

The following are answers to the questions our presenters received from participants during the ERCOT Market Update webinar on June 12, 2024.

Pricing

Do you expect electricity prices in ERCOT to continue to rise?

Current fundamentals indicate that this price pattern will be maintained until enough thermal dispatchable supply is added to the market to meet the growing demand. Until then, the price risk is asymmetric to the upside risk, as reliability around the solar ramp-down hours continues to be a concern. As we discussed in the webinar, the market is already building in risk for these concerns. A time lapse of summer peak pricing over the last year illustrates that [prices for all periods have moved up](#) from what they were three months ago, and a year ago.

What is the most likely trend for ancillary services costs over the next 3-4 years given the increase from 2022 to 2023?

During the webinar we discussed ancillary services costs over the last two years (2022 and 2023) and how [there was an increase year over year](#). As a result of this, the PUCT is going to conduct a process to review ancillary services—the procurement amounts, whether the products are sufficient, the costs, etc.—to ensure it's what is needed to support the grid.

Separately, there has been a deployment change for ERCOT Contingency Reserve Service (ECRS) that was approved through the ERCOT stakeholder process. This change allows ERCOT to pre-deploy 500 MW chunks of ECRS and release that capacity to the real-time market so that it's available for dispatch in an effort to help alleviate the cost impacts that we saw last summer. The 500 MW chunks of ECRS that are pre-deployed however will be released behind a \$750/MWh price floor, which means they won't be dispatchable until prices hit that level or higher.

Supply & Demand

How will the Reliability Standard improve the market?

Having a reliability standard will allow ERCOT to look forward, years in advance, and pinpoint where there isn't going to be enough dispatchable generation to reliably serve the market without having costly load shed events. Then, stakeholders can discuss and determine what actions to take from the playbook of options through organized planning. This would be comparable to what is already being done for transmission. Currently there's a 5-year transmission planning process where the PUCT performs studies to identify where there are bottlenecks or there isn't enough transmission capacity. Then there are discussions to determine where new projects are needed. The same thing is needed on the generation side to avoid load shed events.

How will the Reliability Standard be enforced in a deregulated market where no regulatory body can force new generation to be built to meet the standard?

A reliability standard will establish the resource adequacy goal for the competitive market to achieve. It would work similar to how the ancillary services market works: ERCOT determines the amount to procure, and competitive forces dictate the prices to provide it. In this case, ERCOT will establish a standard and the market structure will provide the incentives to achieve it. If sufficient resources exist to meet the standard, the market is well supplied. If sufficient resources do not exist to meet the standard, the market is short of supply.

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Supply & Demand (con't)

How many contracts have been initiated for new power plants?

ERCOT's latest [System Planning and Weatherization Update](#) indicates about 16 GW of new gas interconnection requests. Of the 16 GW in the queue, only about 2.1 GW of capacity has Full Interconnection Study (FIS) completed and has an Interconnection Agreement (IA) in place. According to the [latest GIS report](#), there is about 11.6 GW of capacity waiting to complete the FIS and/or reach an IA with ERCOT.

It is important to note that the latest [Cost of New Entry \(CONE\) Study from the Brattle Group](#) valued CONE in ERCOT at \$293/kW-year, compared to the previous level of \$110/kW-year. This illustrates the increases in the cost of building new thermal generation in ERCOT.

How do you see hydrogen fitting into the ERCOT energy mix?

Hydrogen, as a generation source in ERCOT, does not currently exist. However, there is potential for its capability long-term as Mitsubishi Power/Mitsubishi Heavy Industries has manufactured a [hydrogen co-firing combustion gas turbine](#). This turbine can run on a gas and hydrogen blend, with the ability to run on 100% hydrogen. Hydrogen's potential lies in supporting grid reliability and storage, and transitioning gas plants toward cleaner energy sources.

From a demand perspective, ERCOT has stated that they expect roughly 2.5 GW of added demand associated with green hydrogen buildout, according to their latest [System Planning and Weatherization Update](#).