M E M O R A N D U M

TO: Missouri Public Service Commission Official Case File
File No. GR-2020-0108
Union Electric Company d/b/a Ameren Missouri

FROM: Anne M. Crowe, Utility Regulatory Auditor IV – Procurement Analysis
Kwang Y. Choe, PhD., Regulatory Economist – Procurement Analysis
Jacob R. Robinett, Utility Engineering Specialist III – Procurement Analysis

/s/ *David M. Sommerer* 10/09/20
Project Coordinator / Date

/s/ *Robert S. Berlin* 10/09/20
Staff Counsel's Office / Date

/s/ *Keenan B. Patterson, P.E.*, 10/09/20
Utility Regulatory Engineer II/ Date

SUBJECT: Staff Recommendation in File No. GR-2020-0108, Union Electric Company d/b/a Ameren Missouri, 2018-2019 Actual Cost Adjustment Filing

DATE: October 9, 2020

EXECUTIVE SUMMARY

On October 17, 2019, Union Electric Company d/b/a Ameren Missouri ("Ameren Missouri" or "Company") filed its Actual Cost Adjustment ("ACA") for the 2018-2019 period. This filing revises the ACA rates based upon the Company's calculations of the ACA balances.

The Procurement Analysis Department Staff ("Staff") of the Missouri Public Service Commission has reviewed the Company's ACA filing. A comparison of billed revenue recovery with actual gas costs will yield either an over-recovery or under-recovery of the ACA balance.

For this ACA period[1], for gas cost recovery, Ameren Missouri had a single Purchased Gas Adjustment ("PGA")/ACA rate division plus an additional incremental PGA/ACA rate specifically applicable to the customers in the Rolla service area. In Ameren Missouri's most recent rate case (Case No. GR-2019-0077), the Rolla PGA/ACA service area was ordered to be combined, effective September 1, 2019, with the remaining Ameren Missouri gas service area, so as to create one state-wide PGA/ACA division for Ameren Missouri. Ameren Missouri Rolla service area customers served from MoGas Pipeline ("MoGas") continued to pay an additional

[1] The 2018-2019 ACA period is September 1, 2018 through August 31, 2019.

incremental PGA and ACA charge for MoGas transportation until the September 1, 2019 effective date of the new state-wide PGA/ACA division.

Staff conducted the following analyses:

- a review of billed revenue compared with actual gas costs;
- a reliability analysis including a review of estimated peak-day requirements and the capacity levels needed to meet these requirements;
- a review of the Company's natural gas supply plans including a review of the Company's gas purchasing practices to evaluate the prudence of the Company's purchasing decisions for this ACA period; and,
- a hedging review to evaluate the reasonableness of the Company's hedging practices for this ACA period.

Staff has proposed no dollar adjustments to the Company's ACA account balances filed October 17, 2019. However, Staff's comments and recommendations related to Reliability Analysis and Gas Supply Planning, Gas Cost, and Hedging are discussed in each section of the memorandum. Staff recommends the Commission issue an order directing the Company to establish the ACA account balances shown in the table below to reflect the under or (over)-recovery balances as of August 31, 2019.

An over-recovery reflects an amount that is owed to the customer by the Company and is shown as a negative number (in parentheses). An under-recovery is an amount that is owed to the Company by its customers and would be shown in the table below as a positive number:

	Balances per Ameren Missouri Filing	**Current Period Staff Adjustments**	**Staff Recommended Ending Balances 8/31/19**
Firm Sales ACA	$ (5,400,216)	$ 0	$ (5,400,216)
Interruptible Sales ACA	$ 40,048	$ 0	$ 40,048
Rolla System	$ 706,397	$ 0	$ 706,397

Additionally, Staff recommends the Commission order the Company to respond to the Staff Recommendation Memorandum within 45 days.

STAFF'S TECHNICAL DISCUSSION AND ANALYSIS

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

I. Overview
II. Reliability Analysis and Gas Supply Planning
III. Gas Cost
IV. Hedging
V. Recommendations

Each section explains Staff's concerns and recommendations.

I. OVERVIEW

Ameren Missouri's natural gas operations are served by the following interstate pipelines: Panhandle Eastern Pipe Line Company, LP (PEPL), Trunkline (upstream, or prior to, PEPL), Texas Eastern Transmission, LP ("Texas Eastern" or "TETCO""), Natural Gas Pipeline Company of America, LLC ("NGPL"), Southern Star Central Gas Pipeline, Inc. ("SSC") and MO Gas Pipeline ("MoGas"). PEPL and SSC serve approximately 108,000 customers in the Jefferson City/Columbia area. TETCO serves approximately 18,600 customers in the Cape Girardeau area. NGPL serves approximately 1,500 customers in the Marble Hill area. PEPL and MoGas serve approximately 3,800 customers in the Rolla, Salem, and Owensville area.

II. RELIABILITY ANALYSIS AND GAS SUPPLY PLANNING

Reliability Analysis and Gas Supply Plan Review

As a gas corporation providing natural gas service to Missouri customers, the Company is responsible for conducting reasonable long-range supply planning and the decisions resulting from that planning. One purpose of the ACA process is to examine the reliability of the Local Distribution Company's (LDC) gas supply, transportation, and storage capabilities. For this analysis, Staff reviews the LDCs 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 reserve margin, and natural gas supply plans for various weather conditions.

Staff's review for the Ameren Missouri service areas produced the following comments and concerns:

<u>Reserve Margins – Panhandle – Columbia/Rolla Region</u>

** [redacted] ** Staff encourages the Company to evaluate its capacity needs for the Columbia region on an annual basis.

There is no national industry or regulatory standard for reserve margins. In Missouri, reserve margins between 5 and 10 percent are generally considered to provide adequate reserve for extreme demand conditions without holding excessive capacity. However, reserve margins outside of this range may be acceptable or tolerable depending on the costs, the gas company's management of risk, transportation contract provisions or the availability of pipeline capacity. Negative reserve margins indicate that a utility may not have sufficient pipeline capacity to meet peak flow conditions, and this situation should be avoided.

<u>Panhandle Eastern Pipeline Reserve Margins – Rolla System</u>

** [redacted] ** Based on Ameren's response to DR 65 of GR-2020-0108, Ameren has secured an additional 1,000 MMBtu of firm transportation capacity. The capacity was procured in a MoGas rate case settlement (RP 18 877-000). This firm transportation started in the winter of 2019/2020 and will be evaluated during the 2019/2020 ACA review. Staff recommends that Ameren continue to evaluate its reserve margins for the Rolla System on the Panhandle Eastern Pipeline.

<u>Texas Eastern Transmission Corporation Reserve Margins – Cape Girardeau System</u>

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____ ** Staff encourages Ameren to evaluate its capacity needs for the Cape Girardeau region on an annual basis.

<u>Design Flow Modeling</u>

In light of the steps Ameren has needed to take to assure supply to Wentzville during especially cold events in recent winters, Staff has had concerns about Ameren's capacity to receive gas at city gate serving Wentzville and distribute gas in that system. The Company uses modeling software for flow analysis of each of its systems. This software allows the company to conduct flow analysis of the distribution system including critical load points and be able to evaluate alternatives to address the system's capacity limitations. The Company is currently utilizing a consulting firm, Total Infrastructure Management Systems, to verify the flow analysis of the Wentzville distribution system. Staff recommends that the Company continue to develop the modeling system for the TETCO, NGPL, and PEPL systems, and that it closely monitor the capacity of city gates and its distribution system in the Wentzville area to assure it can provide adequate gas in very cold conditions.

Ameren has installed a temporary LNG facility in Wentzville, MO in January 2020 to help with the reliability of the Panhandle system. The LNG facility's impact on peak day capability and associated gas cost will be reviewed as part of Staff's 2019/2020 ACA review.

III. GAS COST

During this ACA period, Staff found the Company used an outdated Federal Energy Regulatory Commission authorized storage injection rate in calculating the cost of its natural gas inventory with Dominion Energy Transmission, Inc. Although the amount of this error was immaterial for this period, using incorrect interstate pipeline rates has the potential to misstate gas costs. Staff also made recommendations regarding the Company's inventory spreadsheets in the prior ACA; however, due to timing differences, the Company did not have the opportunity to correct the inventory spreadsheets in this ACA period. Staff recommends the company review its procedures to ensure it uses the correct interstate pipeline rates when calculating its gas in inventory.

IV. HEDGING

The Staff reviewed Ameren Missouri's hedging program. The Company's goal is to hedge prices to reduce market price volatility. In particular, Ameren Missouri's stated objective is to create a forward gas supply portfolio and to dollar-cost-average gas supply prices to mitigate price volatility for the PGA sales customers, among other objectives. The current planning horizon for gas supply purchases and price hedging is thirteen seasons, or six and one-half years. Gas supply transactions and price hedges for this period are phased in, based on factors including current futures prices, availability of gas supply, as well as general market conditions.

Ameren Missouri receives regular natural gas market reports from energy and financial firms and regular market reports and assessments. The Staff reviewed Ameren Missouri's hedging practices for the winter months of November 2018 through March 2019. Ameren Missouri's hedging implementation plan is to protect approximately ** ____ ** percent of normal winter demand requirements against market price volatility for the three Ameren Missouri systems, PEPL-UE, TETCO-UE and NGPL-UE. The price protection, including storage, comes from financial natural gas swaps and call options for PEPL-UE. Storage and swaps were utilized for TETCO-UE. The financial hedges were placed between mid-June 2013 and early-September 2018 for the winter heating season of November 2018 through March 2019. These resulted in ** __ ** percent hedged overall for Ameren Missouri, based on actual delivered volumes for the winter months, and ** __ ** percent based on normal volumes for the winter months.[2]

Staff reviews the prudence of a Company's decisions based on what the Company knew, or should have reasonably 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, the Company should continue to evaluate its current strategy of financially hedging summer storage injections regarding potentially less percentage coverage and using more cost-effective financial instruments under the current market where the market prices have become

[2] These actual percentages fell within the parameters of the Company's Risk Management Policy. Although the costs of hedging are spread across the three systems, operational impacts of the hedging may affect each system differently. PEPL-UE and TETCO-UE were ** ____ ____ ** hedged based on normal volumes. Storage was utilized in the past for NGPL-UE but the storage contract expired in March 2015. Since there is one system-wide PGA rate, the specific regional differences are averaged to all systems.

relatively less volatile. Additionally, the Company should carefully plan for the price protected volumes based on the reasonably forecasted normal requirements consistent with its hedging goal.

V. RECOMMENDATIONS

Staff recommends the Commission issue an order directing the Company to establish the ACA account balances shown in the table below to reflect the under or (over)-recovery balances as of August 31, 2019.

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1. Staff requests the Commission to order Ameren Missouri to respond to all of the concerns, comments, and the recommendations contained herein within 45 days.

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of Union Electric Company d/b/a	)	
Ameren Missouri's Purchased Gas Adjustment	)	**File No. GR-2020-0108**
Tariff Filing	)	

**AFFIDAVIT OF ANNE M. CROWE,
KWANG Y. CHOE, PhD., AND JACOB R. ROBINETT**

STATE OF MISSOURI	)	
	)	ss.
COUNTY OF COLE	)	

COME NOW ANNE M. CROWE, KWANG Y. CHOE, PHD., AND JACOB R. ROBINETT, and on their oath declare that they are of sound mind and lawful age; that they contributed to the foregoing *Staff Recommendation* in memorandum form; and that the same is true and correct according to their best knowledge and belief, under penalty of perjury.

Further your Affiants sayeth not.

/s/ *Anne M. Crowe*
Anne M. Crowe

/s/ *Kwang Y. Choe, PhD.*
Kwang Y. Choe, PhD.

/s/ *Jacob R. Robinett*
Jacob R. Robinett