Exhibit No.:	
Issue(s):	*Senate Bill 4, Replacement Generation*
Witness:	*Trevor Rucker*
Sponsoring Party:	*MoPSC Staff*
Type of Exhibit:	*Surrebuttal Testimony*
Case No.:	*EA-2025-0238*
Date Testimony Prepared:	*January 16, 2026*

MISSOURI PUBLIC SERVICE COMMISSION

INDUSTRY ANALYSIS DIVISION

ENGINEERING ANALYSIS DEPARTMENT

SURREBUTTAL TESTIMONY

OF

TREVOR RUCKER

UNION ELECTRIC COMPANY, INC.
d/b/a Ameren Missouri

CASE NO. EA-2025-0238

Jefferson City, Missouri
January 2026

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INTRODUCTION

Q. Please state your name and business address.

A. My name is Trevor Rucker, and my business address is Missouri Public Service Commission, P.O. Box 360, Jefferson City, Missouri 65102.

Q. What is your current position with the Missouri Public Service Commission ("Commission")?

A. I am an Associate Engineer in the Engineering Analysis Department of the Industry Analysis Division.

Q. Are you the same Trevor Rucker who contributed to the Staff Rebuttal Report filed on December 12, 2025, in this docket?

A. Yes.

Q. What is the purpose of your surrebuttal testimony?

A. I will discuss Jordan Seaver's rebuttal testimony filed in this docket on behalf of the Office of Public Counsel ("OPC"). I will specifically discuss the portion of Mr. Seaver's rebuttal testimony regarding the closure of existing electric generating power plants and using the Big Hollow Energy Center ("BHEC") natural gas combustion turbine generator project

("CTG Project") and battery energy storage system project ("BESS Project") (collectively "BHEC Projects") as replacement reliable electric generation.

Q. What are the statutory requirements related to replacement reliable electric generation?

A. Senate Bill 4 was truly agreed to and finally passed on March 13, 2025, signed by Governor Kehoe on April 9, 2025, and became effective on August 28, 2025. Among other things, Senate Bill 4 added section 393.401, RSMo, which includes requirements for replacement generation for existing electric generation power plants[1] to be closed. An electrical corporation must certify to the Commission that it has secured and placed onto the electric grid an equal or greater amount of reliable electric generation prior to the closure of an existing electric generating power plant on or after January 1, 2026.[2] In order to determine if an equal or greater amount of reliable electric generation is being placed onto the electric grid, an electrical corporation shall compare the average of the summer and winter accredited capacity for the generation technology of the existing electric generating power plant to be closed to the average of the summer and winter accredited capacity for the generation technology of the replacement reliable electric generation.[3] Dispatchable power resources shall comprise at least eighty percent (80%) of the average of the summer and winter accredited capacity of the replacement reliable electric generation.[4] The determination of the capacity to be assigned to replacement generation shall use the resource accreditation used by the regional transmission operator or independent system operator ("RTO/ISO") at the time of the electrical corporation's

[1] Section 393.401, RSMo, defines "existing electric generating power plant" as a thermal power plant of over one hundred (100) megawatts (MW) in nameplate capacity, a generating unit at a thermal power plant with a nameplate capacity of over one hundred (100) megawatts (MW), or two or more generating units at a thermal power plant with a combined nameplate capacity of over one hundred (100) megawatts (MW).
[2] Subsection 2 of section 393.401, RSMo.
[3] Subsection 2 of section 393.401, RSMo.
[4] Subsection 2 of section 393.401, RSMo.

application under subsection 1 of section 393.170, RSMo.[5] There are additional requirements related to unexpected or unplanned closures of existing electric generation power plants, but those requirements are not relevant to this case or discussion.

Q. Can you provide an executive summary of your surrebuttal testimony?

A. Yes. In my surrebuttal testimony, I will discuss the requirements of section 393.401, RSMo, for replacement reliable electric generation related to the BHEC Projects. My analysis will show that Ameren Missouri is not required to request that the Commission certify the BHEC Projects as replacement reliable electric generation, nor does section 393.401, RSMo, require that the Commission certify the BHEC Projects as replacement reliable electric generation. Additionally, I conclude that Ameren Missouri's calculation of the average accredited replacement capacity for the BHEC CTG Project is not consistent with the requirements of section 393.401, RSMo.

REPLACEMENT GENERATION REQUIREMENTS

Q. Can you summarize the rebuttal testimony of Mr. Seaver as it pertains to replacement generation?

A. Yes. Mr. Seaver asserts that Ameren Missouri has not requested that the Commission certify the BHEC Projects as replacement reliable electric generation for the Sioux Energy Center ("Sioux"), and that subdivision 2 of subsection 4 of section 393.401, RSMo, requires that the Commission certify the BHEC Projects as replacement reliable electric generation for Sioux.

[5] Subdivision 1 of subsection 4 of section 393.401, RSMo. Subsection 1 of section 393.170, RSMo, requires an electrical corporation to obtain a certificate of convenience and necessity ("CCN") prior to beginning the construction of an energy generation unit larger than one (1) megawatt (MW).

Mr. Seaver's rebuttal testimony also discusses the prudence and timing of the future retirement of Sioux, including the impact of any delay to a future combined cycle natural gas generation project intended to replace Sioux. Mr. Seaver notes that neither the retirement of Sioux nor a combined cycle natural gas generation project have dockets before the Commission. Mr. Seaver concludes that the BHEC Projects do not support the requirements of section 393.401, RSMo.

Q. Do you agree that Ameren Missouri has not requested that the Commission certify the BHEC Projects as replacement reliable electric generation?

A. Yes. In its Application, Ameren Missouri stated that the BHEC CTG Project could be used as replacement generation for 1) Sioux in the event that a planned combined cycle natural gas generation project is delayed, 2) Sioux if an event occurs that forces an early retirement of Sioux, or 3) Labadie Energy Center ("Labadie") if environmental regulations require an early retirement of one or more Labadie units or otherwise impact Labadie's generation.[6] Ameren Missouri also stated that these same benefits apply with respect to the BHEC BESS Project.[7] However, Ameren Missouri did not request in its Application – nor in any subsequent filing in this docket – that the Commission certify either of the BHEC Projects as replacement reliable electric generation.

Q. If Ameren Missouri has not requested that the Commission certify the BHEC Projects as replacement reliable electric generation, what are Ameren Missouri's plans for utilizing the BHEC Projects as replacement generation?

A. As I discussed above, Ameren Missouri stated that a benefit of the BHEC Projects is that they could be used as replacement generation if certain events occur.

[6] Paragraph 12 of Ameren Missouri's Application.
[7] Paragraph 29 of Ameren Missouri's Application.

Ameren Missouri did not indicate that the BHEC Projects would be the primary replacement generation for any of Ameren Missouri's existing electric generating power plants. Ameren Missouri also did not indicate that serving as replacement generation was the primary reason for the need for the BHEC Projects.

In its response to Staff Data Request 0140, Ameren Missouri stated that the BHEC CTG Project is intended as replacement generation for Sioux, which has an anticipated retirement date of December 31, 2031. Ameren Missouri further stated that Sioux has an average accredited capacity for winter and summer of 734 MW and that the current expected average accredited capacity for winter and summer for the BHEC CTG is 608 MW. Ameren Missouri noted that the BHEC CTG Project would cover approximately 83% of Sioux, and that other resources would be needed to cover the remaining 17%. Ameren Missouri also stated in response to the data request that the BHEC BESS Project could be designated as replacement reliable generation for Sioux.

It is unclear based on this response if Ameren Missouri's plans for utilizing a combined cycle natural gas generation project to serve as replacement generation for Sioux have changed since the Application. It is also unclear whether Ameren Missouri plans to utilize the BHEC BESS Project as replacement reliable generation for Sioux or if Ameren Missouri is simply stating that it could use the BHEC BESS Project as replacement reliable generation for Sioux if needed. Staff sent Data Requests 0140.1 and 0140.2 to Ameren Missouri for clarification. As of the time of this surrebuttal testimony, Staff has not received responses from Ameren Missouri.

Q. Do you agree that subdivision 2 of subsection 4 of section 393.401, RSMo, requires that Ameren Missouri must request that the Commission must certify that the BHEC Projects are replacement generation for Sioux?

A. No. Subdivision 2 of subsection 4 of section 393.401, RSMo, states that "*As part of its approval of the replacement reliable electric generation under subsection 1 of section 393.170, the public service commission* ***shall certify*** *that the requirements of this subsection* ***shall be met*** *by the replacement reliable electric generation.*" (emphasis added). I'm not an attorney, but I read this to mean that in its approval of a CCN for replacement generation, the Commission must simply require that the requirements of subsection 4 of section 393.401, RSMo, be met in order for a generation unit to be considered replacement reliable electric generation. Additionally, Section 393.401, RSMo, does not explicitly contain a requirement that an electrical corporation request that the Commission certify that a generation unit is designated as replacement generation during the CCN process or at any other point.

Q. Did Staff evaluate the requirements of section 393.401, RSMo, in the Staff Rebuttal Report filed in this docket?

A. No. At the time of the Staff Rebuttal Report, Staff did not evaluate the specific requirements of section 393.401, RSMo, because Ameren Missouri did not discuss serving as replacement generation as the primary reason for the need of the BHEC Projects and Staff did not anticipate that the requirements of section 393.401, RSMo, would be in dispute.

Q. Does Staff believe that it should provide analysis of the requirements of section 393.401, RSMo, and Ameren Missouri's compliance with these requirements at this time?

A. Yes. Rebuttal testimony has been filed on behalf of OPC on the topic of replacement generation requirements, and Staff does not agree with the analysis on the requirements of section 393.401, RSMo, contained therein. This highlights the need for additional analysis.

Q. What does section 393.401, RSMo, require regarding the CCN process?

A. Subdivision 1 of subsection 4 of section 393.401, RSMo, requires that the determination of the capacity to be assigned to replacement generation must use the resource accreditation used by the RTO/ISO at the time of the electrical corporation's CCN application. Subdivision 2 of subsection 4 of section 393.401, RSMo, requires that as part of its approval of a CCN for replacement reliable electric generation, the Commission shall certify that the requirements of subsection 4 of section 393.401, RSMo, shall be met by the replacement reliable electric generation. There are additional requirements related to the CCN process related to unexpected or unplanned closures of existing electric generation power plants or if an electrical corporation has experienced a significant and long-term loss of load, neither of which are at issue in this case.

Q. If section 393.401, RSMo, does not require an electrical corporation to request that the Commission certify that a generation unit is designated as replacement reliable electric generation during the CCN process, what should an electrical corporation include in its CCN application if it intends for a generation unit to be considered as replacement reliable electric generation?

A. An electrical corporation should make clear its intentions or plans to utilize a generation unit or facility as replacement reliable electric generation in its application for a CCN to ensure that both Staff and the Commission evaluate the requirements of

section 393.401, RSMo, as they pertain to the project. In fact, it might be wise for the electrical corporation to specifically request that the Commission certify that the requirements of subsection 4 of section 393.401, RSMo, shall be met by the replacement reliable electric generation to ensure this requirement of section 393.401, RSMo, is met. Section 393.401, RSMo, does not appear to allow for this requirement to be met retroactively after the CCN application has been approved.

Q. If Ameren Missouri was not required to request that the Commission certify the BHEC Projects are replacement reliable electric generation during the CCN process, what is Ameren Missouri required to do at this time with regards to section 393.401, RSMo, if it intends to utilize the BHEC Projects as replacement reliable electric generation?

A. Ameren Missouri must determine the average accredited replacement capacity for the BHEC Projects by averaging the summer and winter accredited capacity using the resource accreditation used by the RTO/ISO at the time of Ameren Missouri's Application.[8] The Midwest Independent System Operator's ("MISO") resource accreditation would apply to the BHEC Projects.

Q. Has Ameren Missouri determined the average accredited replacement capacity for the BHEC Projects?

A. Ameren Missouri stated that the average accredited replacement capacity for the BHEC CTG Project is 608 MW and referenced Figure 2 of Andrew M. Meyer's direct testimony.[9] Ameren Missouri has not specifically provided the average accredited replacement capacity for the BHEC BESS Project. Staff sent Data Request 0140.1 to clarify Ameren Missouri's plans for utilizing the BHEC BESS Project as replacement reliable electric

[8] Subdivision 1 of subsection 4 of section 393.401, RSMo.
[9] Ameren Missouri's response to Staff Data Request 0140.

generation. The data request additionally asked for the average accredited replacement capacity for the BHEC BESS Project. As of the time of this surrebuttal testimony, Staff has not received a response from Ameren Missouri.

Q. How did Ameren Missouri determine the average accredited replacement capacity for the BHEC CTG Project?

A. Figure 2 of Mr. Meyer's direct testimony shows the anticipated installed capacity ("ICAP") for the summer, fall, winter, and spring seasons, class average accreditation percentage, and direct loss of load ("DLOL") capacity. The ICAP is multiplied by the class average accreditation percentage to determine the DLOL capacity. Ameren Missouri averaged the summer and winter DLOL capacities to provide the average accredited replacement capacity for the BHEC CTG Project of 608 MW.

Q. Is Ameren Missouri's average accredited replacement capacity calculation for the BHEC CTG Project consistent with the requirements of section 393.401, RSMo?

A. No. Ameren Missouri used forecasted class average accreditation percentages for the planning year in which the BHEC CTG Project is anticipated to be placed in-service to calculate the average accredited replacement capacity, as discussed in Mr. Meyer's direct testimony.[10] Ameren Missouri should have used MISO's accreditation at the time of the Application to calculate the average accredited replacement capacity for the BHEC CTG Project.

Q. How should the average accredited replacement capacity for the BHEC CTG Project be calculated?

[10] Andrew M. Meyer Direct Testimony Page 6 line 11 to Page 7 line 6.

A. The average accredited replacement capacity for the BHEC CTG Project should be calculated by averaging the summer and winter accredited capacities that have been calculated using MISO's accreditation at the time of the Application, as required by subdivision 1 of subsection 4 of section 393.401, RSMo. The accredited capacity for each season is calculated by multiplying the ICAP by the MISO class averages to determine the initial seasonal accredited capacity ("ISAC"), and then applying MISO's UCAP/ISAC[11] ratio to identify the final seasonal accredited capacity ("SAC") per season.

Q. What would the average accredited replacement capacity be for the BHEC CTG Project using MISO's accreditation at the time of the Application?

A. In order to calculate the average accredited replacement capacity, I will use the same ICAP values shown in Figure 2 of Mr. Meyer's direct testimony, MISO's Final Schedule 53 Class Averages for Planning Year 2025-2026, and MISO's Seasonal UCAP/ISAC Ratio for Planning Year 2025-2026.[12] The ICAP values for the BHEC CTG, 673 MW for summer and 798 MW for winter, multiplied by the 2025-2026 class averages for combustion turbines 50+ MW (93.1% for summer, 68.8% for winter)[13] results in an ISAC for summer and winter of 627 MW and 549 MW, respectively. Applying the UCAP/ISAC ratios for summer (0.983) and winter (1.085)[14] results in SACs of 616 MW for summer and 596 MW for

[11] "UCAP" stands for unforced capacity.
[12] Planning Year 2025-2026 began on June 1, 2025. Ameren Missouri filed its Application on June 26, 2025.
[13] MISO's Final Schedule 53 Class Averages for Planning Year 2025-2026: https://cdn.misoenergy.org/PY%202025-2026%20%20Schedule%2053%20Class%20Average%20-%20Final667331.pdf?_t_id=zOa72IwTYjp44a1j3vOjYg%3d%3d&_t_uuid=MMevxSNeTF23P3_ZeEVADQ&_t_q=schedule+53+class+average&_t_tags=language%3aen%2csiteid%3a11c11b3a-39b8-4096-a233-c7daca09d9bf%2candquerymatch&_t_hit.id=Optics_Models_Find_RemoteHostedContentItem/667331&_t_hit.pos=4
[14] MISO's Seasonal UCAP/ISAC Ratio for Planning Year 2025-2026: https://cdn.misoenergy.org/PY25-26%20UCAP%20ISAC%20Ratio679673.pdf?_t_id=zOa72IwTYjp44a1j3vOjYg%3d%3d&_t_uuid=72UOEu9kRJioQtlnQCN2VA&_t_q=ucap+%2fisac+ratio&_t_tags=language%3aen%2csiteid%3a11c11b3a-39b8-4096-a233-c7daca09d9bf%2candquerymatch&_t_hit.id=Optics_Models_Find_RemoteHostedContentItem/679673&_t_hit.pos=2

winter. The average of the SACs results in an average accredited replacement capacity of approximately 606 MW.

Q. How does the average accredited replacement capacity calculated by Ameren Missouri using forecasted class average accreditation percentages compare to the average accredited replacement capacity you calculated using MISO's accreditation at the time of the Application?

A. Ameren Missouri provided an average accredited replacement capacity for the BHEC CTG Project of 608 MW, which it stated would cover approximately 83% of the replacement capacity needed for Sioux.[15] The average accredited replacement capacity for the BHEC CTG Project that I calculated was 606 MW, which would still represent approximately 83% of the replacement capacity needed for Sioux, albeit 2 MW less than the value calculated by Ameren Missouri.

Q. What are the ramifications for an average accredited replacement capacity calculation that is not consistent with section 393.401, RSMo?

A. Specific to the BHEC Projects, there is adequate time for Ameren Missouri to correct its calculations and use average accredited replacement capacities for the BHEC Projects using MISO's accreditation at the time of the Application. Looking to the future, if Ameren Missouri does plan to utilize the BHEC CTG Project as replacement reliable electric generation for Sioux, Ameren Missouri will need to account for the additional capacity needed to ensure that an equal or greater amount of replacement reliable electric generation is placed onto the electric grid prior to the retirement of Sioux. Additionally, Ameren Missouri will need to ensure that it correctly calculates average accredited replacement capacities for

[15] Ameren Missouri's response to Staff Data Request 0140.

replacement reliable electric generation in the future to ensure compliance with section 393.401, RSMo.

Q. Do you agree with Mr. Seaver's overall conclusion that the BHEC Projects do not support the requirements identified in section 393.401, RSMo?

A. It is unclear to me how exactly Mr. Seaver concluded that the BHEC Projects do not support the requirements of section 393.401, RSMo. It does not appear to me at this time that Ameren Missouri has failed to comply with any of the requirements of section 393.401, RSMo, and compliance with most of the requirements cannot be verified until some point in the future.

Q. What is required of Ameren Missouri to comply with the requirements of section 393.401, RSMo?

A. Ameren Missouri must provide certification that it has secured and placed on the electrical grid sufficient replacement reliable electric generation to replace the capacity of Sioux prior to its retirement.[16] Ameren Missouri indicated that it may meet this requirement at least in part by utilizing the BHEC Projects as replacement reliable electric generation. Therefore, compliance with this requirement cannot be verified until Sioux is retired and the BHEC Projects are placed in-service. Ameren Missouri suggested that it may use multiple generation projects to serve as replacement reliable electric generation for Sioux, so it is possible that Ameren Missouri won't be able to meet the requirements with the BHEC Projects alone.

Ameren Missouri must provide certification to the Commission prior to or on the date that the BHEC Projects are placed in-service that the requirements of section 393.401, RSMo,

[16] Subsection 2 of section 393.401, RSMo.

have been met in order for the BHEC Projects to be considered replacement reliable electric generation.[17] Again, this is a requirement for which compliance cannot be verified at this time.

Subsection 3 of section 393.401, RSMo, allows for replacement reliable electric generation to be placed in-service after the closure of the existing electric generating power plant if some or all of the interconnection facilities for the existing generation will be utilized. However, that is not applicable to this case because the BHEC Projects are not proposed to be built at the Sioux site.

Subsections 2 and 4 of section 393.401, RSMo, both include requirements regarding how the average accredited replacement capacity for replacement reliable electric generation is calculated. As I discussed above, the average accredited replacement capacity calculated for the BHEC CTG Project by Ameren Missouri is inconsistent with the requirements of section 393.401, RSMo. However, this can be remedied by Ameren Missouri by correcting the average accredited replacement capacity for the BHEC CTG Project. This should not be an issue with compliance with section 393.401, RSMo, unless Ameren Missouri fails to correct the average accredited replacement capacity for the BHEC CTG Project and/or fails to put sufficient replacement reliable electric generation on the electric grid due to incorrect calculations.

CONCLUSION

Q. Can you summarize your surrebuttal testimony regarding the rebuttal testimony of OPC's witness, the requirements for replacement reliable electric generation in

[17] Subsection 6 of section 393.401, RSMo.

section 393.401, RSMo, and Ameren Missouri's compliance with those requirements as they pertain to the BHEC CTG Project and BHEC BESS Project?

A. Yes. I agree with Mr. Seaver that Ameren Missouri has not requested that the Commission certify the BHEC Projects as replacement reliable electric generation. Whereas Mr. Seaver asserted that subdivision 2 of subsection 4 of section 393.401, RSMo, requires that the Commission certify that BHEC Projects as replacement reliable electric generation, I concluded that it does not. I also analyzed the requirements of section 393.401, RSMo, regarding the determination of the average accredited replacement capacity for the BHEC Projects and concluded that Ameren Missouri's calculations for the BHEC CTG Project were not consistent with the requirements of section 393.401, RSMo.

I also disagree with Mr. Seaver regarding his assertion that the BHEC Projects do not support the requirements of section 393.401, RSMo. I discussed the relevant requirements of section 393.401, RSMo, and concluded that at this time, it does not appear that Ameren Missouri has failed to comply with any of the requirements.

Q. Has anything in OPC's rebuttal testimony changed Staff's position that the CCN for the BHEC Projects should be approved?

A. No. Staff's position is still that the CCN for the BHEC Projects should be approved, subject to the conditions included in the Staff Rebuttal Report filed in this docket.

Q. Does Staff recommend any conditions in addition to those contained in the Staff Rebuttal Report related to its position that the CCN for the BHEC Projects should be approved?

A. Yes. Staff recommends that in addition to the conditions included in the Staff Rebuttal Report filed in this docket, the approval of a CCN for the BHEC Projects should include the following conditions:

1. In order for the BHEC Projects to be considered replacement reliable electric generation, Ameren Missouri shall meet the requirements of subsection 4 of section 393.401, RSMo.

2. If the BHEC Projects are to be utilized as replacement reliable electric generation, Ameren Missouri shall provide certification to the Commission that the requirements of section 393.401, RSMo, have been met on or before the dates that the BHEC Projects are placed in-service.

3. Prior to the closure of an existing electric generating power plant for which the BHEC Projects are to be utilized as replacement reliable electric generation, Ameren Missouri shall certify to the Commission that it has secured and placed on the electric grid an equal or greater amount of reliable electric generation.

Q. Does this conclude your surrebuttal testimony?

A. Yes.

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 Permission and Approval and Certificates of Public Convenience and Necessity Authorizing it to Construct a New Generation Facility and Battery Energy Storage System	))))))	Case No. EA-2025-0238

AFFIDAVIT OF TREVOR RUCKER

STATE OF MISSOURI	)	
	)	ss.
COUNTY OF COLE	)	

COMES NOW TREVOR RUCKER and on his oath declares that he is of sound mind and lawful age; that he contributed to the foregoing *Surrebuttal Testimony of Trevor Rucker*; and that the same is true and correct according to his best knowledge and belief.

Further the Affiant sayeth not.

TREVOR RUCKER

JURAT

Subscribed and sworn before me, a duly constituted and authorized Notary Public, in and for the County of Cole, State of Missouri, at my office in Jefferson City, on this 15th day of January 2026.

D. SUZIE MANKIN
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: April 04, 2029
Commission Number: 12412070

Notary Public