

What to know about

BESS & GRID RELIABILITY



Battery Energy Storage Systems (BESS) are one of the most powerful tools we have to keep electricity flowing when demand is high or extreme weather hits.

When sited close to end-users, they can step in to fill shortages or address disruptions on the local grid in a **split-second**. That speed can make a critical safety difference during very hot or very cold days.



Image: Eni Plenitude



Did you know? ERCOT reported that BESS growth took Texas's risk of blackouts in extreme summer heat from **12%** in 2024 to **less than 1%** in 2025.¹

1. Source: ERCOT's Monthly Outlook for Resource Adequacy for August 2025

Smoothing out supply and demand

Because BESS capture energy when it's produced in excess, they also make an excellent companion to renewable energy sources like wind and solar – charging up on extra sunny or windy days, and releasing when power supply is scarce. Building these technologies in tandem significantly **stabilizes our energy costs**.



THE FACTS

BESS have already saved Texans from outages and price spikes during **extreme weather, and they'll continue to do so.**

When Winter Storm Heather impacted Texas in January 2024, BESS units generated **\$750 million in market savings** by delivering ancillary services and freeing up to 3 GW of gas generation to **meet demand** and **lower prices**.¹



When record hot temperatures strained the grid in September 2023, energy stored by BESS supplied electricity to approximately **434,000 homes** and helped **avoid grid failure**.¹



Since Winter Storm Uri in 2021, the Texas grid has faced **three winter storms** that each set new all-time winter peak demand records. Thanks in part to BESS, there were **zero blackouts**.²



During Winter Storm Fern in 2026, energy storage made up nearly 10% of ERCOT's fuel mix during peak demand, helping **drive down energy prices by over 50%**.³



1. Source: Role of Battery Energy Storage Systems (BESS) in the ERCOT Market, Aurora Energy Research, May 2024

2. Source: ERCOT Monthly Operational Overviews (2021-2025). Canary Media, February 2026

3. Source: ERCOT dashboard 1/26/26