



Energy Independence

The Resiliency Discussion Has Come to Texas

After winter storms and widespread outages, facilities are installing microgrids to reduce dependence on the utility. On-site generation provides reliable power to keep sites operating. With an Energy as a Service (EaaS) solution from Unison Energy, facilities avoid investing capital and only pay for the energy they use.

Texas facilities are reconsidering their dependence on the utility after some four million homes and businesses were left without power for days, while hospitals, hotels, and industrial plants were left unable to operate.

This is not the first time: in 2011 and at least eight other instances since the 1990s, Texas endured similar crises. Despite this recurring pattern, state and utility regulators have not taken action to address it and are unlikely to do so quickly.

Given a history of relative inaction, it is unlikely that Texas regulators will make substantive changes that would prevent these types of crises in the future. And any changes that do occur will ultimately increase electricity costs for Texas customers. For example, merging the grid with the other U.S. grids could exceed \$1 million per mile of transmission lines, increasing transmission and distribution (T&D) charges for facilities reliant on the grid.

Texas facilities can take control of their energy by deploying microgrids for energy independence.

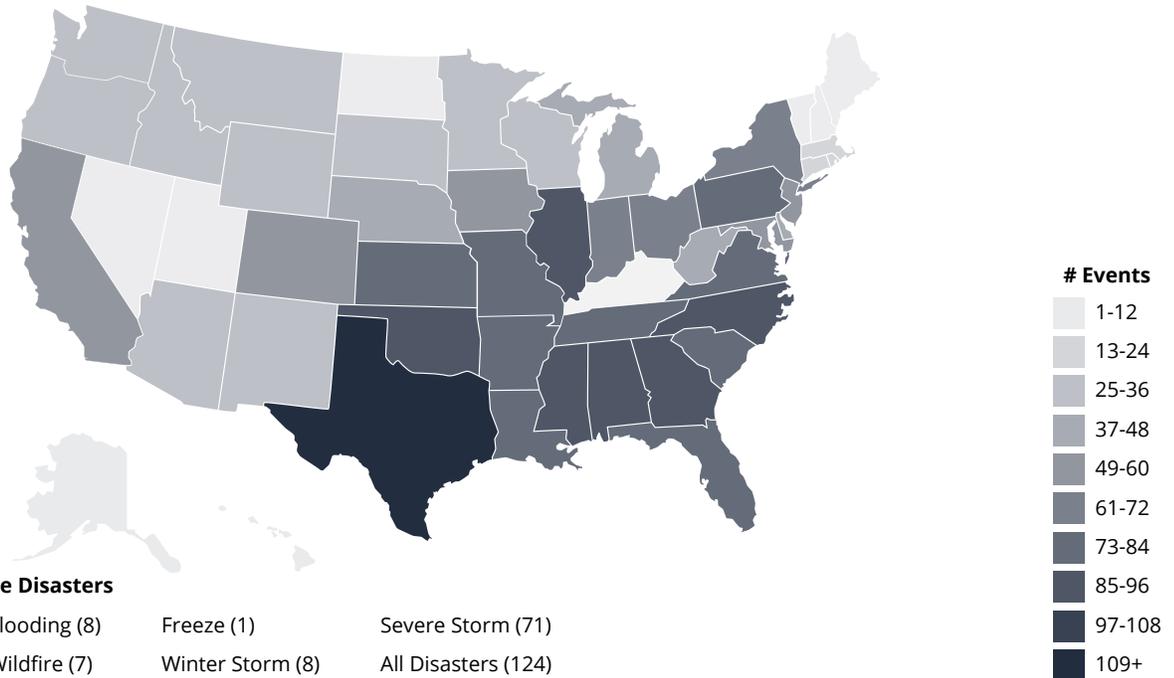
Solution: Microgrids and Energy as a Service (EaaS)

Texas facilities do not have to wait for a regulatory solution. Microgrids offer a way to operate independently from the grid during outages. Combined heat and power (CHP) or cogeneration microgrids generate both electric and thermal energy for the facility. They typically run in parallel with the utility, but when a utility outage occurs, the CHP system enters into island mode and runs independently of the grid, insulating the facility from extended outages as well as the “dirty power” that usually accompanies them

and that can damage equipment. Using natural gas, the facility can remain in island mode for as long as the outage lasts. The CHP system is designed to withstand temperature extremes, so weather is not a factor.

Unison Energy offers an Energy as a Service (EaaS) solution to pay for the microgrid. In this model, Unison installs, owns, and operates the microgrid under a long-term contract. The facility only pays for the energy used by the site.

1980-2020 Billion-Dollar Weather and Climate Disasters (CPI-Adjusted)



NOAA National Centers for Environmental Information (NCEI) U.S. Billion-Dollar Weather and Climate Disasters (2021).
<https://www.ncdc.noaa.gov/billions/>, DOI: 10.25921/stkw-7w73

Save on Energy Costs

Microgrids are less expensive to operate than purchasing power from the utility. Furthermore, they offer cost control in the face of utility pricing variability. The Texas billing spikes left some customers with charges up to 70x higher than average, with wholesale prices up 300%. Facilities that avoided these costs may not be off the hook yet — as utility retailers default, the cost will likely end up on customers' bills. An EaaS solution can protect customers from price variability, as well as long-term increases in electricity costs due to grid upgrades.

Continue to Serve Your Community

Microgrids allow hospitals, hotels, and other critical facilities to serve their communities precisely when they are most needed. And because microgrids are able to take large facilities off the grid, they can alleviate the load on the grid at a time when regulators need end-users to decrease energy usage.

Texas Leads in Energy Independence

Texas already leads the country in early adoption and use of CHP — 126 Texas sites have over 17,000 MW capacity total. While much of this capacity has served large refineries, market developments have opened CHP to a wider range of commercial and industrial sites.

Compared to policy changes, microgrids offer a relatively quick and ultimately more effective way to ensure resilient energy, not just today but for the next 15-20 years, while simultaneously achieving cost savings and reducing carbon.

Choosing a CHP microgrid is a more cost-effective option than ever thanks to the Energy as a Service (EaaS) model. In this model, Unison Energy owns, installs, and operates the system, meaning the facility pays no upfront or maintenance costs and instead pays just for usage. Texas facilities can start enjoying the benefits of microgrids quickly, and rest easy that they will have resilient power for years to come.

If your Texas site could benefit from the resiliency, cost savings, and emissions reductions of a CHP microgrid, learn more at unisonenergy.com or speak to a representative at sales@unisonenergy.com.