

Exhibit No.:  
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Witness: Cody VandeVelde  
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Sponsoring Party: Evergy Missouri Metro and Evergy Missouri  
West  
Case No.: EO-2023-0369/0370  
Date Testimony Prepared: August 20, 2024

**MISSOURI PUBLIC SERVICE COMMISSION**

**CASE NOS.: EO-2023-0369/0370**

**SURREBUTTAL TESTIMONY**

**OF**

**CODY VANDEVELDE**

**ON BEHALF OF**

**EVERGY MISSOURI METRO and  
EVERGY MISSOURI WEST**

**Kansas City, Missouri  
August 2024**

**TABLE OF CONTENTS**

I. INTRODUCTION ..... 1

II. RESPONSE TO STAFF WITNESSES..... 2

*FIGURE 1: COMBINED METRO AND MISSOURI WEST POSITION BEFORE NEW  
CAPACITY ADDITIONS* ..... 2

*FIGURE 2: METRO 20-YEAR NPVRR RANKINGS*..... 6

*FIGURE 3: MISSOURI WEST 20-YEAR NPVRR RANKINGS*..... 7

**SURREBUTTAL TESTIMONY**

**OF**

**CODY VANDEVELDE**

**CASE NOS. EO-2023-0369/0370**

1

**I. INTRODUCTION**

2 **Q: Please state your name and business address.**

3 A: My name is Cody VandeVelde. My business address is 818 S. Kansas Avenue,  
4 Topeka, Kansas.

5 **Q: Are you the same Cody VandeVelde who filed direct testimony in these dockets**  
6 **on April 29, 2024, and rebuttal testimony on July 9, 2024?**

7 A: Yes.

8 **Q: Who are you testifying for?**

9 A: I am testifying on behalf of Evergy Metro, Inc. d/b/a as Evergy Missouri Metro  
10 (“Evergy Missouri Metro”), Evergy Missouri West, Inc. d/b/a Evergy Missouri  
11 West (“Evergy Missouri West”) (collectively, “Evergy” or the “Company”).

12 **Q: What is the purpose of your rebuttal testimony?**

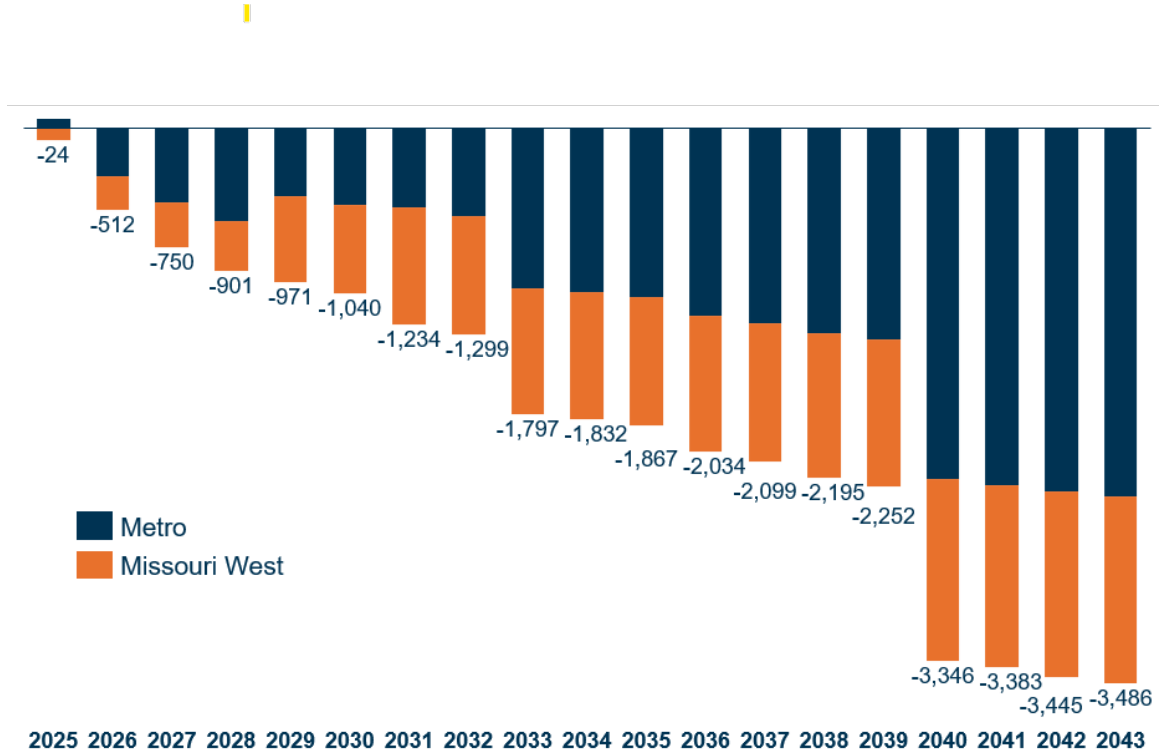
13 A: The purpose of my testimony is to respond to portions of Staff Witness Brad  
14 Fortson’s rebuttal testimony.

1 **II. RESPONSE TO STAFF WITNESSES**

2 **Q: In Mr. Fortson’s direct testimony, he states “It may be reasonable to use the**  
 3 **market-based equivalent of avoided costs rather it be in a scenario of positive**  
 4 **or negative reserve margin. However, it is not reasonable to assume that**  
 5 **absent incremental DSM that the Company would need new generation**  
 6 **resources.” How do you react to this?**

7 **A: I disagree with Mr. Fortson. As established in the 2024 IRPs, and shown in Figure**  
 8 **1, both Metro and EMW are capacity-short without the addition of new, accredited**  
 9 **capacity.**

10 **FIGURE 1: COMBINED METRO AND MISSOURI WEST POSITION BEFORE NEW**  
 11 **CAPACITY ADDITIONS**



12 Generally, accredited capacity can be obtained in three ways: 1) market capacity,  
 13 2) supply-side generation resources, or 3) demand-side management. I can agree  
 14 with Mr. Fortson that historically it has been reasonable to use a market-based  
 15

1 equivalent of avoided capacity costs. The issue with using this assumption moving  
2 forward is that the current capacity planning and marketplace is anything but typical  
3 compared to the last decade plus due to the utility industry as a whole facing  
4 resource adequacy challenges. It is not reasonable to assume that the capacity need  
5 shown in Figure 1 above can be achieved by market capacity, particularly in the  
6 near-term. Since Evergy's planning assumptions don't expect a plethora of market  
7 capacity availability, the 2024 IRPs Preferred Plans meet the capacity need via the  
8 other two options - DSM and new-build generation resources. For this reason, I  
9 disagree with Mr. Fortson because it is reasonable to believe that incremental DSM  
10 offsets the need for new generation resources that would otherwise be needed to  
11 meet Metro and EMW's projected capacity need.

12 **Q: What are the consequences if the Commission were to rule against Evergy's**  
13 **MEEIA Cycle 4 applications?**

14 A: Evergy's 2024 IRPs studied alternative resource plans for both Metro and EMW  
15 that included No DSM, which is a good indicator of forward planning assumptions  
16 if the Commission were to rule against the Cycle 4 application. In this alternative  
17 resource plan, that includes the absence of DSM and before considering new  
18 supply-resource build, both utilities' IRPs indicate a capacity shortfall starting in  
19 2026 and continuing thereafter. If Evergy is short on capacity, in addition to not  
20 having enough generating capability to meet peak customer demand, the Southwest  
21 Power Pool ("SPP") would impose deficiency payments on Evergy. In order to  
22 meet customer demand and avoid SPP deficiency payments, the No DSM plan for  
23 Metro builds a 150 MW battery resource in 2026 and 150 MW of solar in 2028.

1 Neither of these resources are needed in Metro’s Preferred Plan due to including  
2 the capacity from DSM. For Missouri West, the No DSM plan builds 150 MW of  
3 battery in both 2026 and 2027 (300 MW total over the two year) – neither of these  
4 batteries are needed in EMW’s Preferred Plan, which includes capacity from DSM.

5 **Q: So, according to the alternative resource plans including No DSM in the 2024**  
6 **IRPs Evergy will need to build new supply-side resources if the Commission**  
7 **does not approve its MEEIA Cycle 4 application?**

8 A: Yes. In the event Metro and Missouri West are not approved to implement Cycle  
9 4, Evergy would likely file a change in resource plan deviating from the current  
10 Preferred Plans. Evergy would then start executing on developing, building, and/or  
11 purchasing new supply-side resources to fill the capacity need that is expected  
12 without MEEIA Cycle 4. Evergy would also likely search for cost-effective market  
13 capacity in parallel to developing supply-side resources, but Evergy does not expect  
14 to find significant market capacity available given current market conditions.  
15 According to the No DSM alternative resource plans in the 2024 IRP, if Evergy is  
16 unable to develop and commission new supply-side capacity resources, or acquire  
17 sufficient market capacity, by the summer of 2026, it is likely to be short of SPPs  
18 resource adequacy requirements and subject to capacity deficiency payments.

19 **Q: Did Evergy utilities include a MEEIA Cycle 4 only alternative resource plan**  
20 **in their 2024 IRP analysis?**

21 A: No.

1 **Q: Has Evergy run alternative resource analysis studying DSM scenarios that are**  
2 **aligned with only the MEEIA Cycle 4 application and not 20-years' worth of**  
3 **DSM programs?**

4 A: Yes. After filing the 2024 IRPs and following a Staff data request, Evergy created  
5 an alternative resource planning scenario including MEEIA Cycle 4 as the future  
6 DSM addition. The scenario was constructed in line with Staff's data request  
7 seeking that Evergy re-run the Metro and EMW Preferred Plans with the only  
8 exception being substituting the MEEIA Cycle 4 DSM profile for the Preferred  
9 Plan's RAP Plus level DSM throughout the 20-year planning period. I have  
10 attached **Schedules CV-1 through CV-4** to my surrebuttal testimony, which  
11 further detail the MEEIA Cycle 4 alternative resource plans.

12 **Q: What was the conclusion of this MEEIA Cycle 4 alternative resource plan?**

13 A: As expected, the modeling results demonstrated that four years of MEEIA  
14 programs are beneficial, but do not provide all of the benefits of the full period  
15 demand-side programs of RAP Plus. MEEIA programs defer early capacity build  
16 needs, but as Cycle 4 concludes, more new resources are eventually needed. As  
17 shown in Figure 2 and Figure 3, the MEEIA Cycle 4 plans rank better than the plans  
18 with no demand-side programs, but worse than the plans with RAP Plus future  
19 programs. For Metro, the MEEIA Cycle 4 plan had a 20-year NPVRR that was  
20 \$120 million lower than the No DSM plan, and for EMW, the MEEIA Cycle 4  
21 plan's 20-year NPVRR was \$290 million lower than the No DSM plan. In regard  
22 to generation capacity decisions specifically, between 2025 and 2028, when  
23 compared to the No-DSM plan, the Metro MEEIA Cycle 4 plan avoids building

1 150 MW of battery in 2026 and instead builds 150 MW of wind. It also avoids a  
 2 net 15 MW of new market capacity addition. Similarly, between 2025 and 2028,  
 3 the Cycle 4 scenario for Missouri West avoids a total of 300 MW of battery across  
 4 2026-2027, avoids 150 MW of wind in 2028, and builds an incremental 150 MW  
 5 of solar. It also purchases 113 MW less of market capacity.

6 **FIGURE 2: METRO 20-YEAR NPVRR RANKINGS**

Rank	Plan	NPVRR (\$M)	Difference	Description
1	<b>CAAB</b>	<b>23,144</b>		<b>RAP Plus</b>
2	AAAB	23,190	47	RAP
3	CCAB	23,217	73	Retire La Cygne 2 2032
4	GAAB	23,271	128	RAP Plus MO, KEEIA Only DSM
5	CAAC	23,274	130	No 2027 Solar
6	<b>MEEIA</b>	<b>23,284</b>	<b>140</b>	<b>MEEIA</b>
7	CBAB	23,307	163	Retire Iatan 1 2030
8	DAAB	23,337	193	RAP Minus
9	BAAB	23,370	226	MAP
10	<b>EAAB</b>	<b>23,394</b>	<b>250</b>	<b>No DSM MO</b>
11	FAAB	23,516	372	No TOU, No DSM MO
12	CAAD	23,574	430	High/High
13	HAAB	23,685	542	No DSM MO, KEEIA Only DSM

7



1

FIGURE 3: MISSOURI WEST 20-YEAR NPVRR RANKINGS

<i>Rank</i>	Plan	NPVRR (\$M)	Difference	Description
1	CBAA	11,067		Retire Iatan 1 2030
2	CCAA	11,076	9	Retire Jeffrey 2 2039
3	AAAA	11,081	14	RAP
4	<b>CAAA</b>	<b>11,086</b>	<b>19</b>	<b>RAP Plus</b>
5	CAAC	11,089	21	No 2027 Solar
6	DAAA	11,090	23	RAP Minus
7	<b>MEEIA</b>	<b>11,099</b>	<b>31</b>	<b>MEEIA</b>
8	CGAG	11,138	71	Low/Low, No retirements
9	CDAA	11,163	96	Retire Jeffrey 1 2030
10	CFAA	11,208	140	Retire Crossroads 2028
11	CAAF	11,241	174	High/High
12	CEAA	11,271	203	Retire all coal early
13	BAAA	11,272	204	MAP
14	<b>EAAA</b>	<b>11,388</b>	<b>321</b>	<b>No Future DSM</b>

2

3 **Q: Do the MEEIA Cycle 4 only DSM alternative resource plans change how**  
4 **Energy expects to study DSM in future IRPs?**

5 A: No. These alternative resource plans do not change Evergy’s mind on the best way  
6 to study DSM in the context of long-term planning. In order to treat demand-side  
7 resources economically-equivalently to supply-side resources, as mandated in the  
8 Commission’s Rule at 20 CSR 4240-22.060(4), Evergy continues to believe that  
9 DSM should be studied throughout the full 20-year planning horizon. There is  
10 value in extending and growing the DSM programs, as evidenced by the RAP+  
11 scenario (Preferred Plan) resulting in a lower NPVRR as compared to the MEEIA  
12 Cycle 4 plans.

1 **Q: Did Evergy align generation resource types used to quantify the cost of new**  
2 **generation in its cost avoidance methodology with assumptions in its 2024**  
3 **IRPs?**

4 A: Yes. The 2024 IRP assumption for capacity options had no meaningful market  
5 capacity purchase beyond 2025<sup>1</sup>. In 2026 and 2027, new natural gas combustion  
6 turbines (“CT”) were not available as build options because of the lead time to  
7 construct. In 2028 and beyond, CT resources were available. Since CTs weren’t  
8 available in Evergy’s MEEIA Cycle 4 capacity cost avoidance, solar was used as  
9 the next most economic capacity resource type

10 **Q: Why does Mr. Fortson believe it’s unreasonable to use new solar as the cost**  
11 **input for new generation<sup>2</sup>?**

12 A: It seems Mr. Fortson disagrees with using solar as a resource type for CONE when  
13 quantifying avoided capacity costs. He states that it may be reasonable to use a  
14 natural gas combustion turbine (“CT”) to quantify the value of capacity avoidance.  
15 I would agree that it seems to be industry standard to use a CT in this scenario.  
16 Evergy’s attempt in its methodology was to use the most economic and available  
17 capacity resource for each year of the analysis. As explained above, CTs were only  
18 available starting in 2028. It would be inconsistent to attempt to align the cost  
19 avoidance methodology with the 2024 IRPs, pursuant Commission Rules<sup>3</sup>, but  
20 ignore the resource types that are available in the IRP. It seems that Staff would  
21 like Evergy to align MEEIA assumptions with certain aspects of the Company’s

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<sup>1</sup> For further explanation of Evergy’s MEEIA Avoided Cost Methodology, refer to Section III of VandeVelde Direct, EO-2023-0369/0370.

<sup>2</sup> Fortson Rebuttal, EO-2023-0369/0370, pg. 8, Ins. 1-16.

<sup>3</sup> Commission’s Electric Utility Resource Planning Rules in 20 CSR 4240-22.

1 IRP, but ignore which resources are available in the IRP when determining CONE  
2 in the capacity avoidance methodology.

3 **Q: On page 12 of Mr. Fortson’s testimony, he accuses the Company of not**  
4 **complying with Commission Rule 20 CSR 4240-20.094(4)(C)4. Do you agree**  
5 **with this?**

6 A: No. Mr. Fortson’s main argument relies upon Evergy’s IRPs not studying MEEIA  
7 Cycle 4 specifically. The 2024 IRPs included alternative resource plan that  
8 included numerous levels of demand-side management (“DSM”). The 2024  
9 Preferred Plan selected the RAP+ level of DSM. The RAP+ scenario has DSM  
10 assumptions consistent with Evergy’s MEEIA Cycle 4 program, therefore it has  
11 complied with 20 CSR 4240-20.094(4)(C)4 where it states a MEEIA application  
12 shall include: “The impacts from all demand-side programs includes in the  
13 application on any postponement or new supply-side resources...”.

14 **Q: Has Evergy ever included specific DSM scenarios aligned with three-year**  
15 **MEEIA cycles in past IRPs or MEEIA filings?**

16 A: No. None of Evergy’s prior IRPs studied specific MEEIA Cycles as alternative  
17 resource plans. I explained why in detail in my rebuttal testimony in this case.

18 **Q: Has the Missouri Public Service Commission ever issued a ruling stating the**  
19 **Evergy did not comply with its Rule 20 CSR 4240-20.094(4)(C)4?**

20 A: No. Evergy’s approach in its 2024 IRP and its MEEIA Cycle 4 application are  
21 consistent with past IRPs and MEEIA applications. It seems that Mr. Fortson’s  
22 arguments of non-compliance are a matter of opinion and not supported by previous  
23 Commission rulings in Evergy’s applications for MEEIA Cycle 1, 2, and 3.

1 **Q: On pages 13 – 16, Mr. Fortson focuses on the triennial IRPs in 2015, 2018,**  
2 **2021, and 2024. Is it appropriate to compare planning scenarios and different**  
3 **alternative resource plans across historic IRPs?**

4 A: No. Each IRP has unique planning considerations, and there are dynamic planning  
5 inputs that continually evolve, particularly in the last few years. Load forecasts,  
6 planning reserve margin requirements, commodity prices, and environmental  
7 compliance requirements are examples of critical uncertain factors that can deviate  
8 significantly between triennial filings. Evergy Preferred Plans in the 2024 IRPs  
9 and resource plans in 2015 that included NO DSM cannot be viewed as an apples-  
10 to-apples comparison.

11 **Q: On page 15 Mr. Fortson says the Metro 2024 Preferred Resource Plan’s**  
12 **inclusion of a 415 MW CT in 2032 demonstrates that the 207 MW CT in 2031**  
13 **for the 2015 No-DSM plan is never really avoided. Can you give an example**  
14 **of why his comparisons are not applicable?**

15 A: Yes. Mr. Fortson states that the Metro 2015 DSM plan avoided 207 MW of CT in  
16 2031 that was otherwise included in the NO-DSM plan.<sup>4</sup> He seems to believe that  
17 since Metro’s 2024 Preferred Plan includes CTs in 2032 that it must mean historic  
18 DSM assumptions never offset the need for some level of CT in the 2031-2032 time  
19 frame. These scenarios are mutually exclusive, meaning that DSM in the 2015 plan  
20 could have offset the need for 207 MW of CT in 2031 and the 2024 Preferred Plan  
21 can include a new need for CTs in 2032 due to changes in model expectations. For  
22 example, let’s assume that all factors that impact resource planning decisions

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<sup>4</sup> Fortson Rebuttal, EO-2023-0369/0370, pg. 13. Lns. 15-16.

1 between 2015 and 2024 were unchanged besides load expectations and planning  
2 reserve margin requirements. Had DSM in the 2015 resource plan offset the need  
3 for a 207 MW CT in 2031, the expectation of higher future load included in the  
4 2024 IRP could drive a new, future need for a CT in a similar time frame. This  
5 incremental need for a CT has no bearing to whether or not 2015 DSM offset the  
6 need of a CT in 2031. In the 2024 IRP, Metro included a new large economic  
7 development load of over 350 MW – importantly, this load was not considered in  
8 2015. It is completely reasonable that the 2015 DSM offset a future need of 2031  
9 CTs, and the new large load is now creating a new, independent need for CTs in  
10 2032.

11 This simple example is just one change in the planning environment that  
12 makes it extremely difficult to compare historic IRPs to current plans.

13 **Q: Please summarize your testimony.**

14 A: As detailed in Metro and Missouri West’s 2024 IRPs, load growth and more  
15 stringent capacity requirements at the SPP are driving a significant need for  
16 capacity in the near future that did not historically exist. The whole electric utility  
17 industry is facing resource adequacy constraints not seen in decades. Evergy  
18 expects the solution to meeting future customer needs will require an “all of the  
19 above” approach. This means, it’s going to take a combination of building new  
20 supply-side resources, demand-side resource programs, and purchasing capacity  
21 from the market or from new or existing supply-side resources. If MEEIA Cycle 4  
22 is denied, it would remove one important piece of this puzzle. Given market  
23 capacity is not expected to be a meaningful contributor to meeting Metro and

1 Missouri West's near-term capacity requirements, removing DSM generally leaves  
2 developing new supply-side resources as the only option. This reduces the  
3 diversification of solutions and would put "all eggs in one basket". Evergy does  
4 not feel this is in the best interest of customers. Metro and Missouri West have  
5 near-term capacity need and Evergy feels strongly that MEEIA Cycle 4 is valuable  
6 to meeting that need. If the Commission rules against Cycle 4 Evergy will need to  
7 expedite building new supply-side resources and develop additional resources that  
8 it otherwise would not be building over the next four years.

9 **Q: Does this conclude your testimony?**

10 A: Yes.

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

In the Matter of Evergy Metro, Inc. d/b/a Evergy )  
Missouri Metro's Notice of Intent to File an ) File No. EO-2023-0369  
Application for Authority to Establish a Demand- )  
Side Programs Investment Mechanism )

In the Matter of Evergy Missouri West, Inc. d/b/a )  
Evergy Missouri West's Notice of Intent to File an ) File No. EO-2023-0370  
Application for Authority to Establish a Demand- )  
Side Programs Investment Mechanism )

**AFFIDAVIT OF CODY VANDELDELDE**

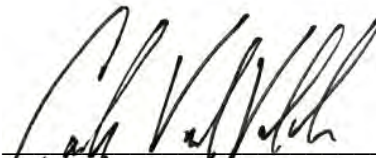
**STATE OF MISSOURI** )  
 ) ss  
**COUNTY OF JACKSON** )

Cody VandeVelde, being first duly sworn on his oath, states:

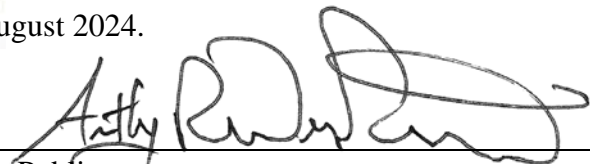
1. My name is Cody VandeVelde. I work in Topeka, Kansas and I am employed by Evergy Metro, Inc. as Senior Director, Strategy and Long-Term Planning - Energy Resource Management.

2. Attached hereto and made a part hereof for all purposes is my Surrebuttal Testimony on behalf of Evergy Missouri Metro and 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.

  
\_\_\_\_\_  
Cody VandeVelde

Subscribed and sworn before me this 20<sup>th</sup> day of August 2024.

  
\_\_\_\_\_  
Notary Public

My commission expires: 4/26/2025

