

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

In the Matter of a Determination of Special	)	
Contemporary Resource Planning Issues to be	)	
Addressed by Evergy Missouri Metro in its Next	)	File No. EO-2026-0035
Triennial Compliance Filing or Next Annual	)	
Update Report	)	

In the Matter of a Determination of Special	)	
Contemporary Resource Planning Issues to be	)	
Addressed by Evergy Missouri West in its Next	)	File No. EO-2026-0036
Triennial Compliance Filing or Next Annual	)	
Update Report	)	

**EVERGY MISSOURI METRO AND EVERGY MISSOURI WEST’S
RESPONSE TO SUGGESTED SPECIAL CONTEMPORARY ISSUES**

Pursuant to Missouri Public Service Commission (“Commission”) Rule 20 CSR 4240-22.080(4)(B), Evergy Metro, Inc. d/b/a Evergy Missouri Metro (“Evergy Missouri Metro”) and Evergy Missouri West, Inc. d/b/a Evergy Missouri West (“Evergy Missouri West”) (collectively, “Evergy” or the “Company”) hereby respectfully submits its *Response to the Lists of Special Contemporary Issues* suggested by the Staff of the Public Service Commission (“Staff”) and the Office of Public Counsel (“OPC”). The suggestions by the parties for special contemporary issues are identical for both Evergy Missouri Metro and Evergy Missouri West; therefore, the Evergy hereby submits one response for both special contemporary issue dockets.

I. INTRODUCTION

In Rule 20 CSR 4240-22.080(4)(A) parties to the Integrated Resource Plan (“IRP”) process may file a list of suggested special contemporary issues.

The definition of *special contemporary issue* is found at 20 CSR 4240-22.020(55):

(55) Special contemporary issues means a written list of issues contained in a commission order with input from staff, public counsel, and intervenors that are evolving new issues, which may not otherwise have been addressed by the utility or are continuations of unresolved issues from the preceding

triennial compliance filing or annual update filing. Each utility shall evaluate and incorporate special contemporary issues in its next triennial compliance filing or annual update filing.

20 CSR 4240-22.080(4) characterizes special contemporary issues generally as, “evolving regulatory, economic, financial, environmental, energy, technical, or customer issues,” that utilities must adequately address in their resource planning. The Commission has provided additional guidance on the assessment of proposed special contemporary issues in its order in File No. EO-2012-0039.¹

On August 8, 2025, the Commission issued, *Order Opening a File Regarding Special Contemporary Resource Planning Issues and Offering an Opportunity To File Suggestions*, directing interested parties wishing to suggest a special contemporary issue that Evergy should consider in its next Triennial IRP or in its annual update report to file written suggestion no later than September 15, 2025. Evergy has an opportunity to respond to the lists provided in accordance with Rule 20 CSR 4240-22.080(4)(A). Per the rule, Evergy’s response to the suggested special contemporary issues shall be filed by October 1, 2025.

II. STAFF LIST OF CONTEMPORARY ISSUES

On September 11, 2025, Staff filed suggestions for special contemporary issues. Staff requests Evergy address the following issues for Evergy Missouri Metro and Evergy Missouri West: (1) Nuclear Power Plant; (2) Large Load Customers; (3) Capacity; (4) Battery Energy Storage Systems; and (5) Transmission.

¹ See *Order Establishing Special Contemporary Resource Planning Issues*, dated October 19, 2011; Docket No. EO-2012-0039.

Issue 1: Nuclear Power Plant

1. Staff requests that the Commission order Evergy to provide: Discrete timeline for permitting processes and construction activities of a nuclear power plant: (a) at an existing site, including discussion on transmission capacity needs; (b) at a greenfield site; (c) tax credit availability and likelihood of being able to achieve current milestones; and (d) discussion on systems that track nuclear-based energy attribute certificates /credits and discussion on State policies (renewable or clean energy standards) that include nuclear-based energy attributes.

RESPONSE: The Company does not believe that discrete timelines for permitting processes and construction activities of a nuclear power plant are appropriate for an Annual Update to its Integrated Resource Plan and therefore does not support this request. The suggestion does not meet the definition of special contemporary issue. It is not an evolving new issue, which may not otherwise have been addressed by the utility. That said, the Company would not object to discussing the feasibility of nuclear resources as part of its Annual Update, including updates on recent announcements in the industry. The Company evaluated new nuclear in its 2024 Triennial IRP. This type of review and evaluation falls within the framework of the Commission's IRP rules and Evergy will assess viable technologies accordingly in the 2026 Annual IRP Update.

Issue 2: Large Load Customers

2. Staff requests that the Commission order Evergy to provide: (a) Current pipeline of large load customers and which are likely to materialize; (b) Discussion on interconnection; (c) Potential impact if load does not persist for more than 5, 10, 15 years; (D) Ratepayer impact, by class, if current Company cost allocation is utilized; and (e) Risk Analysis, including (i) Ratepayer; (ii.) Shareholder; (iii.) Fuel Adjustment Clause ("FAC") impacts; (iv.) Cost of Renewable Energy Standard ("RES") compliance; and (v.) Changes in load profile or magnitude.

RESPONSE: The majority of these suggestions do not meet the definition of special contemporary issue as they are not evolving new issues, which may not otherwise have been addressed by the utility. The Company believes parts (a) and (b) are already issues that align with the load analysis and forecasting sections found in 20 CSR 4240-22.030. The Company included large load pipeline analysis in its 2025 Annual IRP Updates and expects to continue to analyze

large loads in future IRPs. The Company does not support part (c), (d) and parts (e) (i-iii), as they do not fall within the framework of the Commission's IRP rules and are more appropriately handled in the current open litigation on large load tariffs in Missouri. For part (e) (iv), Evergy can calculate the RES Requirements related to various large load scenarios and will incorporate its findings into the narrative of its 2026 IRP Annual Update if ordered by the Commission. The Company does not support Part (e) (v) as the request lacks detail and is more appropriately handled in potential existing customer protection provisions as part of the current open litigation on large load tariffs in Missouri.

Issue 3: Capacity

3. *Staff requests that the Commission order Evergy to provide: (a) Updated capacity purchase options, (i) Amount; (ii) Price per kW.*

RESPONSE: Evergy does not support this request. The suggestion does not meet the definition of special contemporary issue. It is not an evolving new issue, which may not otherwise have been addressed by the utility. This type of review and evaluation falls within the framework of the Commission's IRP rules and Evergy will assess accordingly in the 2026 Annual IRP Update.

Issue 4: Battery Energy Storage Systems

4. *Staff requests that the Commission order Evergy to provide: (a) Range of Costs; (b) Operational characteristics; and (c) Useful life*

RESPONSE: Evergy does not support this request. The suggestion does not meet the definition of special contemporary issue. It is not an evolving new issue, which may not otherwise have been addressed by the utility. This type of review and evaluation falls within the framework of the Commission's IRP rules and Evergy will assess accordingly in the 2026 Annual IRP Update. The items listed above regarding Battery Energy Storage Systems are already considered during the modeling of IRP inputs. Like the 2025 annual update, Evergy expects to include:

- Relevant information related to battery costs based on updated technology curves as well as pricing information from the 2025 All-Source RFP;
- Modeling of potential ITCs and PTCs for batteries as per updated IRS guidance; and
- Review of recent SPP studies to establish updated ELCC values for battery resources.

Issue 5: Transmission

5. Staff requests that the Commission order Evergy to provide: (a) Zonal transmission import/export limitations; and (b) Company/Zonal resource adequacy requirements by season

RESPONSE: Evergy does not support this request. The suggestion does not meet the definition of a special contemporary issue. It is not an evolving new issue, which may not otherwise have been addressed by the utility. Part (a) does not apply to Evergy because SPP does not have zonal transmission import/export limitations as part of its resource adequacy construct. Part (b) falls within the framework of the Commission’s IRP rules and Evergy will assess accordingly in the 2026 Annual IRP Update. Evergy’s IRPs plan to meet SPP resource adequacy requirements throughout the planning horizon consistent with 20 CSR 4240-22.10(2).

III. OPC LIST OF CONTEMPORARY ISSUES

On September 15, 2025, OPC filed suggestions for special contemporary issues. OPC requests Evergy address the following issues for Evergy Missouri Metro and Evergy Missouri West: (1) Modeling RES Requirement Generation in Various Large Load Scenarios; (2) Modeling for New Developments in Small Modular Nuclear Reactor Technology; (3) Modeling related to Mothballing Any Dispatchable Generation; (4) Modeling related to Supercritical Carbon Dioxide Power Cycles; and (5) Modeling for Geological Hydrogen Onsite or Near Natural Gas Storage.

Issue 1: Model RES Requirement Generation in Various Large Load Scenarios

1. OPC requests that the Commission order Evergy to model for renewable generation buildout and REC purchases under various large load scenarios. These large load scenarios should vary based on different levels of commitment by large load customers. Current commitments and lack thereof should guide how each scenario's load varies. The model should include a least cost constraint, while also prioritizing speed of RES compliance. Where adding generation is more costly but quicker than other options, and can be shown to lower net-present value revenue requirement, this should be seen as preferable to other options. RECs are RES-compliant and should be considered as important assets to meet the RES compliance percentage due to the interconnection queue in SPP and any large transmission buildout that would need to accompany renewable generation build.

RESPONSE: Evergy can calculate the RES Requirements related to various large load scenarios and will incorporate its findings into the narrative of its 2026 IRP Annual Update if ordered by the Commission.

Issue 2: Modeling for New Developments in Small Modular Nuclear Reactor Technology

2. OPC requests that the Commission order Evergy to monitor new developments in SMR technology and to model for potential additions of SMR to its generating fleet. The modeled technology should include those listed above and any others that are being considered in known agreements.

RESPONSE: The suggestion does not meet the definition of special contemporary issue. It is not an evolving new issue, which may not otherwise have been addressed by the utility. The Company evaluated new nuclear in its 2024 Triennial IRP. This type of review and evaluation falls within the framework of the Commission's IRP rules and the Company would not object to discussing the feasibility of nuclear resources as it assesses viable technologies in the 2026 Annual IRP Update.

Issue 3: Modeling Related to Mothballing Any Dispatchable Generation

3. *OPC requests that the Commission order Evergy to analyze and produce estimated costs for mothballing any dispatchable generation resource that is subject to a planned retirement in the 20-year planning period. Estimates should include all costs including the minimum continued O&M of the mothballed units.*

RESPONSE: OPC requested this as a special contemporary issue in EO-2024-0043 & EO-2024-0044, and it was not granted by the Commission. The Company does not believe this request meets the definition of a special contemporary issue. This is not an evolving new issue which may not be otherwise addressed by the utility. The Company will review the potential of mothballing dispatchable generation resources at the time that these resources are removed from service, but these decisions will be highly specific to individual resources at the time of their potential retirement. As a result, this cannot be analyzed on a generic basis over a 20-year period given the significant uncertainty around regulations and permitting for individual units at a specific time in the future. As retirements become more near-term, the Company will review relevant EPA regulations and guidance that may limit the Company's ability to mothball dispatchable generation resources at the time the unit(s) are removed from service.

Issue 4: Modeling Related to Supercritical Carbon Dioxide Power Cycles

4. *OPC requests that the Commission order Evergy to investigate the option of a supercritical carbon dioxide power cycle plant as a resource candidate in future supply-side generation planning and modeling scenarios.*

RESPONSE: Evergy does not support this request. This is an emerging technology that is still in the research phase. Evergy included this topic in the 2025 Annual Update. A demonstration pilot plant at the Southwest Research Institute in San Antonio, Texas generated a small amount of power (4 MW) for the first time in May of 2024. In the final phase of the demonstration project, plant modifications in 2025 are targeting full power of 10 MW. The total project cost of \$169 million equates to \$16,900/kW. Given this newly emerging technology comes at a high cost for a

limited capacity of 10 MW, it will likely not be a viable option in the near to mid-term. Therefore, this request should not be included as a special contemporary issue for Evergy's 2026 Annual IRP update.

Issue 5: Modeling for Geological Hydrogen Onsite or Near Natural Gas Storage

5. *OPC requests that the Commission order Evergy to model for the use of potential geologic hydrogen resources at sites where natural gas turbines are located, to model for the transport of potential geologic hydrogen to natural gas turbines located nearby, and to model for the potential siting of new natural gas turbines at locations of potential geologic hydrogen sites.*

RESPONSE: Evergy does not support this request. 20 CSR 4240-22.040 (1), states in pertinent part, "The utility shall evaluate all existing supply-side resources and identify a variety of potential supply-side resource options *which the utility can reasonably expect to use, develop, implement, or acquire*, and, for purposes of integrated resource planning, all such supply-side resources shall be considered as potential supply-side resource options." (*italics added*). Evergy maintains that this emerging technology is not yet viable and therefore, it is not a technology that Evergy could reasonably expect to use, develop, implement, or acquire. OPC's request admits: "[a]t this point the technology for production of electricity by geologic hydrogen is not in use and is in the preliminary stages..." Because geological hydrogen is not currently a viable technology, this request should not be included as a special contemporary issue for Evergy's 2026 Annual IRP Update.

WHEREFORE, Evergy Missouri Metro and Evergy Missouri West respectfully submit their *Response to the Lists of Special Contemporary Issues* to the Commission.

Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the above and foregoing document was served upon counsel for all parties on this 1st day of October 2025, by EFIS filing and notification, and/or e-mail.

/s/ Roger W. Steiner

Roger W. Steiner