

# GAS COMMITTEE MONTHLY CALL

NATURAL GAS HEDGING STRATEGIES, IMPACTS ON CUSTOMERS, AND LESSONS FOR STATE REGULATORS

MARCH 11, 2024

1:00-2:00 P.M. ET

#### Agenda:

#### 1. Welcome

Chair Tammy Cordova, Nevada



Paul Corby | Senior Vice President, Energy, Planalytics Sarah Mead | Director Gas Supply, WEC Energy Group

#### 3. Committee Q&A

Committee and staff subcommittee members

#### 4. State Updates

#### 5. NARUC Cybersecurity Training

Chair Cordova

#### 6. Closing reminders

Last call: Colorado Site Visit
2024 Committee Meeting Schedule





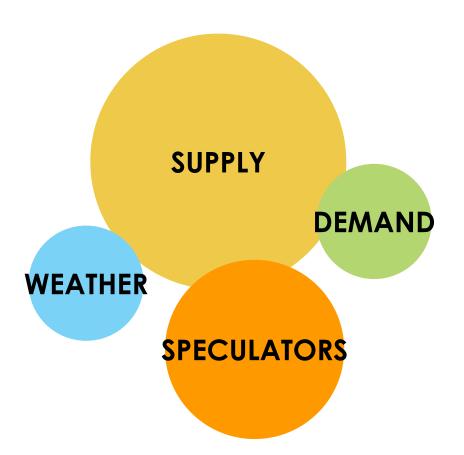
# Hedging

March 11, 2024 | NARUC Gas Committee March Meeting

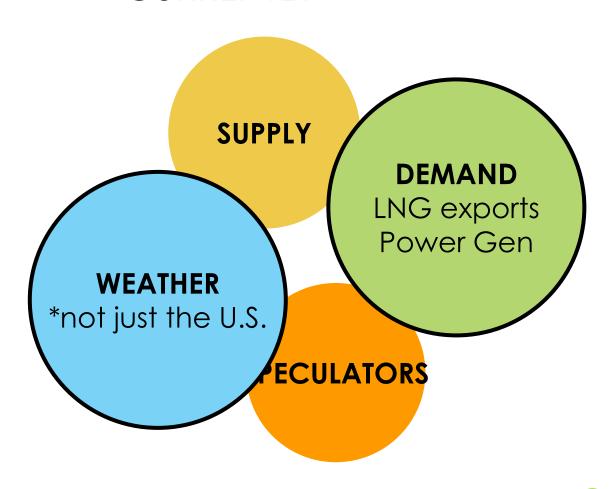
Paul Corby, Senior Vice President

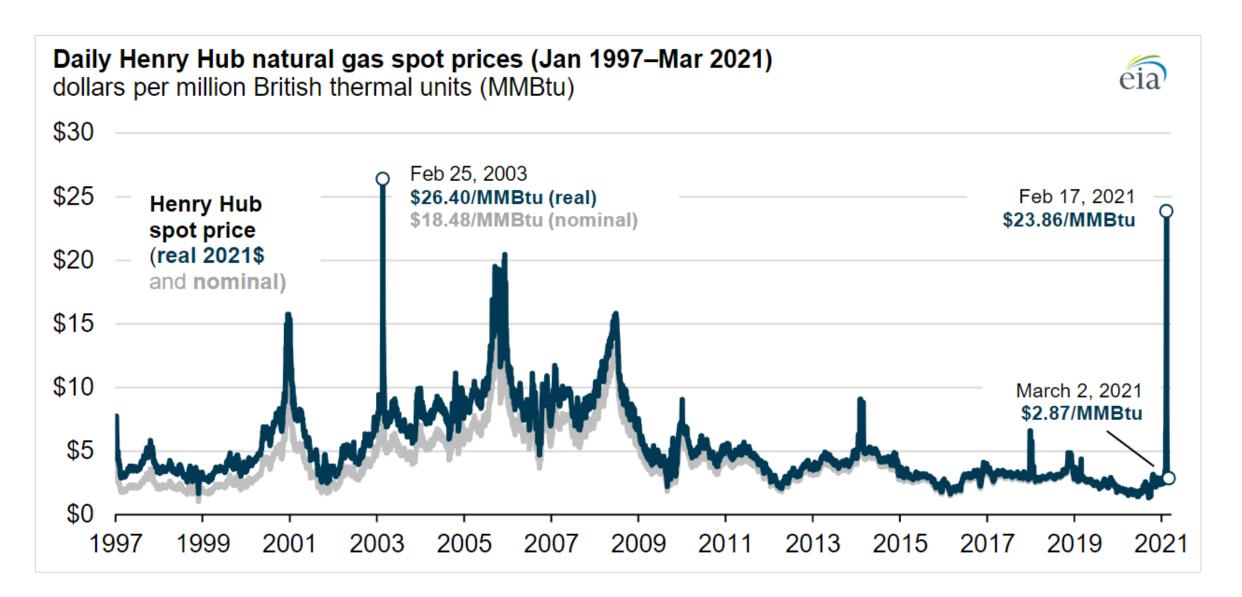
#### Natural Gas Price Drivers

A DECADE AGO

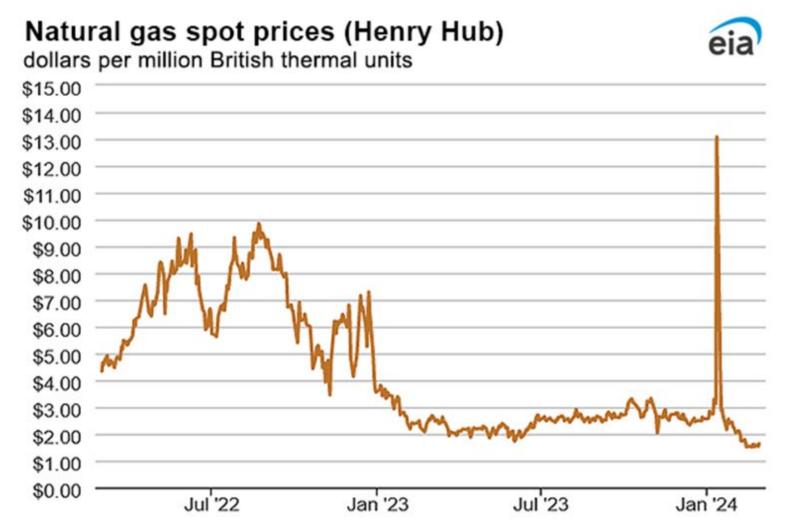


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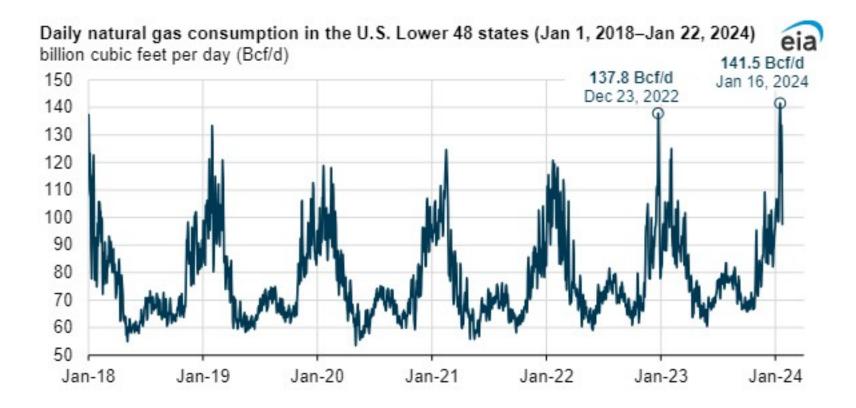






Data source: Natural Gas Intelligence

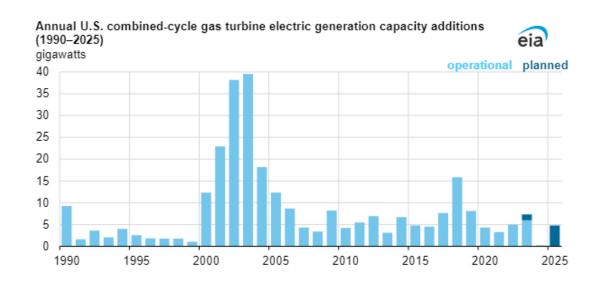
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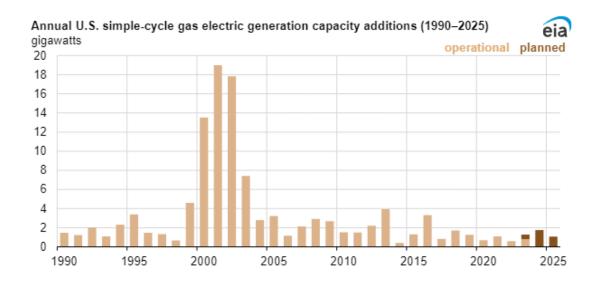


Weather will lead to more price volatility as power generation needs continue to grow:

- 22 nuclear power reactors are in various stages of decommissioning.
- On Jan. 16 the U.S. consumed a record high of 141.5 bcf when well-below-normal temperatures increased demand for residential and commercial space heating and for electric power generation. Consumption of natural gas and withdrawals from underground storage increased to record volumes.

## Growth in Natural Gas-Fired Power Plants





Total natural gas-fired capacity additions increased in both 2022 and 2023 after consecutive declines in the prior three years.

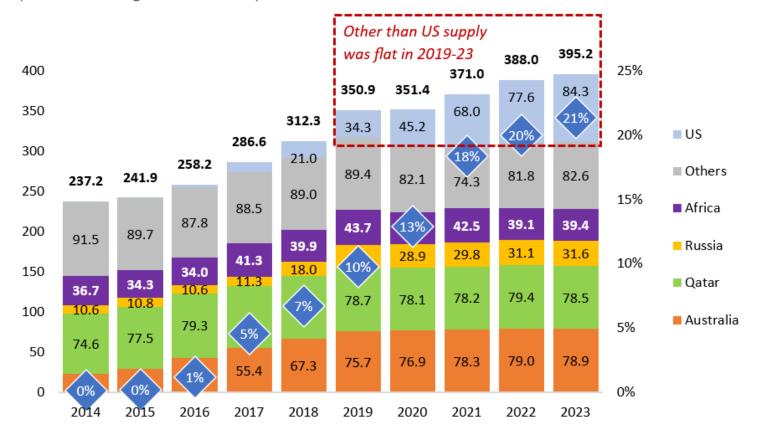
20 new natural gas-fired power plants with a total capacity of 7.7 GW are expected come online in 2024 & 2025.



# The US is Supplying Rise in LNG Demand

Global LNG supply by source in 2014-2023 and US share (%)

(Source: Cedigaz, Feb. 2024)



European dependency on US LNG strengthened further, with the US share in European LNG imports rising to 47% in 2023.

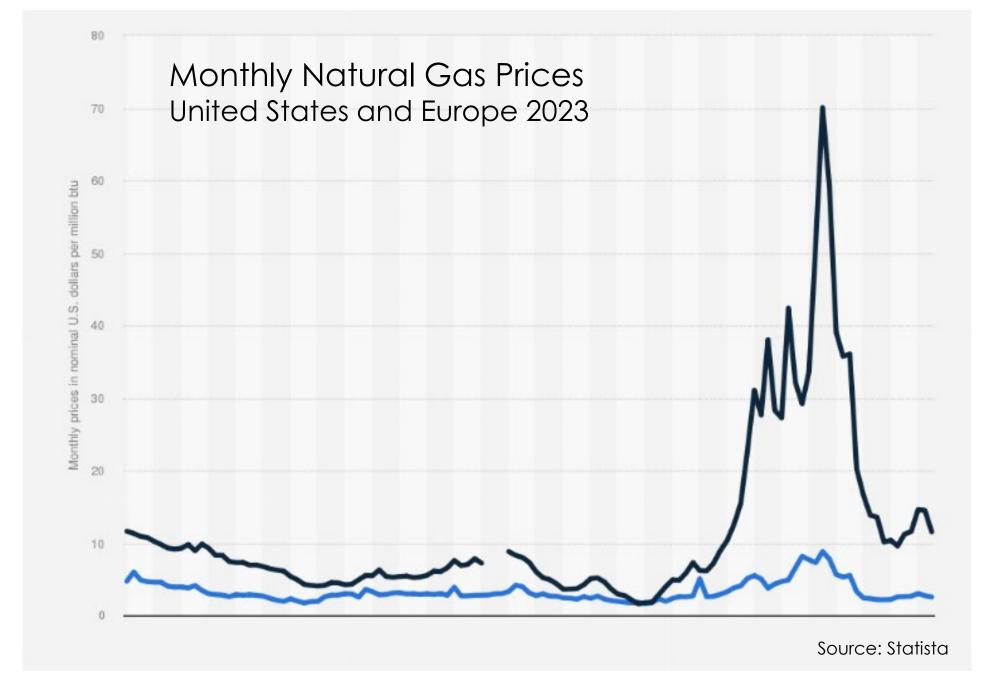
#### U.S. LNG Exports:

- Currently: 13 bcf/d
- Under Construction: 12 bcf/d
- Permitted: 16 bcf/d

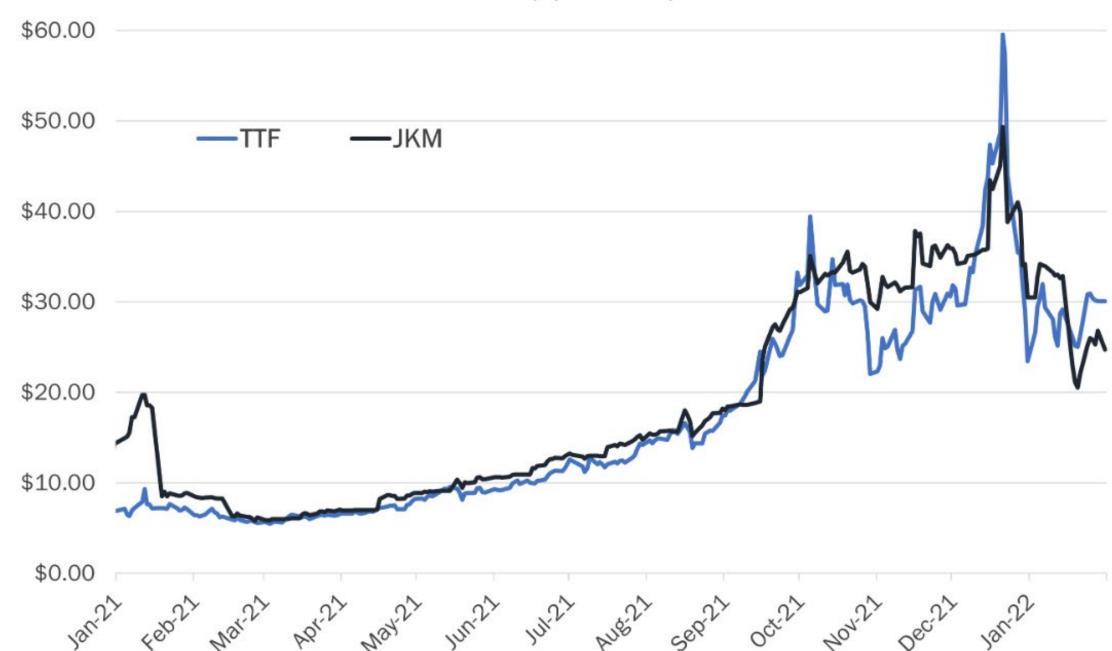
Global pricing pressures likely to increase as LNG exports grows.



"EQT Corporation (NYSE: EQT) ("EQT" or the "Company") today announced it made the strategic decision to curtail approximately 1 Bcf per day of gross production beginning in late February in response to the current low natural gas price environment resulting from warm winter weather and consequent elevated storage inventories.

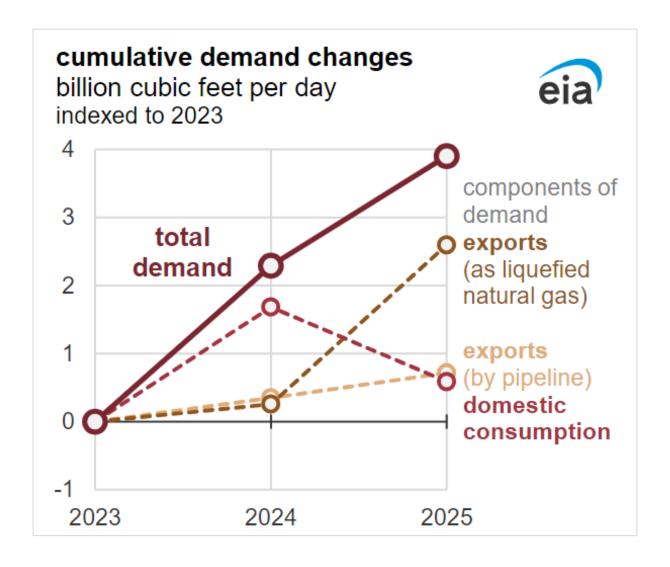


#### International Natural Gas Benchmarks (\$/MMBtu)



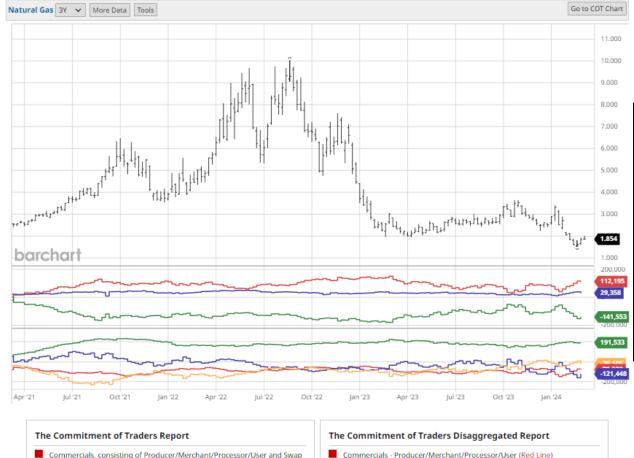


# Growth in LNG Exports





# Hedging Limits Hedge Funds' Influence



	IE - NEW YORK M Y POSITIONS	ERCANTILE EXCH	IANGE				_	AS OF: 2024-02-7		
Non-Commercial			Commercial			Total	Non-R	Non-Reportable		
Long	Short	Spreads	Long	Short	Long	Short	Long	Short		
(Contracts of	10,000 MMBTU'S	)		Open Interest: 1,500,882						
326,328	467,881	558,237	545,380	433,185	1,429,945	1,459,303	70,937	41,579		
Changes					(Change In Open Interest: -91,578					
-30,006	-42,325	-28,330	-22,411	-19,062	-80,747	-89,717	-10,831	-1,861		
Percent of Op	oen Interest for Ea	ach Category of Tr	aders							
21.7%	31.2%	37.2%	36.3%	28.9%	95.3%	97.2%	4.7%	2.8%		
Number of Tr	aders in Each Cat	egory					(To	tal Traders: <b>343</b>		
122	130	155	80	68	298	266				





# Making the Unknown Known

Locking in prices meets objective of offsetting exposure to future price movements.

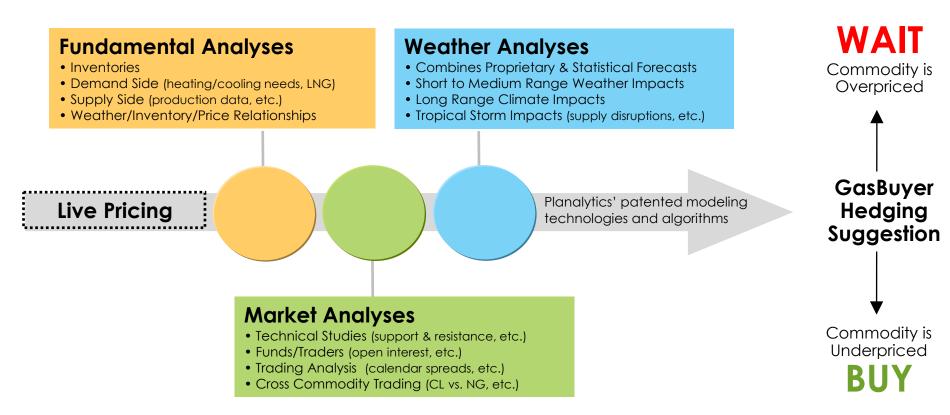
- Sometimes the hedged price ends up being less than the future settlement price
- Sometimes the hedged price ends up being higher than the future settlement price

Hedging promises price certainty, not the lowest price.

# Planalytics GasBuyer®

#### Market Analysis & Hedging Suggestions

A combination of historical correlations, current market information and advanced forecasting capabilities enable the GasBuyer to provide hedging actions for energy commodities.





# Planalytics GasBuyer®

YClose ⊳	Last ¢	G High / Low	G Change	Volatility	C Volume	OpenInt	Suggestion Qty ⊳	Goal	Total ¢	Strip 1
1.885y	<b>1.885</b>	1.918 / 1.829	0.000	64.7%	103,040	280,263	<b>A</b>	75	0	Start May 24 ✓
2.052y	↑ 2.034	2.064 / 2.000	-0.018	62.4%	51,127	256,037		75	0	End Feb 25 ✓
2.285y	<b>2.268</b>	2.299 / 2.239	-0.017	58.3%	22,975	74,283		75	0	Trigger 0.0
2.535y	2.513	2.542 / 2.488	-0.022	55.0%	19,039	106,815	DON'T	75	0	Strip 2.8463 Suggestion
2.614y	<b>2.589</b>	2.620 / 2.565	-0.025	51.9%	11,629	42,596	BUY	75	0	Qty 1
2.597y	_	2.602 / 2.546	-0.027	51.7%	8,940	95,792	OR	75	0	0
	<b>↑</b> 2.642	2.673 / 2.616	-0.025	48.6%	16,565	105,988	BUY	75	0	Strip 2 Start May 24 >
_	_									End Aug 24 ✓
3.03/y	<b>3.016</b>	3.034 / 2.990	-0.021	37.1%	3,989	45,441		75	0	
3.501y	<b>3.486</b>	3.497 / 3.456	-0.015	28.2%	2,555	53,144		75	0	Trigger 0.0
		0.774 (0.700	0.000	24.20		74.700				<b>Strip</b> 2.3510
3.772y	<b>3.750</b>	3.771 / 3.729	-0.022	24.2%	4,449	71,766	•	75	0	Suggestion
3.608y	3.595	3.609 / 3.570	-0.013	24.3%	1,878	36,116		75	0	Qty 3



#### From Our Clients

Mountaineer Gas has been using Planalytics for over 20 years. We have been very pleased with the results that we have been able to attain using the software. We recommend Planalytics to help any energy user or utility manage their commodity risk.

Thomas Westfall
 Vice President, Gas Supply and Technical Services



# THANK YOU

#### — For more information —



Paul M. Corby Senior Vice President Energy pcorby@planalytics.com Direct: 610.407.2987

Cell: 610.357.4852



# Natural Gas Financial Hedging Strategies, Impacts on Customers, and Lessons for State Regulators

Sarah Mead - Director Gas Supply - March 2024

#### **Physical VS Financial Hedging**

#### Physical:

- Owned/leased storage
- LNG storage
- Diversity of supply location
- Diversity of counterparties
- Diversity of Pipeline Services

#### Financial:

Hedge Natural Gas Prices by purchasing a variety of financial instruments on the CME-NYMEX

- Futures Contract
- Calls
- Collars
- Synthetic Calls
- Basis Swaps
- Puts (to unwind an existing Collar)



#### **Natural Gas Hedging Definition**

- Is to take an offsetting position in an asset or investment that reduces the price risk of an existing position.
- A hedge is therefore a trade that is made with the purpose of reducing the risk of adverse price movements.
- Financial hedge of natural gas prices entails purchasing a variety of financial instruments, most commonly available on the CME - NYMEX exchange.
  - The New York Mercantile Exchange (NYMEX) is the world's largest physical commodity futures exchange and is part of the Chicago Mercantile Exchange Group (CME Group), which is the world's leading and most diverse derivatives marketplace.

#### **Goals for LDCs**

Most common goals are to <u>reduce</u> volatility in gas prices and <u>protect</u> against upside price risk.

- Common purchasing strategy is time driven to achieve dollar cost averaging.
- Hedging supplies following a mechanical approach involving the execution of a predetermined quantity
  of hedges that is time driven.
- The objective of this approach is to take much of the subjectivity out of when to hedge, allowing for a price averaging.
- In other words, we do not believe we (or anyone else) can outguess the market and execute hedges that will consistently reduce prices. However, we believe we can execute hedges to reduce price volatility.

#### Types of Effective yet Simple Hedging Products

#### Futures

- Financial fixed price, establishes a known price to be paid by the buyer, locks in a specific price for a future date.
- This does not allow customers to gain or lose from rising or falling prices.
- Significant reduction in volatility as it dampens the effects of price changes.
- Settles prior to month start to keep as a financial instrument with gain/loss recorded.

#### Calls

- Gives the purchaser the right, but not the obligation, to purchase gas at a particular price (strike price).
- Effectively caps the price to be paid.
- This allows customers to participate in downward prices but mitigates the effects of a price run up.
- In order to control/reduce premium expenses, calls are typically layered in at high strike prices.

#### **Common Questions**

- Why are we hedging if it costs our customers money?
  - To reduce pricing volatility
  - Limit cost impacts of upward price movements
- How should I think of hedging?
  - Insurance policy
- How should I think of losses from hedging?
  - Protection from higher prices
  - The current market might be suppressed, benefiting the portion not hedged.

# Questions

#### **Appendix**

#### Collars

- Includes a purchased Call Option and a sold Put Option.
- Gives the buyer the right, but not the obligation, to purchase gas at the call option strike price and gives the put option buyer the right, but not the obligation, to sell gas to the buyer at the put option strike price.
- By completing a consumer collar transaction, you place a floor and ceiling on the price paid. This allows customers prices to move up and down with the marketer price while damping the effects of the price run-up or run-down.
  - Cheaper than a Call due to revenue received from the sold Put.
  - Limited downside price protection

#### **Appendix**

#### Synthetic Calls

- Purchase a futures contract and Buy a Put
- Cheaper than a Call
- Limited downside price protection

#### Basis Swaps

- Difference in price between 2 locations
- Used to insure the delivered cost of gas under a physical transaction

# Puts (to tie to an existing Collar)

- Purchase a Put to offset the Sold Put within an existing Collar (Creates a Call)
- Use to create a Call more cheaply than buying the Call initially
- Increases downside price protection



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- 4. State Updates
- 5. NARUC Cybersecurity Training

Chair Cordova

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# NARUC Cybersecurity Training

- OF REGULATORY UTILITY COMMISSION & SASIMON A S
- NARUC recently announced the availability of scholarships for advanced cybersecurity training
  - Scholarships available to eligible commission staff following a competitive, <u>application-based process</u>
  - Training is intended for staff with existing knowledge of cybersecurity basics who are looking to deepen their technical subject matter expertise
- As a reminder, there are other cyber training opportunities available to all:
  - In-person Cybersecurity Training for Regulators: Our in-person training is an intensive, 2.5-day experience that focuses on cybersecurity fundamentals
    - The next in-person training will be April 16–18 In New Orleans, LA. More information is available <a href="here">here</a>. A second in-person training event will be in September, but dates and location are still pending.
    - NARUC provides travel support for members to attend.
  - On demand Cybersecurity Training: NARUC is now offering an online, learn at your own pace, cybersecurity training option
    - Content focuses on NARUC's Cyber Manual and how to use this resource to engage jurisdictional utilities in discussions around a range of cybersecurity issues
    - Training was created in partnership with the Department of Energy and is hosted on a DOE-sponsored learning management system. You can access the on-demand training site <a href="here">here</a>.
       Please note, access is free, but registration is required

# Last Call! Natural Gas Partnership Site Visit Denver, March 25–27

- This site visit will provide NARUC members with opportunities to learn about continuous methane monitoring equipment & independent certification, observe current methane emissions quantification technologies, and connect with fellow commissioners & experts
- Please let us know ASAP if you plan to RSVP to attend



Travel reimbursement funding is available to commissioners via NARUC's partnership with the U.S. Department of Energy, Office of Fossil Energy and Carbon Management.

## **Closing Reminders**



- Monday, April 8
- Monday, May 6
- Monday, June 3

Please reach out to Chair Cordova or Staff Subcommittee Chair Adam Danise if you have suggestions for future Gas Committee meeting speakers!

