

The why and how of standardizing microgrid project development.

H MER International MICROGRID Conference 8th Annual #HIMC2020 Duncan Campbell VP, Project Analysis Scale Microgrid Solutions



Energy Resilience is Top of Mind in 2020

Storm Batters N.Y. Region; More Than 2 Million Without Power

Utilities in New York, New Jersey and Connecticut raced to restore power, but officials said it might take several days, in some cases.

Rolling Blackouts in California Have **Power Experts Stumped**

Managers of the electric system argue that a lack of power prompted the decision to enact blackouts, though demand this weekend fell short of the state's peak years.

PG&E cuts power to roughly 65,000 customers in 16 Northern California counties

PG&E hopes to restore power by Monday evening.

Hurricane Sally power outages top 540,000 in **Alabama, Florida and Georgia**

At least 1 person died because of the storm, which dropped 30 inches of rain on Florida

Hurricane Laura cuts power to over 800K Texas, Louisiana customers as storm barrels toward Arkansas

More than 800,000 in Texas, Louisiana without power.

PG&E Shuts Off Power to Roughly 167,000 Customers

Portions of Napa and Sonoma counties are included in a PSPS event planned to last through Wednesday, according to the utility.

Microgrids offer a superior resilience solution for many.



Reduces Utility Costs When Grid Is Operating

Often More **Capacity Than Backup Generator**

SCALE MICROGRID SOLUTIONS



More **Diversified** Than Counting on a Diesel Tank

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So why are traditional backup generators still the dominant solution, even in attractive markets?

- The legacy microgrid project development process takes too long, is too expensive, and ultimately creates excessive project risk.
- Today's microgrids are all FIRST OF THEIR KIND systems. This has several significant downsides.
- Most customers require a solution that is as productized as possible. Few have the wherewithal for a grueling and underwhelming process.



What's the solution?

Standardization can improve the microgrid development process and ultimately the value proposition delivered to customers.

At Scale we believe you must:

1. Constrain the surface area of the design optimization problem.

2. Deeply integrate engineering, finance, project management, and operations.

3. Create simple tools and processes that reflect the above.

THANK YOU.

