

Intro:

- Has been doing energy for 27 years
- Has been involved in decarbonization and equity, and is aware there is a growing intersection

If we created a tool for you, what would you look for in this tool?

- (Will send links to reports) - looking at differences(differential experience) between outages and experience quality
 - National database unavailable
 - Utilities do things differently, analyze things to a different level
- Should get as granular as possible in identifying disadvantaged communities, who they are being served by
- Doesn't know if differential experience correlates with utilities - there are inconsistent outcomes. EG there are areas where disadvantaged communities had more outages but didn't have the worse ones.
 - Obfuscates the problem, we can focus on identifying what these differential experiences are and should try to look for data and trends to justify them.
- I was under the impression that the TOP slide deck showed examples of studies that "establish the inequity". Is that oversimplified?
 - No one has said it is "clear". There is an expectation/assumption that it is, but utility by utility data is firm enough to make a generic inclusion. It is still necessary to figure out what problem we are trying to solve. If we want to solve inequity but solve a different problem the solution might not address what we originally intended to address.
 - Should narrow down the scope of the issue to make it manageable.
- How do you foresee using federal support opportunities such as the Energy Infrastructure Reinvestment loan guarantees being used to create energy equity in the senses of equal access to energy and equal reliability in the event of a natural disaster?
 - You may never see these kinds of opportunities again. This administration passed a bill with the most funding opportunities. Coupled with the strongest equity principles. All of these are grants or commissions to utilities to invest in resilience. Thinking about equity requires thinking about investing in achieving carbon neutrality in an equitable manner.
- Your work on *Observations of an Evolving Grid: Resilience and Equity Performance Metrics* discusses the importance of developing benchmarks for grid planning, especially for equity and resilience. What design principles would you recommend in designing an effective tool for a grid planner, keeping these metrics in mind?
 - The work we are doing is the same work that national labs are working on.
 - Multi-objective decision planning:
 - The distribution of resources itself could become a resource itself
 - The distribution system thus affects the transmission system
 - Acknowledge the interconnectedness of all of these systems when developing tool.
 - The tool should be accessible enough to be able to used by many different users
 - Came up in the past 3 interviews

- Target regulators, who would benefit directly from data
- The electricity system is non-uniform. Non RTO market. Regulators create expectations for utilities. Utilities might not be directly interested in our tools, but if regulators are utilities become indirectly interested
- Also target communities: If utilities are interested in order for the process to be inclusive the community must also be included
- Jason: You say that the electrical utility will clearly be an end user of a new digital tool. On a totally different plane, one could imagine that social service organizations could be an end user of some digital tool that points to inequity during emergency situations. In your opinion, is that a misguided use of a new tool?
 - Tend to go upstream. A more holistic way is to get all 3 parties mentioned above on the same level.
 - If there aren't sufficient levels of usability on the system is not as useful
 - Should be able to show the necessary granularity to show that disadvantaged communities are experiencing discomforts
 - Utilities repair those sections with the highest impact. So the first lines repaired aren't those of the people who need it the most but rather the ones that get most of the grid back in order — mentioned by Carol
- Closing remarks:
 - Will send couple of links -- data heavy sites and regulator-specific data.
 - Willing to have this conversation again once we have more detail