BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

Application of Union Electric Company, d/b/a)	
Ameren Missouri for Approval of)	
Decommissioning Cost Estimate for Callaway)	File No. EO-2012-0070
Energy Center and Funding Level of Nuclear)	
Decommissioning Trust Fund.)	

NON-UNANIMOUS STIPULATION AND AGREEMENT

COME NOW Union Electric Company d/b/a Ameren Missouri ("Ameren Missouri") and the Staff of the Missouri Public Service Commission ("Staff") (collectively, the "Parties," and individually "Party") and hereby submit this Non-Unanimous Stipulation and Agreement ("Agreement") to the Missouri Public Service Commission ("Commission") in resolution of File No. EO-2012-0070. The Office of the Public Counsel ("Public Counsel") has advised the Parties that it will not oppose this Agreement.

INTRODUCTION

The Legislature provided, in Section 393.292 RSMo,¹ that the Commission may authorize changes to the rates and charges of an electrical corporation as a result of a change in the level or annual accrual of funding necessary for its nuclear power plant decommissioning trust fund. This statute creates a narrow exception to the general requirement that the Commission must consider "all relevant factors," prior to changing any rate charged by a utility under its jurisdiction. See State ex. rel. Utility Consumers Council of Missouri, Inc. v. Public Serv. Comm'n, 585 S.W.2d 41 (Mo. banc 1979). Under Section 393.292, the Commission may limit its review in nuclear decommissioning trust fund cases to only those factors relevant to the funding level or accrual rate of the trust fund when deciding matters related to the rates and

¹ Statutory references are to RSMo 2000, unless otherwise noted. Section 393.292 was enacted by the Missouri Legislature in Laws 1989 and has not been amended.

charges associated with that fund. Further, Section 393.292 gives the Commission authority to adopt rules and regulations governing the procedures associated with these tariff changes as well as to ensure that the amounts contained in the trust funds will be neither "greater nor lesser than the amounts necessary to carry out the purposes of the trust." In Case No. EX-90-110, the Commission adopted its original decommissioning rule, 4 CSR 240-20.070.

4 CSR 240-3.185(3) states, in 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."

Ameren Missouri established an external nuclear decommissioning trust fund as a result of its Callaway Energy Center ("Callaway") rate case decided by the Commission in 1985. Re Union Electric Co., Case Nos. EO-85-17 and ER-85-160, 27 Mo.P.S.C. (N.S.) 183, 249, 256-57 (1985); See also, Re Union Electric Co., Case Nos. ER-84-168 and EO-85-17, 27 Mo.P.S.C. (N.S.) 164 (1984).

On September 2, 2008, Ameren Missouri filed an Application (Case No. EO-2009-0081) with the Commission for approval of its then-current decommissioning cost estimate and continuation of the then-current authorized funding level for its nuclear decommissioning trust fund for Callaway. A Unanimous Stipulation and Agreement, which settled all issues pertaining to Case No. EO-2009-0081, was filed on April 23, 2009. Among other things, the Unanimous Stipulation and Agreement maintained the annual decommissioning expense accrual and trust fund payment at \$6,486,378.

THE 2011 COST STUDY

On September 1, 2011, Ameren Missouri, pursuant to 4 CSR 240-3.185(3), filed its Application for Approval of Decommissioning Cost Estimate for Callaway Energy Center and Funding Level of Nuclear Decommissioning Trust Fund ("the Application"). Attachment 1 to the Application is a cost study ("the 2011 Cost Study") detailing Ameren Missouri's latest cost estimate for decommissioning Callaway entitled "Decommissioning Cost Analysis for the Callaway Energy Center," dated August 2011. TLG Services, Inc. ("TLG"), a consulting engineering firm, prepared the 2011 Cost Study for Ameren Missouri. Attachment 2 to the Application is Ameren Missouri's analysis of the current funding level for the decommissioning trust, as set forth in a five-page document entitled "Callaway Energy Center Tax-Qualified Nuclear Decommissioning Trust Fund Projection, Missouri Jurisdiction" ("the Economic Analysis").

In the Application, Ameren Missouri requests the Commission: (1) approve the 2011 Cost Study and the Economic Analysis, which are Ameren Missouri's estimate of decommissioning costs and the funding level necessary for said costs, and (2) specifically find that the annual funding level contributed to the decommissioning trust fund is included in Ameren Missouri's current cost of service for rate-making purposes and is based on the underlying assumptions contained in the 2011 Cost Study and the Economic Analysis.

In the 2011 Cost Study, TLG examined two decommissioning options; DECON³ and SAFSTOR.⁴ A third option, ENTOMB⁵, was considered in prior decommissioning cost studies

² Since 1982, TLG has provided engineering and field services for contaminated facilities including estimates of decommissioning costs for nuclear generating units. TLG also prepared the decommissioning cost estimate for Callaway that was filed with and approved by the Commission in 1991, 1993, 1999, 2002, 2005 and 2008.

³ DECON assumes decontaminating and decommissioning ("D&D") immediately following conclusion of power operations in 2024, when the 40-year operating license expires. Work is anticipated to be completed by 2034. (Footnote continued on the next page.)

but was not included in the 2008 or the 2011 Cost Study. The 2011 Cost Study states that Ameren Missouri has informed the U.S. Nuclear Regulatory Commission ("NRC") of its intent to submit a license renewal application in the fourth quarter of 2011 (for an additional 20 years of operation). However, for the purposes of the 2011 Cost Study, the final shutdown date of Callaway is projected to occur in 2024.⁶

The NRC received by letter dated December 15, 2011 an application from Ameren Missouri for renewal of operating license NPF-30 for Callaway. On February 14, 2012,

DECON consists of removal of fuel assemblies, source material, radioactive fission and corrosion products, and other radioactive materials immediately after cessation of power operations. Total estimated cost to decommission in 2011 Dollars is \$754,500,000.

- ⁴ SAFSTOR places the facility in protective storage for deferred decontamination to levels that permit release for unrestricted use. Delayed decontamination and dismantling activities are initiated once spent fuel and source material are removed such that license termination is accomplished within the 60-year time period set by the NRC. This process is anticipated to be completed by 2087. Total estimated cost to decommission in 2011 Dollars is \$1,026,384,000.
- ⁵ ENTOMB is defined as "the alternative in which radioactive contaminants are encased in a structurally long-lived material, such as concrete; the entombed structure is appropriately maintained and continued surveillance is carried out until the radioactive material decays to a level permitting unrestricted release of the property." As with the SAFSTOR alternative, decommissioning is currently required to be completed within 60 years. The 60-year restriction has limited the practicality for the ENTOMB alternative at commercial reactors that generate significant amounts of long-lived radioactive material. In 1997, the NRC directed its staff to re-evaluate this alternative and identify the technical requirements and regulatory actions that would be necessary for entombment to become a viable option. The resulting evaluation provided several recommendations; however, rulemaking has been deferred pending the completion of additional research studies, for example, on engineered barriers.
- ⁶ If decommissioning financial assurance is provided by an external sinking fund, 10 CFR § 50.75(e)(1)(ii) requires that "the total amount of funds would be sufficient to pay decommissioning costs at the time termination of operation is expected." 10 CFR § 50.75(e)(1)(ii) also goes on to state, in part, "A licensee that has collected funds based on a site-specific estimate under § 50.75(b)(1) of this section may take credit for projected earnings on the external sinking funds using up to a 2 percent annual real rate of return from the time of future funds' collection through the decommissioning period, provided that the site-specific estimate is based on a period of safe storage that is specifically described in the estimate. This includes the periods of safe storage, final dismantlement, and license termination. A licensee that has collected funds based on the formulas in § 50.75(c) of this section may take credit for collected earnings on the decommissioning funds using up to a 2 percent annual real rate of return up to the time of permanent termination of operations. A licensee may use a credit of greater than 2 percent if the licensee's ratesetting authority has specifically authorized a higher rate." Because Ameren Missouri does not contemplate shutting down Callaway prior to the end of its license life, the shutdown date used in the Economic Analysis, which was filed on September 1, 2011, and in the Revised 05/29/2012 Economic Analysis, which is attached hereto as Appendix A, is 2024, the year in which Callaway's NRC Operating license expires. Ameren Missouri collects decommissioning funds based on a site specific estimate the Revised 05/29/2012 Economic Analysis assumes credit for earnings during the decommissioning period at an expected 5.338% annual real rate of return through 2023.

Melanie A. Galloway, Acting Director, Division of License Renewal, Office of Nuclear Reactor Regulation sent a letter to Ameren Missouri advising that NRC staff had determined Ameren Missouri's application was sufficient and acceptable for docketing. The letter from Ms. Galloway forwarded the NRC staff's safety and environmental review schedule for the license renewal schedule. The projected date for a decision on relicensing, if there was no NRC hearing, was December 2013.

On June 8, 2012, the United States Court of Appeals for the District of Columbia Circuit ("D.C. Circuit") vacated and remanded the NRC's 2010 Update to its Waste Confidence Decision ("WCD") concerning storage and disposal of spent nuclear fuel from commercial reactors and the NRC's regulatory implementation of the 2010 Update of the WCD through a new Temporary Storage Rule ("TSR"). On August 7, 2012, the NRC in the Ameren Missouri Callaway relicensing docket, among various other licensing and relicensing dockets, issued a Memorandum and Order stating, in part, at page 4 that although it will not issue licenses dependent upon the WCD or TSR until the D.C. Circuit's remand is appropriately addressed, "[t]his determination extends just to *final* license issuance; all licensing reviews and proceedings should continue to move forward." (Emphasis in original).

The Economic Analysis summarizes a detailed analysis by Ameren Missouri based on the premise that the current contribution to the decommissioning trust should be changed only if it does not result in a final trust account balance which is just sufficient to cover the predicted decommissioning costs under a reasonable set of economic, financial, and investment assumptions. The calculations called for in the Economic Analysis were performed in a manner consistent with

previous filings. Ameren Missouri owns 100 percent of Callaway and the Economic Analysis allocated 100 percent of Callaway to Ameren Missouri's Missouri retail operations.⁷

Ameren Missouri performed its Economic Analysis to verify the adequacy of the current annual funding level (\$6,758,605), given the revised prediction of decommissioning costs from the 2011 Cost Study (\$754,500,000). Based on this analysis, Ameren Missouri has concluded that its current funding level should result in a final decommissioning trust fund amount which is sufficient to cover the costs estimated in the 2011 Cost Study under what Ameren Missouri believes are a reasonable set of economic, financial and investment assumptions. Consequently, Ameren Missouri does not seek any changes to its funding level, and asks the Commission to approve the current funding level amount. Because Ameren Missouri is not proposing a change in the funding level, Ameren Missouri has not filed new tariff sheets regarding its funding of decommissioning, is not requesting a hearing, and does not believe that a hearing is required respecting its decommissioning cost study filing.

STIPULATIONS AND AGREEMENTS

Ameren Missouri and the Staff have reached certain understandings, and therefore stipulate and agree as follows:

1. Ameren Missouri's Missouri retail jurisdiction annual decommissioning expense accrual and trust fund payment was set by the Commission at \$6,214,184, first in Case No. EO-91-300, Re Union Electric Co., 1 Mo.P.S.C.3d 356 (1992); again in Case No. EO-94-81, Re Union Electric Co., 3 Mo.P.S.C.3d 68 (1994); again in Case No. EO-97-86, Re Union Electric Co., 7 Mo.P.S.C.3d 117 (1998); again in Case No. EO-2000-205, Re Union Electric Co., 8 Mo.P.S.C.3d 497 (2000); and again in Case No. EO-2003-0083, Re Union

⁷ Missouri jurisdictional demand allocator is 100% as per File No. ER-2011-0028, as addressed *infra*.

Electric Co., 12 Mo.P.S.C.3d 68 (2002).⁸ In Case No. EO-2004-0108, the Commission addressed decommissioning trust funding along with the transfer of Ameren Missouri's MetroEast service territory and property to AmerenCIPS as Ameren Missouri's Missouri jurisdictional demand allocator increased to 97.92% post transfer. In its Report And Order On Rehearing in that case, Re Union Electric Co., 13 Mo.P.S.C.3d 266 (2005), the Commission ordered an increase in Ameren Missouri's annual Missouri decommissioning expense and contribution amount from \$6,214,184 to \$6,486,3789 to reflect the increased liability for decommissioning costs assumed by Missouri ratepayers. Now, in the instant Application, Ameren Missouri requests the Commission to continue the Missouri jurisdictional demand allocator at 100% and annual accruals at \$6,758,605, which methodology commenced in

⁸ In 1984 in Ameren Missouri's (then d/b/a Union Electric Company ("UE")) Callaway rate case, Ameren Missouri and the Staff stipulated that the decommissioning cost of Callaway was \$120,000,000 in 1983 dollars. As a result of the Commission's Callaway Report And Order, Ameren Missouri's Missouri jurisdictional annual trust fund payment requirement was set at \$2.9 million. Re Union Electric Co., Case Nos. EO-85-17 and ER-85-160, 27 Mo.P.S.C.(N.S.) 183, 249 (1985). In Case No. EO-91-300, which was Ameren Missouri's first filing pursuant to 4 CSR 240-20.070, a Unanimous Stipulation And Agreement was accepted by the Commission which identified the cost in 1990 dollars to immediately decommission Callaway, as if it had completed 40 years of service, as being \$347 million and set Ameren Missouri's Missouri retail jurisdiction annual trust fund accrual and payment requirement as \$6,214,184. The great increase in the cost estimate was due principally to a major increase in the projected cost charged by licensed facilities for disposal of low-level radioactive waste. (Low-level radioactive waste should not be confused with high-level radioactive waste and spent nuclear fuel. The federal fee, which is collected with each kilowatt hour of electricity generated by Callaway, relates to disposal facilities for high-level radioactive waste and spent nuclear fuel, not disposal facilities for low-level radioactive waste.) In Case Nos. EO-94-81, EO-97-86, EO-2000-205 and EO-2003-0083, Unanimous Stipulation And Agreements were accepted by the Commission which identified the costs in 1993, 1996, 1999 and 2002 dollars, respectively, to immediately decommission Callaway, as if it had completed 40 years of service, as being \$371,511,680, \$419,975,000, \$509,451,856 and \$515,339,000, respectively. In all four cases, Ameren Missouri's Missouri retail jurisdiction annual trust fund accrual and payment requirement remained at \$6,214,184, as that amount was determined to be adequate for the funding of future decommissioning expenses. In Case No. EO-2004-0108, the Missouri retail jurisdiction annual trust fund accrual and payment requirement was increased to \$6,486,378 to reflect the increased liability for decommissioning costs assumed by the Missouri ratepayers as a result of the MetroEast Property Transfer. In Case No. EO-2006-0098, a Unanimous Stipulation And Agreement was accepted by the Commission which identified the costs in 2005 dollars to immediately decommission Callaway, as if it had completed 40 years of service, as being \$586,515,200. Ameren Missouri's Missouri retail jurisdiction annual trust fund accrual and payment requirement remained at \$6,486,378, as that amount was determined to be adequate for the funding of future decommissioning expenses.

⁹ Report And Order On Rehearing in Case No. EO-2004-0108 contains a typographical error that transposed the second and third digits in the annual contribution amount to the Missouri jurisdictional subaccount. (*See* 13 Mo.P.S.C.3d at 297 and 304 compared to 13 Mo.P.S.C.3d at 296). Because this error has an insignificant impact on trust fund funding, Ameren Missouri used this actual ordered amount as its present annual contribution amount.

File No. ER-2011-0028. In Case Nos. EO-2004-0108, EO-2006-0098, and EO-2009-0081, a methodology was utilized by which Missouri ratepayers were responsible for less than 100% of Ameren Missouri's decommissioning liability. Ameren Missouri serves wholesale customers, such as municipals, with power from Callaway. The provision of service to other than Missouri retail ratepayers was recognized by the utilization of an allocation methodology with a Missouri jurisdictional demand allocator of less than 100% to Missouri retail customers. Starting in Ameren Missouri's last general rate increase case, File No. ER-2011-0028, and continued in the present Ameren Missouri general rate increase case File No. ER-2012-0166, Ameren Missouri did not perform and has not performed an allocation. Callaway was treated and is being treated as allocated 100% to the Missouri retail jurisdiction, and municipal customers, sales, and costs were and are being treated as off-system customers, sales, and costs. The \$6,758,605 of annual decommissioning expense accrual was included in the determination of Ameren Missouri customer rates approved by the Commission as part of Re Union Electric Co., File No. ER-2011-0028 (July 13, 2011) when the Missouri jurisdictional demand allocator was reflected as 100%. The Staff agreed to this methodology in File No. ER-2011-0028, and the Staff has filed its direct case in the presently pending File No. ER-2012-0166 on the basis of this methodology.

2. On September 1, 2011, Ameren Missouri filed its Application along with the 2011 Cost Study and Economic Analysis. Ameren Missouri requests the Commission recognize in its Order for this case that Ameren Missouri's Application, the 2011 Cost Study, and Economic Analysis meet the requirements of 4 CSR 240-3.185(3). The Staff noted in several of its Status Reports to the Commission that the Staff and Ameren Missouri had engaged in discussions on the basis of the Staff's review and analysis of Ameren Missouri's application and its responses to

Staff data requests, and on the basis of those discussions, Ameren Missouri performed additional analysis. The additional analysis performed by Ameren Missouri included its Revised 05/29/2012 Economic Analysis which shows, among other things, the following and is attached hereto as Appendix A:

Portfolio Return Assumptions

Asset Allocation Equities: 65.000% Bonds: 35.000% Real Return on Bonds: 2.250% **CPI Inflation** 2.000% Nominal Return on Bonds: 4.250% Equity Premium over Bonds: 4.750% Nominal Return on Equities: 9.000% Weighted Average Return: 7.338% Real Rate of Return Through 2023: 5.338% Switch Out of Equities at End-Of Year: 2023

- 3. The 2011 Cost Study estimates the decommissioning cost for the DECON alternative to be \$754,500,000 in 2011 dollars, which is 8.7% higher than the 2008 estimate of \$693,907,000 and represents approximately a 2.83% annualized escalation rate over the 3-year period.
- 4. The current annual contribution of \$6,758,605 to Ameren Missouri's nuclear decommissioning trust fund is reasonable given the uncertainties in the numerous forecasted assumptions used to determine the contribution level. The forecasted assumptions include, but are not limited to, capital market expectations, projected decommissioning inflation rates and the costs to decommission Callaway. The Parties agree on the annual contribution level. They recognized a disparity between the expected capital market returns Ameren's pension plan consultants, Towers Watson, provided for purposes of Ameren's development of an assumed rate of return for its pension fund and the capital market returns Ameren Missouri used to estimate required annual contributions for its nuclear decommissioning trust fund in the

Economic Analysis that is Attachment 2 to Ameren Missouri's Application. After discussions between Staff and Ameren Missouri, Ameren Missouri submitted to Staff a Revised 05/29/2012 Economic Analysis attached hereto as Appendix A using the high-end of Towers Watson's expected capital market returns, which Ameren used for development of an assumed rate of return for its pension plan.

- 5. The Parties agree that, it is reasonable to use capital market return expectation information provided by Ameren Missouri's pension plan consultant, or the 2% real rate of return set forth in 10 CFR §50.75(e)(1)(ii), for purposes of developing expected portfolio returns for Ameren Missouri's nuclear decommissioning trust fund. The Parties agree that any proposed changes to the annual contribution to Ameren Missouri's nuclear decommissioning trust fund shall be based on capital market return expectation information provided by Ameren Missouri's pension plan consultant, or the aforementioned 2% real rate of return, unless the Parties agree to use a different source and/or methodology for capital market return expectations or the Commission finds in a contested case that different source and/or methodology for capital market return expectation are more appropriate.
- 6. Ameren Missouri shall continue its Missouri retail jurisdiction expense accruals and trust fund payments at current levels without any change in its Missouri retail jurisdictional rates, unless and until the Commission subsequently approves such a change.
- 7. Annual Missouri retail jurisdictional decommissioning costs in the amount of \$6,758,605 are, and should continue to be, included in Ameren Missouri's cost of service and reflected in its current rates for ratemaking purposes. The Parties request that this finding be specifically recognized in the Commission's Report and Order and note that this finding is

required in order for the decommissioning fund to utilize the sinking fund methodology of decommissioning funding.

- 8. The Parties request that the Commission in its Report and Order in this case approve, pursuant to 4 CSR 240-20.070(4)(C), the use of a jurisdictional demand allocator of 100.00%.
- 9. Except as explicitly agreed otherwise herein, none of the Parties to this Agreement shall be deemed to have approved or acquiesced in any question of Commission authority, decommissioning methodology, ratemaking principle, valuation methodology, cost of service methodology or determination, depreciation principle or method, rate design methodology, cost allocation, cost recovery, or prudence that may underlie this Agreement or for which provision is made in this Agreement.
- 10. If the Commission does not unconditionally approve this Agreement without modification, and notwithstanding its provision that it shall become void thereon, neither this Agreement nor any matters associated with its consideration by the Commission shall be considered or argued to be a waiver of the rights that any Party has to a hearing on the issues presented by the Agreement, regarding cross-examination or a decision in accordance with Section 536.080.1 RSMo or Art. V, Section 18 Mo. Const. The Parties shall retain all procedural and due process rights as fully as though this Agreement had not been presented for approval, and any testimony or exhibits that may have been offered or received in support of or in opposition to this Agreement shall thereupon become privileged as reflecting the substantive content of settlement discussions, and shall be stricken from and not be considered as part of the administrative or evidentiary record before the Commission for any further purpose whatsoever.

- 11. To assist the Commission in its review of this Agreement, the Parties also request that the Commission advise them of any additional information that the Commission may desire from the Parties related to the matters addressed in this Agreement, including any procedures for furnishing such information to the Commission.
- 12. If requested by the Commission, the Staff shall submit to the Commission a memorandum responsive to the Commission's request. Each Party of record shall be served with a copy of any memorandum and shall be entitled to submit to the Commission within five (5) days of receipt of the Staff's memorandum, a responsive memorandum which shall also be served on all Parties. The contents of any memorandum provided by any Party are its own and are not acquiesced in or otherwise adopted by the other signatory to this Agreement, whether or not the Commission approves and adopts this Agreement.
- 13. The Staff also shall provide, at any agenda meeting at which this Agreement is noticed to be considered by the Commission, whatever oral explanation the Commission requests. The Staff shall, to the extent reasonably practicable, provide the other Parties with advance notice of when the Staff shall respond to the Commission's request for such explanation once such explanation is requested from the Staff. The Staff's oral explanation shall be subject to public disclosure, except to the extent it refers to matters that are privileged or protected from disclosure pursuant to any Protective Order issued in this case.
- 14. Because this is an Agreement with the sole purpose of addressing the authority requested by the Application of Ameren Missouri, except as specified herein, the Parties to the Agreement shall not be prejudiced, bound by, or in any way affected by the terms of this Agreement: (a) in any future proceeding; (b) in any proceeding currently pending under a separate docket; and/or (c) in this proceeding, should the Commission decide not to approve the

Agreement or in any way condition its approval of the same, except as stated herein. Because this is an Agreement for the purpose of settling matters in this case, it shall not be cited as precedent or referred to in testimony in any subsequent or pending judicial or administrative proceeding, except that this shall not be construed to prohibit reference to its existence in future proceedings, including proceedings to enforce compliance with its terms.

- 15. Pursuant to Section 393.292 RSMo and 4 CSR 240-3.185, the Parties agree that the Commission may review for good cause, including a change of circumstances of a material nature, and authorize changes to Ameren Missouri's rates and charges as a result of a change in the annual accrual of funding for the Missouri jurisdictional account of the Callaway decommissioning trust, after a full hearing, including but not limited to any general rate increase case or excess earnings complaint case, and after considering all facts relevant to such accrual rate.
- 16. The provisions of this Agreement have resulted from numerous discussions/negotiations among the signatory Parties and are interdependent. In the event that the Commission does not approve and adopt the terms of this Agreement in total, it shall be void and no Party hereto shall be bound by, prejudiced, or in any way affected by any of the agreements or provisions hereof unless otherwise provided herein.
- 17. In the event the Commission accepts the specific terms of this Agreement, the signatories waive their respective rights: a) to cross-examine witnesses pursuant to Section 536.070(2) RSMo; b) to present oral argument and written briefs pursuant to Section 536.080.1 RSMo; c) to the reading of the transcript by the Commission pursuant to Section 536.080.2 RSMo; and d) to judicial review pursuant to Section 386.510 RSMo. This waiver applies only to a Commission Order respecting this Agreement issued in this

proceeding, and does not apply to any matters raised in any subsequent Commission proceeding, or any matters not explicitly addressed by this Agreement.

WHEREFORE, the Parties hereto request that the Commission issue an Order:

- 1. Approving the Non-Unanimous Stipulation and Agreement;
- 2. Receiving into evidence this Non-Unanimous Stipulation and Agreement, the 2011 Cost Study filed on September 1, 2011, and the Revised 05/29/2012 Economic Analysis attached hereto as Appendix A;
- 3. Approving the expected nominal return on plan assets of 7.338% through 2023, which assumes a 65% allocation to equity securities with an expected 9.000% nominal return and a 35% allocation to bonds with an expected 4.250% nominal return, provided as part of the Revised 05/29/2012 Economic Analysis;
- 4. Approving the 5.338% annual real rate of return through 2023, which is based on the weighted average return of 7.338% minus the CPI inflation of 2.000%.
- 5. Finding, pursuant to this Non-Unanimous Stipulation and Agreement, that Ameren Missouri's Missouri retail jurisdiction annual decommissioning expense accruals and trust fund payments shall continue at the current level of \$6,758,605;
- 6. Finding, in order for the Callaway decommissioning fund to continue to utilize the sinking fund method of decommissioning funding, that the current decommissioning costs for Callaway are included in Ameren Missouri's current Missouri cost of service and are reflected in its current rates for ratemaking purposes;
- 7. Recognizing that Ameren Missouri's 2011 Cost Study meets the requirements of 4 CSR 240-3.185(3);

8. Approving, pursuant to 4 CSR 240-20.070(4)(C), the use of a jurisdictional demand allocator of 100.00%.

Respectfully submitted,

/s/ Thomas M. Byrne

Thomas M. Byrne, Missouri Bar No. 33340 Managing Associate General Counsel Wendy K. Tatro, Missouri Bar No. 60261 Associate General Counsel Ameren Services Company Attorneys for Union Electric Company, d/b/a/ Ameren Missouri P.O. Box 66149, MC 1310 St. Louis, MO 63166-6149 (314) 554-2514 (Telephone-Byrne) tbyrne@ameren.com (314) 554-3484 (Telephone-Tatro) wtatro@ameren.com (314) 554-4014 (Fax)

/s/ Steven Dottheim

Steven Dottheim
Chief Deputy Staff Counsel
Missouri Bar No. 29149
(573) 751-7489 (Telephone)
(573) 751-9285 (Fax)
steve.dottheim@psc.mo.gov
Attorney for the Staff of the
Missouri Public Service Commission
P. O. Box 360
Jefferson City, MO 65102

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing *Non-Unanimous Stipulation And Agreement* have been transmitted electronically to all counsel of record this 21st day of September, 2012.

/s/ Steven Dottheim

Ameren Missouri

Callaway Energy Center Tax-Qualified Nuclear Decommissioning Trust Fund Projection Missouri Jurisdiction

1 Current Year:	2012
2 Year Decommissioning Begins:	2024
3 Year Decommissioning Ends:	2033
4 End-Of-Year Fund Balances	
March 31, 201/End-Of-Year Fund Balance:	\$364,969,370
2033 End-Of-Year Fund Balance:	\$0
	After entering all data, manually set this cell equal to the Final, Ending Balance of Fund, located on "Fund Projections" worksheet!
5 Annual Contribution to Fund	
Current: (Effective 07-31-2011)	\$6,758,605
Revised: (Effective 01-01-2012)	\$6,758,605
Effective Date of Revised Annual Contribution	
Year:	2013
Quarter:	1
6 Portfolio Return Assumptions	
Asset Allocation	
Equities:	65.000%
Bonds:	35.000%
Real Return on Bonds:	2.250%
CPI Inflation:	2.000%
Nominal Return on Bonds:	4.250%
Equity Premium over Bonds:	4.750%
Nominal Return on Equities:	9.000%
Weighted Average Return:	7.338%
Real Rate of Return Through 2023	5.338%
Switch Out of Equities at End-Of-Year:	2023
7 Investment Management & Trust Fees (Basis Points):	15.00
8 Federal & State Tax Assumptions	
Federal Tax Rate:	20.0000%
Missouri State Income Tax Rate:	0.0000%
Percentage of Federal Taxes Deductible on MO Taxes:	50.0000%
Composite Tax Rate:	20.0000%

Ameren Missouri

Callaway Energy Center Tax-Qualified Nuclear Decommissioning Trust Fund Projection Missouri Jurisdiction

1 Decommissioning Expense Estimates

Original, Total Decommissioning Cost Estimate:

Original Estimate Based On:

Current, Total Decommissioning Cost Estimate:

Demand Allocator (Missouri):

MO Jurisdictional, Total Decommissioning Cost Estimate:

Decommissioning Inflation:

\$754,500,000

Aug. 2011 TLG Study

\$754,500,000

100.00%

\$754,500,000

1.352%

	Decommissioning Expense Calculation							
Year	Aug. 2011 TLG Study Total Decommissioning Expenses	Aug. 2011 TLG Study Decommissioning Expenses % OF TOTAL	Missouri Jurisdictional Decommissioning Expenses 2011	# of Years of Inflation	Inflation Factor At 1.352% Decommissioning Inflation Rate	Missouri Jurisdictional Decommissioning Expenses (Inflated \$\$)		
TOTAL	\$754,500,000	100.00%	\$754,500,000			\$946,884,461		
2012	\$0	0.00%	\$0	1	1.0135	\$0		
2013	\$0	0.00%	\$0	2	1.0272	\$0		
2013 2014 2015	\$0 \$0 \$0	0.00% 0.00% 0.00%	\$0 \$0 \$0	3	1.0411	\$0 \$0 \$0		
2016	\$0	0.00%	\$0	5	1.0552 1.0695	\$0		
2017	\$0	0.00%	\$0	6	1.0839	\$0		
2018	\$0	0.00%	\$0	7	1.0986	\$0		
2019 2020	\$0 \$0	0.00%	\$0 \$0	9	1.1134 1.1285	\$0 \$0		
2021	\$0	0.00%	\$0	10	1.1438	\$0		
2022	\$0	0.00%	\$0	11	1.1592	\$0		
2023	\$0	0.00%	\$0	12	1.1749	\$0		
2024	\$14,699,000	1.95%	\$14,699,000	13	1.1908	\$17,503,569		
2025	\$84,013,000	11.13%	\$84,013,000	14	1.2069	\$101,395,591		
2026	\$149,853,000	19.86%	\$149,853,000	15	1.2232	\$183,303,930		
2027	\$147,494,000	19.55%	\$147,494,000	16	1.2398	\$182,858,201		
2028	\$87,092,000	11.54%	\$87,092,000	17	1.2565	\$109,433,959		
2029	\$86,854,000	11.51%	\$86,854,000	18	1.2735	\$110,610,772		
2030	\$65,122,000	8.63%	\$65,122,000	19	1.2907	\$84,056,071		
2031	\$44,842,000	5.94%	\$44,842,000	20	1.3082	\$58,662,435		
2032	\$61,162,000	8.11%	\$61,162,000	21	1.3259	\$81,094,340		
2033	\$13,369,000	1.77%	\$13,369,000	22	1.3438	\$17,965,593		

Ameren Missouri Callaway Energy Center Tax-Qualified Nuclear Decommissioning Trust Fund Projection Missouri Jurisdiction

Current Year:	2012	Equities:	65.00%	Federal Tax Rate:	20.00%
Year Decommissioning Begins:	2024	Bonds:	35.00%	Missouri State Income Tax Rate:	0.00%
Year Decommissioning Ends:	2033	Real Return on Bonds:	2.250%	Percentage of Federal Taxes Deductible on MO Taxes:	50.00%
		CPI Inflation:	2.000%	Composite Taxe Rate:	20.0000%
March 31, 2012 End-Of-Qtr Fund Balance	\$364,969,370	Nominal Return on Bonds:	4.250%	-	
2033 EOY Fund Balance:	\$0	Equity Premium over Bonds:	4.750%	Original, Total Decommissioning Cost Est: Aug. 2011 TLG Study	\$754,500,000
		Nominal Return on Equities:	9.000%	Current, Total Decommissioning Cost Est: 2012	\$754,500,000
Current Contribution:	\$6,758,605	Weighted Average Return:	7.338%	Demand Allocator (Missouri):	100.00%
Revised contribution:	\$6,758,605	Real Rate of Return Through 2023	5.338%	MO Jurisdictional, Total Decommissioning Cost Estimate:	\$754,500,000
		Switch Out of Equities at EOY:	2023	Decommissioning Inflation Assumption:	1.352%
				•	
		Management & Trust Fees: (BP)	15.00		

	Fund Projections								
Year	Beginning-of-Year Balance	Annual Contributions To Fund	Pre Tax & Fee Income	Investment Management & Trust Fees	Federal & State Income Taxes	After Tax & Fee Income	Missouri Jurisdictional Decommissioning Expenses (Inflated \$\$)	End-Of-Year Balance	
TOTAL		\$ 86,172,214	\$ 635,531,815	\$ 15,853,218	\$ 123,935,719	\$ 495,742,878	\$ 946,884,461		
arch 31, 2012								\$364,969,3	
2012	\$ 364,969,370	\$ 5,068,954	\$ 20,224,196	\$ 424,818	\$ 3,959,876	5 \$ 15,839,502	2 \$ -	385,877,8	
2013	385,877,826	6,758,605	28,561,742	605,307	5,591,28	7 22,365,148		415,001,5	
2014	415,001,579	6,758,605	30,698,697	650,595	6,009,620	24,038,481		445,798,6	
2015	445,798,665	6,758,605	32,958,433	698,486	6,451,990	25,807,958	3 -	478,365,2	
2016	478,365,228	6,758,605	35,348,005	749,128	6,919,77	5 27,679,102	-	512,802,9	
2017	512,802,935	6,758,605	37,874,872	802,680	7,414,438	3 29,657,754	-	549,219,2	
2018	549,219,294	6,758,605	40,546,922	859,308	7,937,52	31,750,091		587,727,9	
2019	587,727,990	6,758,605	43,372,498	919,190	8,490,66	1 33,962,646	j -	628,449,2	
2020	628,449,241	6,758,605	46,360,419	982,513	9,075,58	1 36,302,325	j -	671,510,1	
2021	671,510,171	6,758,605	49,520,015	1,049,474	9,694,108	38,776,433		717,045,2	
2022	717,045,209	6,758,605	52,861,148	1,120,283	10,348,173	3 41,392,693		765,196,5	
2023	765,196,506	6,758,605	56,394,250	1,195,159	11,039,818	3 44,159,272		816,114,3	
2024	816,114,384	6,758,605	34,456,531	1,241,955	6,642,91	5 26,571,660	17,503,569	831,941,0	
2025	831,941,080	-	33,202,840	1,196,767	6,401,21	5 25,604,858	101,395,591	756,150,3	
2026	756,150,347	-	28,241,181	1,017,928	5,444,65	1 21,778,602	183,303,930	594,625,0	
2027	594,625,019	-	21,385,827	770,833	4,122,999	9 16,491,995	182,858,201	428,258,8	
2028	428,258,813	-	15,875,528	572,219	3,060,662	2 12,242,647	109,433,959	331,067,5	
2029	331,067,501	-	11,719,890	422,433	2,259,49	1 9,037,965	110,610,772	229,494,6	
2030	229,494,694	-	7,967,333	287,175	1,536,032	2 6,144,126	84,056,071	151,582,7	
2031	151,582,749	-	5,195,690	187,274	1,001,683	3 4,006,733	58,662,435	96,927,0	
2032	96,927,047	-	2,396,145	86,367	461,950	5 1,847,822	81,094,340	17,680,5	
	17,680,529		369,654	13,324	71,260	5 285,064	17,965,593		

Ameren Missouri

Callaway Energy Center Tax-Qualified Nuclear Decommissioning Trust Fund Projection
Missouri Jurisdiction

1 Portfolio Return Assumptions

Equity Allocation:

Bond Allocation:

Real Return on Bonds:

CPI Inflation:

Nominal Return on Bonds:

Equity Premium over Bonds:

Nominal Return on Equities:

Weighted Average Return:

Real Rate of Return Through 2023

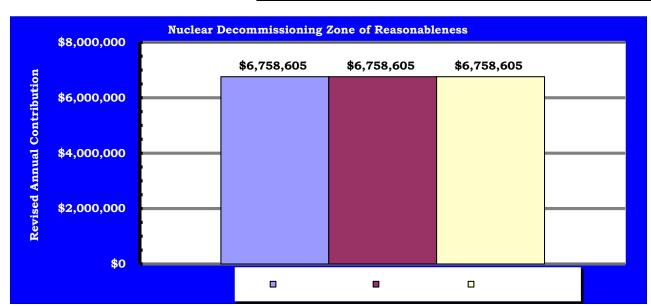
Switch out of Equities at End-Of-Year:

Contribution Boundary Estimates						
Optimistic Estimate	Expected Estimate	Conservative Estimate				
65.000%	65.000%	65.000%				
35.000%	35.000%	35.000%				
2.250%	2.250%	2.250%				
2.000%	2.000%	2.000%				
4.250%	4.250%	4.250%				
4.750%	4.750%	4.750%				
9.000%	9.000%	9.000%				
7.338%	7.338%	7.338%				
5.338%	5.338%	5.338%				
2023	2023	2023				

2 Decommissioning Expense Estimates

Decommissioning Inflation: 1.352% 1.352% 1.352%

Revised Annual Contribution:OptimisticExpectedConservative\$6,758,605\$6,758,605\$6,758,605



Ameren Missouri Callaway Energy Center Tax-Qualified Nuclear Decommissioning Trust Fund Projection Missouri Jurisdiction Zone of Reasonableness Analysis

	Contribution Boundary Estimates				
Portfolio Return Assumptions	Optimistic Estimate	Expected Estimate	Conservative Estimate		
Equity Allocation:	65.00%	65.00%	65.00%		
Bond Allocation:	35.00%	35.00%	35.00%		
Real Return on Bonds:	2.250%	2.250%	2.250%		
CPI Inflation:	2.000%	2.000%	2.000%		
Nominal Return on Bonds:	4.250%	4.250%	4.250%		
Equity Premium over Bonds:	4.750%	4.750%	4.750%		
Nominal Return on Equities:	9.000%	9.000%	9.000%		
Weighted Average Return:	7.338%	7.338%	7.338%		
Real Rate of Return Through 2023:	5.338%	5.338%	5.338%		
Switch out of Equities at End-Of-Year:	2023	2023	2023		

		Required Contribution Amounts					
Decommissioning Inflation:		Optimistic Estimate		Expected Estimate		Conservative Estimate	
0.25%	\$	(1,997,179)	\$	(1,997,179)	\$	(1,997,179)	
0.50%	\$	(144,020)	\$	(144,020)	\$	(144,020)	
0.75%	\$	1,784,526	\$	1,784,526	\$	1,784,526	
1.00%	\$	3,791,393	\$	3,791,393	\$	3,791,393	
1.25%	\$	5,879,621	\$	5,879,621	\$	5,879,621	
1.50%	\$	8,052,363	\$	8,052,363	\$	8,052,363	
1.75%	\$	10,312,892	\$	10,312,892	\$	10,312,892	
2.00%	\$	12,664,598	\$	12,664,598	\$	12,664,598	
2.25%	\$	15,110,999	\$	15,110,999	\$	15,110,999	
2.50%	\$	17,655,741	\$	17,655,741	\$	17,655,741	
2.75%	\$	20,302,606	\$	20,302,606	\$	20,302,606	
3.00%	\$	23,055,515	\$	23,055,515	\$	23,055,515	
3.25%	\$	25,918,530	\$	25,918,530	\$	25,918,530	
3.50%	\$	28,895,867	\$	28,895,867	\$	28,895,867	
3.75%	\$	31,991,891	\$	31,991,891	\$	31,991,891	

