MEMORANDUM

- TO: Missouri Public Service Commission Official Case File, Case No. GR-2006-0333, Union Electric Company d/b/a AmerenUE
- FROM: David M. Sommerer, Manager Procurement Analysis Department
 Anne Allee, Regulatory Auditor Procurement Analysis Department
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 Derick Miles, Utility Engineering Specialist Procurement Analysis Department
 Lesa Jenkins, P.E., Regulatory Engineer Procurement Analysis Department

/s/ David M. Sommerer	09/18/07	/s/ Lera L. Shemwell 09/18/07	
Project Coordinator / Date		General Counsel's Office / Date	

- SUBJECT: Staff Recommendation in Case No. GR-2006-0333, Union Electric Company, d/b/a AmerenUE's 2005-2006 Actual Cost Adjustment Filing
- DATE: September 18, 2007

The Procurement Analysis Department (Staff) has reviewed Union Electric Company, d/b/a AmerenUE's (Company or AmerenUE) 2005-2006 Actual Cost Adjustment (ACA) filing. This filing was made on October 17, 2006, and is docketed as Case No. GR-2006-0333. The filing contains the Company's calculations of the ACA balance.

During this ACA period, AmerenUE separated its Missouri gas operations into the following pipeline service areas: Panhandle Eastern Pipe Line (PEPL or Panhandle), Texas Eastern Transmission Corporation (TETCO), and Natural Gas Pipeline Company of America (NGPL). PEPL serves approximately 95,600 customers in the Jefferson City/Columbia area. TETCO serves approximately 19,200 customers in the Cape Girardeau area. NGPL serves approximately 2,000 customers in the Marble Hill area. AmerenUE acquired the Rolla system, formerly the Aquila MPS – Eastern system, on May 1, 2004. PEPL, Missouri Pipeline Company (MPC), and Missouri Gas Company (MGC) serve approximately 3,900 customers in the Rolla, Salem, and Owensville area.

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-recovery 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.

LINE LOSSES FOR TRANSPORTATION CUSTOMER

AmerenUE's tariff requires it to make an adjustment to its transportation customers' actual metered volumes so that the distribution system's two percent line losses (lost and unaccounted for gas) are taken into consideration in determining the transportation customers' usage. As part of its audit, Staff found that AmerenUE was not making this line loss adjustment to the volumes of one of its transportation customers. This error also continued into the following ACA period. AmerenUE disclosed that it discovered the same error for an additional transport customer related to the following ACA period. The Company notified the Staff that it had corrected its process so that beginning August 1, 2007, the 2% line losses would be included in the transportation customers' usage. The error that occurred in this ACA period had no effect on the ACA rate charged to the firm sales customers, therefore, Staff proposes no adjustment to the PEPL ACA balance. However, the Staff recommends AmerenUE correct this error in its 2006/2007 ACA filing so that the error has no impact on the firm sales customer ACA balance. Staff has notified the General Counsel's office of this tariff violation.

PRIOR PERIOD ADJUSTMENTS

In the 2004/2005 ACA Case No. GR-2006-0087, Staff recommended adjustments to correct errors in the Company's ending ACA balances. The Company agreed Staff's adjustments were appropriate and agreed to adjust its ACA balances in accordance with Staff's recommendations. The Commission accepted Staff's adjustments and issued its Order Establishing Ending ACA Balances on February 15, 2007. However, AmerenUE had already made the current 2005/2006 ACA filing prior to Staff's recommendation and therefore was unable to incorporate Staff's adjustments in its filing. Staff recommends that the Company adjust its ACA balances to reflect the prior ACA period adjustments. The following are the necessary adjustments: increase the PEPL over-recovery by \$26,932, increase the NGPL under-recovery by \$4,736 and increase the TETCO over-recovery by \$3,576.

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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 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 has the following comments and concerns regarding the reliability analysis:

1. Updated Demand Studies

The Natural Gas Supply Plan for September 2005 through August 2006 Data Request No. 67 (DR No. 67) states that the demand studies are routinely updated to capture changes in demand caused by customer growth, customer loss, conversions to transportation service, increases in appliance efficiency and other factors that impact the demand profile of the system over time. Staff's 2001/2002 ACA review revealed the revised Natural Gas Supply Plan (2001/2002 ACA, GR-2002-0438 DR No. 29) and the Risk Management Policy stated that the demand studies are updated on a routine cycle at least every three years. The Company also states that each year, after the winter season, the accuracy of the regression models is reviewed against actual system performance to determine if significant changes to the distribution system have occurred, and if so, a new demand study will be prepared to revise the accuracy of the model. The 2004 Demand Studies included data through March 2004 and were submitted to Staff in January 2006. Using AmerenUE's schedule, Staff expects revised Demand Studies for 2007, concluding the winter of 2006/2007, for AmerenUE's use in planning for the 2007/2008 ACA Review.

a. Analysis of Capacity Requirements by Pipeline

The 2007 Demand Studies should segregate the three major pipelines on which AmerenUE has capacity (PEPL, NGPL, and TETCO). Additionally, in regards to the PEPL study; it should include the following demand studies:

1) the Rolla/Salem/Owensville area for appropriate MGC capacity;

2) the Wentzville, Curryville, and Winfield areas and Rolla, Salem and Owensville areas for appropriate MPC capacity; and,

3) the Columbia/Jefferson City and Rolla area for appropriate PEPL capacity.

b. Analysis and Support for Growth for Peak Day Capacity Estimates – All systems

Each of the Demand Studies state for all of AmerenUE's operating areas; the Peak Day Design has been extended to include five seasons and estimates 0.5% growth per year. This is based on AmerenUE's 2006 budget numbers supplied by the Corporate Planning Department which projects 3% load growth over the next five years. Staff reviewed customer load growth data submitted in response to DR No. 2.1 (supplemental), and this estimated growth rate seems reasonable for the Columbia area, however, appears to overestimate growth for all other areas. The Demand Studies need to include a better explanation of future growth numbers and the Company's reasoning for choosing the numbers. Because capacity planning is done every three years, and contract decisions impact multiple years, the estimation for future growth must be based on reasonable numbers.

c. Reserve Margin and Capacity Planning

The 2007 Demand Studies must include reserve margin estimates for each pipeline, including the 2007/2008 winter and at least the next 5 winters, including the workpapers supporting these estimates. AmerenUE's plans should explain why the capacity levels are reasonable, and if not, the actions the Company is pursuing to modify its capacity portfolio.

2. Storage Monitoring and Plan Review– Marble Hill Service Area

The Company Storage Plan (DR No. 67) states: "...seasonal storage services will be filled to near maximum inventory levels while no-notice storage will be approximately 95% full to allow for possible early winter season injections; to allow for injections on warm winter days when flowing gas supplies may exceed citygate demand." The 95% threshold was a change from 90% from the prior 2004/2005 ACA Review period. Although the NGPL storage is *not* no-notice, it does allow for injections or withdrawals in the winter months. By planning to fill to near maximum, the Company has no flexibility to inject, if necessary, for a warm November. The AmerenUE storage plan for this winter (DR No. 74) shows the planned storage level at 97.2% of Maximum Storage Quantity (MSQ) at the end of October. AmerenUE actually filled NGPL storage to

96.4% by the end of September and to 100% by the end of October. Because of the warm weather in November (87% of normal) and little ability to inject into storage, the Company made an off-system sale of 5,850 MMBtu. Staff cannot find fault with this decision as the Company sold the gas at a higher price than the purchase price. The Company sold this gas at a profit, which the Company flowed through the ACA to rate payers as a reduction to gas costs.

It is Staff's recommendation that the Company evaluate its plan to fill this storage to near full at the end of October giving it the option of injecting into storage when the weather is warm in November, so that an off-system sale is not the only option for dealing with excess gas.

3. Cape Girardeau Reserve Margin and Capacity Planning

Changes to the capacity level for this system will first impact the winter of 2006/2007 and thus, it will be reviewed in the 2006/2007 ACA.

HEDGING

The Staff reviewed AmerenUE's hedging practice for the winter months, November 2005 through March 2006. The main 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. AmerenUE's hedging implementation plan was designed to protect approximately 67% of normal winter demand requirements against market price volatility for 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. Hedges utilizing the fixed price contracts and the financial natural gas swaps were placed between late April and mid July 2005 for the winter heating season of November 2005 through March 2006. PEPL-UE and NGPL-UE were 93% and 98% hedged, respectively, while TETCO-UE was 78% hedged for November 2005 through March 2006 based on actual delivered gas.

The Staff also reviewed AmerenUE's Natural Gas Supply Plan. In its gas procurement strategy, AmerenUE engages in long-term planning and procurement for its utility gas supply portfolio to insure system reliability and to mitigate price volatility for its PGA sales customers. In particular, the Company's hedging strategy is to hedge against market price volatility. The current supply 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

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prices, and the availability of supply and general market conditions. The objective is to create a forward gas-supply portfolio and to dollar-cost-average gas supply prices that mitigate price volatility for the PGA sales customers, reduces natural gas supply acquisition risk, enhances system reliability while maintaining flexibility to manage load variations, and separates physical delivery and financial exposure. The primary goal of the hedging strategy is to dampen price swings, not specifically to reduce actual gas costs to the utility's customers. Beating the market is not considered the object of a successful hedging strategy. Price stability is the objective.

AmerenUE receives regular natural-gas market analyses from energy and financial firms such as Conoco Phillips, Bank of America, Deustche Bank, Barclays Capital, Coral Energy (Shell Trading), J.P. Morgan Chase, Merrill Lynch, and Pira at no cost. AmerenUE also uses Risk Management Inc., a paid consultant, for regular market reports and assessments.

Although the Company's hedging practice was appropriate for November 2005 through March 2006, the Staff recommends that the Company continue to assess and document the effectiveness of its hedges for the 2006-2007 ACA and beyond.

RECOMMENDATIONS

The Staff recommends the Commission issue an order requiring AmerenUE to:

1. Establish the following account balances in its next ACA filing to reflect the (over)/under recovery of the ACA balances to be (refunded)/collected from the ratepayers as of August 31, 2006:

	Balance per	Staff	Ending
	AmerenUE Filing	Adjustments	Balances
Natural Gas Pipeline Co. of America:			
Firm Sales ACA	\$ 36,773	\$4,736	\$ 41,509
Interruptible Sales	0	0	0
Panhandle Eastern Pipe Line Co:			
Firm Sales ACA	\$ (3,928,900)	\$ (26,707)	\$ (3,955,607)
Interruptible Sales ACA	\$ 188,749	\$ (225)	\$ 188,524
Former Aquila Eastern System Incremental:			
Firm Sales	\$ 11,116	0	\$ 11,116
Texas Eastern Transmission Corp:			
Firm Sales	\$ (1,495,196)	0	\$ (1,495,196)
Interruptible Sales	\$ (279,044)	\$ (3,576)	\$ (282,620)

- 2. Correct the line-loss error for its transportation customers in its 2006/2007 ACA filing so that the error has no impact on the firm sales customers ACA balance.
- 3. Continue to assess and document the effectiveness of its hedges for the 2005/2006 period and beyond.
- 4. Respond to Staff's concerns in the Reliability Analysis and Gas Supply and Planning section related to:
 - updated demand studies;
 - analysis of capacity requirements by pipeline,
 - analysis and support for growth for peak day capacity estimates;
 - reserve margin and capacity planning; and,
 - storage monitoring and plan review for Marble Hill service area.
- 5. Respond to the recommendations herein within 30 days.

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of Union Electric Company d/b/a) AmerenUE's Purchased Gas Adjustment) (PGA) Factors to be Audited in its 2005-2006) Actual Cost Adjustment)

Case No. GR-2006-0333

AFFIDAVIT OF DAVID M. SOMMERER

SS.

STATE OF MISSOURI

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 \underline{n} 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:Line Losses for Transportation Customer and Prior Period
AdjustmentsKwang Choe:HedgingDerick MilesReliability Analysis and Gas Supply Planning
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 $\frac{1}{8}$

day of



Notary Public