MEMORANDUM

TO: Missouri Public Service Commission Official Case File
File No. GR-2012-0077, Union Electric Company d/b/a Ameren Missouri

FROM: David M. Sommerer, Manager – Procurement Analysis
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/s/ David M. Sommerer 12/21/12	/s/ Jeffrey A. Keevil 12/21/12
Project Coordinator / Date	Staff Counsel's Office / Date

SUBJECT: Staff Recommendation in File No. GR-2012-0077, Union Electric Company d/b/a Ameren Missouri, 2010-2011 Actual Cost Adjustment Filing

DATE: December 21, 2012

EXECUTIVE SUMMARY

On October 17, 2011, Union Electric Company d/b/a Ameren Missouri (Ameren or Company) filed its Actual Cost Adjustment (ACA) for the 2010-2011 period. This filing revises the ACA rates based upon the Company's calculations of the ACA balance.

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, 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 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 no dollar adjustments related to reliability analysis and gas supply and planning. However Staff's concerns 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 concerns are addressed in the Hedging section of the memorandum.

At this time, the Staff has determined the following preliminary ending ACA balances as shown in the table below. However, Staff recommends the Commission hold this ACA case open so that Staff can monitor Ameren Missouri's pursuit of refunds from MPC and MGC and make further recommendations as necessary. On September 25, 2012, the Circuit Court found Ameren entitled to recover from MoGas $7,449,885.68 plus interest. Although the gas costs for this ACA period do not include overcharges from MPC and MGC, due to the cumulative nature of the ACA balance, past overcharges impact this period's ACA balance.

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

	Balance per Ameren Missouri Filing	**Prior Period Staff Adjustments**	**Current Period Staff Adjustments**	**Ending Balances 8/31/11**
Firm Sales ACA	$4,207,018*	$375,584	$0	$4,582,602
Interruptible Sales ACA	$ 22,184	$0	$0	$22,184
Rolla System	$(41,072)	$(375,584)	$0	$(416,656)

* *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.*

STAFF'S TECHNICAL DISCUSSION AND ANALYSIS

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

I. Overview

II. Refund of MPC and MGC Overcharges

III. Reliability Analysis and Gas Supply Planning

IV. Hedging

V. Recommendations

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 (MoGas) (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 3,700 customers in the Rolla, Salem, and Owensville area.

The following charts show this ACA period's breakdown of gas costs as compared to the prior ACA period. The first chart shows the various components of the Company's gas costs on a per Mcf basis. The second chart shows each of these gas cost components as a percentage of the Company's total gas costs.

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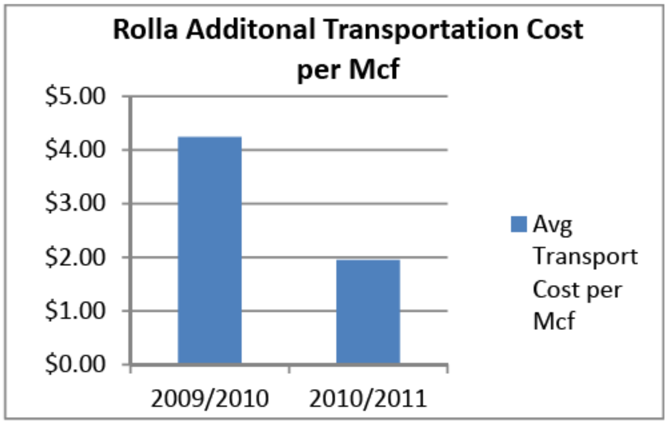
The final chart shows the additional incremental Rolla area average cost per Mcf for MoGas transportation.



II. REFUND OF MISSOURI PIPELINE COMPANY AND MISSOURI GAS COMPANY OVERCHARGES

Ameren uses MoGas Pipeline (MoGas), formerly known as Missouri Pipeline Company (MPC) and Missouri Gas Company (MGC), to transport gas to its customers. MPC and MGC transportation overcharge issue continues to be 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 found Ameren entitled to recover from MoGas $7,449,885.68 plus interest. Ameren has been filing status reports in its prior ACA cases informing the Commission and Staff of the status of its MoGas litigation. Although the gas costs for this ACA period do not include overcharges from MPC and MGC, due to the cumulative nature of the ACA balance, past overcharges impact this period's ACA balance. **Therefore, Staff recommends th e Commission hold this ACA case open so that Staff can monitor Ameren Missouri's pursuit of refunds from MPC and MGC and make further recommendations as necessary.**

History of the issue

Ameren had firm transportation service agreements with Missouri intrastate pipelines, MPC and MGC. On June 21, 2006, in Case No. GC-2006-0491, the Staff filed a complaint against MPC and MGC alleging that MPC and MGC gave an affiliate lower rates for transportation service and, by doing so, lowered the maximum transportation rates MPC and MGC could charge non-affiliated customers. Ameren is a non-affiliated customer of MPC and MGC.

The Commission issued its initial Order in Case No. GC-2006-0491 on August 28, 2007, with an effective date of September 7, 2007, and a Revised Report and Order on October 11, 2007, with an effective date of October 21, 2007. Although the Commission's Revised Order was effective October 21, 2007, the Order found that, by operation of their tariffs, in giving an affiliate lower rates, MPC and MGC had lowered the maximum firm reservation tariffed rates beginning

May 1, 2005. The Commission further found, when MGC lowered rates for its affiliate on July 1, 2003; it also lowered both its tariffed firm and interruptible commodity rates for all non-affiliates. Despite the Commission's October 11, 2007 Revised Report and Order setting maximum tariff rates, MPC and MGC continued to bill Ameren higher rates. Ameren paid MPC/MGC's bill under protest, nonetheless, and passed the overcharges through to its customers.

The overcharges continued until MPC and MGC, now MoGas Pipeline, implemented new Federal Energy Regulatory Commission (FERC) regulated transportation rates, effective June 1, 2008, upon FERC's approval of MoGas' FERC filed tariff rates.

The Commission's Revised Report and Order in Case No. GC-2006-0491 was affirmed by the Western District Court of Appeals in Case No. WD 70325, *Missouri Pipeline Co. v. Missouri Public Serv. Com'n.* 307 S.W.3d 162 (Mo.App. W.D. 2009) *cert. denied* February 2, 2010. The Commission's Revised Report and Order became final and unappealable after the Western District Court of Appeals issued its mandate on April 22, 2010. Ameren pursued refunds of the overcharges through a lawsuit in Cole County Circuit Court; subsequent to this ACA period, on September 25, 2012, the Circuit Court found Ameren entitled to recover from MoGas $7,449,885.68 plus interest.

III. 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 Local Distribution Company (LDC) is responsible for: 1) conducting reasonable long-range supply 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.

There were no financial adjustments related to Reliability Analysis and Gas Supply Planning for this ACA period.

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

<u>Pipeline Capacity – Columbia (PEPL) system</u>
There were no changes to capacity for the Columbia system for the winter of 2010/2011. However, due to Trunkline's intentions to convert some of its natural gas pipeline to a liquids (oil) line, Ameren Missouri contracts that expire 3/31/2012 with Panhandle for forward haul capacity and with Trunkline for back haul capacity were replaced. The Company provided a brief update of its firm capacity planning for the Columbia system during its fall Gas Supply Presentation to Staff for the 2012/2013 winter. This brief update indicated Ameren has a one

year pipeline contract with PEPL and Trunkline and delivered supply for the winter of 2012/2013 and a two-year contract with PEPL and plans for delivered supply for the winter of 2013/2014.

Ameren's estimated peak day load for the Columbia area for the 2010/2011 winter was ** _____ ** MMBtu, when considering the Upper 95% Confidence Interval. Ameren's capacity for the Columbia area is ** _____ ** MMBtu/day. However, 2,287 MMBtu is released for the Missouri School Aggregation Program. Thus, the available capacity becomes ** _____ ** MMBtu. The reserve margin for the Columbia region for the 2010/2011 ACA period, when considering the confidence interval, is a *negative* ** ___ **. Although Ameren did not experience a historic peak cold day of 81 HDD in the 2010/2011 ACA, and thus the shortfall of pipeline capacity did not harm customers, had the Company experienced colder weather, additional supply and capacity would have been necessary.

Ameren has provided Staff with copies of its updated Demand Studies every three years. The Columbia/PEPL system 2010 Demand Study was provided 5/26/2011. Ameren indicated in its 11/15/2012 Gas Supply Presentation that it is currently working on an updated Demand Study for the Columbia/PEPL system. Because of the shorter terms for the contracted capacity on the Columbia/PEPL system, the upcoming storage contract expiration, and changes in demand noted by Ameren (e.g. changes in usage due to economy, energy efficiency), Staff recommends Ameren update the peak day capacity planning portion of the Demand Study for the Columbia/PEPL system more frequently so that it has more current data when making decisions regarding its pipeline transportation contracts, including storage, and delivered supply needs. Staff recommends the Ameren capacity planning updates for the Columbia/PEPL system be provided annually for 2013 and 2014. Staff's recommendation would not require Ameren to update everything in the Demand Study; rather just update the peak day requirements before making decisions on capacity contracts.

Rolla Growth/Decline

The Company provides an estimate of the peak day for the Rolla area served by the MoGas pipeline and also provides a reserve margin calculation. When the upper 95% confidence interval is considered, the reserve margin is ** ___ **. The Company provides no estimates for future growth or decline for the area. Because the Ameren peak day estimates are generally only provided once every three years, Ameren must include peak day estimates for more than one year. Staff recommends the Company provide a Year 1 through Year 5 estimate of Peak Design Days as it does for establishing capacity (and future reserve margins) for the pipelines serving its other Missouri service areas.

IV. HEDGING

The Staff reviewed Ameren's hedging program. The goal of a hedging plan is to mitigate the price volatility of the commodity (natural gas) for the winter heating season of November through March, though hedging of storage injections can also be a consideration in hedge planning. In particular, the Company's goal is to hedge prices to reduce market price volatility. 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 2010 through March 2011. 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 fixed-forward contracts, and financial natural-gas swaps for PEPL-UE and NGPL-UE, though only storage was utilized for TETCO-UE. Most of these hedges were placed between early October 2007 and mid October 2010 for the winter heating season of November 2010 through March 2011. These resulted in ** __ ** hedged overall for Ameren, 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. Although Staff is not suggesting that the Company should design its hedging strategy to try to beat the market, the Company's hedging plan 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 achieving the goal of a stable price level. For example, the Company should evaluate whether extensive reliance on swaps and the volumes associated with them are appropriate under the current market where the market prices have become less volatile. The Staff does note that recent Ameren updates have referenced its use of call options as a supplement to the use of swap instruments. 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. Thus, Ameren should carefully examine the types of financial instruments in order to maintain a balanced portfolio. Additionally, Ameren has recently indicated potential changes to storage contracts. Storage contracts have reliability, economic (summer vs. winter price), and operational flexibility advantages beyond use as a hedge tool. The Company should carefully consider the significant loss of these benefits

[1] 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 2010 through March 2011 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.

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if it is considering any reduction, turn-back, or reallocation of its regulated Missouri-LDC interstate pipeline storage contracts. Therefore, prior to making any changes to the storage contracts, Ameren should: analyze the cost/benefit of storage over other hedging options; consider the flexibility storage provides in its gas supply planning; and consider the cost/benefit of storage compared to other supply options.

The Company should also regularly examine the balance between storage and other financial hedging instruments in the overall hedging portfolio for a warmer weather scenario as well as for normal load. The Staff further recommends the Company continue to document its hedging decisions and provide the documentation to the Staff during each ACA review. This documentation should include an overall hedging plan that addresses hedging goals, objectives, and strategies for each month of each ACA review and the circumstances under which certain hedging transactions occurred. The hedging plan should be updated, documented and completed well in advance of each approaching winter season. The Company should also continue to carefully evaluate its plans for longer-term time horizons for placing hedges.

Finally, the Staff recommends the Company continue to assess and document the effectiveness of its hedges for the 2011-2012 ACA period and beyond. The analysis should be meaningful and include, but not be limited to: whether the hedging implementation was consistent with the hedging plan; testing for hedge effectiveness for any financial instruments that attempt to hedge the physical price risk exposure; 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. If the Company plans to change hedging strategies, the Company should provide the Staff with copies of all analyses, including any and all documents regarding changes to the Company's hedging policy / plan.

V. RECOMMENDATIONS

1. The Staff recommends the Commission hold this ACA case open so that Staff can monitor Ameren's pursuit of refunds from MPC and MGC and make further recommendations as necessary.

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2. Staff also asks the Commission to order Ameren to respond to Staff's concerns /comments / recommendations in the Reliability Analysis and Gas Supply Planning section (Capacity planning for Columbia/PEPL system; peak day estimates for more than one-year for Rolla area). Staff has no dollar adjustments related to Reliability Analysis and Gas Supply Planning.

3. 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.

4. Staff also asks the Commission to order Ameren to respond to the concerns / comments / recommendations 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 2010-2011 ACA Audit	))	File No. GR-2012-0077

AFFIDAVIT OF DAVID M. SOMMERER

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

David M. Sommerer, being of lawful age, on his oath states: that as a Utility Regulatory Manager in the Procurement Analysis Unit of the Utility Services Department, he has participated in the preparation of the foregoing report, consisting of 9 pages to be presented in the above case; that he has verified that the following Staff Memorandum was prepared by himself and Staff of the Commission that have knowledge of the matters set forth as described below; that he has verified with each of the Staff members listed below that the matters set forth in the Staff Memorandum are true and correct to the best of his knowledge and belief,

Anne Crowe, Utility Regulatory Auditor IV:	Billed Revenues and Actual Gas Costs
Derick Miles, PE, Utility Regulatory Engineer I:	Reliability Analysis & Gas Supply Planning
Kwang Choe, PhD, Regulatory Economist II:	Hedging
Lesa A. Jenkins, P.E., Regulatory Engineer:	Reliability Analysis and Gas Supply Planning

that he has knowledge of the matters set forth in such report and that such matters are true to the best of his knowledge and belief.

David M. Sommerer

David M. Sommerer

Subscribed and sworn to before me this 20th day of December, 2012.

Sara Seaver

Notary Public

SARA SEAVER
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: August 23, 2015
Commission Number: 11231209