MEMORANDUM

| TO: | Missouri Public Service Commission Official Case File Case No. GR-2009-0337, Union Electric Company d/b/a AmerenUE | | | | | |
|----------|--|--|--|--|--|--|
| FROM: | David M. Sommerer, Manager – Procurement Analysis Department Anne Allee, Regulatory Auditor – Procurement Analysis Department Kwang Choe, Ph.D., Regulatory Economist – Procurement Analysis Department Derick Miles, Utility Engineering Specialist – Procurement Analysis Department Lesa Jenkins, P.E., Regulatory Engineer – Procurement Analysis Department | | | | | |
| | /s/ David M. Sommerer 12/20/10 Project Coordinator / Date | /s/ Lera L. Shemwell 12/20/10 General Counsel's Office / Date | | | | |
| SUBJECT: | Staff Recommendation in Case No. GR-2009-0337, Union Electric Company d/b/a AmerenUE, 2008-2009 Actual Cost Adjustment Filing | | | | | |

DATE: December 20, 2010

The Procurement Analysis Department (Staff) of the Missouri Public Service Commission has reviewed Union Electric Company d/b/a AmerenUE's (Company or AmerenUE) October 16, 2009 Actual Cost Adjustment (ACA) filing for the 2008-2009 period. The filing, in Case No. GR-2009-0337, contains the Company's ACA balance calculations.

AmerenUE's Missouri natural-gas operations are served by the following interstate pipelines: Panhandle Eastern Pipe Line (PEPL), Texas Eastern Transmission Corporation (TETCO), and Natural Gas Pipeline Company of America (NGPL) and MoGas Pipeline (MoGas) (f/k/a Missouri Pipeline Company and Missouri Gas Company). PEPL serves approximately 102,000 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. AmerenUE acquired its Rolla area system, formerly the Aquila MPS - Eastern system, on May 1, 2004. PEPL and MoGas serve approximately 3,700 customers in the Rolla, Salem, and Owensville area.

In Case No. GR-2007-0003, in its March 15, 2007 *Order Approving Stipulation and Agreement*, the Missouri Public Service Commission (Commission) authorized AmerenUE to create a state-wide, single Purchased Gas Adjustment (PGA) and ACA rate. The Rolla area customers served from MoGas continue to pay an additional incremental PGA charge for MoGas transportation.

Staff's review included an analysis of the billed revenues and actual gas costs used in the Company's computation of its ACA rates. A comparison of billed revenue recovery with actual gas costs will result in an over-recovery or under-recover of the ACA balance.

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Staff conducted the following analyses:

- (a) a hedging review to determine the reasonableness of the Company's hedging practices for this ACA period;
- (b) a reliability analysis including a review of estimated peak-day requirements and the capacity levels needed to meet these requirements; and
- (c) a review of the Company's gas purchasing practices to determine the prudence of the Company's purchasing decisions for this ACA period.

STAFF DISCUSSION OF FINDINGS

MISSOURI PIPELINE COMPANY AND MISSOURI GAS COMPANY

The Missouri Pipeline Company (MPC) and Missouri Gas Company (MGC) issue is an open item from prior ACA Cases. The Commission found in GC-2006-0491 (Amended Report and Order dated October 11, 2007) that MPC and MGC, in violation of their tariffs, overcharged non-affiliated customers form July 2003 through May 2008. Discounted rates to MPC and MGC affiliate, Omega, were the maximum rates that could be charged to non-affiliated customers. MPC/MGC, however, even after the October 11, 2007 Report and Order, continued to bill AmerenUE for transportation services at rates higher than their Commission approved maximum tariff rates. While AmerenUE paid MPC/MGC's bill under protest, AmerenUE paid and passed these unapproved rates (overcharges) through to its customers. AmerenUE has filed in Circuit Court to recover the overpayment. Staff has separated the dollar amount of this issue into the following two pieces based upon the timing of the overcharges:

- 1. Overcharge amounts AmerenUE paid to MPC/MGC <u>prior</u> to Commission's Order in GC-2006-0491. The rates AmerenUE paid MPC/MGC exceeded the tariff rate established in the Commission's order, but AmerenUE could not have known the outcome of the Commission complaint.
- 2. Overcharge amount paid to MPC/MGC <u>after</u> the Commission's Order in GC-2006-0491. AmerenUE knew the rates it was paying MPC/MGC exceeded the effective tariff rates established by Commission's October 11, 2007 Revised Report and Order.

| Overcharges | | | | | |
|------------------------|------------------|-----------------|-----------------|--|--|
| | | MPC – | | | |
| Time Period | MGC – Rolla Area | PEPL/Combined | Total | | |
| July 2003 - July 2007 | \$ 3,284,475.28 | \$2,079,592.64 | \$ 5,364,067.92 | | |
| August 2007 - May 2008 | \$ 1,315,598.26 | \$ 770,219.50 | \$ 2,085,817.76 | | |
| Total | \$ 4,600,073.54 | \$ 2,849,812.14 | \$ 7,449,885.68 | | |

The table below shows the total of each piece of the overcharges:

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The Rolla area customer's total overpayment to MGC is \$4,600,074. The PEPL/Consolidated area customer's overpayment to MPC is \$2,849,812 in total.

History of this issue

During prior ACA periods, AmerenUE had firm transportation service agreements with then Missouri-regulated intrastate pipelines, MPC and MGC. On June 21, 2006, the Staff filed a complaint against MPC and MGC in Case No. GC-2006-0491. The complaint alleged, among other things, that, in accord with their Missouri tariffs, through their transactions with an affiliate, MPC and MGC gave their affiliate lower rates and, by doing so, lowered the maximum transportation rates MPC and MGC could charge non-affiliates. AmerenUE is a non-affiliate 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. The August 28th Order was withdrawn on October 4, 2007, and reissued 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 their maximum firm reservation 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 firm and interruptible commodity rates for all non-affiliates. The overcharges continued until MPC and MGC, now MoGas Pipeline, implemented new transportation rates, effective June 1, 2008, upon FERC's approval of MoGas' FERC filed tariff rates. The Commission's order was affirmed by the Western District Court of Appeals in Case No. WD 70325, *Missouri Pipeline Co. v. Missouri Public SAerv. Com'n.* 307 S.W.3d 162 (Mo.App. W.D. 2009) *cert. denied* February 2, 2010.

The maximum tariff rates determined by this Commission in its *Revised Order* were lower than the rates MPC and MGC billed AmerenUE. Thus, from July 2003 through July 2007, AmerenUE paid and passed through to its customers rates that exceeded the maximum tariff rates. These overcharges make up the first piece of this issue. Prior to August 2007, AmerenUE could not have known the rates it paid would be higher than the maximum rates set by the Commission in its August 2007 Order. The table below shows the amount of overcharges by ACA period for this timeframe. MO PSC Case No. GR-2009-0337 Official Case File Memorandum December 20, 2010 Page 4 of 10

| ACA Period Sept - Aug | То | tal Invoice Paid | - | tal Invoice with Affiliate Rate | Overcharged Amount |
|--------------------------|----|------------------|----|------------------------------------|---------------------------------|
| 2002/03 ¹ | \$ | 86,362.00 | \$ | 86,362.00 | \$ - |
| 2003/04 | \$ | 1,089,137.60 | \$ | 1,064,403.24 | \$ 24,734.36 |
| 2004/05 | \$ | 2,354,590.67 | \$ | 1,507,255.45 | \$ 847,335.23 |
| 2005/06 | \$ | 2,429,541.44 | \$ | 186,138.87 | \$ 2,243,402.58 |
| 2006/07 ² | \$ | 2,509,541.01 | \$ | 260,945.25 | \$ 2,248,595.76 ³ |
| Subtotal | \$ | 8,469,172.73 | \$ | 3,105,104.80 | \$ 5,364,067.92 |

¹ Months of July & Aug 2003 only because Order GC-2006-0491 affected rates beginning 7/1/03

² Excludes August 2007 because Commission Order issued on August 28, 2007

³ Different amount than amount stated in Staff's Memorandum in ACA Case GR-2008-0107 due to an error correction.

Staff's Considerations

Staff considered the following information in its review of the MPC and MGC gas costs:

- When the opportunity arose to potentially lower gas costs for its customers through Case No. GC-2006-0491, AmerenUE actively participated.
- AmerenUE provided a witness to support the Staff in its attempt to obtain an injunction to prevent MPC and MGC from billing higher unauthorized rates.
- AmerenUE has filed a Petition in the Cole County Circuit Court to obtain refunds of the MPC/MGC overcharges on behalf of its customers.
- Along with the Staff and the Municipals, AmerenUE filed a brief in the Supreme Court opposing transfer of the Western District's decision upholding the Commission's *Revised Order*. The Court did not take transfer.

Staff considers these actions to be prudent. Staff also expects AmerenUE to diligently pursue and return refunds of the overcharges to its customers. As recommended in ACA Case Nos. GR-2008-0107 and GR-2008-0366, Staff recommends this case be held open in order to monitor AmerenUE's actions with regard to its pursuit of refunds. Staff recommends that all refunds of the overcharges and all associated interest collected from MoGas be refunded to the customers that were overcharged.

The second part of this analysis involves the amount paid to MPC/MGC after the Commission's Order in GC-2006-0491. The months of this time period are August 2007 through May 2008. By August 2007, AmerenUE, MPC and MGC were aware of the initial Commission Order in GC-2006-0491. Despite the Commission Order, MPC and MGC continued to bill AmerenUE rates that exceeded the maximum tariff rates Ordered by the Commission. Once AmerenUE became aware of the Commission's initial Order and received its bill from MPC and MGC for service, it adjusted the billed rates and paid the amount consistent with the Commission's Order. However, AmerenUE later paid the balance of the MPC and MGC bills under protest. These overcharges were also included in AmerenUE's 2007/08 ACA calculation. The table below shows the amount of overcharges for this period of time.

| ACA Period Sept - Aug | То | tal Invoice Paid | al Invoice with filiate Rate | 0 | vercharged Amount |
|--------------------------|----|------------------|-------------------------------------|------|--------------------------|
| 2006/07 ¹ | \$ | 192,459.08 | \$ 4,057.43 | \$ | 188,401.65 |
| 2007/08 | \$ | 2,145,401.52 | \$ 247,985.42 | \$ 1 | ,897,416.10 ² |
| Subtotal | \$ | 2,337,860.60 | \$ 252,042.85 | \$ 2 | 2,085,817.75 |

¹ Includes August 2007 only because Commission Order issued on August 28, 2007 ² Different amount than amount stated in Staff's Memorandum in ACA Case GR-2008-0366 due to error correction.

For the overcharges that fall within the second time period, the earliest date AmerenUE could have refused to pay the overcharged amount is after the Commission issued its initial order. 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. This date falls within AmerenUE's next ACA period. Staff may make further recommendations as necessary.

RELIABILITY ANALYSIS AND GAS SUPPLY PLANNING

As a gas corporation providing natural gas service to Missouri customers, the Company is responsible for conducting reasonable, long-range supply planning and for 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 LDC's plans and decisions regarding estimated peak-day requirements and the LDC's pipeline capacity levels to meet those requirements, peak-day reserve margin and the rationale for this reserve margin level, and natural gas supply plans for various weather conditions.

Staff has no proposed financial adjustments to the 2008/2009 ACA period related to Reliability Analysis and Gas Supply Planning section.

The following is a list of comments and concerns by Staff as they pertain to Reliability Analysis and Gas Supply Planning for the respective service area:

Marble Hill Region (served by Natural Gas Pipeline Company - NGPL) AmerenUE's Storage Balance Targets Nearing the Winter Season

Staff has a concern with AmerenUE's target ending October storage balance. Staff's concern is AmerenUE might be forced to sell gas at a loss if it fills its storage too soon. Going into November 2008, AmerenUE was 5% ahead of its plan to have 95% of its Maximum Storage Quantity (MSQ) of 50,000 dth in storage at the end of October. Although the NGPL storage balance peaked at 100% of MSQ, the company did not have to sell gas at a loss because the weather for October 2008 was 10% cooler than normal, and November was

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17% cooler than normal. Had the months of October and November been normal or warmer than normal, it is possible that the Company would have had to sell gas at a loss.

In further evaluation of AmerenUE's October and November storage balance, Staff noticed the Company's 2007 Demand Studies for the Marble Hill Region show the November maximum customer demand volumes of 17,792 dekatherms, and normal volumes of 19,051 dth. Minimum, normal, and maximum estimated load volumes are a consideration in the LDCs storage injection and withdrawal plans. Normal volume estimates should not exceed the maximum customer demand volume. Staff is concerned that the maximum estimated load volumes being lower than the normal load volumes, may be contributing to high storage balances in October and November

For the 2005/2006 through 2007/2008 ACA Reviews, Staff has commented regarding the high level of the Company's storage balances (for NGPL) at the end of October. As recommended in the prior three ACA reviews, Staff again recommends AmerenUE reconsider its target ending October storage balance to give itself more flexibility for injecting additional natural gas when October or November weather is warmer than normal.

<u>Columbia/Jefferson City/Wentzville/Rolla Region ("Columbia region" served by Panhandle</u> <u>Eastern Pipe Line Company – PEPL and Trunkline Gas Company)</u>

AmerenUE estimates the reserve margin for the Columbia region for the 2008/2009 ACA period is 2.5%. When considering variability using the confidence interval factors from AmerenUE's analysis, the reserve margin is a *negative* 2.5%. Staff encourages the Company to continue to evaluate its capacity needs, on PEPL and Trunkline, for the Columbia region in its 2010 Demand Studies.

| 2008/2009 Reserve Margin | | | | | | | |
|---|--------------------|----------------------------------|--|--|--|--|--|
| Considering Variation in Peak Day Estimate | Estimated Value | Upper 95% confidence interval | | | | | |
| Capacity | 145,250 | 145,250 | | | | | |
| Less School Aggregation Release | <u>(1,457)</u> | <u>(1,457)</u> | | | | | |
| Available Capacity | 143,793 | 143,793 | | | | | |
| Less Estimated Peak Day Requirements | (140,317) | (147,508) | | | | | |
| Reserve | 3,476 | (3,715) | | | | | |
| Reserve Margin | 2.5% | -2.5% | | | | | |

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HEDGING

The Staff reviewed AmerenUE's Natural Gas Supply Plan as it relates to hedging. AmerenUE's plan is to engage in long-term planning and procurement for its utility gas supply portfolio to ensure system reliability and to mitigate price volatility for its purchased gas adjustment (PGA) sales customers. In particular, the Company's strategy is to hedge against market price volatility. 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 each of the forward thirteen seasons are phased in based upon the proximity to the current season, the current futures prices, and the availability of supply and general market conditions. The stated objective is to create a forward gas supply portfolio and to dollar-cost-average gas supply prices to mitigate price volatility for retail sales customers, reduce natural gas supply acquisition risk, enhance system reliability while maintaining flexibility to manage load variations, and separate physical delivery and financial exposure.

AmerenUE receives regular natural-gas market reports analyses from energy and financial firms. AmerenUE also uses consulting services for regular market reports and assessments.

The Staff reviewed AmerenUE's hedging practices, with a focus on the winter months, November 2008 through March 2009. One of the goals of a hedging plan is to mitigate the price volatility of the commodity (natural gas) for the winter heating season. AmerenUE's hedging implementation plan is to protect approximately 67-75% of normal winter demand requirements against market price volatility for the overall three AmerenUE systems, PEPL-UE, TETCO-UE and NGPL-UE. The price protection, including storage, comes from fixed-forward contracts, and financial natural-gas swaps. Most of these hedges were placed between early February 2006 and late October 2008 for the winter heating season of November 2008 through March 2009. In addition, the Company purchased financial natural-gas swaps in early January 2009 for February 2009 and March 2009 for PEPL-UE system. These actions resulted in 88% of AmerenUE's gas supply being hedged, based on the Company's actual delivered volumes for the winter months and 93% based on normal volumes for the winter months. In warmer-than-normal winter conditions, this percentage would be greater. 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 91% and 80% hedged, respectively, while NGPL-UE was 43% hedged for November 2008 through March 2009 based on actual delivered gas. PEPL-UE and TETCO-UE were 95% and 90% hedged based on normal volumes. For NGPL-UE, it was 38% hedged based on normal volumes. The higher overall hedging level compared to the planned level for AmerenUE is, in part, attributable to the hedges placed in early January 2009 for February 2009 and March 2009 for PEPL-UE system. The Company's rationale for the January purchases are: 1) November 2008 and December 2008 were colder than normal and temperatures for the two weeks following January 7th were also forecasted to be below normal; 2) As of January 6th the Company had only 50% of PEPL storage inventory remaining (this was much lower than the previous winters), with over half of the winter season remaining; 3) The December-January pace of storage withdrawal would deplete storage by the end of February; and 4) Locking up supply in the low \$4 range in the face of cold weather MO PSC Case No. GR-2009-0337 Official Case File Memorandum December 20, 2010 Page 8 of 10

forecasts was prudent at the time. Additionally, for its NGPL area, AmerenUE relied only on storage for hedging, which resulted in much lower hedge percentage than its other systems. The Company explained in the previous ACA period that NGPL's small system has less flexibility for fixed price volumes than the larger systems and demand on this system has declined.

While Staff is concerned with the negative financial impacts AmerenUE's high level of hedging had in this ACA period, Staff reviews the prudence of a Company's decision making based on what the Company knew at the time it made its decisions. AmerenUE has explained in detail that natural gas market price volatility during the 2008-2009 ACA period was a factor. Market prices continued to spike in the first half of 2008 followed by precipitous drops between the second half of 2008 and the early part of 2009. Market prices went from above \$13/MMBtu in July 2008 to below \$4/MMBtu in March 2009. Thus, the financial hedges placed prior to the second half of the year 2008 for the winter heating season of November 2008 through March 2009 and for April through August 2009, in particular, resulted in substantial losses as market prices declined through late August 2009.

In response to Staff's data requests pertaining to the hedging evaluation, AmerenUE made a presentation regarding its hedging analysis for the 2008-2009 ACA periods. AmerenUE did not, based on the market information available at the time the financial hedges were placed, expect that the natural gas market prices would collapse in the second half of 2008 and in 2009, and thus did not alter its hedging strategy. Although Staff is not suggesting that the Company should or could design its hedging strategy in order to beat the market, nor is Staff questioning the prudence of the Company's overall hedging plan, its planning should be flexible enough to incorporate changing market circumstances. The Company should continually evaluate its hedging strategy in response to changing market dynamics to balance the cost of hedging against the goal of price stabilization. For example, the Company should evaluate how well price parameters, upon which the Company bases some of hedging executions, are reflective of the current market. The Company should also examine the balance between storage and other financial hedging instruments in the overall hedging portfolio.

RECOMMENDATIONS

1. Although Staff has proposed no adjustments to the Company's filed ACA balances in this case, Staff proposes to reserve its recommendation on the ACA balances pending AmerenUE's pursuit of refunds from MPC and MGC. AmerenUE has filed a petition in Cole County Circuit Court, Case No. 09AC-CC00398. Although this period does not include over-charges from MPC and MGC, due to the cumulative nature of the ACA balance, past over-charges impact this period's ACA balance and appear in the table shown below. The Staff recommends the Commission hold this ACA case open so that Staff can monitor AmerenUE's pursuit of refunds from MPC and MGC and make further recommendations as necessary.

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| | Balance per AmerenUE Filing | Staff Adjustments | Ending Balances |
|--------------------------|--------------------------------|----------------------|--------------------|
| Firm Sales ACA | \$(3,444,553)* | \$0 | \$(3,444,553) |
| Interruptible Sales ACA | \$(94,451) | \$0 | \$(94,451) |
| Rolla System: Firm Sales | \$12,809 | \$0 | \$12,809 |

* 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.

- 2. Respond to Staff's concerns in the Reliability Analysis and Gas Supply and Planning section. Staff has no adjustments related to Reliability Analysis and Gas Supply and Planning.
- 3. The Staff recommends the Company assess and document the effectiveness of its hedges for the 2009-2010 ACA and beyond. The analysis should include
 - a. All documents that examine the cost effectiveness and/or results of the Company's hedging activities as it relates to the Company's goal of price stability and/or mitigating price spikes.
 - b. All documents that explain:
 - i. How the amount of the hedged volumes was determined;
 - ii. How the hedged volumes, both physical and financial, were allocated among various hedging instruments;
 - iii. Whether the costs of hedging justified the costs for the price protection and whether this evaluation is done continually;
 - iv. How the Company determined time and price driven hedges;
 - v. Whether or not the actual hedging activities were consistent with the Company's hedging plan for the ACA period under review in this case;
 - vi. Any market anomalies that caused the Company to deviate from its hedging plan and/or policies and what the impact was on the Company's hedges for physical supplies of natural gas.
- 4. Staff encourages hedging for natural gas price stabilization The Staff also recommends the Company analyze and document whether any changes should be made to the Company's hedging policy/plan. If the Company plans to change

hedging strategies, the Company should provide copies of all analyses including any and all documents regarding changes to the Company's hedging policy/plan in light of the negative financial impacts in this ACA period.

- a. Include all supporting documents considered for the hedging policy/plan changes made including but not limited to: the volumes to hedge, the types of hedging instruments to use, the prices to hedge, and the timing of hedges.
- b. Include documents discussing if changes to the natural gas market environment or other factors have affected the Company's future hedging policy / plan and how any changes would reasonably balance protection of rate payers and achievement of cost effective hedging results.
- c. Evaluate whether achieved levels are actually approaching coverage in warmer-than-normal winter scenarios that could exceed 100% hedging.
- 5. Respond to the recommendations herein within 30 days.

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

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In the Matter of Union Electric Company d/b/a AmerenUE's Purchased Gas Adjustment (PGA) Factors.

Case No. GR-2009-0337

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 Department of the Utility Services Division, he has participated in the preparation of the foregoing report, consisting of 10 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 Allee, Regulatory Auditor – Billed Revenue and Actual Gas Costs Kwang Choe, Ph.D., Regulatory Economist - Hedging Derick Miles, Utility Engineering Specialist - Reliability Analysis and Gas Supply Planning Lesa 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

Subscribed and sworn to before me this

day of

D. SUZIE MANKIN Notary Public - Notary Seal State of Missouri Commissioned for Cole County My Commission Expires: December 08, 2012 Commission Number: 08412071

Notary Public