

DEVELOPING LOCAL GOVERNMENT MICROGRIDS

OTHER CHALLENGES



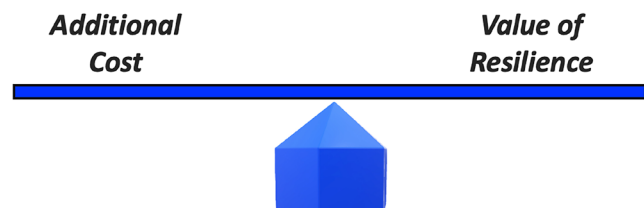
Placing a value on resilience, choosing an ownership model, and addressing social equity are additional challenges facing the development of Town Center microgrids.

VALUING RESILIENCE

If designed to meet public policy goals of resilience, not all TC microgrids will reduce costs. To offset the added cost, it can be argued that the added value of resilience that a microgrid brings a community during outages offsets the added supply costs. But, an integral part of that calculation is, how is resilience calculated and then valued? This question presents challenges to policy analysts and scholars.

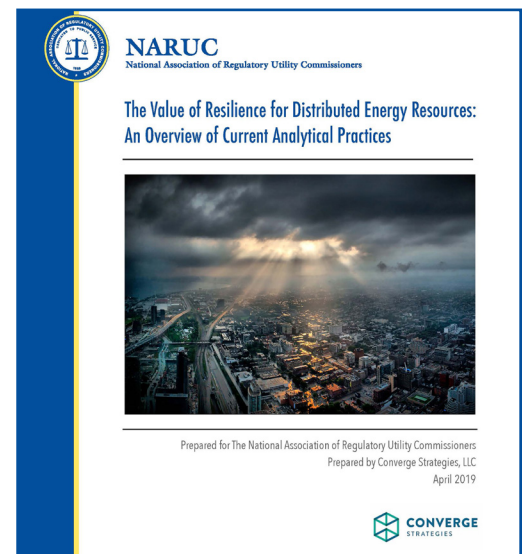
For example, to set a value on resilience for a given use case, energy users need to determine:

1. How much energy resilience do they need?
2. How much do they want?
3. How much can they afford?



These elements highlight that putting a price on the value energy resilience provides is harder than defining it. 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.

A 2019 [NARUC publication, The Value of Resilience for Distributed Energy Resources: An Overview of Current Analytical Practices](#), analyzed various approaches. The summary is insightful: “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, 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.”



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OWNERSHIP CONSIDERATIONS

In December of 2020, the Pacific Energy Institute released a report that inventoried ownership models entitled Community Microgrid Ownership Models. This report discussed different models of microgrid ownership that generally serve more than one offtaker. The major takeaway from the report is that ownership models can and will vary by owner, EDC status, community or client(s) served, investor preferences, and technology.

Community Microgrid Ownership Models

Brittany Blair and Paul De Martini

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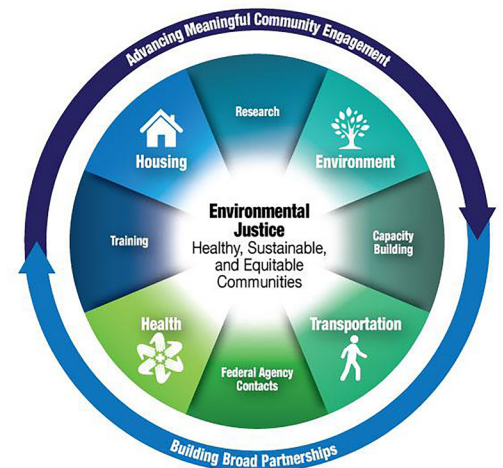
Pacific Energy Institute Report

The report noted that “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.”

MICROGRIDS, DER, AND SOCIAL JUSTICE/EQUITY

Social equity in energy policy has become an important element in response to studies that conclude that low-income communities often suffer negative health and economic impacts from the impact of energy supply and use decision. 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.

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 limited to wealthier segments of society. DER benefits should be shared and made available across all segments.



Environmental Justice



Microgrids.io

An Information Resource for Planning and
Developing Local Government Microgrids

