

2023 THINK MICROGRID POLICY SUMMIT:

OPPORTUNITIES TO ADVANCE NEW POLICY STRATEGIES

For the second time, Think Microgrid convened nearly 100 experts from across industry, government, academia and the advocacy community to address some of the most challenging aspects of the microgrid market today and in the future. Think Microgrid is the unified voice of the microgrid industry and dedicated to engaging and informing community leaders and decision makers about what microgrids offer...and what stands in their way.

Over the course of several hours of updates and interactive discussions, participants at the summit considered a set of "paradoxes" where policies may be in tension with one another, limiting the potential for microgrids to serve as resilience, climate and equity solutions. But within each of these paradoxes, there are opportunities to pursue transformative change and engage in the kind of provocative discussion that are needed.

We hope that these statements – informed, refined and shaped by the discussions at the Policy Summit – can help guide critical conversations that are needed today.

1: THE ROLE OF FOSSIL FUEL IN BUILDING RESILIENCE

Paradox	Opportunity
Electrification policies banning all gas service	Microgrid projects should be encouraged
eliminate the opportunity for microgrids to	when marginal emissions are low and
provide needed resiliency solutions and often	backup power applications are
create stranded assets and higher emissions.	incorporated.

Gas bans are becoming increasingly common across the country. As of April 2023, over 70 cities and counties in California alone implemented some form of gas ban policy. Today, many microgrids incorporate low-emissions natural gas generation or fuel cell technologies. By banning gas outright, these policies sacrifice a meaningful resiliency tool. They also fail to recognize that resiliency alternatives during outage events or resource-constrained periods—including diesel backup generation or bulk power system purchases— may have higher overall marginal emissions than microgrids. Gas ban policies should take a phased approach and distinguish between natural gas end-uses like heating and cooking and gas generation designed to serve the public good. Furthermore, such policies should be informed by average marginal emissions data so that the climate impacts of microgrids can be evaluated fairly against grid power alternatives.



2: UTILITY DISTRIBUTION INFRASTRUCTURE TO SUPPORT MICROGRIDS

Paradox	Opportunity
Utilities are often unable or unwilling to	Regulators and policymakers should create
provide transmission and distribution	pathways for regulated community or
upgrades necessary for adequate electric	private investment in distribution
service on a timely basis.	infrastructure.

Across the country, utilities have declared that essential distribution infrastructure used to serve specific communities needs cannot be provided in a timely manner. In many cases, these areas are disproportionately in rural or disadvantaged communities. There may be multiple underlying reasons for these delays, including staff constraints, concerns about ratepayer impacts and the interconnection requirements. However, it is also the case that private and public capital sources stand ready to invest in the development of microgrids paired with necessary distribution infrastructure— or in lieu of it. Officials should implement pathways for and encourage private development of distribution and transmission infrastructure, focused on enabling communities to meet electricity demand when the distribution utility fails to do so. One model would be "resiliency enterprise zones," or communities designated by a state authority to host private development due to their unique remoteness or vulnerabilities. Authorities should prioritize the identification and resolution of regulatory or technical constraints, ensuring that the interactions of these zones complement the operations of the distribution utility and serve to advance policy and economic development objectives.

3: BARRIERS TO MULTI-CUSTOMER MICROGRID DEVELOPMENT

Paradox	Opportunity
Community microgrids are currently	Legislatures should examine and update
functionally illegal in nearly all jurisdictions.	laws that prohibit multi-customer
	microgrids.

In every state, there are laws that prevent power lines to interconnect multiple customer properties and prevent the development of multi-customer private or community microgrids. As a result, private or community operated microgrids are functionally illegal, with the result that today's microgrid deployments are overwhelmingly dominated by individual facilities, campus settings or utility pilot projects. If laws preventing multi-customer microgrids are outdated and inconsistent with current technologies, resilience needs, and public policy goals they should be modified or updated. Policy makers should define qualifications to certify operators as entities distinct from public utilities and grid operators and define criteria for the operation and market participation of private multi-customer microgrids. "Resiliency enterprise zones" could offer policy makers an opportunity to develop this model in specific use cases or geographic areas where immediate resiliency solutions are warranted. Policy makers should recognize that while legalization of private multi-customer microgrids may pose a financial challenge to distribution utilities, in certain cases it may represent the best option for reliable and affordable delivery of electric service.



4: ACCESS TO FAIR VALUE FOR MICROGRID EXPORTS

Paradox	Opportunity
Energy exports are an important part of	Regulators and policymakers should
financing microgrids, but in most jurisdictions	develop appropriate open access
access to bulk power markets or retail tariffs	frameworks for the distribution grid that can
are inconsistent or unavailable.	complement microgrid tariffs and bulk
	power markets.

Intelligent, interconnected microgrids provide a wide range of value to retail and wholesale markets, but exceedingly few jurisdictions have established mechanisms that provide mechanisms to capture value for energy exports and grid services. Microgrids warrant special consideration by policymakers and regulators because they can flexibly adjust their load profiles at the point of interconnection with the distribution grid, supporting grid operations, resiliency needs and public policy objectives. Market operators and commissions should take steps to develop tariffs that compensate microgrid energy exports and grid services. Meanwhile, an open access framework for distributed energy (similar to today's wholesale power markets) would provide a vehicle by which microgrids could incorporate the value of energy exports and grid services in all markets. Under such a model, private microgrids would be able to support grid operations and create market access wholesale markets, retail utilities, local industrial users and other community facilities.

5: PROMPT AND EQUITABLE DISTRIBUTION OF PUBLIC FUNDS

Paradox	Opportunity
Underserved communities that are often	Prioritize deploying public funding for
prioritized for community microgrid	microgrids to address equity concerns, while
development, often have inadequate	identifying areas for meaningful community
infrastructure and difficulty accessing public	support.
funding for projects.	

Many state and federal policies prioritize distributed energy and microgrid solutions for disadvantaged, low-income or rural communities, but persistent disparities in grid investments have created large inequities in the capabilities of the grid infrastructure. While programs exist to support distributed energy solutions, limited resources may stand in the way of securing funding. Often, the most pressing question for communities is, "Where do I start?" Thoughtful distribution of public funding should prioritize awareness and education, technical assistance and application support, and ongoing partnership as policy landscapes and business opportunities evolve. Specifically, public entities should provide resources to help develop project proposals through (1) funding opportunity identification, (2) project identification, (3) application preparation, (4) technical assistance, and (5) workforce development initiatives. Public entities should also closely examine their definitions of "disadvantaged" to combine traditional indicators like average income with metrics around disaster vulnerability, grid volatility, and timespans for restoration of electric service.