BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the Matter of Evergy Metro, Inc. d/b/a Evergy Missouri Metro's 2025 Integrated Resource Plan Annual Update Filing	)))	Case No. EO-2025-0250
In the Matter of Evergy Missouri West, Inc. d/b/a Evergy Missouri West's 2025 Integrated Resource Plan Annual Update Filing	)))	Case No. EO-2025-0250

COMMENTS OF RENEW MISSOURI ADVOCATES

COMES NOW, Renew Missouri Advocates d/b/a Renew Missouri **(**"Renew Missouri") and offers the below comments in response to the Integrated Resource Plan ("IRP") Annual. Update filing of Evergy Metro, Inc. d/b/a Evergy Missouri Metro (herein referred to as "Evergy Metro") and Evergy Missouri West, Inc. d/b/a Evergy Missouri West (herein referred to as "Evergy West") (collectively, "Evergy" or "Company").

The below comments were prepared by Renew Missouri staff and reflect our organization's reactions to and opinions on the Company's most recent IRP update. Renew Missouri appreciates the opportunity to share these comments and welcomes further discussion.

All communications and inquiries regarding the below comments, and any other communications to Renew Missouri relevant to this case, should be directed to the undersigned counsel.

Respectfully Submitted,

/s/ Nicole Mers
Nicole Mers, Bar No. 66766
501 Fay Street, Suite 206
Columbia, MO 65201
T:314-308-2729
nicole@renewmo.org

GENERAL COUNSEL FOR RENEW MISSOURI ADVOCATES

Certificate of Service

I hereby certify that copies of the foregoing have been emailed to all counsel of record this 23rd day of May 2025.

/s/ Nicole Mers

I. Introduction

While Renew Missouri is optimistic about portions of Evergy Metro's and Evergy West's preferred Integrated Resource Plans ("IRP"), the tenor of our comments must be tempered by disappointment with the overall direction that Evergy proposes. Specifically, in this 2025 IRP filing, the Company increases new generation from natural gas facilities at even higher amount than last year and does not retire any coal units until a now later date of 2033. Although this IRP continues moving towards the Company's goal of achieving net-zero carbon emissions by 2045, the filing leaves significant gaps and the interim goal of a 70% reduction by 2030 compared to 2005 levels is no longer achievable under this plan. Even with including all coal retirements and new generation across the Company's entire portfolio, the emissions reduction achieved at the end of 2034 will still be 18.5%. short of the Company's reduction target. Notably, the IRP misses the mark on the Company's internal goal and exposes ratepayers both to vulnerabilities and avoidable costs through the Company's heavy reliance on new natural gas with uncertain fuel prices and rising construction costs.

While Evergy delays wind investments and the retirement of the coal-fired Jeffrey 2 power plant, it focuses on building new natural gas generation. Instead, the Company should commit to greater investment in energy efficiency, new renewable facilities (i.e., solar and wind), grid-scale battery storage, and other demand-side resources and demand-side management programs to maximize what can be achieved prior to making costly investments in new fossil fuel-burning generators.

II. Load Forecast

a. *Large Load Growth*

The load forecasts in Evergy IRP update are less than transparent and clear. It is unclear how much load growth and thus IRP decisions are being driven by large load customer growth.

This can lead to inadequate information for assigning costs and building new generation facilities. Overstating load growth may lead to investment in generation that could otherwise turn out to have been unnecessary.

III. New Supply-Side Resources

a. New Natural Gas Generation

As stated in our introduction, Renew Missouri is alarmed by the investments in new natural gas plants included in Evergy's Preferred Plan. Investment in new gas plants is risky from economic, environmental, and societal perspectives. Of course, reliable and dispatchable resources like wind and solar are of critical importance and we applaud the Company's plan to add an additional 15 MW of solar, 150 MW of wind by 2035. As with many new clean energy investments, project timing will be a critical factor in securing the best outcome for the Company's customers with IRA incentives. Yet, Evergy expects to develop new natural gas generation assets over the next two decades.

b. Grid-scale Battery Storage.

We are encouraged by and applaud Evergy's inclusion of a 150 MW battery storage system in the preferred plan. Grid-scale energy storage costs are generally decreasing, due partially to greater availability of raw materials and increased market interest. Evergy should continue to take advantage of the Investment Tax Credit ("ITC") for energy storage while it is available. In the fourth quarter of 2023, lithium carbonate spot prices were at their lowest in two years and were forecast to correlate with decreased prices for lithium-ion storage systems going forward, a key market trend given that lithium-ion based batteries are common candidates for storage systems.[1]

[1] See Wood Mackenzie Power & Renewables/American Clean Power Association. "U.S. Energy Storage Monitor: Q4 2023 Executive Summary."

The U.S. Energy Information Administration predicts, furthermore, that grid-scale energy storage deployment will double by 2026, which could lower prices further.[2]

Nevertheless, in order for the Companies to develop least-cost energy storage resources, Evergy should seek the full ITC for energy storage, a plan which hinges on three factors: *when* the grid-scale energy storage facilities are placed in service, *where* the facilities are located, and *whether* the projects meet prevailing wage and apprenticeship criteria. As with the ITC for other clean energy resources, the ITC for energy storage can be stacked with up to ten percent in additional tax credits each for projects located in "energy communities" as well as for projects *paired* with eligible wind or solar facilities and *located* in low-income communities, and that are *less than* 5 MW total capacity. Further, it will apply to projects greater than 1 MW that meet domestic content requirements.[3] Therefore, Renew Missouri encourages the Company to *creatively site and size* energy storage facilities to obtain the maximum ITC bonus and adders available. Importantly, storage projects that are less than 1 MW are automatically eligible for the maximum ITC bonus rate (which is 30% through 2033), and eligible for fast-tracked interconnection per FERC Order No. 792.[4] Such qualifying projects could conceivably be distributed in low-income communities and paired with community solar projects, thus making them eligible for the ITC low-income community adder. Additionally, such projects could even be

[2] U.S. Energy Information Administration. "Short-Term Energy Outlook." (January 9, 2024). Accessed at: https://www.eia.gov/outlooks/steo/report/elec_coal_renew.php

[3] (1) Regarding "energy communities", these are defined as those that include (i) a brownfield site; (ii) a census tract or any adjoining tract in which a coal mine closed after Dec. 31, 1999, or a coal-fired electric power plant was retired after Dec. 31, 2009; and (iii) an area that has (or, at any time during the period beginning after Dec. 31, 1999, had) significant employment or local tax revenue related to the extraction, processing, transport or storage of coal, oil or natural gas. (2) Regarding the credit for storage paired with wind and/or solar facilities in low-income communities, the total project capacity must be less than 5 MW to qualify. (3) Regarding the credit for domestic content, the credit increases through 2026 to account for greater availability of domestic materials in future units.

[4] Federal Energy Regulatory Commission. Final Rule. *Small Generator Interconnection Agreements and Procedures.* Order No. 792. Issued November 12, 2013. Accessed at: https://www.ferc.gov/electric-transmission/generator-interconnection/standard-interconnection-agreements-and-procedures

located in areas of Evergy's footprint where energy resiliency is of more concern – and energy storage therefore of greater value – including where critical infrastructure (e.g., hospitals, emergency response) is located. As the map below shows, there is currently very little energy storage operating in the SPP footprint of Missouri, meaning there is an important opportunity for Evergy to contribute to both the adoption of the technology and to greater energy resiliency in the region.

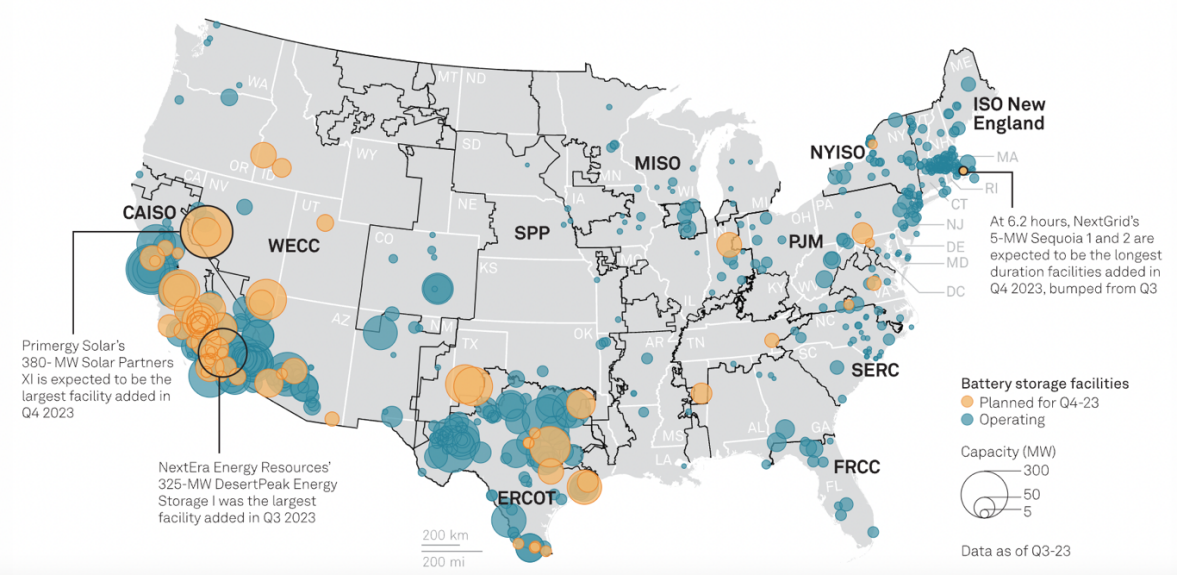

Figure 1. US battery storage capacity and additions in Q3, 2023. Source: S&P Global Commodity Insights, US government filings. 2023. Accessed at: https://www.spglobal.com/commodityinsights/en/market-insights/latest-news/electric-power/111423-us-battery-storage-capacity-surpasses-146-gw-in-q3-35-gw-planned-in-q4

c. Power Purchase Agreements.

Regarding consideration of Power Purchase Agreements ("PPAs"), Renew Missouri encourages Evergy to pursue PPAs when and where it makes economic sense. To highlight Staff's comments on PPAs in a previous docket, Staff witness Mr. Luebbert noted that "[a] PPA could provide substantially similar energy and accredited capacity attributes at a lower cost and potentially less

ratepayer risk ....” than the utility-owned solar facility at issue in that case.[5] Yet, Evergy did not consider PPAs as part of its preferred plan. By narrowly focusing on owning all its generators, Evergy is disregarding better alternatives to risky investments. Evergy should be comparing the cost-effectiveness of a PPA to that of building and owning its own generation facilities, as well as assessing SPP interconnection queue issues that could be avoided via a PPA. For example, a PPA for an existing clean energy generator in SPP’s interconnection queue -- with stable, consistent prices -- could provide substantial savings compared to the costs of both the construction of new natural gas generators and the volatile fuel costs associated with gas.

Beyond the potential cost savings, we argue that even a clean energy PPA with a substantially similar cost to new natural gas generation remains beneficial to the Company in reaching its net-zero emission goals. Renew Missouri reiterates the need for Evergy to model the potential for clean energy PPAs and to defer or replace fossil fuel investments planned for in this IRP. Additionally, we would also note the importance of evaluating bids submitted in response to any Request for Proposal (“RFP”) for PPAs issued by the Company in a fair and consistent manner, especially when renewables are involved. We raise this here due to concerns Renew Missouri had with how Evergy evaluated recent PPA proposals resulting in the Company seeking partial ownership of the Dogwood gas plant (Case No. EA-2023-0291) rather than entering into a PPA for a clean energy facility or with a third-party demand response aggregator that also responded to and could have satisfied the RFP. Specifically, Evergy dismissed the bid for a clean energy facility due to concerns over permitting, despite the fact the developer had site control for nearly the entire footprint of the project and expected it to be in service within the period specified in the RFP. The company also

[5] PSC. Case No. File No. EA-2023-0286. Rebuttal Testimony of Mr. Luebbert. (Filed October 11, 2023). See p.10 lines 10-15.

dismissed the bid from the demand response aggregator over concerns the aggregator had no prior experience working in the SPP footprint, despite the fact the business had worked in several other RTO/ISO regions in the United States.

Another important factor to consider is the ability to fast-track interconnection of renewable energy systems that are less than 5MW under FERC Order 792, which specifically reforms "*pro forma* Large Generator Interconnection Procedures, *pro forma* Small Generator Interconnection Procedures, *pro forma* Large Generator Interconnection Agreement, and *pro forma* Small Generator Interconnection Agreement to address interconnection queue backlogs, improve certainty, and prevent undue discrimination for new technologies. The reforms are intended to ensure that the generator interconnection process is just, reasonable, and not unduly discriminatory or preferential."[6] The reforms under FERC Order 792 would make a 50% ITC-eligible project even more beneficial to the Company as it would allow for fast-track approval under SPP and would make such a project operational sooner than previous regulations would allow.

d. Distributed Energy Resources.

Virtual Power Plants. As technology continues to advance, new opportunities will proliferate for electric providers to interact with customer owned DERs, including residential battery storage systems and electric vehicle batteries. Utilities across the United States are evaluating how to integrate these technologies into new or existing demand-side programs that effectively operate as VPPs. For example, if distributed solar systems were integrated with battery storage systems and

[6] Summary provided by the Federal Registry dated November 6th of 2023. See also https://www.federalregister.gov/documents/2023/09/06/2023-16628/improvements-to-generator-interconnection-procedures-and-agreements

Evergy were able to call on those resources, the DERs would operate as a VPP. This arrangement would better align the contributions and capabilities of the technologies with peak demand and support the resource adequacy imperative of the Companies. Used thus, VPPs can also increase transmission and distribution efficiency by smoothing system peaks. When dispatchable batteries (such as those in the Company's battery storage pilot program) are strategically called on, that added capacity can lead to deferred investments in the Company's local transmission system and avoided fuel costs. In this way, VPPs provide affordability benefits through direct reduction of the utility's costs or through compensation to customers that participate in such demand-side programs. Excluding societal benefits (e.g., emissions reductions), the Brattle Group found the net cost of VPPs providing resource adequacy benefits to the utility is about 40% to 60% of that of traditional alternatives.[7] Ultimately, the integration of dispatchable batteries with existing demand-side generation will increase reliability and resiliency.

However, VPPs are not limited to residential storage-plus-solar applications and should be evaluated in a few other ways. The more readily available application of VPPs is for smart thermostats to preheat or pre-cool buildings and homes during off-peak hours to reduce demand surges, typically over periods of two to four hours. Similarly, smart water heaters or heat pumps can be controlled remotely to preheat water during peak demand periods. Now that the Company has deployed smart meters across its residential customer base, both applications should be viable. Additionally, Evergy should pursue a larger-scale VPP in the style recently proposed to Minnesota regulators by Xcel Energy for a dispersed set of projects ultimately resulting in the combination

[7] The Brattle Group. "Real reliability: The value of virtual power". (May 2023). Accessed at: https://www.brattle.com/wp-content/uploads/2023/04/Real-Reliability-The-Value-of-Virtual-Power_5.3.2023.pdf

of 440 MW of solar with 400 MW of storage that would potentially include more backup generators and energy efficiency measures.[8]

Finally, it is also important to note FERC Order 2222 can help with the deployment of VPPs. While specifically targeting the proliferation of distributed energy resources ("DERs"), FERC Order 2222 will allow VPPs to compete with conventional resources in wholesale markets and motivate the creation of more programs and incentives to encourage VPP project development once the order is fully implemented by SPP between 2027 and 2029. In areas served by vertically integrated utilities without trading options, as is the case with Evergy Metro and Evergy West, there is less incentive to support VPP project development. In other words, allowing participation in wholesale markets motivates more VPP programs because it allows the resources to interact with the grid in more ways and to earn revenue by doing so.[9]

Distributed Solar. Regarding customer-owned solar, Renew Missouri would like to reiterate here our argument that all residential rate design options be offered to all customers, as we have said in recent cases before the Commission. Currently EMW customers who are net-metered can participate in all TOU programs, however, EMM customers cannot currently. EMM is currently requesting approval of tariff sheets that would allow net metered customers to participate in all of their TOU offerings.

Aside from the legal issues, there is a strong public policy argument for why customer-owned DERs complement TOU programs. On-peak and off-peak pricing differentials can

[8] "In Minnesota, Xcel Energy looks to mimic power plant with solar and storage networks". Energy News Network.(August 23, 2024). Accessed at: https://energynews.us/2024/08/23/in-minnesota-xcel-energy-looks-to-mimic-power-plant-with-solar-and-storage-networks/?utm_medium=email

[9] "Virtual Power Plants and Energy Justice". Brittany Speetles, Eric Lockhart, and Adam Warren. National Renewable Energy Laboratory. Technical Report 7A40-86607. (October 2023).

encourage DG customers to adapt their energy usage to times of the day that are most cost-effective for them. Pairing rates with a variety of customer owned DERs (e.g., solar, battery energy storage, electric vehicles paired with EV charging equipment, and smart meters) is a comprehensive approach for full utilization of the best available technology to achieve demand savings, at both the household and system levels. If the Company is serious about reducing demand, as this IRP states it is, Evergy should also be serious about enabling every customer to support that goal.

Beyond consideration for whether DG customers will be allowed to participate in any of the Company's TOU plans, we reiterate the need for Evergy to model the potential for integrated solar and storage programs to aid in deferring or avoiding at least a portion of the transmission and generation needs planned for in this IRP. A recent case study found that, in a scenario where utility-owned storage was paired with customer-owned DERs and compared to traditional system upgrades, the DERs approach would result in a 40% reduction in operating costs over the planning horizon.[10] Evergy should promote residential and commercial adoption of DERs by adding battery storage and solar to the Company's Pay-As-You-Save ("PAYS") program and by expanding and making permanent the current battery storage pilot.

e. Demand Response, FERC Order 2222, and Third-Party DSM Aggregators.

Evergy currently offers demand response in its MEEIA portfolio, as well as a battery pilot program. FERC 2222 also requires SPP to allow greater market access to DERs and SPP is currently developing a process to comply with the FERC Order. In light of the new forecast for large customer load it would be prudent for the Company to include third party aggregators of

[10] "Valuing distributed energy resources for non-wires alternatives". Electric Power Systems Research. (September 2024). Accessed at: https://www.sciencedirect.com/science/article/pii/S0378779624004073

DERs in its IRP to have more paths available to adequately serve the forecasted growth. Evergy in the past has been criticized by stakeholders for not calling demand response events more often or at all.[11] Renew Missouri has concerns that if customers can opt out or override events with limited penalty, or events are not called, demand response outcomes may not match impacts modeled in the IRP. Furthermore, demand response can be a valuable tool in Evergy's arsenal to meet load and peak needs. Since customers are already paying for demand response incentives in Evergy's MEEIA program as well as its battery storage pilot program, Renew Missouri offers that demand response should be utilized more often. This means modeling a variety of demand response participation levels and third-party aggregation efforts in the IRP, as well as future efforts to call events and encourage participation from customers who have received incentives.

[11] *In the Matter of Evergy Missouri Metro and Evergy Missouri West's Notice of Intent to File Applications for Authority to Establish a Demand-Side Programs Investment Mechanism*, File No. EO-2019-0132 and EO-2019-0133, Staff Rebuttal Report, p. 59-73.