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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
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MISSOURI PUBLIC SERVICE COMMISSION

CASE NOS.: EO-2023-0369/0370

REBUTTAL TESTIMONY

OF

CODY VANDEVELDE

ON BEHALF OF

EVERGY MISSOURI METRO and EVERGY MISSOURI WEST

Kansas City, Missouri
July 2024

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REBUTTAL TESTIMONY

OF

CODY VANDEVELDE

CASE NOS. EO-2023-0369/0370

I. INTRODUCTION

Q: Please state your name and business address.

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

Q: Are you the same Cody VandeVelde who filed direct testimony in these dockets on April 29, 2024?

A: Yes.

Q: Who are you testifying for?

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

Q: What is the purpose of your rebuttal testimony?

A: The purpose of my testimony is responding to portions of the direct testimony of Staff witnesses Brad Fortson, Sarah Lange, J Luebbert, and OPC witness Geoff Marke. Specifically, I will be responding to various criticisms of the Company's approach to analyzing DSM in its IRP and its avoided capacity cost methodology.

Q: Please summarize the key conclusions of your testimony.

A: My rebuttal testimony will show that DSM will play a valuable role in meeting a portion of Metro and Evergy Missouri West's ("EMW") future capacity needs. I will explain how Evergy's IRP analysis appropriately evaluated the long-term potential of DSM in Metro and EMW's territories by evaluating the programs on an economically-equivalent basis to supply-side resources. The 2024 IRPs focused on long-term integrated analysis over a 20-year period, and the accredited capacity from the DSM levels selected in Metro's and EMW's Preferred Plans help avoid specific, higher-cost supply-side resource investment that otherwise would be needed to meet customer needs. This MEEIA Cycle 4 request will allow Metro and EMW to execute a plan for the first four years, 2025-2028, generally aligned with the 2024 IRPs selected DSM level – thus avoiding the investment in numerous solar and battery generating resources by 2028.

II. RESPONSE TO STAFF WITNESSES

Q: Do you have any overall comments or observations about the Staff direct testimony?

A: Generally, Staff witnesses seem to believe that MEEIA programs do not provide capacity benefit or avoid investment in other capacity resources. As I outlined in my direct, and will further comment on later in this testimony, Metro and EMW's 2024 IRPs clearly show the capacity benefit of DSM programs. Both utilities are able to avoid investment in supply-side resources in the 2025 to 2028 period with MEEIA Cycle 4 programs that are well-aligned with the level of DSM included in the 2024 IRPs during those same years. Said differently, absent DSM, Metro and EMW would need to invest in supply-side capacity resources above and beyond what is already planned over the next five years.

Q: On page 9, lines 18-19 of his direct testimony, Staff witness Fortson concludes that Evergy is not avoiding generation builds from the inclusion of additional energy efficiency and demand response portfolios based on Evergy's 2024 IRP plans with NO DSM compared to its Preferred Plan. Do you agree with his testimony on that point?

A: No. The IRPs for Evergy Metro and Evergy Missouri West clearly outline expected avoided generation builds due to the combination of residual impact from prior MEEIA portfolios and the inclusion of incremental future DSM programs. Specifically for Metro, as shown in Table 1 below, there are $250 million of expected Net Present Value Revenue Requirement ("NPVRR") savings due to selecting the RAP+ level of DSM (Plan CAAB) as compared to an alternative resource plan that included no DSM (Plan EAAB). Compared to the RAP+ plan, the plan with no DSM is more expensive and includes an additional 150 MW battery build in 2026 and an additional 150 MW of solar in 2028 due to the greater capacity need driven by the absence of incremental DSM.[1]

TABLE 1: METRO'S DEMAND-SIDE MANAGEMENT PORTFOLIO OPTIONS[2]
($'s in millions)

Rank	Plan	NPVRR	Difference	Description
1	CAAB	23,144		RAP Plus
2	AAAB	23,190	47	RAP
3	DAAB	23,337	193	RAP Minus
4	BAAB	23,370	226	MAP
5	EAAB	23,394	250	No DSM MO

Similarly, Table 2 shows that Missouri West's IRP resulted in $307 million of expected NPVRR savings between the plan that included the RAP+ level of

[1] MW values represent nameplate capacity.
[2] Depicted as Table 17 on page 42 of Volume 6 of Metro's 2024 IRP.

DSM (Plan AAAA) compared to no DSM (Plan EAAA). The No DSM plan is more expensive due to inclusion of battery builds in both 2026 and 2027 due to the greater capacity need without the RAP+ level DSM.

TABLE 2: EMW'S DEMAND-SIDE MANAGEMENT PORTFOLIO OPTIONS[3]
($'s in millions)

Rank	Plan	NPVRR	Difference	Description
1	AAAA	11,081		RAP
2	CAAA	11,086	5	RAP Plus
3	DAAA	11,090	9	RAP Minus
4	BAAA	11,272	190	MAP
5	EAAA	11,388	307	No Future DSM

Q: On page 3, lines 6-7 of her direct testimony, Staff witness Sarah Lange testifies that if the MEEIA program avoids or delays a renewable investment, few or any costs can be avoided. Do you agree?

A: No. Ms. Lange appears to be referencing only the potential avoided cost associated with producing energy from a renewable resource. What she appears to ignore is that when renewables investment is avoided or delayed, the utility is avoiding or delaying the cost of constructing, commissioning, and operating the renewables generation resource. For example, if Evergy were to avoid or delay building a new solar project, the Company is clearly avoiding spending the associated capital and ongoing maintenance costs associated with the avoided project. The fact that there are no variable fuel costs required to produce power from the solar project does not impact the substantial upfront capital costs and ongoing maintenance costs would be avoided.

[3] Depicted as Table 18 on page 42 of Volume 6 of Missouri West's 2024 IRP.

Evergy expects to file multiple Certificates of Convenience and Necessity ("CCN") for solar projects in Missouri in the near future. At that time, I expect all parties will agree that the capital investment and overall cost of service within the CCN request will clearly be more than "few or any costs" as described by Ms. Lange. Additionally, if it weren't for DSM programs reducing future supply-side capacity needs, the CCN applications that are soon to be filed would be even larger (more MWs and higher amounts of capital investment). As I will point out later in this testimony, Ms. Lange's MPSC Staff colleague's direct testimony supports the notion that there are capital and operations and maintenance costs associated with renewable energy resources.

Q: On pages 4-9 of his direct testimony, Staff witness Luebbert discusses Staff's understanding of generation facility avoided costs, distribution facility cost, and transmission facility cost. Do you have a response?

A: Generally, I agree with this portion of Mr. Luebbert's testimony. It is worth pointing out that only the generation facility avoided costs is relevant to this case as Evergy has not claimed avoided costs of distribution or transmission its MEEIA Cycle 4 application.

Q: On pages 13-15 of his direct testimony, Staff witness Luebbert argues that renewable energy resources: (1) are primarily capitalized costs that are set at the time of inclusion in rates; (2) do not consume any fuel to operate; and (3) have minimal, if any, operations and maintenance costs that are dependent on the level of generation or dispatch. Once the capitalized costs are included in rates, there are minimal, if any, costs associated with the assets that can be avoided through MEEIA programs. Do you have a response?

A: Generally, I agree with Mr. Luebbert on all three points, pertaining to renewable energy resources, but specifically with his assertion that there are ongoing capital and operations and maintenance costs that are incurred when constructing and operating renewables resources. These cost categories are quantifiable upon the avoidance or delay of a renewable energy resource due to DSM programs.

Q: On page 14, lines 4-7, Staff witness Luebbert asserts that it is nonsensical to assume benefits associated with avoided generation investments and award Evergy millions of dollars in earnings opportunities for MEEIA programs while the Company is simultaneously seeking a return on billions of dollars of investments in supply-side resources. If the supply-side investments are not being deferred or avoided, he claims it is hard to imagine how the result of this double compensation could lead to just or reasonable rates. Do you have a response?

A: The circumstances described in this portion of Mr. Luebbert's testimony do not apply to Evergy's forecasted capacity position. The Companies' strategies to meet future capacity and energy needs that were outlined in the 2024 IRPs do not yield situations that result in requests to be double compensated. As evidenced by my direct testimony in this case[4], both Metro and EMW have substantial future capacity needs when only considering each utilities' existing resources to meet future load obligations. The projected capacity deficit is such that DSM alone won't cover the required capacity needs. Both Companies' IRPs call for incremental DSM portfolios plus substantial new supply-side resource additions. They aren't mutually exclusive, and therefore it should not be considered double compensation if the Company is granted recovery for both demand-side and supply-side resources over the same time frame.

Q: On pages 15-16 of his direct testimony, Mr. Luebbert argues that Evergy does not typically include modeling of specific MEEIA cycles as discrete alternatives for comparisons. Most alternative resource plans assume a level of demand-side programs being implemented over a 20-year planning horizon. To the extent that a supply-side resource appears to be deferred by comparing alternative resource plans with and without demand-side resources, it is not reasonable to assume that the deferral is the result of implementing MEEIA Cycle 4. Do you have any comments in response to his testimony?

A: Evergy chooses to model DSM resource scenarios in accordance with the Commission's Rule at 20 CSR 4240-22.060(4) states: "The analysis shall treat supply-side and demand-side resources on a logically-consistent and economically-equivalent basis, such that the same types or categories of costs, benefits, and risks shall be considered and such that these factors shall be quantified at a similar level

[4] File No. EO-2023-0169/0170, Cody VandeVelde Direct Testimony, Figure 1, p. 6.

of detail and precision for all resource types." In order to consider demand-side resources equivalently with supply-side resources, Evergy must plan for DSM scenarios as long-term resources throughout the 20-year planning horizon. Just as the Company would never run scenarios that allow the IRP model to build supply-side resources, like a combustion turbine or solar resource, for three years and then decommission the plant, neither should it allow the model to treat demand-side resources as a short-term resource that is effectively "decommissioned" after three years.

Q: How do you react to Mr. Luebbert's assertion that another factor complicating MEEIA is that absent specifically identifying a supply-side resource that can be deferred via a specific MEEIA cycle, i.e. MEEIA Cycle 4, a MEEIA earnings opportunity ("EO") may cause Evergy shareholders to recover "foregone earnings opportunities" for the same plant across multiple cycles resulting in over recovery?

A: Evergy's capacity cost avoidance methodology is structured to consider an annualized amount of the avoided cost of service of a supply-side resource. Therefore, each year that a megawatt of DSM fulfills a capacity need, it avoids an amount equal to the annual revenue requirement of a megawatt of investment in a supply-side resource (or market capacity payment) that would otherwise be required. My direct testimony in this case further explains the inputs and assumptions withing Evergy's avoided capacity cost methodology.

Q: Do you agree with Mr. Luebbert that the IRP assumes a package of demand-side measures that will not coincide with the measures that are actually installed over time. Most MEEIA applications have included, and the utility has received, a great deal of flexibility how the approved budgets are spent on demand-side programs. All energy efficiency measures have distinct savings attributes and likewise the resulting benefits, or detriments, of implementation will vary as the actual measure installations vary. Do you have a response?

A: If Mr. Luebbert's assertion is that the demand-side portfolio selected in Evergy's IRPs was a forecast that will likely deviate from the actual amount of DSM adopted by customers, then yes, I agree. It is not reasonable to expect that a multi-year forecast, no matter the metric, will be perfect. Just as Evergy doesn't expect to perfectly predict future load forecasts, commodity price curves, market prices, or supply-side construction costs, neither does it expect to perfectly predict future customer DSM adoption. While not expecting to be perfect, Evergy has structured its MEEIA Cycle 4 programs to drive outcomes that target the level of DSM included in the 2024 IRP Preferred Plans, a concept that witness Brian File will elaborate on in his rebuttal testimony.

Q: On page 16 of his direct testimony, Mr. Luebbert also argues that SPP treats Evergy Missouri West and Evergy Missouri Metro (both Kansas and Missouri) as a single entity for purposes of fulfilling resource adequacy requirements, further complicating the view of benefits for demand reductions. Does SPP's treatment of Evergy Missouri West and Evergy Missouri Metro complicate analysis of the benefits of demand reductions?

A: No. In this case, both Metro and EMW have a need for capacity along similar timeframes, so SPP treating both Companies as a single entity does not complicate the view of benefits for demand reductions. Each utility benefits from demand reductions in every year beyond 2025 of the 20-year planning horizon under base load growth planning assumptions. SPP treating both Companies as a single entity does not complicate the benefits of demand reductions since both Companies are in similar capacity positions.

Q: Do you agree with Mr. Luebbert that Evergy does not allow the modeling software used in the IRP to select, size, or optimize demand-side programs being included within alternative resource plans?

A: While demand-side resources aren't available as options for capacity expansion to select, there are varying levels of DSM considered, which effectively allows the model to optimize DSM across four different DSM profiles. DSM programs need to be well planned and Evergy leans on its DSM potential study to frame up the options that are used in alternative resource planning.

Q: On pages 16-17 of his direct testimony, Mr. Luebbert also suggests that the alternative resource plans will select a "level" of demand-side management for the entirety of the planning horizon, and there are not thresholds included for adding additional demand-side resources near times of greatest need, nor slowing demand-side management when the timing or size of supply-side resources are not effectively altered. Do you have any comments?

A: First, as evidenced in the 2024 IRPs, Metro and EMW consistently have a need for cost-effective capacity resources throughout the 20-year planning period. Given the capacity positions, the argument of adding and subtracting DSM programs to perfectly align with times of greatest need does not apply to Metro and EMW's future capacity positions. Evergy evaluates numerous levels of DSM programs that plan for consistent performance year-to-year throughout the 20-year planning horizon. It is best to evaluate various levels of DSM over a long-term scenario and "right-size" the portfolios over time to meet the long-term need based on cost/benefit analysis in the form of least cost NPVRR of the planning scenarios.

Secondly, I can appreciate Mr. Luebbert's notion, but there are some inherent issues with being able to perfectly execute a dynamic DSM portfolio that was modeled years in advance. Long-term planning environments are subject to significant uncertainty and conditions, and as conditions change, so do expectations of DSM implementation and ultimate customer adoption.

Building a DSM program that is robust and can be counted on over many years takes consistency across the utilities' program offerings and a customer base that remains committed over time. Changing DSM programs, or levels of DSM programs, annually is not a feasible strategy to gain long-term traction with customers.[5] Changing DSM portfolio offerings year-to-year and leaving customers with no certainty of what their programs might look like over time would likely reduce customer adoption or hinder the "stickiness" of ongoing customer participation.

Upfront investment is required to gain DSM program participants. This upfront investment can make sense economically if the DSM benefit can be realized over the long-term. It would be inefficient to invest to gain participants, eventually cut ties with them for a period of time, only to invest again to regain those same participants. Additionally, in many DSM programs the participants are required to cover some of the incremental upfront cost. If the utility planned to implement DSM programs with uncertainty around timing and size, it could likely require the utility to incentivize the customer costs at 100% in order to gain meaningful participation. Otherwise, customers are unlikely to invest in the required incremental costs to participate in DSM programs without the expectation that they will receive the benefits well into the future. For example, it would not be feasible to expect a customer to invest in new appliances to meet certain program requirements, if there was very little certainty that the program would be in place in the following year.

[5] Mr. Luebbert does not elaborate on his proposed "threshold" approach to studying DSM programs int he IRP, so for purposes of this discussion I have focused on an annual approach since the IRP generally evaluates capacity decisions annually.

Q: Do you agree with Mr. Luebbert on pages 25-26 that reductions in capacity can create the potential for new capacity revenues through sales to third-parties, but those revenues are generally socialized through all customers through the FAC?[6]

A: No. Reductions in capacity (capacity position becomes relatively shorter) would reduce the likelihood of new capacity revenues. If Mr. Luebbert intended to say increases in capacity can create the potential for new capacity revenues through sales to third-parties, then I would agree. If this is the case, Mr. Luebbert's point is not relevant in this MEEIA Cycle 4 application as the level of DSM being targeted is nowhere close to enough to meet the total future capacity needs for Metro and EMW. For example, per the 2024 IRPs the combined 2026 position of Metro and EMW prior to adding new capacity is over 500 MW deficient (projecting to be short of capacity obligation) and the combined 2026 Metro and EMW RAP+ accredited MWs is approximately 230 MWs.

Q: On page 25 of his direct testimony, Mr. Luebbert also argues that benefits flow to the customer classes in the following ways: First, ratepayers would only realize a benefit of capacity sales if an agreement was signed with another entity. Do you agree?

A: Yes. Since Evergy operates in the Southwest Power Pool, which does not have a centralized market-clearing capacity product, the Company generally relies on bilateral capacity transactions with a third-party entity to realize benefits of capacity sales and purchases.

[6] Case No. EO-2023-0369/0370, J Luebbert Direct Testimony, pg. 25, lns. 1-3.

Q: Next, Mr. Luebbert argues that the magnitude of such a benefit would depend on the capacity needs of other entities, the availability of excess capacity by other entities, and the agreed upon contract of any capacity sale. Is he correct?

A: Yes. The bi-lateral capacity market (the collective position of third-party entities) will determine the likelihood, amount, and price of any potential new capacity transactions.

Q: Mr. Luebbert also testifies that the length of time covered by the contract would dictate the flow of any realized benefits. Do you agree?

A: Yes.

Q: According to Mr. Luebbert, if the sale of excess capacity was a short-term agreement (less than one year), benefits of a capacity sale would flow to the customer classes on the basis of loss-adjusted class energy via the FAC. However, if the length of time covered by the contract were greater than one year, then ratepayers would not realize any benefit prior to the effective date of rates following a general rate case by the respective Evergy companies. Evergy shareholders would retain that benefit prior to the effective date of rates following the subsequent general rate case. Do you have a response?

A: I agree with Mr. Luebbert's description of how capacity transactions are handled via current FAC mechanics, but as I stated earlier, given the capacity positions of Metro and EMW (not forecasted to have excess capacity in the near-term) it is unlikely for either to have a meaningful amount of capacity sales transactions. It is much more likely these utilities will be in the market looking to purchase market capacity to meet future customer need. In that case, just as he has explained that the tenure of a capacity sales transaction determines whether the revenues would be reflected in customer rates via the FAC or a general rate case, the same can be said about capacity purchase transactions and the associated costs. In other words, if Metro or EMW were to purchase capacity in a short-term agreement (less than one year), then customers would cover those costs via the FAC. If a capacity purchase agreement was longer than one year, then the costs would not be recovered from customers until the subsequent general rate case and thus shareholders would cover those costs in the interim.

III. RESPONSE TO OPC WITNESS GEOFF MARKE

Q: Do you have any initial observations about the direct testimony of Dr. Geoff Marke of the Office of the Public Counsel?

A: Given that Dr. Marke states in his direct testimony that he will address Evergy's avoided cost estimates in his rebuttal testimony, my observations are focused on a specific portion of Section III of Mr. Marke's direct testimony, which is titled "Avoided Costs".

Q: On page 7 of his direct testimony, Dr. Geoff Marke states that moving forward, the elimination of easy-to-claim energy savings from lighting measures will reduce the opportunity for meaningful deferred capital investments. Evergy's plan to spend $4.6 billion in capital investments over the next four years supports that reality. Do you agree?

A: No. It seems that Dr. Marke is asserting that Metro's and EMW's forecasted $4.6 billion of capital investments 2024-2028 somehow support reduced opportunity for meaningful deferral of capital investments afforded by implementing MEEIA programs. The fact of the matter is that each utility has significant capital investment requirements that reach well above anything MEEIA programs can offset. The only portion of the $4.6 billion that Dr. Marke references that is currently impacted by MEEIA programs is the New Generation/Renewables category, which is approximately 25% of the aggregate amount. For every MW of accredited capacity that is obtained through MEEIA programs, Evergy avoids obtaining that MW through other means – either market capacity purchases or capital investment to construct capacity resources. If MEEIA programs were not in place, the New Generation/Renewables investment category would face upward pressure due to greater capacity need, thus shifting the $4.6 billion investment even higher. These facts support the reality that absent accredited capacity via MEEIA programs, Evergy would be forecasting higher levels of investment to construct new generating capacity.

Q: Does that conclude your testimony?

A: Yes, it does.

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 Application for Authority to Establish a Demand-Side Programs Investment Mechanism	)	File No. EO-2023-0369
In the Matter of Evergy Missouri West, Inc. d/b/a Evergy Missouri West's Notice of Intent to File an Application for Authority to Establish a Demand-Side Programs Investment Mechanism	)	File No. EO-2023-0370

AFFIDAVIT OF CODY VANDEVELDE

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 Rebuttal Testimony on behalf of Evergy Missouri Metro and Evergy Missouri West consisting of sixteen (16) 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 9th day of July 2024.

Notary Public

My commission expires: 4/26/2025

ANTHONY R. WESTENKIRCHNER
NOTARY PUBLIC - NOTARY SEAL
STATE OF MISSOURI
MY COMMISSION EXPIRES APRIL 26, 2025
PLATTE COUNTY
COMMISSION #17279952