

**Exhibit No.:** \_\_\_\_\_  
**Issue(s):** Groundwater Monitoring and  
Treatment/Safe Closure Costs/  
Other Capital Assets  
**Witness/Type of Exhibit:** Schaben/Rebuttal  
**Sponsoring Party:** Public Counsel  
**Case No.:** EF-2024-0021

**REBUTTAL TESTIMONY**

**OF**

**ANGELA SCHABEN**

Submitted on Behalf of the Office of the Public Counsel

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

CASE NO. EF-2024-0021

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Denotes Confidential Information that has been redacted

February 23, 2024

**PUBLIC**

## TABLE OF CONTENTS

<b>Testimony</b>	<b>Page</b>
Introduction	1
Groundwater Monitoring and Treatment Costs	2
Estimated Safe Closure Costs	5
Rush Island Energy Center Demolition Estimate	7
Capitalized Software and Other Capitalized Costs	9

**REBUTTAL TESTIMONY**

**OF**

**ANGELA SCHABEN**

**AMEREN MISSOURI INC.**

**CASE NO. EF-2024-0021**

1 **INTRODUCTION**

2 **Q. Please state your name, title, and business address.**

3 A. Angela Schaben, Utility Regulatory Auditor, Office of the Public Counsel (“OPC” or “Public  
4 Counsel”), P.O. Box 2230, Jefferson City, Missouri 65102.

5 **Q. What are your qualifications and experience?**

6 A. Please refer to the Schedule ADS-R-1 attached hereto.

7 **Q. Have you testified previously before the Missouri Public Service Commission?**

8 A. Yes. Please refer to the Schedule ADS-R-2 attached hereto.

9 **Q. What is the purpose of your testimony?**

10 A. My testimony addresses ground water monitoring and treatment capital investment and O&M  
11 (operation and maintenance) costs, certain closure O&M costs, and treatment of office  
12 furniture and software costs Ameren Missouri included in its Rush Island securitization filing.

13 **Q. Would you summarize your recommendations to the Commission for how it should treat  
14 these costs?**

15 A. I propose that the Commission disallow the groundwater monitoring and treatment costs which  
16 Ameren Missouri included in its case and, instead, address their recovery in a general rate case.  
17 Additionally, I propose that the Commission disallow certain closure costs and the amount  
18 remaining on capitalized software and office equipment/furniture with a 5-year useful life from  
19 securitization and instead address these costs through regular ratemaking.

1 **GROUNDWATER MONITORING AND TREATMENT COSTS**

2 **Q. What are the groundwater monitoring and treatment costs that Ameren Missouri**  
3 **included in its direct case which you are recommending the Commission disallow?**

4 A. They are Ameren Missouri’s estimate of \$4,615,042 in future water treatment and monitoring  
5 costs for actual and potential groundwater contamination at the Rush Island site which are  
6 based upon the costs of a “recently completed water treatment pilot project at another energy  
7 center and invoiced amounts for monitoring services.”<sup>1</sup>

8 **Q. Has Ameren Missouri already made investments and incurred costs for groundwater**  
9 **monitoring and treatment at its Rush Island Energy Center?**

10 A. Yes. In ER-2022-0337, Ameren Missouri included approximately \$2 million in plant additions  
11 for groundwater monitoring and treatment implementation construction equipment and  
12 investments<sup>2</sup>.

13 **Q. Is Ameren Missouri already monitoring and treating groundwater at its Rush Island**  
14 **Energy Center?**

15 A. Yes.

16 **Why?**

17 A. It is required to.

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<sup>1</sup> Direct Testimony of Mitchell J. Lansford, file no. EF-2024-0021, page 7.

<sup>2</sup> Ameren Missouri’s response to MPSC data request number 0381; file no. ER-2022-0337; Schedule ADS-R-3.

1 **Q. Why is Ameren Missouri required to monitor and treat groundwater at its Rush Island**  
2 **Energy Center site?**

3 A. According to the Company’s response to OPC data request 1105, “[g]roundwater monitoring  
4 and treatment at Ameren Missouri's Rush Island site is regulated by the Missouri  
5 Department of Natural Resources and the Federal EPA's Coal Combustion Residuals (CCR)  
6 Rule”. The EPA’s CCR requires groundwater monitoring and treatment activities.

7 **Q. What are coal combustion residuals?**

8 A. *Coal combustion residuals (CCR)* means fly ash, bottom ash, boiler slag, and flue gas  
9 desulfurization materials generated from burning coal for the purpose of generating  
10 electricity by electric utilities and independent power producers.<sup>3</sup>

11 **Q. What does the EPA's (CCR) Rule do?**

12 A. The CCR rule provides standards for the disposal of coal combustion residuals in landfills and  
13 surface impoundments.<sup>4</sup> The Rush Island Energy Center engages in coal combustion, which  
14 leads to coal combustion residuals.

15 **Q. Does Ameren Missouri currently conduct water treatment and monitoring activities at**  
16 **other active coal burning plants in addition to Rush Island?**

17 A. Yes. In addition to Rush Island Energy Center, Labadie and Sioux also conduct activities in  
18 accordance with EPA’s CCR rule.<sup>5</sup>

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<sup>3</sup> [40 CFR Part 257 Subpart D.](#)

<sup>4</sup> [40 CFR Part 257 Subpart D.](#)

<sup>5</sup> [Ameren Missouri – Managing CCRs](#); see also Schedule ADS-R-4

1 **Q. Does the EPA CCR rule establish how long Ameren Missouri is required to carry out**  
2 **groundwater monitoring and treatment activities at its Rush Island site after it stops**  
3 **burning coal there?**

4 A. According to the Company’s response to OPC data request 1105, “[t]he Federal CCR rule is  
5 self-implementing, in accordance with 40 CFR 257.104(c). It requires 30 years of post-  
6 closure care. If at the end of the post-closure care period the CCR unit is operating under  
7 assessment monitoring, post-closure care must continue until the CCR unit returns to  
8 detection monitoring in accordance with §257.95”.

9 **Q. What is your understanding of Ameren Missouri’s data request response?**

10 A. Ameren Missouri is required to continue groundwater monitoring treatment activities on the  
11 Rush Island site for an unspecified period of time after decommissioning Rush Island, which  
12 could potentially exceed 30 years.

13 **Q. How many years of groundwater monitoring and treatment costs did Ameren Missouri**  
14 **include in its application?**

15 A. Five years of groundwater treatment costs (2025-2029) and eight years of groundwater  
16 monitoring costs (2025-2032).<sup>6</sup>

17 **Q. What securitized bond life is Ameren Missouri proposing?**

18 A. Fifteen years.

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<sup>6</sup> Ameren Missouri’s response to OPC data request 1105.

1 **Q. Does it make sense to you for Ameren Missouri’s retail customers to pay for five to eight**  
2 **years of estimated O&M costs over the course of fifteen years?**

3 A. No. Recovering actual groundwater and monitoring expenses during a general rate case, in  
4 accordance with the matching principle, makes more sense.

5 **Q. Should groundwater monitoring and treatment costs be considered energy transition**  
6 **costs?**

7 A. No. Groundwater monitoring and treatment costs are required by an EPA rule based on  
8 remediating historical actions related to burning coal and is not relevant in energy transition  
9 considerations. Ameren Missouri will incur them for its Rush Island Energy Center regardless  
10 of whether or not it decommissions its Rush Island coal plant.

11 **Q. How do you recommend that the Commission treat these estimated groundwater**  
12 **monitoring and treatment costs at Rush Island which Ameren Missouri is seeking to**  
13 **recover through securitization?**

14 A. I recommend that all costs associated with groundwater monitoring and treatment be removed  
15 from the securitization case, to include both plant investment of approximately \$2 million and  
16 future groundwater monitoring operation and maintenance expenses requested from this case.  
17 Since groundwater monitoring treatment and monitoring expenses are necessary as a result of  
18 historical coal burning operations rather than future energy transition costs, recovery should  
19 occur through a general rate case.

20 **ESTIMATED SAFE CLOSURE COSTS**

21 **Q. What amount has Ameren Missouri included in its securitization amount for what it**  
22 **describes as safe closure costs at Rush Island?**

23 A. Ameren Missouri’s estimate of \$4,407,500.

1 **Q. Upon what types of activities does Ameren Missouri base this estimate?**

2 A. Disposals, electrical feeds, rentals, neutralizations, closures, and flood protection.

3 **Q. Does Ameren Missouri plan to continue to use the Rush Island site after it abandons its**  
4 **coal generating plant on that site?**

5 A. Yes. Although it plans to shut down its Rush Island coal plant, Ameren Missouri has continued  
6 with other projects on the site.

7 **Q. Please provide an example of projects Ameren Missouri has begun on the current Rush**  
8 **Island Energy Center site.**

9 A. According to Ameren Missouri's response to OPC data request 1102, existing transmission  
10 lines (the Switchyard) located on the Rush Island Energy Center site will remain in use. As a  
11 result, the Company "has begun the execution of a program of projects necessary for the  
12 reliability of the transmission system with the retirement of the Rush Island Energy  
13 Center. The projects will add reactive power to the system necessary to maintain system  
14 stability without the generation."

15 **Q. Should the costs of these transmission system reliability projects be securitized?**

16 A. No.

17 **Q. Why not?**

18 A. The activities included in the safe closure costs estimate are temporary and provide more value  
19 to the site where a switchyard will remain. These are regular expenses that should not be  
20 securitized over 15 years. Recovery for portable restrooms should not include carrying costs  
21 over a 15-year securitization.



1 **Q. What do you recommend that the Commission do with the safe closure costs estimates?**

2 A. I recommend that the Commission exclude Ameren Missouri’s \$4,407,500 safe closure costs  
3 estimate from the approved securitization amount. The decommissioning report clearly states  
4 that its overall objective is to “develop a demolition estimate to bring the site to a brownfield  
5 condition for potential future use.” Ameren Missouri already has projects in place to upgrade  
6 the already existing switchyard on the site. Clearly the site will remain in use beyond the  
7 decommissioning of the coal plant. Therefore, actual safe closure costs should be recovered  
8 during a regular rate case.

9 **RUSH ISLAND ENERGY CENTER DEMOLITION ESTIMATE**

10 **Q. Did Ameren Missouri procure a decommissioning study for its Rush Island coal-fired**  
11 **generating plant?**

12 A. Yes. According to Ameren Missouri witness Jim Williams, Black & Veatch developed an  
13 AACE level 4 demolition Order of Magnitude (OOM) cost estimate, with an expected  
14 accuracy range between -30% and +30%. According to this report, “[t]he overall objective of  
15 this work was to develop a demolition estimate to bring the site to a brownfield condition for  
16 potential future reuse.”<sup>7</sup>

17 **Q. What is Black and Veatch’s cost estimate for decommissioning the Rush Island coal-fired**  
18 **generating plant?**

19 A. \$29,750,000 to \$55,250,000 with a midpoint of \$42,500,000.

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<sup>7</sup> Rush Island Energy Center Demolition Estimate; File no. EF-2024-0021, Schedule JW-D2.

1 **Q. Is this estimate reasonable as a basis for an amount to securitize for Rush Island**  
2 **generating plant decommissioning?**

3 A. No. The Rush Island decommissioning cost estimate is a high-level analysis and does not  
4 incorporate a complete Decommissioning and Demolition (“D&D”) plan that includes a  
5 constructability analysis. According to Black & Veatch’s report:

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9 \_\_\_\_\_  
10 \_\_\_\_\_  
11 \_\_\_\_\_  
12 \_\_\_\_\_  
13 \_\_\_\_\_ \*\*

14 If estimated decommissioning costs of Rush Island are securitized, the amount should be based  
15 on a decommissioning plan providing greater accuracy, preferably a definitive estimate  
16 (something like -5% to + 15%).

17 **Q. What Rush Island generating plant decommissioning costs do you recommend that the**  
18 **Commission allow to be securitized?**

19 A. None, and certainly no more than \$29,750,000. The Commission should not rely on the total  
20 estimated decommissioning costs that Ameren Missouri has presented in this case.  
21 Decommissioning cost estimates included in securitization should be based upon a D&D plan  
22 providing greater accuracy than a report with a -30% to 30% accuracy range. If the  
23 Commission decides to rely on the presented Black and Veatch decommissioning report, I  
24 recommend allowing no more than \$29,750,000 in decommissioning costs. This is a 30%  
25 reduction of the \$42,500,000 decommissioning cost estimate.

1 **CAPITALIZED SOFTWARE AND OTHER CAPITALIZED COSTS**

2 **Q. Do the retirement schedules Ameren Missouri witness Mr. Lansford testifies to include**  
3 **capitalized software costs assigned to Rush Island?**

4 A. Yes. Intangible software costs are recorded in account 303 of the NARUC Uniform System  
5 of Accounts (USOA).

6 **Q. In which USOA accounts are Rush Island office furniture and equipment costs recorded?**

7 A. Office furniture is recorded in account 316.21 and office equipment is recorded in account  
8 316.22.

9 **Q. Why did you choose the October 15, 2024, date rather than the September 1, 2024, date**  
10 **Ameren Missouri used for the retirement date of Rush Island?**

11 A. According to Mr. Lansford, the “New Source Review (“NSR”) litigation requires that the  
12 energy center is retired no later than October 15, 2024.”<sup>8</sup>

13 **Q. Over how many years is software, office furniture and office equipment generally**  
14 **depreciated?**

15 A. This particular software is being depreciated over a five-year life, according to Staff schedules  
16 from Case No. ER-2022-0337<sup>9</sup> and should have a remaining useful life less than one year.  
17 Using current depreciation rates, the office furniture is being depreciated over a 20-year life  
18 and the office equipment is being depreciated over a 15-year life for ratemaking purposes.

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<sup>8</sup> Direct testimony of Mitchell J. Lansford, File no. EF-2024-0021, page 4.

<sup>9</sup> File No. ER-2022-0337, Staff confidential workpapers titled "Confidential\_Intangible Amortizations\_ER-2022-0337\_Young\_Trueup", tab named "CR data 303".

1 **Q. Based on the Company’s workpapers, as of October 15, 2024, for each of these categories**  
2 **how many years of useful life remain?**

3 A. According to the Company’s calculations, the software will have less than one year of useful  
4 life remaining. The office furniture will have approximately nine years of useful life  
5 remaining, and the office equipment will have approximately three years of useful life  
6 remaining.<sup>10</sup>

7 **Q. Given the useful lives remaining for these categories of property, does it make sense to**  
8 **you to amortize the undepreciated balances in these accounts over 15 years—the**  
9 **proposed securitization time frame?**

10 A. No, it does not.

11 **Q. What do you recommend that the Commission do with the undepreciated balances for**  
12 **the software, office furniture and office equipment that will be recorded in USOA**  
13 **accounts 303, 316.21, and 316.22?**

14 A. I recommend the remaining balances in accounts 303, 316.21, and 316.22 not be included in  
15 the securitized balance and, instead, be addressed in regular general rate case proceedings.

16 **Q. Does this conclude your testimony?**

17 A. Yes.

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<sup>10</sup> See schedule ADS-R-5.

