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Case No.:	EA-2025-0238

REBUTTAL TESTIMONY

OF

JORDAN SEAVER

Submitted on Behalf of the Office of the Public Counsel

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

CASE NO. EA-2025-0238

December 12, 2025

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**REBUTTAL TESTIMONY
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JORDAN SEAVER**

Union Electric Company d/b/a Ameren Missouri

CASE No. EA-2025-0238

1 **I. INTRODUCTION**

2 **Q. What is your name and what is your business address?**

3 A. My name is Jordan Seaver, and my business address is 200 Madison Street,
4 Governor Office Building, Suite 650, Jefferson City, MO 65102.

5 **Q. By whom are you employed and in what capacity?**

6 A. I am employed by the Office of Public Counsel (“OPC”) as a Policy Analyst.

7 **Q. Have you previously testified before the Missouri Public Service
8 Commission (“the Commission”)?**

9 A. Yes, I have previously testified before the Missouri Public Service Commission.
10 See Schedule JS-R-1 for my past pre-filed testimony and memoranda.

11 **Q. What are your work and educational backgrounds?**

12 A. I have been employed as a Policy Analyst by OPC since January 2022. I have
13 attended Michigan State University’s Institute of Public Utilities (“IPU”)
14 Accounting and Ratemaking Course, as well as the National Association of
15 Regulatory Utility Commissioners’ (“NARUC”) Rate School. I previously
16 worked as a Legal Assistant for Cascino Vaughan Law Offices for 7 years. I
17 have a Master of Arts in Philosophy from the University of Wyoming, and a
18 Bachelor of Arts in Philosophy from the University of Illinois at Chicago.

19 **Q. What is the purpose of your direct testimony?**

20 A. The purpose of this testimony is to respond to the testimony of Union Electric
21 Company d/b/a Ameren Missouri (“Ameren” or the “Company”) witnesses Scott
22 Wibbenmeyer, Christopher Stumpf, and Matt Michels. In particular, I attempt
23 to highlight the fact that the projects in this request for a Certificate of
24 Convenience and Necessity (“CCN”) are high risk for current Ameren

1 ratepayers and that the Company is attempting to acquire them at this time
2 to serve new large load customers. In his direct testimony, OPC witness Geoff
3 Marke proposes three options: (1) the Company acknowledges that all of the
4 costs of the Big Hollow Energy Center are being caused by expected large load
5 customers and that said customers should and will bear the costs of the Big
6 Hollow Energy Center; (2) that, if the Company declares that costs of the Big
7 Hollow projects will be socialized to all customers, then the OPC will take the
8 case to hearing arguing that the Commission should deny the CCN under the
9 Tartan factors; or (3) that if the Company refuses to address who will bear the
10 costs of the Big Hollow projects, then the OPC will not oppose the CCN but will
11 take up the issue of cost recovery in a future rate case.

12 In this testimony I provide reasons that the BESS in particular is not a good
13 choice for siting next to a gas plant, that it may not be the best type of resource
14 to serve the peculiar load of new AI data centers, and that, if the Company is
15 going to install a BESS it would be better to delay the acquisition of such a
16 resource. Further, I argue that the argument that the Big Hollow CTG
17 supports the watt for watt provision of Senate Bill 4 (“SB4”) should provide no
18 support whatsoever for the Commission’s consideration of granting a CCN.
19 Finally, I discuss the changes in planned generation investment from the
20 preferred resource plan (“PRP”) of 2017 to the current PRP of 2025. These
21 PRPs have developed over the years and have not remained the same. It is
22 important to consider the cost of this increased planned investment because
23 the cause of the increase is primarily the expected large load customers.

1 **II. BACKGROUND**

2 **Q. What are the details of the Big Hollow Combustion Turbine Generator**
3 **Project (“CTG”) presented in the testimony of Mr. Stumpf and Mr.**
4 **Michels?**

5 A. The Big Hollow CTG project is constituted by 4 simple-cycle gas combustion
6 turbines (“CT”), backed up by on-site fuel oil. These turbines each have a
7 summer nameplate capacity of 170 MW and a winter nameplate capacity of
8 200 MW. In total, then, the Big Hollow CTG will have a summer nameplate
9 capacity of 680 MW and a winter capacity of 800 MW. Each of the combustion
10 turbines is dual fuel configured with fuel oil as the backup fuel source. The
11 expected in-service date of the Big Hollow CTG is September 2028.

12 Ameren asserts that, beginning in 2028-2029, the Big Hollow CTG will be able
13 to supply winter capacity at or above Ameren’s extreme weather target. If
14 the retirement of Ameren’s Sioux coal plant takes place, then Ameren states
15 that the Big Hollow CTG will be a necessary fallback option if the planned
16 combined cycle to replace the Sioux coal generating facility is delayed or
17 otherwise doesn’t actualize. The Company’s planned combined cycle would
18 need to come online before the retirement of Sioux, in accordance with the
19 watt-for-watt provision of Senate Bill 4 (“SB4”), § 393.401 RSMo. Given the
20 interest of data center companies in Ameren’s service territory, and the
21 expected increase in load of, at the very least, 500 MW, the Big Hollow CTG is
22 necessary to serve that new load. Indeed, serving the expected large load
23 customers appears to be the primary reason for the Big Hollow Energy Center.

1 **Q. What are the details of the Big Hollow battery energy storage system**
2 **(“BESS”) as presented in the testimony of Mr. Wibbenmeyer and Mr.**
3 **Michels?**

4 A. The Big Hollow BESS is a 400 MW_{AC} battery storage facility with four hour
5 duration. It is made up of individual “skids” with battery modules and other
6 equipment contained inside, each one having about 1 MW capacity. The BESS
7 will be capable of remote control through the Company’s Supervisory Control
8 and Data Acquisition system.

9 **Q. What is the Company’s stated purpose of the Big Hollow BESS?**

10 A. Ameren states that the BESS will provide “an immense amount of optionality
11 allowing Ameren Missouri to meet its load needs in times of high
12 demand...similar to a CTG.”¹ Ameren also states that BESS is to take
13 advantage of the transmission interconnection at the Rush Island site without
14 having to submit an interconnection study with Midcontinent Independent
15 System Operator (“MISO”). Other than that, the proposed purposes for
16 acquisition of the BESS are vague and are merely generic functions or roles of
17 any BESS.

18 Staff DR 0034² identifies eleven possible uses for the Big Hollow BESS and
19 asks the Company which application or use the BESS is expected to fulfill.
20 Staff’s identified possible uses include frequency regulation, arbitrage,
21 ramping or spinning reserve, excess solar and wind storage, voltage support,
22 load management. The Company’s response is, effectively, that all of these are
23 possible applications and uses of a BESS in the MISO market according to
24 MISO³. It simply states that MISO considers a BESS capable of fulfilling all

¹ Scott Wibbenmeyer, Direct Testimony, EA-2025-0238, p. 5.

² The DR and Company response is attached as Schedule JS-R-2. The Company provided a MISO fact sheet as the source for its response to the DR, and this is attached as Schedule JS-R-3.

³ The Company attached this MISO Markets and Market Participation fact sheet that discusses the potential and appropriate applications and uses of different types of resources in the MISO market.

1 of these needs. But, Ameren does not state that the Big Hollow BESS is
2 intended for any one of the identified uses, or not intended for others, except
3 that there is no intention for co-locating future renewable generation at the
4 Rush Island site and that it supplies needed capacity for expected large load
5 customers according to the IRP modeling.

6 **III. TIMING OF THE BESS INVESTMENT**

7 **Q. What is the Company's stated reason for the timing of the BESS for**
8 **the Rush Island site specifically?**

9 A. The Company's stated reason is that "the BESS Project will utilize Rush
10 Island's existing interconnection rights via MISO's Generator Replacement
11 Process, which allows the project to avoid the lengthy MISO Large Generator
12 Interconnection Process, thereby avoiding the associated project delays and
13 additional transmission interconnection costs for Ameren Missouri
14 customers."⁴ Thus, the Company is trying to install the BESS before it must
15 pay for and apply for an interconnection study with MISO. The Company also
16 references capacity needs due to large load customers starting in 2028.

17 **Q. Do you agree that Ameren should install the BESS now?**

18 A. No, I believe Ameren should wait to install the BESS to take advantage of
19 reduced battery costs in the future.

20 According to the International Energy Agency ("IEA"), battery energy storage
21 costs are expected to decline by at least 40% by 2030⁵. According to the

<https://cdn.misoenergy.org/Fact%20Sheet%20-%20MISO%20Market%20Participation%20Overview632546.pdf>

⁴ Scott Wibbenmeyer, Direct Testimony, EA-2025-0238, p. 6.

⁵ IEA, Batteries and Secure Energy Transitions Executive Summary,

<https://www.iea.org/reports/batteries-and-secure-energy-transitions/executive-summary>.

1 International Renewable Energy Agency (“IRENA”), the costs of battery
2 energy storage systems could fall by 50%-66% by 2030⁶.

3 **Q. Are there any downsides to delaying the installation of the BESS?**

4 A. The downsides are that the Company may have to conduct a generator
5 interconnection study with MISO and the potential though unlikely⁷ loss of
6 federal investment tax credits the Company says are available. However, the
7 study will not hinder placing BESS on the site in the future, because the time
8 horizon for the project would change if it is delayed, and the generator
9 interconnection study takes an estimated 355 days.

10 Further, the battery by itself is not necessary for meeting capacity needs above
11 and beyond the Big Hollow CTG (for current, existing customers), especially
12 given that the Company has also filed two CCNs, one for new solar generation
13 (Case No. EA-2025-0239) and one for new solar generation plus BESS (Case
14 No. EA-2026-0069). Of course, considering an addition of load from new large
15 load customers does make the additional capacity of the BESS necessary.

16 Battery energy storage systems also are not generators, and the intended
17 purpose for it, especially next to a gas plant, has not been adequately explained
18 by the Company. The downsides considered above would not cause significant
19 issues for the Company meeting either its existing load or new large load
20 customers considering the other new generation that the Company is planning
21 to build prior to 2030.

⁶ IRENA, Electricity storage and renewables: Costs and markets to 2030, October 2017,
<https://www.irena.org/publications/2017/Oct/Electricity-storage-and-renewables-costs-and-markets>.

⁷ The One Big, Beautiful Bill Act, passed on July 4, 2025, changed some of the tax credits that were made available by the Inflation Reduction Act. The investment tax credit that the Company would receive for the Big Hollow BESS is 48E, which has been left almost entirely intact. The 48E ITC is available for BESS projects that, among other requirements, begin construction before 2033. Therefore, the 48E credits that Mr. Wibbenmeyer discusses in his testimony (Direct, pp. 14-16) would almost certainly still be available if the Company were to delay the BESS project to take advantage of declining costs.

1 **Q. The Company highlights the need to take advantage of the**
2 **interconnection rights at the former Rush Island site. What are your**
3 **thoughts on this?**

4 A. The interconnection study necessary for placing a BESS at the Rush Island
5 site after the time period specified by the Company would not completely
6 negate cost savings achieved by delaying a BESS at this site. This is because
7 the costs of BESS are expected to decline significantly in the next 4-5 years
8 (see above, page 5, lines 14-17). So, a delay to take advantage of declining costs
9 would benefit customers in terms of bill impact. A delay also means that the
10 Company would eventually have the capacity from the BESS on its system.
11 The costs provided in the Company's testimony for the Big Hollow BESS are
12 extraordinarily high for a 400 MW of capacity⁸, especially considering that the
13 BESS is not planned to be connected to any intermittent generation that would
14 improve its capacity and allow for dispatchable generation from that site.

15 **Q. Why do you highlight the Big Hollow BESS's lack of connection to**
16 **intermittent generation?**

17 A. I highlight the lack of connection to wind and solar because such a connection
18 would allow an intermittent generator, such as a BESS, to supply energy to
19 the grid at times when it is needed but the generator itself is unable to produce
20 it. The fact that this BESS is not connected to an intermittent generator
21 decreases its utility as it must be charged from the grid in an arbitrage
22 manner. This means that charging and discharging will be determined by low
23 or high prices, respectively, as opposed to being charged when the generator
24 (i.e. the wind or solar farm) is able to run and the energy it produces is not
25 necessary on the grid.

⁸ For comparison, the Castle Bluff Energy Center, which is four natural gas simple cycle combustion turbines, is expected to provide more than 800 MW of capacity and is expected to have an ultimate cost of around \$900 million.

1 This is problematic for several reasons. Firstly, this requires a more near-term
2 look at market prices, which can result in more price volatility than dedicated
3 contracts or assets that generate according to functional parameters.
4 Secondly, significant arbitrage of a BESS can result in accelerated degradation
5 of the asset.⁹ The degradation of the BESS itself is a necessary result of using
6 it, but this process can be accelerated by using it as an arbitrage asset.
7 Additionally, the degradation of the BESS, in turn reduces its effective
8 capacity, thus the accelerated degradation induced by arbitrage leads to an
9 accelerated loss of capacity of the asset.

10 **Q. Why do you believe that a standalone BESS is not the optimal choice**
11 **for serving expected large load customers?**

12 A. In addition to the problems pointed out in my answer to the preceding question,
13 a BESS is an inverter-based resource. This simply means that the BESS
14 produces direct current electricity, which must be passed through an inverter
15 before it can be put on the transmission and distribution lines of our grid,
16 which operates in alternating current electricity. With increased inverter-
17 based generators on the grid, there is a decreased ability to absorb greater
18 voltage disturbances. This means that there is an increased likelihood of
19 voltage instability and thus an increased likelihood of power outages or load
20 shedding.

⁹ See, e.g., Amit Mathrani, “Battery energy storage systems: The foundations of a resilient energy future in the US”, Rabobank, March 18, 2025, <https://www.rabobank.com/knowledge/d011469763-battery-energy-storage-systems-the-foundations-of-a-resilient-energy-future-in-the-us>: “Energy arbitrage is often the first market BESS enter, capitalizing on the spread between low and high wholesale electricity prices. In markets like CAISO and ERCOT, where price volatility creates frequent opportunities, BESS can charge during low-price periods and discharge when prices peak. However, arbitrage carries risks: Frequent cycling accelerates battery degradation, increasing maintenance costs and shortening system lifespan.”

1 Interestingly, it has been noted in at least one study¹⁰ that an increase of BESS
2 in a combination with both thermal generation (e.g., CTs) and intermittent
3 generation (e.g, solar) results in an increased ability to absorb more voltage
4 disturbance because there is the ability to increase the total system inertia.
5 However, the abstract nature of this study does not consider the localized
6 possibility of an inverter-based generator, like a solar facility, being shut down
7 due to voltage instability that the distant BESS is unable to rectify. The large
8 load customers that are expected include AI data centers. These data centers
9 have load profiles with extreme ramping characteristics. In other words, “AI
10 training and inference workloads generate high-frequency power fluctuations
11 that are fundamentally different from conventional demand patterns”¹¹. From
12 the same paper: “The results [of this paper] showed that abrupt spikes create
13 severe frequency deviations, sustained oscillations can escalate into collapse,
14 and gradual ramps excite slower oscillatory modes. These insights highlight
15 how the proposed energy-flow analytics provide a fine-grained view of
16 transient stress that conventional stability measures fail to reveal.”¹²

17 Furthermore, two authors have recently noted that excess BESS capacity on
18 the grid can cause blackouts and force load shedding¹³. An additional problem
19 is the decreasing capacity accreditation that is likely to occur with the increase
20 of BESS in the MISO market, especially if much of that increase comes from
21 standalone BESS. Much like the eventual decline in the initial accredited
22 capacity of wind and solar facilities, BESS could be deemed much less reliable
23 than they are currently assumed to be. For example, a 2023 NERC report

¹⁰ Tyler Bennett Phillips, et al., “An Operational Resilience Metric to Evaluate Inertia and Inverter-based Generation on the Grid”, Idaho National Laboratory, October 2022, https://inldigitallibrary.inl.gov/sites/sti/sti/Sort_54701.pdf.

¹¹ Kyung-Bin Kwon, et al., “Operational Risks in Grid Integration of Large Data Center Loads: Characteristics, Stability Assessments, and Sensitivity Studies”, October 6, 2025, p. 1, <https://arxiv.org/pdf/2510.05437v1>.

¹² *Ibid.*, p. 10.

¹³ Bo Yang and Zunlian Zhao, “Energy storage overcapacity can cause power system instability and blackouts, too”, *Nature*, September 10, 2024, <https://www.nature.com/articles/d41586-024-02896-3>.

1 found that “BESS may have the same systemic performance problems as Solar
2 PV resources.”¹⁴ Additionally the report notes that

3 All BESS facilities experienced partial plant tripping caused by inverter
4 protection, failing to ride through normally cleared single-line-to-ground
5 grid faults. The affected inverters tripped on both new causes and
6 causes previously reported associated with solar PV resources.
7 Facilities also exhibited the previously identified plant control
8 interaction that delays the return to pre-disturbance output levels.¹⁵

9 This, along with the fact that the widespread use and heavy reliance on BESS
10 has not yet occurred, increases the likelihood that unforeseen events in the
11 next 5 years might make the MISO accredited capacity of BESS decline.

12 These problems highlight the benefits of waiting for more evidence on the
13 ability of BESS to be deployed particularly for helping to serve new large load
14 customers and support my proposal to delay an acquisition of the BESS
15 proposed in this application.

16 **IV. § 393.401 RSMo.: SB4/WATT-FOR-WATT**

17 **Q. Does Ameren identify another reason for the Big Hollow Projects?**

18 A. Yes. In its Application, Ameren states that the Big Hollow CTG “will assist
19 the Company in meeting the letter and spirit of the replacement generation
20 requirements in” SB4.¹⁶ In describing the Big Hollow BESS, Ameren states
21 that these benefits “also exist with respect to the Big Hollow BESS Project.”¹⁷

¹⁴ Joint NERC and WECC Staff Report, 2022 California Battery Energy Storage System Disturbances, September 2023, p. iv, https://www.nerc.com/globalassets/who-we-are/standing-committees/rstc/nerc_bess_disturbance_report_2023.pdf.

¹⁵ *Ibid.*

¹⁶ Application, EA-2025-0238, p. 5.

¹⁷ *Ibid.* p. 14.

1 **Q. What is your position on the statement in the Company’s Application**
2 **for this CCN that “the Project will assist the Company in meeting the**
3 **letter and spirit of the replacement generation requirements in**
4 **Senate Bill No. 4”¹⁸?**

5 A. My position is that the implication is unclear, as the Company is not asking
6 that the Commission certify that the Big Hollow Energy Center (the CTG and
7 the BESS together) is the replacement for Sioux, as required by § 393.401.4(2)
8 RSMo.

9 The Application goes on to state that there is “combined cycle generation that
10 is planned to replace the aging Sioux Energy Center coal facility” but that the
11 Big Hollow project “also provides flexibility if an event occurred prior to 2032
12 that forces an early retirement of Sioux”¹⁹ or if the planned combined cycle is
13 delayed.

14 Firstly, I believe that retirement of the Sioux generating facility in just 6 or 7
15 years when there is the potential for 2 GW of new load in the next 5 years
16 would likely be imprudent under current and expected conditions. Secondly,
17 in the event that there was a delay in any part of the purported combined cycle
18 that will replace Sioux, the appropriate action would likely be to delay the
19 retirement of Sioux, not goldplate buildout by preemptively installing extra
20 generation. Further, neither the retirement of Sioux nor its replacement
21 combined cycle plant are in their own filed dockets under consideration by the
22 Commission. Thus, it is not appropriate to support the Big Hollow projects by
23 claiming they are in support of the requirements identified in § 393.401 RSMo.

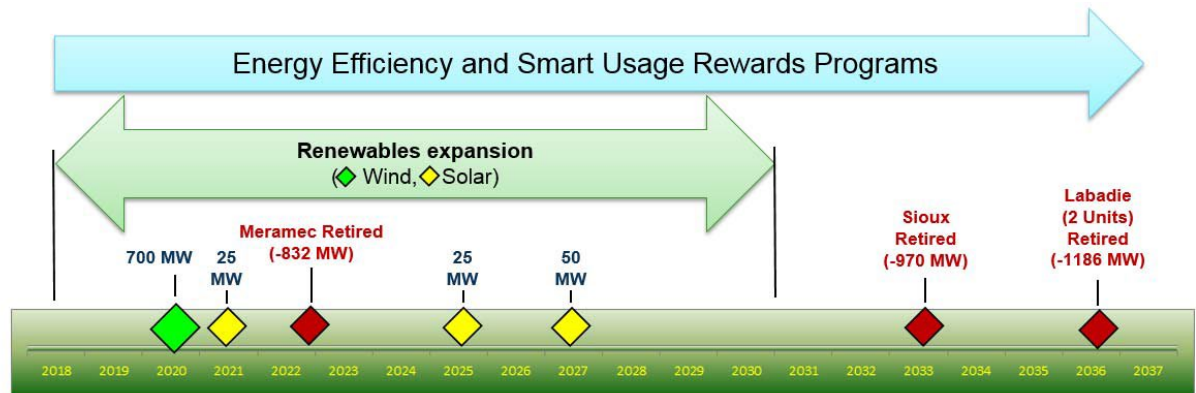
¹⁸*Ibid.* p. 5.

¹⁹ *Ibid.*

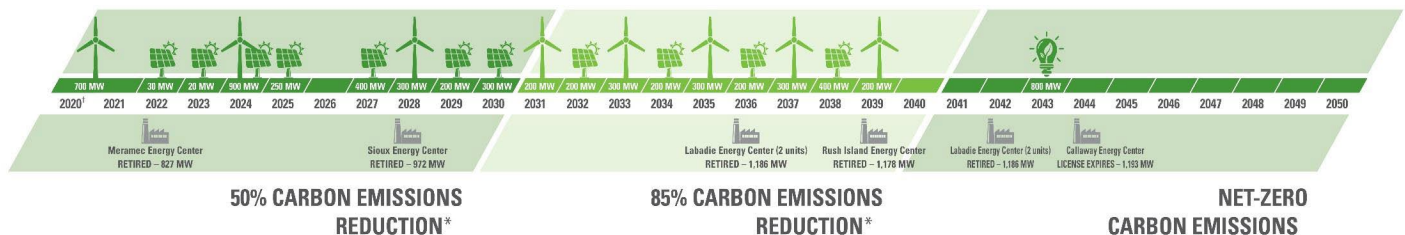
V. AMEREN'S GENERATION INVESTMENT HAS INCREASED AS A DIRECT RESULT OF EXPECTED LARGE LOAD CUSTOMERS

Q. Have the Company's previous IRPs showed a level of generation buildout similar to that of the 2025 PRP update?

A. No. The 2017 IRP PRP showed a buildout of 700 MW of wind and 100 MW of solar by 2030. That's a total addition of 800 MW. Below is the chart showing the 2017 PRP:

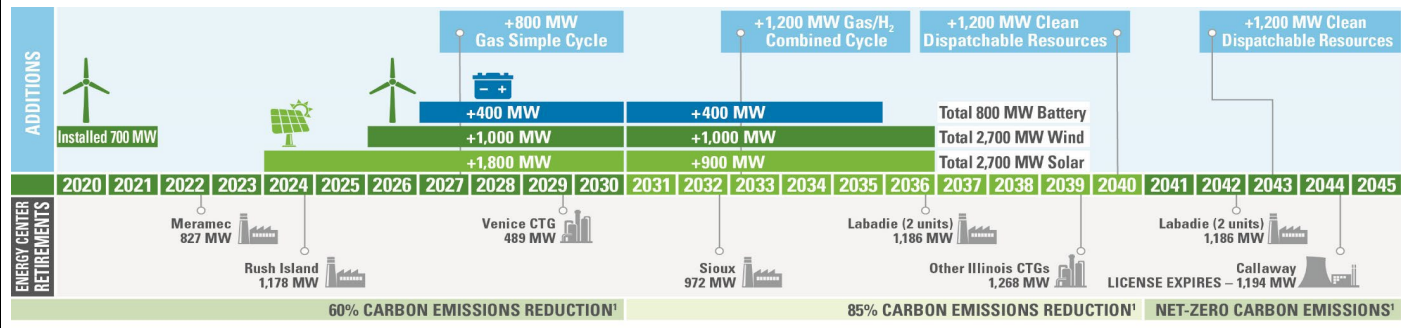


The 2020 IRP PRP showed the Company increasing its generation buildout greatly, with the cause being the net-zero carbon emissions by 2041 goal. The additions in the 2020 PRP include 3,200 MW of wind and 2,200 MW of solar by 2041. That's a total addition of 5,400 MW. Below is the chart showing the 2020 PRP:



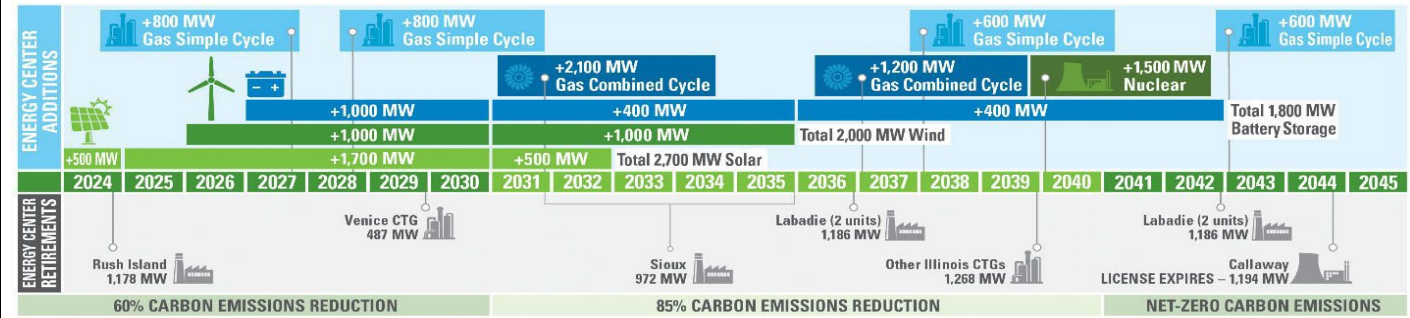
* Reductions are presented as of the end of the period indicated and based off of 2005 levels. Wind and solar additions, energy center retirements by end of indicated year.
 † Projects expected to be substantially complete in 2020, fully in service in early 2021.

1 The 2023 IRP PRP showed the Company increasing its generation buildout even
 2 more, while also adding more kinds of generation to the mix. The additions in
 3 the 2023 PRP include 2,700 MW of wind, 2,700 MW of solar, 800 MW of battery
 4 storage, 2,000 MW of gas turbines, and 1,200 MW of “clean dispatchable
 5 resources”, all by 2041. That’s a total addition of 9,400 MW. Below is the chart
 6 showing the 2023 PRP:



NOTE: Final timing of Rush Island retirement is dependent on a revised order from the U.S. District Court. The company continues to evaluate the potential for additional energy efficiency and demand response programs. Reductions are presented as of the end of the period indicated and based off 2005 levels. Wind and solar additions, energy center retirements by end of indicated year.
 1. Ameren’s goals encompass both Scope 1 and 2 emissions including other greenhouse gas emissions of methane, nitrous oxide and sulfur hexafluoride. This goal is dependent on a variety of factors including cost-effective advancements in innovative clean energy technologies as well as constructive federal and state energy and economic policies.

7
 8 Finally, the 2025 PRP Annual Update shows the Company increasing its
 9 generation buildout due to the expected large load customers in its service
 10 territory. The additions in the 2025 PRP include 2,700 MW of solar, 2,000 MW
 11 of wind, 1,800 MW of battery storage, 5,500 MW of gas turbines (both simple and
 12 combined cycle are included in this total), and 1,500 MW of nuclear, all by 2042.
 13 That’s a total addition of 13,500 MW, with one year difference from the prior
 14 PRP. Below is the chart showing the 2025 PRP:



NOTE: Reductions are presented as of the end of the period indicated and based off 2005 levels. Wind and solar additions, energy center retirements by end of indicated year.

1 The 2025 PRP has increased generation additions by 2041-2042 by 4,100 MW.
2 This is a 44% increase over the generation additions planned for in the 2023 PRP.
3 The 2025 PRP shows an increase in generation by 2031 of 5,800 MW. This is an
4 increase for this time period over the 2023 PRP by 1,800 MW, and an increase
5 over the 2020 PRP of 3,100 MW. Below is a chart summarizing the changes to
6 PRP generation additions from the 2017 IRP to the 2025 PRP Update.

PRP	Planned New Capacity by 2031	Planned New Capacity by 2041	Difference Between 2017 Plan in Planned Additions by 2031	Difference Between 2017 Plan in Planned Additions by 2041
2017	800 MW	800 MW	-	-
2020	3,100 MW	5,400 MW	2,300 MW	4,600 MW
2023	4,700 MW	9,400 MW	3,900 MW	8,600 MW
2025 Update (current PRP)	5,800 MW	13,500 MW	5,000 MW	12,700 MW

7
8 **Q. How do these PRP changes support Dr. Marke's proposals in his**
9 **testimony?**

10 A. Dr. Marke's proposals, which I support, are, in light of the Company's enormous
11 planned generation buildout, an initial measure that could keep current
12 ratepayers from overpaying for generation that is being built and/or purchased
13 at a premium to serve new large load customers. In his direct testimony,
14 Company witness Steven Wills says the Company is planning to expend over \$16
15 billion in planned capital additions in just the next 5-6 years, not including the
16 Big Hollow projects.²⁰ This enormous amount of planned capital expenditure as
17 well as the costs presented in this case are mostly, if not completely, for the

²⁰ Steven Wills, Direct Testimony, Case No. EA-2025-0238, p. 9.

1 planned addition of large load customers in the form of data centers.²¹ If the
2 OPC is forced by the Company to take the case to hearing, and the Commission
3 decides to deny the CCN for these projects, then current customers will benefit
4 from a lower rate increase in the near future due to the lack of capital costs from
5 these projects. If the Company affirms the causal connection between these
6 projects and the expected large load customers, and pledges cost recovery of these
7 projects from only those customers, then current customers will also benefit
8 from the appropriate cost allocation of a future rate increase including the Big
9 Hollow costs.

10 **Q. Have the costs of the Big Hollow projects changed since the time of the**
11 **filing of this application?**

12 A. According to a response to OPC DR No. 1, the costs for the CTG has not changed.
13 However, with regard to the BESS, the Company states that “tariffs have
14 continued to fluctuate, which will affect the overall cost of the project. However,
15 tariffs will be determined when the goods enter the country at the time of
16 import...Therefore, the risk adjusted cost estimate is still valid as a worst-case
17 scenario for tariff levels and overall cost of the project.” This suggests an
18 increased likelihood that the overall cost of the BESS may go beyond the risk-
19 adjusted cost estimate. This potential for increased costs for the BESS at this
20 time further supports the OPC’s arguments that the Company is taking on
21 unique risk to acquire these resources at this time in support of new customer
22 load growth.

²¹ Matt Michels’ testimony includes a lengthy discussion of the various large load scenarios considered by the Company. The capacity and energy needs of the Company will be affected by the expected large load customers, and this is the main driver of the updated 2025 PRP. The cases that Mr. Michels uses to evaluate “the cost of resource acceleration to meet near-term LLC demand” are Cases 6 and 7 (found in the table on p. 8 of Mr. Michels’ direct testimony). But the case that is used for the PRP is Case 4, which has significant increases of large load in each year. He also considers Case 5 as the extreme case, which includes additions of large load demand that exceed the amounts included in the PRP. This highlights just how much the increased generation buildout is driven by the expected large load from data centers.

1 **Q. What is the unique risk of this time period that you're referring to?**

2 A. In the direct testimony of Company witness Christopher Stumpf, there is a
3 discussion of constraints on suppliers of combustion turbines²². Mr. Stumpf
4 states that "there were two potentially viable alternatives," which were GE and
5 Siemens. He goes on: "It should be noted that during this period of time, the
6 combustion turbine market became very constrained; in fact, during the bid
7 review phase for Castle Bluff, Siemens informed us that it could not timely offer
8 production slots for the engines, which prevented Siemens from being a viable
9 supply option. The risk of not being able to procure production slots in time to
10 make the required in-service dates for the CTG Project was also very high given
11 market conditions." Mr. Stumpf also notes that Mitsubishi declined to submit a
12 proposal because "it did not believe it could compete". And on 12/9/2025 (the
13 week of the filing of this testimony) GE announced in its annual investor update
14 that it "expects turbine reservations to be sold out through 2030 by the end of
15 2026" and that it currently has "an 80-GW backlog that stretches into 2029."²³
16 The difference in costs between these 800 MW of capacity from gas turbines and
17 the same 800 MW of capacity of turbines that was acquired in the Castle Bluff
18 case is significant and likely a result of the extremely high demand on gas
19 turbines due to an attempt to power large load data centers.

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

21 A. Yes.

²² Christopher Stumpf, Direct Testimony, Case No. EA-2025-0238, p. 6.

²³ Brian Martucci, "GE Vernova expects to end 2025 with an 80-GW turbine backlog that stretches into 2029", Utility Dive, December 11, 2025, <https://www.utilitydive.com/news/ge-vernova-gas-turbine-investor/807662/>.

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

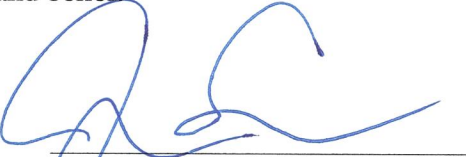
In the Matter of the Application of Union Electric)	
Company d/b/a Ameren Missouri for Permission)	<u>Case No. EA-2025-0238</u>
and Approval and Certificates of Convenience)	
and Necessity Authorizing it to Construct a New)	
Generation Facility and Battery Energy Storage)	
System)	

AFFIDAVIT OF JORDAN SEAVER

STATE OF MISSOURI)
) ss
COUNTY OF COLE)

Jordan Seaver, of lawful age and being first duly sworn, deposes and states:

1. My name is Jordan Seaver. I am a Policy Analyst for the Office of the Public Counsel.
2. Attached hereto and made a part hereof for all purposes is my rebuttal testimony.
3. I hereby swear and affirm that my statements contained in the attached testimony are true and correct to the best of my knowledge and belief.



Jordan Seaver
Policy Analyst

Subscribed and sworn to me this 8th day of December 2025.

<p align="center">TIFFANY HILDEBRAND NOTARY PUBLIC - NOTARY SEAL STATE OF MISSOURI MY COMMISSION EXPIRES AUGUST 8, 2027 COLE COUNTY COMMISSION #15637121</p>
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Tiffany Hildebrand
Notary Public

My Commission expires August 8, 2027.