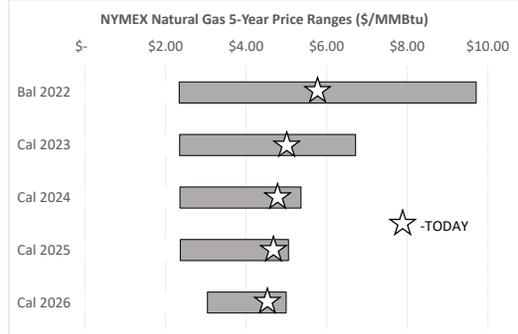




Tuesday, October 25, 2022

Natural Gas Commentary

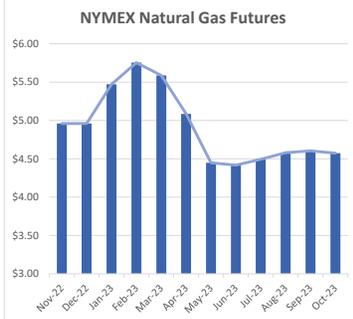
- The November natural gas contract reached a 7-month low of \$4.959 last week, driven by mild seasonal temperatures and softening prices in Europe.
- After cresting at \$8.279 in June, the 12-month gas strip has retreated to \$4.885 per MMBtu. While the front end of the curve has softened, calendar strips for 2025 and beyond - when U.S. LNG export capabilities are expected to grow by nearly 50% - have remained firm. Several analysts expect current market backwardation (lower prices further out on the curve) to revert to a contango (higher prices further out on the curve) market over the next 12-months.
- Natural gas inventories are on target to exceed 3.5 Tcf at the end of injection season following a series of 100+ Bcf builds. The year-over-year deficit has shrunk to -3.1%, and the gap vs. the 5-year average is now -5.2%.
- U.S. dry natural gas production reached a record-high of 98.8 Bcf/d in September. Demand is similarly elevated year-over-year, with the largest gains coming in the power burn sector.
- OPEC+ announced a production cut of 2 million bbl/d, signaling the potential for higher prices. This will likely inspire additional domestic drilling along with associated gas production.



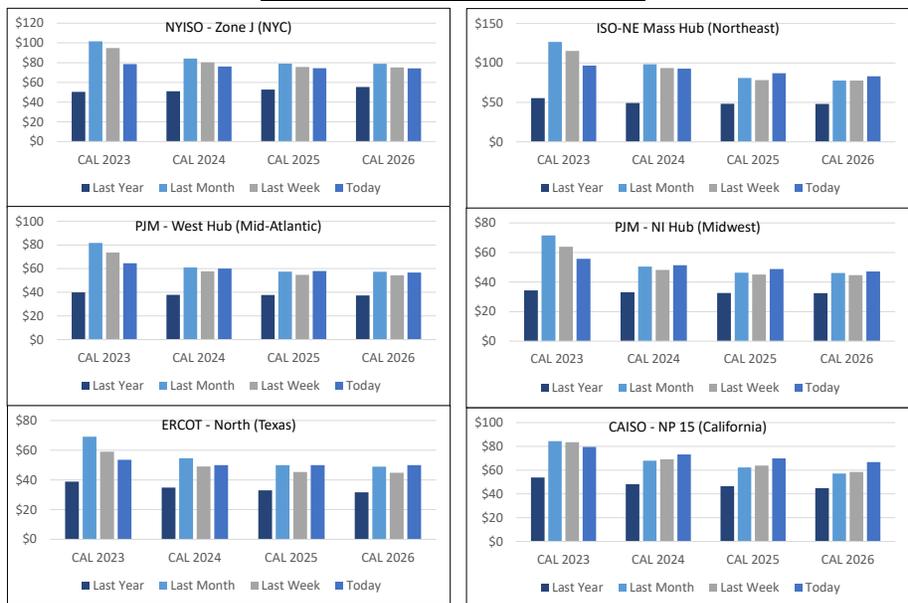
NYMEX Natural Gas Futures

Month	\$/MMBtu	% Δ
Nov-22	\$ 4.959	-36.5%
Dec-22	\$ 4.959	-31.3%
Jan-23	\$ 5.472	-28.7%
Feb-23	\$ 5.754	-28.1%
Mar-23	\$ 5.587	-25.4%
Apr-23	\$ 5.086	-19.5%
May-23	\$ 4.448	-18.3%
Jun-23	\$ 4.417	-17.7%
Jul-23	\$ 4.494	-17.0%
Aug-23	\$ 4.579	-16.8%
Sep-23	\$ 4.604	-17.0%
Oct-23	\$ 4.574	-16.7%

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



Electricity Market Update (Prices in \$ / MWh)



Bullish Factors Creating Market Support

- Global energy prices remain elevated, creating strong demand for U.S. LNG exports.
- Freeport LNG terminal is set to resume exports in early-to-mid November.
- Domestic demand remains elevated in the power-generation sector amid coal retirements and seasonal nuclear maintenance.

Bearish Factors Creating Market Resistance

- Natural gas production remains at near-record-setting levels.
- European gas storage levels are approaching maximum capacity.
- Weather forecasts call for normal temperatures for the majority of the U.S. and below-average snowfall this winter across most of the country.

Electricity Market Commentary

- National electric futures prices fell across the board over the past month in parallel with natural gas. Low coal inventories have helped support prices in PJM and MISO while distillate fuel shortages have helped maintain a price floor in the NYISO and ISO-NE regions.
- Natural gas (↓ from 38% to 36%) and coal (↓ from 23% to 19%) are expected to be used less in the U.S. electric generation mix during 2023 as renewables are expected to increase from 20% to 24%.
- In its latest Short-Term Energy Forecast, the EIA is calling for wholesale power prices to be 20-60% higher this winter on average as compared to last year. Published utility default tariff rates have seen similarly sharp increases beginning in January 2023.
- Supply constraints around LNG shipments and pipeline restrictions raise concerns regarding fuel inventories for power generation, which will cause elevated winter electric prices, especially in the Northeast, with ISO-NE expected to feel the cost increase most dramatically.

Oil Prices

	\$/Bbl	% Δ
WTI Crude	\$ 84.77	0.7%
Brent Crude	\$ 91.38	-2.0%

	\$/Gal	% Δ
RBOB (Gasoline)	\$ 2.75	-6.3%
No. 2 Heating Oil	\$ 4.64	44.7%

U.S. Temperature Forecasts

