DW26

Upcoming DW-to-Everything Projects:
Scaling up with Microgrids & Hybrid Systems

October 27, 2025

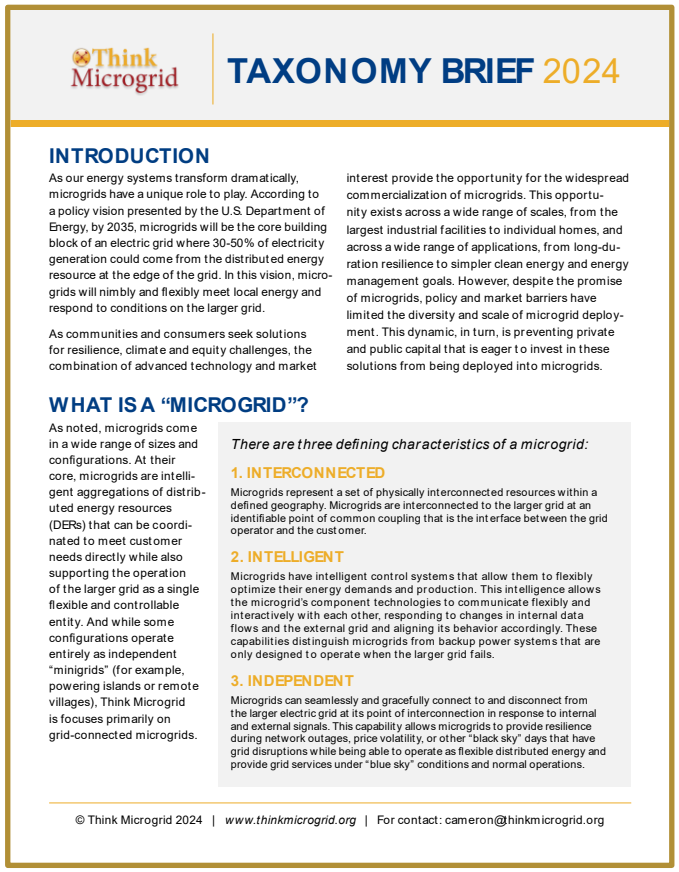
What is Think Microgrid?

1. **Unified Voice of the Industry**
   - What are microgrids?
   - Policy makers, regulatory community, media

2. **Policy & Regulatory Solutions**
   - Stimulating action with community decision makers
   - Targeted thought leadership and comments

3. **Convenings and Focused Collaboration**
   - Policy Summits
   - Hosted Events and Briefings

Taxonomy Brief



Think Microgrid

TAXONOMY BRIEF 2024

INTRODUCTION

As our energy systems transform dramatically, microgrids have a unique role to play. According to a policy vision presented by the U.S. Department of Energy, by 2035, microgrids will be the core building block of an electric grid where 30-50% of electricity generation could come from the distributed energy resource at the edge of the grid. In this vision, microgrids will nimbly and flexibly meet local energy and respond to conditions on the larger grid.

As communities and consumers seek solutions for resilience, climate and equity challenges, the combination of advanced technology and market interest provide the opportunity for the widespread commercialization of microgrids. This opportunity exists across a wide range of scales, from the largest industrial facilities to individual homes, and across a wide range of applications, from long-duration resilience to simpler clean energy and energy management goals. However, despite the promise of microgrids, policy and market barriers have limited the diversity and scale of microgrid deployment. This dynamic, in turn, is preventing private and public capital that is eager to invest in these solutions from being deployed into microgrids.

WHAT IS A "MICROGRID"?

As noted, microgrids come in a wide range of sizes and configurations. At their core, microgrids are intelligent aggregations of distributed energy resources (DERs) that can be coordinated to meet customer needs directly while also supporting the operation of the larger grid as a single flexible and controllable entity. And while some configurations operate entirely as independent "minigrids" (for example, powering islands or remote villages), Think Microgrid is focuses primarily on grid-connected microgrids.

There are three defining characteristics of a microgrid:

1. INTERCONNECTED

Microgrids represent a set of physically interconnected resources within a defined geography. Microgrids are interconnected to the larger grid at an identifiable point of common coupling that is the interface between the grid operator and the customer.

2. INTELLIGENT

Microgrids have intelligent control systems that allow them to flexibly optimize their energy demands and production. This intelligence allows the microgrid's component technologies to communicate flexibly and interactively with each other, responding to changes in internal data flows and the external grid and aligning its behavior accordingly. These capabilities distinguish microgrids from backup power systems that are only designed to operate when the larger grid fails.

3. INDEPENDENT

Microgrids can seamlessly and gracefully connect to and disconnect from the larger electric grid at its point of interconnection in response to internal and external signals. This capability allows microgrids to provide resilience during network outages, price volatility, or other "black sky" days that have grid disruptions while being able to operate as flexible distributed energy and provide grid services under "blue sky" conditions and normal operations.

- **Released April 2024**
- Presents a framework to consider various 'families' of microgrids and policy challenges associated with each

- ***Primary Criteria include:***
  1. **Size and Grid Interconnection**
  2. **Customers Served**
  3. **Ownership and Investment Capital**

ACCESS THE TAXONOMY

Membership

Bloom energy

ENCHANTED ROCK
The Power is On.

Life Is On Schneider Electric

PowerSecure

CoastEnergy

BALTO ENERGY

Blue Lake
Clean Energy Group

NORTHERN PACIFIC POWER SYSTEMS

EGSA

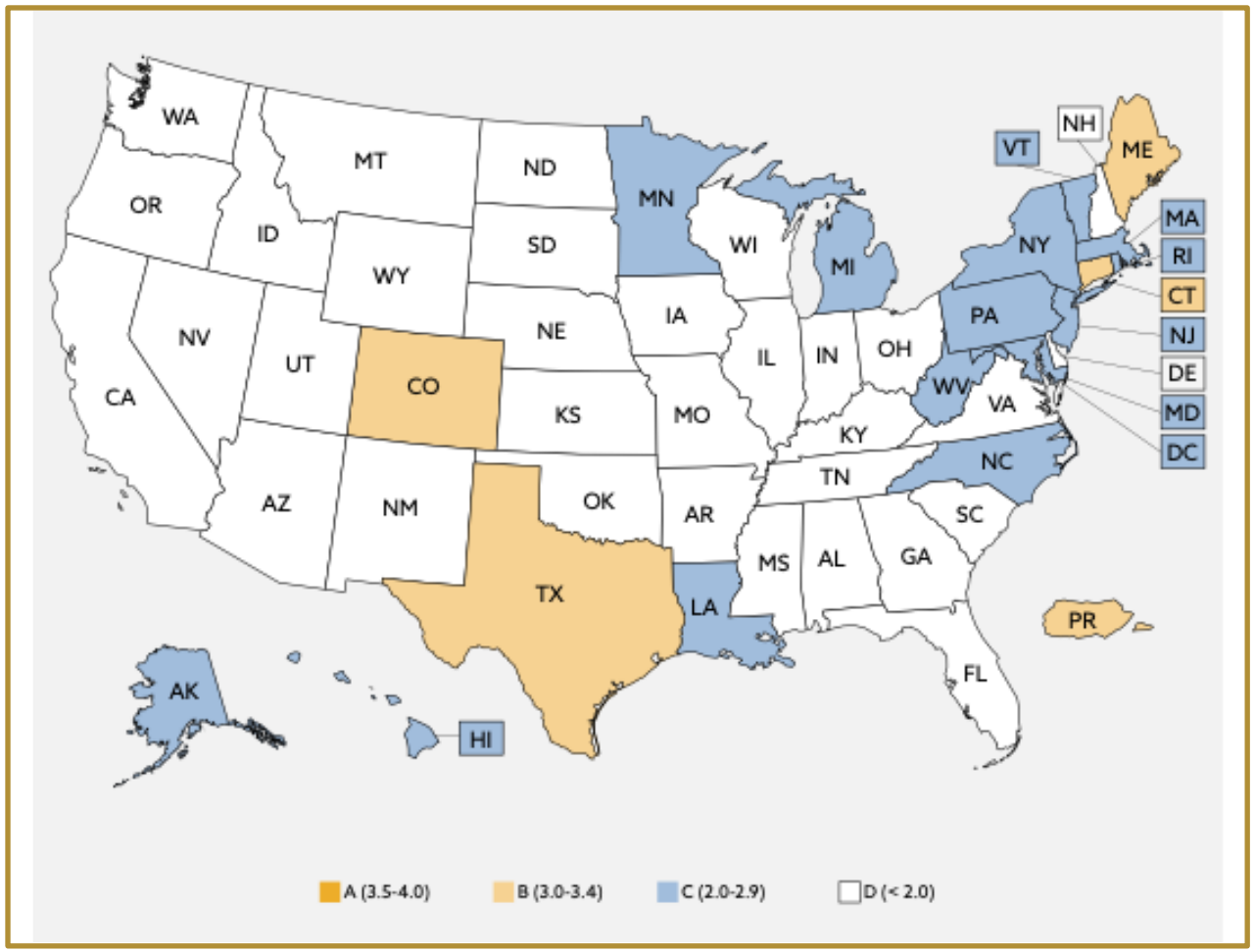
What is a “microgrid”?

Intelligent resources that are connected and optimized.

Interconnected and interactive with the grid.

Islandable as needed during resilience events.

State Scorecard



Guiding Vision 2035:

- 30-50% DER capacity share
- Microgrids as “essential building blocks”

Evaluation Criteria:

1. Deployment (% of peak)
2. Policy Reform
3. Integrated Resilience
4. DER Markets
5. Community Equity

A: -

B: PR, CO, CT, ME, TX

C: VT, HI, MD, NY, AK, MA, NJ, MI, MN, WV, RI, LA, DC, NC, PA

State Scorecard

Policy and market access, not technology, remain the limiting factors for microgrid commercialization.

Guiding Vision 2035:

- 30-50% DER capacity share
- Microgrids as “essential building blocks”

Evaluation Criteria:

1. Deployment (% of peak)
2. Policy Reform
3. Integrated Resilience
4. DER Markets
5. Community Equity

A: -
B: PR, CO, CT, ME, TX
C: VT, HI, MD, NY, AK, MA, NJ, MI, MN, WV, RI, LA, DC, NC, PA

Thank you

Cameron Brooks
Executive Director
cameron@thinkmicrogrid.org
(303) 957-7667