

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

In the Matter of Evergy Metro, Inc., d/b/a Evergy	)	
Missouri Metro’s 2026 Integrated Resource Plan	)	<u>EO-2026-0188</u>
Annual Update Filing	)	
 In the Matter of Evergy Missouri West, Inc. d/b/a	)	
Evergy Missouri West’s 2026 Integrated	)	<u>EO-2026-0189</u>
Resource Plan Annual Update Filing	)	

Comments of Renew Missouri

COMES NOW Renew Missouri Advocates d/b/a Renew Missouri submits these comments on Evergy Metro, Inc., d/b/a Evergy Missouri Metro (“Metro”) and Evergy Missouri West, Inc. d/b/a Evergy Missouri West’s (“West”) (collectively, “Evergy” or the “Company”) 2026 Integrated Resource Plan (“IRP”) Annual Update filing.

The below comments were prepared by Renew Missouri and reflect our organization’s reactions to and opinions on the Company’s most recent IRP Report and materials.

All communications and inquiries regarding the below comments, and any other communications to Renew Missouri relevant to this case, should be directed to the following individuals:

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Renew Missouri appreciates the opportunity to share these comments and welcomes further discussion.

Concern 1. Evergy's load growth forecasts require a more diverse portfolio of resources.

Evergy's updated load forecasts demonstrate that serving significant commercial and industrial load growth will require a diverse portfolio of generation, storage, and demand-side resources. SPP's 2026 ELCC Study shows that solar provides strong accredited capacity during the summer, battery storage currently provides nearly full capacity accreditation in both summer and winter, and wind provides complementary seasonal reliability value. Together, these technologies offer different operating and accreditation characteristics that can reduce dependence on any single resource type and improve planning flexibility.

Renew Missouri supports Evergy's continued evaluation of a diversified resource portfolio that includes solar, wind, battery storage, demand-side resources, and other technologies capable of meeting projected load growth. As customer demand accelerates, maintaining a diverse portfolio can improve reliability while mitigating fuel-price, construction, operational, and regulatory risks. Evergy states that its 2026 IRP ELCC curves are based on data points from SPP's 2024 ELCC Study and 2025 Loss of Load Expectation Study and are guided by degradation curves used in prior IRPs. However, the ELCC curves presented in the stakeholder materials differ materially from SPP's published ELCC results for certain resources, particularly battery storage and winter solar. In future updates, Renew Missouri requests that Evergy explain:

- The methodology used to translate SPP's ELCC studies into the IRP ELCC curves;
- The basis for the starting ELCC assumption assigned to each resource;
- How the degradation curves were developed;

- Whether the curves represent average ELCC, marginal ELCC, or the accreditation of incremental resource additions;
- How projected changes in renewable and storage penetration were incorporated; and
- Whether the Company performed sensitivities using SPP's published ELCC values or alternative degradation assumptions.

Greater transparency regarding these assumptions would improve stakeholders' ability to understand how accredited capacity values influence resource selection within the preferred portfolio.

Concern 2. Solar and battery storage remain critical components of least-cost planning and should be evaluated more thoroughly in future planning years.

The Company's resource sensitivities further demonstrate that when planned solar or storage resources are unavailable, the optimization model generally replaces them with additional thermal generation, battery storage, or deferred solar additions rather than eliminating them entirely. This suggests that the optimization model continues to identify solar and battery storage as economically competitive resources despite the Company's more conservative cost assumptions.

Renew Missouri is concerned by the removal of utility-scale solar resources from the preferred plan after 2028. This concern is further exacerbated by Evergy's statements it will experience shortfalls its ability to meet Renewable Energy Standard requirements in future planning years.

We recognize that these changes reflect the Company's assumptions regarding recent legislative efforts, regulatory, and federal policy changes, as well as increased development costs and project uncertainty. However, integrated resource planning should recognize that resource economics can change substantially over a twenty-year planning horizon. Continued improvements in photovoltaic technology, manufacturing, project development practices, and financing have

historically reduced the cost of utility-scale solar over time. While near-term market conditions may justify fewer solar additions, Renew Missouri believes it is premature for long-term planning to assume that utility-scale solar will not again become one of the most cost-effective resource options between 2029 and 2045.

Renew Missouri is also concerned that the Company's assumed capital costs for future utility-scale solar resources may represent a relatively conservative planning assumption compared to the range reflected in publicly available government and industry benchmarks. While Renew Missouri recognizes that project costs have increased due to inflation, tariffs, supply chain constraints, and financing costs, multiple independent sources continue to identify utility-scale solar as among the lowest-cost sources of new electric generation. Because capital cost assumptions directly influence optimized resource selection, evaluating only relatively high-cost assumptions may understate the long-term value of utility-scale solar over the planning horizon.

At a minimum, Evergy should perform a sensitivity case using lower utility-scale solar capital costs that are consistent with publicly available industry benchmarks and long-term technology cost projections. For example, the U.S. Department of Energy's annual utility-scale photovoltaic cost benchmark estimates the current market price of a representative 100 MW utility-scale solar facility at approximately \$1.12/Wdc, with a modeled long-run sustainable price below \$1.00/Wdc. These benchmarks are developed from detailed cost surveys conducted by DOE's national laboratories and provide one of the most widely recognized references for utility-scale solar capital costs. Although, individual projects may vary based on site conditions, interconnection requirements, labor costs, and financing, these benchmarks provide an independent point of comparison for evaluating the reasonableness of long-term planning assumptions.

Furthermore, NREL's Annual Technology Baseline continues to project declining utility-scale photovoltaic capital costs over the long term as manufacturing, module efficiency, balance-of-system improvements, and project development practices continue to evolve. While short-term costs have increased because of tariffs, lost incentives, financing costs, and supply chain constraints, the long-term trend reflected in NREL's planning assumptions remains downward. Because the Annual Technology Baseline is specifically designed to support utility resource planning, it provides an appropriate basis for evaluating alternative capital-cost sensitivities within the IRP. Given the uncertainty surrounding future technology costs, Renew Missouri recommends that Evergy consider at least one additional sensitivity using utility-scale solar capital costs consistent with NREL's Moderate or Advanced technology projections.

Renew Missouri also notes that the Company's explanation for removing solar resources between the 2025 and 2026 preferred plans, combines near-term policy uncertainty with long-term resource economics. While changes to federal tax incentives, permitting challenges, tariffs, and local siting issues may affect the timing of individual projects, those factors do not necessarily determine the long-run capital cost or economic competitiveness of utility-scale solar over a twenty-year planning horizon. Because these uncertainties may evolve independently, Evergy should consider sensitivities that separately examine policy assumptions and technology cost assumptions rather than treating them as a single planning outcome. Renew Missouri also notes that the Company's assumed utility-scale solar capital costs reflected in the stakeholder materials (\$/kW), appear to be higher than the publicly available government and industry benchmarks discussed above. This further supports Renew Missouri's recommendation that the Company re-examine its utility-scale solar cost assumptions and evaluate additional sensitivities using capital costs that are more consistent with these independent planning benchmarks.

Concern 3. Thermal resource development uncertainty reinforces the value of a diversified portfolio and requires more critical review of future natural gas assets.

Evergy's preferred portfolio includes a significant expansion of natural gas generation to meet projected load growth over the planning horizon. While Renew Missouri recognizes that dispatchable resources will continue to play an important role in maintaining system reliability, the Company's preferred portfolio also increases exposure to several risks associated with thermal resource development. Integrated Resource Planning is intended to evaluate these uncertainties through sensitivity analysis, particularly where resource availability, construction timelines, and long-term costs remain uncertain.

The Company itself acknowledges that new combined-cycle generating facilities currently require development lead times of approximately five to seven years due to turbine manufacturing constraints and that reciprocating engine projects are also subject to equipment backlogs. Evergy further notes that construction costs remain elevated because of inflation, supply chain conditions, and broader market forces. These challenges are industry-wide rather than unique to Evergy and reflect nationwide competition for gas-fired generation equipment as utilities respond to increasing electricity demand from data centers, industrial development, electrification, and planned coal retirements. As a result, manufacturing capacity, engineering services, construction labor, and major electrical equipment are likely to remain under significant pressure throughout much of the planning horizon.

Renew Missouri is also concerned that the preferred portfolio assumes timely development of both new generating facilities and the supporting natural gas infrastructure necessary to reliably operate those resources. The North American Electric Reliability Corporation's 2025 Long-Term Reliability Assessment identifies regions experiencing significant growth in natural gas generation

including MRO-SPP as areas where additional firm fuel supplies may be secured through natural gas system projects that are currently planned or proposed over the next decade. This observation demonstrates that future firm fuel availability cannot simply be assumed, but instead depends upon the successful development of additional pipeline and transportation infrastructure that has not yet been completed. As more electric generators compete for firm transportation capacity, assumptions regarding future fuel deliverability become increasingly important planning considerations rather than settled facts. These concerns are further amplified by the significant amount of natural gas generation currently being proposed throughout Missouri and the broader SPP region. Associated Electric Cooperative, Inc. (AECI) has announced plans to add approximately 4,720 MW of natural gas generation by 2031, while Ameren Missouri's preferred resource plan proposes approximately 6,100 MW of new natural gas generation through 2041. In addition, the Nebius data center project in Independence is expected to be served by a privately developed 800 MW natural gas generating facility interconnected with SPP. The local, regional, and national level interest in adding new natural gas projects over the same time period increases the importance of evaluating whether the preferred portfolio remains achievable in light of potential shortages of equipment, delayed construction schedules, and fuel infrastructure development issues.

While Evergy appropriately models a range of future natural gas price scenarios, Renew Missouri recommends that the Company also consider additional sensitivities related to fuel availability and infrastructure development. These sensitivities could include delayed pipeline expansion, varying levels of firm transportation availability, delayed thermal resource commercial operation dates, higher thermal capital costs, and scenarios in which competing regional demand affects equipment procurement or fuel infrastructure access.

Taken together, these considerations reinforce the value of maintaining a diversified resource portfolio rather than increasing reliance on any single resource type. A balanced portfolio that includes natural gas generation, renewable energy, battery storage, demand-side resources, and emerging technologies provides greater optionality while reducing exposure to correlated manufacturing, construction, fuel supply, infrastructure, and regulatory risks. Portfolio diversity is particularly valuable during periods of rapid load growth and evolving market conditions because it avoids concentrating planning risk in a single resource pathway.

Concern 4. Utility-owned, customer-hosted battery storage should be evaluated as a planning resource.

As Evergy reviews significant future battery storage deployment to serve projected load growth, Renew Missouri recommends that the Company evaluate utility-owned, customer-hosted battery energy storage systems as a candidate resource within its integrated resource planning process.

Rather than evaluating battery storage solely as centralized utility infrastructure or as customer-owned distributed energy resources, Evergy should analyze whether strategically located, utility-owned batteries at commercial and industrial customer sites could complement utility-scale storage while providing localized reliability, peak-demand reduction, grid flexibility, and transmission and distribution benefits.

This concept builds upon the planning philosophy reflected in Evergy's Large Load Power Service tariff by recognizing that utility infrastructure may be strategically deployed at or near significant customer load when doing so improves system efficiency and reliability. Utility ownership and operational control would allow the Company to manage dispatch, maintenance, upgrades, and eventual replacement of the battery systems. The assets could therefore be incorporated into

system planning and operations without depending exclusively on continued customer participation in a voluntary demand-response program.

Compared with conventional utility-scale battery projects, large customer-hosted systems may offer additional planning advantages by using sites that are already developed, connected to the electric system, and located adjacent to substantial electrical demand. Depending on the location and project design, this approach could:

- Reduce land-acquisition, siting, and permitting requirements;
- Shorten project-development timelines;
- Make more efficient use of existing electrical infrastructure;
- Reduce local peak demand;
- Improve resilience for critical or high-value loads; and
- Defer or avoid certain transmission and distribution investments.

Utilities have demonstrated related customer-hosted infrastructure models through projects such as Ameren Missouri's utility-owned solar installations at St. Louis Lambert International Airport and Barnes-Jewish Hospital. These examples do not establish that a similar approach for battery storage will necessarily be cost-effective within Evergy's system, but they demonstrate that customer-hosted, utility-controlled infrastructure is a viable structure worthy of IRP evaluation.

Potential host sites could include airports, hospitals, universities, manufacturers, water and wastewater facilities, data centers, and other large commercial or industrial customers with suitable load profiles and available space.

Study the feasibility of a Large Customer Battery Partnership Pilot

If the IRP analysis indicates that utility-owned, customer-hosted storage may provide system and customer benefits, Evergy should investigate and report on the feasibility of a voluntary Large Customer Battery Partnership Pilot.

The feasibility analysis should examine:

- Commercial and industrial customer interest and potential host locations;
- Appropriate battery sizes, durations, and configurations;
- Utility ownership, operational control, and dispatch rights;
- Host-site responsibilities and compensation mechanisms;
- Interconnection and cybersecurity requirements;
- Capacity accreditation and production-cost value;
- Peak-demand reduction and avoided transmission or distribution investments;
- Potential resilience benefits and the allocation of those benefits;
- Interaction with the Large Load tariff;
- Treatment of charging costs and battery losses;
- Benefits and costs for participating and non-participating customers; and
- Cost-effectiveness compared with centralized battery projects and conventional transmission or distribution upgrades.

The study should also identify how costs and benefits would be allocated so that participating customers provide appropriate value to the system and costs are not improperly shifted to non-participating customers.

Recommendation

Renew Missouri recommends that utility-owned, customer-hosted battery storage be included in Evergy's candidate resource list in its next integrated resource planning cycle and modeled consistently with other supply-side, demand-side, and non-wires alternatives.

The resource should be evaluated using appropriate production-cost modeling, ELCC assumptions, capital and operating costs, dispatch constraints, battery degradation, avoided transmission and distribution costs, development timelines, and other economic screening criteria applied to competing resources.

This analysis would provide the Company, the Commission, and stakeholders with a more complete understanding of whether strategically located customer-hosted battery systems can cost-effectively complement resource investments, support growing commercial and industrial load, defer transmission and distribution upgrades, and improve overall system flexibility. If the analysis demonstrates sufficient system value, Evergy should develop a proposed pilot for Commission consideration in an appropriate future proceeding.

Renew Missouri encourages Evergy to evaluate a broader range of plausible future conditions rather than concentrating its preferred portfolio around any single set of technology, fuel, policy, or market assumptions. A more comprehensive set of sensitivities will provide greater confidence that the preferred portfolio remains both reliable and cost-effective across a wide range of potential futures.

Respectfully,

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CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing have been emailed to all counsel of record this 29th day of July 2026.

/s/ Nicole Mers