

January 31

2024



MARKET INTELLIGENCE REPORT



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The Energy Markets are Changing

THIS WEEK IN THE NEWS

- [U.S. monthly dry natural gas production set a new record in December.](#)
- [Biden delays consideration of new natural gas export terminals, citing climate risk.](#)
- [Oil prices climb on geopolitical tensions, positive economic data.](#)
- [Global gas demand set for stronger growth in 2024.](#)
- [Chicago mayor proposes natural gas ban in new buildings.](#)
- [BP faces activist investor pressure to ditch clean energy pledges.](#)
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- [Is the rooftop solar industry in trouble?](#)



MAP OF DEREGULATED ENERGY MARKETS



FUNDAMENTAL MARKET DRIVERS

Bull Drivers (Dynamics Driving Prices Higher)

- ❖ **Inflation and supply chain issues** are driving up the cost of new electric generation.
- ❖ **Six more weeks of winter** ahead and the potential for another arctic blast.
- ❖ **Natural gas burn** in the power generation sector is up 5.3% year-over-year.

Bear Drivers (Dynamics Driving Prices Lower)

- ❖ **Natural gas production** returning to closer to levels seen prior to winter freeze-offs.
- ❖ **Freeport LNG** experiencing a one-train outage.
- ❖ **Temperature forecasts** are above normal for the first half of February.





ENERGY PROCUREMENT CONSIDERATIONS

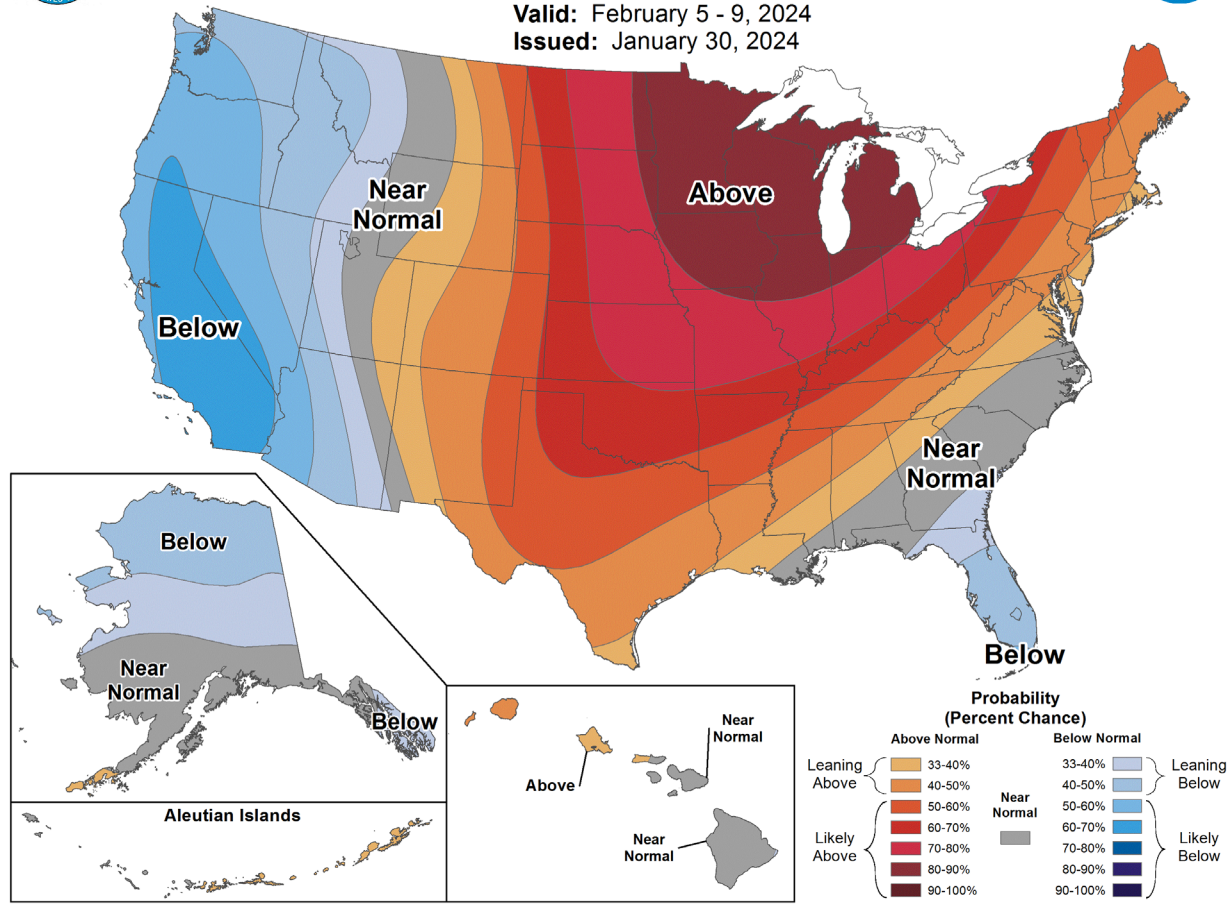
- *Natural Gas Fundamentals remain bearish in the short term* due to high storage, moderate weather, and strong domestic production.
- Winter weather will be the primary driving factor for prices in the near-to-immediate term. Even *short periods of extreme cold have proven to send electric and natural gas prices substantially higher.*
- While U.S. Dry Natural Gas production is expected to establish new records in 2024 and 2025, the *demand for natural gas in the electric generation sector* is also approaching all-time highs.
- The United States is a huge producer of NG and exports to Europe and Asia are growing because export prices are 3-4X what it sells for domestically. Several new LNG export terminals are under construction and *export capacity will increase dramatically* in the coming years.
- Calendar natural gas strips *out to 2035 are all trading below \$4 per MMBtu.*
- Longer term agreements should be considered as part of your risk management strategy. At a minimum, *partial hedges should be evaluated out to 2027 and beyond.*

MARKET FUNDAMENTALS OVERVIEW: WEATHER OUTLOOK



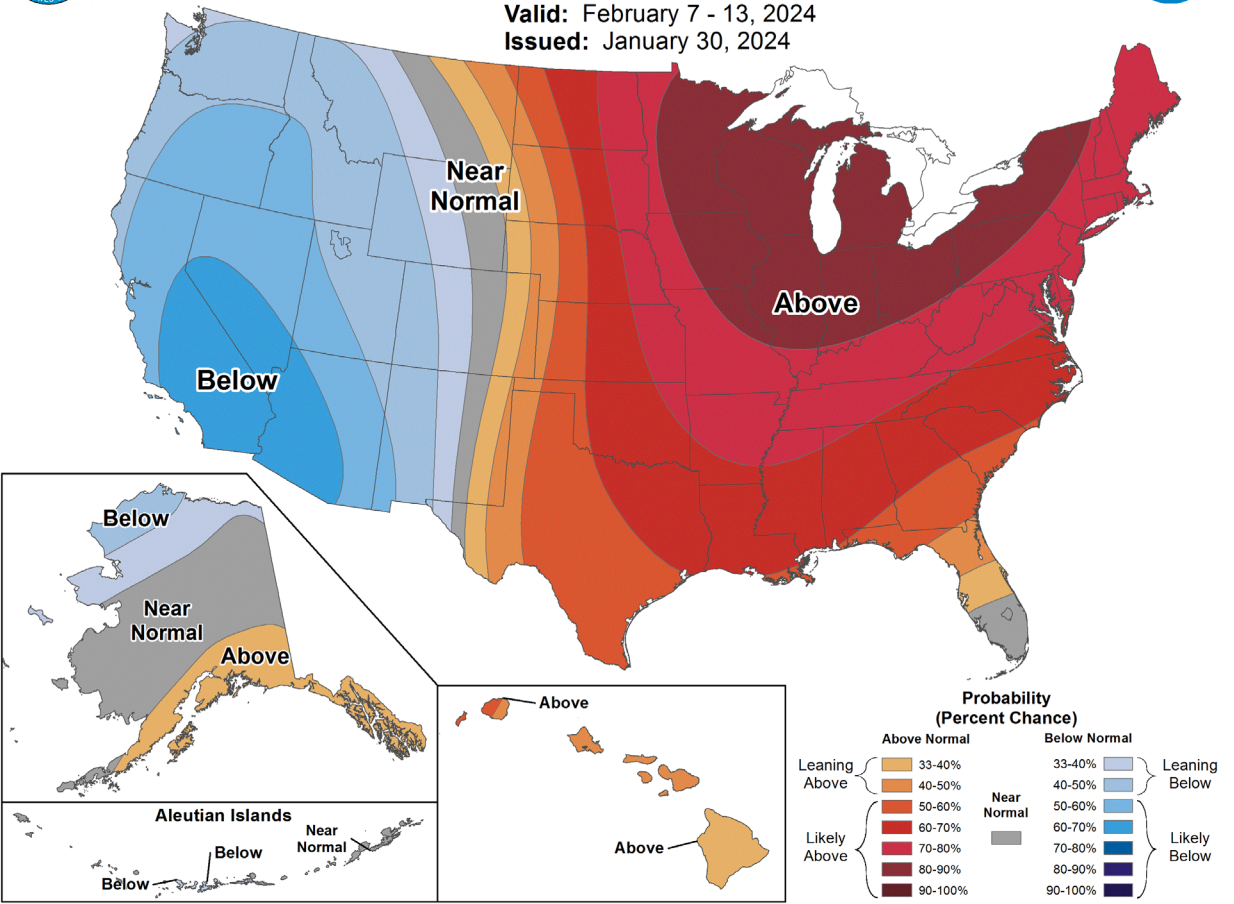
6-10 Day Temperature Outlook

Valid: February 5 - 9, 2024
Issued: January 30, 2024



8-14 Day Temperature Outlook

Valid: February 7 - 13, 2024
Issued: January 30, 2024



Key Takeaway: Temperatures are expected to be mild over the eastern half of the U.S. during the first half of February. The Western U.S. will be mild and slightly cooler. Overall, light national demand for natural gas is expected over the next 7-days. *Pricing Impact:* **Bearish**

WTI – CRUDE OIL – 12 MONTH STRIP



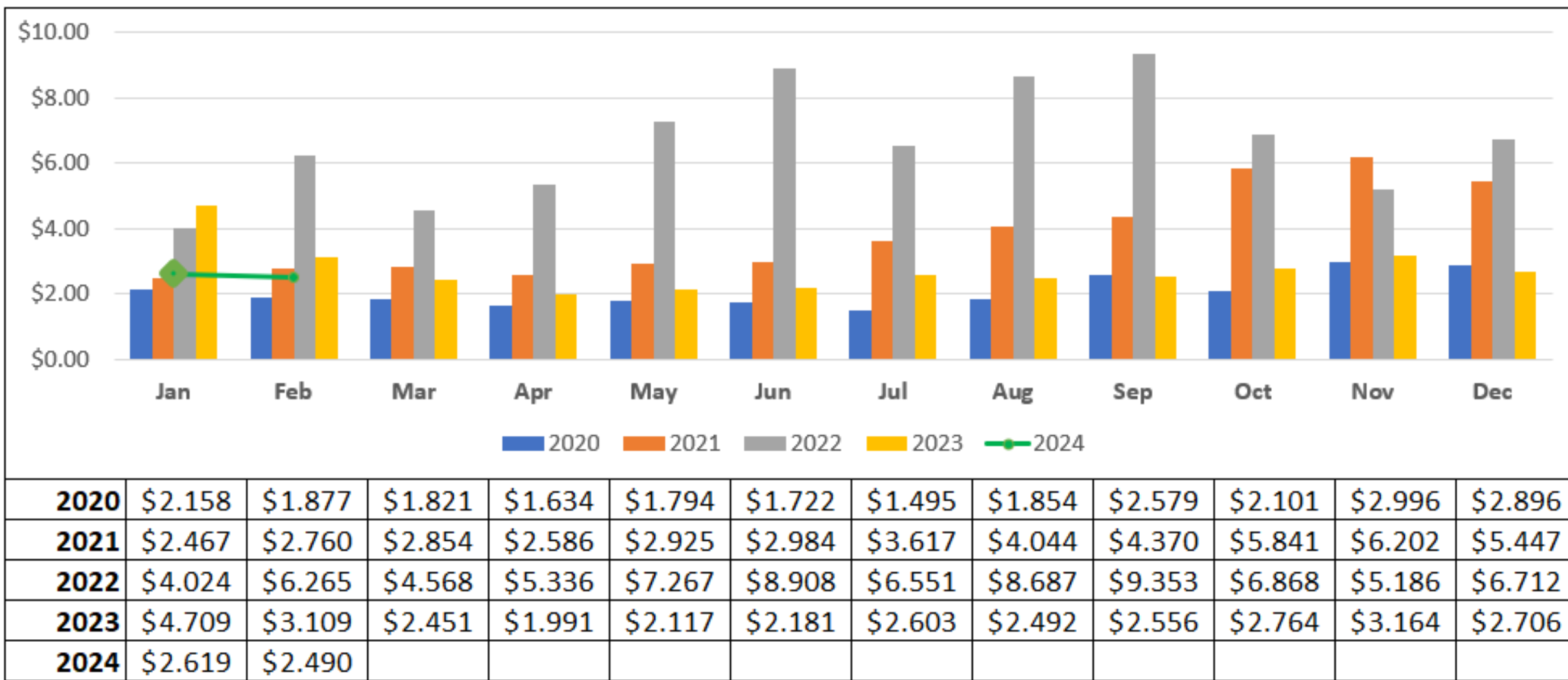
	Last Year	Last Month	Last Week	Today
Trade Date	1/30/2023	12/27/2023	1/22/2024	1/29/2024
12M Strip	\$76.97	\$72.00	\$73.65	\$75.09
% Δ	2.44%	4.29%	1.96%	-

HENRY HUB – NATURAL GAS – 12 MONTH STRIP

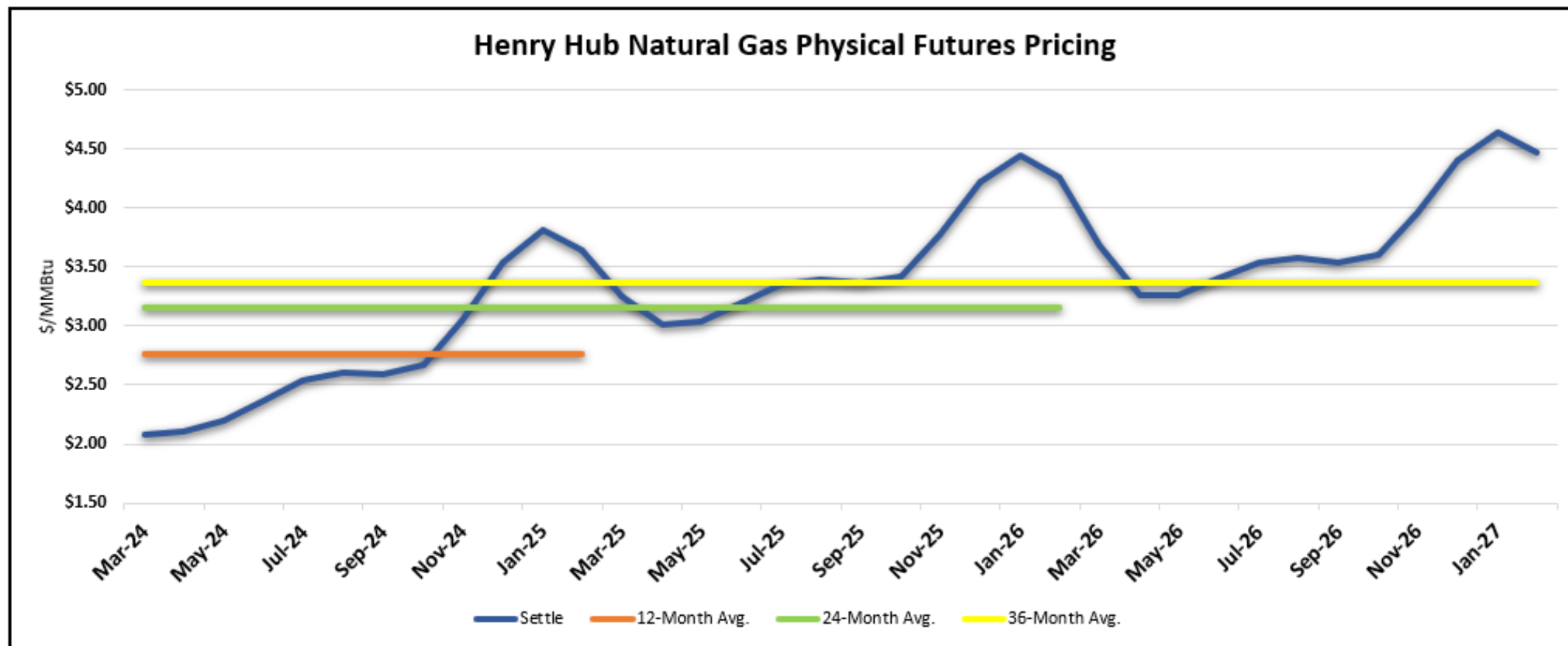


	Last Year	Last Month	Last Week	Friday
Trade Date	1/30/2023	12/27/2023	1/23/2024	1/30/2024
12M Strip	\$3.359	\$2.630	\$2.778	\$2.771
% Δ	17.51%	5.36%	0.25%	-

NYMEX MONTHLY NATURAL GAS SETTLEMENTS



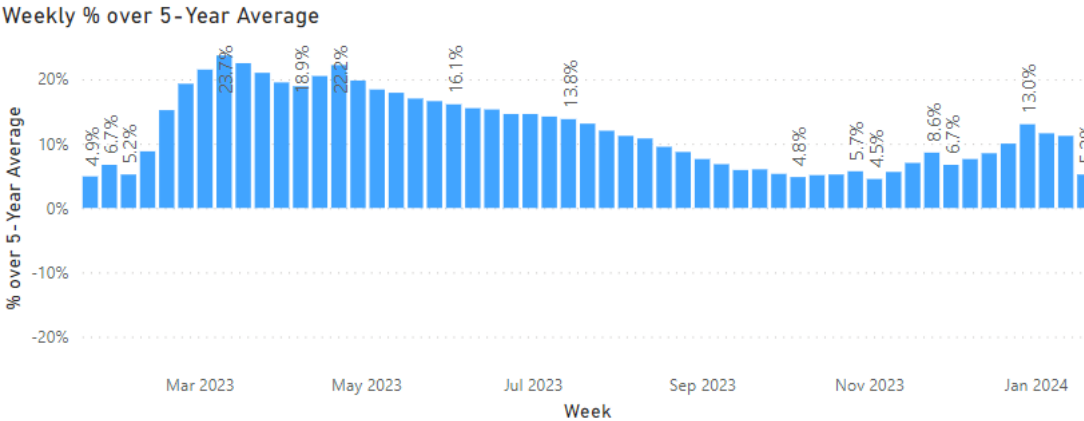
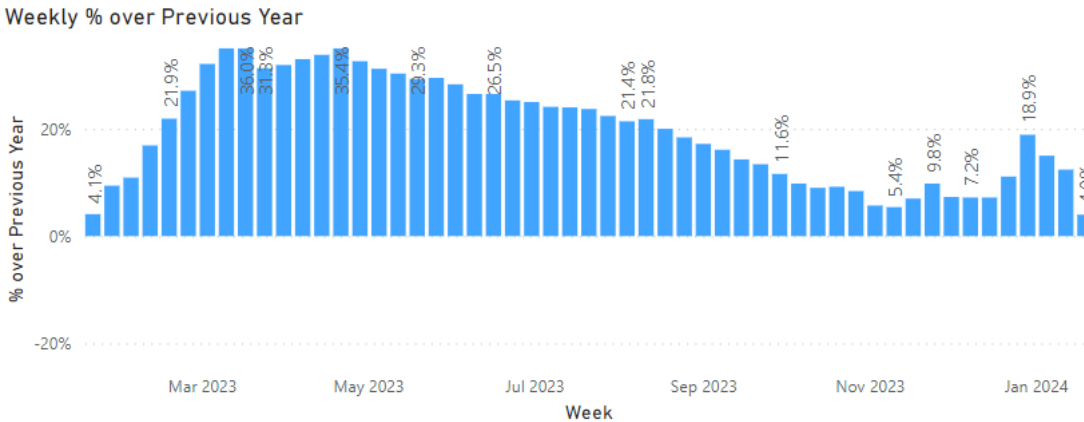
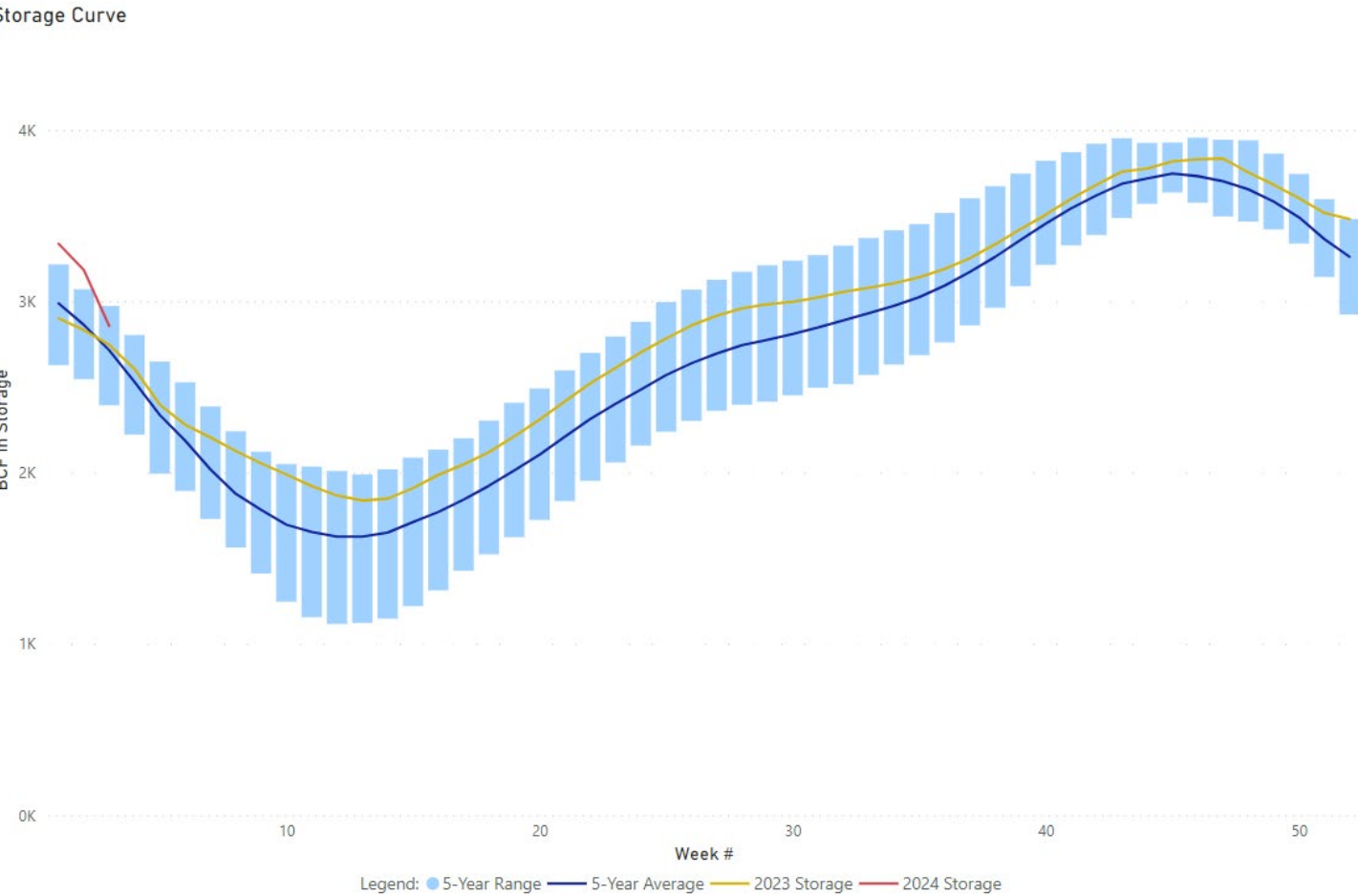
NATURAL GAS FUTURES PRICING



Mar-24	\$ 2.077	Sep-24	\$ 2.585	Mar-25	\$ 3.250	Sep-25	\$ 3.363	Mar-26	\$ 3.685	Sep-26	\$ 3.543
Apr-24	\$ 2.104	Oct-24	\$ 2.667	Apr-25	\$ 3.012	Oct-25	\$ 3.421	Apr-26	\$ 3.265	Oct-26	\$ 3.607
May-24	\$ 2.201	Nov-24	\$ 3.048	May-25	\$ 3.041	Nov-25	\$ 3.768	May-26	\$ 3.261	Nov-26	\$ 3.956
Jun-24	\$ 2.370	Dec-24	\$ 3.532	Jun-25	\$ 3.201	Dec-25	\$ 4.216	Jun-26	\$ 3.400	Dec-26	\$ 4.402
Jul-24	\$ 2.538	Jan-25	\$ 3.812	Jul-25	\$ 3.360	Jan-26	\$ 4.449	Jul-26	\$ 3.541	Jan-27	\$ 4.647
Aug-24	\$ 2.600	Feb-25	\$ 3.638	Aug-25	\$ 3.399	Feb-26	\$ 4.255	Aug-26	\$ 3.575	Feb-27	\$ 4.469

MARKET FUNDAMENTALS OVERVIEW: NATURAL GAS STORAGE

Weekly change	Current Storage	Total year ago	5-year average	Percent Full
-326	2,856	2,746	2,714	66.4%



Key Takeaway: The EIA reported that, for the week ending January 95th, U.S. inventories decreased by 326 Bcf, which was in line with expectations. Total stockpiles now stand at 2,856 Bcf, up by 4.0% from a year ago and 5.2% above the five-year average for the same week. *Pricing Impact: Neutral-Bearish*

NYISO ZJ (NYC) vs. HH – 12 MONTH FLAT FORWARDS



Key Takeaway: For Cal 2025, reliability risks in New York City may emerge in a hot summer—sending prices sharply upward—while natural gas price volatility risks rise alongside a step-change increase in LNG export capacity. *Pricing Impact: **Neutral-Bullish**.*

PJM WEST HUB vs. HH – 12 MONTH FLAT FORWARDS



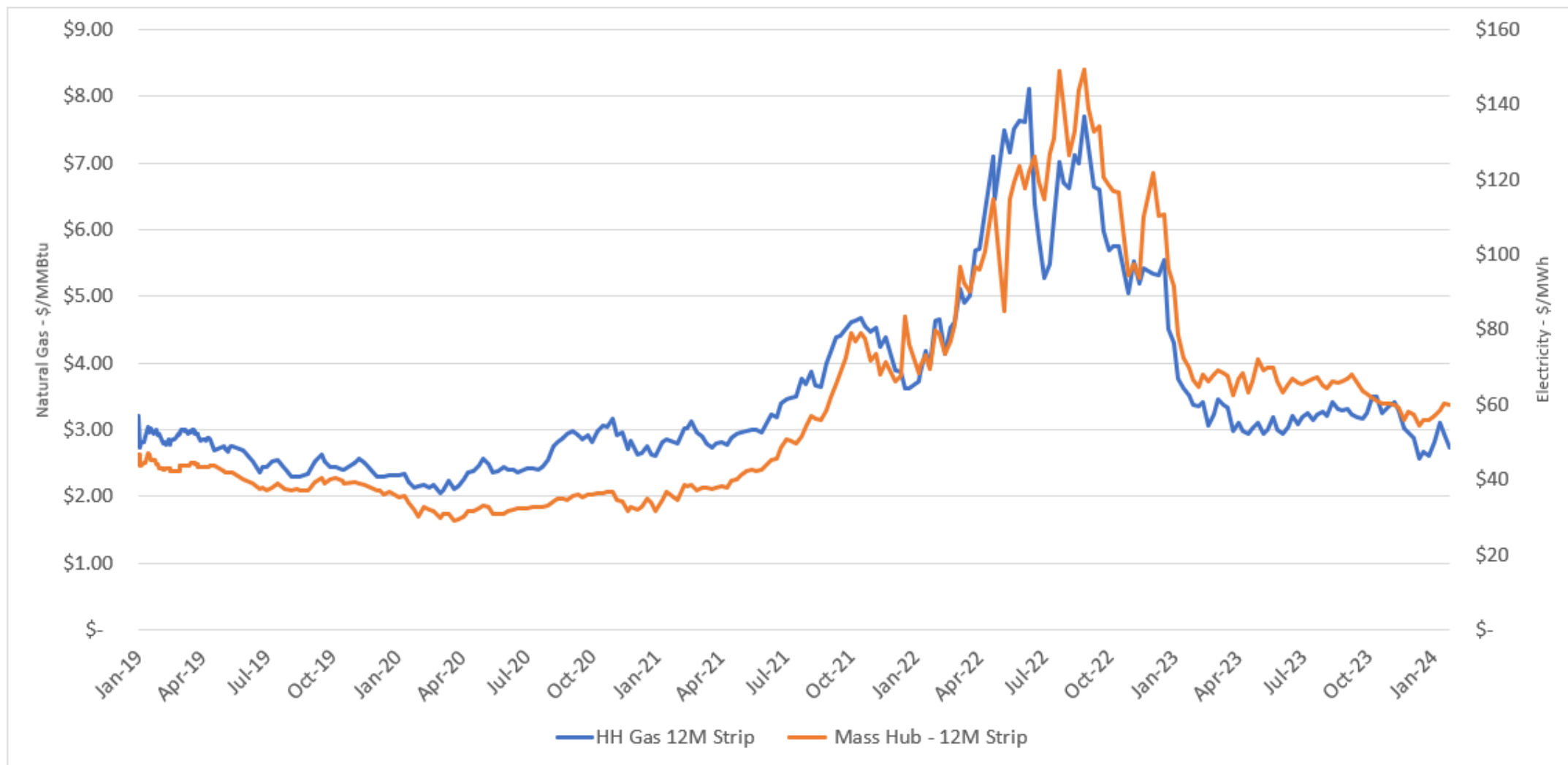
Key Takeaway: Last month, the PJM Board of Managers approved transmission projects with an estimated cost of \$5 billion to accommodate data center load growth and generation retirements. Pricing Impact: **Neutral-Bullish.**

PJM NI HUB vs. HH – 12 MONTH FLAT FORWARDS



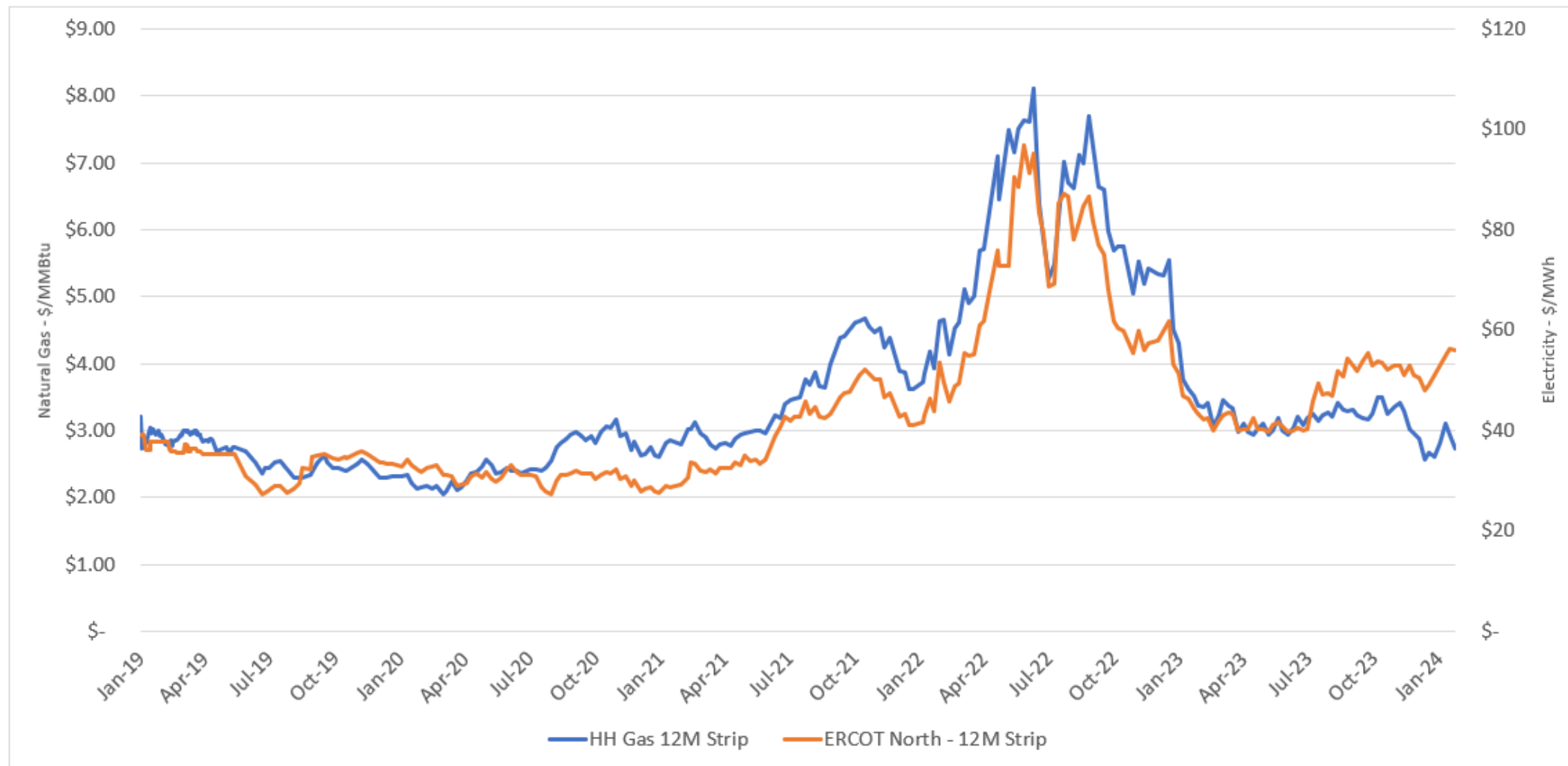
Key Takeaway: Real time prices at the PJM Comed Hub averaged \$40.75 per MWh in January 2024. This compares to an average price of \$24.01 per MWh in December 2023 and \$32.48 per MWh in January 2023. *Pricing Impact: Neutral.*

MASS HUB vs. HH – 12 MONTH FLAT FORWARDS



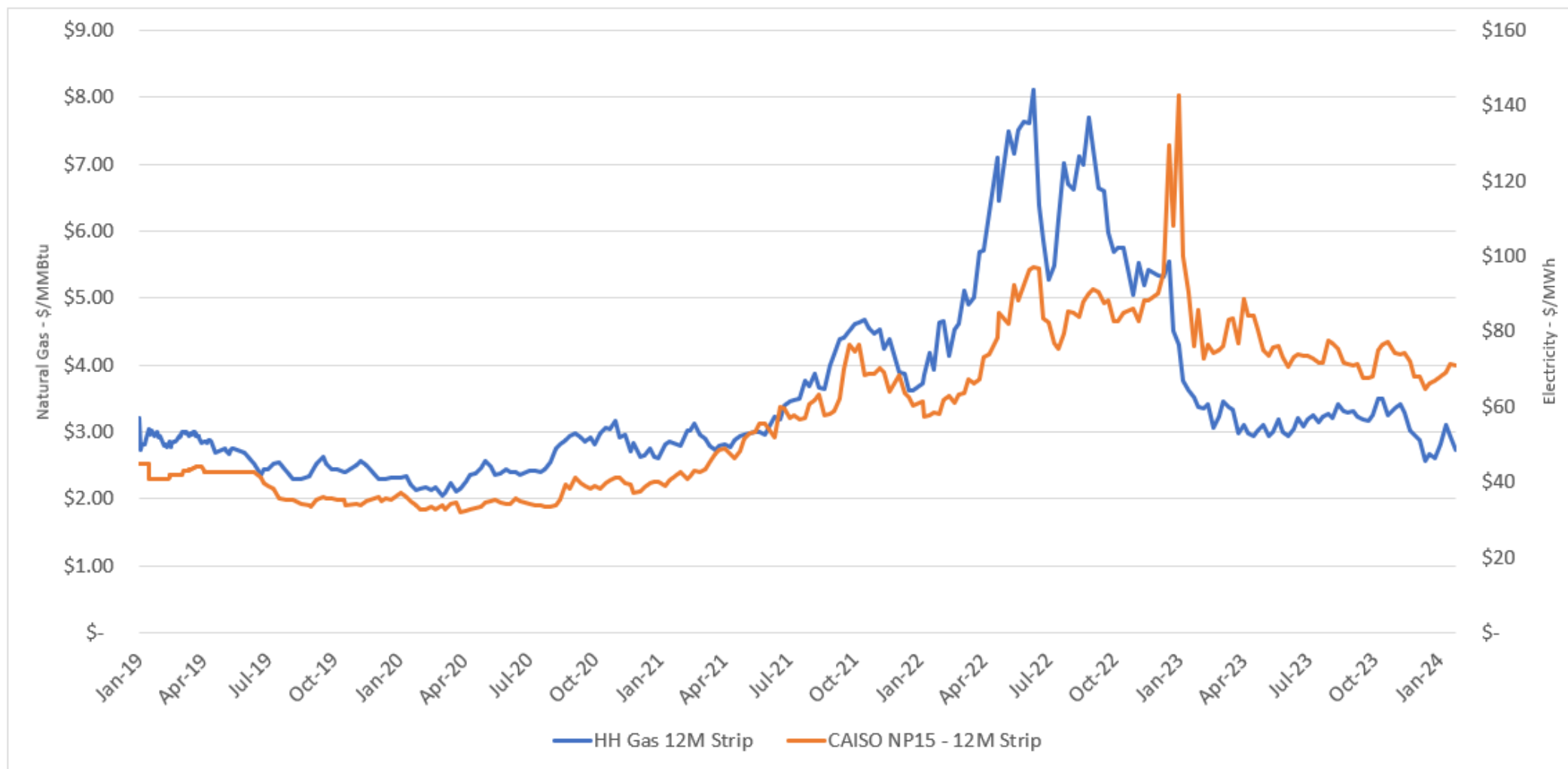
Key Takeaway: FERC approved a request to delay FCA 19 by one year. The ISO and NEPOOL cited time needed to complete the Resource Capacity Accreditation (RCA) project. FCA 19 will be the first auction to include the capacity accreditation changes developed through the RCA project. The project aims to account for the unique attributes of the resources that will make up the future grid and accurately measure each resource's contribution to system reliability. *Pricing Impact: **Neutral-Bullish**.*

ERCOT (TX) vs. HH – 12 MONTH FLAT FORWARDS



Key Takeaway: On January 26th, the Biden Administration announced it was “pausing” decisions on exports of LNG to non-Free Trade Agreement countries until the DOE updates the economic and environmental analyses used to evaluate authorizations. Halting export permits would potentially curtail future demand on the ERCOT grid as well as incentives to develop gas assets in the Permian basin. *Pricing Impact: **Neutral-Bearish**.*

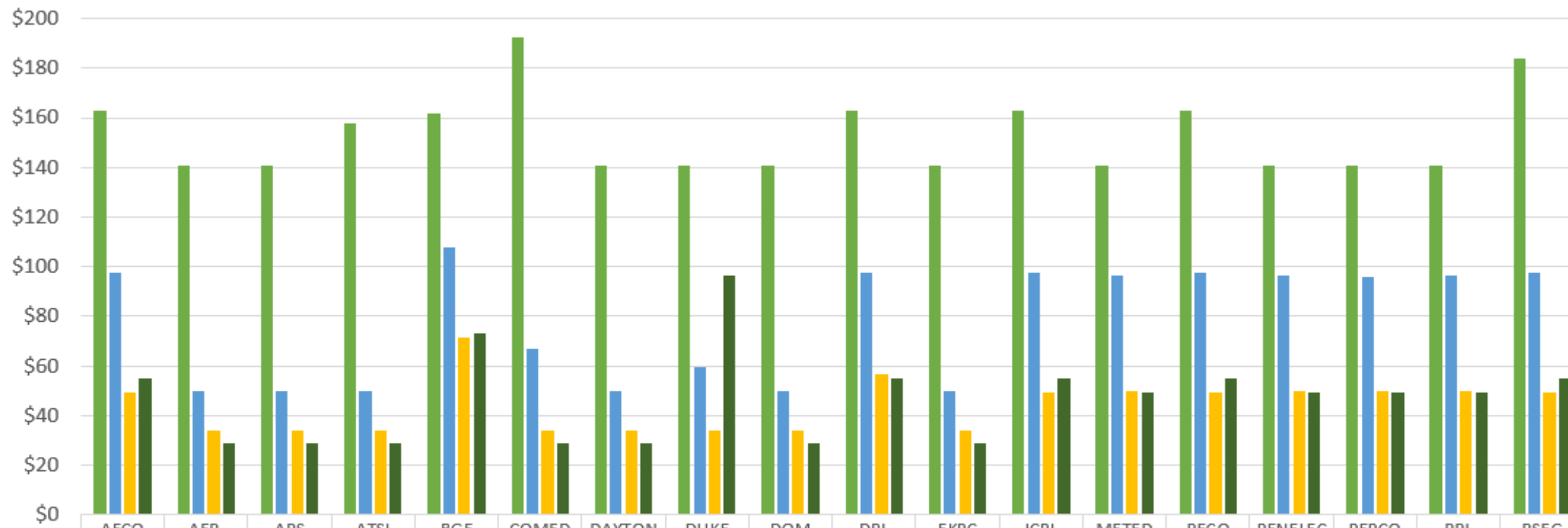
CAISO (CA) vs. HH – 12 MONTH FLAT FORWARDS



Key Takeaway: Following a spectacular late spring-like weekend in Southern California, unseasonable warmth will linger throughout the West early this week. A pattern change is set to begin in the latter half of the week as a Pacific trough sets in which will flip the temperature profile from much above normal to below normal across most of the West into next week, while some occasional much belows are possible in the DSW and California. *Pricing Impact: **Bullish**.*

PJM FORWARD CAPACITY AUCTION PRICES (\$/MW-DAY)

PJM Base Residual Capacity Auction Results

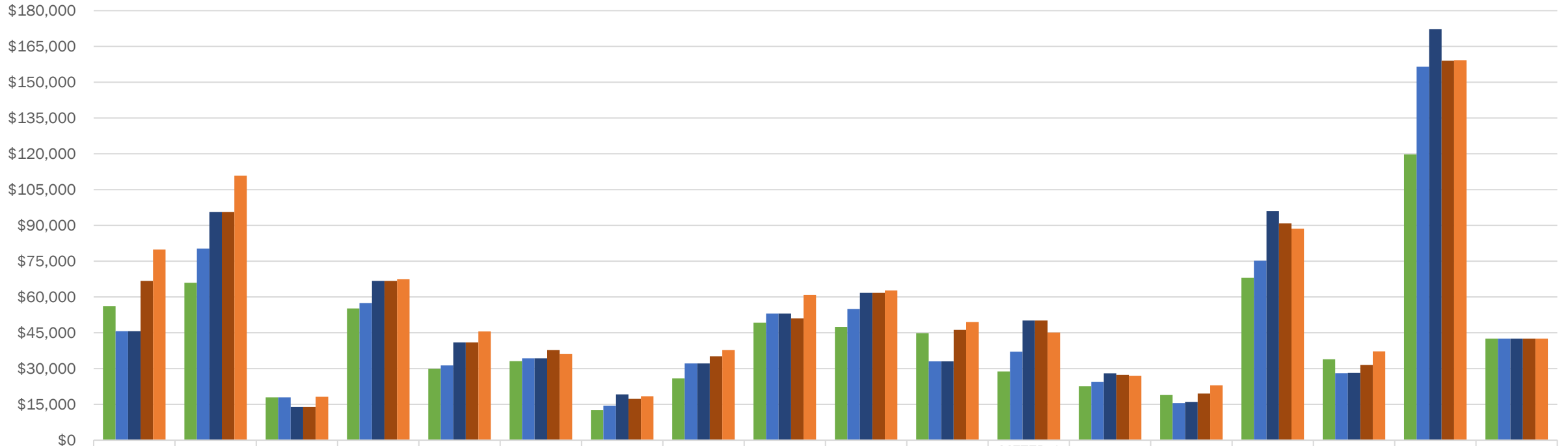


■ 2021/2022 ■ 2022/2023 ■ 2023/2024 ■ 2024/2025



PJM NETWORK INTEGRATED TRANSMISSION (NITS)

Network Integrated Transmission Service Rate (\$/MW-Year)



	AECO	AEP	APS	ATSI	BGE	ComEd	Dayton	Duke	Duquesne	Domionion	DPL	METED / PENELEC	JCPL	PECO	PPL/ UGI	PEPCO	PSEG	Rockland
2019	\$56,171.	\$65,923.	\$17,895.	\$55,185.	\$29,860.	\$33,116.	\$12,561.	\$25,840.	\$49,200.	\$47,471.	\$44,803.	\$28,796.	\$22,588.	\$18,922.	\$68,031.	\$33,873.	\$119,735	\$42,548.
2020	\$45,693.	\$80,306.	\$17,895.	\$57,482.	\$31,311.	\$34,280.	\$14,456.	\$32,143.	\$53,072.	\$54,914.	\$33,000.	\$37,083.	\$24,354.	\$15,513.	\$75,204.	\$28,022.	\$156,503	\$42,548.
2021	\$45,693.	\$95,597.	\$13,930.	\$66,744.	\$40,962.	\$34,280.	\$19,175.	\$32,143.	\$53,072.	\$61,729.	\$33,000.	\$50,128.	\$28,012.	\$16,022.	\$95,997.	\$28,165.	\$172,189	\$42,548.
2022	\$66,741.	\$95,597.	\$13,930.	\$66,744.	\$40,962.	\$37,749.	\$17,320.	\$35,136.	\$51,000.	\$61,729.	\$46,184.	\$50,128.	\$27,327.	\$19,517.	\$90,836.	\$31,496.	\$159,013	\$42,548.
2023	\$79,876.	\$110,857	\$18,162.	\$67,420.	\$45,531.	\$36,069.	\$18,410.	\$37,718.	\$60,850.	\$62,688.	\$49,476.	\$45,112.	\$27,008.	\$22,998.	\$88,606.	\$37,201.	\$159,248	\$42,548.



THE ENERGY MARKET DYNAMICS

- Despite sound fundamentals (healthy storage, strong production), Natural Gas prices remain highly sensitive to changes in temperature and weather – particularly during the winter.
- Demand for U.S. LNG is on the rise at the same time when natural gas demand in the power generation sector is setting new records.
- All traded forward calendar years continue to trade below \$3.75 per MMBtu, which historically has been a signal to hedge at least a portion of energy risk exposure in the future.
- The combination of fossil-fuel power plant retirements and delayed/cancelled renewable projects means that Natural Gas demand will continue to regularly establish new records in the foreseeable future.

