Exhibit No.:Generation Development and Portfolio<br/>TransitionWitness:Jason HumphreyType of Exhibit:Surrebuttal TestimonySponsoring Party:Evergy Missouri West<br/>Case No.:Case No.:EA-2024-0292Date Testimony Prepared:May 19, 2025

#### MISSOURI PUBLIC SERVICE COMMISSION

#### CASE NO.: EA-2024-0292

#### SURREBUTTAL TESTIMONY

OF

#### JASON HUMPHREY

#### **ON BEHALF OF**

#### **EVERGY MISSOURI WEST**

Kansas City, Missouri

May 2025

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#### SURREBUTTAL TESTIMONY

#### OF

#### **JASON HUMPHREY**

#### Case No. EA-20244-0292

1 <b>I.</b>	INTRODUCTION

- 2 Q: Please state your name and business address.
  3 A: My name is Jason Humphrey. My business address is 818 S. Kansas Ave, Topeka, Kansas
- 4 66612.
- 5 Q: Are you the same Jason Humphrey who filed Direct testimony in this docket on 6 October 25, 2024?
- 7 A: Yes.
- 8 Q: Who are you testifying for?
- 9 A: I am testifying on behalf of Evergy Missouri West, Inc. d/b/a Evergy Missouri West
  10 ("Evergy Missouri West," "EMW," "Evergy," or "the Company").
- 11 Q: What is the purpose of your Surrebuttal testimony?

A: The purpose of my Surrebuttal testimony is to respond to various witnesses from the 12 Missouri Public Service Commission Staff ("Staff") and their testimony set forth in the 13 Staff Report & Recommendation ("Staff Rec.") and J Luebbert's Rebuttal. Specifically, I 14 respond as to the following: (1) acknowledge Staff's recommendation to approve the 15 request for a Certificate of Convenience and Necessity ("CCN") for Sunflower Sky Solar 16 Project, LLC ("Sunflower Sky") and Foxtrot Solar Energy LLC ("Foxtrot") (collectively, 17 18 the "Projects"), albeit certain proposed economic feasibility and conditions, (2) EMW's capacity need for the Projects, (3) confirming EMW is qualified to provide the electric 19

service from the Project to its customers, and (4) the Projects' economic feasibility,
 specifically pertaining to pricing nodes. Additionally, I address the Office of the Public
 Counsel ("OPC") Dr. Geoff Marke's Rebuttal regarding the Projects' supposed cost
 uncertainties and tax credits.

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#### Why is Evergy seeking CCNs for the Projects at this time?

A: As outlined in the Company's Application and Direct Testimony, the Company is seeking
the CCNs for the Projects as a vital measure to meet the escalating demand for both
capacity and energy in the region. With the rising need for dependable power, particularly
due to the increasing Southwest Power Pool ("SPP") resource adequacy requirements, and
the need for capacity and energy for Missouri West's current and future native load, these
Projects are crucial for ensuring the Company can maintain safe, reliable, and adequate
service.

## 13 Q: Did Staff, OPC, and Renew Missouri recommend approval for the two CCN 14 requests?

Yes. EMW and Renew Missouri are in agreement that the CCNs should be approved 15 A: outright. See J. Owen Rebuttal at 3 (Renew Mo.) (stating Renew Missouri supports "the 16 17 granting of the solar CCNs as well as implementation of the Green Solutions Program."). Staff and OPC recommend approval of the CCNs but subject to certain conditions. See 18 19 Staff Rec. at 50-51; J Luebbert Rebuttal at 3; G. Marke Rebuttal at 8-13. Approval of the 20 CCNs would represent an important milestone for the Company as it moves forward with the development of new solar energy generation resources in accordance with the 21 22 Company's 2024 Integrated Resource Plan ("IRP"). The CCNs permit the Company to

1 2 advance the results of the 2024 Preferred Plan portfolio in support of the needs of safe, reliable, and efficient service for the customers of EMW.

# Q: Is Evergy seeking additional CCNs through separate proceedings to support its Preferred Plan, and is this approach aligned with the Company's 2024 IRP?

Yes. The CCNs for Sunflower Sky and Foxtrot are part of a large, holistic approach by the 5 A: 6 Company to provide safe and adequate electric service through a diversified portfolio of As discussed in Evergy's Application and Direct, and Staff's 7 generation assets. recommendation, EMW recently acquired approximately 143 megawatts ("MW") of the 8 Dogwood Energy Facility<sup>1</sup> natural gas combined cycle unit, and in the near future EMW 9 is planning to construct three (3) thermal additions in 2029 and 2030.<sup>2</sup> See C. VandeVelde 10 Direct at 6-7. 11

# Q: Why is it important for the Company to continue to execute on this portfolio of projects as part of the Preferred Plan identified in the 2024 Triennial IRP?

A: The 2024 IRP Preferred Plan portfolio has been shown to be very robust against the many uncertain futures evaluated in that plan. Importantly, these solar assets have been a key part of meeting customer needs at the lowest cost (see VandeVelde Direct at 16) and will provide on-peak, carbon-free energy in support of an "all of the above" generation portfolio strategy. These plants offer EMW the opportunity to benefit from a fuel-free resource, consistent with the assumptions made in the IRP in the very near future. In fact, given the capacity benefit of these solar farms, it is imperative that Evergy Missouri West start

<sup>&</sup>lt;sup>1</sup> See Order Approving Stipulation & Agreement and Granting Certificate of Convenience & Necessity, <u>In re</u> Application of Evergy Mo. West for an Operating Certif. of Convenience & Necessity related to Dogwood Nat. Gas Facility, EA-2023-0291 (Mar. 21, 2024).

<sup>&</sup>lt;sup>2</sup> In re Evergy Gas CCN, EA-2025-0075.

construction in a timely manner to ensure these resources are available to serve customers
and be a part of the generation mix that supports EMW's compliance with the SPP's
resource adequacy rules.

# 4 Q: Does Evergy Missouri West's CCN request for the Projects satisfy the *Tartan*<sup>3</sup> 5 factors?

- 6 A: Yes. As discussed in Company witness Kevin Gunn's Surrebuttal testimony, Staff and the 7 Company are in agreement that the CCN request satisfies all of the *Tartan* factors besides whether the Projects are economically feasible. See Staff Rec. at 18; J Luebbert Rebuttal 8 9 at 3. These solar projects are critical, aligning with the identified need for 150 MW of solar generation by summer 2027, as outlined in EMW's 2024 IRP. As detailed in this discussion 10 and supported by several Evergy witnesses, the Projects demonstrate economic feasibility. 11 Delaying jeopardizes the Projects' timelines, impacts supply chain coordination, and costs, 12 potentially impairs the Company's ability to hire qualified constructors, and ultimately 13 14 hinders the Company's ability to bring needed resources online in time to ensure grid reliability. Given the lead times required for permitting, procurement, and construction, 15 timely approval is essential to keep the Company's resource planning on track and to meet 16 17 growing demand with clean, cost-effective solar generation.
- 18 **II.**

#### <u> TARTAN FACTOR – NEED</u>

# Q: Did Evergy Missouri West factor Dogwood Energy Center's ("Dogwood") capacity accreditation into the Company's 2024 IRP?

A: Yes. Evergy agrees with Staff's recommendation that "EMW will not receive their total
share of [the 143 MW of] accredited capacity of Dogwood until 2031." See Staff Rec. at

<sup>&</sup>lt;sup>3</sup> In re Tartan Energy Co., No. GA-94-127, 1994 WL 762882 (1994).

- 1 13. This was known to EMW and disclosed to the Commission in No. EA-2023-0291.
- 2 EMW factored in Dogwood's capacity into its 2024 IRP, which ultimately identified the
- 3 need for Sunflower Sky and Foxtrot. <u>See generally</u> C. VandeVelde Direct.
- 4

#### III. <u>EMW IS QUALIFIED TO PROVIDE THE SERVICE</u>

- 5 Q: Is Evergy Missouri West qualified to construct, install, own, operate, maintain, and
  6 otherwise control the Projects?
- 7 A: Yes. Evergy Missouri West, Staff, and Renew Missouri Advocates ("Renew Missouri")
  8 are in agreement that the Company is qualified to provide electric service from the Projects.
- 9 <u>See Staff Rec. at 18; J Luebbert Rebuttal at 3; J. Owen Rebuttal at 3 (Renew Mo.).</u>
- 10 IV. <u>TARTAN FACTOR ECONOMIC FEASIBILITY</u>

#### 11 Q: Are the Projects economically feasible as required by the Tartan factors?

A: Yes. As described in the Direct testimony of Cody VandeVelde, the Projects are wholly consistent with the Preferred Plan portfolio for Missouri West, which was a portfolio that went through a rigorous IRP process where minimization of the net present value of the revenue requirement ("NPVRR") for Missouri West customers was the primary metric evaluation.

Furthermore, as described in the Direct testimony of John Carlson, the Projects were selected through a highly competitive All-Source Request for Proposal ("RFP") process that evaluated both quantitative factors such as land control, development maturity, location, cost of capacity, cost of energy, net capacity factor, etc. and qualitative factors, like overall development risk, permitting risk, and developer experience.

Finally, when evaluated against other projects of like resource type, such as a solar
 project-to-solar project or wind project-to-wind project evaluation, Foxtrot and Sunflower

1 Sky were the best projects available to Missouri West. This was true on a number of 2 different metrics including geographic proximity to the service territory, ability to 3 participate in additional tax credits, levelized cost, contracting status, and overall project 4 risk.

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## Q: Should Evergy Missouri West include contingency plans based on key inputs, such as market price changes, changes in tax incentives, and load assumptions in order for the Commission to find the Company's decision to acquire, construct, own and operate the Projects is prudent, as Staff suggests on page 50?

9 A: No. The Company respectfully disagrees with Staff that it is required to provide continuous updates of the Projects costs and potential revenue, compared against alternative solutions, 10 as the Projects' costs "become more finite and estimates of variables that affect market 11 revenue get more precise." See Staff Rec. at 41. As Evergy witness Kevin Gunn discusses 12 in his Surrebuttal testimony, such updates are not required to determine if a project is 13 14 economically feasible or for the Commission's prudence standard. These standards are not practical in the context of large, complex project construction given that many of the factors 15 that impact market pricing, such as future transmission buildout and future SPP generation 16 17 resource mixes, cannot be known with absolute precision. Based on the information the Company has provided to the Commission, that was "reasonable at the time, under all 18 19 circumstances," the solar facilities satisfied the prudence standard and Tartan factors. 20 Constantly re-evaluating options mid-cycle introduces unnecessary risk, delays, and cost 21 uncertainty. Similarly, while EMW acknowledges the value of refining estimates where 22 possible, the expectation for increasingly finite and precise projections of inherently 23 uncertain variables like market revenue potential must be balanced with the realities of forecasting in a competitive and dynamic energy market that is intended only to dispatch the next megawatt hour of energy at the lowest marginal cost. The Company will further demonstrate the cost prudency of the Projects when they are eventually brought into customer rates in a rate case, supported by both the rigorous IRP process and comprehensive project oversight.

# Q: Does EMW agree with Staff on page 24 of its Recommendation that since exact or negative pricing node ("P-Nodes") were not used by the Company, Staff cannot determine the economic feasibility of the Projects?

9 A: No. This is too broad a read of the economic feasibility of the Projects and completely discounts the resource adequacy benefits these Projects provide through their accredited 10 capacity to Evergy Missouri West. The IRP modeling process, which begins with a 11 capacity expansion plan to meet the resource adequacy requirement of the Southwest 12 Power Pool, does not incorporate exact nodal prices. Forecasting such granular and 13 14 speculative pricing far into the future, at market nodes that have yet to be constructed with grid modifications that will take place over time, is neither practical nor aligned with 15 standard resource planning methodologies. This is particularly true for proposed generation 16 17 facilities where the specific market node does not yet exist, as is the case here, making precise locational price modeling impossible. The Company applies this consistent 18 19 approach across all new generation types—natural gas, solar, or otherwise—ensuring a fair 20 and reasonable comparison of resources during the planning process.

21 Moreover, solar generation is generally peak-correlated, meaning it tends to 22 produce energy during times of higher system demand, when market prices are typically 23 more favorable. As such, sustained negative pricing for solar resources is not anticipated.

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1 In the rare instances where localized negative pricing might occur, as it does at all market nodes, the financial impact is mitigated, or completely offset, through robust economic 2 support mechanisms such as tax credits and the value of Renewable Energy Credits 3 ("REC"), which together contribute significantly to the overall revenue stream and cost-4 effectiveness of these projects. See J. Grace Direct and Surrebuttal. Most importantly, 5 6 these resources will still contribute to the capacity accreditation of EMW in support of 7 SPP's resource adequacy requirements. These factors help ensure that solar investments remain prudent and beneficial to customers, even in the face of evolving market dynamics. 8

9 Q: Does EMW agree with Staff's proposed economic condition on page 50 of its
 10 Recommendation to provide reports three (3) years on negative P-node prices and
 11 impact on revenue?

A: No. The company does not agree that it needs to provide these specific P-node price reports for a period of three years. However, it does acknowledge that staff and parties to the fuel adjustment clause ("FAC") cases including OPC receive Locational Marginal Price ("LMP") pricing reports as part of those cases. This should provide an avenue for parties to review the data requested. See J Luebbert Rebuttal at 3; see also G. Marke Rebuttal at 813 (OPC) (OPC is in agreement with Staff's conditions)

# 18 Q: Is the levelized cost of energy ("LCOE") a critical metric to determine the Projects 19 economic feasibility?

A: Yes, but it is not the only technique used by the Company. When evaluating economic feasibility, looking at the totality of the facts and determining if the projects ultimately support the needs of the customers, is the most critical. John Carlson's Surrebuttal testimony discusses the use of LCOE as a comparative technique generally, and it is also

1 broadly an important factor that the Commission has recognized in the economic 2 evaluation of projects. In isolation, LCOE is one of the most critical and relevant metrics 3 for determining the economic feasibility of a solar generation facility, but when combined with an IRP portfolio that minimizes the NPVRR, it is particularly strengthened as a 4 comparative metric. The LCOE provides a standardized way to compare the long-term cost 5 6 of generating electricity from different technologies by calculating the total lifecycle cost 7 per megawatt-hour of energy produced. This includes capital investment, operations and maintenance costs, and projected performance over the Projects' useful lives. It allows 8 9 planners, regulators, and stakeholders to assess the relative affordability and efficiency of various generation resources on a consistent basis and provides an important comparison 10 metric when evaluating project selection after an IRP has identified a resource type to be 11 constructed in a given year as part of a portfolio that minimizes customer cost. 12

#### 13 Q: What other items are important for the evaluation of economic feasibility?

14 A: While the ultimate question of whether or not the resource is in support of a portfolio that minimizes the present worth of long-run utility costs is the most important, other factors in 15 addition to LCOE are important. It is important to determine if the project is competitive 16 17 against other projects available for build in the marketplace. It is also important to evaluate the robustness of the project development plan, as well as the financing plan of the asset. 18 19 Finally, to determine economic feasibility, the economic inputs for the project should result 20 in that specific resource still being selected in an IRP-style analysis. Sometimes input 21 assumptions do change due to market or project forces, and updated analysis is necessary 22 as evidenced by supplemental analysis performed in the EA-2025-0075 docket when it was 23 evident the pricing of natural gas facilities had changed since the initial pricing used in the

2024 Triennial IRP. Ultimately, if the resource is needed to support the preferred portfolio
 which includes project attributes that are supportive of the minimized NPVRR, a project is
 economically feasible.

4 Q: Have any actions taken by the new administration affected the Projects?

5 Yes. As discussed in my February Supplemental Direct filing in No. EA-2025-0075, A: 6 President Trump executed proclamations reinstating and expanding a 25% tariff on steel 7 and aluminum imports which came into effect on March 12, 2025. Since then, the additional tariffs on specific countries and industries have been announced, including the 8 9 "Liberation Day" tariffs. The proclamations may significantly impact the total cost of Sunflower Sky and Foxtrot because many components of the "Projects contain steel and 10 aluminum." and some materials will be imported for the projects. Id. "The new tariffs [] 11 increase input costs, cause shortages and supply chain disruptions, and escalate the risk of 12 disputes involving cost allocation, project delays, scope changes, and performance 13 14 defenses such as force majeure, change in law, or impracticability." Id. When the CCN is granted, EMW can take affirmative measures within its supply chain and through its 15 engineering, procurement, and construction contractors to further mitigate the tariff risk. 16 17 Thus, as stated by Evergy witness Kevin Gunn's Direct and Surrebuttal, it is essential, now more than ever, that the Commission grant the Company decisional prudence as EMW has 18 19 shown that the Projects are economically feasible based on the information presented in 20 this case.

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**Q**:

### Will the new presidential administration's policies, specifically toward the Inflation Reduction Act ("IRA"), impact the Projects' tax credits?

The Company is currently "monitoring potential impacts that may result from changes to 3 A: the Inflation Reduction Act," but "[h]istorically, Republican administrations have chosen 4 to extend the PTC and ITC benefits for renewable projects." See Confidential Schedule 5 6 JH-1, Evergy Response to Staff DR No. 0053. "However, should this administration 7 change course and choose to eliminate these tax incentives for future tax years, both the Foxtrot and Sunflower Sky projects are likely to maintain eligibility for tax credits" under 8 9 the "safe harbor" provision of the current 2025 tax rules. Id. When tax laws are changed, they typically go into effect during the following tax year. Id. So, "given that both projects 10 are anticipated to start construction or incur significant capital expenditures in 2025," the 11 Projects "will likely be eligible to maintain ITC/PTC qualification under the current 2025 12 tax rules." Id. 13

## Q: Does EMW agree with OPC's Rebuttal on pages 4-5 that the Projects' costs are uncertain because of the administration's policy on tax credits?

A: No. As discussed herein, Sunflower Sky and Foxtrot are likely to maintain eligibility of tax
credits under the "safe harbor" provision of the 2025 tax rules. OPC's reference to the
"White House Fiscal year 2026 discretionary budget" or the potential for further roll back
or elimination of tax credits are not anticipated to apply to these Projects. The Company
remains committed to selecting the tax strategy that ultimately results in the most benefits
to Missouri West's customers.

1 Q: Please summarize your testimony.

2 A: In conclusion, the Projects are an integral compliment to the Company's diversified portfolio, contributing to its overall objective of supporting the 2024 triennial IRP Preferred 3 Plan and ensuring compliance with SPP's resource adequacy requirements. Delaying the 4 5 Projects could disrupt established timelines, create inefficiencies in supply chains, and 6 hinder the Company's ability to provide safe and reliable service to its customers. Additionally, the economic feasibility of the Projects has been validated through rigorous 7 8 analysis, including the comparison to the generic solar resource used in the IRP, LCOE, 9 and capacity value supplied by the resource in support of the SPP resource adequacy requirements, along with other metrics discussed herein. Solar generation not only aligns 10 with peak demand periods but also leverages available financial incentives, such as tax 11 12 credits, which provide additional customer financial benefits beyond the energy and capacity of the Projects. As such, the Projects represent a prudent and necessary investment 13 14 for the Company's long-term success and sustainability.

15 Q: Does that conclude your testimony?

16 A: Yes, it does.

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

In the Matter of the Application of Evergy ) Missouri West, Inc. d/b/a Evergy Missouri ) West for Permission and Approval of a ) Certificate of Public Convenience and Necessity)

Case No. EA-2024-0292

#### AFFIDAVIT OF JASON HUMPHREY

#### STATE OF MISSORUI ) ) ss COUNTY OF JACKSON )

Jason Humphrey, being first duly sworn on his oath, states:

1. My name is Jason Humphrey and I am employed by Evergy Kansas Central, Inc. as Vice President Development.

2. Attached hereto and made a part hereof for all purposes is my Surrebuttal Testimony on behalf of Evergy Missouri West consisting of twelve (12) pages, having been prepared in written form for introduction into evidence in the above-captioned docket.

3. I have knowledge of the matters set forth therein. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded, including any attachments thereto, are true and accurate to the best of my knowledge, information and belief.

Jason Humphrey

OMMISSION #1727995

Subscribed and sworn before me this 19<sup>th</sup> day of May 2025. Athe Arthony R westenkinchner Notary Public My commission expires: April 26, 2029 My Commission Expires April 26, 2029

## SCHEDULE JH-1 CONTAINS CONFIDENTIAL INFORMATION NOT AVAILABLE TO THE PUBLIC.

## **ORIGINAL FILED UNDER SEAL.**

#### Evergy Metro, Inc. d/b/a Evergy Missouri Metro and Evergy Missouri West, Inc. d/b/a Evergy Missouri West

Docket No.: EA-2024-0292 Date: May 19, 2025

#### CONFIDENTIAL INFORMATION

The following information is provided to the Missouri Public Service Commission under CONFIDENTIAL SEAL:

Document/Page	Reason for Confidentiality from List Below
Schedule JH-1	3, 4, and 6

Rationale for the "confidential" designation pursuant to 20 CSR 4240-2.135 is documented below:

- 1. Customer-specific information;
- 2. Employee-sensitive personnel information;
- 3. Marketing analysis or other market-specific information relating to services offered in competition with others;
- 4. Marketing analysis or other market-specific information relating to goods or services purchased or acquired for use by a company in providing services to customers;
- 5. Reports, work papers, or other documentation related to work produced by internal or external auditors, consultants, or attorneys, except that total amounts billed by each external auditor, consultant, or attorney for services related to general rate proceedings shall always be public;
- 6. Strategies employed, to be employed, or under consideration in contract negotiations;
- 7. Relating to the security of a company's facilities; or
- 8. Concerning trade secrets, as defined in section 417.453, RSMo.
- 9. Other (specify)

Should any party challenge the Company's assertion of confidentiality with respect to the above information, the Company reserves the right to supplement the rationale contained herein with additional factual or legal information.