

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

Application of Union Electric Company,)	
d/b/a AmerenUE, for Approval of)	
Decommissioning Cost Estimate for)	Case No. EO-2006-0098
Callaway Plant and Funding Level of)	
Nuclear Decommissioning Trust Fund)	

STAFF RECOMMENDATION

COMES NOW the Staff (“Staff”) of the Missouri Public Service Commission (“Commission”), and respectfully states as follows:

1. On August 31, 2005, Union Electric Company d/b/a AmerenUE (“AmerenUE”) filed its Application For Approval Of Decommissioning Cost Estimate For Callaway Plant And Funding Level Of Nuclear Decommissioning Trust Fund. The Application requests, among other things, that the Commission approve the continuation of the Company’s current funding level of its nuclear decommissioning trust fund.

2. On November 18, 2005, pursuant to Commission order, the Staff timely filed its Second Status Report stating, in relevant part, that the parties had reached an agreement in principle to settle this case, and that the Staff expected a Stipulation And Agreement to be filed by December 15, 2005. A Unanimous Stipulation And Agreement (“Agreement”) was filed in this case earlier today. As noted in the Agreement, the Staff intends that its Recommendation serve as its suggestions in support of the Agreement.

3. Attached hereto as Appendix A is the Staff’s Memorandum, which includes supporting discussion, analysis, and recommendations regarding AmerenUE’s Application.

WHEREFORE, the Staff submits its Recommendation and respectfully requests that the Commission issue an Order approving the Unanimous Stipulation And Agreement, also filed on this date, and taking the additional specific actions prayed for in that Agreement.

Respectfully submitted,

DANA K. JOYCE
General Counsel

/s/ Dennis L. Frey

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Certificate of Service

I hereby certify that copies of the foregoing have been mailed, hand-delivered, transmitted by facsimile, or electronically mailed to all counsel of record this 15th day of December 2005.

/s/ Dennis L. Frey

MEMORANDUM

TO: Missouri Public Service Commission Official Case File,
Case No. EO-2006-0098, Union Electric Company, d/b/a AmerenUE

FROM: John Kiebel, Utility Management Analyst III, Engineering and Management Services
Department

<u>/s/ John Kiebel/ 12-15-05</u> John Kiebel Project Coordinator/Date	<u>/s/ Steven Dottheim/ 12-15-05</u> Steven Dottheim General Counsel's Office/Date
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SUBJECT: Staff's Recommendation for Approval of Union Electric Company's Application for
Approval of the Funding Level of its Nuclear Decommissioning Trust Fund

DATE: December 15, 2005

AmerenUE Application

On August 31, 2005, Union Electric Company, d/b/a AmerenUE (AmerenUE or Company), filed an Application with the Missouri Public Service Commission (Commission) requesting that the Commission: 1) approve the Company's estimate of decommissioning costs and the funding level necessary to defray these costs; and 2) specifically find that the annual funding level contributed to the decommissioning trust fund is included in the Company's current cost of service for rate making purposes. In response, the Commission established Case No. EO-2006-0098.

On September 1, 2005, the Commission issued an Order in this case. In that Order, the Commission directed its Staff to file either a Stipulation And Agreement, including a recommendation and a proposed procedural schedule, or a status report stating when it plans to file its recommendation. On October 3, 2005, the Staff timely filed a Status Report indicating that it expected to file either a Stipulation And Agreement or a Recommendation along with a proposed procedural schedule by November 18, 2005. On November 18, the Staff timely filed, pursuant to an October 6, 2005 Commission Order, a Second Status Report announcing that the parties had reached an agreement in principle and that by December 15, 2005, either a Stipulation And Agreement or a Recommendation with a proposed procedural schedule would be filed.

Background

The U.S. Nuclear Regulatory Commission (NRC) defines the term "decommission" as follows in 10 C.F.R. §50.2 and limits decommissioning to the radiological part of the facility:

Decommission means to remove (as a facility) safely from service and reduce residual radioactivity to a level that permits release of the property for unstructured use and termination of license.

This Commission defines “decommissioning” and “decommissioning costs” as follows in 4 CSR 240-20.070:

(1) As used in this rule, decommissioning means those activities undertaken in connection with a nuclear generating unit’s retirement from service to ensure that the final removal, disposal, entombment or other disposition of the unit and of any radioactive components and materials associated with the unit, are accomplished in compliance with all applicable laws, and to ensure that the final disposition does not pose any undue threat to the public health and safety. Decommissioning includes the removal and disposal of the structures, systems and components of a nuclear generating unit at the time of decommissioning.

(2) As used in this rule, decommissioning costs means all reasonable costs and expenses incurred in connection with decommissioning, including all expenses to be incurred in connection with the preparation for decommissioning, including, but not limited to, engineering and other planning expenses; and to be incurred after the actual decommissioning occurs, including, but not limited to, physical security and radiation monitoring expenses, less proceeds of insurance, salvage or resale of machinery, construction equipment or apparatus the cost of which was charged as a decommissioning expense.

In addition, 4 CSR 240-20.070(9) establishes the frequency of filings with the Commission of information regarding the decommissioning trust fund, stating in pertinent part:

On or before September 1, 1990 and every three (3) years after that, utilities with decommissioning trust funds shall perform and file with the commission cost studies detailing the utilities’ latest cost estimates for decommissioning their nuclear generating unit(s) along with the funding levels necessary to defray these decommissioning costs. These studies shall be filed along with appropriate tariff(s) effectuating the change in rates necessary to accomplish the funding required.

AmerenUE owns 100% of the Callaway Nuclear Power Plant (Callaway). The Company’s electrical operations currently involve two jurisdictions to which decommissioning costs are allocated: (1) Missouri retail (state jurisdiction) and (2) Missouri wholesale (federal jurisdiction). Missouri’s retail jurisdictional demand allocator constitutes approximately 98.40% of AmerenUE’s electric operations on the basis of demand.

Filing History

The Company has made its triennial filings on a timely basis since Callaway went into operation on December 19, 1984. The Company filed its first decommissioning study on March 29, 1991 in Case No. EO-91-300. Subsequent filings were made in Case Nos. EO-94-81, EO-97-86, EO-2000-0205, and EO-2003-0083.

AmerenUE has indicated to the Staff that, with respect to the instant case, the Callaway nuclear decommissioning trust fund will be able to maintain its tax-qualified status without the Commission making a finding as to a specified dollar amount necessary to decommission Callaway.

Sale of Metro East Properties

The Company's annual nuclear decommissioning payment increased from \$6,214,184 in its 2002 filing to its current level of \$6,486,378 upon the May 2, 2005 transfer of AmerenUE's Metro East properties to AmerenCIPS (Metro East case, Case No. EO-2004-0108). The \$272,194 increase, or 4.38%, reflects the increased liability for decommissioning costs assumed by Missouri ratepayers. The contribution to the Missouri jurisdictional sub-account of the decommissioning trust fund for the quarter ending June 30, 2005 was pro-rated to reflect the number of days in the quarter prior to the May 2, 2005 closing date.

In accordance with the order in the Metro East case, 100% of the Illinois jurisdictional sub-account of the decommissioning trust fund was transferred to the Missouri jurisdictional sub-account upon the closing of the property transfer. The Illinois jurisdictional sub-account was closed as the decommissioning expense and the contribution amount associated with the Illinois jurisdiction ceased upon the closing of the Metro East transfer.

Decommissioning Cost Study

AmerenUE contracted with TLG Services, Inc. (TLG) to perform the analysis of the cost to decommission Callaway in 1993. TLG has been utilized by AmerenUE to update the 1993 cost study for each triennial review since 1993. According to the Application, TLG is an industry leader in nuclear decommissioning cost analysis, and has provided engineering and field services for contaminated facilities including estimates of decommissioning costs for nuclear generating units since 1982.

The Company's current estimate to decommission Callaway is \$586,515,200 in terms of 2005 Dollars. In the Company's prior filing, the estimate to decommission Callaway was \$515,339,000 in terms of 2002 Dollars. The estimated decommissioning cost in terms of 2005 Dollars is almost 14% more than it was in terms of 2002 Dollars.

The Staff has not performed an analysis of the cost to decommission Callaway.¹ The Staff does not

¹ In previous decommissioning cases, the Staff has advised the Commission of its intention to retain a consultant to

have the data necessary to either support or challenge the cost estimate to decommission Callaway, nor can it endorse the decommissioning cost amount provided by AmerenUE. The Staff recommends that the Commission not make a specific finding that the cost of decommissioning Callaway is approximately \$586,515,200.

The Staff believes that both AmerenUE and KCPL will seek NRC approval of license extensions that will permit them to continue operating their nuclear generating units for an additional 20 years. The Staff also notes that both AmerenUE and KCPL will need to file at least six more triennial decommissioning studies beginning in 2008 and prior to the expiration of the current nuclear plant operating licenses.

The Staff believes that a detailed analysis of the decommissioning cost is not warranted at this time. The Staff's conclusion is based on the estimated cost to hire a consultant and on the number of remaining years of operation for Callaway until the expiration of its license. However, the Staff continues to believe a consultant should be utilized in a future decommissioning case when Callaway is closer to license expiration.

Cost of Service

The Company believes that the \$6,486,378 annual contribution should provide a sufficient fund to decommission Callaway at the expiration of its current operating license in 2024. The Staff is willing to accept AmerenUE's amount for purposes of calculating the annual contribution given the lack of a Staff-endorsed detailed cost estimate. The Staff asserts that AmerenUE's annual contribution is included in the Company's current cost of service for ratemaking purposes.

Decommissioning Trust Fund Model

The Staff's Decommissioning Trust Fund Model was developed in 1999. The primary objective of the model was to calculate a "revised annual contribution" given various input data. This would help to assure that the trust fund will be sufficient for the eventual decommissioning of Callaway with no surplus funds remaining after payment of all decommissioning costs.

The model relies heavily on the assumptions set forth in Case No. EO-91-300, as well as the decommissioning cost estimates provided by TLG. Due to the present uncertainty of actual

decommissioning costs, it is Staff's position that Staff's assumptions provide the "best available" information on which to estimate an appropriate annual contribution amount. The current annual payment was calculated by the Company, and Staff believes it to be sufficient to cover the estimated decommissioning cost under a reasonable set of economic, financial and investment assumptions.

perform or assist in performing an analysis of the cost to decommission Callaway and Wolf Creek Generating Station (Wolf Creek), the nuclear generating unit owned in part by Kansas City Power & Light Company (KCPL). It was anticipated that the consultant would also provide a reconciliation between the Callaway and Wolf Creek decommissioning quantities, dimensions, weights and levels of radioactivity. The cost for the Staff to hire a consultant to perform the desired analysis has been priced as amounting to several hundred thousand dollars. As a consequence, the Staff does not anticipate seeking to hire such a consultant until further in the life of the Callaway and Wolf Creek generating units.

The calculation of an annual decommissioning expense and contribution amount is sensitive to varying forecasts of future decommissioning inflation and investment returns. Forecasted nominal investment returns are dependent upon future investment policy and on forecasts of real returns on bond investments, equity premiums over and above bond investment returns and on general inflation levels.

Based on its own analysis, the Staff believes it is appropriate to keep the funding level of the decommissioning trust fund at its current annual level, with payment made to the trust fund on a quarterly basis.

Decommissioning Trust Fund Performance

AmerenUE's decommissioning trust fund had a market value of \$220,451,094 as of June 30, 2005 for its Missouri jurisdictional portion of Callaway. The June 30, 2005 market value is almost 46% higher than the June 30, 2002 market value of \$151,015,590.

The Staff has calculated an internal rate of return for the trust fund and reviewed the overall rate of return of the fund. The overall rate of return is simply the percentage of gain/loss realized on the capital invested in the fund, which does not take into consideration the timing of deposits and withdrawals to the trust fund. AmerenUE's trust fund has achieved an overall after-tax rate of return of 8.53% since the August 31, 1985 inception of the fund.

Although both the internal rate of return and the overall after-tax rate of return provide Staff with a valuable measurement of how the fund is performing, the Staff chose to use the overall after-tax rate of return to evaluate the fund's overall performance. This is due to Staff's ability to benchmark current performance measurements against assumptions established by this Commission in Case No. EO-91-300. In that case, the Staff proposed two assumptions to be used for the purpose of evaluating future decommissioning funding needs: an inflation factor of 5% and an after-tax average return of 8.5%.

The Company's actual after-tax return of 8.53% through June 30, 2005 is slightly above the Staff's assumed after-tax return of 8.50%. The real rate of return, which removes the August 2005 Consumer Price Index inflation level of 3.60% from the actual after-tax return, is approximately 4.93%. This compares quite favorably to Staff's assumption on the real rate of return. The Staff assumed both an 8.50% after-tax average return and a 5.00% inflation rate to arrive at a 3.5% assumed real rate of return.

The Staff also reviewed information provided by AmerenUE, which compares the performance of AmerenUE's Decommissioning Trust to the following indices:

Name of Fund/Index	Inception Date	After-tax Return from Inception through Quarter Ended June 30, 2005
AmerenUE Decommissioning Trust	8/31/1985	8.53%
S&P 500 Equity Index	12/31/1970	11.28%
Lehman Aggregate Bond Index	12/31/1975	8.91%
Lehman Gov't/Credit Bond Index	12/31/1972	8.51%
Lehman Municipal	1/31/1980	7.90%
91-day Treasury Bill Index	11/30/1978	6.38%

Source: AmerenUE Response to Staff Data Request 0003 dated September 27, 2005.

Staff Recommendation

As a result of the Staff's review, the following areas were resolved among AmerenUE, the Staff and the Office of the Public Counsel:

- (1) AmerenUE will continue to fund the decommissioning trust fund at the annual level of \$6,486,378.
- (2) The current level of the decommissioning fund will be adequate to decommission Callaway at the expiration of its current 40-year operating license.
- (3) The annual contribution of \$6,486,378 is included in the Company's current cost of service for ratemaking purposes.
- (4) The Commission should not make a specific finding that the cost of decommissioning Callaway is approximately \$586,515,200.
- (5) Pursuant to Section 393.292 RSMo 2000 and 4 CSR 240-3.185: The annual contribution amount is subject to change by the Commission in any subsequent general rate increase case or excess earnings complaint case, for good cause, including a material change in circumstances.