office of the Illinois Attorney General
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Julia	Friedman	Oracle
Christina	Frank	Peoples Gas and North Shore Gas
Kristen	Kalaman	Resource Innovations
Deborah	Dynako	Slipstream
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Keely	Hughes	The JPI Group
Stephen	Taylor	The Will Group
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Erika	Dominick	Walker-Miller Energy Services
Carla	Walker-Miller	Walker-Miller Energy Services

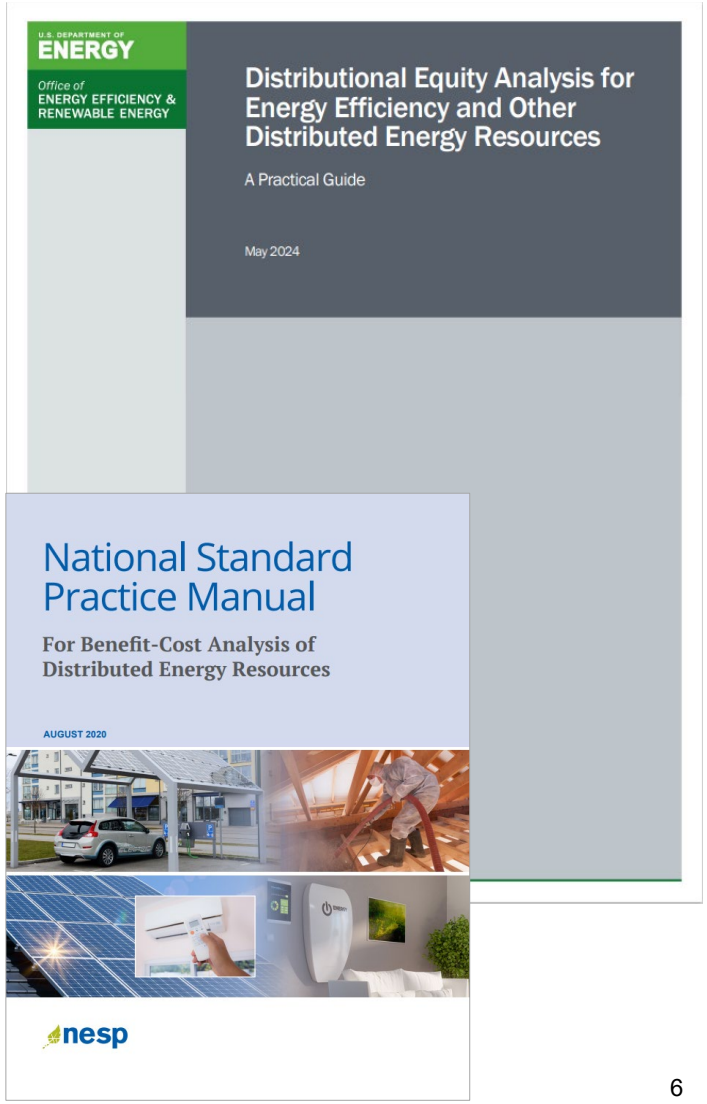
Guiding Resources for the DEA Case Studies

Distributional Equity Analysis for Energy Efficiency and Other Distributed Energy Resources *(May 2024)*

- Funded by US DOE, through Lawrence Berkeley National Lab (LBNL) and E4TheFuture
- Overseen by an Advisory Committee made up of experts in energy equity and in energy planning.
- Additional information and report available here.

National Standard Practice Manual (NSPM) for DERs

- Benefit Cost Analysis (BCA) guidance being used by states across the country
- With state focus on equity, key questions raised about how BCA addresses equity (or not…)



Reminder: Work Group Role and Meeting Guidelines

- Work Group Role
  - Participate in Work Group meetings – input is critical to project and is encouraged (via chat box, verbal input, follow-up emails, and/or subgroup phone calls)
  - Provide comments on DEA key methodologies, inputs, and assumptions
  - Review and comment on DEA and BCA results and draft/final case studies report
- Agendas and meeting materials will be sent in advance of meetings
- Meeting notes will be shared with Work Group
- Chatham House rule will apply
  - i.e., input shared in our meetings will not be assigned to or associated with any Work Group member or representative outside of the Work Group meetings

All Materials Posted to DEA Case Study Project Website:

DEACaseStudy.org

Case Study Objectives

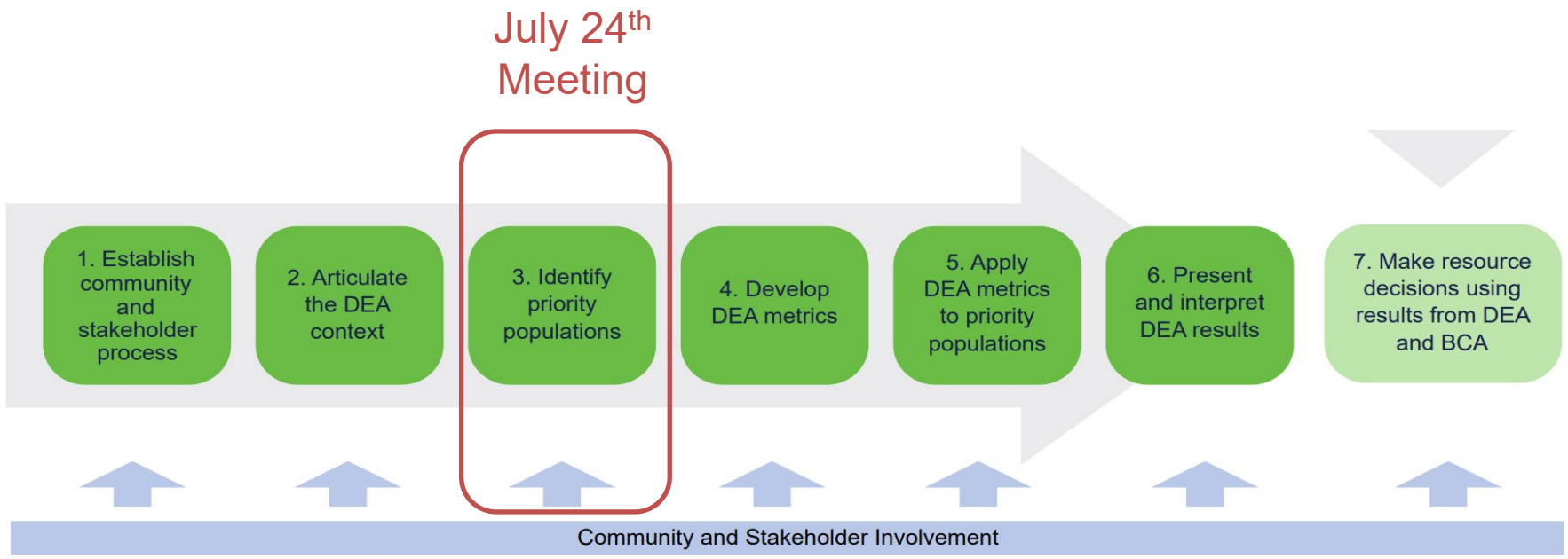
1. Show ICC and stakeholders **how to conduct a DEA** using existing definitions for priority populations and metrics based on statute and utility plans.
2. **Identify gaps and limitations** and options to address gaps going forward.
3. Develop stakeholder understanding on **how to use map-based resources and spatial tools** to visualize DEA metrics for priority populations.
4. Using analysis results, **demonstrate the use of DEA, alongside BCA, to guide decision-making** on DER resource investments that accounts for impacts on priority populations.

Recap from Work Group Meeting #3

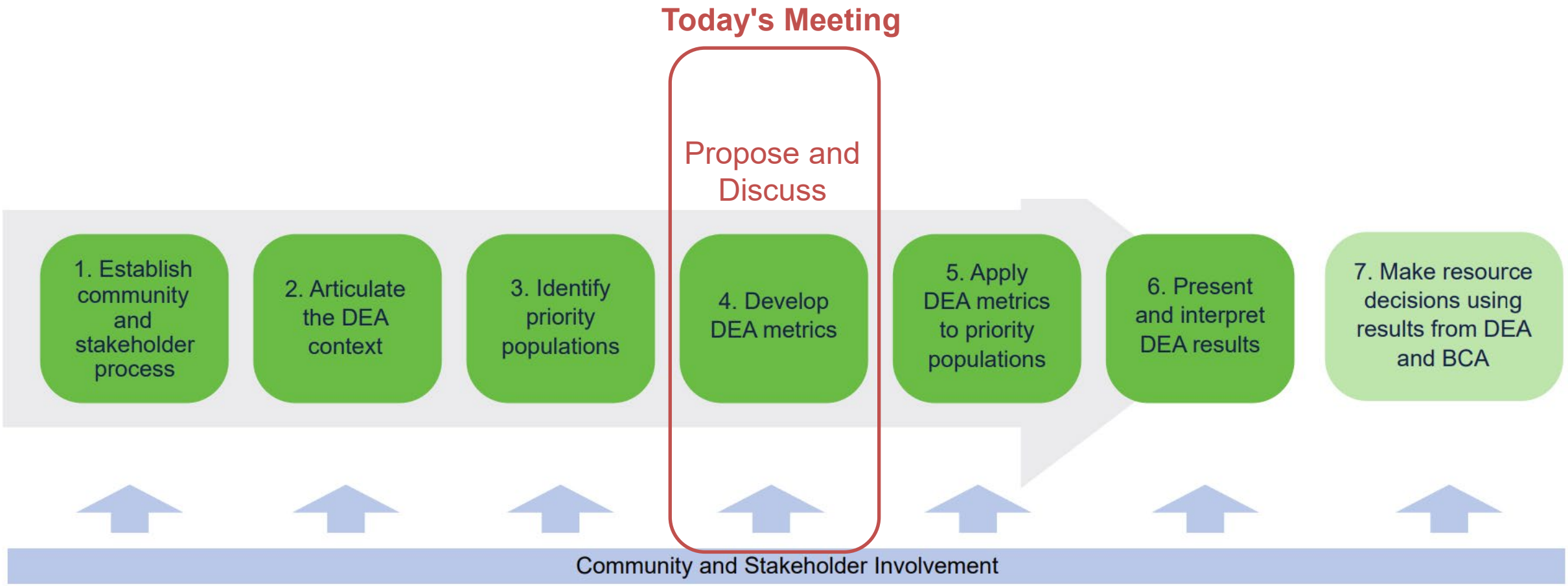
We proposed the priority populations for the two DEA case studies

Proposal	Utility	DER	Priority Population
Case Study #1	ComEd	EE Plan	Low-income
Case Study #2	Ameren	BE Plan	EIEC and LI

Note: We reviewed suggestions from last meeting regarding use of mapping tools, and will come back to this later in our meeting today...



DEA Stages – Where we are in the process



Stage 4. DEA Metrics

Overview of DEA Metrics

- DEA metrics are used to determine if costs and benefits of a utility program or investment are equitably distributed between priority populations and other customers.
- Choice of DEA metrics determine which aspects of equity will be assessed in the DEA.
- DEA metrics are a subset of systemwide energy metrics.
  - DEA metrics focus on distributional equity.
  - Systemwide energy metrics include metrics that measure all dimensions of energy equity (distributional, procedural, recognitional, and restorative) in all utility contexts.
- DEA metrics are generally different from *indicators* used to define priority populations.
  - Indicators can be socioeconomic status, racial demographics, ethnicity, income-status. They can also include data on exposure to environmental pollution or contamination.
- Data for DEA metrics usually comes from utilities.

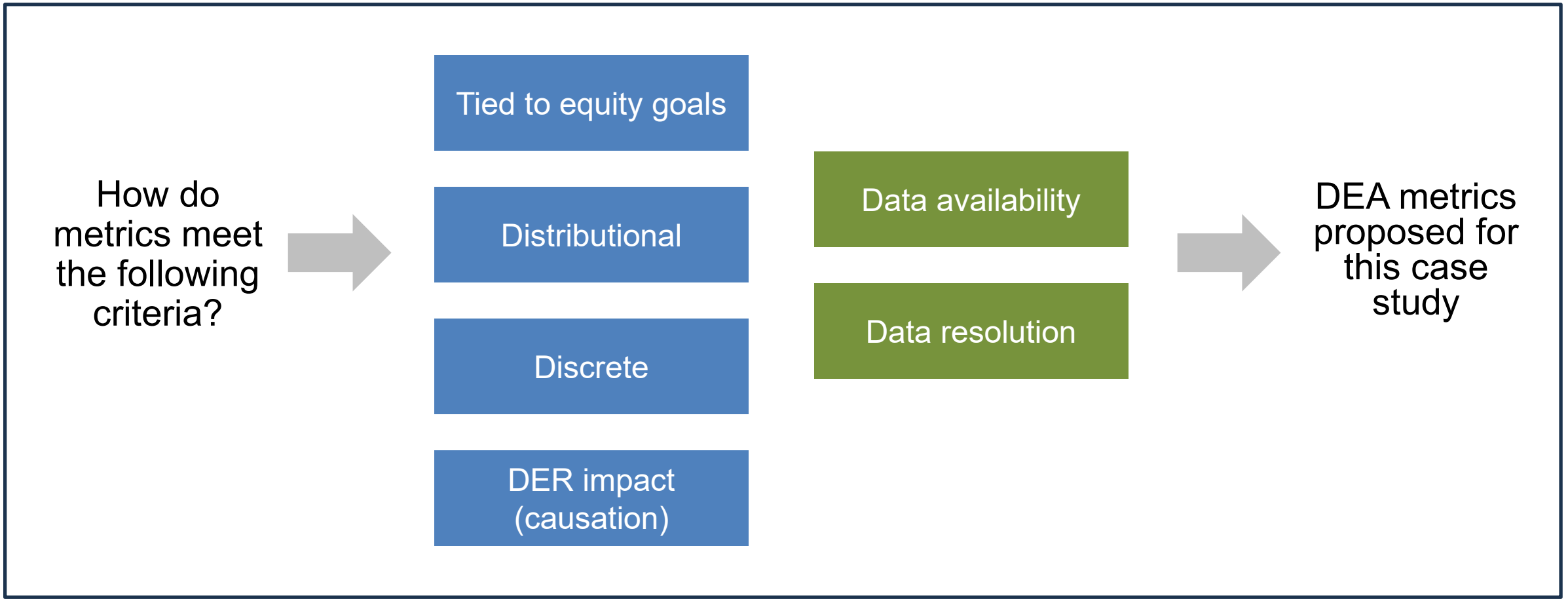
Update on Utility Collaboration and Data Access

- Utilities are busy working on EE and BE plan development.
- Utilities must query their databases for answering our data requests.
- Utilities cannot provide public, customer-level data due to privacy concerns.
  - Most of the data needed for the analysis must be shared under an NDA .
  - Contracting can take weeks.
  - Obtaining data involves many parties.
- We have received data from Ameren for BE DEA case study (based on July 2024 Updated Plan) and should be receiving historical EE data (2022-23) from ComEd soon.
- Recommendations on metrics to include in the two DEA case studies (next slides) may be affected by ultimate data we receive and review

Data Available in Utility EE and BE Plans

- **ComEd's EE Plans (actual 2022-2023)**
  - Program participation (# of customers)
  - Energy Savings (MWh)
  - Utility dollars invested/spending ($)
- **Ameren's BE Plans (estimated or projected for 2026-2028)**
  - Participation (# of customers)
  - Utility dollars invested/spending ($)
  - Emissions reduced (tons/yr)
  - BCA workbooks for 2026-2028

Overview of Today's Metrics Discussion



Choosing DEA Metrics: Metric & Data Considerations

Metric Consideration	Description
Tied to equity goals	Does the metric address one or more of the jurisdictional equity goals?
Distributional	Does the metric focus on distributional equity impacts, i.e., whether some customers are receiving greater benefits than others for the required costs?
Discrete	Does the metric overlap with BCA metrics or other DEA metrics?
DER impact (causation)	Will the DER being considered have an impact on the metric?
Data availability	Is the relevant metric data currently or anticipated to be available? *i.e. Does the utility collect this data? Is this data available elsewhere?*
Data resolution	Is the data at a level that is detailed enough to provide sufficient resolution? *i.e. Is the available data at Census tract, town, or zip code-level resolution?*

DEA Metrics We Considered

DEA Metric	Metric Definition
1. Participation	Participants as percent of eligible customers
2. Utility Investment	Utility funds invested in programs
3. Rate and bill impacts	Percent change in rates
	Percent change in bills
4. Energy savings	Percent reduction in energy consumption
5. Shutoffs	Change in number of shutoffs or frequency of shutoffs
6. Reliability – outages	Change in number and duration of outages on the utility system
	Change in number and duration of outages at the customer level
7. GHG impacts	Change in impacts from reduced GHG emissions
8. Employment & Jobs	Change in the number of full-time job hours
9. Public Health Impacts or Air Quality	Change in ambient air quality concentrations from reduced air emissions

Recommended DEA Metrics

DEA Categories	Example Metrics	ComEd	Ameren
1. Participation	Participants as percent of eligible customers	Yes	Optional
2. Utility Investment	Utility funds invested in programs	Optional	Yes
3. Rate and bill impacts	Percent change in rates	Yes	Yes
	Percent change in bills		
4. Energy savings	Percent reduction in energy consumption		
5. Shutoffs	Change in number of shutoffs or frequency of shutoffs	Yes	No
6. Reliability – outages	Change in number and duration of outages on the utility system	No	
	Change in number and duration of outages at the customer level		
7. GHG impacts	Change in impacts from reduced GHG emissions		
8. Employment & Jobs	Change in the number of full-time job hours		
9. Public Health Impacts or Air Quality	Change in ambient air quality concentrations from reduced air emissions		

Metric 1: Participation

		ComEd EE	Ameren BE
Tied to equity goals	CEJA contains goals for benefits to be allocated to EIEC customers, and participants receive program benefits.	✓	✓
Distributional	Participation in programs varies by priority populations vs. all other customers.	✓	✓
Discrete	Participation likely overlaps with other DEA metrics or BCA impacts, such as level of investment.	?	?
DER impact	Participants receive program benefits.	✓	✓
Data availability	Data likely available from plans, reports, and databases.	✓	✓
Data resolution	Data unlikely to be available at desired resolution; access to utility data is key.	✓	X

Metric 2: Utility Investment

		ComEd EE	Ameren BE
Tied to equity goals	CEJA requires ComEd to allocate $40M/yr and Ameren to allocate $13M/yr to low-income customers in EE plans (Section 8-103B(c)). CEJA also requires 40% of make-ready infrastructure investment in BE plans to EIEC populations (Section 45(d)(3)).	✓	✓
Distributional	This metric directly measures which populations are receiving utility funding for a DER.	✓	✓
Discrete	This metric likely overlaps with other DEA metrics such as participation.	?	?
DER impact (causation)	Utility investment influences the outcomes of a DER program.	✓	✓
Data availability	Data likely available from Ameren and ComEd plans and reports.	✓	✓
Data resolution	Data unlikely to be available at desired resolution.	?	X

Metric 3a: Rate Impacts

		ComEd EE	Ameren BE
Tied to equity goals	In 2022, ICC recommended that Ameren and ComEd offer low-income discount rates.(1) Ameren and ComEd plan to offer low-income rates beginning in 2025.(2)	✓	✓
Distributional	Rates will not vary by priority populations vs. other customers.	X	X
Discrete	Rate impacts influence bill impacts.	?	?
DER impact (causation)	A ratepayer-funded DER program will have direct influence on customer rates.	✓	✓
Data availability	Input data (including energy consumption, energy rates, and utility dollars invested) are likely available from utility's internal databases.	✓	✓
Data resolution	Data unlikely to be available at desired resolution; access to utility data is key.	?	✓

(1) Low-Income Discount Rate Study Report. *Illinois Commerce Commission* (Dec 2022). https://icc.illinois.gov/downloads/public/icc-reports/low-income-discount-rate-study-report-2022-12-15.pdf

(2) Utility Energy Assistance. *Illinois Commerce Commission.* (2024). https://www.icc.illinois.gov/consumers/utility-energy-assistance

Metric 3b: Bill Impacts

		ComEd EE	Ameren BE
Tied to equity goals	Bills can be converted into energy burden (the percentage of household income spent on energy). The Illinois Attorney General recommended a 3.1% energy burden for energy and water.(1) No specific goals have been adopted yet.	✓	✓
Distributional	Measures the impact of the program for priority population and other participants.	✓	✓
Discrete	Bill impacts may not be discrete (they overlap with rate impacts) but tell us important information about impacts on program participants.	?	?
DER impact (causation)	A DER program will have a strong influence on customer bills.	✓	✓
Data availability	Input data (including energy consumption, energy rates, utility dollars invested) are likely available from the utility's internal databases.	?	✓
Data resolution	Data unlikely to be available at desired resolution; access to utility data is key.	?	X

(1) Office of the Attorney General – Initial Comments. Office of the Attorney General. Illinois Commerce Commission on Its Own Motion – Notice of Inquiry Regarding Energy Affordability (20-NOI-01). Sept 30 2020. Available at https://www.icc.illinois.gov/notice-of-inquiry/20-noi-01

Metric 4: Energy Savings

		ComEd EE	Ameren BE
Tied to equity goals	Clean Energy law requires that 25% of EE energy savings come from programs in low-income households.	✓	✓
Distributional	Can quantify changes in energy consumption for different population subsets.	✓	✓
Discrete	Changes in energy are used to calculate BCA impacts and other metrics (such as bill impacts), so may not be discrete.	?	?
DER impact (causation)	DER programs will have a direct impact on energy savings for participants.	✓	✓
Data availability	Data likely available from the utility's internal databases.	?	✓
Data resolution	Data unlikely to be available at desired resolution; access to utility data is key.	?	X

Metric 5: Shutoffs

		ComEd EE	Ameren BE
Tied to equity goals	Illinois has several programs to reduce shutoffs and recently passed a bill (People's Utility Rate Relief Act) adding protections against shutoffs.(1)	✓	✓
Distributional	Priority populations (e.g. low income customers) face challenges with paying bills and may be more likely to experience shutoffs. Bill savings can help program participants pay their bills and potentially avoid shutoffs.	✓	?
Discrete	Shutoffs are not measured in a traditional BCA and would not overlap with other DEA metrics.	✓	✓
DER impact (causation)	Research has looked at the correlation between shutoffs and energy efficiency programs.(2) However, proving a statistical historical correlation is still uncertain. The correlation between shutoffs and *beneficial electrification* programs is not well studied.	?	X
Data availability	Data may be available on publicly available utility dashboards or reported by the utility in quarterly annual reports.	✓	?
Data resolution	Data unlikely to be available at desired resolution; access to utility data is key.	?	X

(1) Illinois House Bill 2172. Available at https://legiscan.com/IL/text/HB2172/2023
(2) ComEd Utility Non-Energy Impacts Research. Guidehouse (Apr 2021). Available at https://www.ilsag.info/wp-content/uploads/ComEd-Utility-NEI-Overview_2021-04-19.pdf

Metrics not suggested for this case study

6. Reliability (outages)

- Distributional: Breaking out impacts by population subsets may be challenging, given how data is currently tracked.
- DER Impact: While research supports a correlation between energy efficiency programs and a reduction in number of outages(1), using outages as a metric would be challenging due to external factors and a lack of data.

7. GHG Emissions

- Distributional: Climate change is a global phenomenon, and impacts to a specific population are very difficult to measure.
- Discrete: Avoided GHG emissions are often monetized and included in a BCA, so this metric would not be discrete.
- DER Impact: It is very difficult, if not impossible, to isolate the extent to which a DER could change GHG-driven, weather-related impacts due to climate change.

(1) Carvallo, J., Mims Frick, N., Schwartz, N. A review of examples and opportunities to quantify the grid reliability and resilience impacts of energy efficiency (Oct 2022). Available at https://www.sciencedirect.com/science/article/pii/S0301421522004062#:~:text=In%20deterministic%20analysis%2C%20energy%20efficiency,demand%20relative%20to%20available%20supply.

Metrics not suggested for this case study

8. Employment & Jobs

- Distributional: It is difficult to measure changes in jobs and other employment impacts for different population subsets, given how data is currently tracked.
- Data resolution: Due to the nature of utility's workforce equity program (small number of total participating contractors), program impacts would be challenging to discern.

9. Public Health or Air Emissions

- Distributional: Breaking out health impacts by population subsets is challenging.
- Discrete: Monetized public health benefits from avoided emissions typically appear in a BCA.
- Data resolution: Current EPA tools can estimate public health impacts from programs such as energy efficiency at the county-level, not at a finer scale.
- DER impact: Scale of current BE programs is too small to have substantial impact. See next slide for EE programs.

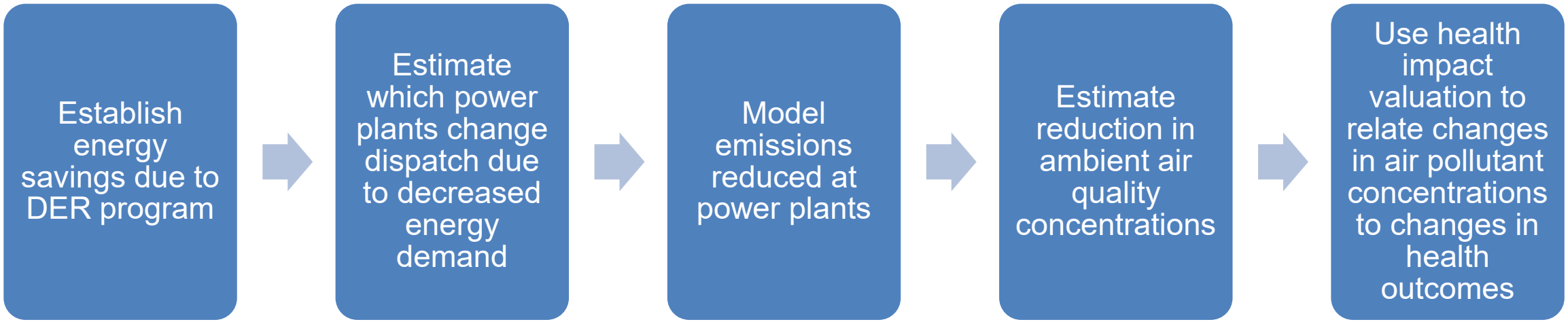
(1) Carvallo, J., Mims Frick, N., Schwartz, N. A review of examples and opportunities to quantify the grid reliability and resilience impacts of energy efficiency (Oct 2022). Available at https://www.sciencedirect.com/science/article/pii/S0301421522004062#:~:text=In%20deterministic%20analysis%2C%20energy%20efficiency,demand%20relative%20to%20available%20supply.

9. Public Health or Air Emissions - DER Impact

DER programs can reduce fossil fuel-based air emissions, leading to a reduction in air pollution concentrations and improved public health. However, the *location* and *magnitude* of these changes is difficult to estimate.

The EPA has developed two tools to estimate public health impacts from energy storage, renewable energy, or energy efficiency programs.[1,2] However, these tools estimate impacts on a *county-level* resolution and are likely too broad for this analysis.

Process to Estimate Health Impacts from EE Programs



[1] AVoided Emissions and geneRation Tool (2024). EPA. Available at https://www.epa.gov/avert

[2] CO-Benefits Risk Assessment Health Impacts Screening and Mapping Tool (2024). EPA. Available at https://www.epa.gov/cobra

Suggested Metrics for ComEd EE DEA

Potential Metric	ComEd EE		
	Recommend?	*Suitability*	*Key Rationale*
1. Participation	Yes	Strong	Good indication of customers who benefit most
2. Utility Investment	Optional	Moderate	Contingent on data availability. May overlap with participation (prioritize participation)
3a. Rate Impacts	Yes	Strong	Good indication of impacts on non-participants
3b. Bill Impacts	Yes	Strong	Good indication of impacts on participants
4. Energy Savings	Yes	Strong	Good indication of impacts to participants
5. Shutoffs	Yes	Moderate	Reduced bills may lead to more on-time payments

Suggested Metrics for Ameren BE DEA

Potential Metric	Ameren BE		
	Recommend ?	*Suitability*	*Key Rationale*
1. Participation	Optional	Challenging to present	Participation is harder to aggregate for some BE programs and may be better captured by utility investment metric.
2. Utility Investment	Yes	Strong	Good indication of neighborhoods that benefit most
3a. Rate Impacts	Yes	Strong	Good indication of impacts on non-participants
3b. Bill Impacts	Yes	Strong	Good indication of impacts on participants
4. Energy Savings	Yes	Strong	Good indication of impacts to participants
5. Shutoffs	No	Low	Relationship between transportation electrification programs and shutoffs is not well studied

Feedback and Discussion on DEA Metrics

- Do you have questions on any of the metric considerations or data considerations we described?
- What metrics not included in our proposed DEA do you feel should be a priority in the future?
- What type of data should be tracked in the future in order to measure distributional equity, that is not already tracked?

DEA Metric
1. Participation
2. Utility Investment
3. Rate and bill impacts
4. Energy savings
5. Shutoffs
6. Reliability – outages
7. GHG impacts
8. Employment & Jobs
9. Public Health Impacts or Air Quality
10. Other?

Poll #1 on Suggested DEA Metrics

- Question 1: Do you agree with our recommended metrics for the ComEd EE DEA?

Potential Metric	ComEd EE		
	Recommend?	*Suitability*	*Key Rationale*
1. Participation	Yes	Strong	Good indication of customers who benefit most
2. Utility Investment	Optional	Moderate	Contingent on data availability. May overlap with participation (prioritize participation)
3a. Rate Impacts	Yes	Strong	Good indication of impacts on non-participants
3b. Bill Impacts	Yes	Strong	Good indication of impacts on participants
4. Energy Savings	Yes	Strong	Good indication of impacts to participants
5. Shutoffs	Yes	Moderate	Reduced bills may lead to more on-time payments

Poll #2 on Suggested DEA Metrics

- Question 2: Do you agree with our recommended metrics for the Ameren BE DEA?

Potential Metric	Ameren BE		
	Recommend ?	*Suitability*	*Key Rationale*
1. Participation	Optional	Challenging to present	Participation is harder to aggregate for some BE programs and may be better captured by utility investment metric.
2. Utility Investment	Yes	Strong	Good indication of neighborhoods that benefit most
3a. Rate Impacts	Yes	Strong	Good indication of impacts on non-participants
3b. Bill Impacts	Yes	Strong	Good indication of impacts on participants
4. Energy Savings	Yes	Strong	Good indication of impacts to participants
5. Shutoffs	No	Low	Relationship between transportation electrification programs and shutoffs is not well studied

Stage 3. Identify Priority Populations – Follow-up from Meeting #3

Priority Populations for the DEA Case Studies

State policy establishes Low-income and Equity Investment Eligible Communities (EIEC) as priority populations

Low-Income

- CEJA defines as persons and families whose income does not exceed 80% of area median income, adjusted for family size and revised every 2 years. “Low-income community”: a census tract where at least half of households are low-income.(1)
- Utilities are required to dedicate a set portion of energy efficiency (EE) portfolio budget for programs targeting low-income customers

EIECs

- CEJA defines as Restore, Reinvest, Renew Areas (R3) + Environmental Justice communities (EJC).(2)
- Utility beneficial electrification plans must provide benefits to EIECs and low-income communities.(3)

(1) 102-0662 § 10-10 (Sep 15, 2021), https://epa.illinois.gov/content/dam/soi/en/web/epa/topics/ceja/documents/102-0662.pdf
(2) 102-0662 § 10-10 (Sep 2021), https://epa.illinois.gov/content/dam/soi/en/web/epa/topics/ceja/documents/102-0662.pdf
(3) 20 ILCS 627/ (Nov 2021), https://www.ilga.gov/legislation/ilcs/ilcs3.asp?ActID=3348&ChapterID=5

Priority Populations for the DEA Case Studies

- Based on our research and discussions with stakeholders at our July 24 Workgroup meeting, we are using the priority populations as defined in statute.
- Each DEA analysis will use a unique definition for priority population, as defined by CEJA and the Electric Vehicle Act:

Proposal	Utility	DER	Priority Population
Case Study #1	ComEd	EE Plan	Low-income
Case Study #2	Ameren	BE Plan	EIEC and low-income

- Workgroup generally agreed at last meeting that ideally, going forward, there would be a consistent definition for priority populations between EE and BE plans and consideration for other populations, e.g., moderate income

Workgroup Suggestions On Mapping Tools: EJScreen and CEJST

Limitations

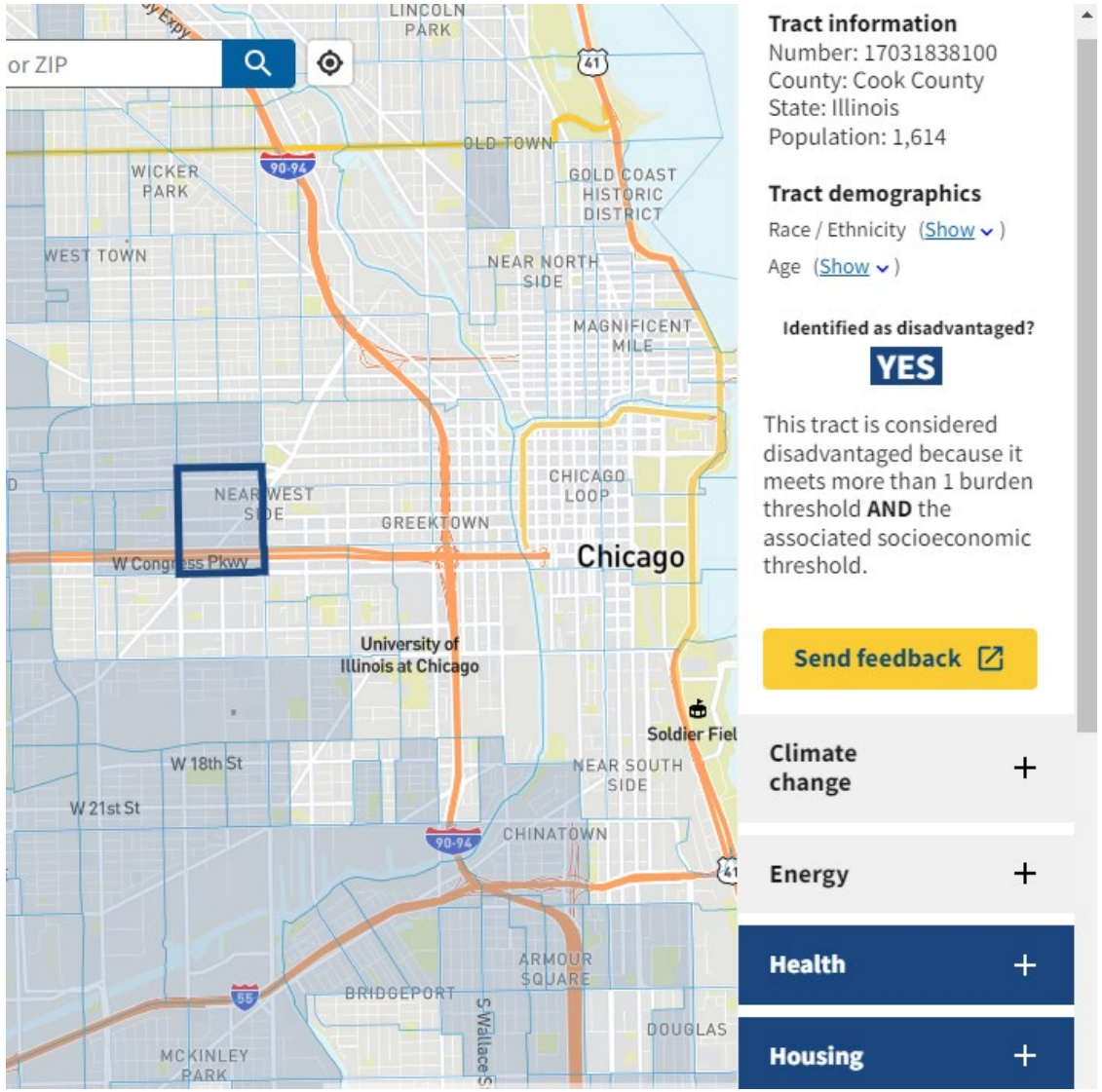
- These mapping tools *do not provide programmatic data* on impacts of specific programs needed for our DEA (e.g., participation in the EE program). They only have aggregated data which cannot be connected to customers.
- The utilities are *not* currently tracking customer data on individual indicators (e.g., race) included in CEJST or EJScreen.
- There is no way to match the CEJST or EJScreen criteria with specific customers impacted by the DER program using DEA metrics.
- The spatial resolution of the mapping tools (census tracts and block groups) may be difficult to align with any zip code utility data we receive.

Possible Uses

- These mapping tools can provide general indicator data and can characterize populations and burdens faced by different populations spatially.
- Next slides show examples of how we could use these mapping tools to provide background information on priority populations in Illinois

Climate and Economic Justice Screening Tool (CEJST) Overview

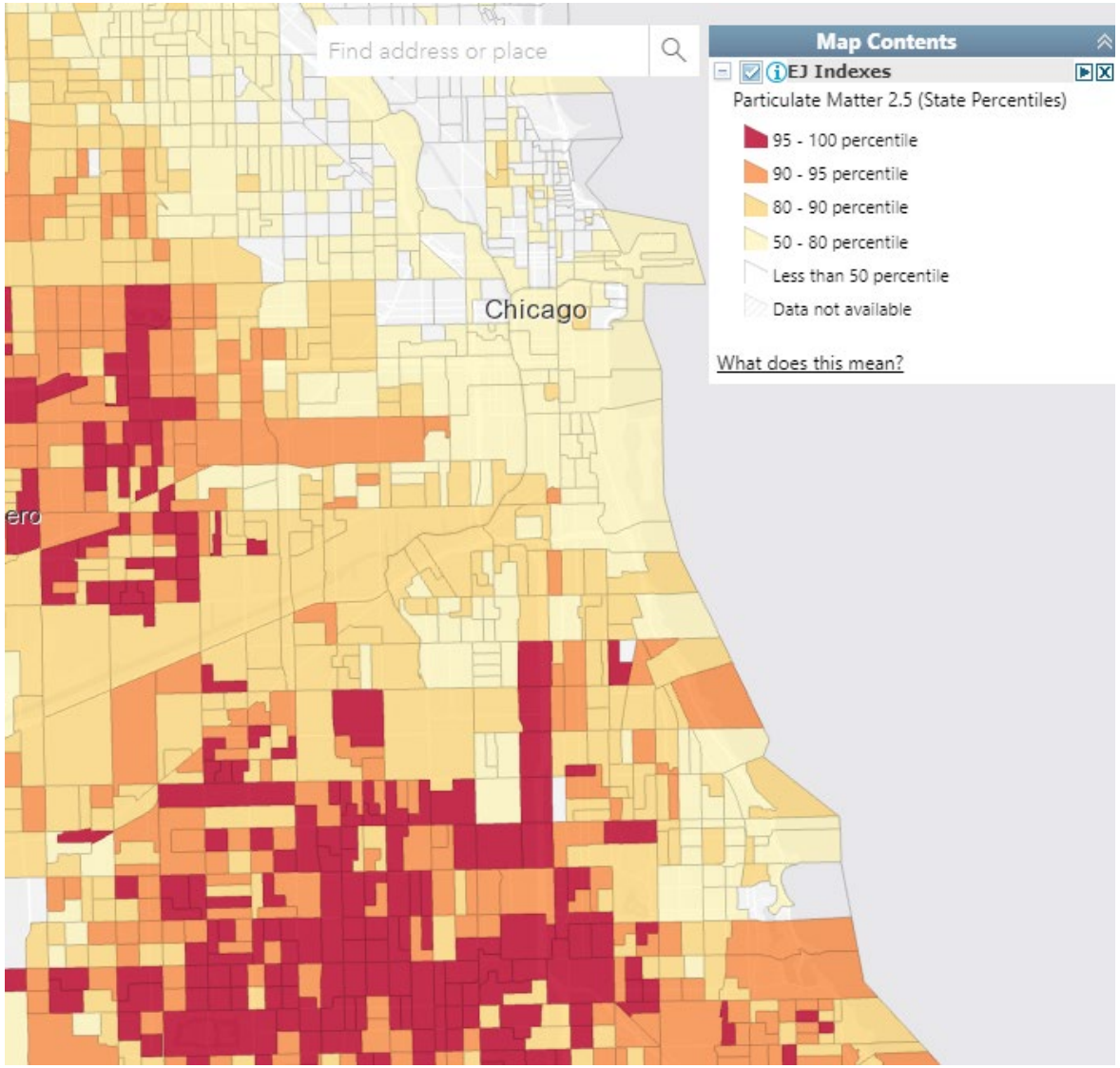
- CEJST is used to identify disadvantaged communities across the U.S., and we can download all of the underlying public datasets from CEJST to analyze individually.
- CEJST evaluates 33 indicators under 8 categories of burden:
  - climate change, energy, health, housing, legacy pollution, transportation, water and wastewater, workforce development
  - Race is not included in the designation of a “disadvantaged community”, but the tool does present race and ethnicity by census tract for informational purposes



Source: https://screeningtool.geoplatform.gov/en/#11.96/41.87557/-87.67527

EJScreen overview

- EJScreen has data on environmental and socioeconomic indicators for every block group in the U.S.
  - Includes **13 environmental indicators** (such as exposure to diesel particulate matter), and
  - **7 socioeconomic indicators** (such as people of color, low-income households, and unemployment rate)
  - The “EJ indexes” combine each environmental indicator in isolation with a demographic index measuring the low-income population and people of color



Source: https://ejscreen.epa.gov/mapper/

EJScreen Demographic Indicators

EIECs have a higher percent of people that fall under an EJScreen socioeconomic indicator compared to the state as a whole or non-EIEC block groups.

- While we only did this illustrative analysis for EIECs, we could analyze this data for low-income census tracts as well.

EJScreen Demographic indicator	State %	EIEC %	Non-EIEC %	Definition
People of color	40%	66%	26%	*All people other than non-Hispanic white-alone individuals*
Low-income households	27%	40%	19%	*Household income less than 200% of the federal poverty level*
Unemployment	4%	5%	3%	*Population that did not have a job, made >1 specific active effort to find a job during the prior 4 weeks, and were available for work*
Limited English-speaking households	4%	8%	2%	*Household in which no one age 14+ speaks only English, or speaks a non-English language and speaks English "very well"*
Less than high school education	10%	17%	6%	*People age 25+ whose education is short of a high school diploma*

EJScreen Environmental Indicators

- EIECs have a higher exposure levels to particulate matter (PM) relative to all other block groups ("state total") and non-EIEC block groups.
  - The median PM2.5 concentration is 3% higher in EIECs compared to all block groups in the state, and 5% higher than non-EIEC block groups.
  - The median concentration of diesel particulate matter is 30% higher in EIECs compared to all block groups in the state, and nearly twice as high as non-EIEC block groups.

EJScreen Environmental indicator	units	State total	EIEC	Non-EIEC	Definition
Particulate matter < 2.5 microns	*micrograms/m^3*	8.98	9.26	8.81	*Median annual average PM2.5 levels in the air*
Diesel particulate matter	*micrograms/m^3*	0.23	0.31	0.18	*Median annual concentration of Diesel PM*

Project Schedule and Next Steps

Estimated Project Schedule and Work Group Meetings

Work Group Meeting	Approximate Date
#1 - Introduction to process, relevant policies	March 6, 2024
#2 – Proposed Case Studies & DEA Context	May 10, 2024
#3 – Priority Populations and DEA Metrics	July 24, 2024
#4 – DEA Metrics	Oct 9, 2024
#5 – Review Results	Dec 2024 or Jan 2025
#6 – Decision-making & Draft Report	Jan or Feb 2025

Next Steps

- Our team will continue to review utility data and will begin initial metric calculations for priority populations to present at the next meeting
- Please reach out to team with any questions/comments following this meeting (see next slide)
  - Project Coordination: Julie Michals at jmichals@e4thefuture.org
  - Lead Work Group contact: Greg Ehrendreich at gehrendreich@mwalliance.org

Thank you!
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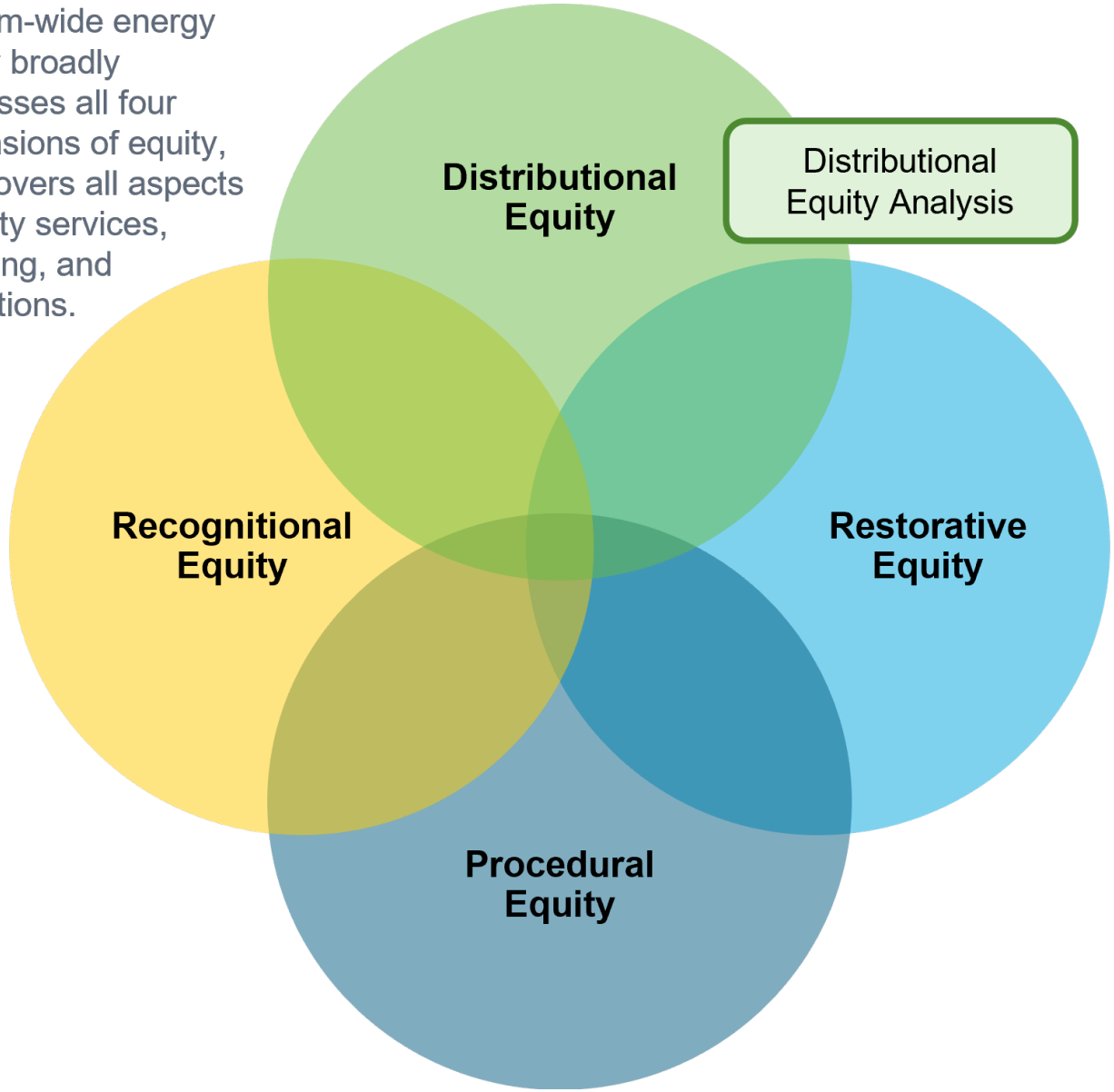
Check out NESP Events for NSPM and BCA webinars

Stay informed with NESP News

Background Slides

System-wide energy equity broadly addresses all four dimensions of equity, and covers all aspects of utility services, planning, and operations.



Distributional Equity Analysis + Benefit Cost Analysis

DEA and BCA address one aspect of distributional equity:

What are the distributional equity impacts of utility resource investments?

Eligibility Verification for ComEd's EE Programs

- Low-income customers (income-qualified)
  - Income-qualified multifamily customers – income below 80% of Area Median Income – can verify eligibility through:
    - Showing participation in an affordable housing program or weatherization assistance program
    - Submittal of a Rent Roll documentation or tenant information showing income
    - Located in a Low-Income Census tract
    - Demonstrate participation in disaster relief program or local/community-based assistance programs
  - Income-qualified single family customers - income below 80% of Area Median Income – can verify eligibility through
    - Showing participation in a weatherization assistance program, energy assistance program (such as Low Income Home Energy Assistance Program (LIHEAP) or the Percentage of Income Payment Plan (PIPP), other income eligible programs like the Supplemental Nutrition Program (SNAP),
    - Being located in a census tract identified as low-income (using the U.S. Department of Housing and Urban Development (HUD) annually published "qualified census tracts")
    - Self-certification process

Source: https://www.ilsag.info/wp-content/uploads/IL_EE_Policy_Manual_Version_3.0_Final_11-3-2023.pdf

Eligibility Verification for Ameren's BE Programs

- Eligible BE program participants are those located in:
  - an Environmental Justice Community
  - Restore, Reinvest, Renew (R3) Community
  - Low-income community

- Eligible BE program participants are also individual customers who:
  - Lives in an EJC, R3, or LI community
  - Is low-income, meaning:
    - A member of a household at or below 80% of the latest median household income as reported by the United States Census Bureau for the most applicable community or county;
    - A member of a household at or below 150% of the federal poverty level;
    - A person who is eligible for the Illinois Low Income Home Energy Assistance Program (LIHEAP) as defined in the Energy Assistance Act;
    - A person who is eligible to participate in the Percentage of Income Payment Plan (PIPP or PIP Plan) as defined in the Energy Assistance Act; or
    - A person who is eligible to receive Lifeline service as defined in the Universal Service Telephone Service Protection Law of 1985.

Source: https://www.icc.illinois.gov/docket/P2024-0494/documents/352385/files/616708.pdf