

Important highlights at a glance

The following is an overview of some important elements of the ERCOT Market Update presentation on April 24, 2025.

Regulatory update

Load forecast: load growth is the big story in ERCOT.

- Data center growth for 2030 increased from 29,614 MW in the 2024 long-term load forecast to [77,965 MWh in the 2025 forecast](#). At the current growth rate, ERCOT will have peak demand of 208,000 MW in five years.
- To inform the transition planning process, ERCOT adjusts the load forecast from the TSPs based on historical requests that were submitted versus those that interconnected. The [adjusted load forecast](#) shows load growth at 145 GW in 2031, adjusted from 218 GW.

This is load growth like we've never experienced, and with ERCOT being a single isolated interconnection, it makes it a challenge.

What's being done to manage the load growth?

ERCOT

- **NPRR1234:** Establishes a formal interconnection process, including a fee for large loads and requirements for modeling data. *Adopted*
- **PGRR115:** Establishes the steps that need to be taken for load commissioning and interconnection. *Adopted*
- **PGRR122:** Adds reliability criteria in transmission planning and in the large load interconnection process. *Pending*

PUCT

- **Project 56962:** Requires registration with the Commission if crypto mining facilities are > 75MW, >10% curtailable.

Generation capacity additions: ERCOT publishes the [generation by year and fuel type](#) with effective load carrying capability (ELCC), which is the amount of time a certain generation resource is available to serve peak demand at times when the grid has low reserves. When significant gas is added, that's a good thing because it can meet demand 24/7, whereas wind and solar represent a lower ELCC because they can't be available at all times. Although record amounts of generation capacity have been added over the last several years, it has been disconnected to when the grid needs the capacity.

The [Texas Energy Fund \(TEF\)](#) was established to provide low-interest loans to incent investors to bring more dispatchable natural gas generation to the region. This was the Texas legislature's effort to get more gas on the grid.

Permian Basin Reliability Plan: The PUCT has approved a \$13B project to add more transmission infrastructure and import paths to the Permian Basin, which will support large load growth from oil and gas, crypto mining, and data centers.

ERCOT market design change: ERCOT is implementing real-time co-optimization plus battery (RTC+B), which is the co-optimization of 5-minute real-time energy and ancillary service dispatch, with full battery state of charge (SOC) modeling and dispatch. The Operating Reserve Demand Curve (ORDC) will be replaced with Ancillary Service Demand Curves (ASDCs) as the primary scarcity pricing mechanism. This is expected to greatly improve the dispatch efficiency of the system, with the intent to lower energy and ancillary services costs. *Go-live on Dec. 5, 2025.*

CPS Braunig RMR: ERCOT determined that the three CPS Energy Braunig units that were supposed to indefinitely suspend operations on Mar. 31, 2025 were needed, so they entered into a reliability must run (RMR) agreement with CPS to keep Braunig unit 3 running from Mar. 3, 2025 to Mar. 2, 2027 at a cost of \$41.5m. The other two units will be replaced with Lifecycle Power's mobile generation units, which will be moved from Houston to San Antonio, with a total project cost of \$54m.

Market fundamentals & strategy

There's been a fundamental shift in ERCOT, which used to have steady load growth, sufficient dispatchable generation, and the U.S. fracking boom that led to a lower natural gas market. The new era of ERCOT has seen continued bullishness in forward prices as an influx of intermittent resources has increased the risk to reliability on the grid, on top of the load growth expected from the expansion of AI demand and other sectors in Texas.

- The [forward market continues to price in perceived load growth](#) and reliability concerns, with the summer strips driving most of the price increase.
- Historical yearly average real-time prices [have cleared lower year-over-year](#) for the most part, however there have been some extremely volatile real-time monthly settles, like August 2023, which reached nearly \$200/MWh.
- [Increased solar generation and battery participation](#) has assisted in lower real-time clears, however the risk of real-time price volatility is highest around the solar ramp-down hours, both in the morning and the evening, with summers and winters holding the most risk.

Buying considerations for today's bullish forward market:

- Consider a purchasing strategy that includes a [blend of index exposure and forward hedges](#). This can help limit risk while providing the flexibility to capture [advantageous buying opportunities](#) when they present themselves.
- Load flexibility has become a viable way to reduce costs or receive compensation for your ability to curtail when called upon. Consider a lower-risk, no-penalty approach, like our [Responsive Economic Dispatch \(RED\) program](#).