# 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 Callaway Plant and Funding	)	Case No	
Level of Nuclear Decommissioning Trust Fund	)		

# APPLICATION FOR APPROVAL OF DECOMMISSIONING COST ESTIMATE FOR CALLAWAY PLANT AND FUNDING LEVEL OF NUCLEAR DECOMMISSIONING TRUST FUND

COMES NOW Union Electric Company, d/b/a AmerenUE ("AmerenUE"), and pursuant to 4 CSR 240-3.185(3) hereby respectfully requests that the Missouri Public Service Commission ("Commission") approve AmerenUE's decommissioning cost estimate and the continuation of the funding level of its nuclear decommissioning trust fund at the current \$6,486,378 annual amount. AmerenUE further requests that the Commission find that the \$6,486,378 annual funding level of its decommissioning trust fund is included in AmerenUE's current cost of service for ratemaking purposes and confirm that this funding level is based on the parameters and assumptions stated in this Application.

In support thereof, AmerenUE states the following:

### **BACKGROUND**

1. AmerenUE is a Missouri corporation, in good standing in all respects, with its principal office and place of business located at 1901 Chouteau Avenue, St. Louis, Missouri 63103. AmerenUE is engaged in providing electric and gas service in portions of Missouri as a public utility under the jurisdiction of the Commission. AmerenUE is the owner and

operator of the Callaway Plant, a nuclear generating unit whose decommissioning trust fund is the subject of this Application.

- 2. There is already on file with the Commission a certified copy of AmerenUE's Restated Articles of Incorporation (see Commission Case No. EA-87-105), and a copy of AmerenUE's Fictitious Name Registration as filed with the Missouri Secretary of State's Office (see Commission Case No. GO-98-486). Said documents are incorporated herein by reference and made a part hereof for all purposes.
- 3. Pleadings, notices, orders and other correspondence concerning this Application should be addressed to:

William B. Bobnar Associate General Counsel Ameren Services Company 1901 Chouteau Avenue P.O. Box 66149 (MC 1310) St. Louis, MO 63166-6149 (314) 554-3148 Fax: (314) 554-4014 wbobnar@ameren.com

4. AmerenUE does not have any pending action or unsatisfied judgments or decisions against it from any state or federal agency or court which involve customer service or rates, which action, judgment or decision has occurred within the last three (3) years. Furthermore, AmerenUE does not have any annual report or assessment fees that are overdue.

# STATUTORY BASIS FOR FILING

5. 4 CSR 240-3.185(3) states, in part, the following:

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.

# METRO - EAST PROPERTY TRANSFER

6. On May 2, 2005, AmerenUE closed the "Metro East Property Transfer", as approved by the Commission in its Report and Order on Rehearing in Case No. EO-2004-0108 (hereinafter "the Order"). As of the closing, all of AmerenUE's Illinois customers were transferred to AmerenCIPS. Thus, AmerenUE ceased to have any Illinois ratepayers at that point in time and no further decommissioning revenues will be collected from those former ratepayers and AmerenUE took the following actions:

In accordance with the Order, ninety-eight percent 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 and the remainder transferred to the Wholesale (FERC) jurisdictional sub-account. The Illinois jurisdictional sub-account was subsequently eliminated.

Prior to the closing, annual decommissioning expenses of \$6,214,184 and \$272,554 were collected from AmerenUE's Missouri and Illinois electric ratepayers, respectively. Quarterly contributions of \$1,553,546.00 and \$68,138.50 were made to the Missouri and Illinois jurisdictional sub-accounts of the decommissioning trust fund, respectively. Upon the closing, in accordance with the Order, the annual Missouri decommissioning expense and contribution amount was increased from \$6,214,184 to \$6,486,378 to reflect the increased liability for decommissioning costs assumed by the

Missouri ratepayers. The decommissioning expense and contribution amount associated with the Illinois jurisdiction ceased upon the closing. The contribution to the Missouri jurisdictional sub-account of the decommissioning trust 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 that the \$6,214,184 annual decommissioning contribution amount was in effect and the number of days following the transfer that the \$6,486,378 annual decommissioning contribution amount was in effect. The resulting pro-rated contribution to the sub-account for the quarter was in the amount of \$1,598,413.14.

# 2005 COST STUDY

The direction of AmerenUE, the site specific cost study to determine the estimated cost for decommissioning the Callaway Plant. Since 1982, TLG has provided engineering and field services for contaminated facilities including estimates of decommissioning costs for nuclear generating units. In fact, TLG is an industry leader in nuclear power plant decontamination and decommissioning planning, cost estimating, and project field supervision and they have prepared and updated decommissioning cost estimates for the vast majority of nuclear generation units in the country. TLG also is the company that prepared the decommissioning cost estimate that was filed with and approved by the Commission in 1999 and 2002.

Attachment 1, which is attached hereto and made a part hereof for all purposes, is the updated decommissioning cost estimate prepared by TLG. As indicated in

Attachment 1, TLG estimates the cost to decommission the Callaway Plant employing the DECON alternative is \$586,515,200 in 2005 dollars.

# NECESSARY ANNUAL FUNDING LEVEL

AmerenUE's analysis of the required annual funding level for the Missouri 8. jurisdictional sub account is based on the premise that the current annual contribution to the decommissioning trust should be changed only if that annual contribution continued over the licensed life at Callaway Plant does not result in a final trust account balance which is just sufficient to cover the estimated decommissioning cost given in Attachment 1 under a reasonable set of economic, financial, and investment assumptions. As one would expect, the calculation of an annual decommissioning expense and contribution amount adequate to cover future decommissioning liabilities is sensitive to varying forecasts of future decommissioning inflation and investment returns. Forecasted nominal investment returns are dependent on 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. Since the determination of an annual decommissioning contribution can be sensitive to these various factors, the Company and the Commission staff have jointly developed a "Zone of Reasonableness" model that computes the required annual decommissioning contribution within a "reasonable" range of economic and financial parameters.

Attachment 2, AmerenUE's analysis of the required funding level (a five-page document entitled "AmerenUE – Callaway Plant Tax-Qualified Nuclear

Decommissioning Trust Fund Projection – Missouri Jurisdiction") is attached hereto and made a part hereof for all purposes.

# ZONE OF REASONABLENESS MODEL ASSUMPTIONS

The jointly-developed "Zone of Reasonableness" model computes "Optimistic", "Expected" and "Conservative" annual funding levels required for the future decommissioning liability to be fully funded at various decommissioning inflation rates. In the Order, the Commission ordered AmerenUE to contributed \$6,486,378 to the Missouri jurisdictional sub account. In support of this application, the "Zone of Reasonableness" model was used to verify the adequacy of that annual funding level. Basic input parameters regarding the computation of the "Optimistic", "Expected" and "Conservative" contribution boundaries that form the "Zone of Reasonableness" include:

•	Beginning value of the Missouri jurisdictional sub account (as of 06/30/2005):	\$220,451,094
•	Total decommissioning cost estimate:	\$586,515,200
•	Base year of the cost estimate:	2005
•	Missouri jurisdictional demand allocator	98.40%
•	Federal income tax rate:	20%
•	State income tax rate:	0%
•	Projected investment management and trust fees:	15.00 basis points
•	Asset allocation:	65% equities and 35% bonds

Three different sets of assumptions were made for the following parameters, from which the "Conservative", "Expected" and "Optimistic" contribution boundaries were derived:

- Real rate of return on bonds:
  - 3.25% for the "Conservative" contribution boundary,
  - 3.50% for the "Expected" contribution boundary,
  - 3.75% for the "Optimistic" contribution boundary.
- General inflation level (CPI):
  - 2.50% for the "Conservative" contribution boundary,
  - 2.75% for the "Expected" contribution boundary,
  - 3.00% for the "Optimistic" contribution boundary.
- Equity premium over bonds:
  - 4.75% for the "Conservative" contribution boundary,
  - 5.00% for the "Expected" contribution boundary,
  - 5.25% for the "Optimistic" contribution boundary.
- Year in which divestiture from equity investments occurs:
  - 2021 for the "Conservative" contribution boundary,
  - 2022 for the "Expected" contribution boundary,
  - 2024 for the "Optimistic" contribution boundary.

### ZONE OF REASONABLENESS MODEL RESULTS

As a basis for recommending that the current annual contribution amount remain unchanged, the Company calculated the decommissioning inflation values for which an

annual funding level of \$6,486,378 would be adequate under the economic and financial assumptions associated with the "Optimistic", "Expected" and "Conservative" contribution boundaries of the zone of reasonableness model. These decommissioning inflation values are, respectfully, 4.339%, 3.662% and 3.114%. Thus, if the economic and financial conditions assumed for the "Optimistic" scenario are actually experienced, an annual contribution of \$6,486,378 would be adequate up to a decommissioning inflation rate of 4.339%. Should the economic and financial conditions assumed for the "Conservative" scenario be experienced, an annual contribution of \$6,486,378 would be adequate up to a decommissioning inflation rate of 3.114%. If the economic and financial conditions assumed for the "Expected" scenario are actually experienced, an annual contribution of \$6,486,378 would be adequate up to a decommissioning inflation rate of 3.662%.

The "Zone of Reasonableness" model used in this analysis is presented in Attachment 2. Page 1 of Attachment 2 details the basic input assumptions on which the proposed annual contribution is based. Page 2 of Attachment 2 illustrates the escalation of the decommissioning expense cash flows at the 3.662% decommissioning inflation rate, which is the maximum rate at which the proposed annual contribution level of \$6,486,378 would be adequate under the "Expected" contribution boundary assumptions. Page 3 of Attachment 2 contains a spreadsheet illustrating how the proposed annual contribution amount will adequately cover decommissioning expenses with a \$0 balance upon completion at a decommissioning inflation rate of 3.662% and the economic and financial assumptions associated with the "Expected" contribution boundary. Page 4 of Attachment 2 illustrates the assumptions applicable to the "Optimistic", the "Expected" and to the "Conservative" contribution boundaries and the decommissioning inflation rates for which

the proposed annual contribution would be adequate under each of these sets of assumptions. Page 5 of Attachment 2 again illustrates the assumptions applicable to the "Optimistic", "Expected" and "Conservative" contribution boundaries and the annual contributions that would be required under each of these sets of assumptions at varying decommissioning inflation levels.

In conclusion, the calculations set forth in Attachment 2 validate

AmerenUE's request to continue funding the decommissioning trust fund using the same
annual amount previously authorized by the Commission in Case No. EO-2004-0108.

Because AmerenUE is not seeking a change to the funding level, there is no need for

AmerenUE to file new tariffs.

- 9. Because it is unnecessary for AmerenUE to change the funding level of the decommissioning trust, and unnecessary to file new tariffs, AmerenzUE does not request a hearing, nor does it believe one is required.
- 10. In its Order in the early cases regarding the establishment of the decommissioning trust fund (Case No. EO-85-17 and Case No. ER-85-160), the Commission states:

"The Commission, though, requires that UE establish the external fund to take the maximum advantage of the 1984 tax law and follow the requirements of the tax law in making investments for the fund."

Consequently, AmerenUE is required by Commission order to fund the future decommissioning liability through contributions to the tax-qualified trust fund. In order to make the proposed contributions to the tax-qualified trust fund, AmerenUE will be required to establish that the Commission has determined the amount of decommissioning costs included in its cost of service for ratemaking purposes and has disclosed the after-tax

return and any other assumptions, estimates, determinations and other factors used in establishing or approving such amount. This is in accordance with the Treasury Regulation 26 C.F.R. Section 1.468A-3(g), which reads as follows:

(g) Requirement Of Determination By Public Utility
Commission Of Decommissioning Costs To Be Included In
Cost Of Service

The Internal Revenue Service shall not provide a taxpayer with a schedule of ruling amounts for any nuclear decommissioning fund unless a public utility commission that establishes or approves rates for electric energy generated by the nuclear power plant to which the nuclear decommissioning fund relates has –

- (1) Determined the amount of decommissioning costs of such nuclear power plant to be included in the taxpayer's cost of service for ratemaking purposes; and
- (2) Disclosed the after-tax return and any other assumption and determinations used in establishing or approving such amount for any taxable year beginning on or after January 1, 1987.

In order for AmerenUE to comply with this requirement, AmerenUE requests that the Commission state in its Report and Order for this case that the annual decommissioning expense and contribution to the Callaway Plant Tax Qualified Nuclear Decommissioning Trust Fund in the amount of \$6,486,378 is included in AmerenUE's cost of service for ratemaking purposes and acknowledge that this annual decommissioning expense and contribution amount is based on the parameters and assumptions contained in Attachment 2 and summarized below:

The after-tax value of Missouri jurisdictional sub-account of the Callaway Plant
Tax Qualified Nuclear Decommissioning Trust Fund as of June 30, 2005 was
\$220,451,094.11.

- The proposed expense and contribution amount is to be effective as of January 1, 2006.
- The present, total decommissioning cost estimate is \$586,515,200 in terms of 2005 dollars.
- The Missouri jurisdictional allocator is 98.40%.
- The Missouri jurisdictional decommissioning cost estimate is \$577,130,957 in terms of 2005 dollars.
- The federal income tax rate is 20%.
- The state income tax rate is 0%.
- Investment management and trust fees are estimated at 15 basis points annually.
- The real return on bonds is assumed to be 3.50%.
- The equity premium is assumed to be 5.00%.
- An asset allocation of 65% equities and 35% bonds is assumed to exist through
   2022, at which time all equity investments will be divested.
- An inflation rate of 2.75% is assumed for general (CPI) inflation.
- Decommissioning cost escalation is assumed to be 3.662%.
- Pre-tax and expense nominal returns on the fund's investments will be 9.500% through 2022, and 6.25% thereafter. The average pre-tax and expense nominal return over the life of the fund will be 8.6893%.

WHEREFORE, AmerenUE requests that the Commission: (1) approve Attachment 1 and 2, which are AmerenUE's estimate of decommissioning costs and the funding level necessary to defray said costs, and (2) specifically find that the annual funding level

contributed to the decommissioning trust fund is included in AmerenUE's current cost of service for rate-making purposes and is based on the underlying assumptions contained in Attachment 2 and summarized in Article 10 above.

Respectfully submitted,

William B. Bobnar

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### **VERIFICATION**

STATE OF MISSOURI	)
	) SS
CITY OF ST. LOUIS	)

On this 31<sup>st</sup> day of August, 2005, I, William B. Bobnar, a licensed attorney in good standing employed by Ameren Services Company, being first duly sworn upon my oath, state that I have read the foregoing *APPLICATION FOR APPROVAL OF DECOMMISSIONING COST ESTIMATE FOR CALLAWAY PLANT AND FUNDING LEVEL OF NUCLEAR DECOMMISSIONING TRUST FUND* of Union Electric Company d/b/a AmerenUE, that the facts stated therein are true and correct to the best of my knowledge, information and belief and that the above attorney is authorized to file such document on behalf of Union Electric Company d/b/a AmerenUE.

William B. Bobnar

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal on the date first written above.

DEBBY ANZALONE
Notary Public - Notary Seal
STATE OF MISSOURI
St. Louis County

My Commission Expires: April 18, 2006

### **CERTIFICATE OF SERVICE**

The undersigned hereby certifies that a true and copy of the foregoing Notice of Dismissal was served on all parties of record via United States first-class mail, postage prepaid, or by electronic mail (e-mail) on this 31<sup>st</sup> day of August, 2005.

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