

**BEFORE THE PUBLIC SERVICE COMMISSION**  
**OF THE STATE OF MISSOURI**

|   |   |                       |
|---|---|-----------------------|
| In the matter of Union Electric Company | ) |                       |
| d/b/a AmerenUE's Gas Adjustment         | ) |                       |
| Factors to be reviewed in its 2003-2004 | ) | Case No. GR-2005-0102 |
| Actual Cost Adjustment.                 | ) |                       |

**STAFF RECOMMENDATION**

COMES NOW the Staff ("Staff") of the Missouri Public Service Commission ("Commission") in the above-captioned matter and for its recommendation states as follows:

1. On October 15, 2004, Union Electric Company d/b/a AmerenUE filed its Actual Cost Adjustment (ACA) filing.
2. Staff's review included an analysis of the billed revenues and actual gas costs used by the Company to compute its ACA rates. Please see Appendix A, Staff's Recommendation (NP version).
3. Additionally, Staff reviewed the Company's gas purchasing practices to review the prudence of the company's purchasing decisions and Staff conducted a reliability analysis to assure that the Company had reasonably estimated peak day fuel and capacity needs.
4. As a result of its review, Staff recommends that the Commission: adopt the account balances recommended by Staff, order the Company to respond to Staff's recommendations within 30 days of the filing of this report, except for Staff's recommendations concerning reliability, to which the Company should be ordered to

**NP**

respond no later than January 31, 2006. The Commission should also order the Company to submit copies of the updated demand studies for each service area to the Staff no later than January 31, 2006.

WHEREFORE, the Staff recommends that the Commission issue its order: (1) requiring AmerenUE to respond to Staff's memorandum within 30 days; (2) adopting the account balances recommended by the Staff; (3) requiring Ameren to respond to Staff's reliability recommendations no later than January 31, 2006; and (4) requiring the Company to submit updated demand studies for each service area to the Staff no later than January 31, 2006.

Respectfully submitted,

DANA K. JOYCE  
General Counsel

/s/ Lera L. Shemwell  
Lera L. Shemwell  
Senior Counsel  
Missouri Bar No. 43792  
Attorney for the Staff of the  
Missouri Public Service Commission  
P. O. Box 360  
Jefferson City, MO 65102  
(573) 751-7431 (Telephone)  
(573) 751-9285 (Fax)  
Email: [lera.shemwell@psc.mo.gov](mailto:lera.shemwell@psc.mo.gov)

## **Certificate of Service**

I hereby certify that copies of the foregoing have been emailed, mailed, hand-delivered to all counsel of record this 9th day of November, 2005.

/s/ Lera L. Shemwell

## MEMORANDUM

TO: Missouri Public Service Commission Official Case File,  
Case No. GR-2005-0102, Union Electric Company d/b/a AmerenUE

FROM: Dave Sommerer, Manager - Procurement Analysis Department  
Anne Allee, Regulatory Auditor - Procurement Analysis Department  
Lesa Jenkins, P.E., Regulatory Engineer – Procurement Analysis Department  
Kwang Choe, Ph.D., Regulatory Economist – Procurement Analysis Department

/s/ Dave Sommerer 11/7/2005

Project Coordinator / Date

/s/ Thomas R. Schwarz, Jr. 11/7/2005

General Counsel's Office / Date

SUBJECT: Staff Recommendation in Case No. GR-2005-0102, Union Electric Company d/b/a AmerenUE's 2003-2004 Actual Cost Adjustment Filing

DATE: November 7, 2005

The Procurement Analysis Department (Staff) has reviewed Union Electric Company d/b/a AmerenUE's (Company or AmerenUE) 2003-2004 Actual Cost Adjustment (ACA) filing. This filing was made on October 15, 2004, and is docketed as Case No. GR-2005-0102. The filing contains the Company's calculations of the ACA balance.

AmerenUE separates 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 92,700 customers in the Jefferson City/Columbia area. TETCO serves approximately 19,100 customers in the Cape Girardeau area. NGPL serves approximately 2,300 customers in the communities of Fisk and Lutesville. AmerenUE acquired the Rolla system, formerly the Aquila MPS – Eastern system, on May 1, 2004. The Rolla system is served by the pipelines of Panhandle Eastern Pipe Line (PEPL or Panhandle), Missouri Pipeline Company (MPC), and Missouri Gas Company (MGC). The Rolla system serves approximately 4,200 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. Staff also reviewed AmerenUE's gas purchasing practices to determine the prudence of the Company's purchasing decisions.

In addition, Staff conducted a reliability analysis for AmerenUE including: 1) estimation of peak-day requirements and the capacity levels to meet those requirements; 2) review of peak-day reserve margin and the rationale for this reserve margin; and 3) review of natural gas supply plans.

## **RELIABILITY ANALYSIS**

The Company is responsible for operating its system in a safe and adequate manner. This objective requires the Company to conduct long-range supply planning in a reasonable manner and make prudent decisions from the information generated from this planning activity. A component of the ACA audit process is to examine the reliability of the LDC's gas supply, transportation, and storage capabilities. For this analysis, Staff reviews 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 underlying rationale for the resultant reserve margin, and natural gas supply plans for various weather conditions.

Staff's review of the status of reliability for the AmerenUE service areas of Fisk/Lutesville, Cape Girardeau, Columbia, and Rolla (previously Aquila MPS – Eastern System) produced the following comments and concerns.

### **1. Demand Studies – General**

- a. Demand Studies are AmerenUE's review of usage data and the transportation capacity needed for a historic peak cold day. The Company's Natural Gas Supply Plan for September 2003 through August 2004, Data Request No. 82 (DR82) stated that the demand studies are to be 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. The prior Natural Gas Supply Plan (2001/2002 ACA, GR-2002-0438 DR29) and the Company's Risk Management Policy required that the demand studies were to be updated on a routine cycle at least every three years. The Company's procedures further stated that each year after the winter season the accuracy of the Company's regression models is to be 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 2002 Demand Studies included data through March 2002 and were submitted to Staff in October and November 2003. Consistent with then current Company procedures, the Staff expected revised demand studies following the winter of 2004/2005 to be available for Staff review in the fall of 2005. The Company's current demand study has not been revised to reflect the Rolla operations integration into the Company's Columbia system.

AmerenUE informed Staff that it is currently updating the Demand Studies for all three systems and that the Columbia system Demand Study is being revised to include the Rolla area. AmerenUE expects the updated Demand Studies for each Missouri service area be provided to Staff no later than January 31, 2006. These demand studies are a critical element of a prudent gas-purchasing program as they define the amount of natural gas, type, and capacity necessary to maintain system reliability.

- b. The Company's 2002 Demand Studies provide estimates of peak-day requirements and the reserve margin for the year under review, but do not provide projections for future years. Since these Demand Studies are intended to only be updated by AmerenUE every three years, and capacity decisions are made based on these studies, decisions that will impact multiple years, Staff recommends that the demand studies include estimates of peak-day requirements for the next five years since the Company has adopted a gas purchasing strategy that covers six years. Additionally, these estimates for future years should be accompanied with: 1) the support for any growth factor that the Company deems reasonable for each of the five years; 2) the resultant estimated reserve margin for each of these years; and 3) a statement from AmerenUE regarding the adequacy of AmerenUE's reserve margins. In the event the Company finds inadequate or excess gas-supply capacity exists, the Company should provide a list of the actions AmerenUE intends to take to remedy the situation. Additionally, AmerenUE should consider documenting start-up times and reasonable operating hours for the propane facility for a peak day on its Cape Girardeau system.
- c. The Company's 2002 Demand Studies consider systems sales loads for a four year and three month period for the service areas of Fisk/Lutesville and Cape Girardeau, and a six year and five month period for the Columbia service area. Staff is concerned that the time frame for the data being reviewed for all three systems is too long, but particularly for the Columbia system. The AmerenUE analyses should consider how growth or other factors have impacted usage during the analysis period and whether changes throughout the period could be skewing the estimates of usage.

**2. Peak Day – School Aggregation – all systems**

AmerenUE excludes basic transportation and interruptible customer requirements in its peak day estimate because there is no obligation to provide back-up gas supplies. However, Ameren includes requirements for School Aggregation Service, a service similar to basic transportation, in both the pipeline capacity and the peak day requirements, even though schools obtain capacity through a capacity release and are responsible for providing their own supply.

AmerenUE states that the ultimate gas supplier to the Missouri School Aggregation Program has the responsibility to calculate the required maximum daily quantity (MDQ) level to be requested for release under the program. However, the Company also states that, in general, \*\* \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_. (DR96)

A review of historical data reveals that the coldest month weather would result in January having the expected greatest usage. If AmerenUE used the methodology that it has provided to Staff to estimate peak day requirements for its firm customers, the estimate

would fall short by 8% to 19% of peak-day requirements. Since this record cold January did not occur \*\* \_\_\_\_\_ \*\*, Ameren's methodology would fall even further short of the requirements for a peak cold day.

Thus, schools in the School Aggregation Program are acquiring capacity in quantities far less than needed for a potential peak cold day. Other customers, firm customers (mainly residential and small commercial customers) are being assigned the responsibility of carrying an extra load for these schools for all the months in which the schools do not cover their peak day capacity.

## HEDGING

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 purchased gas adjustment (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 seven seasons or three and one half years. Gas supply transactions and price hedges for each of the forward seven seasons are phased in based upon the proximity to the current season, the current futures prices, 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 necessarily to reduce gas costs to the utility's customers. Beating the market is not considered the object of a successful hedging strategy. The supply portfolio will also seek to diversify credit risk among counterparties which includes purchasing financial price hedging instruments from financial counterparties who are not involved with the physical delivery of natural gas.

Approximately 75% of normal winter requirements will be hedged against market price volatility. Storage withdrawals constitute about 50% of the hedge, and 25% are price hedged by purchasing an embedded price hedge along with the physical gas supply or by purchasing a separate financial contract. Embedded hedges include physical supplies purchased using a NYMEX price structure that can be fixed, physical supplies purchased with a costless price collar, and physical supplies purchased with price caps. Financial contracts include over-the-counter financial swaps and NYMEX futures contracts.

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. AmerenUE's hedging implementation plan was designed to protect approximately 75% of normal winter demand requirements against market price volatility. Three AmerenUE systems, PEPL-UE, TETCO-UE and NGPL-UE, combined were 70% hedged for November 2003 through March 2004 based on actual delivered gas, while the Rolla system was hedged for 80% of actual delivered gas. The price protection, including storage, comes from fixed-forward contracts, embedded hedges such as collars, and

financial natural gas swaps. AmerenUE receives regular natural-gas market analyses from energy and financial firms such as Conoco Phillips, Bank of America, UBS Warburg, GSC Energy, Deutsche Bank, Morgan Stanley, Anadarko Energy Services, OG &E Energy, at no cost. AmerenUE also uses Risk Management Inc., a paid consultant, for regular market reports and assessments.

## PIPELINE REFUND

On May 6, 2004, AmerenUE received a \$17,302.68 refund from Panhandle Eastern Pipe Line Company. This refund was not included in the calculation of the ACA balance for the PEPL service area. Staff proposes to adjust the May 2004 PEPL ACA account balance by a total of \$17,303 to recognize the receipt of the pipeline refund. This correction results in an overall \$17,415 decrease to the PEPL ACA account balance.

## RECOMMENDATIONS

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

### 1. Account balances

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, 2004:

|   | Balance per<br>AmerenUE Filing | Staff<br>Adjustments | Ending<br>Balances |
|---|--------------------------------|----------------------|--------------------|
| Natural Gas Pipeline Co. of America:<br>Firm Sales ACA  | \$ (139,869)                   |                      | \$ (139,869)       |
| Interruptible Sales                                     | \$ 0                           |                      | \$ 0               |
| Panhandle Eastern Pipe Line Co:<br>Firm Sales ACA       | \$ 1,128,651                   | \$ (17,164)          | \$ 1,111,487       |
| Interruptible Sales ACA                                 | \$ 81,787                      | \$ (251)             | \$ 81,536          |
| Transportation  | \$ 0                           |                      | \$ 0               |
| Former Aquila Eastern System Incremental:<br>Firm Sales | \$ 190,133                     |                      | \$ 190,133         |
| Texas Eastern Transmission Corp:<br>Firm Sales          | \$ 171,428                     |                      | \$ 171,428         |
| Interruptible Sales                                     | \$ 36,649                      |                      | \$ 36,649          |



**2. Reliability**

- a. Respond to the comments/concerns in the reliability section of this recommendation by January 31, 2006.
  - b. Submit copies of the updated demand studies for each Missouri service area to Staff by January 31, 2006.
3. Respond to the recommendations herein within 30 days.