ERCOT MARKET UPDATE WEBINAR
After the call summary

Compiled: June 12, 2024

Important highlights at a glance

Regulatory update

Market design activity

Real-time 5-minute co-optimization (RTC): approved many years ago, this will significantly improve the efficiency of dispatching real-time energy and ancillary services resources in a co-optimized fashion. ***Testing: Spring 2025; go-live in late 2025 or early 2026.***

Reliability standard: ERCOT is performing system simulations of the grid to allow the PUCT to set a standard that decreases the risk of a load shed event. Key parameters that are being examined to value load shed events include: 1) how much does it cost when electricity doesn't flow ("lost load" cost), which is temporarily estimated at $25,000/MWh, and 2) how much does it cost to build a new peaking generation resource, which is currently estimated at $293/kW-year but is likely to be revised down.

Dispatchable Reliability Reserve Service (DRRS): implemented during the last legislative session through HB1500, DRRS is a new ancillary service that provides a product for generation resources that can be dispatched/online within two hours and can sustain maximum output for four continuous hours. ***Go-live: expected to be mid-2026.***

Performance Credit Mechanism (PCM): the Texas legislature included an "absolute annual cost cap" of $1 billion to ensure the PCM does not overwhelm the energy and services market. The PUCT proposed a review schedule to allow more time for stakeholder feedback and to complete cost assessments before the PUCT conducts a rulemaking. ***Stakeholder workshop held on 4/17 at ERCOT; comments are due in late June.***

Ancillary services cost review

The PUCT will review the ancillary services procurement methodology later this year. They're considering a change in the deployment of ECRS for this summer, which would allow ERCOT to pre-deploy 500 MW chunks of ECRS capacity to the real-time market to help alleviate the cost impacts seen in 2023. Stakeholders are also considering an offer price floor for ECRS capacity pre-deployed under these changes. ***Takes effect in mid-July.***

Texas Energy Fund

SB2627 was adopted, which creates $7.2b in funding opportunities from loans and grants for new dispatchable capacity in ERCOT. Notice of intent filings were due May 31 and so far there is 55,908 MW for $38.9 billion filed.

Pricing & market fundamentals

Prices: in ERCOT, forward prices have strengthened over the last few months as a result of significant expected load growth throughout the end of the decade. The increase to the forward calendar strips is mainly driven by peak summer pricing and, more specifically, the hours when solar generation ramps down. These hours have seen a heightened risk for price volatility and are expected to continue to maintain a price premium as the load growth comes online.

Demand: large loads, like crypto mining facilities and data centers, are looking to establish their business in Texas. Even growing residential populations in the state are putting more electrical demand on the grid. The outlook on grid reliability is tightening as these loads move into the state, tipping the fundamental scale out of balance. Over the next few years, ERCOT is expecting load growth of:

- almost 12 GW from oil and gas production
- almost 12 GW of large flexible loads from crypto and data centers fueling the AI boom, as well as hydrogen production

Supply: historically, ERCOT has had enough supply in the thermal dispatchable fleet to meet the growing demand. Currently however, the reliable, dispatchable supply growth needed to meet this demand is being outpaced by the load growth. This supply and demand imbalance can be seen most notably during the solar ramp-down hours (typically 6–10 p.m. CST). As solar generation declines, load does not decline at the same rate, leaving a large supply gap to quickly fill to meet the demand. As a result, much of the volatility in the real-time market is held within these hours. Without additional thermal dispatchable generation, the risk of volatility will continue.

Conclusion

The looming questions: how will ERCOT maintain reliability as the demand grows and where will the supply come from to maintain reliability. Significant thermal dispatchable supply will have to be added to the generation stack to bring the fundamentals back into balance. Because this is not an overnight solution, we typically advocate long-term procurement to help avoid exposure to price volatility and to protect from further upside risk in the future.

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