# Exhibit No. 502

Renew Missouri – Exhibit 502 Testimony of Jessica Polk Sentell Rebuttal Case No. ET-2025-0184

Exhibit No.:

Issues: Policy

Witness: Jessica Polk Sentell

Sponsoring Party: Renew Missouri

Advocates

Type of Exhibit: Rebuttal Testimony

Case No.: ET-2025-0184

Testimony Filed: September 5, 2025

#### MISSOURI PUBLIC SERVICE COMMISSION

ET-2025-0184

REBUTTAL TESTIMONY

**OF** 

JESSICA POLK SENTELL

ON BEHALF OF

RENEW MISSOURI ADVOCATES

September 5, 2025

#### I. INTRODUCTION

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

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

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

A: In my role as Director of Eastern Missouri and Policy Associate at Renew Missouri, I, along with other Renew Missouri staff, have developed and offered educational materials and programs on topics related to energy law and policy in Missouri, rural renewable siting and county planning and zoning, rural broadband, local organizing and rural electric cooperative engagement, and our year-end update covering state and federal rulemakings, Public Service Commission ("PSC" or the "Commission") cases, and other various energy efficiency/renewable energy updates. Regarding my background and education, I have a Masters of Public Administration and a Bachelor of Science in Political Science, both from Missouri State University in Springfield, Missouri. Upon graduating with my master's degree, I was selected as a Presidential Management Fellow by the Office of the President of the United States, Washington, D.C. As a Presidential Management Fellow, I spent over three years working as a Program Analyst for the federal government. During my tenure, I worked for the US Department of Defense, Joint Chiefs of Staff, National Military Command Center, Pakistan-Afghanistan Coordination Cell, Office of Governance & Development; US Department of State, Office of the Special Representative to Muslim Communities; and US Department of Justice, Drug Enforcement Administration, International Operations, Special Projects Branch. I am also a certified teacher in the State

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

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

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

#### Q: Have you testified before any state utility commissions?

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

Evergy Missouri Metro and Evergy Missouri West recent CCN for solar generation facilities for File No. EA-2024-0292, In the Matter of the Application of Evergy Missouri West, Inc. d/b/a Evergy Missouri West for Permission and Approval of Certificates of Public Convenience and Necessity Authorizing It to Construct, Install, Own, Operate, Manage, Maintain and Control Two Solar Generation Facilities. I have submitted testimony in Liberty's recent rate case, File No. ER-2024-0261, In the Matter of the Request of The Empire District Electric Company d/b/a Liberty for Authority to File Tariffs Increasing Rates for Electric Service Provided to Customers In its Missouri Service Area and Evergy Missouri Metro and Evergy Missouri West's recent large load tariff case, File No. EO-2025-0154, In the Matter of the Application of Evergy Metro, Inc. d/b/a Evergy Missouri Metro and Evergy Missouri West, Inc. d/b/a Evergy Missouri West for Approval of Tariffs Related to Service of Large Loads.

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

A: The purpose of my testimony is to support many of the riders involved in Ameren Missouri ("Ameren" or the "Company") ET-2025-0184. I will make the argument that the Commission should approve those riders for the Company to offer to large load customers and consider others.

# Q: Could you please briefly summarize your testimony as well as your recommendations?

A: I will summarize each of the three Large Load Customers ("LLCs") tariff riders Renew Missouri is specifically supporting and outline the benefits of allowing LLCs to participate in said tariff riders. Finally, I will recommend adding additional riders that include options for LLCs generating their own energy or provide credit for load curtailment.

#### II. SUPPORT OF RIDERS

## Q: Why does Ameren Missouri need new tariff riders for large load customers?

A: As Mr. Dixon and others testified, there is substantial demand from large-load customers, and Ameren Missouri needs tariffs to address new consumer needs and be marketable or appealing to companies potentially locating in Ameren Missouri's service territory. Ameren's current Renewable Solutions Program ("RSP") for commercial customers is already fully subscribed, while experts across the energy sector are forecasting a continued increase in demand. In short, the ability to offer renewable energy rider options to LLCs needs to be addressed at the earliest opportunity, which would be in this case.

# Q: Have other investor-owned utilities brought forward large-load tariff proposals?

A: Yes, both across the country and here in Missouri.<sup>3</sup> Evergy Missouri Metro and Evergy Missouri West have a large load tariff case currently before the Commission.<sup>4</sup>

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<sup>&</sup>lt;sup>1</sup> Direct Testimony of Robert B. Dixon, p. 11-12, 14-19.

<sup>&</sup>lt;sup>2</sup>In the Matter of Union Electric Company d/b/a Ameren Missouri's Tariffs to Adjust Its Revenues for Electric Service, Case No. ER-2024-0319, *Direct Testimony of James Owen*, p. 25-27, 30.

https://www.iea.org/news/growth-in-global-electricity-demand-is-set-to-accelerate-in-the-coming-years-as-power-hungry-sectors-expand

https://www.eia.gov/todayinenergy/detail.php?id=65264

https://www.energy.gov/articles/doe-releases-new-report-evaluating-increase-electricity-demand-data-centers https://eta-publications.lbl.gov/sites/default/files/2025-

<sup>01/</sup>electricity rate designs for large loads evolving practices and opportunities final.pdf

<sup>&</sup>lt;sup>3</sup> https://eta-publications.lbl.gov/sites/default/files/2025-

<sup>01/</sup>electricity rate designs for large loads evolving practices and opportunities final.pdf, p. 13

<sup>&</sup>lt;sup>4</sup> In the Matter of the Application of Evergy Metro, Inc. d/b/a Evergy Missouri Metro and Evergy Missouri West, Inc. d/b/a Evergy Missouri West for Approval of New and Modified Tariffs for Service to Large Load Customers, Case No. EO-2025-0154.

# Q: Provide a brief description of the Renewable Solutions Program - Large Load Customers (Schedule "RSP-LLC").

A: This is an optional rate for LLCs who subscribe to renewable energy from Ameren Missouri-owned or contracted projects. This program will operate similarly to Ameren Missouri's current RSP subscription program. Customers will receive credits on their bills subject to the output of their subscribed resource.

## Q: Why is Renew Missouri supportive of this rider?

A: Renew Missouri is generally supportive of customers having clean energy choices that make economic sense for both customers and the Company. RSP-LLC will help customers reach their own sustainability goals. It will also help Ameren Missouri reach their stated sustainability goals of "net-zero carbon emissions by 2045." Furthermore, generation resources utilized for this rider program are "part of the Company's preferred resource plan." Finally, Renew Missouri voiced our support for expanding the RSP last year. Given current demand predictions, this seems to be the next logical phase of expanding the RSP to a new category of customers. According to Ameren Missouri's Phase 2 presentation materials, participating in the traditional RSP supports "sustainability goals; reduce[s] your carbon footprint; lower[s] local emissions; support[s] the renewable energy market;" contributes towards being "good stewards of the Missouri environment; [and] shows you use clean energy to your shareholders, customers, community and employees."

<sup>&</sup>lt;sup>5</sup> <a href="https://www.ameren.com/company/environment-and-sustainability">https://www.ameren.com/company/environment-and-sustainability/integrated-resource-plan</a>

<sup>&</sup>lt;sup>6</sup> Direct Testimony of Ajay Arora, p. 16.

<sup>&</sup>lt;sup>7</sup> In the Matter of Union Electric Company d/b/a Ameren Missouri's Tariffs to Adjust Its Revenues for Electric Service, Case No. ER-2024-0319, *Direct Testimony of James Owen*, p. 23-34.

<sup>&</sup>lt;sup>8</sup> https://www.ameren.com/-/media/missouri-site/files/cleanenergycustomerprograms/renewable-solutions/renewable-solutions-phase-2.ashx, p. 6 .

| ("CC  | CAP").   |
|-------|--|
| Q:    | Provide a brief overview of the Clean Capacity Advancement Program                 |
| local | renewable energy while reducing cost and risk for all Ameren Missouri customers.   |
| indus | strial customers and communities a pathway to meet their sustainability goals with |
| The C | Company's 2024 IRP update states RSP "offer[s] Ameren Missouri commercial an       |

A: This rider is for LLCs that want to support clean capacity additions, such as battery storage. The customer will pay a specific price per MW each month. These revenues will help cover the costs of adding the clean capacity and general revenue requirements.

#### Q: Why is Renew Missouri supportive of this rider?

A: Renew Missouri is generally supportive of customers having clean energy choices that make economic sense for both the customer and the Company. CCAP will help customers reach their own sustainability goals by adding clean capacity and will help cover the costs of adding sustainable generation and storage to Ameren Missouri's generation and storage portfolio. In Ameren Missouri's own words, battery storage "is more economic than additional [natural gas] up to at least 1,750 MW, and likely closer to 2,000 MW." Besides adding clean capacity, increased clean energy choices will reduce greenhouse gas emissions and thus improve conditions for better health of Missourians.

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<sup>&</sup>lt;sup>9</sup> <a href="https://www.ameren.com/-/media/missouri-site/files/environment/irp/2024/2024\_ameren\_irp\_annual\_update.ashx">https://www.ameren.com/-/media/missouri-site/files/environment/irp/2024/2024\_ameren\_irp\_annual\_update.ashx</a>, p. 19.

<sup>&</sup>lt;sup>10</sup>Direct Testimony of Matt Michels, p. 14.

<sup>11 &</sup>lt;a href="https://moenvironment.org/blog/survey-shows-missouri-voters-support-state-plan-to-cut-carbon-pollution/">https://moenvironment.org/blog/survey-shows-missouri-voters-support-state-plan-to-cut-carbon-pollution/</a>
<a href="https://moenvironment.org/blog/survey-shows-missouri-voters-support-state-plan-to-cut-carbon-pollution/">https://moenvironment.org/blog/survey-shows-missouri-voters-support-state-plan-to-cut-carbon-pollution/</a>
<a href="https://moenvironment.org/blog/survey-shows-missouri-voters-support-state-plan-to-cut-carbon-pollution/">https://moenvironment.org/blog/survey-shows-missouri-voters-support-state-plan-to-cut-carbon-pollution/</a>
<a href="https://moenvironment.org/blog/survey-shows-missouri-voters-support-state-plan-to-cut-carbon-pollution/">https://moenvironment.org/blog/survey-shows-missouri-voters-support-state-plan-to-cut-carbon-pollution/</a>
<a href="https://moenvironment.org/">https://moenvironment.org/</a>

https://dnr.mo.gov/air/get-involved/help-improve-air-quality

https://www.nrdc.org/sites/default/files/CPP-Missouri-Compliance-IB.pdf

https://www.epa.gov/ks/region-7-air-quality-program

https://climate.nasa.gov/news/3134/reducing-emissions-to-lessen-climate-change-would-yield-dramatic-health-benefits-by-2030/

https://www.epa.gov/climateimpacts/climate-change-impacts-health

https://pmc.ncbi.nlm.nih.gov/articles/PMC4953604/

### Q: Provide a brief overview of the Clean Energy Choice Program ("CEC").

A: The CEC allows LLCs to bring proposals to Ameren Missouri, asking them to study and potentially implement clean energy technology resources not accounted for in current or future Integrated Resources Plans ("IRPs"). The implementation is still subject to PSC approval.

#### Q: Why is Renew Missouri supportive of this rider?

A: Renew Missouri is supportive of customers having clean choices regarding generation and storage when they make economic sense for both the customer and the Company. CEC creates a process whereby LLCs can request the Company to consider specific preferred forms of clean energy technologies. Renew Missouri also supports the possibility these agreements might be subject to even more stringent terms and conditions in order to protect other ratepayers.

### Q: Do you have any concerns about the named riders?

A: Renew Missouri does not have any concerns. However, we do want to encourage Ameren Missouri to ensure new renewable generation is added to the Company's portfolio to be dedicated to *both* their RSP and RSP-LLC. As mentioned, the RSP is fully subscribed and has current and hopeful commercial customers already saying they would subscribe or subscribe to more, if available.<sup>12</sup> We simply want to urge Ameren Missouri to meet this demand.

Q: In multiple instances, you referenced LLCs meeting sustainability goals. Can you give examples of these goals?

<sup>&</sup>lt;sup>12</sup> <u>In the Matter of Union Electric Company d/b/a Ameren Missouri's Tariffs to Adjust Its Revenues for Electric Service,</u> Case No. ER-2024-0319, *Direct Testimony of James Owen*, p. 25-27.

C&I customers, like Google, Amazon, and Meta want "renewable-backed power." 13 "They 1 A: have decarbonization mandates embedded in their business models and investor 2 commitments."<sup>14</sup> Walmart has a goal to use 100% renewable energy by 2035; as of July 3 2025, they are only using 36% renewable energy. 15 Mr. Dixon also references the goals of 4 GM, Emerson, and Boeing - all in the Company's service territory. 16 5 6 While these businesses have emissions goals, Amazon saw a six percent increase in emissions in 2024, attributed to data centers.<sup>17</sup> Thus, C&I customers may have an even 7 greater need for increased clean energy options than previously thought. 8 9 As Mr. Dixon testified, "large customers strongly desire to be served by a utility whose 10 power supply is of course reliable but that also reflects an appropriate and significant 11 proportion of energy from clean energy resources. In fact, many of these customers have 12 goals to be served by 100% carbon free energy in the not-too-distant future." (emphasis added).<sup>18</sup> 13 Are there regional economic benefits to offering these riders? 14 Q: 15 Yes. Access to renewable energy generation options is increasingly vital to a region's A: competitive economic development. Offering customers options to purchase renewable 16 17 energy is one way for Ameren Missouri to draw corporate customers to the region. This will also prevent large load customers from leaving or seeking to expand outside Ameren's 18

<sup>13</sup> https://www.utilitydive.com/news/ira-energy-storage-flexibility-arevon/751991/?utm\_source=Sailthru&utm\_medium=email&utm\_campaign=Issue:%202025-07-01%20Utility%20Dive%20Newsletter%20%5Bissue:74555%5D&utm\_term=Utility%20Dive

<sup>&</sup>lt;sup>14</sup> *Id*.

<sup>15</sup> https://corporate.walmart.com/content/corporate/en\_us/purpose/sustainability.html/

<sup>&</sup>lt;sup>16</sup> Direct Testimony of Robert B. Dixon, p. 11.

<sup>17</sup> https://www.bloomberg.com/news/articles/2025-07-16/amazon-s-emissions-climbed-6-in-2024-on-data-center-buildout?cmpid=BBD071725\_GREENDAILY&utm\_medium=email&utm\_source=newsletter&utm\_term=250717 &utm\_campaign=greendaily&embedded-checkout=true

<sup>&</sup>lt;sup>18</sup> Direct Testimony of Robert B. Dixon, p. 11.

service territory. Mr. Dixon expressed it this way, "Anyone that is concerned about the future of Missouri's economy should consider our renewable energy generation policies and the implications of these business community priorities as a signal of future investment decisions, as the ability of Missouri utilities to deliver clean energy will be an important factor in our economic development success" Last year, Ameren Missouri stated "Real business investment decisions are being made based on renewable energy access, and states that can provide access to renewables are succeeding in some of the largest economic development opportunities in the country."

#### Q: Can you give examples of such investment or development?

Yes. Renewable developments are bringing in corporate customers and/or enabling them to expand inside Ameren's service territory. Those developments are also positively contributing to both the regional and state-wide economy. Clean energy investments generate approximately three times more jobs than equivalent investments in fossil fuels.<sup>21</sup> Nearly \$8 billion was invested in solar, wind, and battery storage in 2024.<sup>22</sup> "Jobs in sustainable energy grew 4.2 percent in 2023, more than twice the rate of the overall economy. More than 3 million Americans are part of today's sustainable energy workforce....By deploying these homegrown sustainable energy solutions, the United

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<sup>&</sup>lt;sup>19</sup> Direct Testimony of Robert B. Dixon, p. 11.

<sup>&</sup>lt;sup>20</sup> In the Matter of the Application of Union Electric Company d/b/a Ameren Missouri for a Certificate of Convenience and Necessity for a Solar Facility, Approval of a Subscription-Based Renewable Energy Program, and Authorization to Establish Tracking Mechanism, File No. EA-2022-0245, Report and Order, p. 16; Ex. 6, Surrebuttal Testimony of Robert B. Dixon, pp. 12-14.

<sup>&</sup>lt;sup>21</sup> Center for American Progress. (2009, June). The Economic Benefits of Investing in Clean Energy. Center for American Progress. Retrieved January 29, 2025, from <a href="https://cdn.americanprogress.org/wp-content/uploads/issues/2009/06/pdf/peri">https://cdn.americanprogress.org/wp-content/uploads/issues/2009/06/pdf/peri</a> report execsumm.pdf

<sup>&</sup>lt;sup>22</sup> The Business Council for Sustainable Energy. (2025, February). Sustainable Energy in America 2025 Factbook. 2025 Key Trends. Retrieved February 20, 2025, from <a href="https://bcse.org/market-trends/2025-key-trends/">https://bcse.org/market-trends/2025-key-trends/</a>

| 1  | States is building a competitive and secure national economy. Sustainable energy                          |  |  |  |
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| 2  | investments are bringing manufacturing – and jobs – back to America." <sup>23</sup>                       |  |  |  |
| 3  | Communities have already begun to reap the benefits of renewable energy investments                       |  |  |  |
| 4  | with roughly 20,000 manufacturing jobs generated since 2022 and an additional 80,000                      |  |  |  |
| 5  | manufacturing jobs projected to be available, generating an estimated \$2 billion in worker               |  |  |  |
| 6  | income and nearly \$5 billion in tax revenue. <sup>24</sup>   |  |  |  |
| 7  | Nucor, for example, built a \$250 million steel plant in Evergy's territory in Sedalia. <sup>25</sup> The |  |  |  |
| 8  | micro-mill is the first in the country to run on wind energy. <sup>26</sup> The Nucor steel plant brought |  |  |  |
| 9  | in 500 construction jobs and 250 permanent positions, with entry-level positions starting                 |  |  |  |
| 10 | around \$65,000 annually (nearly double the area's average starting wages of \$35,000). <sup>27</sup>     |  |  |  |
| 11 | While the terms and conditions are not publicly available, Nucor was the first in the recent              |  |  |  |
| 12 | regulatory shift to establish a large load tariff and rates outside of special contracts, similar         |  |  |  |
| 13 | to what is being created by this proposed large load tariff. <sup>28</sup>                                |  |  |  |
| 14 | In 2022, Meta announced that they will be building an \$800 million data center in Kansas                 |  |  |  |
| 15 | City, providing up to 100 jobs. <sup>29</sup> This nearly 1 million-square-foot facility will be powered  |  |  |  |

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<sup>&</sup>lt;sup>23</sup> *Id*.

<sup>&</sup>lt;sup>24</sup> American Clean Power. (2024, July 1). Clean Energy Investing in America. Clean Energy Investing in America. Retrieved August, 2024, from https://cleanpower.org/wp-content/uploads/gateway/2024/08/ACP Investing-in-America-24-v2 Report.pdfhttps://www.gardnercapital.com/news/gardner-capital-mc-power-companies-dedicatemacon-missouri-solar-farm-july-1/ https://cleanpower.org/facts/state-fact-sheets/

<sup>&</sup>lt;sup>25</sup> The Missouri Times. (2019, December 18). PSC approves order related to Evergy, Nucor steel mill. https://themissouritimes.com/psc-approves-order-related-to-evergy-nucor-steel-mill/

<sup>&</sup>lt;sup>26</sup> CNBC. (2018, December 17). Powering the future: First US steel plants powered by wind, solar energy are coming for industry with big carbon footprint, https://www.cnbc.com/2019/12/07/first-us-steel-plants-powered-bywind-solar-energy-are-

coming.html#:~:text=The%20Nucor%20plant%20was%20not,were%20finalists%20for%20the%20project <sup>27</sup> *Id*.

<sup>&</sup>lt;sup>28</sup> Nucor is used as an example to show there is demand for this type of service and tariff in Missouri, *not* to assess terms and conditions of the riders.

<sup>&</sup>lt;sup>29</sup> The Fast Mode. (2022, March 28). Meta plans \$800 million data center in Missouri. https://www.thefastmode.com/investments-and-expansions/23897-meta-plans-800m-data-center-in-missouri

entirely by renewable energy, making it one of the most sustainable data centers in the world. In March 2024, Google announced a \$1 billion investment in a new data center in Kansas City. The company is working with Evergy, Ranger Power, and D. E. Shaw Renewable Investments to run the data center entirely on clean energy using a 5,000-acre solar farm in Henry County.<sup>30</sup> The solar farm and data center will generate approximately 1,000 new construction jobs, 1,400 permanent jobs, and over \$1 million annually in tax revenue for Henry County. This revenue will be distributed to taxing entities in the area, such as the county government and school district.<sup>31</sup> In short, these opportunities are coming to Missouri. If Ameren Missouri wants to remain competitive and appealing to C&I customers, they will have to offer renewable riders like the ones discussed in this testimony, especially since Evergy Missouri Metro and Evergy Missouri West already have a large load case with such options before the Commission. Missouri, as a centrally located state, provides an ideal location to connect coastal data centers and has less risk of being subjected to damage from natural disasters.<sup>32</sup> Allowing Ameren Missouri to offer various optional riders to LLCs will continue to create similar economic opportunities in Missouri in the future. Multiple times, Renew Missouri has asserted it is supportive of adding clean generation resources. Why is that?

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<sup>&</sup>lt;sup>30</sup> KC News. (2024, March 20). Google announces \$1 billion data center in Kansas City. https://thinkkc.com/news/blog/thinkkc-blog/2024/03/20/google-announces-data-center-investment-in-kansas-city

<sup>&</sup>lt;sup>31</sup> Shorman, J., Cronkleton, R., & The Kansas City Star. (2024, March 21). Google Announces \$1B Data Center in Kansas City. Governing: Workforce. Retrieved February 4, 2025, from https://www.governing.com/workforce/google-announces-1b-data-center-in-kansas-city

Kim, J. (2024, December 3). Henry County grants Chapter 100 tax abatement to Ranger Power despite pushback from residents, Local News, Retrieved December, 2024, from http://kshb.com/news/local-news/henry-countygrants-chapter-100-tax-abatement-to-ranger-power-despite-pushback-from-residents

Ranger Power. (2025). Beavertail Solar Project. Retrieved February, 2025, from https://beavertailsolar.com/

<sup>&</sup>lt;sup>32</sup>The Fast Mode. (2022, March 28). Meta plans \$800 million data center in Missouri.

https://www.thefastmode.com/investments-and-expansions/23897-meta-plans-800m-data-center-in-missouri

| 1  | A: | Clean generation and storage options will reduce carbon emissions, improve conditions for     |
|----|----|---|
| 2  |    | better health, allow for local resource generation, contribute to keeping energy prices low,  |
| 3  |    | improve energy security, and create a more reliable grid.                                     |
| 4  |    | Clean energy now outcompetes fossil fuels ("81% of renewable capacity additions in 2023       |
| 5  |    | produce[d] cheaper electricity than fossil fuel alternatives") and analysts project wind and  |
| 6  |    | solar costs will continue falling further below coal and natural gas costs. <sup>33</sup>     |
| 7  |    | A recent analysis of the Texas grid showed by increasingly relying on solar and wind power    |
| 8  |    | and adding battery storage "reliability has improved dramatically," "electricity prices there |
| 9  |    | are below the national average," and the state has "sharply reduce[d] the chances of          |
| 10 |    | blackouts."34 Researchers added: "It could be an example for other grids in how to create     |
| 11 |    | reliability at a low cost." <sup>35</sup>   |
| 12 | Q: | Overall, why does Renew Missouri support adding these riders?                                 |
| 13 | A: | Besides the specific benefits already discussed for each program, the Fuel Adjustment         |
| 14 |    | Clause ("FAC") will be revised to recognize revenues from the RSP-LLC, CCAP, and CEC          |
| 15 |    | while those benefits will return to all Ameren customers through locally produced energy,     |

more sustainable energy, and lower overall energy prices.

<sup>33</sup> Canary Media & Bond, K. (2023, September 1). Chart: Renewables are on track to keep getting cheaper and cheaper. Canary Media. Retrieved January 29, 2025, from <a href="https://www.canarymedia.com/articles/clean-energy/charts-renewables-are-on-track-to-keep-getting-cheaper-and-cheaper-and-cheaper-https://go.woodmac.com/l/131501/2025-07-

<sup>03/34</sup>js68/131501/1751599312T1F9ZgHG/Wood Mackenzie report extract Grid forming Technology.pdf, p. 4 Davidson, K. (2025, February 4). Amid legal challenges, federal funding freeze hangs heavy over Michigan climate and energy efforts. Michigan Advance. Retrieved February 5, 2025, from

https://michiganadvance.com/2025/02/04/amid-legal-challenges-federal-funding-freeze-hangs-heavy-over-michigan-climate-and-energy-efforts/?utm\_campaign=Newsletter&utm\_medium=email&\_hsenc=p2ANqtz-MQhDzWPhW3a pHoP9e6G2j1cUGNFer1m dCGTCioJSrbA LnXLvTEd5RHE1KT

IRENA. (2024). Renewable Power Generation Costs In 2023. International Renewable Energy Agency. Retrieved February 5, 2025, from https://www.irena.org/-

<sup>/</sup>media/Files/IRENA/Agency/Publication/2024/Sep/IRENA Renewable power generation costs in 2023.pdf

<sup>&</sup>lt;sup>34</sup> <a href="https://www.reuters.com/sustainability/boards-policy-regulation/trump-calls-wind-solar-bad-power-grid-texas-shows-otherwise-2025-07-10/">https://www.reuters.com/sustainability/boards-policy-regulation/trump-calls-wind-solar-bad-power-grid-texas-shows-otherwise-2025-07-10/</a>

<sup>&</sup>lt;sup>35</sup> *Id*.

Furthermore, we are strongly supportive of customers having the **choice** (or in this case, **choices**) to adjust their energy consumption (amount, generation sources, and storage) according to the LLC's needs. The choices enabled by these tariff riders essentially create customer-specific pricing and customer-specific generation resources for large-load customers.

There is also substantial established demand for such programs. As discussed, many large-load customers have sustainability goals, and these programs would help them meet said goals. Ameren's RSP program is already fully subscribed and not meeting modern large-load customer needs. This is in addition to the fact there will be an increased demand for energy for the foreseeable future.<sup>36</sup> Finally, these programs are all *optional*. Large-load customers will not be forced to participate. These riders simply allow large-load customers to utilize programs that align with their business plan and sustainability goals as they see fit, along with providing additional revenues to benefit all customers.

#### III. Additional Riders

- 15 Q: What additional riders should Ameren Missouri also offer LLCs?
- 16 A: Renew Missouri would also like to see the Company offer tariff or rider options in which
  17 the large-load customer could bring their own generation.
- **O:** How would such a tariff or rider work?

<sup>&</sup>lt;sup>36</sup> In the Matter of the Application of Evergy Missouri West, Inc. d/b/a Evergy Missouri West for Permission and Approval of Certificates of Public Convenience and Necessity Authorizing It to Construct, Install, Own, Operate, Manage, Maintain and Control Two Solar Generation Facilities, Case No. EA-2024-0292, *Direct Testimony of Kimberly H. Winslow*, p. 6 & 13.

https://www.iea.org/news/growth-in-global-electricity-demand-is-set-to-accelerate-in-the-coming-years-as-power-hungry-sectors-expand

https://www.eia.gov/todayinenergy/detail.php?id=65264

https://www.energy.gov/articles/doe-releases-new-report-evaluating-increase-electricity-demand-data-centers

The LLC would own their own generation resource. A contract would be negotiated subject to Ameren's capacity needs and discretion. Customers will receive credit based on the difference between the demand charge and the negotiated capacity price. In broad strokes, a tariff or rider could be structured like Evergy's similar proposal.<sup>37</sup> However, Renew Missouri would like the Company to propose exact terms and conditions they are comfortable with and that align with their other proposed terms and conditions, while collaborating with stakeholders. If there are differences between the two services areas and/or customers that should be considered and accounted for, Renew Missouri is comfortable with stakeholders taking this into consideration. Proposed credits should be determined according to the particular circumstances of each contract and the value of such capacity at that time.

#### Q: Why does Renew Missouri think this is necessary?

A:

A:

Renew Missouri has consistently been supportive of net metering/parallel generation. This reduces demand stress on Ameren's system by supplying additional power. It also allows for an efficient use of low-cost power and capacity, assuming low-cost generation and capacity would be one of the reasons for engaging in this type of arrangement. In many instances, the owned generation would be a renewable form of generation, which we support due to its low price, predictable generation patterns, potential to be stored and dispatched when needed, and being a locally produced source of power.<sup>38</sup> Finally, Evergy

<sup>&</sup>lt;sup>37</sup> In the Matter of the Application of Evergy Metro, Inc. d/b/a Evergy Missouri Metro and Evergy Missouri West, Inc. d/b/a Evergy Missouri West for Approval of New and Modified Tariffs for Service to Large Load Customers, Case No. EO-2025-0154.

<sup>&</sup>lt;sup>38</sup> This statement is based on known generation sources from my research in the service area, current pricing, and market projections. When most businesses are installing local generation, they are rarely installing nuclear and natural gas plants; these costs would be extremely high and would require infrastructure very few customers would possess. Based on Renew's research of Ameren Missouri's service territory and current customers, when local businesses are installing their own generation, it has historically been renewable.

1 Missouri Metro and Evergy Missouri West have proposed a similar tariff, and we think 2 that parity between IOUs is important.<sup>39</sup>

Q: Is that the only additional tariff Renew Missouri believes Ameren Missouri should consider?

A: No, we would also like to see Ameren Missouri consider a Large Load Demand Response Tariff.

#### Q: Please describe what that would entail.

A: This would be another optional rider for large-load customers with flexible loads and/or on-site generation that would provide financial incentives to LLCs for flexible operations and local generation usage. The Company could call demand response "events" in order to improve system reliability, address resource adequacy, offset system peaks, or lower market costs. <sup>40</sup> LLCs could then curtail load or use on-site generation. Again, I feel the Company should propose exact terms and conditions they are comfortable with and that align with their other proposed terms and conditions, as well as examine the demand response programs operated under the 2009 Missouri Energy Efficiency Investment Act

<sup>&</sup>lt;sup>39</sup> In the Matter of the Application of Evergy Metro, Inc. d/b/a Evergy Missouri Metro and Evergy Missouri West, Inc. d/b/a Evergy Missouri West for Approval of New and Modified Tariffs for Service to Large Load Customers, Case No. EO-2025-0154.

<sup>&</sup>lt;sup>40</sup> Energy generation and transmission requires harvesting and then moving electricity across long distances. There are inevitable energy losses along the route, as well as unavoidable infrastructure costs to do this - especially when generating and transmitting *large* amounts of energy as would be the case for large-load customers. Thus, customers in this program will be *saving* Ameren Missouri generation, transmission, and infrastructure costs, including energy losses, when curtailing their load or shifting to on-site generation during an "event." By reducing generation, transmission, and infrastructure costs, this helps keep costs low for all customers. Similar to costs, when large amounts of energy are generated and transmitted to a large-load customer, resources are certainly being used at high rates and system reliability is decreased. When a large-load customer curtails their demand or shifts to on-site energy production, generation, transmission, and infrastructure resources will all be more plentiful as they will not be used by the large-load customer(s). Less demand then improves resource adequacy and generation and transmission reliability.

("MEEIA") portfolio and Evergy's similar proposal.<sup>41</sup> Obviously, if there are differences between the two services areas and/or customers that should be considered and accounted for, Renew Missouri is comfortable with stakeholders taking this into consideration. Incentives, of course, could be re-examined in future rate cases.

#### Q: Why is Renew Missouri supportive of this rider?

A: Renew Missouri has consistently been supportive of demand response for both residential and commercial tariffs for all Missouri investor-owned utilities. <sup>42</sup> This program is also part of MEEIA, so the structure and concept is already generally accepted. This not only reduces stress on the overall grid but helps keep costs lower for *all* customers. It also encourages energy efficiency and is a conscious use of resources. This program will "induce reductions in consumption, either through demand shifting or conservation during hours with the highest" demand.<sup>43</sup>

Duke University has recently done research on large-load flexibility and concluded,

"the integration of flexible loads offers a promising, near-term strategy for addressing structural transformations in the US electric power system. By utilizing

<sup>&</sup>lt;sup>41</sup> In the Matter of the Application of Evergy Metro, Inc. d/b/a Evergy Missouri Metro and Evergy Missouri West, Inc. d/b/a Evergy Missouri West for Approval of New and Modified Tariffs for Service to Large Load Customers, Case No. EO-2025-0154.

<sup>&</sup>lt;sup>42</sup> For examples of Renew Missouri's support of demand response, see <u>In the Matter of the Application of Evergy Metro</u>, Inc. d/b/a Evergy Missouri Metro and Evergy Missouri West, Inc. d/b/a Evergy Missouri West for Approval of New and Modified Tariffs for Service to Large Load Customers, Case No. EO-2025-0154, *Rebuttal Testimony of Jessica Polk Sentell*.

<sup>&</sup>lt;sup>43</sup> National Bureau of Economic Research. "Electricity Retail Rate Design in a Decarbonized Economy: An Analysis of Time-Of-Use and Critical Peak Pricing." (October 2022). Accessed at: <a href="https://www.nber.org/papers/w30560">https://www.nber.org/papers/w30560</a> I am asserting these outcomes based on research into similar programs, as this is the entire goal of such a program. If this is not the outcome, then the program is not working correctly. For example, when Ameren Missouri would call an "event" (e.g. because demand is peaking, reliability is questionable, energy prices are rising, etc.), customers in this program will lessen their use of the Company's power. These customers will either curtail their load (i.e. reduce the amount of energy they are using from Ameren Missouri) or instead begin using on-site generation. They will either simply be using less energy or generating their own energy; either way, they will *not* be using the Company's energy. Thus, they will "induce reductions in consumption." If the participating customers did *not* use less energy or did *not* use local generation, consumption would remain at higher levels and *not* be reduced, but this would be antithetical to the theory behind such a program.

| 1  |    | existing system headroom, regulators and market participants can expedite the                   |  |  |  |  |  |
|----|----|---|--|--|--|--|--|
| 2  |    | accommodation of new loads, optimize resource utilization, and support the                      |  |  |  |  |  |
| 3  |    | broader goals of reliability, affordability, and sustainability."44                             |  |  |  |  |  |
| 4  |    | Again, Evergy Missouri Metro and Evergy Missouri West have proposed a similar tariff,           |  |  |  |  |  |
| 5  |    | and we think that parity between IOUs is important. <sup>45</sup>                               |  |  |  |  |  |
| 6  | Q: | Do you have any other recommendations?  |  |  |  |  |  |
| 7  | A: | While Renew Missouri is not recommending action in this tariff case, we would like to see       |  |  |  |  |  |
| 8  |    | Ameren Missouri evaluate the quantity and expiration status of their Renewable Energy           |  |  |  |  |  |
| 9  |    | Certificates ("RECs") in a future rate case. If there are excess or expiring RECs at that time, |  |  |  |  |  |
| 10 |    | Ameren Missouri should consider an unbundled REC program like Evergy Missouri Metro             |  |  |  |  |  |
| 11 |    | and Evergy Missouri West. Again, this is a future recommendation for consideration in a         |  |  |  |  |  |
| 12 |    | future case, along with stakeholder input and adjusted for Ameren Missouri's particular         |  |  |  |  |  |
| 13 |    | service territory and customer base.  |  |  |  |  |  |
| 14 | Q: | Does this conclude your testimony?  |  |  |  |  |  |
| 15 | A: | Yes.  |  |  |  |  |  |
|    |    |   |  |  |  |  |  |

 $<sup>\</sup>frac{44}{https://nicholasinstitute.duke.edu/publications/rethinking-load-growth-assessing-potential-integration-large-flexible-loads-us-power, p.~25$ 

<sup>&</sup>lt;sup>45</sup> n the Matter of the Application of Evergy Metro, Inc. d/b/a Evergy Missouri Metro and Evergy Missouri West, Inc. d/b/a Evergy Missouri West for Approval of New and Modified Tariffs for Service to Large Load Customers, Case No. EO-2025-0154.

# BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

| In the Matter of the Application Electric Company d/b/a Ameren  |           |                 |   |
|---|-----------|-----------------|---|
| for Approval of New and Modifi<br>for Service to Large Load Custor  |           | )               | File No. ET-2025-0184                     |
| AFFID   | AVIT OF   | JESSICA PO      | OLK SENTELL                               |
| STATE OF MISSOURI   | )         | ss              |   |
| COUNTY OF WAYNE  COMES NOW Jessica Po   | olk Sente | ell, and on her | oath states that she is of sound mind and |
| lawful age; that she prepared th  | e forego  | ing Rebuttal T  | estimony; and that the same is true and   |
| correct to the best of her knowled  | dge and b | elief.          |   |
| Further the Affiant sayeth  | not.      | Jessica Poll    | ca Polh Seufell                           |
| Subscribed and sworn before me  | this th d | lay of Septemb  | er 2025.                                  |
| ALLISON R GRIMES Notary Public - Notary Seal STATE OF MISSOURI Wayne County My Commission Expires: July 8, 2028 Commission # 24052867 |           | Notary Pub      | lic & Flun                                |