M E M O R A N D U M

TO: Missouri Public Service Commission Official Case,
Case No.GR-2022-0128, Liberty Utilities (Midstates Natural Gas) Corp.

FROM: Kwang Y. Choe, PhD, Regulatory Economist, Procurement Analysis
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/s/ David M. Sommerer 12/09/2022	*/s/ Jamie Myers* 12/09/2022
Project Coordinator / Date	Staff Counsel's Office / Date

SUBJECT: Staff Recommendation in Case GR-2021-0128, Liberty Utilities (Midstates Natural Gas) Corp. 2020-2021 Actual Cost Adjustment Filing

DATE: December 9, 2022

EXECUTIVE SUMMARY

On November 4, 2021, Liberty Utilities (Midstates Natural Gas) Corp., d/b/a Liberty Utilities' ("Liberty" or "Company") filed its Actual Cost Adjustment (ACA) for the 2020-2021 annual period for rates to become effective on December 1, 2021. This filing revised the ACA rates based upon the Company's calculations of the ACA balance for the 2020-2021 period. The Commission approved those rates on an interim subject to refund basis, with an effective date of December 1, 2021.

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, 2020 to August 31, 2021;

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.

STAFF'S TECHNICAL DISCUSSION AND ANALYSIS

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

I. OVERVIEW

Service Area

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: the 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 2021 and is now served under an AMA with ** [redacted] **. The NEMO area serves an average of 12,693 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 29,885 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 3,725 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 4,997 sales customers.

The total customer count for all service areas is an average of 51,300 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 not include adjustments ordered in Case No. GR-2021-0101 (2019-2020 ACA period). The beginning ACA balance was adjusted to reflect the ACA balance ordered in Case No. GR-2021-0101 as noted below.

All Areas:	Company Filed Balance 8/31/20	Staff Adjustments	Staff Proposed Balances 8/31/20
NEMO Area			
Demand ACA	$ (35,082)	$ (20,912)	$ (55,993)
Commodity ACA	$ (2,169,783)	$ (40,302)	$ (2,210,084)
SEMO Area			
Demand ACA	$ 1,899,814	$ 0	$ 1,899,814
Commodity ACA	$ (5,322,799)	$ (113)	$ (5,322,912)
WEMO Area			
Demand ACA	$ (522)	$ 7,733	$ 7,211
Commodity ACA	$ 100,704	$ 53,481	$ 154,184
Kirksville Area			
Demand ACA	$ 511,325	$ 8,130	$ 519,456
Commodity ACA	$ (1,741,283)	$ (8,171)	$ (1,749,454)

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. As a result of testing and revenue reconciliation, Staff proposes the following adjustments to the billed revenues reported for the following service areas:

Northeast – Exhibit II-B Recoveries of the ACA workbook referenced inaccurate Demand and, Commodity rates resulting in revenue reclassification between Demand and Commodity of $371,174.65 (increase Demand recoveries and corresponding decrease in Commodity recoveries).

WEMO – Exhibit II-B Recoveries of the ACA workbook referenced inaccurate Demand and, Commodity rates resulting in revenue reclassification between Demand and Commodity of $11,706.92 (increase Demand recoveries and corresponding decrease in Commodity recoveries).

Kirksville – Exhibit II-B Recoveries of the ACA workbook referenced inaccurate Demand and, Commodity rates resulting in revenue reclassification between Demand and Commodity of $12,325.47 (increase Demand recoveries and corresponding decrease in Commodity recoveries). Additionally, revenues reported excluded $133 of aggregation revenues. The exclusion of aggregation revenues is a repeat finding for Liberty. Staff recommends Liberty ensure that all supporting summary schedules are agreed to the ACA workbooks prior to submission.

The following table is a summary of the effects on billed revenues by service area:

Revenue Adjustments by Service Area			
NEMO	Reported	Corrected	(Under)/ Overstated
Demand	($1,309,808)	($1,680,983)	($371,175)
Commodity	($1,986,371)	($1,615,196)	$371,175
WEMO			
Demand	($207,390)	($219,097)	($11,707)
Commodity	($988,888)	($977,181)	$11,707
Kirksville			
Demand	($1,033,192)	($1,045,517)	($12,325)
Commodity	($378,420)	($366,228)	$12,192

Natural Gas Costs

Liberty submitted invoices for all natural gas purchases made during the review period. Staff reconciled 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 verified 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, hedging gains/losses were adjusted to agree with remittances/invoices provided and re-allocated across all service areas based on gross, first of month volumes (reflecting the basis for which hedging activities are entered).

Imbalances/Cash-outs

Transportation customer imbalances also impact gas costs with supply under deliveries decreasing gas costs (transportation customer owes Company) and supply over deliveries (Company owes transportation customer) increasing gas costs. Liberty's tariff provides for a scheduling fee for transportation imbalances in excess of 10% of the transportation customer's daily confirmed nomination. In reviewing the inputs into the scheduling fee calculation, inconsistencies were noted. The inconsistencies were due to the pipeline rates changing from monthly rates to daily rates that had not been accurately reflected in the monthly scheduling fee rates resulting in understated scheduling fees of $5,095.70 for NEMO, $41,926.84 for SEMO, and $8,766.06 for Kirksville. Understated scheduling fees (revenues) results in overstated natural gas costs.

Further, it appears that the scheduling fee may have been incorrect since March of 2020, when pipeline rates changed from monthly rates to daily rates. Staff recommends Liberty review scheduling fees and rebill transportation customers, as needed.

The table below summarizes the adjustments between service areas affecting natural gas costs.

Gas Cost Adjustments by Service Area			
NEMO	Reported	Corrected	Under/ (Overstated)
Demand	$2,151,022	$2,151,022	$0
Commodity	$5,147,280	$5,120,983	($26,297)
SEMO			
Demand	$4,488,120	$4,488,120	$0
Commodity	$9,585,608	$9,381,352	($204,256)
WEMO			
Demand	$188,276	$188,276	($0)
Commodity	$4,027,013	$4,028,055	$1,042
Kirksville			
Demand	$1,405,968	$1,405,968	$0
Commodity	$70,477	$52,100	($18,377)

Imbalance/Cash Outs

During Winter Storm Uri, Liberty issued Operational Flow Orders (OFO) consistent with OFOs issued by NGPL, PEPL, and Enable MRT. Staff recalculated and compared imbalance/cash out calculations to the ACA filing, finding that cash out calculations did not adhere to Liberty's approved tariff sheets by excluding the OFO charge of $25 per Dth (Sheet No. 53) resulting in understated revenues of $165,100 in the SEMO Service Area and $10,950 in the NEMO Service Area.

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; therefore, any changes to either billed revenues or natural gas cost will impact monthly over/under recovery balances. The beginning/ending over/under recoveries, incorporating the corrections noted above, resulted in adjustments to reported carrying costs, summarized in the table below:

Carrying Cost Adjustments by Service Area			
NEMO	Reported	Corrected	Under/ (Overstated)
Demand	$3,945	$1,320	($2,625)
Commodity	($6,423)	($4,825)	$1,598
SEMO			
Demand	$17,882	$17,882	$0
Commodity	($25,129)	($26,569)	($1,440)
WEMO			
Demand	($332)	($309)	$24
Commodity	$22,280	$23,032	$752
Kirksville			
Demand	$8,077	$8,097	$20
Commodity	($23,001)	($24,179)	($1,179)

Other Matters

Board of Directors Minutes

Meeting materials for the 2nd Quarter Regional Quarterly Board Meeting reviewed by Staff included a presentation identifying a number of observations that could be assessed as deficiencies for the 2020 period, including three (3) such observations for Liberty. Staff requested more information regarding the deficiencies observed and the current status of any corrective actions taken. Liberty's response stated that they were generally not aware of any deficiencies and would research the issue and provide additional information at a later date. No additional information has been received as of this date. Staff recommends Liberty complete its research and provide an update on the status/resolution of the deficiencies referred to in its quarterly board meeting.

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 2020-2021 ACA period related to reliability analysis and gas supply planning. Staff's other comments and recommendations are discussed in this section.

Reserve Margins

In its recommendations in prior ACA cases, Staff noted issues relate to reserve margin in certain service areas (Case Nos. GR-2021-0101, GR-2020-0123, GR-2019-0123, GR-2018-0077 and GR-2017-0089). Staff recommends that Liberty continue to monitor and address transportation needs for its various service areas.

Transportation Customers and School Aggregation

Staff compared the monthly imbalances of school aggregation pools to other transportation customers. ** [redacted] ** School pools tend 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.

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[redacted]

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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 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 2021-2022 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

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

[2] ** [redacted] **

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:

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[redacted]

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There is no financial adjustment related to hedging.

V. WINTER STORM URI

Beginning on or around February 6, 2021, an Arctic air mass enveloped much of the continental United States with temperatures experienced throughout the Midwest well below normal between February 8 and February 18, 2021. Planning for the February 2021 Cold Weather Event known as Winter Storm Uri, began as early as Monday, February 1, 2021.

Prudence Standard

Under this standard, natural gas utilities' actions and decisions are evaluated based on whether each action or decision was reasonable at the time, under all the circumstances, and based on the information that was or should have been known at that time; it is not an evaluation of those actions and decisions using the benefit of hindsight. Imprudence alone is not treated as a basis for a disallowance. However, when imprudence is coupled with harm to a utility's ratepayers, then a prudence disallowance is appropriate.

Staff reviewed Liberty's actions and decisions as it related to Winter Storm Uri, February 12th through February 21st, including review of natural gas purchases, storage utilization, interruptible service agreements, and hedging. ** [redacted] **
Based on Staff's review, no additional adjustments to Liberty's ending ACA balances have been recommended.

VI. 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 8/31/21 column of the following table:

All Areas:	**Company Filed Balance 8/31/21**	**Staff Adjustments***	**Staff Proposed Balances 8/31/21**
NEMO Area			
Demand ACA	$ 810,077	$ (394,711)	$ 415,366
Commodity ACA	$ 984,703	$ 306,174	$ 1,290,877
SEMO Area			
Demand ACA	$ 1,687,362	$ 0	$ 1,687,362
Commodity ACA	$ 903,916	$ (205,809)	$ 698,107
WEMO Area			
Demand ACA	$ (19,968)	$ (3,950)	$ (23,918)
Commodity ACA	$ 3,161,108	$ 66,981	$ 3,228,089
Kirksville Area			
Demand ACA	$ 892,179	$ (4,176)	$ 888,003
Commodity ACA	$ (2,072,227)	$ (15,535)	$ (2,087,762)

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.

*The table that follows reconciles Staff Adjustments by ACA period.

* Reconciliation of Staff Adjustments by ACA Period			
NEMO	2019-2020	2020-2021	Total Adjustment
Demand	($20,912)	($373,799)	($394,711)
Commodity	($40,302)	$346,476	$306,174
SEMO			
Demand	$0	$0	$0
Commodity	($113)	($205,696)	($205,809)
WEMO			
Demand	$7,733	($11,683)	($3,950)
Commodity	$53,481	$13,500	$66,981
Kirksville			
Demand	$8,130	($12,306)	($4,176)
Commodity	($8,171)	($7,364)	($15,535)

2. Respond to all Staff recommendations in Section II, Billed Revenue and Actual Gas Costs; Section III, Reliability Analysis and Gas Supply Planning; and Section IV, Hedging within 30 days.

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of Liberty Utilities (Midstates Natural Gas) Corp. d/b/a Liberty (MNG) Purchased Gas Adjustment (PGA)Tariff Filing	)))	**Case No. GR-2022-0128**

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;* and that the same is true and correct according to his best knowledge and belief, under penalty of perjury.

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 9th day of December, 2022.

Dianna L. Vaught

Notary Public

DIANNA L VAUGHT
Notary Public - Notary Seal
STATE OF MISSOURI
Cole County
My Commission Expires: July 18, 2023
Commission #: 15207377

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of Liberty Utilities (Midstates Natural Gas) Corp. d/b/a Liberty (MNG) Purchased Gas Adjustment (PGA)Tariff Filing	)))	**Case No. GR-2022-0128**

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;* and that the same is true and correct according to his best knowledge and belief, under penalty of perjury.

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 9th day of December, 2022.

Dianna L. Vaught

Notary Public

DIANNA L VAUGHT
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BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of Liberty Utilities (Midstates Natural Gas) Corp. d/b/a Liberty (MNG) Purchased Gas Adjustment (PGA)Tariff Filing	)))	**Case No. GR-2022-0128**

AFFIDAVIT OF KIMBERLY K. TONES, CIA, CPA

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

COMES NOW Kimberly K. Tones, CIA, CPA, and on her oath declares that she is of sound mind and lawful age; that she contributed to the foregoing *Staff Recommendation;* and that the same is true and correct according to her best knowledge and belief, under penalty of perjury.

Further the Affiant sayeth not.

Kimberly K. Tones

KIMBERLY K. TONES, CIA, CPA

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 8th day of December, 2022.

Dianna L. Vaught

Notary Public

DIANNA L VAUGHT
Notary Public - Notary Seal
STATE OF MISSOURI
Cole County
My Commission Expires: July 18, 2023
Commission #: 15207377