

Important highlights at a glance

The following is a quick overview of the most important elements of the Winter 2023 Market Update presentation.

Weather outlook

The El Niño Southern Oscillation (ENSO) region has continued to experience strong warming trends (both sea surface/subsurface temps) since spring and is now in a [moderate El Niño phase](#), which is expected to strengthen through the early winter months before trailing off in late winter (which is typical of ENSO to peak mid-winter). When you add other factors to the ENSO measure, including GLAAM, which is a measure of the intensity of the zonal circulation around the equator, the data points to warmer overall risks.

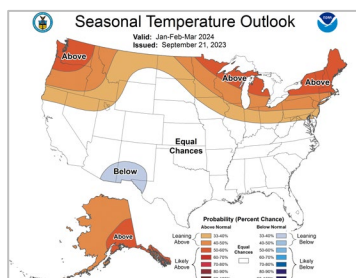
What does a winter El Niño mean?

El Niño conditions typically indicate a warm north and a cool south, along with an overall wet southern U.S. and a dry Pacific Northwest/North.

The south, particularly [Texas, is still experiencing extreme drought conditions](#) that, according to the U.S. Drought Monitor, will take quite a bit of sustained precipitation to alleviate. The expectation is that El Niño conditions will bring wetter conditions this winter across the south, but it will take some time to come out of the drought.

What is NOAA saying about winter forecasts?

The National Oceanic & Atmospheric Administration (NOAA) is showing a warm north and a cool to normal south. This forecast shows the percent chance of a particular region to be normal, leaning warm, or leaning cooler during the winter months.



Market fundamentals

Summer power recap

Real-time on-peak pricing for summer 2023 came in lower overall and less volatile from summer 2022 across PJM, NYISO and ERCOT—until August, when ERCOT RT pricing shot up. This was due to both the hot weather and the reliance on wind/non-dispatchable generation in the region. This has also had an impact on forward pricing. Calendar 2024 for ERCOT-Houston began to climb higher than the Cal '24 NYMEX in early 2023, and has continued to increase its spread to the present.

Gas update

Storage: While we came out of last winter at 1,850 Bcf in storage, [end-of-season forecasts are calling for 3,700-3,900 Bcf by mid-November](#).

Production: U.S. production is at 102-103 Bcf/day and holding steady.

Exports: have dipped from Q1 highs, but capacity remains and continues to grow. [Exports to Mexico](#) have hit all-time highs at 6.8Bcf/day (hit in June).

Supply/demand balance: we are currently in a storage surplus situation after coming out of a warmer winter however demand continues to grow.

NYMEX historical forwards: forward pricing today is [lower than it was last year at this time](#).

Regional Considerations

Moving into winter, weather is one of the greatest risks. We're also watching:

East/Midcontinent: regional storage and production; Mountain Valley Pipeline could impact $\uparrow\downarrow$

Northeast: oil pricing and international LNG supply, along with regulatory impacts

Texas/West: gas storage and associated gas coming out of Permian Basin (West); cold-weather threats and supply/demand balance amidst intermittent renewable generation output (ERCOT)

Strategy Considerations

- The long-term curve shape for both the NYMEX and real-time electricity is [in a contango](#), though less severe than what it was earlier this year.
- Forward prices have reacted to unexpected index behavior driven by weather (New England index pricing from last winter impacted forward winter prices $\downarrow$).
- **Buying energy:** going longer-term may still provide value, even though longer-term prices are higher than they were last winter when the market was backwardated. There are bullish factors that could impact longer-term prices in the future, making prices now for the long-term potentially more of a value.
- **Managing costs:** consider managing non-commodity cost components, like capacity and transmission, through active PLC management and product structuring.