MEMORANDUM

TO: Missouri Public Service Commission Official Case File

File No. GR-2013-0100, Union Electric Company d/b/a Ameren Missouri

FROM: Anne Crowe, Regulatory Auditor – Procurement Analysis

Kwang Choe, Ph.D., Regulatory Economist – Procurement Analysis Lesa Jenkins, P.E., Regulatory Engineer – Procurement Analysis

/s/ David M. Sommerer 10/29/13 /s/ Robert S. Berlin 10/29/13
Project Coordinator / Date Staff Counsel's Office / Date

/s/ Lesa Jenkins P.E, 10/29/13 Utility Regulatory Engineer II/ Date

SUBJECT: Staff Recommendation in File No. GR-2013-0100, Union Electric Company

d/b/a Ameren Missouri, 2011-2012 Actual Cost Adjustment Filing

DATE: October 29, 2013

EXECUTIVE SUMMARY

On October 17, 2012, Union Electric Company d/b/a Ameren Missouri (Ameren or Company) filed its Actual Cost Adjustment (ACA) for the 2011-2012 period. This filing revises the ACA rates based upon the Company's calculations of the ACA balances.

The Procurement Analysis Unit (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.

Ameren has a single Purchased Gas Adjustment (PGA) and ACA rate for all its Missouri service areas (state-wide rate). The Rolla area Ameren customers served from MoGas Pipeline (MoGas), however, continue to pay an additional incremental PGA charge for MoGas transportation.

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,

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

Staff has no dollar adjustments related to reliability analysis and gas supply and planning. However Staff's comments and recommendations regarding this area are discussed within the Reliability Analysis and Gas Supply and Planning section of the memorandum.

Staff has no adjustments related to hedging. However Staff's comments and recommendations regarding hedging practices are addressed in the Hedging section of the memorandum.

At this time, the Staff has determined certain gas cost accounting adjustments as shown in the following ending ACA balances in the table below. However, Staff recommends the Commission hold this ACA case open until Ameren provides documents demonstrating that MoGas has made its required settlement payment and that Ameren returned the settlement payment to its customers through the PGA/ACA mechanism.

	Balance per Ameren Missouri Filing	Current Period Staff Adjustments	Ending Balances 8/31/12	
Firm Sales ACA	\$6,687,003.50*	\$(25,745.11)	\$6,661,258.39	
Interruptible Sales ACA	\$ (261,817.67)	\$(3,980.89)	\$(265,798.56)	
Rolla System	\$(137,830.58)	\$0	\$(137,830.58)	

^{*}An over-recovery is the amount owed to the customers by the Company and is shown in the table as a negative number. An under-recovery is an amount owed to the Company by the customers and is shown in the table as a positive number.

Additionally, Staff recommends the Commission order the Company to respond to the Staff Recommendation within 30 days.

STAFF'S TECHNICAL DISCUSSION AND ANALYSIS

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

- I. Overview
- II. Gas Cost Correction
- III. Refund of MPC and MGC Overcharges
- IV. Reliability Analysis and Gas Supply Planning
- V. Hedging
- VI. Recommendations

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Each section explains Staff's concerns and recommendations.

I. OVERVIEW

Ameren's natural-gas operations are served by the following interstate pipelines: Panhandle Eastern Pipe Line (PEPL), Texas Eastern Transmission Corporation (TETCO), Natural Gas Pipeline Company of America (NGPL), and MoGas Pipeline (f/k/a Missouri Pipeline Company (MPC) and Missouri Gas Company (MGC)). PEPL serves approximately 103,000 customers in the Jefferson City/Columbia area. TETCO serves approximately 19,000 customers in the Cape Girardeau area. NGPL serves approximately 1,700 customers in the Marble Hill area. PEPL and MoGas serve approximately 3,800 customers in the Rolla, Salem, and Owensville area.

II. GAS COST – CORRECTION

Staff identified an error in the Company's recording of its actual gas costs in the state-wide ACA filing. The Company had entered a number in its ACA spreadsheet calculation as a positive instead of a negative. This error overstated the gas costs by \$29,726. Therefore Staff proposes to reduce the gas costs of the firm sales customers' by \$25,745 and the interruptible sales customers' by \$3,981.

III. REFUND OF MISSOURI PIPELINE COMPANY (MPC) AND MISSOURI GAS COMPANY (MGC) OVERCHARGES

The MPC and MGC transportation overcharge issue is an open issue from prior ACA Cases. Ameren filed a petition in Cole County Circuit Court, Case No. 09AC-CC00398, to recover overcharges from MPC and MGC. Subsequent to this period, on September 25, 2012, the Circuit Court issued a judgment that found Ameren was entitled to recover from MoGas (formerly known as MPC and MGC) an amount of \$7,449,885.68 plus interest. On July 15, 2013 Ameren and Laclede Gas Company filed a Joint Motion requesting the Commission dispose of all MoGas issues with respect to their ACA cases. The Joint Motion states that Ameren, Laclede, and MoGas reached a Settlement Agreement and MoGas is required to pay Ameren \$3,506,000 as settlement of the judgment. The Staff Response to Joint Verified Motion of Union Electric Company d/b/a Ameren Missouri and Laclede Gas Company was filed July 29, 2013. The Commission granted Ameren's and Laclede's Motion to resolve all MoGas issues effective August 24, 2013. Therefore, Staff recommends the Commission hold this ACA case open until Ameren provides documents demonstrating that MoGas made the settlement payment and it returned the settlement payment to its customers through the PGA/ACA mechanism.

IV. RELIABILITY ANALYSIS AND GAS SUPPLY PLANNING

Reliability Analysis and Gas Supply Plan Review

As a regulated gas corporation providing natural gas service to Missouri customers, the Local Distribution Company (LDC) is responsible for: 1) conducting reasonable long-range supply

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planning, and 2) the decisions resulting from that planning. One purpose of the ACA process is to review the Company's planning for gas supply, transportation, and storage to meet its customers' needs. For this analysis, Staff reviewed the LDC'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 reserve margin, and natural gas supply plans for various weather conditions.

Staff has no proposed financial adjustments for the 2011/2012 ACA period related to Reliability Analysis and Gas Supply Planning section.

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

Propane Changes for Future ACA

Propane is considered in both Ameren's reliability analysis, its Demand Study, and in Ameren's gas supply planning for cold days. Ameren's propane inventory policy/procedures call for it to fill the propane storage tanks to near their maximum liquid inventory levels prior to each winter heating season. Ameren did not follow that policy/procedure for the 2011/2012 ACA period. Because of warm weather in the 2011/2012 winter, the lower level of propane storage inventory was not an issue. Ameren's response to Staff's inquiry also indicates it did not fill propane for the 2012/2013 winter and that it will retire the propane plant after the 2012/2013 winter.

Because propane plant costs are carried in the Company's rate base, the retirement of the plant is something that should be reviewed in the context of the next general rate case. The impact of such retirement on the peak day resources will be examined in the appropriate ACA.

Storage Plans

Ameren provides three (3) different plans that pertain to storage withdrawals as summarized in the following table.

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For its hedging presentation, Ameren uses the storage numbers in the column labeled Ameren Natural Gas Strategy 2011-2012. Staff recommends Ameren review its Natural Gas Strategy so that its plans for storage in its hedging plans use the actual operational storage plans that Ameren intends to follow to allow for peak deliverability through the second week of February.

V. HEDGING

The Staff reviewed Ameren's hedging program. The Company's goal is to hedge prices to reduce market price volatility. In particular, Ameren'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 receives regular natural-gas market reports from energy and financial firms and regular market reports and assessments. The Staff reviewed Ameren's hedging practices for the winter months, November 2011 through March 2012. Ameren's hedging implementation plan is to protect approximately ** _____ ** of normal winter demand requirements against market price volatility for the three Ameren systems, PEPL-UE, TETCO-UE and NGPL-UE. The price protection, including storage, comes from financial natural-gas swaps for PEPL-UE, though only storage was utilized for TETCO-UE and NGPL-UE. The financial hedges were placed between mid-September 2008 and mid-October 2011 for the winter heating season of November 2011 through March 2012. These resulted in ** ____ ** hedged overall for Ameren,

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based on actual delivered volumes for the winter months, and ** — ** based on normal volumes for the winter months.¹

Staff is concerned about the continued negative financial impacts from the hedging transactions in this ACA period. While Staff reviews the prudence of a Company's decision-making based on what the Company knew 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 evaluate its current strategy of financially hedging summer storage injections under the current market where the market prices have become less volatile. Additionally, the Company should evaluate whether extensive reliance on swaps and the volumes associated with them are appropriate.

In this period the Company used options to hedge its summer prices and recent Ameren hedging updates have referenced its use of call options as a supplement to the use of swap instruments in subsequent ACA periods. Call options allow participation in downward price movements albeit at the cost of a premium for the option. In its evaluation of the volume hedged, Ameren "delta" adjusts the volumes of its option positions. However, the process of the delta hedging may limit consideration of out-of-the-money calls. Out-of-the-money calls may have a strike price that still affords significant protection near current market prices but at a reduced premium cost. It appears that the Company's delta-hedging approach would greatly limit out-of-the money calls as a possible hedge tool. If the Ameren approach to delta weighting of hedges is effectively limiting consideration of reasonable strike price levels of out-of-the-money call options, then other methods of weighting the hedges should also be considered. Thus, Ameren should examine the types of financial instruments with their associated characteristics in light of the long-term historical financial impact of heavy fixed price (swap) reliance.

Finally, the Staff recommends the Company continue to assess and document the effectiveness of its hedges for the 2012-2013 ACA period and beyond in a meaningful way. The analysis should include 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. During various proceedings in the past, at Staff's request, Ameren has provided a useful summary of how the Company's hedges (swaps) have performed against market pricing, i.e., the impact of purchases without the hedges. The Company has provided that analysis which looks back over an extensive historical period. This hedge performance or mark-to-market summary is helpful in seeing the long term financial impact of the hedge program. The Staff recommends that Ameren continue to develop this summary in future ACA periods.

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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 ** ___ ** and ** ___ ** hedged, respectively, while NGPL-UE was ** ___ ** hedged for November 2011 through March 2012 based on actual delivered gas. PEPL-UE and TETCO-UE were ** ___ ** and ** ___ ** hedged based on normal volumes. For NGPL-UE, it was ** ___ ** hedged based on normal volumes. Since there is one system-wide PGA rate, the specific regional differences are averaged to all systems.

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VI. RECOMMENDATIONS

At this time, the Staff has determined the following accounting adjustments as reflected in the ending ACA balances shown in the table below. However, Staff recommends the Commission hold this ACA case open until Ameren provides documents demonstrating that MoGas has made its required settlement payment and that Ameren has returned the settlement payment to its customers through the PGA/ACA mechanism.

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- 1. Staff has no dollar adjustments related to Reliability Analysis and Gas Supply Planning. However, Staff also asks the Commission to order Ameren to respond to Staff's comments and recommendation in the Reliability Analysis and Gas Supply Planning section pertaining to storage plans.
- 2. Staff also asks the Commission to order Ameren to respond to the concerns / comments / recommendations expressed by Staff in the Hedging Section. Staff has no dollar adjustments related to Hedging.
- 3. Staff also asks the Commission to order Ameren to respond to the accounting adjustments reflected in the above table and to the concerns, comments, and the recommendations contained herein within 30 days.

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

Ameren Missouri's 2011-2012 ACA Audit	d/b/a)	File No. GR-2013-0100
AFFIDAVIT OF	KWANG	Ү. СНОЕ
STATE OF MISSOURI) ss.		
COUNTY OF COLE)	•	
Kwang Y. Choe, being of lawful age, on his	s oath stat	es: that as a Regulatory Economist II in
the Procurement Analysis Unit of the Utility		
preparation of the foregoing memorandum con		
above case; that he has knowledge of the mat Hedging; and that such matters are true and corn		•
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	Kwang	g Y. Choe
Subscribed and sworn to before me this 2°	94	day of <u>October</u> , 2013.
D. SUZIE MANKIN Notary Public - Notary Seal State of Missouri Commissioned for Cole County My Commission Explose: December 12, 2015	Oscary Publi	collankin

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of Union El Ameren Missouri's 2011-201	lectric Com 2 ACA Aud	ipany d/b/a lit)	File No. GR-	2013-010	10
	AFFIDAV.	IT OF ANN	E M. CRO	OWE		
STATE OF MISSOURI)					
COUNTY OF COLE)	SS.				
Anne M Crowe, being of	lawful age,	, on her oatl	h states: th	nat as a Utility	Regulator	y Auditor
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the preparation of the forego						
the above case; that she has k Billed Revenues and Actual (-	•
her knowledge and belief,						
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		Aı	nne M. Cr	owe		
Subscribed and sworn to before	re me this _	29th	day of _	Octobe	ı	_, 2013.
D. SUZIE MANKIN Notary Public - Notary Seal State of Missouri Commissioned for Cole County My Commission Expres: December 12, 20 Commission Number: 12412070	016	Notary F	-	Manke	$\tilde{\mathcal{N}}$	

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of Union Electric Company d/b/a) Ameren Missouri's 2011-2012 ACA Audit) File No. GR-2013-0100
AFFIDAVIT OF LESA JENKINS
STATE OF MISSOURI)) ss. COUNTY OF COLE)
Lesa Jenkins, being of lawful age, on her oath states: that as a Utility Regulatory Engineer II in the Procurement Analysis Unit of the Utility Services Department, she has participated in the preparation of the foregoing memorandum consisting of pages to be presented in the above case; that she has knowledge of the matters set forth in the Memorandum pertaining to Reliability Analysis and Gas Supply Planning; and that such matters are true and correct to the best of her knowledge and belief,
Lesa Jenkins
Subscribed and sworn to before me this 29th day of October, 2013. D. SUZIE MANKIN Notary Public - Notary Seal State of Missouri Commission Expires: December 12, 2018 Commission Number: 12412070