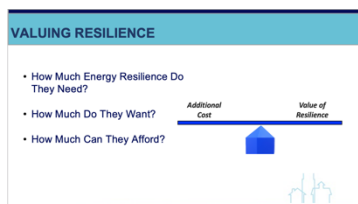


Slide 1: Hello. This is Marc Pfeiffer with our seventh in the Developing Town Center Microgrid webinar series. All of the webinars, their accompanying Fact Sheets, and the full report can be found at [www.microgrids.io](http://www.microgrids.io).

For this webinar, we will discuss the challenges of valuing resiliency, choosing an ownership model, and addressing social equity and how they affect the development of Town Center microgrids.



Slide 2: So, if a town center microgrid is designed to meet public policy goals of resilience, not all of them will reduce costs. The primary reason is because resilient, usually non-carbon based energy supply, costs more than carbon based supply.

It can be argued that the added value of resilience that a town center microgrid brings to a community during outages offsets the added supply costs. But, an integral part of that calculation is, how is resilience calculated and then valued?

For example, to set a value on resilience for a given use case, energy users need to determine:

How much energy resilience do they need?

How much they want?

And how much can they afford?

This question presents ongoing challenges to policy analysts and scholars. That's because trying to answer these questions highlights that putting a price on the value that energy resilience provides is harder than actually defining it.



Slide 3: There is great academic, environmental advocacy, and commercial interest in finding pathways to making resilience-based decisions. It is, however, an unsettled area of research and is evolving with new models and approaches. For example, the 2019 NARUC publication, The Value of Resilience for Distributed Energy Resources: An Overview of Current Analytical Practices analyzed various approaches. The closing paragraph of its Executive Summary is very insightful on our point. I quote:

“Each of these options has its own sets of trade-offs and potential limitations. The difficulties involved in valuing resilience relate directly to the challenges inherent in analyzing high-impact and low-probability power interruption events. Regulators seeking to evaluate resilience investments will need to grapple with these challenges against the backdrop of increasingly severe threats to the electricity grid.”

In other words, we have ideas, but no definite approaches to solve the resilience riddle yet.



Slide 4: Then there is the ownership question. In December of 2020, the Pacific Energy Institute released a report titled “Community Microgrid Ownership Models.” It provides a useful inventory of microgrid ownership models. It included microgrid ownership that generally served more than one offtaker, as would a TC microgrid.

The major takeaway from that report is that ownership models can and will vary by owner, EDC status, community or client or clients served, investor preferences, and technology.

It also noted that, quote, “Greater regulatory flexibility for utilities, communities, and private developers to pursue various ownership and operational models will allow innovation to determine the best approach to community microgrids.”



Slide 5: Our final element highlights that social equity in energy policy has become an important point of discussion. This is in response to studies that conclude that low-income communities often suffer negative health and economic impacts from energy supply and use decisions.

Thus, social equity issues that connect the development of DER to the support of low-income and environmental justice communities are becoming a consideration in public policy decision-making. For example, New Jersey has embarked on a second round of incentives for community solar projects that maintain a strong focus on them.

In this context, regulators and investors need to ensure that public and private DER and TC microgrid developments reduce emissions and include and emphasize distressed communities in their planning.

These plans need to ensure that the benefits and values brought by DER are not just limited to wealthier segments of society. DER benefits should be shared and made available across all segments.

