



# Fuel Supply Update

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Operating Committee  
February 9, 2023

## Coal

- On site inventory and Appalachian production increasing
- Prices dropping

## Natural Gas

- Strong fundamentals
- Storage nearly 7% above 5 year average
- Minor well freeze off in Appalachian production last week

## Oil

- Distillate and Residual regional and generator on site inventories generally flat
- Regional demand and price fairly flat
- Global prices down

## Production

- Year to date Appalachian production approximately 5% above 2022 volumes

## Transportation

- No major issues but continue to monitor:
  - Last week's Norfolk Southern train derailment on PA/OH border
  - River lock maintenance projects in Ohio Valley

## Prices

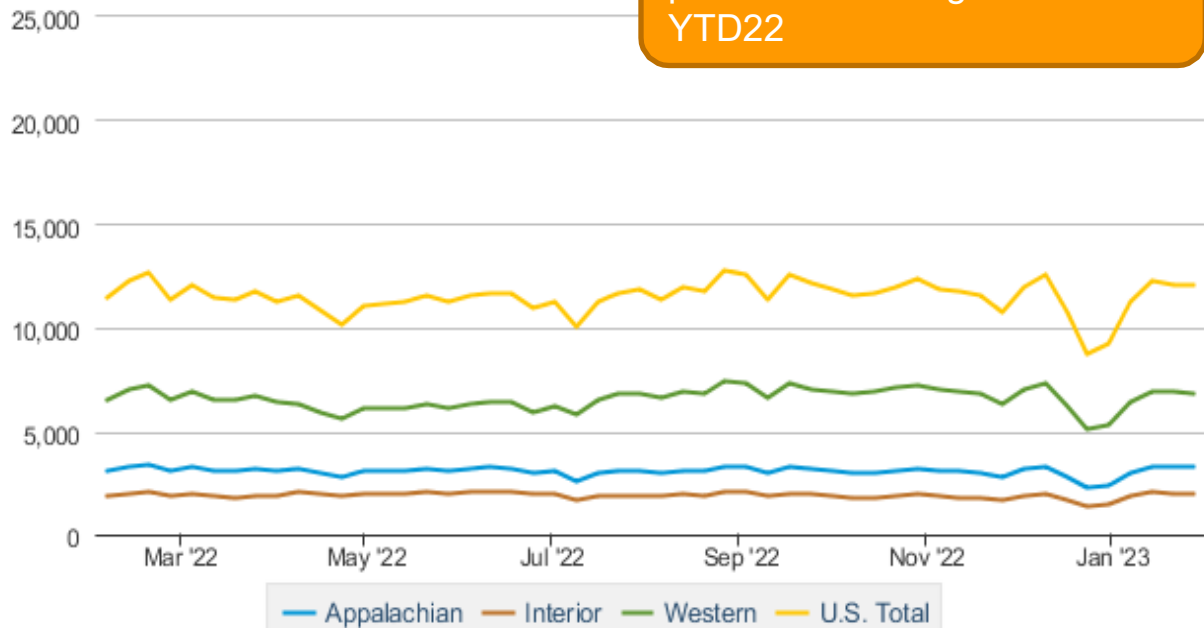
- Prices dropping
- Nearly commensurate with natural gas prices though spot gas prices are currently lower

## PJM Activity

- Weekly data requests continuing to help identify and track supply and transportation issues
- Communicating with individual resource owners to address any emergent supply concerns

## Weekly coal production by region

thousand short tons



YTD23 Appalachian production 5% higher than YTD22

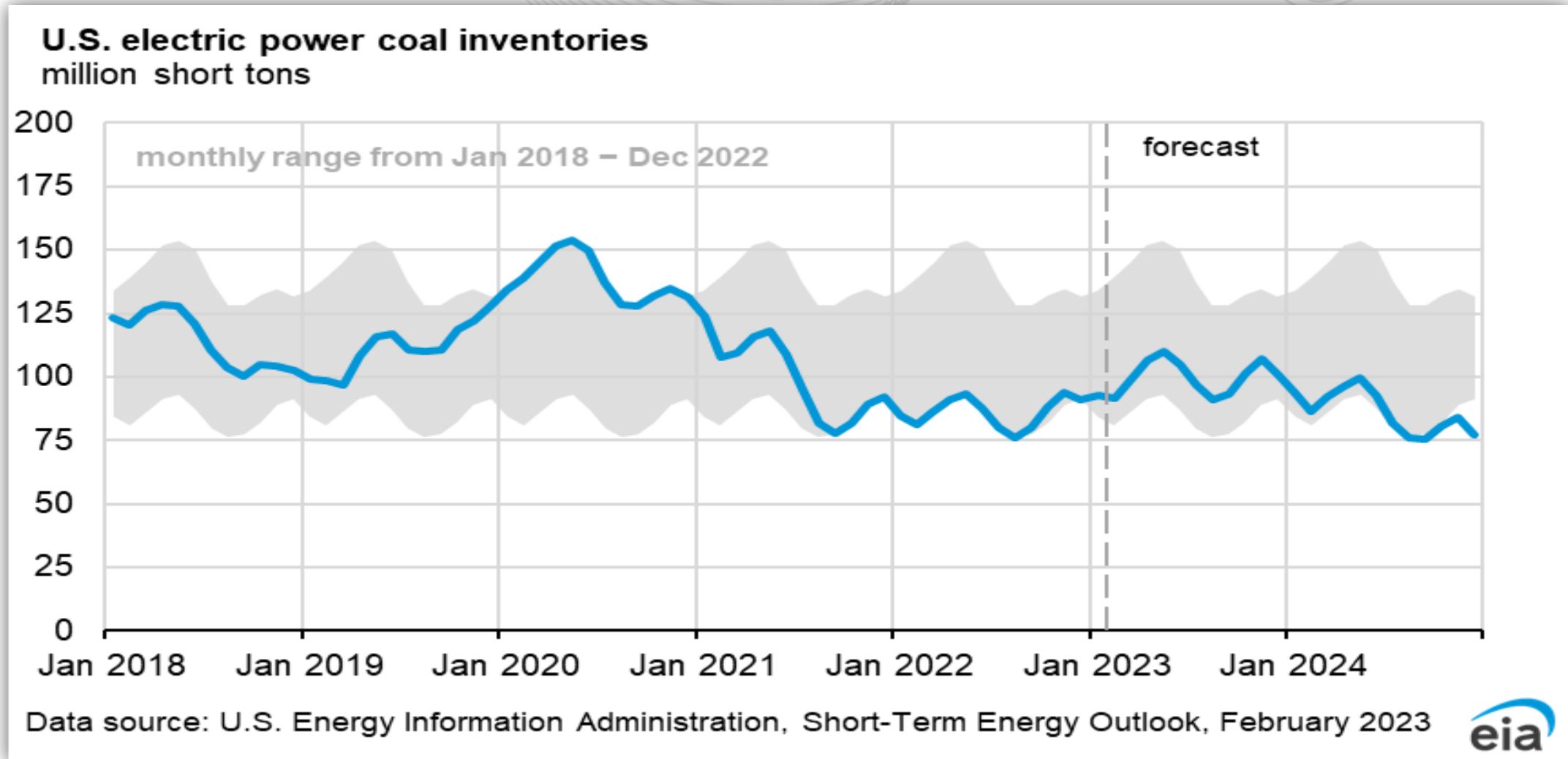
eia Data source: U.S. Energy Information Administration

## Average weekly coal commodity spot prices

dollars per short ton

	Week ending					Week ago change
	01/06/23	01/13/23	01/20/23	01/27/23	02/03/23	
Central Appalachia 12,500 Btu, 1.2 SO <sub>2</sub>	\$138.00	\$138.00	\$142.25	\$142.25	\$131.65	\$-10.60
Northern Appalachia 13,000 Btu, < 3.0 SO <sub>2</sub>	\$115.00	\$115.00	\$117.75	\$117.75	\$97.75	\$-20.00
Illinois Basin 11,800 Btu, 5.0 SO <sub>2</sub>	\$116.00	\$116.00	\$140.00	\$140.00	\$123.75	\$-16.25
Powder River Basin 8,800 Btu, 0.8 SO <sub>2</sub>	\$15.50	\$15.50	\$15.45	\$15.45	\$15.40	\$-0.05
Uinta Basin 11,700 Btu, 0.8 SO <sub>2</sub>	\$37.85	\$37.85	\$37.70	\$37.70	\$37.55	\$-0.15

EIA forecasted inventory continues to decline based on anticipated generator retirements



## Production

- Feb. 2<sup>nd</sup> – 4<sup>th</sup> cold snap resulted in some gas well freeze offs totaling around 2 bcf/day in Appalachian supply
- Pales in comparison to the 10 to 11 bcf/day loss during Elliott

## Storage

- Mild winter weather overall has resulted in a nearly 7% inventory surplus to the 5 year average

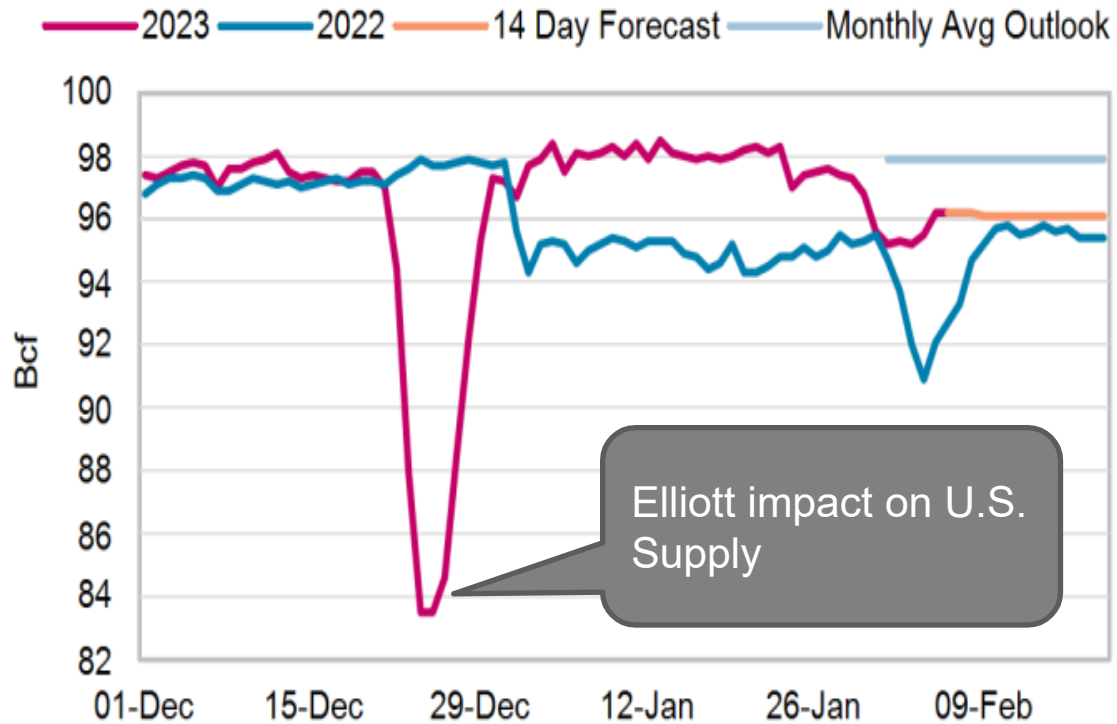
## Prices

- After spiking last Friday, regional spot prices have plummeted below \$3/mmbtu
- March 2023 NYMEX price currently trading below \$2.50/mmbtu on calls for above average temperatures for balance of February

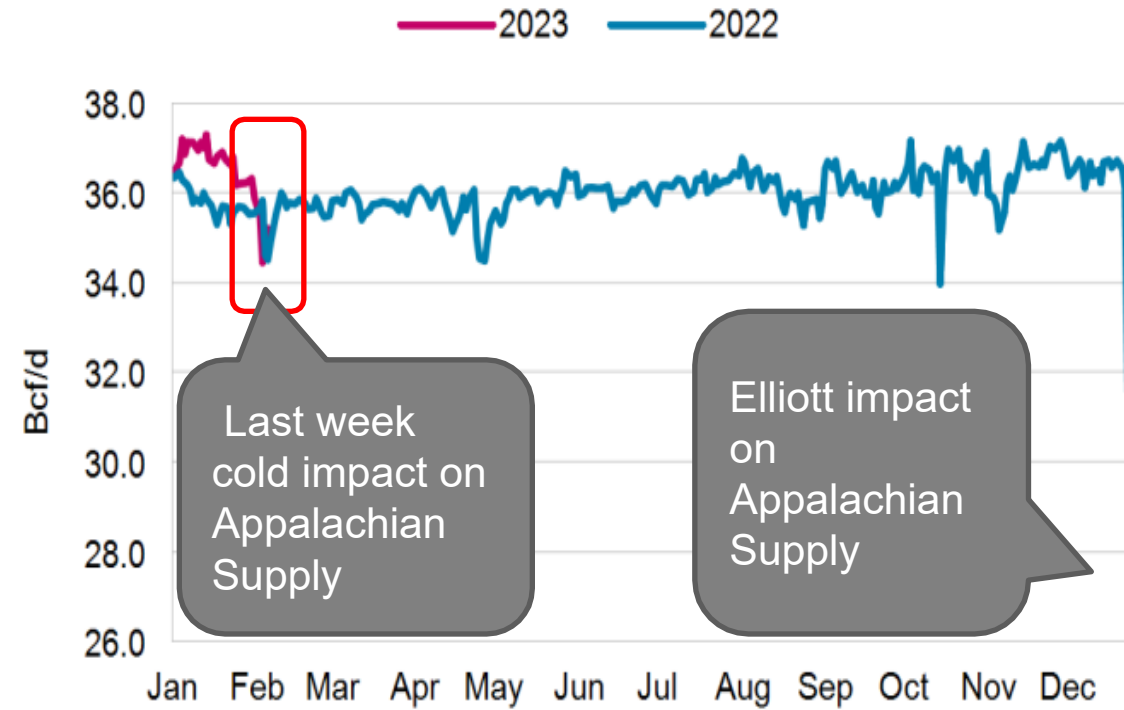
## LNG

- Total U.S. export capacity is 14 Bcf/day
- 2 Bcf/day remains offline with partial return of Freeport terminal now delayed until late February with full return possible by March
- Export volumes currently between 11 and 12 Bcf/day

## TOTAL U.S. DRY GAS PRODUCTION



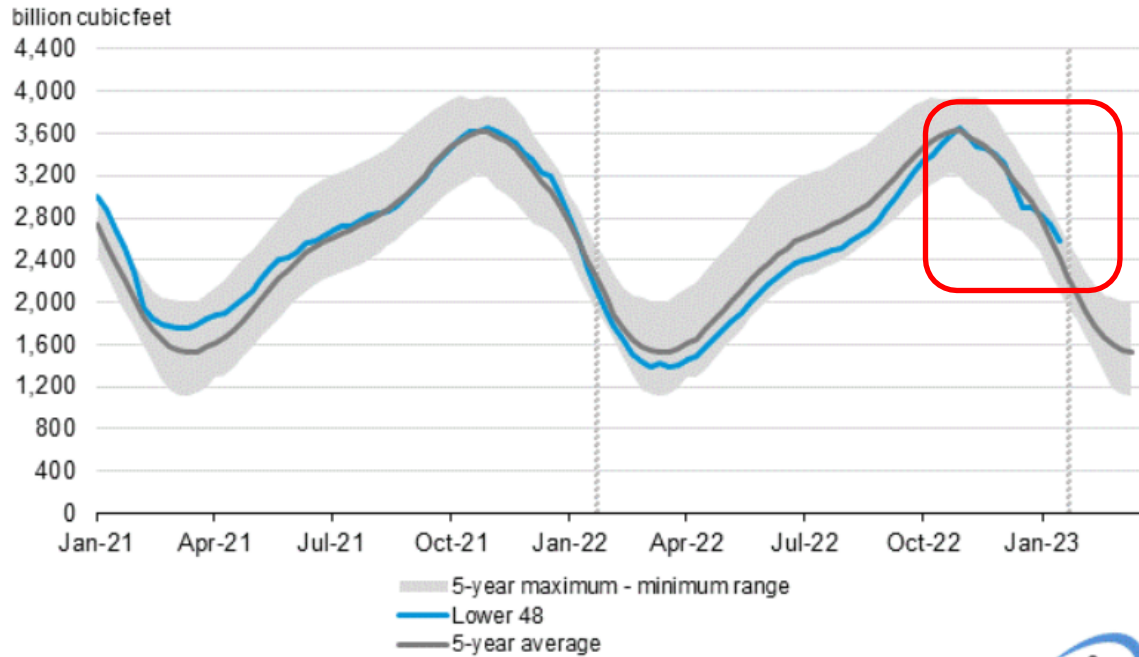
## NORTH (NE-MW) REGION DRY GAS PRODUCTION



# Natural Gas Underground Storage – As Of 1/27/23

## Growing Inventory Levels

Working gas in underground storage compared with the 5-year maximum and minimum



Data source: U.S. Energy Information Administration



Working gas in underground storage, Lower 48 states

[Summary text](#) [CSV](#) [JSON](#)

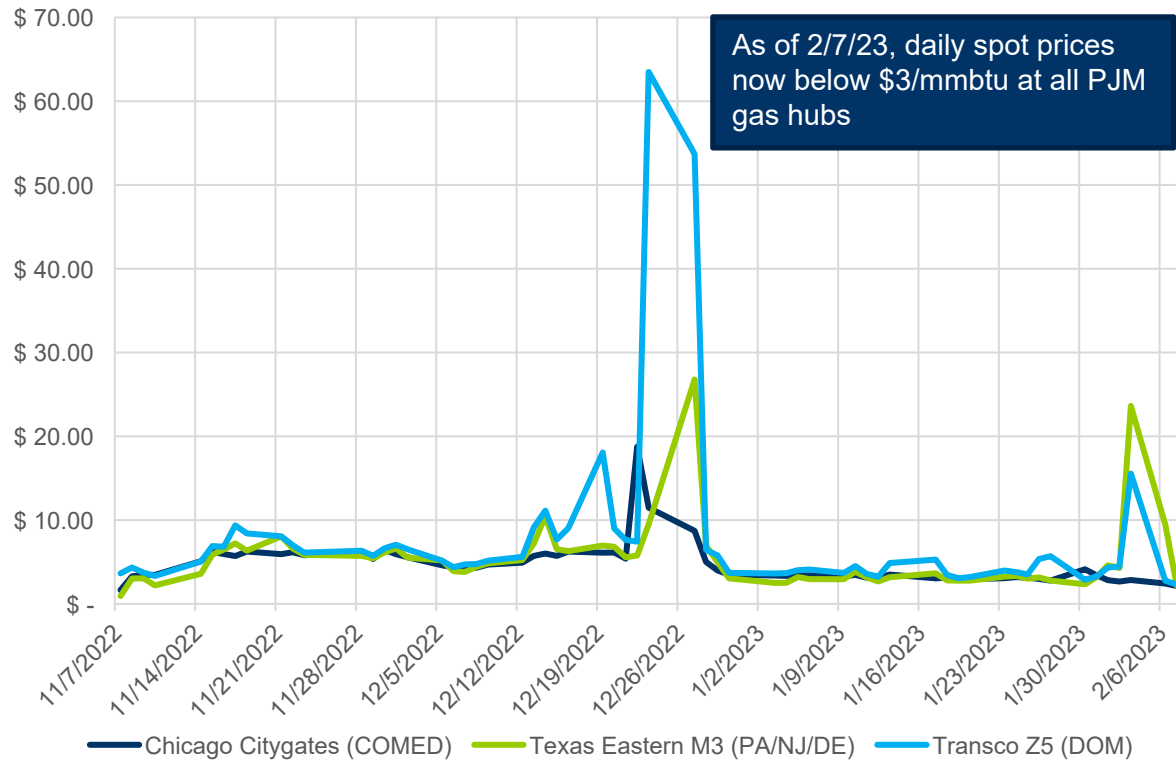
Historical Comparisons

Region	Stocks billion cubic feet (Bcf)				Year ago (01/27/22)		5-year average (2018-22)	
	01/27/23	01/20/23	net change	implied flow	Bcf	% change	Bcf	% change
East	578	622	-44	-44	551	4.9	560	3.2
Midwest	708	754 R	-46	-46	628	12.7	656	7.9
Mountain	132	140	-8	-8	134	-1.5	137	-3.6
Pacific	140	150	-10	-10	197	-28.9	213	-34.3
South Central	1,025	1,067	-42	-42	851	20.4	854	20.0
Salt	297	310	-13	-13	238	24.8	250	18.8
Nonsalt	728	757	-29	-29	613	18.8	604	20.5
<b>Total</b>	<b>2,583</b>	<b>2,734 R</b>	<b>-151</b>	<b>-151</b>	<b>2,361</b>	<b>9.4</b>	<b>2,420</b>	<b>6.7</b>

R=Revised.



## Daily Average Spot Price - PJM Hubs 3 Month History



## Natural Gas Futures

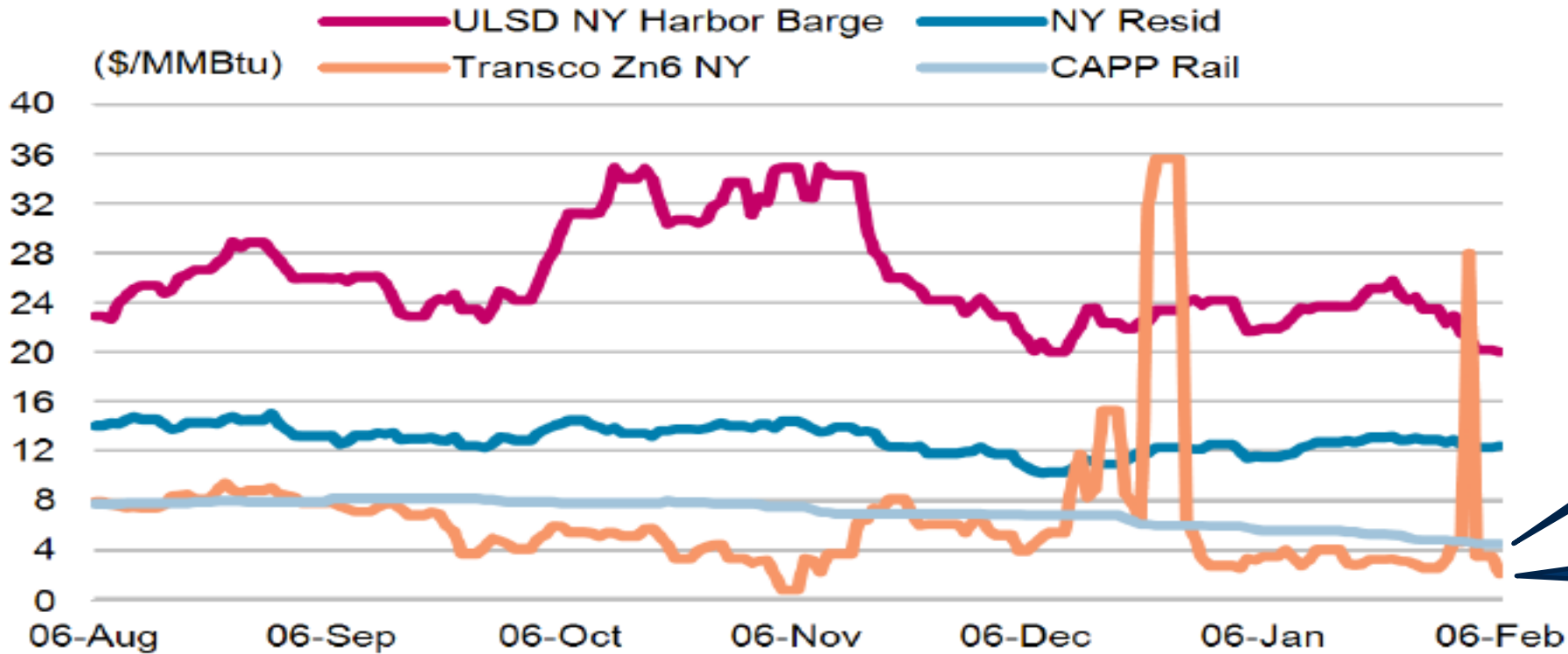
### NYMEX prompt month futures continuation



# Competitive Fuel Cost Comparison

After brief spike last week, gas price plummets

## NORTHEAST COMPETITIVE FUEL COSTS



Central App Coal Price

Spot Transco Z6 Gas Price

## Regional Inventory

- EIA PADD 1 (East Coast) inventories of low sulfur diesel and residual fuel oil in relatively good shape helped by overall mild winter

## Prices

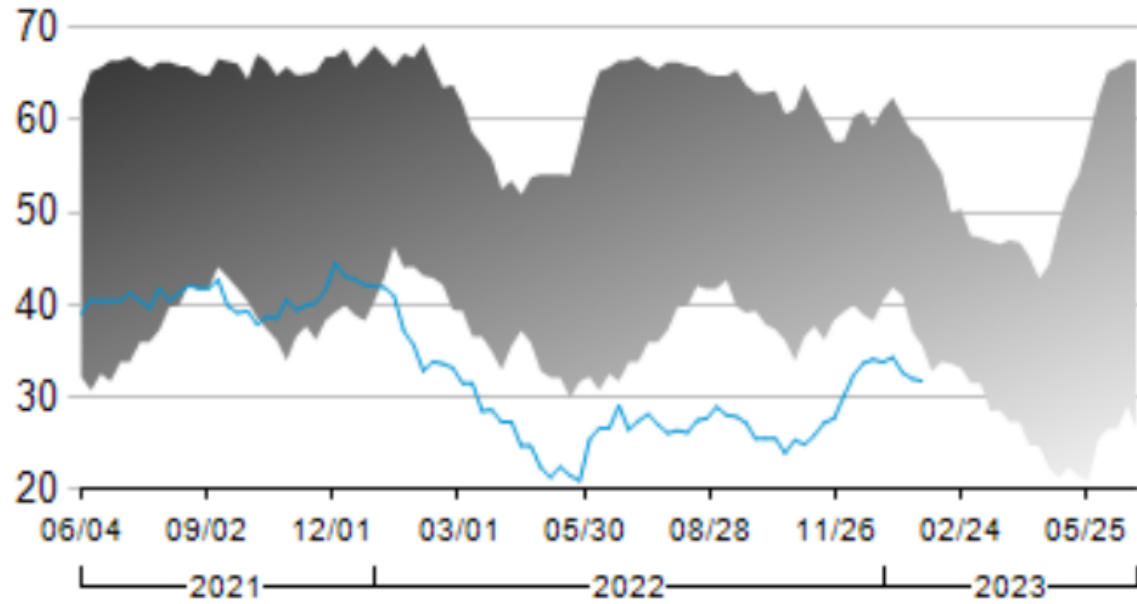
- ULSD ranging between \$3 and \$3.50/gallon over the last couple of months

## PJM Activity

- Weekly data requests to identify and track supply and transportation issues

PADD 1 Total Distillate Fuel Oil Stocks

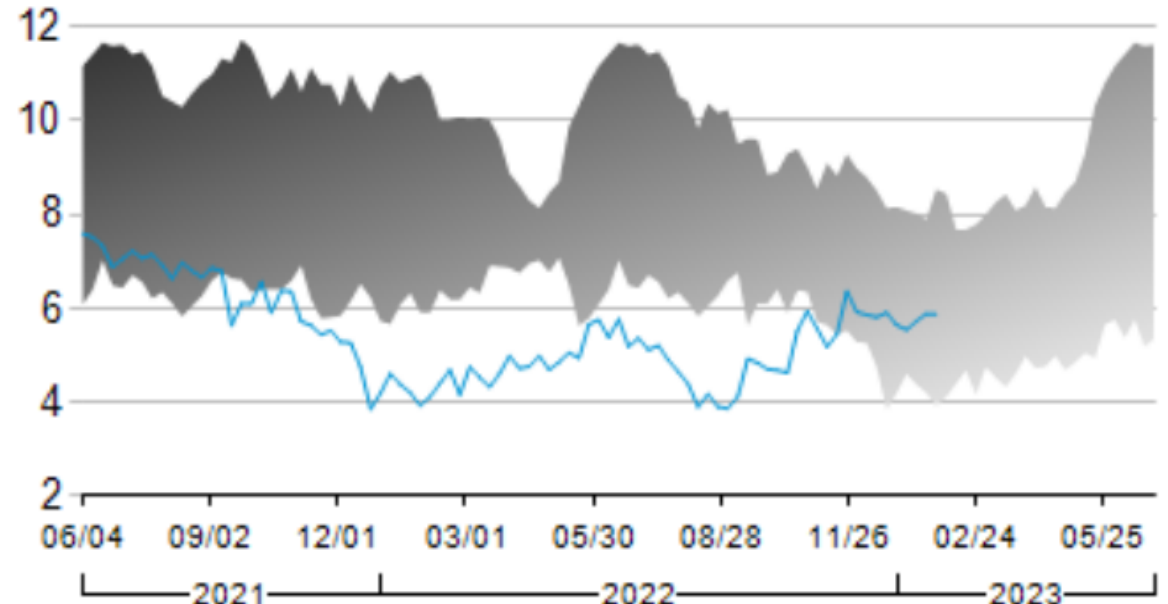
Million Barrels



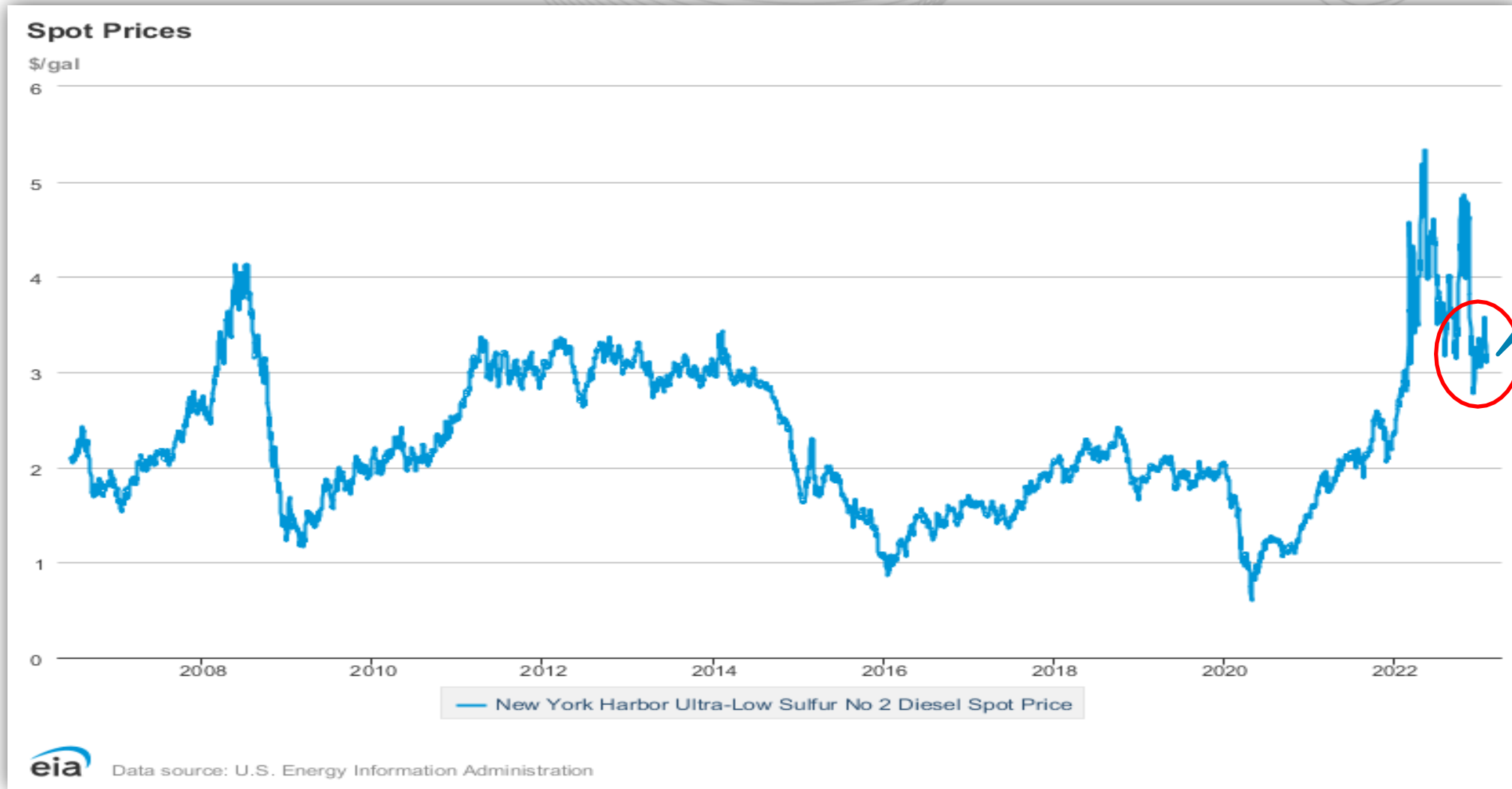
5-yr Range Weekly

PADD 1 Residual Fuel Oil Stocks

Million Barrels

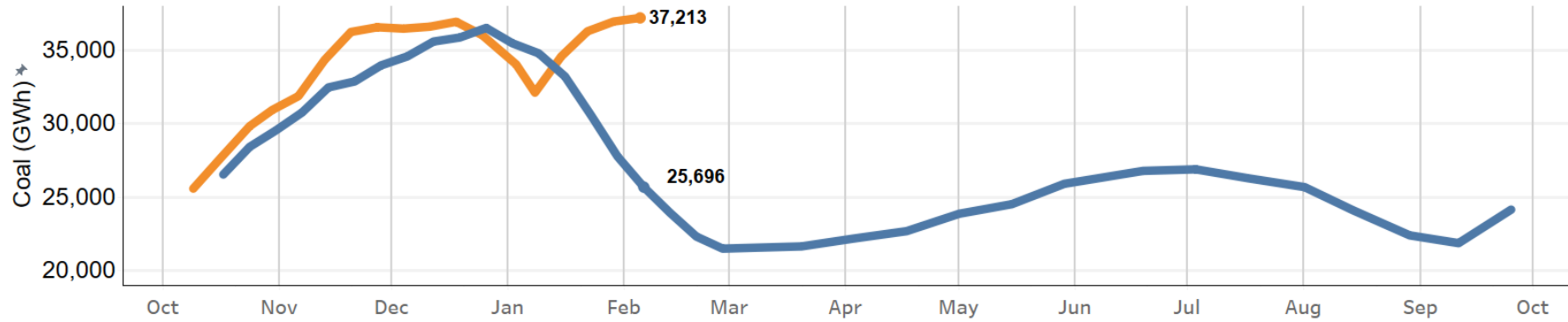


5-yr Range Weekly

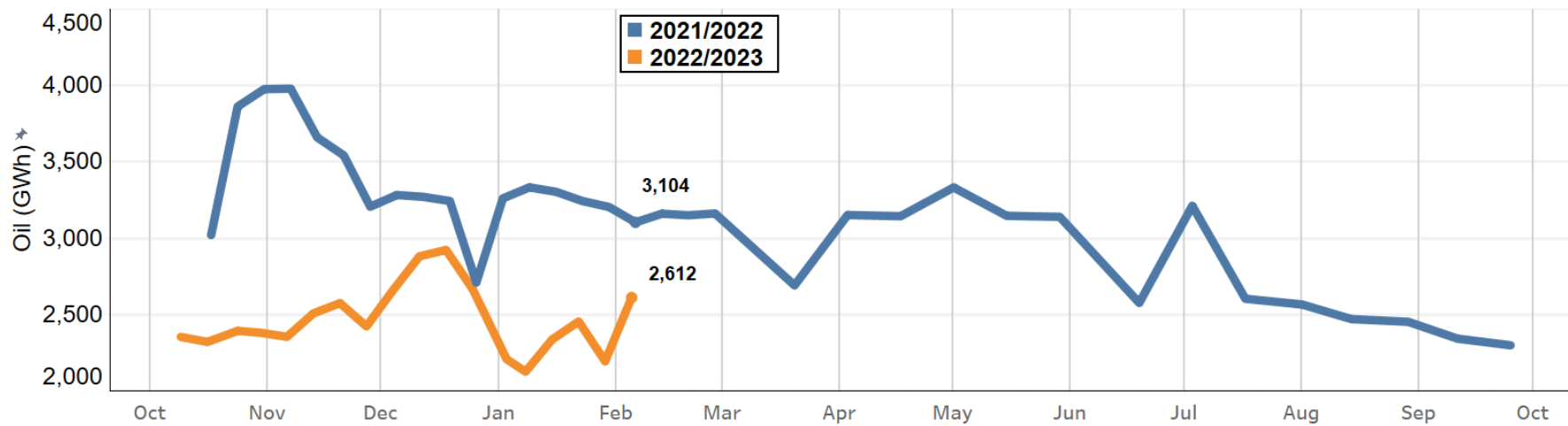


2/6/23:  
\$3.30/gal

## Coal



## Oil



## Weekly Fuel Data Requests

- Effective with the 1<sup>st</sup> week of March, PJM will be reducing the frequency of these data requests from weekly to bi-weekly
- Overall, the inventory of fuel and non fuel consumables has shown improvement and critical transportation risks (railroad strike) have diminished
- PJM will continue to assess the needs and effectiveness of these requests and reserves the right to adjust the data requirements and frequency as appropriate
- Continue to utilize Markets Gateway to identify fuel related operational restrictions

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## Fuel Supply Update



### Member Hotline

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(610) 666-2244 / [it\\_ops\\_ctr\\_shift@pjm.com](mailto:it_ops_ctr_shift@pjm.com)

