

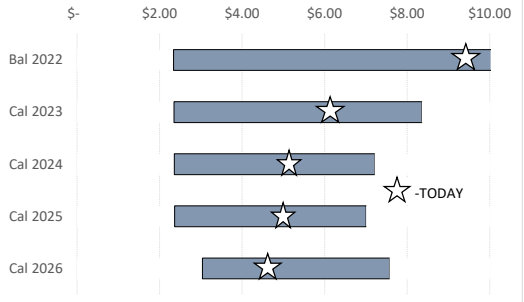


Thursday, August 18, 2022

**Natural Gas Commentary**

- September natural gas prices jumped to \$9.244 this week following news of a pipeline leak that caused production to cease at six offshore platforms off the Gulf of Mexico. While it is expected that the supply will be quickly restored, this provides a strong indication of what will happen should a tropical storm disrupt supply as peak hurricane season approaches.
- The EIA projects Henry Hub gas to average \$7.54/MMBtu in the second half of 2022 and fall to \$5.10/MMBtu in 2023 as natural gas production is expected to ramp up.
- Gas production in the lower 48 states has increased to 97.4 Bcf, representing a 4.4% increase year-over-year. Projections for 2023 show over 100 Bcf/day in dry gas production.
- EU member states are scrambling to expand LNG import capabilities as strong uncertainty remains regarding Russia's willingness to deliver natural gas into Western Europe.
- The EIA reports current natural inventories at 2,501 Bcf, which is 11.9% below the 5-year average. This growing deficit year-over-year increases the risk of price volatility for the upcoming winter.

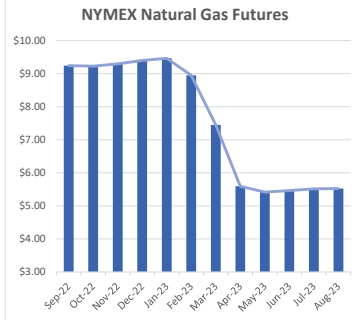
**NYMEX Natural Gas 5-Year Price Ranges (\$/MMBtu)**



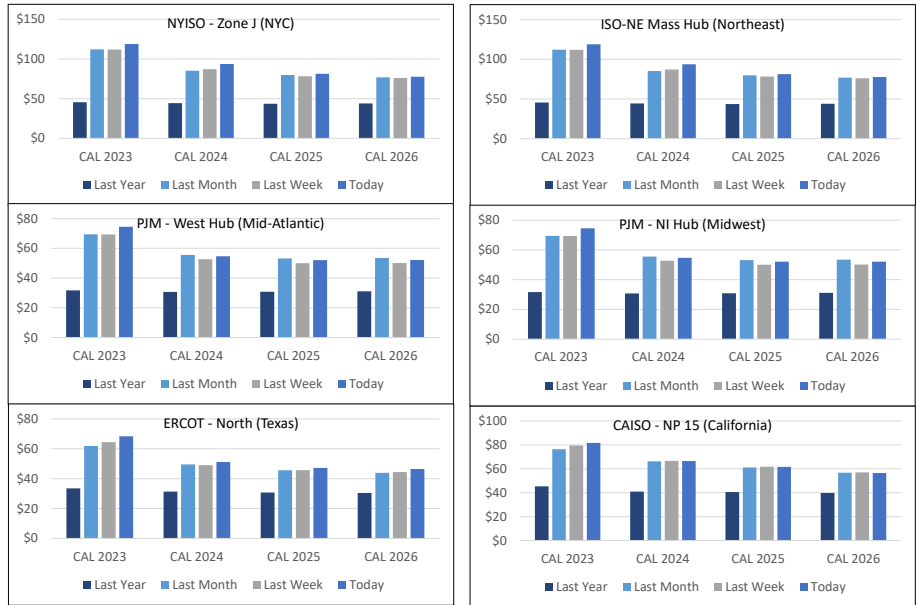
**NYMEX Natural Gas Futures**

Month	\$/MMBtu	% Δ
Sep-22	\$ 9.244	38.1%
Oct-22	\$ 9.228	40.3%
Nov-22	\$ 9.297	41.9%
Dec-22	\$ 9.401	41.6%
Jan-23	\$ 9.465	40.1%
Feb-23	\$ 8.951	30.8%
Mar-23	\$ 7.448	11.6%
Apr-23	\$ 5.593	-5.7%
May-23	\$ 5.416	10.9%
Jun-23	\$ 5.463	14.4%
Jul-23	\$ 5.512	14.0%
Aug-23	\$ 5.524	12.8%

Note - Δ is change in price over past 30 days.



**Electricity Market Update (Prices in \$ / MWh)**



**Bullish Factors Creating Market Support**

- Russia's threat to limit or cut off Natural Gas supplies to Europe ahead of the upcoming winter.
- Growing deficit in U.S. Natural Gas inventories.
- Extreme heat and drought conditions persist in the Western U.S.

**Bearish Factors Creating Market Resistance**

- Freeport LNG export terminal remains offline.
- Domestic natural gas production is beginning to increase.
- PJM capacity prices for delivery year 2023/24 cleared at \$34.1/MW-day, the lowest clearing price in 10 years.

**Electricity Market Commentary**

- President Biden signed a major climate and energy package with a goal of cutting CO2 emissions to 40% of 2005 levels by 2030. Funds will be allocated to provide tax credits to accelerate U.S. manufacturing of clean energy technology and provide financial incentives to promote efficiency projects.
- U.S. solar capacity additions are expected to reach 20 GW for 2022 and 24 GW in 2023. Renewables are expected to account for 22% of U.S. power generation in 2022 and 24% in 2023.
- California became the first state to unveil submetering technology for electric vehicles, giving EV owners the ability to measure vehicle consumption separately without the need for a new meter. This removes a hurdle for EV adoption and allows owners to benefit from lower charging rates.
- The International Energy Agency (IEA) projects global electric demand to grow by 2.4% in 2022, following a 6% increase in 2021. Renewables are growing faster than overall demand, meaning that global CO2 emissions are down despite prevalent gas-to-coal switching in Europe due to extremely high gas prices.

**Oil Prices**

	\$/Bbl	% Δ
WTI Crude	\$ 87.39	-11.4%
Brent Crude	\$ 93.29	-5.8%

	\$/Gal	% Δ
RBOB	\$ 2.93	4.7%
No. 2 Heating Oil	\$ 3.21	-8.3%

**U.S. Temperature Forecasts**

