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MISSOURI PUBLIC SERVICE COMMISSION

FILE NO. ER-2024-0319

REBUTTAL TESTIMONY

OF

MATT MICHELS

ON

BEHALF OF

UNION ELECTRIC COMPANY

D/B/A AMEREN MISSOURI

**St. Louis, Missouri
January 2025**

REBUTTAL TESTIMONY

OF

MATT MICHELS

FILE NO. ER-2024-0319

1 **Q. Please state your name and business address.**

2 A. My name is Matt Michels. My business address is One Ameren Plaza, 1901
3 Chouteau Ave., St. Louis, Missouri.

4 **Q. By whom are you employed and what is your position?**

5 A. I am employed by Ameren Services Company as Director of Corporate
6 Analysis. In that capacity, I provide services to Ameren Corporation's operating
7 subsidiaries, including Union Electric Company, d/b/a Ameren Missouri ("Ameren
8 Missouri" or "Company").

9 **Q. Please describe your educational background and employment**
10 **experience.**

11 A. I joined Ameren Services Company in 2005 as a Consulting Engineer in
12 Corporate Planning. My responsibilities included coordination and monitoring of projects
13 implemented in conjunction with the integration of processes and systems following the
14 acquisition by Ameren Corporation of Illinois Power Company ("Illinois Power") in
15 October 2004. I was subsequently involved in the integration of combustion turbine
16 facilities acquired by Ameren Missouri in 2006. In September 2008, I was promoted to
17 Managing Supervisor of Resource Planning with responsibility for long-range resource
18 planning, including Ameren Missouri's Integrated Resource Plan filings and associated
19 analyses. In February 2013, I was promoted to Corporate Analysis Manager. In February

1 2014, I was promoted to Senior Manager of Corporate Analysis. In June 2017, I was
2 promoted to my current position as Director of Corporate Analysis. My responsibilities
3 include long-range resource planning, energy policy analysis, environmental compliance
4 planning analysis, fuel budgeting, and other resource related analysis.

5 I earned a Bachelor of Science degree in Electrical Engineering from the University
6 of Illinois at Urbana-Champaign in May 1990. I have been employed by Ameren or Illinois
7 Power since June 1990 in various positions related to resource and business planning.
8 During most of that time, my responsibilities have included the development, use, and
9 oversight of various planning models used for purposes such as production costing,
10 acquisition evaluation, corporate restructuring, financial forecasting, and resource
11 planning. I have previously testified before this Commission in proceedings involving
12 resource planning, renewable energy resources, and energy efficiency.

13 **Q. To what testimony or issues are you responding?**

14 A. I am responding to the direct testimony of Staff witness Claire Eubanks
15 regarding the treatment of transmission infrastructure costs associated with transmission
16 projects occasioned by the October 2024 retirement of Ameren Missouri's Rush Island Energy
17 Center ("RIEC") and to the direct testimony of Sierra Club witness Tyler Comings regarding
18 his allegations with respect to the Company's Sioux Energy Center ("SEC") and Labadie Energy
19 Center ("LEC").

20 **Q. Please summarize the key conclusions from your responses to these**
21 **witnesses as set forth in your rebuttal testimony.**

22 A. Regarding the RIEC transmission infrastructure costs, Ms. Eubanks appears to
23 have misinterpreted the nature and results of the break-even analysis I performed to support the

1 Company's decision in December 2021 to retire RIEC rather than retrofit it with additional
2 environmental controls (i.e., with flue gas desulfurization equipment, or "scrubbers"). Ms.
3 Eubanks suggests that the break-even cost of transmission upgrades associated with the
4 retirement of RIEC was \$115 million, when in fact the break-even cost was determined to be
5 \$386 million under even the lowest cost assumption for scrubbers. As a result, the basis upon
6 which she suggests limits on recovery of these transmission upgrade costs is erroneous. Ms.
7 Eubanks also omits important facts regarding the Company's prior Integrated Resource Plan
8 ("IRP") filings and supporting analyses that are relevant to the question of planning for
9 transmission infrastructure needs associated with retiring RIEC.¹

10 Regarding Mr. Comings' assertions with respect to SEC and LEC, these are matters that
11 are best handled through the Company's IRP process, which the Company has done and
12 continues to do. Mr. Comings' further assertions that the Company has not fulfilled certain
13 obligations pursuant to 1) the Missouri Public Service Commission's ("MPSC") order in the
14 Company's previous electric rate review, and 2) a Joint Agreement filed with the MPSC
15 regarding the Company's 2023 IRP, are untrue. In fact, the Company has identified costs that
16 could be avoided if SEC were retired early and has determined that no avoidable costs are
17 included in the Company's rate request in this case, consistent with the MPSC's prior electric
18 rate order for the Company.² Also, the Company is currently working toward fulfillment of its
19 agreed resolution for Sierra Club's concerns regarding environmental compliance analysis as
20 agreed to in the 2023 IRP Joint Filing.³ That Joint Filing does not require this analysis to be
21 completed at this point.

¹ Company witness Justin Davies separately addresses specific project-related issues raised by Ms. Eubanks in her direct testimony.

² File No. ER-2022-0337, *Report and Order*, issued June 14, 2023.

³ File No. EO-2024-0220, Joint Filing, filed June 11, 2024.

1 **Q. Please summarize the assertions of Ms. Eubanks to which you are**
2 **responding.**

3 A. Ms. Eubanks asserts the following in her direct testimony regarding
4 transmission upgrade costs and the Company's associated resource planning:

5 1. Ameren Missouri made the decision to retire Rush Island on a break-even
6 analysis of around \$115 million for the transmission upgrades.⁴

7 2. Ameren Missouri received the court ruling in January of 2017, but Ameren
8 Missouri did not evaluate the impact of the early retirement of Rush Island on the transmission
9 system until MISO started the Attachment Y2 study process on November 2, 2021.⁵

10 3. Ameren Missouri stated: “In previous years there were studies completed by
11 Transmission Planning in support of the IRP that examined possible impacts of retiring Rush
12 Island and other generating units based upon retirement dates assumed in the IRP. However,
13 there were no other studies that looked at a year out or fiveyear out retirement time frame.”⁶

14 4. Ameren Missouri received its Notice of Violations in 2010 and 2011, therefore,
15 it seems reasonable, or appropriate, that Ameren Missouri would have been planning for such a
16 court ruling as far back as its 2011 Triennial Compliance Filing.⁷

17 5. Ameren Missouri then received the negative court ruling on January 23, 2017,
18 approximately seven months before it filed its 2017 Resource Plan on August 1, 2017. Ameren
19 Missouri chose to appeal that decision and chose not to evaluate a comparison of the retirement
20 of Rush Island to retrofitting Rush Island until the 2020 IRP. Given Ameren Missouri had
21 already received a negative outcome from the Court, it would have been reasonable and prudent

⁴ File No. ER-2024-0319, Claire M. Eubanks, P.E. Direct Testimony, p. 12, ll. 16-17.

⁵ File No. ER-2024-0319, Claire M. Eubanks, P.E. Direct Testimony, p. 12, ll. 19-21.

⁶ File No. ER-2024-0319, Claire M. Eubanks, P.E. Direct Testimony, p. 12-13, ll. 21- 4.

⁷ Fle No. ER-2024-0319, Claire M. Eubanks, P.E. Direct Testimony, p. 13, ll. 5-7.

1 for Ameren Missouri to consider the possibility that an Appeals Court would uphold that
2 decision.⁸

3 **Q. The first assertion by Ms. Eubanks you've highlighted concerns a break-**
4 **even analysis performed by the Company. Please briefly describe this analysis.**

5 A. In short, the break-even analysis was part of a larger analysis used by the
6 Company in making its decision to retire RIEC rather than install scrubbers, a decision the
7 Commission specifically found to have been a prudent one in File No. EF-2024-0021. The
8 larger analysis compared the relative economics of the two options (retire or retrofit) under 48
9 different sets of assumptions in terms of the long-run costs to customers expressed in terms of
10 the net present value of revenue requirements ("NPVRR"). It showed that retiring RIEC
11 resulted in lower costs to customers (i.e., lower NPVRR) than adding scrubbers in all but three
12 of those 48 combinations of assumptions. For each of those 48 combinations of assumptions, I
13 also calculated the cost of transmission upgrades associated with retiring RIEC that would result
14 in both options yielding the same NPVRR – the break-even transmission costs. For the lowest
15 assumption for the cost of scrubbers, the expected break-even transmission cost was found to
16 be \$386 million, not \$115 million as Ms. Eubanks claims.⁹ In fact, 90% of the 48 scenarios
17 evaluated yielded break-even transmission costs of \$183 million or more. I have included the
18 summary of analysis results for all 48 sets of assumptions, including the break-even
19 transmission costs for each, as Schedule MM-R1. It is clear to me that Ms. Eubanks has latched
20 onto the *base* assumptions used for the retire vs. retrofit analysis and has erroneously concluded

⁸ File No. ER-2024-0319, Claire M. Eubanks, P.E. Direct Testimony, p. 13, ll. 9-17.

⁹ See Schedule MM-R1, p. 1, results for probability-weighted average ("PWA") prices and operating scenario 4 ("OPS 4").

1 that it is the *result* of the break-even analysis when it very clearly is not, as shown in Schedule
2 MM-R1.

3 **Q. Has this analysis been included in your testimony in prior cases?**

4 A. Yes. I first included it in my direct testimony in the Company's most recent
5 prior general electric rate case.¹⁰ I subsequently included it in my direct testimony in the
6 Company's request to securitize certain costs related to the retirement of RIEC.¹¹

7 **Q. Did Ms. Eubanks file testimony in either of those two cases regarding**
8 **the Company's expected costs for transmission infrastructure?**

9 A. Yes. In the cited rate case, Ms. Eubanks mentioned the need for transmission
10 upgrades, but she did not make any recommendations with respect to such costs since no such
11 costs were included in the Company's request in that case. In the securitization case, Ms.
12 Eubanks made nearly identical claims regarding the Company's planning and expected
13 transmission system upgrade costs to those she makes in her direct testimony in this case.

14 **Q. Did you respond to Ms. Eubanks' claims in her rebuttal testimony in the**
15 **securitization case?**

16 A. Yes. In my surrebuttal testimony in that case, I noted the same facts based on
17 the same analysis in response to the same (or very similar) claims made by Ms. Eubanks in this
18 case, all pointing to the same conclusion – that the break-even transmission costs were found to
19 be far greater than the actual transmission system upgrade costs turned out to be.

¹⁰ File No. ER-2022-0337.

¹¹ File No. EF-2024-0021.

1 **Q. How do you respond to Ms. Eubanks' other assertions regarding the**
2 **Company's planning as it relates to the need for transmission system upgrades upon**
3 **retirement of RIEC?¹²**

4 A. I respond in the same fashion and with the same facts as I did in the
5 aforementioned securitization case to assertions made by Ms. Eubanks and another Staff
6 witness, Brad Fortson. In short, the Company has evaluated retirement of RIEC in 2024-2025
7 in each of its triennial IRP filings in 2014, 2017, and 2020, and in each of these IRP filings, the
8 Company included estimates of the transmission system upgrades that would be needed upon
9 retirement of RIEC.¹³ At no time until the Company submitted its Attachment Y2 request to
10 the Midcontinent Independent System Operator ("MISO") in November 2021 could the
11 Company have identified more definitive costs for the necessary transmission system
12 upgrades.¹⁴ This is exactly why the Company calculated break-even costs for transmission
13 system upgrades as part of its analysis of retiring RIEC vs. installing scrubbers. As I described
14 previously in my rebuttal testimony above, the expected break-even costs were found to be well
15 in excess of the costs that were ultimately incurred.

¹² Assertion Nos. 2 to 5, as I listed above.

¹³ See Schedules MM-R2 through MM-R7, which show the Company's triennial IRP Chapters for Transmission and Distribution (Chapter 7) and Integrated Resource Plan and Risk Analysis (Chapter 9) from its 2014, 2017, and 2020 triennial IRP filings.

¹⁴ Mr. Davies describes the MISO Attachment Y process and why earlier analyses of transmission upgrade needs would not be sufficiently predictive in his rebuttal testimony.

1 **Q. Ms. Eubanks notes that the Company had indicated in response to a Sierra**
2 **Club data request that the Company had not evaluated the need for or cost of**
3 **transmission system upgrades one year or five years into the future prior to its 2020**
4 **triennial IRP. Is that important?**

5 A. No. Doing so in the Company's 2014 IRP would have meant evaluating
6 transmission costs for retirement in 2015-2019, and in the Company's 2017 IRP would have
7 meant evaluating transmission costs for retirement in 2018-2022. Neither timeframe includes
8 the date on which RIEC retirement occurred (October 15, 2024). For the reasons described by
9 Mr. Davies in his rebuttal testimony, earlier estimates of transmission infrastructure needs and
10 costs if RIEC had been retired earlier would not be meaningful for purposes of assessing the
11 actual costs that have been incurred associated with RIEC retirement.

12 **Q. Does Ms. Eubanks or any other witness recommend any adjustments to**
13 **the Company's rate request in this case related to the Company's planning and RIEC**
14 **retirement?**

15 A. No. Ms. Eubanks refers to forecast capacity shortfalls in 2025-2027 as shown
16 in the Company's most recently filed IRP documentation, but neither she nor any other witness
17 recommends any associated adjustments to the Company's revenue requirement related to this
18 topic. Regarding those forecast shortfalls, it should be noted that none are in excess of the
19 Company's 300 MW build threshold that has been used by the Company for IRP capacity
20 planning.

21 **Q. Please summarize the issues raised by Mr. Comings in his direct testimony.**

22 A. Mr. Comings' direct testimony is largely focused on planning issues regarding
23 SEC and LEC, including consideration of environmental regulations and compliance. In

1 discussing these planning issues, he alleges that the Company has not complied with the MPSC's
2 order in the Company's most recent prior rate case – that the Company "must identify avoidable
3 capital investments when considering any early retirement of its Sioux and Labadie plants, from
4 what is currently planned. Ameren Missouri shall include identification of avoidable capital
5 investments with any future changes proposed for its Sioux and Labadie [energy centers] in its
6 IRP filings."¹⁵

7 **Q. Is Ameren Missouri abiding by the requirement in the MPSC order**
8 **excerpt cited above?**

9 A. Yes. In the Company's 2023 IRP, its first IRP filing since the MPSC order cited
10 above was issued, Ameren Missouri identified project-level costs that would be necessary for
11 maintaining both SEC and LEC for multiple potential retirement dates, including for retirement
12 dates that are earlier than the currently planned retirement dates. I have included a summary
13 table of avoidable costs in Schedule MM-R8, with details included in a workpaper provided
14 with my rebuttal testimony. It should be noted that this workpaper includes the same information
15 and in the same level of detail as that included in the Company's 2023 IRP workpapers, to which
16 Sierra Club had access as an intervenor in the case.¹⁶

17 **Q. Mr. Comings states that the Company's response to a Sierra Club data**
18 **request indicates that the Company has not identified avoidable costs as required by the**
19 **Commission.¹⁷ How do you respond?**

20 A. The data request seeks costs which the Company has identified as avoidable
21 costs *for which recovery is being requested in this case*. There are no such avoidable costs for

¹⁵ File No. ER-2022-0337, *Report and Order*, p. 64, filed June 14, 2023.

¹⁶ File No. EO-2024-0020

¹⁷ File No. ER-2024-0319, Tyler Comings Direct Testimony, p. 13, ll. 13-20.

1 which the Company is seeking recovery in this case. That said, upon reviewing the original
2 data request response, it is not unreasonable to find it confusing, so a revised response was
3 submitted clarifying that no such costs are included in the Company's request for rate recovery
4 in this case.

5 **Q. Does Mr. Comings raise any other issues regarding costs for which the**
6 **Company is seeking rate recovery in this case?**

7 A. No. The balance of Mr. Comings' direct testimony concerns planning issues
8 that underpin his desire (a reasonable desire) to identify potentially avoidable costs associated
9 with potential earlier retirement of SEC and/or LEC. As I stated previously in my rebuttal
10 testimony, the Company has identified differences in expected capital costs for different
11 potential retirement dates for both SEC and LEC in its most recent IRP analysis, and I have
12 summarized those differences in Schedule MM-R8. The planning issues can be broken down
13 into a two categories – 1) Sioux Competitiveness, and 2) environmental compliance.

14 **Q. Please summarize the Sioux competitiveness issues raised by Mr. Comings.**

15 A. Mr. Comings raises the following concerns in his direct testimony:

- 16 1. The Company's IRP analysis does not justify the current SEC retirement date of
17 2032.¹⁸
- 18 2. SEC's capacity factor is low and its operation subject to forced outages.¹⁹
- 19 3. SEC has experienced increased operating costs and requires sufficient market
20 prices to be economically viable.²⁰

¹⁸ File No. ER-2024-0319, Tyler Comings Direct Testimony, p. 8-9, ll. 10- 9.

¹⁹ File No. ER-2024-0319, Tyler Comings Direct Testimony, p. 9, ll. 10-14, p. 10, ll. 5-12.

²⁰ File No. ER-2024-0319, Tyler Comings Direct Testimony, p. 11, ll. 4-8, p. 12, l. 4, to p. 13, l. 3.

1 **Q. How do you respond to the issues listed above regarding SEC**
2 **competitiveness?**

3 A. Regarding SEC's cost, reliability, and market competitiveness, the Company's
4 IRP modeling explicitly takes these and other considerations into account. Ameren Missouri
5 makes explicit assumptions regarding the expected reliability of SEC in conjunction with its
6 expected maintenance costs because these factors are interdependent. Likewise, the Company's
7 dispatch modeling, which simulates how SEC and the Company's other dispatchable units
8 operate in the MISO market, accounts for the specific operating costs of SEC and how the units
9 are dispatched in MISO across a range of scenarios for power market prices. The Company's
10 resource planning also necessarily accounts for the capacity contribution of SEC toward its
11 resource adequacy requirement in MISO. When we evaluate different retirement dates for SEC,
12 we account for the differences in cost, market revenue and need for capacity, which in turn drive
13 the results for customer costs for the different alternatives in terms of NPVRR. All assumptions
14 are made available to all stakeholders, including Sierra Club, as part of the IRP process to review
15 and critique as they see fit.²¹

16 Regarding the Company's justification for changing SEC's retirement date, the
17 Company provided its explanation of the rationale for doing so in its 2022 Notice of Change in
18 Preferred Plan filed in June 2022 and in its 2023 triennial IRP filed in September 2023.²² In
19 short, the Company explained in its 2022 Notice of Change in Preferred Plan its rationale for
20 the delay in the retirement of SEC from 2028 to 2030 as being connected to the need for
21 replacement natural gas-fired combined cycle ("NGCC") generation.²³ In its 2023 IRP, the

²¹ See MPSC IRP rules at 20 CSR 4240-22.080(8).

²² The Company's 2022 Notice of Change in Preferred Plan is included as Schedule MM-R9, and Chapter 10 of the Company's 2023 triennial IRP is included as Schedule MM-R10.

²³ Schedule MM-R9, p. 27.

1 Company noted the need to consider the potential impact of environmental regulations on the
2 planned NGCC that would replace the SEC units upon their retirement as part of its rationale
3 for delaying the SEC retirement to 2032.²⁴

4 **Q. Does Mr. Comings speak to the relevance of his concerns about the future**
5 **of SEC to this case?**

6 A. Yes, although he performs a bit of linguistic sleight of hand in doing so and
7 doesn't actually discuss the importance of this topic to this case. In his direct testimony, Mr.
8 Comings poses the question, "Is the future of Sioux relevant to this rate case or future rate
9 cases?" He then explains why the future of SEC may be relevant to future rate proceedings
10 without directly addressing its relevance to this case.²⁵ As I mentioned previously in my rebuttal
11 testimony, the only issue that Mr. Comings raises that is relevant to this case is the extent to
12 which any of the costs included in the Company's rate request could have been avoided by an
13 earlier retirement considered in the Company's IRP planning, and there are no such costs
14 included in the Company's request in this case. Consequently, his discussion of SEC is simply
15 not relevant to this case at all.

16 **Q. What issues does Mr. Comings raise with respect to environmental**
17 **compliance?**

18 A. With respect to environmental compliance, Mr. Comings raises the following
19 issues in his direct testimony:

20 1. Ameren Missouri needs to plan for compliance with the U.S. Environmental
21 Protection Agency's ("EPA") greenhouse gas rule for power plants finalized in 2024.²⁶

²⁴ Schedule MM-R10, p. 45.

²⁵ File No. ER-2024-0319, Tyler Comings Direct Testimony, p. 13, ll. 7-12.

²⁶ File No. ER-2024-0319, Tyler Comings Direct Testimony, p. 15, ll. 8-15.

1 2. Ameren Missouri needs to plan for compliance with the EPA's "Good
2 Neighbor" rule regulating ozone season NO_x emissions and the National Ambient Air Quality
3 Standards ("NAAQS") for ozone and the associated potential for the need to install selective
4 catalytic reduction ("SCR") controls.²⁷

5 3. Ameren Missouri needs to plan for compliance with EPA's Regional Haze rule
6 and SO₂ NAAQS and the associated potential for the need to install scrubbers.²⁸

7 4. Ameren Missouri needs to plan for compliance with the EPA's Mercury and Air
8 Toxics Standards ("MATS") and NAAQS for particulate matter ("PM").²⁹

9 **Q. Is Ameren Missouri planning appropriately for compliance with these and**
10 **other environmental regulations?**

11 A. Yes. Mr. Comings notes a number of Company IRP documents which detail the
12 regulations for which the Company is planning. As part of the Joint Filing made by the
13 Company, jointly with Sierra Club and other stakeholders, in the Company's 2023 IRP case,
14 Ameren Missouri agreed to include an evaluation of compliance with these regulations in any
15 "update to its preferred resource plan."³⁰ The Company has not updated its preferred resource
16 plan since the Joint Filing was made (just 7 months ago). The Company continues to evaluate
17 potential compliance options for inclusion in its next preferred resource plan, whether that be in
18 a regularly scheduled IRP filing (triennial or annual update) or a notice of change in preferred
19 resource plan pursuant to the Commission's IRP rules.³¹

²⁷ File No. ER-2024-0319, Tyler Comings Direct Testimony, p. 16, ll. 12-18.

²⁸ File No. ER-2024-0319, Tyler Comings Direct Testimony, p. 18, ll. 12-15.

²⁹ File No. ER-2024-0319, Tyler Comings Direct Testimony, p. 20, ll. 4-7, p. 21, ll. 4-9.

³⁰ See Schedule MM-R11, p. 6.

³¹ See MPSC's IRP rules at 20 CSR 4240-22.080(12).

1 **Q. Has Ameren Missouri previously evaluated the potential need for SCR**
2 **controls?**

3 A. Yes. In the Company's 2023 IRP, the option of SCR controls for LEC was
4 compared to reduced generation levels to comply. Reduced generation was shown to result in
5 lower costs and was therefore reflected in the Company's 2023 IRP preferred plan, as explained
6 in Chapter 9 of the Company's 2023 IRP.³²

7 **Q. Mr. Comings expresses concern that the Company appears to take a "wait**
8 **and see" approach regarding planning for environmental compliance.³³ How do you**
9 **respond?**

10 A. Ameren Missouri takes its responsibilities regarding environmental compliance
11 seriously, and the Company also takes its responsibilities to its customers seriously, including
12 the need to ensure that the expenditures it incurs for environmental compliance are appropriate.
13 Given that environmental regulations are increasingly subject to court challenges and given the
14 recent history of successful challenges to such regulations,³⁴ it is important to maintain
15 optionality and not commit to expensive controls too soon. So, while it is understandable that
16 Sierra Club is sometimes frustrated with the Company's approach to considering environmental
17 compliance, Ameren Missouri is ultimately responsible for such planning and ensuring that the
18 costs incurred for compliance are consistent with the MPSC's primary objective for IRP, which
19 includes providing service at just and reasonable rates.

³² See Schedule MM-R12, pp. 11-13.

³³ File No. ER-2024-0319, Tyler Comings Direct Testimony, p. 15, ll. 1-6.

³⁴ For example, investing hundreds of millions of dollars in pollution controls based on a regulation that is being challenged in court could mean customers are saddled with high costs for controls that as it turns out, are not ultimately required. This is a real concern as we have seen several instances over the past 20 years where environmental regulations that would have required controls in fact were overturned by the courts, or pared back by the agencies, due to court challenges.

Rebuttal Testimony of
Matt Michels

- 1 **Q. Does this conclude your rebuttal testimony?**
- 2 A. Yes, it does.

