Exhibit No.:

Issue(s): Revenue Requirement, Meramec Tracker, R&D Bitcoin Project, High Prairie Wind Curtailment Witness: Lisa M. Ferguson Sponsoring Party: MoPSC Staff Type of Exhibit: Rebuttal Testimony Case No.: ER-2021-0240 Date Testimony Prepared: October 15, 2021

MISSOURI PUBLIC SERVICE COMMISSION

FINANCIAL AND BUSINESS ANALYSIS DIVISION

AUDITING DEPARTMENT

REBUTTAL TESTIMONY

OF

LISA M. FERGUSON

UNION ELECTRIC COMPANY d/b/a AMEREN MISSOURI

CASE NO. ER-2021-0240

Jefferson City, Missouri October 2021

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3		REBUTTAL TESTIMONY	
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		LISA M. FERGUSON	
5 6		UNION ELECTRIC COMPANY, d/b/a AMEREN MISSOURI	
7		CASE NO. ER-2021-0240	
8	Q.	Please state your name and business address.	
9	А.	Lisa M. Ferguson, 111 N. 7 th Street, Suite 105, St. Louis, MO 63101.	
10	Q.	By whom are you employed?	
11	А.	I am employed by the Missouri Public Service Commission ("Commission") as	
12	a member of the Auditing Staff ("Staff").		
13	Q	Are you the same Lisa M. Ferguson who contributed to Staff's Revenue	
14	Requirement Cost of Service Report filed September 3, 2021 in this case?		
15	А.	Yes, I am.	
16	Q.	What is the purpose of your rebuttal testimony in this proceeding?	
17	А.	My rebuttal testimony will update the Commission regarding a change in Staff's	
18	revenue requi	rement position from direct after inclusion of some error corrections. I will also	
19	address Ame	ren Missouri witness Mitchell Lansford regarding the Meramec Retirement	
20	Tracking proposal and the Sioux Research & Development (R&D) Bitcoin project. I will also		
21	address OPC witness Geoff Marke and MIEC witness Greg Meyer in regards to the wind		
22	curtailment is	sue at the High Prairie Energy Center.	

REVENUE REQUIREMENT 1 What was Staff's recommended revenue requirement (i.e., increase in rates) for 2 Q. 3 Ameren Missouri's electric operations as presented in direct testimony? Staff's revenue requirement was \$221,386,208. 4 A. 5 Please explain the error corrections that have been made since that time. Q. 6 A. Staff has corrected errors in multiple areas of its filed direct accounting 7 schedules in the current electric case, as follows: 8 Included an adjustment for non-labor wind operations & Maintenance (O&M) • 9 that was erroneously omitted; 10 Corrected a transposition error in an adjustment related to COVID expense • 11 normalization; Corrected the adjustment to bilateral transactions; 12 • 13 Corrected the adjustment that erroneously removed lease expense twice; • 14 Corrected fuel expense in the cash working capital (CWC) schedule; • Included the plant in service accounting (PISA) test year depreciation that was 15 • 16 erroneously omitted; Corrected the adjustment for removal of Missouri Energy Efficiency Investment 17 • 18 Act (MEEIA) test year costs; 19 Corrected the property tax adjustment that erroneously removed non-utility • 20 expense twice; 21 Corrected the adjustment related to removal of capitalized operations & • 22 maintenance (O&M) depreciation;

1	•	Corrected the sign on the adjustment to remove alcohol expense from the test
2		year;
3	•	Included an omitted normalization adjustment for the exceptional performance
4		bonus expense;
5	•	Corrected a transposition error in an adjustment related to short term incentive
6		compensation;
7	•	Correction to a calculation error related to payroll lobbying expense;
8	•	Correction to include the correct amount of Callaway overtime labor within the
9		payroll calculation;
10	•	Included an adjustment to allocate a portion of the removal of test year company
11		owned life insurance (COLI) gains, losses and premiums in order to be included
12		in gas operations;
13	•	Correction to the Small Primary Service (SPS) revenue adjustments related to
14		weather, days and growth; and
15	•	Corrected the sign on the adjustment to remove coal refinement expense from
16		the test year.
17	•	Corrected depreciation rates for various amortized accounts with associated
18		income tax impact
19	Q.	After these corrections and revenue adjustment, what is Staff's current revenue
20	requirement for Ameren Missouri's electric operations?	
21	А.	Staff's revenue requirement is currently \$187,686,064 prior to Staff's true-up
22	audit.	

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MERAMEC RETIREMENT TRACKER

2 Q. Please provide a summary of Ameren Missouri's proposal regarding the
3 Meramec Energy Center.

4 A. Ameren Missouri plans to retire the Meramec Energy Center in December 2022. Ameren Missouri has included a proposed tracking mechanism in this case by which 1/5th of 5 6 the revenue requirement impacts of plant in service, accumulated reserve, accumulated deferred 7 income taxes, coal inventory, general materials and supplies, inventory, O&M expenses, and depreciation are to be included in Ameren Missouri's cost of service. This approach essentially 8 includes 1/5th of the return and depreciation associated with the rate base components of the 9 Meramec Energy Center facility in the cost of service as well as includes 1/5th of the O&M and 10 depreciation in expense. The remaining 4/5th of the Meramec Energy Center revenue 11 12 requirement will be deferred. This also in turn reduces income taxes. Ameren Missouri 13 believes that this position is consistent with the approach taken regarding the treatment of costs 14 related to Evergy's Sibley plant and its retirement. The Company proposes to recover the remaining 4/5th of the Meramec Energy Center costs in rates over a five-year period starting 15 16 with the effective date of rates in its next rate case (including carrying costs equal to the 17 Company's weighted-average-cost-of capital applied to deferrals included in rate base and 18 carrying costs equal to the Company's short-term borrowing rate applied to deferrals excluded 19 from rate base).

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Q.

Does Staff agree with Ameren Missouri's proposal?

A. Partially. Staff agrees to inclusion of 1/5th of the appropriate amount of costs
being included in base rates as part of this rate case and deferring the remaining 4/5th of the
appropriate amount of costs related to the retirement of the Meramec Energy Center. Staff is

also not opposed to the proposal regarding carrying costs. Staff does recommend inclusion of 1 1/5th of the property tax and insurance expense related to the Meramec Energy Center be 2 included in rates and 4/5th of these items be included in the deferral as discussed below. Staff 3 4 also recommends that the deferral consist of all costs and all cost savings that directly result 5 from the closing of the Meramec Energy Center and that the deferral begin being amortized with the effective date of rates in Ameren Missouri's next general rate case. The 1/5th base 6 7 amount included in rates resulting from this rate case will then be used to compare to the actual 8 costs incurred by Ameren Missouri to operate the Meramec facility from the effective date of 9 rates in this proceeding through the facility's retirement and will also encompass all cost savings 10 directly associated with the closing of the facility. In Ameren Missouri's next electric rate 11 proceeding, the deferral balance (the difference between the costs included for the Meramec facility in this case and the ongoing costs until the facility retirement as well as the cost savings 12 13 resulting subsequent to the closure of the plant). The deferral balance to be amortized as well 14 as the amortization period would be determined by the parties and/or the Commission once all 15 amounts are fully known.

16 As part of its direct testimony, it does not appear that the Company has proposed to 17 defer costs or cost savings in the tracking mechanism past the retirement date of Meramec (i.e. 18 for any costs or cost savings incurred subsequent to the retirement). That approach seems one-19 sided and does not appear to truly encompass the Company's intention of ensuring "that this significant retirement does not benefit or harm any party through regulatory lag"¹. Staff 20 21 recommends that the deferral mechanism begin with the effective date of rates in the current 22 electric rate case and conclude at the true-up cutoff in Ameren Missouri's next electric rate

¹ Direct Testimony of Mitchell Lansford, pg. 9 lines 22-23 and pg. 10 line 1.

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proceeding. The deferral balance as established by the parties and/or the Commission can then
 begin to be amortized starting at the effective date of rates in the next electric rate case over an
 amortization period to be determined by the parties and/or the Commission once all amounts
 are fully known.

Q. Are there aspects that other interveners have raised regarding the proposed
Meramec rate treatment and tracking mechanism that Staff believes is appropriate?

A. Yes. Based on the direct testimony by the intervening parties, specifically the
Midwest Industrial Energy Consumers (MIEC), there are some proposals that Staff agrees
would be appropriate in the cost of service and tracking mechanism. Staff agrees that it is
reasonable to:

Include 1/5th of 10 months' worth of power plant maintenance expense in revenue
 requirement and 4/5th in the tracking mechanism - representing the time between the
 operation of law date and the planned retirement date

Similarly, include 1/5th of 10 months' worth of insurance expense and property tax related to Meramec in revenue requirement and 4/5th in the tracking mechanism representing the time between the operation of law date and the planned retirement date
Include 1/5th of the coal inventory and materials and supplies related to the Meramec facility as of the operation of law date in this case in revenue requirement and 4/5th in the tracking mechanism

However I differ somewhat on the proposed MIEC treatment of the Meramec investment itself.
Staff recommends:

• Including 1/5th of the revenue requirement impact of the net investment (plant in service less accumulated depreciation) and ADIT as of the operation of law date in the cost of

1	service in this case and 4/5 th in the tracking mechanism – which would consist of the		
2	following:		
3	\circ The 10 remaining months of depreciation expense between the operation of law		
4	date and the planned retirement date, including 1/5 th in this case in revenue		
5	requirement and the remaining 4/5 th in the tracking mechanism		
6	\circ The return on the 10 remaining months of the net investment less ADIT as of		
7	the operation of law date in this case, including 1/5 th in revenue requirement and		
8	4/5 th in the tracking mechanism		
9	The approach recommended by Staff above would allow Ameren Missouri a reasonable mean		
10	of recovering the costs of a generating facility that will still be used and useful as of the effective		
11	date of rates for this proceeding, and defer for later determination and recovery the difference		
12	in actual return on and of the investment, tax impacts, and cost savings in a future rate		
13	proceeding. This would allow Ameren Missouri recovery of prudent costs and would allow		
14	customers to benefit from any cost savings that occur due to the closure of the Meramec facility		
15	SIOUX RESEARCH & DEVELOPMENT (BITCOIN) PROJECT		
16	Q. Please provide a brief summary of the issue regarding the Sioux R&D project.		
17	A. As one of many R&D projects that Ameren Missouri has instituted, the		
18	Company has recently executed a project in which it mines Bitcoin cryptocurrency using a		
19	converted shipping container with computers that is located on the distribution lines at the Sioux		
20	generation facility.		
21	Q. Did an Ameren Missouri witness discuss this project or any of its repercussions		
22	on the revenue requirement in this case?		

A. No. Ameren Missouri did not have discussion in its direct testimony regarding
 seeking recovery of any costs related to this R&D project. Staff did, however, learn at a later
 date that capital costs related to this project were included in the estimated plant in service
 included in Ameren Missouri's revenue requirement in the accounting schedules provided with
 Company witness Mitchell Lansford's direct testimony.

Q. 6 Staff mentioned in its direct testimony in this case that the R&D issue potentially 7 impacted four Ameren Missouri case filings. How has this issue been resolved in those cases? 8 A. In its direct testimony, Staff referred to four different cases that Ameren 9 Missouri had filed before the Commission for requested authorization to include the Sioux 10 R&D project associated costs and revenues in customer rates. The interrelated cases discussed 11 were Case Nos. ER-2021-0240 (general base rate proceeding), ER-2022-0026 (FAC rider recovery), EU-2022-0030 (AAO regulatory liability request), and potentially EM-2021-0309 12 13 (request for lease of fiber optic assets).

14 On September 8, 2021, Ameren Missouri and the Commission Staff filed a 15 Stipulation & Agreement in Case No. ER-2022-0026, and agreed to resolve the issue regarding 16 the cost of electricity consumed for the research and development project involving the mining 17 of digital currency being included in the FAR. Ameren Missouri agreed to remove the costs and 18 associated kilowatt hours from the proposed FAR. Ameren Missouri and Staff also agreed that 19 the tariff sheet attached to the agreement should be substituted for the one originally filed and 20 that the substitute tariff be approved by the Commission or allowed to take effect on 21 October 1, 2021. The agreement also provided that when the Stipulation was approved by the 22 Commission, Ameren Missouri would withdraw its application for deferral of the costs of the 23 research and development project in File No. EU-2022-0030. The agreement also provided that

the capital assets used in the digital currency mining research and development
 project would not be included in the revenue requirement used to set rates in the current rate
 Case No. ER-2021-0240. The Commission ordered approval of the Stipulation & Agreement
 on September 15, 2021.

Ameren Missouri also filed to dismiss Case No. EU-2022-0030 on September 15, 2021
and that filing was acknowledged by the Commission on September 20, 2021.

7 Upon further Staff discovery regarding Case No. EM-2021-0309, Ameren Missouri has 8 explained to Staff that the excess fiber optic capacity not currently utilized for electric 9 operations will be leased to outside users and is not being employed for purposes of the Sioux 10 Bitcoin R&D project and Staff proposed conditions in that case requesting that if the 11 Commission approves the specific lease addressed in that case that it require Ameren to notify 12 the Commission if it will utilize this OPGW cable in the Sioux R&D project. Ameren Missouri 13 did not oppose that condition and the Commission approved Ameren Missouri's application in 14 that case on October 6, 2021.

15 In regards to the current rate case proceeding, Case No. ER-2021-0240, in its direct 16 testimony Staff explained that Ameren Missouri had included, as part of its estimated 17 investment increase in its direct case, assets such as a modified shipping container and 18 computers that are used for this Bitcoin mining project. At the time of its direct testimony, 19 Staff had proposed an adjustment of \$615,556 in this current rate case to remove the assets from 20 the estimated plant additions from plant-in-service. Staff has verified that as of August 2021, 21 Ameren Missouri has moved all the plant-in-service, overhead and AFUDC of \$1,026,124 22 related to the Sioux R&D project to construction work in process (CWIP) and those amounts 23 are no longer being recorded as plant in the cost of service. There are also no incremental costs

related to the project that will be included in the revenue requirement. Staff will continue to 1 2 verify this is the case during its true-up audit for all project costs through September 30, 2021. 3 Q. Does Staff continue to have concerns regarding Bitcoin or cryptocurrency 4 projects and its effect on regulated rates? 5 A. Yes. Staff is continuing to research this issue and its effects on cost of 6 service ratemaking. 7 WIND CURTAILMENT AT HIGH PRAIRIE ENERGY CENTER 8 Q. Please provide a brief summary regarding the wind curtailment issue at the High 9 Prairie wind facility. 10 A. Ameren Missouri has included the investment as well as the operations & 11 maintenance costs and energy sales for its High Prairie wind facility in its direct filed case. 12 Ameren Missouri states that both the High Prairie and Atchison Renewable Energy Wind 13 facilities are necessary to comply with Missouri's Renewable Energy Standard requirements. 14 In its direct filing, Staff also included all investment, O&M costs and purchases/sales from the 15 facility's participation in the Midcontinent Independent System Operator (MISO) Regional 16 Transmission Organization (RTO) in the proposed revenue requirement. In their direct 17 testimony, Office of Public Counsel (OPC) and Missouri Industrial Energy Consumers (MIEC) 18 have raised the issue regarding voluntary curtailment of the wind generation at the High Prairie 19 facility due to the deaths of threatened and endangered species and those parties have proposed 20 investment related adjustments to the cost of service related to the voluntary curtailment. 21 Q. Has Staff proposed an adjustment to the High Prairie investment as part 22 of this case? 23 A. No.

1	Q.	Did Staff join a stipulation and agreement in Case No. EA-2018-0202, regarding	
2	the High Prairie wind facility?		
3	А.	Yes.	
4	Q.	Did the Commission approve that stipulation and agreement?	
5	А.	Yes.	
6	Q.	Is a true and accurate copy of that stipulation and agreement attached to your	
7	testimony as LMF-r1?		
8	А.	Yes.	
9	Q.	What does paragraph 12 at pages 3 through 4 of that stipulation and	
10	agreement state?		
11	А.	Paragraph 12 states the following:	
12 13 14 15 16 17 18 19 20 21		Prudence: The Signatories agree that they shall not challenge the prudence of the decision to acquire the facility under the terms of the BTA, including Non-Compliant wind turbine generators under the terms of the BTA, and to merge TG High Prairie, LLC into Ameren Missouri if the acquisition of the facility closes pursuant to the BTA. Nothing in this Stipulation limits the ability of any Signatory or other party from challenging the prudence of the design, construction costs, interconnection costs, and all other project related costs, including costs impacted by construction duration.	
22	Q.	Does BTA refer to the Build Transfer Agreement between Ameren Missouri and	
23	TG High Prairie Holdings, LLC?		
24	А.	Yes.	
25	Q.	Does the Build Transfer Agreement between Ameren Missouri and TG High	
26	Prairie Holdings, LLC, provide for the construction of the High Prairie wind facility in Adair		
27	and Schuyler Counties in Missouri?		
28	А.	Yes.	

Q. What does paragraph 4 of the Stipulation say as to Renewable Energy Standard
 compliance costs?

A. Paragraph 4 states in part that "The Signatories agree the costs of this Project
are Renewable Energy Standard Compliance costs so long as the facility is certified by the
Division of Energy as a renewable energy resource under 4 CSR 340-8.010."

6 Q. Has Staff endeavored to determine the impacts of the wind curtailment on
7 customers' rates?

8 A. Yes. Staff issued several data requests seeking additional information regarding 9 the timeline of events at High Prairie, planned mitigation efforts, the economics of the facility, 10 repercussions of permit violations that may occur at the facility, the full breadth of the situation 11 surrounding the bat deaths caused at the facility and the resulting nighttime generation 12 shutdown as well as logs that reflect actual generation and foregone generation. Staff sought 13 information regarding the economics of the facility because of the curtailment issues. 14 Ameren Missouri has relayed in its response to Staff data request 856 that ...all costs of owning 15 and operating the facility, as well as the return "on" and the return "of" the investment is not 16 currently being fully covered by revenues resulting from operations. This uneconomic status 17 is due to the curtailment of generation due to the environmental issues surrounding the facility. 18 The High Prairie facility has only been in service for approximately 10 months and mitigation 19 measures have not yet been fully deployed. Please refer to Staff witness Claire Eubanks' 20 testimony for a more detailed discussion regarding the environmental issues, mitigation efforts 21 that are planned on the part of Ameren Missouri, and Renewable Energy Standard (RES) 22 compliance.

Q. How does Staff respond to the issue of economics regarding the High Prairie
 facility?

A. Staff has serious concerns surrounding the current economics and the operations of the High Prairie wind facility. After several internal discussions Staff has determined not to propose an adjustment at this time related to the current curtailment of generation. Staff will continue to monitor this issue in the present case and future cases, and may seek different ratemaking treatment to account for the curtailment if appropriate at a later time.

- 8
- 9
- Does this conclude your rebuttal testimony?
- A. Yes, it does.

Q.

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of Union Electric Company d/b/a Ameren Missouri's Tariffs to Adjust Its) **Revenues for Electric Service**

Case No. ER-2021-0240

AFFIDAVIT OF LISA M. FERGUSON

)

STATE OF MISSOURI) SS. COUNTY OF ST. LOUIS

COMES NOW LISA M. FERGUSON and on her oath declares that she is of sound mind and lawful age; that she contributed to the foregoing Rebuttal Testimony of Lisa M. Ferguson; and that the same is true and correct according to her best knowledge and belief.

Further the Affiant sayeth not.

JURAT

Subscribed and sworn before me, a duly constituted and authorized Notary Public, in and for the County of St. Louis, State of Missouri, at my office in St. Louis, on this -/// day of October 2021.

SHELLY GADBERRY Notary Public - Notary Seal Jefferson County - State of Missouri Commission Number 18841226 My Commission Expires May 30, 2022