

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

In the Matter of the Application of Union Electric)
Company d/b/a Ameren Missouri for Acceptance of Its)
Triennial Filing of Cost Estimates for Callaway Energy)
Center Decommissioning, Including the Independent) File No. EO-2023-0448
Spent Fuel Storage Installation, and Approval of the)
Funding Level of the Nuclear Decommissioning Trust)
Fund.)

NON-UNANIMOUS STIPULATION AND AGREEMENT

COME NOW Union Electric Company d/b/a Ameren Missouri (“Ameren Missouri” or “Company”) and the Staff of the Missouri Public Service Commission (“Staff”) (collectively, the “Signatories”) and submit this *Non-Unanimous Stipulation and Agreement* (“*Stipulation*”) to the Missouri Public Service Commission (“Commission”). The Office of the Public Counsel has advised the Signatories that it will not oppose this Agreement.

I. INTRODUCTION¹ AND BACKGROUND

The Commission is authorized “to review and authorize changes to the rates and charges contained in the schedules of an electric corporation as a result of a change in the level or annual accrual of funding necessary for its nuclear power plant decommissioning trust fund only after a full hearing² and after considering all facts relevant to such funding level or accrual rate.”³ The Commission is authorized to adopt regulations governing the procedures for tariff changes under Section 393.292 and “to ensure that the amounts collected from ratepayers and paid into such trust

¹ See Attachment A for the Callaway Energy Center Decommissioning Trust Fund History.

² The requirement for a hearing is met when the opportunity for hearing is provided and no proper party requests the opportunity to present evidence. *State ex rel. Rex Deffenderfer Enterprises, Inc. v. Pub. Serv. Comm’n*, 776 S.W.2d 494, 496 (Mo. App. W.D. 1989).

³ § 393.292, RSMo (2022). This authority is an exception to the prohibition against single-issue ratemaking. *See, e.g.*, § 393.270.4, RSMo (2016); *State ex rel. Utility Consumers’ Council of Mo., Inc. v. Pub. Serv. Comm’n*, 585 S.W.2d 41, 56 (Mo. banc 1979).

funds will be neither greater nor lesser than the amounts necessary to carry out the purposes of the trusts.”⁴

Under the Commission’s regulations, an electric utility shall establish a tax-qualified externally managed trust fund for the purpose of collecting funds to pay for decommissioning costs if it owns, in whole or in part, or operates nuclear generating units, the costs of which are reflected in the rates charged to Missouri ratepayers.⁵ Every three years, electric utilities with decommissioning trust funds must perform a cost study detailing the utility’s latest cost estimates for decommissioning its nuclear generating unit(s).⁶ The study must also detail the funding levels necessary to defray these decommissioning costs.⁷ The study must be filed with the Commission along with any appropriate tariff(s) to effectuate any rate change necessary to defray the decommissioning costs.⁸

Ameren Missouri established an external nuclear decommissioning trust fund as a result of its ownership in the Callaway Energy Center.⁹ In Case EO-91-12, the Commission established Ameren Missouri’s retail jurisdictional operations annual decommissioning accrual and trust fund

⁴ § 393.292, RSMo (2022).

⁵ 20 CSR 4240-20.070(5) (2019). Under Federal law, The Nuclear Regulatory Commission (NRC) establishes minimum amounts necessary for licensees to provide reasonable assurance that funds will be available for the decommissioning process. 10 CFR 50.75 (2019). However, federal regulations also provide that “Funding for the decommissioning of power reactors may also be subject to the regulation of Federal or State Government agencies (e.g., Federal Energy Regulatory Commission (FERC) and State Public Utility Commissions) that have jurisdiction over rate regulations.” 10 CFR 50.75(a) The NRC’s federal regulations are “in addition to, and not substitution for, other requirements, and are not intended to be used by themselves or by other agencies to establish rates.” *Id.*

⁶ 20 CSR 4240-20.070(4) (2019).

⁷ *Id.*

⁸ *Id.*

⁹ *In the Matter of Union Electric Co.*, Case Nos. EO-85-17; ER-85-160, 27 Mo.P.S.C. (N.S. 183, 249, 256-57 (1985)).

payment at \$2.9 million.¹⁰ This annual amount has been adjusted several times, most recently in 2016, when it was set at \$6,758,605.¹¹

II. THE 2023 COST STUDY AND PRIOR STIPULATIONS

Pursuant to 20 CSR 4240-20.070(4), on December 1, 2023,¹² Ameren Missouri filed its Application for Acceptance of Decommissioning Cost Estimates for Callaway Energy Center, Including Independent Spent Fuel Storage Installation, and Approval of Funding Level for Nuclear Decommissioning Trust Fund ("*Application*"). The *Application* requested approval of the Company's decommissioning cost estimates for the Callaway Energy Center ("Callaway" or "Plant") and for the Callaway Independent Spent Fuel Storage Installation ("ISFSI"), as well as the continuation of the funding level of its nuclear decommissioning trust fund at the current \$6,758,605 annual amount, with \$6,082,745 allocated to Plant decommissioning and \$675,860 allocated to ISFSI decommissioning. Ameren Missouri also requested that the Commission find that the \$6,758,605 annual funding level of its decommissioning trust fund be included in the Company's current cost of service for ratemaking purposes and confirm that this funding level is based on the parameters and assumptions set forth in the *Application*.

Attachment 3 to Ameren Missouri's *Application* is the 2023 decommissioning cost estimate analysis prepared by TLG Services, Inc. ("TLG"), titled *Decommissioning Cost Analysis for the Callaway Energy Center* (2023 Study). This cost estimate is comprehensive in that it covers both the Plant and ISFSI decommissioning; however, the costs are segregated for each. The total decommissioning cost estimate of \$1,097,947,000 in 2023 dollars is based on the TLG's estimated

¹⁰ *Id.*

¹¹ Case No. EO-2015-0253 (2016); EO-2018-0051 (2018).

¹² On August 17, 2023, the Commission granted the Company's request for a waiver from Commission Rule 20 CSR 4240-20.70(4) and allowed the Company to file on December 1, 2023, in File No. EE-2024-0019.

cost to decommission the Plant and the ISFSI employing the DECON alternative process,¹³ using an assumed 60-year plant operating life and reflecting the use of off-site, low-level radioactive waste processing to minimize the volume designated for controlled disposal. Of this total, \$1,085,651,000 is attributable to Plant decommissioning, and \$12,296,000 is attributable to ISFSI¹⁴ decommissioning.

Attachment 4 to Ameren Missouri's *Application* is the Ameren Missouri updated funding adequacy analysis calculating the required annual funding levels to cover the total estimated cost to decommission the Plant and the ISFSI.¹⁵ The Company amended its *Application* on March 4, 2024, and provided an Amended Attachment 4 ("*Amended Application*").

¹³ DECON assumes decontaminating and decommissioning immediately following conclusion of power operations in 2044, when the 60-year operating license expires. Work is anticipated to be completed by 2053. DECON consists of removal of fuel assemblies, source material, radioactive fission and corrosion products, and other radioactive materials shortly after cessation of power operations. *General Requirements for Decommissioning Nuclear Facilities*, 53 Fed. Reg. 24018, 24022 (Jun. 27, 1988).

¹⁴ The Department of Energy ("DOE") had a contract with Ameren Missouri and nuclear customers were paying in rates fees to remove, transport and dispose of spent nuclear fuel assemblies (high-level radioactive waste) from the Callaway Energy Center to a Nevada - Yucca Mountain repository site. With DOE not taking the spent nuclear fuel assemblies for the Yucca Mountain site, Ameren Missouri has been storing and will continue to store these spent nuclear fuel assemblies on site at the Callaway Energy Center. Ameren is not the only utility affected by the Department of Energy's failure to accept and dispose of radioactive waste from United States nuclear utilities. *See, e.g., Yankee Atomic Elec. Co. v. U.S.*, 536 F.3d 1268, 1270 (Fec. Cir. 2008) (*Yankee I*).

¹⁵ If decommissioning financial assurance is provided by an external sinking fund, as it is with Callaway, 10 CFR § 50.75(e)(1)(ii) requires that "the total amount of funds would be sufficient to pay decommissioning costs at the time permanent termination of operations 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 rate-setting 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 is Attachment 4 to the November 5, 2020 *Application*, is

After comparing the estimated decommissioning costs for the Plant and ISFSI from TLG to the current trust balance, Ameren Missouri and the Staff believe that there is no need to increase the total amount collected from Ameren Missouri's customers. During the pendency of this proceeding, Ameren Missouri filed an updated Nuclear Decommissioning Report pursuant to 20 CSR 4240-23.020(3) in File No. EO-2025-0122. The Signatories considered this new information and determined the current total annual contribution of \$6,758,605 to Ameren Missouri's decommissioning trust fund should be discontinued. Although the Signatories recognize there are uncertainties in the numerous forecasted assumptions used to determine the decommissioning costs, which include, but are not limited to, capital market expectations, projected decommissioning inflation rates and the costs to physically decommission the facilities, the after tax market value of the fund is sufficient to meet the projected decommissioning costs in 2024 dollars, and no annual contributions are necessary at this time. The Signatories agree the annual contribution level should discontinue until further analysis is done in the next triennial filing in 2026.

Consistent with the Signatories' *Non-Unanimous Stipulation and Agreement* approved by the Commission in EO-2012-0070, the Signatories 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 Signatories

2044, the year in which Callaway's NRC Operating License expires. Ameren Missouri collects decommissioning funds based on a site specific estimate. The economic analysis assumes credit for earnings at an expected 1.96% annual real pre-tax & expense rate of return through 2043 and at 1.09% thereafter.

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 Signatories agree to use a different source and/or methodology for capital market return expectations, or the Commission finds in a contested case that different sources and/or methodologies for capital market return expectations are more appropriate.

The funding adequacy analysis included as Amended Attachment 4 to Ameren Missouri's *Amended Application* projected the 10 and 31-year arithmetic and geometric mean returns for "US Large Cap Equity" and "Government/Credit" for the equity and fixed income portfolios of the decommissioning fund, respectively.¹⁶ These projections were provided by Willis Towers Watson in a report dated "Fall 2023."¹⁷

III. Stipulations and Agreements

The Signatories to this case have reached certain understandings to that Staff and Ameren Missouri stipulate and agree as follows:

1. Ameren Missouri's Missouri retail jurisdictional authorized annual decommissioning expense accrual and trust fund payment is currently set at \$6,758,605, and this amount will be adjusted to \$0 in the Company's compliance tariffs in File No. ER-2024-0319.

2. On December 1, 2023, Ameren Missouri filed its Application along with the 2023 Study.¹⁸ The Signatories request that the Commission recognize in its Report and Order for this

¹⁶ The Application, Attachment 4, Page 4.

¹⁷ The Application, Attachment 4.

¹⁸ On August 17, 2023, the Commission granted the Company's request for a waiver from Commission Rule 20 CSR 4240-20.70(4) and allowed the Company to file on December 1, 2023, in File No. EE-2024-0019.

case that Ameren Missouri's Application and the 2023 Cost Study meet the requirements of 20 CSR 4240-20.070(4).

3. The 2023 Study estimates the decommissioning cost for the DECON alternative to be \$1,097,947,000 (in 2023 Dollars) for the decommissioning period, which is 3.834% higher than the 2020 estimate of \$1,046,835,000 (in 2020 Dollars) for the same decommissioning period.

4. ISFSI funds recovered from the Department Of Energy ("DOE") will be used to reduce plant-in-service and depreciation reserve balances by the amount of the proceeds until the costs of the re-racking project and dry cask storage construction project are covered.

5. Any ISFSI funds recovered from the DOE in excess of the re-racking project and dry cask storage construction project costs will be used to offset the decommissioning costs of the Plant and ISFSI pursuant to the terms of 20 CSR 4240-20.070(16) (2019).

6. Although there are uncertainties in the numerous forecasted assumptions used to determine the contribution levels, the current annual contribution of \$6,758,605 to Ameren Missouri's nuclear decommissioning trust fund is no longer reasonable given the decommissioning trust fund market value is sufficient to meet the projected decommissioning costs in 2024 dollars. The forecasted assumptions include, but are not limited to, capital market expectations, projected decommissioning inflation rates and the costs to decommission the Callaway Energy Center.

7. The Signatories agree that it is reasonable to use capital market return expectation information provided by Ameren Missouri's consultant for purposes of developing expected portfolio returns for Ameren Missouri's nuclear decommissioning trust fund. The Signatories 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, unless the Signatories agree to use a

different source and/or methodology for capital market return expectations or the Commission finds in a contested case that different sources and/or methodologies for capital market return expectations are more appropriate.

8. Ameren Missouri shall suspend its Missouri retail jurisdiction expense accruals and trust fund payments from current levels with the change in its Missouri retail jurisdictional rates in File No. ER-2024-0319, unless and until the Commission subsequently approves such a change.

9. Annual Missouri retail jurisdictional decommissioning costs, inclusive of the ISFSI, should be adjusted to zero and included in Ameren Missouri's cost of service and reflected in its current rates for ratemaking purposes in File No. ER-2024-0319.

10. The Signatories agree and acknowledge that this Agreement does not prevent any Signatory from proposing changes to the annual contribution amount to the nuclear decommissioning trust fund in a subsequent triennial proceeding or rate review.

11. The Signatories agree that Ameren Missouri shall file with the Commission quarterly information providing the performance of the trust investments (including a comparison to benchmarks).

12. Except as explicitly agreed otherwise herein, none of the Signatories to this *Stipulation* 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 *Stipulation* or for which provision is made in this *Stipulation*.

13. If the Commission does not unconditionally approve this *Stipulation* without modification, and notwithstanding its provision that it shall become void thereon, neither this

Stipulation 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 *Stipulation*, regarding cross-examination or a decision in accordance with Section 386.280 RSMo (2016) or Article V, Section 18 of the Missouri Constitution. The Signatories shall retain all procedural and due process rights as fully as though this *Stipulation* had not been presented for approval, and any suggestions or memoranda, testimony or exhibits that may have been offered or received in support of or in opposition to this *Stipulation* 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.

14. To assist the Commission in its review of this *Stipulation*, the Signatories also request that the Commission advise them of any additional information that the Commission may desire from the Signatories related to the matters addressed in this *Stipulation*, including any procedures for furnishing such information to the Commission.

15. 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 *Stipulation* or Party, whether or not the Commission approves and adopts this *Stipulation*.

16. The Staff also shall provide, at any agenda meeting at which this *Stipulation* 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.

17. Because this is a *Stipulation* with the sole purpose of addressing the authority requested by the *Application* of Ameren Missouri, except as specified herein, the Signatories to the *Stipulation* shall not be prejudiced, bound by, or in any way affected by the terms of this *Stipulation*: (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 *Stipulation* or in any way condition its approval of the same, except as stated herein. Because this is a *Stipulation* 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.

18. Pursuant to Section 393.292 RSMo. and 20 CSR 4240-20.070, the Signatories 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.

19. The provisions of this *Stipulation* have resulted from discussions/negotiations among the Signatories and are interdependent. In the event that the Commission does not approve

and adopt the terms of this *Stipulation* 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.

20. In the event the Commission accepts the specific terms of this *Stipulation*, 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 *Stipulation* 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 *Stipulation*.

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

1. Approving this Non-Unanimous Stipulation and Agreement;
2. Receiving into evidence this Non-Unanimous Stipulation and Agreement; Attachment 3 to Ameren Missouri's *Amended Application*, TLG's "*Decommissioning Cost Analysis for the Callaway Energy Center*" (2023 Study), dated September 2023; and Amended Attachment 4 to Ameren Missouri's *Amended Application*, Ameren Missouri's funding adequacy analysis calculating the required annual funding levels for Plant and ISFSI decommissioning, assuming a decommissioning cost escalation rate of 4.7%; and the Nuclear Decommissioning Report filed pursuant to 20 CSR 4240-23.020(3) in File No. EO-2025-0122;
3. Finding that Ameren Missouri's Application and the 2023 Study satisfy the requirements of 20 CSR 4240-20.070(4) (2019);

4. Finding that the Company's Missouri retail jurisdictional annual decommissioning expense accruals and trust fund payments shall be suspended as shown in the compliance tariffs in File No. ER-2024-0319;

5. Finding, in order for the decommissioning fund to continue to utilize the external sinking fund method of decommissioning funding, that the current decommissioning costs for the Plant and ISFSI are in Ameren Missouri's current Missouri retail cost of service and are reflected in its current retail rates for ratemaking purposes;

6. Approving, pursuant to 20 CSR 4240-20.070(5)(C) (2019), the use of a jurisdictional demand allocator of 100.00%;

7. Acknowledging that the annual decommissioning expense and contribution amount proposed in this *Stipulation* is based on Attachment 3, the September 2023 *Decommissioning Cost Analysis for the Callaway Energy Center* and the Nuclear Decommissioning Report filed pursuant to 20 CSR 4240-23.020(3) in File No. EO-2025-0122.

8. Approving the actuarial assumptions used in Amended Attachment 4 to Ameren Missouri's *Application*, the Nuclear Decommissioning Report filed pursuant to 20 CSR 4240-23.020(3) in File No. EO-2025-0122, Ameren Missouri's funding adequacy analysis calculating the required annual funding levels for the Plant and ISFSI decommissioning, specifically:

- The after-tax value of Missouri jurisdictional sub-account of the Plant Tax-Qualified Nuclear Decommissioning Trust Fund as of June 30, 2023, was \$969,908,000 and the after-tax value of Missouri jurisdictional sub-account of the Plant Tax-Qualified Nuclear Decommissioning Trust Fund as of December 31, 2024, was \$1,198,667,094.

- The Plant decommissioning cost estimate is \$1,085,651,000 and the ISFSI decommissioning cost estimate is \$12,296,000, both in terms of 2023 dollars and the total Plant decommissioning cost estimated in terms of 2024 dollars is \$1,162,825,986.¹⁹
- Operating license expiration date of October 18, 2044.
- The Missouri jurisdictional allocator (for both Plant and ISFSI) is 100%.
- The federal income tax rate is 20%.
- The state income tax rate is 0%.
- The composite federal & state income tax rate is 20%.
- An asset allocation of 65% equities and 35% bonds for the market value of the trust fund will be maintained until such time as the fund will begin to de-risk.
- Investment management and trust fees are estimated at 15 basis points annually.
- A long term annualized inflation rate range of 0.5 to 4.5% is assumed for general (CPI) inflation for the period through 2052.
- The long term annualized pre-tax & expense nominal return on bonds ranged from 2.7% to 5.9% for the period through 2052.
- The long term annualized pre-tax & expense nominal return on equities ranged from .4% to 12.9% for the period through 2052.

¹⁹ The figure was derived by applying an assumed 4.70% rate of inflation to the total Plant decommissioning cost in 2023 dollars.

- The long term annualized pre-tax & expense nominal weighted-average return ranged from 2.1% to 9.9% for the period through 2052.
- Long term decommissioning cost escalation ranged from 2.2% to 6.2% for the period through 2052.

9. Recognizing that the Company shall request reinstating the customer contributions to the fund, if the trust fund is estimated to be underfunded by an amount greater than \$50 million at the time of the next triennial filing.

10. Recognizing that ISFSI funds recovered from the DOE will be used to reduce plant-in-service and depreciation reserve balances by the amount of the proceeds until the costs of the re-racking project and dry cask storage construction project are covered. Any ISFSI funds recovered from the DOE in excess of the re-racking project and dry cask storage construction project costs will be used to offset the decommissioning costs of the Plant and ISFSI.

11. Recognizing that, pursuant to 20 CSR 4240-20.070(16) (2016), upon termination of the trust, excess trust funds from the costs of decommissioning the Plant and ISFSI are to be refunded or credited to customers through the ratemaking process.

Respectfully submitted,

/s/ Jennifer S. Moore
Jennifer S. Moore, MO Bar #75056
Senior Corporate Counsel
Ameren Missouri
1901 Chouteau Avenue, MC 1310
St. Louis, MO 63103
Telephone: 314-564-7231
AmerenMOService@ameren.com

**ATTORNEYS FOR UNION ELECTRIC
COMPANY D/B/A AMEREN MISSOURI**

/s/ Travis Pringle
Travis Pringle, MO Bar # 71128
Chief Deputy Counsel
PO Box 360
Jefferson City, MO 65102
Telephone: 573-751-5700
Travis.Pringle@psc.mo.gov

**ATTORNEYS FOR THE STAFF OF
THE MISSOURI PUBLIC SERVICE
COMMISSION**

CALLAWAY ENERGY CENTER DECOMMISSIONING TRUST FUND HISTORY

1. 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 the Callaway Energy Center was \$120 million in 1983 dollars. As a result of the Commission's Callaway *Report and Order*, Ameren Missouri's Missouri retail 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 240-20.070,¹ 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 was 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.)

2. Ameren Missouri's Missouri retail jurisdiction annual decommissioning expense accrual and trust fund payment was again set by the Commission at \$6,214,184, in Case No. EO-94-81, *Re Union Electric Co.*, 3 Mo.P.S.C.3d 68 (1994); Case No. EO-97-86, *Re Union Electric Co.*, 7 Mo.P.S.C.3d 117 (1998); Case No. EO-2000-205, *Re Union Electric Co.*, 8 Mo.P.S.C.3d 497 (2000); and Case No. EO-2003-0083, *Re Union Electric Co.*, 12 Mo.P.S.C.3d 68 (2002). In

¹ Prior to April 30, 2003, 4 CSR 240-3.185 Submission of Reports Pertaining to the Decommissioning of Electric Utility Plants was contained in 4 CSR 240-20.070 Decommissioning Trust Funds.

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.

3. In Case No. EO-2004-0108, the Commission addressed decommissioning trust funding along with the transfer of Ameren Missouri's MetroEast (Illinois) 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 \$6,486,378² to reflect the increased liability for decommissioning costs assumed by Missouri ratepayers. 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. In File No. ER-2011-0028, Ameren Missouri commenced a methodology of the Missouri jurisdictional demand allocator for Callaway increased to 100%; the annual accrual increased to \$6,758,605. The Staff followed this methodology in the Ameren Missouri general rate increase case File No. ER-2012-0166; Ameren Missouri did not perform an allocation. Callaway was treated as allocated 100% to the Missouri retail jurisdiction; municipal

² *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.

customers, sales, and costs were 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 retail customer rates approved by the Commission as part of *Re Union Electric Co.*, File No. ER-2011-0028 (July 13, 2011) and the Missouri jurisdictional demand allocator was reflected as 100%. Ameren Missouri and the Staff followed this methodology in File No. EO-2012-0070, Ameren Missouri's most recent prior Triennial Decommissioning Update, and File No. ER-2012-0166, Ameren Missouri's most recent general rate increase case.

4. In the four triennial decommissioning cost study cases prior to Case No. EO-2004-0108, 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 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 retail 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. The 2011 Cost Study estimated the decommissioning cost for the DECON alternative to be \$754,500,000 in 2011 dollars, which was 8.7% higher than the 2008 estimate of \$693,907,000 (Case No. EO-2009-0081) and represented approximately a 2.83% annualized escalation rate over the 3-year period. Ameren Missouri's

economic analysis found the annual contribution of \$6,758,605 to the nuclear decommissioning trust fund to be reasonable.

5. On August 15, 2014, Ameren Missouri filed in File No. EE-2015-0046 a request for a seven (7) month extension of time to file its 2014 TLG Decommissioning Cost Study to no later than April 1, 2015, rather than September 1, 2014, due to its license extension request that was pending before the Nuclear Regulatory Commission (“NRC”) and the potential impact of the request upon the necessary funding level of its decommissioning trust. The Staff recommended that the Commission grant Ameren Missouri its request for a variance from the Commission’s rule. The Commission issued an order on March 4, 2015 granting Ameren Missouri’s request for an extension of time to file pending decommissioning cost analysis.

6. On April 1, 2015, Ameren Missouri filed in File No. EO-2015-0253 its Application, a 2014 TLG “*Decommissioning Cost Analysis for the Callaway Energy Center,*” not including the cost of decommissioning the Independent Spent Fuel Storage Installation (“ISFSI”), and Ameren Missouri’s analysis of the required funding level under a 2044 operating license expiration date. TLG estimated the cost to decommission the Callaway Energy Center, exclusive of the cost of decommissioning the ISFSI, employing the DECON alternative, as \$864,734,000 in 2014 dollars based on an assumed 60-year plant operating life to 2044 and an annual contribution of \$6,758,605. A *Non-Unanimous Stipulation and Agreement* (“*Stipulation*”) was filed with the Commission on March 14, 2016, followed by a *Notice of Correction to Stipulation and Agreement* on March 30, 2016 (“*Corrected Stipulation*”). Attached to the *Corrected Stipulation* as Attachment 1 was the “*Callaway Energy Center Independent Spent Fuel Storage Installation Decommissioning Cost Analysis,*” dated February 1, 2016. The *Stipulation* and *Corrected Stipulation* found that Ameren Missouri’s Missouri retail jurisdiction annual decommissioning expense accruals and trust fund

payments should continue at the current level of \$6,758,605, with \$6,314,620 allocated to decommissioning the Callaway Energy Center and \$443,985 allocated to decommissioning the ISFSI. The Commission issued its Order approving the *Corrected Stipulation* on April 6, 2016.

7. On September 1, 2017, Ameren Missouri filed in File No. EO-2018-0051 its Application, a TLG “*Decommissioning Cost Analysis for the Callaway Energy Center*” dated August 2017 and including segregated cost estimates for both the Plant and ISFSI decommissioning. TLG estimated the total cost to decommissioning Callaway and the ISFI, employing the DECON alternative, as \$943,465,000 in 2017 dollars. Of this total, \$934,296,000 was attributable to Plant decommissioning and \$9,169,000 was attributable to ISFSI decommissioning. The estimate was based on an assumed 60-year plant operating life to 2044, and reflected the use of off-site, low-level radioactive waste processing to minimize the volume designated for controlled disposal. This resulted in an annual contribution at the same level as 2015 of \$6,758,605. Of this amount, \$6,323,396 was allocated to plant decommissioning and \$435,209 was attributed to ISFSI decommissioning. A Stipulation and Agreement was filed with the Commission on January 4, 2018, indicating that Ameren Missouri’s Missouri retail jurisdiction annual decommissioning expense accruals and trust fund payments should continue at the current level of \$6,758,605, with \$6,323,396 allocated to decommissioning the Callaway Energy Center and \$435,209 allocated to decommissioning the ISFSI. The Commission issued an *Order Approving Stipulation and Agreement* on January 23, 2018.

8. Ameren Missouri filed an Application, a TLG “*Decommissioning Cost Analysis for the Callaway Energy Center*” dated October 2020 and including segregated cost estimates for both the Plant and ISFSI decommissioning on November 5, 2020, in File No. EO-2021-0050. TLG estimated the total cost to decommission Callaway and the ISFSI, employing the DECON

alternative, as \$1,046,835,000 in 2020 dollars. Of this total, \$1,036,260,000 is attributable to Plant decommissioning and \$10,575,000 is attributable to ISFSI decommissioning. The estimate is based on an assumed 60-year plant operating life, and reflects the use of off-site, low-level radioactive waste processing to minimize the volume designated for controlled disposal. This resulted in an annual contribution at the same level as 2018 of \$6,758,605. Of this amount, \$6,242,226 was allocated to plant decommissioning and \$516,379 was attributed to ISFSI decommissioning. The Commission issued an *Order Approving Stipulation and Agreement* on February 24, 2021.