MEMORANDUM

TO: Missouri Public Service Commission Official Case File,

Case No. GR-2022-0135, Spire Missouri, Inc., d/b/a Spire

FROM: Anne M. Crowe, Lead Senior Utility Regulatory Auditor - Procurement Analysis

David T. Buttig, PE, Senior Professional Engineer - Procurement Analysis

Kwang Y. Choe, PhD, Economics Analyst - Procurement Analysis

/s/ David M. Sommerer 12/15/22 /s/ Jamie S. Myers 12/15/22

Project Coordinator / Date Staff Counsel / Date

SUBJECT: Staff's Recommendation for Case No. GR-2022-0135, Spire Missouri, Inc.,

d/b/a Spire 2020-2021 Actual Cost Adjustment Filing

DATE: December 15, 2022

I. EXECUTIVE SUMMARY

On November 12, 2021, Spire Missouri, Inc., d/b/a Spire ("Company" or "Spire East") filed its Actual Cost Adjustment (ACA) for the 2020-2021 ACA period. This filing revises the ACA rates based upon the Company's calculation of the ACA balances.

Spire East's ACA filing contains the gas costs incurred during Winter Storm Uri in February 2021. In Case No. GT-2022-0083 Spire East received authority to increase the credit amount of its Filing Adjustment Factor ("FAF")¹ to offset the increase in gas costs resulting from Winter Storm Uri for up to three years (2021-2023). The Company used the FAF to mitigate the customer impact in this filing.

Spire East serves an average of 662,841 residential, commercial, industrial, and transportation customers in the St. Louis metropolitan area and surrounding counties.

The Commission's Procurement Analysis Department ("Staff") has reviewed the Company's ACA filing. Staff's review included an analysis of billed revenues and actual gas costs for the period October 1, 2020, through September 30, 2021. Staff conducted a reliability analysis for Spire East, including a review of its estimate of customers' needs on a peak day (peak day requirements and the capacity levels to meet those requirements), peak day reserve margin and its rationale, and a review of gas supply plans for various weather conditions. Staff also reviewed Spire East's gas purchasing practices to determine the prudence of the Company's purchasing and operating decisions.

¹ The FAF is designed to refund to, or recover from, customers any over- or under-recoveries of gas costs that have accumulated since the Company's last ACA filing.

MO PSC Case No. GR-2022-0135 Official Case File Memorandum December 15, 2022 Page 2 of 5

Staff has proposed no dollar adjustments to Spire East's September 30, 2021, ACA account balances for the 2020-2021 ACA period. The following Table of Contents provides a guide to Staff's comments and recommendations contained in Sections I through VI of this Memorandum:

Section No.	Торіс	Page
I	Executive Summary	1
II	Billed Revenue and Actual Gas Costs	2
III	Reliability and Gas Supply Analysis	2
IV	Winter Strom Uri	3
V	Hedging	3
VI	Recommendations	5

STAFF'S TECHNICAL DISCUSSION AND ANALYSIS

II. BILLED REVENUE AND ACTUAL GAS COSTS

Staff performed a review and evaluation of the Company's actual gas costs and billed revenue. Based on its review, Staff has proposed no adjustments to the September 30, 2021 ACA balances.

III. RELIABILITY AND GAS SUPPLY ANALYSIS

As a regulated gas corporation providing natural gas services to Missouri customers, a local distribution company (LDC) is responsible for conducting reasonable long-range supply planning and the decisions resulting from that planning. A purpose of the ACA process is to review the LDC's planning for gas supply, transportation, and storage to meet its customers' needs. For this analysis, Staff reviewed Spire East'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 the rest of this section.

Resource Plan

Staff also introduced Spire East's revised Resource Plan in Case No. GR-2021-0127. Staff and Spire discussed the revision both in advance of and subsequent to Spire's finalization of the plan, with discussions occurring of the period of October 2019 to November 2020. Staff will continue

MO PSC Case No. GR-2022-0135 Official Case File Memorandum December 15, 2022 Page 3 of 5

to monitor Spire's resource planning and demand forecasting. ** T

Reserve Margin

Spire East did not vaporize propane during the 2020-2021 ACA period, nor did it during the 2019-2020 period. If the utilization of propane injection is included in the calculation of reserve margin, Spire East had a value of ** **. If it is excluded, the reserve margin dropped to ** Both of these reserve margin values remain in a range generally considered acceptable by Staff.

IV. 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. Spire East indicated it was prepared for the cold weather event as a result of its normal practice of continuously monitoring weather and gas supply. It took steps to ensure storage levels were adequate, that available capacity would meet operational needs, and that the Company could find the appropriate level of supply to fill its capacity.²

The Staff evaluates prudence based on whether a reasonable person would find the utility's actions were reasonable based upon the circumstances and information that was known or should have been known at that time the decision was made, without 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 Spire East's actions and decisions as it related to Winter Storm Uri, February 12th through February 21st, including a review of natural gas purchases, storage utilization, and hedging. Based on Staff's review, no additional adjustments to Spire East's ending ACA balances have been recommended.

V. HEDGING

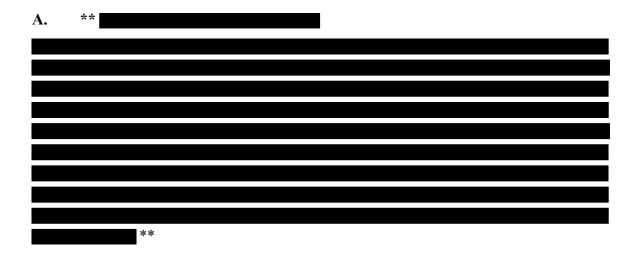
One of the purposes of hedging is to reduce upward gas price volatility. Staff reviewed the Company's Risk Management Strategy, Gas Supply Risk Management Policy and its financial hedging transactions for the 2020-2021 ACA period. The Company implemented its financial

² Case No. AO-2021-0264 Data Request No. 0294.

MO PSC Case No. GR-2022-0135 Official Case File Memorandum December 15, 2022 Page 4 of 5

hedging transactions based on the risk management strategy. Staff also reviewed monthly hedged coverage for the winter period of November 2020 through March 2021. Spire East uses financial instruments and storage withdrawals for its hedge coverage.

Staff has the following comments on Spire East's hedging practice:



B. Evaluation of Hedge Program

Staff reviews the prudence of a Company's decision-making based on what the Company knew or reasonably could have known at the time it made its hedging decisions. The Company's hedging planning should be flexible enough to incorporate changing market circumstances. The Company should evaluate its hedging strategy in response to changing market dynamics as to how much the existing hedging strategy actually benefits its customers while balancing market price risk. For example, Spire East should routinely review and evaluate the adequacy of its hedge coverage regarding the appropriate volumes of financial instruments as well as the possible use of more cost-effective financial instruments to assess exposure to market prices when the market prices become relatively less volatile.

Staff recommends the Company analyze the benefits/costs based on the outcomes from its hedging strategy, and evaluate any potential improvements on the future hedging plan and its implementation to achieve a cost effective hedging outcome as the Company reviews and develops its hedging program each year in the Company's Risk Management Strategy.³ For example, the

³ The Company's Risk Management Strategy dated July 2015 was the most recent on available for the 2020-2021 ACA period. Staff notes that the Company indicated during recent updates that it would evaluate and update its risk management strategy, which considers a longer term hedging, among other changes. Staff will continue to monitor the change in the Company's hedging strategy.

MO PSC Case No. GR-2022-0135 Official Case File Memorandum December 15, 2022 Page 5 of 5

Company she	ould continue to ev	valuate the perfe	ormance of i	ts hedge prog	gram in term	s of the various
types of fina	ncial instruments	used, **				
		20				
27						**
Market Basses	(6.5) Si (6.6)	F 19.59 - 05	79 68	G-G-Y 355,74 GA - d4	Personal Control of the Control of t	

Staff recommends the Companay well document the rationale for its hedging decisions.

Additionally, as Spire East incorporates the lower of First Of Month (FOM) Index or Daily Index pricing for swing supply as a type of insurance against daily price spikes within a month into the Company's Risk Management Strategy, the Company should continue to evaluate the costs/benefits of these instruments in conjunction with other parts of the Company's hedge program.

VI. RECOMMENDATIONS

1. Staff recommends the Commission issue an order directing the Company to establish the ACA account balances as shown in the table below to reflect the under or recovery balance as of September 30, 2021.

An (over)-recovery is the amount owed to the customers by the Company and is shown in the table as a negative number (in parentheses). An under-recovery is an amount owed to the Company by the customers and is shown in the table as a positive number.

	Firm Sales non-LVTSS	Firm Sales LVTSS	Interruptible Sales	LP Sales	Firm Transportation	Basic Transportation	Vehicular Fuel
ACA Balance per Filing	\$ 66,802,094	\$ 1,049,779	\$ 461,103	\$ 660	\$ 586,108	\$ 241	\$ 424,450
Prior ACA Period Adjustment (2019-20)	\$ (1,242,401)	\$ (2,854)	\$ (6,393)	\$ 0	\$ 0	\$ 0	\$ (1,936)
Current Staff Adjustments	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
Staff Recommended ACA Balance	\$65,559,693	\$ 1,046,925	\$ 454,710	\$ 660	\$ 586,108	\$ 241	\$ 422,514

2. Staff recommends the Commission issue an order requiring Spire East to respond to all of the recommendations herein within 30 days.

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of Spire Missouri, Inc. d/b/a Spire (East) Purchased Gas Adjustment (PGA) Tariff Filing) Case No. GR-2022-0135
AFFIDAVIT OF D	AVID T. BUTTIG, PE
*	
STATE OF MISSOURI) ss.	
COUNTY OF COLE)	
and lawful age; that he contributed to the forego	and on his oath declares that he is of sound mind bing 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.	AVID 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 ___/4___ day of December 2022.

D. SUZIE MANKIN
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: April 04, 2025
Commission Number: 12412070

Votary Public

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of Spire Missouri, Inc. d/b/a Spire (East) Purchased Gas Adjustment (PGA) Tariff Filing) Case No. GR-2022-0135
AFFIDAVIT OF KV	WANG 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 forego	oing 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, 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 ________ day of December 2022.

Notary Public

D. SUZIE MANKIN
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: April 04, 2025
Commission Number: 12412070

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of Spire Missouri, Inc. d/b/a Spire (East) Purchased Gas Adjustment (PGA) Tariff Filing Case No. GR-2022-0135)	
AFFIDAVIT OF ANNE M. CROWE	
STATE OF MISSOURI)) ss. COUNTY OF COLE)	
COMES NOW ANNE M. CROWE and on her oath declares that she is of sound	mind and
lawful age; that she contributed to the foregoing Staff Recommendation in Memorand	ım form;
and that the same is true and correct according to her best knowledge and belief.	
Further the Affiant sayeth not. ANNE M. CROWE	

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 _______ day of December 2022.

D. SUZIE MANKIN
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: April 04, 2025
Commission Number: 12412070

Notary Public