

Exhibit No.:

Issues: Policy

Witness: Jessica Polk Sentell

Sponsoring Party: Renew Missouri
Advocates

Type of Exhibit: Rebuttal Testimony

Case No.: EA-2025-0238

Testimony Filed: December 9, 2025

MISSOURI PUBLIC SERVICE COMMISSION

EA-2025-0238

REBUTTAL TESTIMONY

OF

JESSICA POLK SENTELL

ON BEHALF OF

RENEW MISSOURI ADVOCATES

December 9, 2025

1

2

I. INTRODUCTION

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

4 A: Jessica Polk Sentell, Director of Eastern Missouri and Policy Associate, Renew Missouri
5 Advocates d/b/a Renew Missouri (“Renew Missouri”), 501 Fay Street, Suite 206,
6 Columbia, MO 65201.

7 **Q: Please describe your current position, your education, and background.**

8 A: In my role as Director of Eastern Missouri and Policy Associate at Renew Missouri, I,
9 along with other Renew Missouri staff, have developed and offered educational materials
10 and programs on topics related to energy law and policy in Missouri, rural renewable siting
11 and county planning and zoning, rural broadband, local organizing and rural electric
12 cooperative engagement, and our year-end update covering state and federal rulemakings,
13 Public Service Commission (“PSC” or the “Commission”) cases, and other various energy
14 efficiency/renewable energy updates.

15 Regarding my background and education, I have a Masters of Public
16 Administration and a Bachelor of Science in Political Science, both from Missouri State
17 University in Springfield, Missouri. Upon graduating with my master’s degree, I was
18 selected as a Presidential Management Fellow by the Office of the President of the United
19 States, Washington, D.C. As a Presidential Management Fellow, I spent over three years
20 working as a Program Analyst for the federal government. During my tenure, I worked for
21 the US Department of Defense, Joint Chiefs of Staff, National Military Command Center,
22 Pakistan-Afghanistan Coordination Cell, Office of Governance & Development; US
23 Department of State, Office of the Special Representative to Muslim Communities; and
24 US Department of Justice, Drug Enforcement Administration, International Operations,

1 Special Projects Branch. I am also a certified teacher in the State of Missouri and have a
2 certificate in Culturally Responsive Teaching from Southeast Missouri State University's
3 Center for Teaching and Learning. Prior to beginning my position at Renew Missouri, I
4 spent six years teaching political science as a full-time instructor at Southeast Missouri
5 State University in Cape Girardeau, Missouri, six years as a part-time adjunct instructor at
6 Three Rivers College in Poplar Bluff, Missouri, and six years as a full-time high school
7 and dual credit teacher at Clearwater R-1 High School in Piedmont, Missouri.

8 **Q: What work does Renew Missouri conduct in the field of energy policy?**

9 A: Renew Missouri is an advocacy group appearing before regulatory agencies such as the
10 Missouri Public Service Commission, the Kentucky Public Service Commission, and the
11 Kansas Corporation Commission in the role as expert witnesses on clean energy, energy
12 efficiency, and transmission development policy. Our work involves engaging as
13 intervenors on utility rate cases, applications for certificates of convenience and necessity
14 ("CCNs"), mergers and acquisitions, Accounting Authority Orders ("AAOs"), and energy
15 efficiency investment portfolios. Renew Missouri also routinely engages in workshops and
16 rulemaking by providing comments. We have also lent our expertise and knowledge on
17 legislative matters in Missouri and Kansas as well as the federal level on issues ranging
18 from energy efficiency investments to securitization of debts incurred from closing coal
19 plants to helping rural electric cooperatives obtain financing for clean energy projects.

20 **Q: Have you testified before any state utility commissions?**

21 A: I have aided with research and development of pre-filed testimony in Ameren Missouri's
22 recent rate case, File No. ER-2024-0319, *In the Matter of Union Electric Company d/b/a*
23 *Ameren Missouri's Tariffs to Adjust Its Revenues for Electric Service*, and Evergy Missouri

1 Metro and Evergy Missouri West recent CCN for solar generation facilities for File No.
2 EA-2024-0292, *In the Matter of the Application of Evergy Missouri West, Inc. d/b/a Evergy*
3 *Missouri West for Permission and Approval of Certificates of Public Convenience and*
4 *Necessity Authorizing It to Construct, Install, Own, Operate, Manage, Maintain and*
5 *Control Two Solar Generation Facilities*. I have submitted testimony in Liberty's recent
6 rate case, File No. ER-2024-0261, *In the Matter of the Request of The Empire District*
7 *Electric Company d/b/a Liberty for Authority to File Tariffs Increasing Rates for Electric*
8 *Service Provided to Customers In its Missouri Service Area*, Evergy Missouri Metro and
9 Evergy Missouri West's large load tariff case, File No. EO-2025-0154, *In the Matter of the*
10 *Application of Evergy Metro, Inc. d/b/a Evergy Missouri Metro and Evergy Missouri West,*
11 *Inc. d/b/a Evergy Missouri West for Approval of Tariffs Related to Service of Large Loads,*
12 and Union Electric Company's recent large load tariff case, File No. ET-2025-184, *In the*
13 *Matter of the Application of Union Electric Company d/b/a Ameren Missouri for Approval*
14 *of New and Modified Tariffs for Service to Large Load Customers*.

15 **Q: What is the purpose of your testimony?**

16 A: The purpose of my testimony is to support the addition of battery energy storage systems
17 ("BESS") in Ameren Missouri ("Ameren" or the "Company") EA-2025-0238 and caution
18 against over-reliance on natural gas generation in resource planning. I will make the
19 argument that the Commission should approve construction for the Company and reiterate
20 previously offered concerns and analysis of natural gas construction constraints, winter
21 weather reliability issues, and price volatility.

22 **Q: Could you please briefly summarize your testimony as well as your**
23 **recommendations?**

1 A: I will repeat Renew Missouri’s support for battery storage as presented in the rebuttal
2 testimony of William “Nick” Jones in EA-2025-0075.¹ I will also remind the Commission
3 of our testimony warning of adding too much natural gas generation due.²

4 II. SUPPORT OF BESS

5 **Q: Why is Renew Missouri supporting the addition of BESS to this project?**

6 A: BESS is intended to provide flexible capacity for new demand, helping to meet peak loads
7 with clean energy and balance the variability of other clean energy from wind and solar.
8 Indeed, Ameren explains that the expanded storage is driven by the significant new load
9 additions in its service territory and a reduction in expected demand savings from scaled-
10 back efficiency programs.³ “Gas turbines, critical equipment to turn natural gas into
11 electricity, are in short supply....At this point, **battery storage systems, solar arrays and**
12 **wind farms are faster and cheaper to build per kilowatt of capacity than anything**
13 **else,** according to Lazard” [emphasis added].⁴ Renew Missouri applauds Ameren’s
14 recognition of battery storage as a critical resource in developing “a balanced supply-side

¹Ex. 500, Rebuttal Testimony of William “Nick” Jones, p. 36-51, EA-2025-0075, *In the Matter of the Application of Evergy Missouri West, Inc. d/b/a Evergy Missouri West and Evergy Metro, Inc. d/b/a Evergy Missouri Metro for Permission and Approval of a Certificate of Public Convenience and Necessity for Natural Gas Electrical Production Facilities*

² Ex. 500, Rebuttal Testimony of William “Nick” Jones, p. 7-36, EA-2025-0075, *In the Matter of the Application of Evergy Missouri West, Inc. d/b/a Evergy Missouri West and Evergy Metro, Inc. d/b/a Evergy Missouri Metro for Permission and Approval of a Certificate of Public Convenience and Necessity for Natural Gas Electrical Production Facilities*.

³ Direct Testimony of Matt R. Michels, p. 3, Direct Testimony of Ajay K. Arora, p. 3-4, Direct Testimony of Steven M. Wills, p. 3-4 see also Ameren Missouri’s *Preferred Resource Plan Change 2025*, Case No. EO-2025-0235, Ex. 6, Direct Testimony of Matt R. Michels, p. 3. *In the Matter of the Application of Union Electric Company d/b/a Ameren Missouri for Approval of New Or Modified Tariffs for Service to Large Load Customers*, File No. ET-2025-0184.

⁴ Stock, K., Chediak, M., & Saul, J. (2025, December 4). So you want an AI boom. Bloomberg Newsletter: Green Daily. Retrieved December 4, 2025, from https://www.bloomberg.com/news/newsletters/2025-12-04/how-trump-s-renewables-roadblocks-can-stall-the-ai-boom?cmpid=BBD120425_GREENDAILY&utm_medium=email&utm_source=newsletter&utm_term=251204&utm_campaign=greendaily

portfolio to meet customer needs in a reliable and resilient manner” and its inclusion of BESS on an accelerated timetable.⁵

Q: Does BESS make financial sense compared to other forms of generation or dispatchable resources?

A: Yes. While Renew Missouri did not complete our own financial analysis, general knowledge and information available about the energy sector industry clearly shows “batteries are among the cheapest and quickest ways to get more capacity onto the grid.”⁶ This is why other states have added exceptional amounts of BESS in the last couple of years. In some instances, BESS has “displac[ed] some natural-gas use” and helped “stave off” grid emergencies.⁷ Furthermore, as pointed out by Mr. Arora, “they can be charged when market prices are low and discharged during peak system conditions” and this can be done more than once a day.⁸ “Battery storage projects will [also] have tax credits available through 2033.”⁹ Finally, Ameren’s own analyses, performed by Astrapē Consulting (now acquired by PowerGEM) and internally at Ameren, show “BESS up to

⁵ Direct Testimony of Matt R. Michels, p. 3, Direct Testimony of Ajay K. Arora, p. 3-4.

⁶ McCarthy, D. (2025, October 31). *Chart: Batteries are set to surge onto the US grid*. Canary Media. Retrieved December 4, 2025, from <https://www.canarymedia.com/articles/batteries/us-energy-storage-growth-2030-bloombergnef>

⁷ *Id.*

⁸ Direct Testimony of Ajay K. Arora, p. 10.

⁹ Walton, R., & DiGangi, D. (2025, August 27). *US utility-scale storage outlook ticks upward post-OBBA*. Utility Dive. Retrieved December 4, 2025, from <https://www.utilitydive.com/news/EIA-utility-scale-storage-outlook-ticks-upward-post-obba/758710/>

Wood Mackenzie Power & Renewables & American Clean Power Association. (2025, September). *US Energy Storage Monitor* [Q3 2025]. Wood Mackenzie Reports. Retrieved November, 2025, from https://go.woodmac.com/1/131501/2025-09-25/34tzgr/131501/1758833792fvVm5YRQ/US_ESM_Q3_2025_ES_PR.pdf

1 1,500-2,000 MW is more economic relative to additional [natural gas simple cycle] above
2 that included in the 2025 [preferred resource plan].”¹⁰

3 III. NATURAL GAS CONCERNS

4 **Q: You stated you have concerns about future natural gas projects being added**
5 **to Ameren Missouri’s generation portfolio. Please explain that further.**

6 A: Renew Missouri would like to caution the Commission against continuing to add
7 natural gas projects to Ameren’s generation portfolio. Gas turbines take longer to construct
8 compared to renewable forms of generation, are more expensive (especially natural gas
9 peaking, see Chart 1), and have winter reliability issues (see Chart 2 and an explanation
10 from the Union of Concerned Scientists in the footnotes).¹¹

¹⁰ Direct Testimony of Matt R. Michels, p. 15-17, *Preferred Resource Plan Change 2025*, Case No. EO-2025-0235, Ex. 6, Direct Testimony of Matt R. Michels, p. 3. *In the Matter of the Application of Union Electric Company d/b/a Ameren Missouri for Approval of New Or Modified Tariffs for Service to Large Load Customers*, Case No. ET-2025-0184.

¹¹ Robb, D. (2024, October 23). *Simple Cycle, Combined Cycle, or a Hybrid Approach?* Power. Retrieved December 4, 2025, from <https://www.powermag.com/simple-cycle-combined-cycle-or-a-hybrid-approach/>
Stock, K., Chediak, M., & Saul, J. (2025, December 4). *So you want an AI boom*. Bloomberg Newsletter: Green Daily. Retrieved December 4, 2025, from https://www.bloomberg.com/news/newsletters/2025-12-04/how-trump-s-renewables-roadblocks-can-stall-the-ai-boom?cmpid=BBD120425_GREENDAILY&utm_medium=email&utm_source=newsletter&utm_term=251204&utm_campaign=greendaily

Staff of the Federal Energy Regulatory Commission. (2024, November 21). *Winter Energy Market and Electric Reliability Assessment* [A Staff Report to the Commission]. FERC Files. Retrieved December 4, 2025, from chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/<https://www.ferc.gov/sites/default/files/2024-11/Winter%20Assessment%202024-2025%20Long%20Version.pdf>

Arbaje, P. (2023, December 14). *How Gas Plants Fail and Lead to Power Outages in Extreme Winter Weather*. Union of Concerned Scientists blog. Retrieved December 4, 2025, from <https://blog.ucs.org/paul-arbaje/how-gas-plants-fail-and-lead-to-power-outages-in-extreme-winter-weather/>

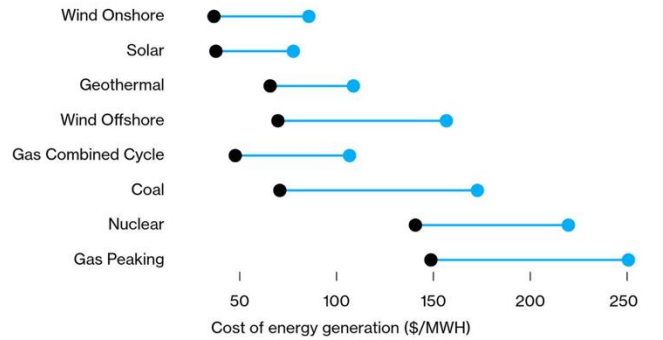
“Recent extreme winter storms have triggered widespread gas plant failures, knocking many plants offline at the same time...These storms can cause direct failures at the plants themselves, as well as indirect failures through disruptions of the gas system that delivers fuel to the plants. When a storm is severe enough, all the primary components of this delivery chain can be, and have been, affected—from the production wells, to the gas processing facilities, to pipelines, all the way to the power plants.” Gas plants “made up a disproportionately larger percentage of the power plant failures.”

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CHART 1¹²

Wind and Solar Are Now Cheaper

Cost to build electricity generation in dollars per megawatt hour, based on recent projects and fuel costs



2

3

CHART 2¹³

¹² Stock, K., Chediak, M., & Saul, J. (2025, December 4). *So you want an AI boom*. Bloomberg Newsletter: Green Daily. Retrieved December 4, 2025, from https://www.bloomberg.com/news/newsletters/2025-12-04/how-trump-s-renewables-roadblocks-can-stall-the-ai-boom?cmpid=BBD120425_GREENDAILY&utm_medium=email&utm_source=newsletter&utm_term=251204&utm_campaign=greendaily

¹³ Arbaje, P. (2023, December 14). *How Gas Plants Fail and Lead to Power Outages in Extreme Winter Weather*. Union of Concerned Scientists blog. Retrieved December 4, 2025, from <https://blog.ucs.org/paul-arbaje/how-gas-plants-fail-and-lead-to-power-outages-in-extreme-winter-weather/>

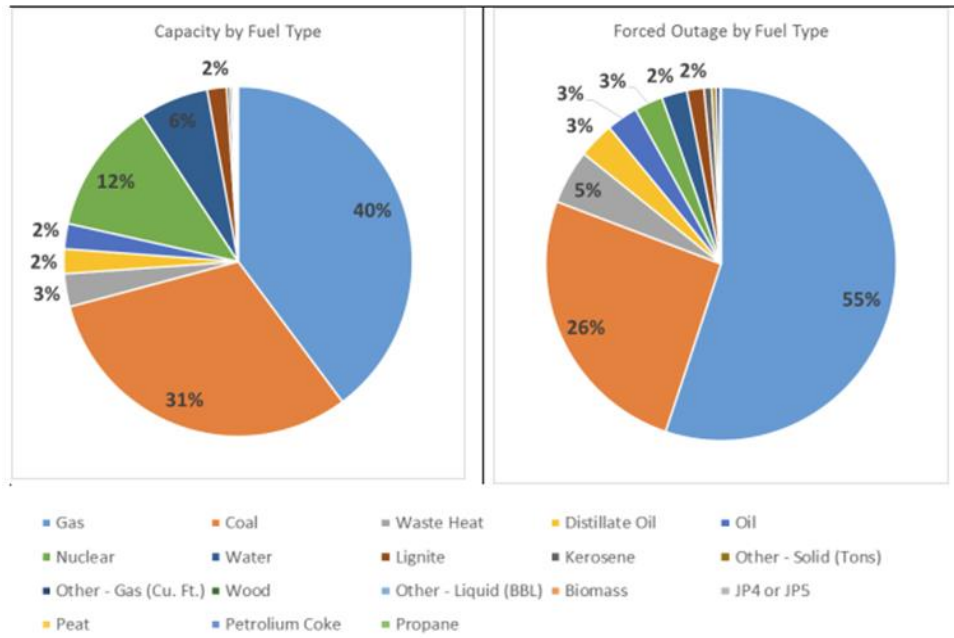


Figure 13: Percentage of Net Dependable Capacity by Fuel Type (left); Percentage of Capacity Lost During Polar Vortex by Fuel Type (right) in Eastern and ERCOT Interconnections

Further, as even Ameren admits, natural gas prices are volatile.¹⁴ “Between January and March of this year [2025], U.S. gas prices jumped by a third due to a cold snap and strong [liquid natural gas] exports.... A similar pattern seems to be unfolding as 2025 winds down, with...gas-fired output getting pared back as gas prices approach three-year highs and strain the budgets of power suppliers” (see Chart 3).¹⁵

CHART 3¹⁶

¹⁴ Direct Testimony of Ajay K. Arora, p. 10, Ex. 500, *Rebuttal Testimony of William “Nick” Jones*, p. 7-36, *In the Matter of the Application of Evergy Missouri West, Inc. d/b/a Evergy Missouri West and Evergy Metro, Inc. d/b/a Evergy Missouri Metro for Permission and Approval of a Certificate of Public Convenience and Necessity for Natural Gas Electrical Production Facilities.*, Case No. EA-2025-0075.

¹⁵ Maguire, G. (2025, December 3). *High and rising natural gas costs may spur fresh climb in US coal use*. Reuters: Commodities. Retrieved December 5, 2025, from https://www.reuters.com/markets/commodities/energy/high-rising-natural-gas-costs-may-spur-fresh-climb-us-coal-use-2025-12-03/?utm_source=Sailthru&utm_medium=Newsletter&utm_campaign=Power-Up&utm_term=120425&lctg=67ed690782623f2b960eb5e8

¹⁶ *Id.*



In the last quarter of 2025, “benchmark U.S. Henry Hub **natural gas futures have climbed by more than 40%** on a combination of rising gas use for heating and sustained strength in exports of [liquid natural gas], which have climbed to a fresh record so far this year. That price run-up *exceeds* the rally seen at the start of 2025” [emphasis added].¹⁷ In 2026, projections “are currently expected to average \$4.15/MMBtu, **which would be the highest average annual U.S. natural gas price since 2022 and would mark the third straight year of U.S. gas price increases**” (see Chart 4) [emphasis added].¹⁸

CHART 4¹⁹

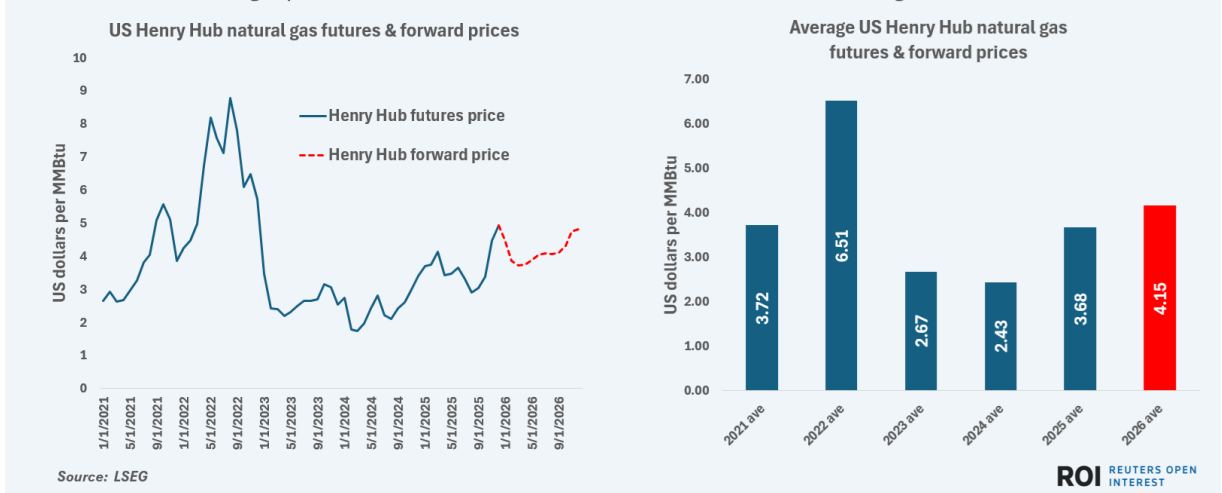
¹⁷ *Id.*

¹⁸ *Id.*

¹⁹ *Id.*

US natural gas futures & forward prices

Benchmark US natural gas prices have rallied 50% in 2025 from 2024, and are seen climbing another 13% in 2026



In short, the more natural gas generation added to Ameren’s portfolio, the more you expose Ameren Missouri, its investors, and its customers to these risks.

Q: Did Renew complete its own economic analysis to arrive at your assertion of natural gas price volatility?

A: Yes, in addition to the recently (December 3, 2025) released LSEG data referenced above, Nick Jones performed an economic analysis of natural gas price volatility for Renew Missouri earlier this year, which we previously offered in EA-2025-0075.²⁰ His analysis concluded, “The ultimate cost...will heavily depend on the cost of natural gas – meaning that their cost to rate payers will be subject to the risks of a notoriously volatile and

²⁰ Maguire, G. (2025, December 3). *High and rising natural gas costs may spur fresh climb in US coal use*. Reuters: Commodities. Retrieved December 5, 2025, from https://www.reuters.com/markets/commodities/energy/high-rising-natural-gas-costs-may-spur-fresh-climb-us-coal-use-2025-12-03/?utm_source=Sailthru&utm_medium=Newsletter&utm_campaign=Power-Up&utm_term=120425&lctg=67ed690782623f2b960eb5e8

Ex. 500, *Rebuttal Testimony of William “Nick” Jones*, p. 7-36, In the Matter of the Application of Evergy Missouri West, Inc. d/b/a Evergy Missouri West and Evergy Metro, Inc. d/b/a Evergy Missouri Metro for Permission and Approval of a Certificate of Public Convenience and Necessity for Natural Gas Electrical Production Facilities, Case No. EA-2025-0075.

1 unpredictable market.”²¹ Again, Ameren also concedes this is an issue and uses it as
2 justification for including BESS with this project.²²

3 IV. CONCLUSION

4 **Q: Please summarize your testimony for the Commission.**

5 A: Renew Missouri does not oppose Ameren’s CCN, as we see significant value in
6 Ameren pairing projects with BESS. We provide this testimony to the Commission, as we
7 are wholeheartedly in support of adding BESS to the project and enthusiastically endorse
8 moving forward with more BESS projects in the future. However, we would be remiss if
9 our testimony did not address our concerns with over-reliance on natural gas generation.
10 Those concerns involve supply chain constraints, weather-related unreliability, and price
11 volatility, as discussed above.

12 **Q: Does this conclude your testimony?**

13 A: Yes.
14

²¹Ex. 500, Rebuttal Testimony of William “Nick” Jones, p. 51, In the Matter of the Application of Evergy Missouri West, Inc. d/b/a Evergy Missouri West and Evergy Metro, Inc. d/b/a Evergy Missouri Metro for Permission and Approval of a Certificate of Public Convenience and Necessity for Natural Gas Electrical Production Facilities, Case No. EA-2025-0075.

²² Direct Testimony of Ajay K. Arora, p. 10.

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) **File No.**
EA-2025-0238
Necessity Authorizing it to Construct a New)
Generation Facility and Battery Energy)
Storage System)

STATE OF MISSOURI)
) ss
COUNTY OF WAYNE)

~~Further the Affiant sayeth not.~~

Jessica P. [Signature]
Jessica P.

Jessica Polk Sentell

Subscribed and sworn before me this 11th day of December 2025.

[Signature]

Notary Public

