

Energy Resiliency During Storm Outages

Is Your Facility Ready for the Next Storm?

When hurricanes, thunderstorms, or high winds bring down power lines, a microgrid can offer your facility resilient, on-site energy generation.

The 2020 hurricane season has been one of the earliest and most active on record, bringing strong winds and pounding rain — resulting in downed utility lines and power outages that pose a risk for any facility. Many of our clients can't afford to lose power for even an hour, let alone days or a week. For industrial facilities, hospitals, distribution centers, grocery stores, and other facilities, major weather events like hurricanes and tropical storms are a financial threat. Every time a major storm passes that leaves widespread outages, many wish they had been better prepared. Is your facility ready for an extended outage?

At Unison Energy, we build, own, and operate microgrids to provide our clients with energy resiliency. Our cogeneration-based microgrids can operate independently from the electric grid, ensuring that facilities can keep the lights on, even during lengthy power outages.

The Need for Resilient Energy During Storms



Superstorm Isaias caused \$4 billion in damage on the East Coast, and over three million lost power, many for over a week. A few weeks later, Hurricane Laura hit as the strongest hurricane in Louisiana in 150 years, leaving 900,000 in the region without electricity. Hurricane Sally caused outages for over half a million Gulf Coast customers. Unfortunately, this devastating hurricane season is far from over.



In August, a derecho tore across 770 miles of the Midwest, disrupting power for more than one million people. Some areas experienced 98% power loss. Extensive infrastructure damage made it all the more difficult for utility companies to restore the grid, and thousands of residents and businesses remained without power for a week.



Across the U.S., much of the utility grid is aging, making it that much more likely that power lines or utility poles will come down during a storm. As storms become more frequent and damaging, utility companies are struggling to prepare for outages and restore service in a timely manner. When the next storm hits, your facility could be left exposed.



Microgrids Keep Facilities Operational Whenever the Grid Goes Down

During Superstorm Isaias, Unison Energy demonstrated that our microgrids are proven during extreme weather events. Eight of our clients experienced extended utility outages, lasting anywhere from several hours to over a week. At each of these sites, a Unison microgrid was operating prior to the storm, generating most of the site's power. Once the outage occurred, the microgrid controllers sensed the utility outage and automatically opened a breaker to isolate the microgrid from the utility. Our on-site generation continued to operate and provide 100% of these facilities' power **as if it were their own private utility**. The lights didn't even flicker during this transition.

Most of these sites operated for 24 hours or more in island mode — without scrambling for backup generators — preventing costly inventory losses and allowing them to continue serving their communities.

Withstand Power Outages with a Unison Energy Microgrid

Resiliency isn't the only benefit. During normal operations, because the power is being produced on site, it is cheaper than the utility. Typically, this on-site power generation is less carbon-intensive than the local utility, so the site reduces its carbon footprint.

Unison Energy builds, owns, and operates microgrid solutions designed to meet the energy needs of our clients. With a 15-20 year energy services agreement, Unison Energy can install a microgrid for your facility with no capital outlay required. We pay for the installation and operations, and you purchase your electricity from us instead of the utility, resulting in a lower energy bill. You'll also have peace of mind knowing that our microgrid will protect your facility from power outages. Even if a storm takes down the grid for days at a time, Unison Energy has you covered.

Your facility needs on-site power generation technology to stay operational when the next storm takes down the grid. Microgrids provide this resiliency.

But it takes more than the right technology to weather a storm. Our Service Operations and Monitoring Teams set the industry standard in service operations, ensuring 98-99% availability across our fleet. When a storm hits, our on-site technicians manage the systems directly, while our 24/7 remote monitoring team tracks key parameters that could signal issues. Even if the system stays in island mode for a week or more, Unison Energy personnel remain on call to ensure the system works as intended and successfully returns to grid parallel mode.