M E M O R A N D U M

TO: Missouri Public Service Commission Official Case,
Case No.GR-2023-0128, Liberty Utilities (Midstates Natural Gas) Corp.

FROM: Kwang Y. Choe, PhD, Economics Analyst
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Procurement Analysis Department, Financial and Business Analysis Division

/s/ David M. Sommerer 12/12/2023
Project Coordinator / Date

SUBJECT: Staff Recommendation in Case GR-2023-0128, Liberty Utilities (Midstates Natural Gas) Corp. 2021-2022 Actual Cost Adjustment Filing

DATE: December 12, 2023

EXECUTIVE SUMMARY

On November 4, 2022, Liberty Utilities (Midstates Natural Gas) Corp., d/b/a Liberty Utilities ("Liberty" or "Company") filed its Actual Cost Adjustment (ACA) for the 2021-2022 annual period for rates to become effective on December 4, 2022. This filing revised the ACA rates based upon the Company's calculations of the ACA balance for the 2021-2022 period. The Commission approved those rates on an interim subject to refund basis, with an effective date of December 4, 2022.

The Procurement Analysis Department ("Staff") of the Missouri Public Service Commission reviewed the Company's ACA filing. Staff's analysis consisted of:

1. A review and evaluation of the Company's billed revenues and its natural gas costs for the period of September 1, 2021 to August 31, 2022;

2. A reliability analysis of the Company's estimated peak day requirements and the capacity levels to meet those requirements;

3. An examination of the Company's natural gas purchasing practices to determine the prudence of the Company's purchasing decisions; and

4. A hedging review to evaluate the reasonableness of the Company's hedging practices for this ACA period.

Based on Staff's review, adjustments to the Company's filed ACA balances have been recommended to reflect the actual billed revenues less natural gas costs for the period under review. Please see the Recommendations section for adjusted ACA balances and Staff's recommendations.

<u>STAFF'S TECHNICAL DISCUSSION AND ANALYSIS</u>

Staff's discussion of its findings is organized into the following five sections:

I. OVERVIEW

<u>Service Area</u>

Liberty's systems in Missouri are grouped into three geographic areas: Northeast, Southeast and West. For gas cost recovery, there are four PGA/ACA rate service areas:

three geographic divisions, and a fourth PGA division, Kirksville, that is separate from the Northeast Service Area. A more detailed description, with the associated interstate pipelines serving these areas, follows:

The Northeast Service Area (NEMO) includes Hannibal-Canton, Bowling Green, and Palmyra and was served by Panhandle Eastern Pipe Line Company ("PEPL") under an Asset Management Agreement (AMA) with ** [redacted] ** through March 2022 and is now served under an AMA with ** [redacted] **. The NEMO area serves an average of 12,654 sales customers.

The Southeast Service Area (SEMO) includes Jackson, with gas transportation provided by Natural Gas Pipeline Co. of America ("NGPL") and is served under an AMA agreement with ** [redacted] **; Piedmont and Arcadia, served by Mississippi River Transmission Corp. ("MRT") under an AMA agreement with

** [redacted] **; and the Southeast Missouri Integrated system, served by Texas Eastern Transmission, LP ("TETCO") and Ozark Gas Transmission, LLC, under an AMA agreement with ** [redacted] **. The Southeast Service Area also includes the former Neelyville/Qulin Service Area. Cumulatively, SEMO serves an average of 29,884 sales customers.

The West Service Area (WEMO) includes the city of Butler, served by PEPL under a supply agreement with ** [redacted] **, and Stateline, also known as Rich-Hill/Hume, served by Southern Star Central Gas Pipeline, Inc. ("SSCGP") under a transportation agreement with Atmos Energy Corporation and a supply agreement with ** [redacted] **. WEMO serves an average of 3,709 sales customers.

The Kirksville Service Area is served under an AMA agreement with ** [redacted] ** with natural gas transportation provided by ANR Pipeline Company ("ANR"). Kirksville serves an average of 4,972 sales customers.

The total customer count for all service areas is an average of 51,219 sales customers.

II. BILLED REVENUE AND ACTUAL GAS COSTS

ACA Balances

ACA balances are cumulative such that the ending balance of one period becomes the beginning balance of the next period. The beginning ACA balance reported for each service area did include adjustments ordered in GR-2022-0128 (2020-2021 ACA period).

Billed Revenues

For each service area, Staff reviewed a sample of customer bills to ensure the PGA/ACA rates charged for natural gas reflected Commission approved PGA/ACA rates. All rates charged to natural gas consumers agreed with approved rates, without exception. In addition, Staff recalculated monthly billed revenue, applying approved rates to volumes of natural gas consumed with immaterial differences noted in rate transition months. Further, Staff tested the reasonableness of total revenues reported by comparing the total natural gas volumes billed to the sum of natural gas volumes purchased plus/minus changes in inventory and lost and unaccounted natural gas summaries. No significant differences were noted.

Natural Gas Costs

Liberty submitted invoices for all natural gas purchases made during the review period. Staff agreed each natural gas invoice to Liberty's ACA filing by service area. Staff also reconciled and recalculated storage balances, hedging gains/loss allocations, injections/withdrawals and weighted average cost of gas (WACOG) to supporting documentation on a test basis. On a test basis, Staff also agreed invoiced natural gas rates to gas supply contracts or other referenced rate sources, such as First of Month (FOM) pricing, pipeline tariff, etc. As a result of testing, Staff noted no significant differences.

Imbalances/Cash-outs

On a test basis, Staff recalculated and agreed to the imbalance/cash-out calculations in this ACA filing. Staff did note a difference of $995.52 from an incorrectly coded Iowa account that was included in the Missouri balance. Per the Company, the coding and reclassification was completed in September 2022. Staff will not make an adjustment during this ACA period; however, Staff will review the correction during the next ACA period to ensure the adjustment was made.

In posting ACA adjustments from the prior year's ACA case, GR-2022-0128, Liberty found that the Staff recommended adjustments for Operational Flow Order (OFO) penalties had been made and would duplicate those entries. Liberty submitted additional documentation supporting the OFO penalties assessed and included in the ACA balance. Staff recalculated and verified that the OFO penalties were included in the ACA balance and the adjustment recommended was a duplication of those entries. As a result of recalculation and verification, Staff recommends an adjustment (an increase in ACA balance) of $165,100 for the SEMO service area and an adjustment (an increase in the ACA balance) of $10,950 for the NEMO service area.

Imbalances/Cash-outs - Regular ACA Balances						
SEMO		**Reported**		**Corrected**		**Adjustments**
Commodity	$	13,195,240.20	$	13,360,340.20	$	165,100.00
NEMO						
Commodity	$	6,633,162.88	$	6,644,112.88	$	10,950.00

Carrying (Interest) Cost

Pursuant to Liberty's PGA Clause, interest is computed based upon the average of the accumulated beginning and ending monthly over/under recoveries at an interest rate of prime rate less 2%. Staff noted that the Commodity carrying cost calculations for the SEMO, NEMO, and Kirksville service areas were based on PGA revenues and not total revenues, including any billing adjustments. Staff recalculated carrying costs using total revenues. The table below summarizes the impact of recalculation on carrying costs.

Carrying (Interest) Cost - Regular ACA Balances			
Regular - Commodity	**Reported**	**Corrected**	**Adjustment**
SEMO	$ 32,347.98	$ 32,419.39	$ 71.41
NEMO	$ 26,552.36	$ 26,605.29	$ 52.93
Kirksville	$ (3,096.09)	$ (3,104.24)	$ (8.15)

On September 16, 2021, Liberty submitted revised tariff sheets designed to narrowly amend the Company's PGA rider to allow under recoveries, with Commission approval, for an extended period not to exceed five years (Commission Case No. GT-2022-0079, Tracking No. JG-2022-0058) effective October 22, 2021. Further, the revised tariff allows Liberty to propose a carrying cost, subject to review, appropriate for the length of the extended period. Liberty has proposed a carrying cost of 7.4%, which is equal to the Company's Weighted Average Cost of Capital (WACC), which was established in case no. GR-2018-0013 for use in the Company's future Infrastructure System Replacement Surcharge ("ISRS") filings. Liberty also proposes extending the recovery of extraordinary gas cost for customers in the WEMO service area from three years to a total of the five years, which is consistent with Liberty's tariff.

Staff is not opposed to extending the recovery period for the WEMO service area not to exceed five years in total: however, Staff does not agree that WACC is an appropriate rate to be applied to the deferred Winter Storm Uri under recoveries and has recalculated carrying cost using the approved tariff rate of prime rate less 2%. The impact to carrying costs are summarized in the table below.

Carrying (Interest) Cost - Storm Uri Balances			
Storm Uri - Commodity	**Reported**	**Corrected**	**Adjustment**
WEMO	$ 165,098.61	$ 45,156.68	$ (119,941.93)
SEMO	$ 38,382.55	$ 10,319.23	$ (28,063.32)
NEMO	$ 77,007.53	$ 20,985.71	$ (56,021.82)

III. RELIABILITY ANALYSIS AND GAS SUPPLY PLANNING

As a regulated gas corporation providing natural gas services to Missouri customers, a local distribution company (LDC), such as Liberty, is responsible for conducting reasonable long-range supply planning and implementing the decisions resulting from that planning. A purpose of the ACA process is to review whether the LDC's planning for gas supply, transportation, and storage meets its customers' needs. For this analysis, Staff reviewed Liberty's plans and decisions regarding estimated peak day requirements and the capacity levels to meet those requirements, peak day reserve margin and the rationale for this margin, and natural gas plans for various conditions.

Staff has no proposed financial adjustments for the 2021-2022 ACA period related to reliability analysis and gas supply planning. Staff's other comments and recommendations are discussed in this section.

Reserve Margin

In its recommendations in prior ACA cases, Staff noted issues related to reserve margin in certain service areas. ** [redacted] **

Service Area	Reserve Margin	
	Liberty	Staff
Bowling Green	** [redacted] **	** [redacted] **
Butler	** [redacted] **	** [redacted] **
Hannibal	** [redacted] **	** [redacted] **
Jackson	** [redacted] **	** [redacted] **
Kirksville	** [redacted] **	** [redacted] **
Stateline	** [redacted] **	** [redacted] **
SEMO w/Quilin	** [redacted] **	** [redacted] **

High reserve margins would normally be a cause for concern, but in the case for both ** [redacted] **, it is not. These areas are served by contracts that are commodity only, so Liberty is not paying reservation fees on the excess capacity. Staff recommends that

Liberty continue to monitor its pipeline contracts and maintain an appropriate reserve margin for each service area.

Transportation Customers and School Aggregation

Staff compared the monthly imbalances of school aggregation pools to other transportation customers. ** [redacted] ** As in previous ACA reviews, School pools continue to be less in balance than firm transportation pools. Staff recommends that Liberty review its school aggregation provisions to assure that they properly incentivize school aggregation pool operators to balance use and deliveries.

**

[redacted]

**

IV. HEDGING

A few definitions that may assist the hedging discussion are as follows. A “swap” is an instrument that fixes the price of gas for a certain volume of gas. Therefore, the price is no longer “variable” as with an index-based contract, but is fixed. A “call option” is a financial instrument that gives the buyer the right but not the obligation to buy gas at a certain preset fixed price. That fixed price is often higher than the current market, and essentially provides a cap on the gas price, albeit at the price of paying a premium. A “physical hedge” is a feature of using an actual gas supply contract to limit exposure to price increases rather than using financial instruments (swaps, futures, calls) that offset the price risk independently and separately from the gas supply itself.

** [redacted]

[redacted][1] [redacted] **

Staff reviews the prudence of a company’s hedging decision-making based on what the company reasonably knew, or reasonably could have known, at the time it made its hedging decisions. Part of a company’s hedging planning should be flexible, in part, to incorporate changing market circumstances in order to balance the cost of hedging against the goal of price stabilization, and thus to achieve a cost effective hedging outcome. For example, a company should continue to

[1] Liberty received hedging advice for its financial hedging transactions from a consulting firm during this ACA period.

evaluate whether utilization of swaps and the volumes associated with them are appropriate when the market prices become less volatile. Staff noted that Liberty has improved its hedge planning practices with its consideration of additional financial instruments in addition to swaps.[2]

Staff recommends the Company continually monitor and be aware of any significant changes in natural gas supply and demand fundamentals over time.

Staff also recommends the Company continue to assess and document the effectiveness of its hedges for the 2022-2023 ACA and beyond. The analysis should include, but not be limited to, whether the hedging implementation was consistent with the hedging plan, identifying the benefits/costs based on the outcomes from the hedging strategy, and evaluating any potential improvements on the future hedging plan and its implementation. Additionally, Staff recommends the Company evaluate whether the hedging plan for each of the four systems has operational implications for warm and cold weather conditions. Finally, Staff recommends the Company continue to monitor the market movements diligently, employ *disciplined* (triggered primarily by the passage of time) as well as *discretionary* (hedge decisions influenced by the Company's view of favorable pricing environments) approaches in its hedging practices, and look into the possibility of expanding its gas portfolio to include physical as well as financial hedges, in addition to storage, that more closely track physical price risk.

An example of a physical hedge would be a fixed price gas supply contract.

The following table provides a summary, by service area, of how much gas was hedged as a percentage of normal required winter volumes:

	Hedged % of Normal
Kirksville	** [redacted] **
WEMO	** [redacted] **
SEMO	** [redacted] **
NEMO	** [redacted] **
** [redacted] **	

There is no financial adjustment related to hedging.

[2] ** [redacted] **

V. RECOMMENDATIONS

Staff recommends that the Commission issue an order requiring Liberty to:

1. Incorporate the (over)/under-recovered ending ACA balances in Staff's Proposed Balances 8/31/22 column of the following table:

August 31, 2022 Ending ACA Balances						
WEMO		**Reported**		**Adjustments**		**Staff Recommended**
Regular ACACommodity	$	928,953.94	$	-	$	928,953.94
Regular ACA Demand	$	(2,071.22)			$	(2,071.22)
Storm Uri ACA	$	2,432,139.01	$	(119,941.93)	$	2,312,197.08
Total ACA	$	3,359,021.73	$	(119,941.93)	$	3,239,079.80
SEMO						
Regular ACACommodity	$	2,349,119.96	$	165,171.41	$	2,514,291.37
Regular ACA Demand	$	2,012,293.65			$	2,012,293.65
Storm Uri ACA	$	511,710.85	$	(28,063.32)	$	483,647.53
Total ACA	$	4,873,124.46	$	137,108.09	$	5,010,232.55
NEMO						
Regular ACACommodity	$	1,944,941.36	$	11,002.93	$	1,955,944.29
Regular ACA Demand	$	(150,099.25)	$	-	$	(150,099.25)
Storm Uri ACA	$	1,112,092.96	$	(56,021.82)	$	1,056,071.14
Total ACA	$	2,906,935.07	$	(45,018.89)	$	2,861,916.18
Kirksville						
Regular ACACommodity	$	881,237.52	$	(8.15)	$	881,229.37
Regular ACA Demand	$	527,400.73	$	-	$	527,400.73
Total ACA	$	1,408,638.25	$	(8.15)	$	1,408,630.10

A positive ACA balance indicates an under-collection that must be recovered from customers.

A negative ACA balance indicates an over-recovery that must be returned to customers.

Adjustment Summary - WEMO		
Adjustment Description		**Adjustment**
Storm Uri ACA		
Carrying Cost	$	(119,941.93)
Increase (Decrease) to Storm Uri ACA	$	(119,941.93)

Adjustment Summary - SEMO		
Adjustment Description		**Adjustment**
Regular ACA Commodity		
Imbalance/Cash Outs	$	165,100.00
Carrying Cost	$	71.41
Increase (Decrease) to Regular ACA-Commodity	$	165,171.41
Storm Uri ACA		
Carrying Cost	$	(28,063.32)
Increase (Decrease) to Storm Uri ACA	$	(28,063.32)

Adjustment Summary - NEMO		
Adjustment Description		**Adjustment**
Regular ACA Commodity		
Imbalance/Cash Outs	$	10,950.00
Carrying Cost	$	52.93
Increase (Decrease) to Regular ACA-Commodity	$	11,002.93
Storm Uri ACA		
Carrying Cost	$	(56,021.82)
Increase (Decrease) to Storm Uri ACA	$	(56,021.82)

Adjustment Summary - Kirksville		
Adjustment Description		**Adjustment**
Regular ACA Commodity		
Carrying Cost	$	(8.15)
Increase (Decrease) to Regular ACA-Commodity	$	(8.15)

Please see Section II. Billed Revenue and Actual Gas Costs for detailed discussion of the recommended adjustments.

2. Respond to all concerns, comments, and recommendations summarized below within 30 days:

   A. Staff recommends that Liberty continue to monitor its pipeline contracts and maintain an appropriate reserve margin for each service area. (Section III. Reliability Analysis and Gas Supply Planning)

B. Staff recommends that Liberty review its school aggregation provisions to assure that they properly incentivize school aggregation pool operators to balance use and deliveries. (Section III. Reliability Analysis and Gas Supply Planning)

C. Staff recommends Liberty's hedging planning incorporate changing market circumstances in order to balance the cost of hedging against the goal of price stabilization, and thus to achieve a cost effective hedging outcome. (Section IV. Hedging)

D. Staff recommends the Company continue to assess and document the effectiveness of its hedges for the 2022-2023 ACA and beyond, including but not be limited to, whether the hedging implementation was consistent with the hedging plan, identifying the benefits/costs based on the outcomes from the hedging strategy, and evaluating any potential improvements on the future hedging plan and its implementation. (Section IV. Hedging)

E. Staff recommends the Company evaluate whether the hedging plan for each of the four systems has operational implications for warm and cold weather conditions. (Section IV. Hedging)

F. Staff recommends the Company continue to monitor the market movements diligently, employ *disciplined* (triggered primarily by the passage of time) as well as *discretionary* (hedge decisions influenced by the Company's view of favorable pricing environments) approaches in its hedging practices, and look into the possibility of expanding its gas portfolio to include physical as well as financial hedges, in addition to storage, that more closely track physical price risk. (Section IV. Hedging)

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of Liberty Utilities (Midstates Natural Gas) Corp. d/b/a Liberty's Purchased Gas Adjustment Tariff Filing	)))	Case No. GR-2023-0128

AFFIDAVIT OF KWANG Y. CHOE, PhD

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

COMES NOW KWANG Y. CHOE, PhD and on his oath declares that he is of sound mind and lawful age; that he contributed to the foregoing *Staff Recommendation, in Memorandum form*; and that the same is true and correct according to his best knowledge and belief.

Further the Affiant sayeth not.

Kwang Y. Choe

KWANG Y. CHOE, PhD

JURAT

Subscribed and sworn before me, a duly constituted and authorized Notary Public, in and for the County of Cole, State of Missouri, at my office in Jefferson City, on this 6th day of December 2023.

DIANNA L. VAUGHT
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: July 18, 2027
Commission Number: 15207377

Dianna L. Vaught
Notary Public

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of Liberty Utilities (Midstates Natural Gas) Corp. d/b/a Liberty's Purchased Gas Adjustment Tariff Filing	)))	Case No. GR-2023-0128

AFFIDAVIT OF DAVID T. BUTTIG, PE

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

COMES NOW DAVID T. BUTTIG, PE, and on his oath declares that he is of sound mind and lawful age; that he contributed to the foregoing *Staff Recommendation, in Memorandum form*; and that the same is true and correct according to his best knowledge and belief.

Further the Affiant sayeth not.

David Buttig

DAVID T. BUTTIG, PE

JURAT

Subscribed and sworn before me, a duly constituted and authorized Notary Public, in and for the County of Cole, State of Missouri, at my office in Jefferson City, on this 11th day of December 2023.

DIANNA L. VAUGHT
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: July 18, 2027
Commission Number: 15207377

Dianna L. Vaught
Notary Public

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of Liberty Utilities (Midstates Natural Gas) Corp. d/b/a Liberty's Purchased Gas Adjustment Tariff Filing	)))	Case No. GR-2023-0128

AFFIDAVIT OF LISA SCHLUP

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

COMES NOW LISA SCHLUP, and on his oath declares that she is of sound mind and lawful age; that she contributed to the foregoing *Staff Recommendation, in Memorandum form*; and that the same is true and correct according to her best knowledge and belief.

Further the Affiant sayeth not.

Lisa Schlup
LISA SCHLUP

JURAT

Subscribed and sworn before me, a duly constituted and authorized Notary Public, in and for the County of Cole, State of Missouri, at my office in Jefferson City, on this 7th day of December 2023.

DIANNA L. VAUGHT
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: July 18, 2027
Commission Number: 15207377

Dianna L. Vaught
Notary Public