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MISSOURI PUBLIC SERVICE COMMISSION

CASE NO.: ER-2024-0189

DIRECT TESTIMONY

OF

CODY VANDEVELDE

ON BEHALF OF

EVERGY MISSOURI WEST

Kansas City, Missouri

September 2025

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DIRECT TESTIMONY

OF

CODY VANDEVELDE

Case No. ER-2024-0189

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: By whom and in what capacity are you employed?

A: I am employed by Evergy Metro, Inc. and serve as Senior Director, Strategy and Long-Term Planning - Energy Resource Management for Evergy Metro, Inc. d/b/a as Evergy Missouri Metro ("EMM""), Evergy Missouri West, Inc. d/b/a Evergy Missouri West ("EMW"), Evergy Metro, Inc. d/b/a Evergy Kansas Metro ("EKM"), and Evergy Kansas Central, Inc. and Evergy South, Inc., collectively d/b/a as Evergy Kansas Central ("EKC") the operating utilities of Evergy, Inc.

Q: Who are you testifying for?

A: I am testifying on behalf of Evergy Missouri West ("EMW" or "Company").

Q: What are your responsibilities?

A: My responsibilities include development of Evergy's corporate strategy and generation resource planning. Specifically related to this testimony, corporate strategy monitors the execution of Evergy's strategic initiatives, one of which is the advancement of ongoing changes to Evergy's generation portfolio, including planning for new resource and

preparation for future retirements. Additionally, my role has oversight of Evergy's Energy Resource Management group, which is responsible for the Company's Integrated Resource Planning ("IRP").

Q: Please describe your education, experience, and employment history.

A: I hold a Bachelor of Business Administration from Washburn University. Since joining Evergy in 2007, I have worked in leadership roles across power marketing, investor relations, long-term planning, and corporate strategy departments.

Q: Have you previously testified in a proceeding at the Missouri Public Service Commission ("MPSC" or "Commission") or before any other utility regulatory agency?

A: Yes. I have previously testified at the Commission.

Q: What is the purpose of your Direct testimony?

A: The purpose of my Direct testimony is to discuss the current state of affairs related to the 300 MW simple-cycle, gas-fired Crossroads Energy Center ("Crossroads") generating plant in Clarksdale, Mississippi in the context of Section 5 of the Unanimous Stipulation and Agreement, filed in this case on October 2, 2024 and approved by the Commission in its Report and Order of December 4, 2024. Specifically, my testimony addresses how the transmission expense significantly increased from approximately $4.7 million in 2011 and 2013 to $18.1 million after Entergy Corp. unsuspectingly integrated its infrastructure into Midcontinent Independent System Operator, Inc. ("MISO"). However, it then focuses on how both the 2024 Triennial IRP and the 2025 Annual IRP Update confirm that retaining Crossroads in EMW's generation portfolio is the most prudent and cost-effective option,

as retiring and replacing the facility, along with relocating it to SPP, would result in significantly higher costs to customers. Additionally, I discuss how Crossroads enhances EMW's portfolio diversity and reliability through its geographic location and fuel supply advantages. Thus, the Commission should find it reasonable and prudent to renew the firm MISO transmission agreements beyond 2029 and authorize EMW to recover the associated transmission expense in rate base, thereby ensuring continued reliable and affordable service for customers.

II. CROSSROADS AND ITS TRANSMISSION COSTS

Q: Please summarize your testimony including what is being asked of the Commission.

A: Over the next few years EMW faces critical decisions regarding the continued operation of Crossroads. The result of these decisions will have significant implications to EMW's capacity portfolio and its ability to reliably serve customers. If the required firm point-to-point MISO transmission path is not renewed beyond 2029, EMW will lose Crossroads' 300 MW of Southwest Power Pool accredited capacity and its accompanying energy. In order to allow EMW customers to retain the option to continue receiving the benefits of the Crossroads facility beyond 2029, the MISO transmission costs that have been set by a tariff approved by FERC must be included in rates by the Commission, as these transmission costs are an integral part of Crossroads' cost of service. If the Commission denies recovery of the MISO transmission costs, the Company will have no choice but to decline to renew the firm point-to-point transmission path agreements beyond 2029. This will require the Company to seek alternative resources to replace the capacity and energy of Crossroads.

Therefore, the Commission should find that the firm point-to-point transmission service agreements should be renewed before it expires in February 2029, and that such action is reasonable and prudent to reassure the Company and its customers that Crossroads will continue to be a reliable source of capacity and energy.

Q: Has the MPSC found that EMW's decision to add the 300 MW of Crossroads was prudent?

A: Yes. In its May 4, 2011 Report and Order in ER-2010-0356 the MPSC concluded: "After a thorough analysis of available options, the Company determined the 300 MW Crossroads Energy Center was the lowest cost option for meeting its requirements."[1] The MPSC also concluded that under a 2010 stipulation in a previous rate case, the Company's 20-year analysis to determine its preferred integrated resource plan, based on 2007 Request For Proposal ("RFP") responses, "showed that Crossroads would result in the lowest 20-year net present value of revenue requirements ('NVPRR')."[2]

Q: What value do customers receive from Crossroads today?

A: Customers receive the full value of capacity and energy produced by Crossroads via four long-term transmission services agreements with Entergy. This arrangement has allowed these benefits to flow to customers since 2010 when the Crossroads plant was included in rate base and reflected in rates as a prudent investment decision. Currently, EMW customers receive accreditation for 300 MW of Crossroads' capacity from Southwest Power Pool, Inc. ("SPP"), which fulfills a portion of EMW's reserve margin requirement.

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[1] Report & Order at 55, In re KCP&L Greater Mo. Operations Co., No. ER-2010-0356 (May 4, 2011).
[2] Id.

Evergy Missouri West, Evergy Metro, Inc. and Evergy Kansas Central are members of SPP, a FERC-approved regional transmission organization ("RTO"). However, the Crossroads plant is in the footprint of MISO, the FERC-approved RTO that is located immediately to the east of SPP, because Entergy is located in MISO.

Q: If Crossroads had not been a part of EMW's portfolio for the past 14 years, would the Company have been short of capacity?

A: Yes. Crossroads has been an integral resource to meeting EMW's capacity obligation. Without it EMW would have been short on capacity. To fulfill its load obligation, the Company would have needed to procure capacity through other means to make up for Crossroads' 300 MW of capacity. This would have required incremental investment to build new generation sources, the procurement of wholesale capacity contracts, or a combination of the two. Had EMW not procured capacity in one of these two forms, it would have been subject to capacity deficiency payments to the SPP. These deficiency payments are calculated based on a range of 125% to 200% of SPP's Cost of New Entry ("CONE") which approximates the cost to build new generation. At SPP's current CONE, $85.61/kW-year, the loss of Crossroads would equate to deficiency payments anywhere from $32 million to over $50 million annually for EMW to cover the 300 MWs of capacity that Crossroads provided. As discussed below, this cost is far in excess of the annual all-in cost of Crossroads, inclusive of the cost of rate base, operating costs, and the cost to secure firm point- to-point transmission service from Crossroads to EMW's service territory under the MISO FERC-approved tariff.

Q: Do EMW's retail rates currently reflect the full cost of service of providing these capacity and energy benefits to customers?

A: No. A portion of the value of the Crossroads plant and the cost of the MISO transmission path are currently excluded from rates. The Company is not seeking any additional amounts of the Crossroads plant to be included in rates.

Q: Does Crossroads provide energy value to EMW customers?

A: Yes. Crossroads provides energy to the SPP market, typically in peak conditions when customer demand for power is high. Over the past five summers (June through August 2021–2025) Crossroads was dispatched 730 times, with 100% start reliability, and operated 5,474 hours. Moreover, Crossroads was a reliable resource that was critical in meeting peak SPP demand and generating market revenues during Winter Storm Uri in February 2021 and Winter Storm Elliott in December 2022 to help offset extremely high wholesale market energy costs that EMW customers were facing. For example, in February 2021 Crossroads generated over $25 million of revenue by being available and selling into SPP's day-ahead energy market. Given that Crossroads is supplied by a natural gas pipeline in Mississippi, which was less impacted by the constraints and price spikes caused by Winter Storm Uri, its total natural gas costs for February 2021 were only $2.9 million to produce the approximately 26,000 MWhs that Crossroads supplied to SPP. This equates to an average day-ahead market revenue of $974 per megawatt-hour ("MWh") generated, compared to a natural gas cost of $111/MWh.

Q: How do EMW customers receive these benefits given that Crossroads is located in Mississippi?

A: Because the resource is located outside of SPP's transmission network, a long-term firm MISO transmission path is required to ensure deliverability of both capacity and energy into SPP. Crossroads' units are therefore directed into SPP's market which allows them to be economically dispatched by SPP. Customers also receive the benefit of energy market revenues which lowers the cost to serve their load.

Q: How long does EMW have rights to the MISO transmission path that provides customers full capacity and energy benefits?

A: There are currently four separate 75 MW firm point-to-point MISO transmission path agreements that the Company entered into with Entergy on December 18, 2013. These agreements are set to expire on February 28, 2029. The MISO transmission paths are firm point-to-point reservations which allow the capacity and energy to be delivered to SPP. The costs associated with these reservations are determined by MISO transmission rates which have been approved by FERC. A non-firm point-to-point MISO transmission reservation would neither allow for capacity accreditation in SPP, nor the market registration that allows Crossroads to participate in SPP's wholesale energy markets. Unless approved for inclusion in rates and subsequently renewed, upon the expiration of these agreements in February 2029, EMW customers will lose the option to continue receiving Crossroads' capacity and energy benefits as there will be no firm MISO transmission path reservation to allow for the flow of power from Mississippi in MISO to Missouri in SPP.

Q: Did Crossroads' transmission costs increase in 2014 when Entergy, the utility in whose service territory Crossroads is located, integrated its systems into the regional transmission organization Midwest (now Midcontinent) Independent System Operator (MISO) in late 2013?

A: Yes. There was a significant increase in costs from 2013 ($4.7 million) to 2014 ($12.0 million). See Schedule CV-1, Entergy News Release (December 19, 2013). This news release explains that the Entergy utilities completed their MISO integration in December 2013, which directly correlates with the timing of the step-up in Crossroads' MISO transmission expense starting in 2014. Except for 2016, the expense to bring the benefit of Crossroads' energy and capacity to EMW's customers has been in double digits, ranging from $10.7 million in 2018 to $18.1 million in 2024.

Q: Did the Company, its utility affiliates, or its holding company, then Great Plains Energy Inc., have any reason to believe that when EMW entered into the transmission service agreement with Entergy in February 2009 that Entergy would join MISO?

A: No. This was not foreseen by the Company and its management. The decision of Entergy to end its relationship with Southwest Power Pool, which was serving as its Independent Coordinator of Transmission, and to join MISO was not expected by EMW. The Company had no reason to believe in 2008 when Crossroads was placed in its generation portfolio that Entergy would decide in April 2011 to join MISO and follow through with the integration of its systems into MISO which occurred in mid-December 2013. Prior to Entergy's announcement in April 2011, it seemed unlikely that Entergy would join MISO. Entergy had virtually no connection to MISO except through Ameren's transmission assets

in the Missouri Bootheel. By contrast, Entergy's western service territory had multiple points of interconnection with the SPP footprint.

It was also not expected by SPP and its members, some of whom like Cleco Corp. ultimately left SPP to join MISO because of its interconnections with the Entergy system. When the Arkansas Public Service Commission granted conditional approval for Entergy to join MISO in October 2012, a representative of SPP said he was "surprised and disappointed" by the commission's action ("Arkansas grants conditional OK for Entergy to join MISO," Reuters, Oct. 26, 2012).

Q: What is the current cost of the MISO transmission?

A: The MISO transmission path cost for the twelve months ending December 31, 2024, was approximately $18.1 million under the FERC-approved transmission service tariff.

Q: Why is the IRP process the appropriate mechanism to assess EMW's needs and what resources are most effective in meeting those needs?

A: The IRP is built with EMW's long-term load forecast as its foundation and starting point. This load forecast represents EMW customers' need for energy over the next 20 years, and the peak in each year establishes EMW's capacity requirement (i.e., the amount of accredited capacity required to meet SPP resource adequacy requirements). Within the IRP, every evaluated plan is built in order to meet these customer needs, meaning that every plan includes sufficient capacity and energy to meet EMW needs. From there, the IRP process determines which of those plans is lowest-cost on a risk-adjusted basis. As a result, a Preferred Plan selected from the IRP is the combination of resources which most effectively and economically meet EMW customer needs over the long-term, based on an

integrated risk analysis in a wide variety of potential scenarios. This integrated, long-term approach is the appropriate way to assess customer needs and different resources because no resource decision can be made in a vacuum. Any decision made regarding a resource at a point in time will impact the decisions that need to be made in the future. The IRP assesses those trade-offs over time through the construction of lowest-cost resource plans over a 20-year period.

Q: How is Crossroads evaluated in EMW's IRP?

A: The Crossroads facility is assumed to be available to meet capacity and energy needs throughout the 20-year planning period. This is consistent with the IRP's historical treatment of other peaking facilities which are typically not evaluated for retirement unless there is a large near-term cost expected or, as is the case with Crossroads, some other near-term decision-point which impacts the plant (e.g., expiring agreements or potential environmental regulations). The IRP does not apply SPP transmission costs to the individual assets, rather the SPP Network Transmission Service is charged directly to load-serving entities based on demand, not resources. The SPP transmission cost associated with Crossroads is treated the same as all other resources, but because Crossroads is uniquely located outside of SPP, the IRP model includes the MISO transmission expense in order for the model to appropriately evaluate its all-in cost of service.

Q: Is Crossroads included in EMW's Preferred Resource Plan beyond February of 2029?

A: Yes, and the EMW IRP Preferred Plan's Net Present Value of Revenue Requirement ("NPVRR") includes the cost of the transmission path to bring Crossroads' capacity and energy benefits from MISO to SPP, the RTO that the Company is a member of.

Q: Was the retirement of Crossroads studied in EMW's 2024 Triennial IRP analysis?

A: Yes. As described in Volume 6 on pages 57-59 of EMW's 2024 Triennial IRP Report filed in No. EO-2024-0154 on April 1, 2024, an alternative resource plan was created to evaluate the economics of continuing to pay for the MISO transmission path versus retiring Crossroads and pursuing a new resource. This alternative resource plan assessed the cost of the Company retiring Crossroads at the end of 2028 (before the expiration of the firm point-to-point transmission service agreement in February 2029), saving the projected future long-term transmission expense and any future capital and O&M expenses.

Q: What was the result of this alternative resource plan?

A: The alternative plan that retires Crossroads is ***more*** expensive for customers than the Preferred Plan which keeps the plant operating beyond 2028 and which includes current and future MISO transmission expense. As shown in Figure 1 below, the expected 20-year Net Present Value of Revenue Requirement ("NPVRR") of retiring Crossroads is $121 million more expensive than EMW's Preferred Plan.

FIGURE 1: 2024 TRIENNIAL IRP NPVRR COMPARISON OF CROSSROADS EARLY RETIREMENT[3]

Rank	Plan	NPVRR	Difference	Description
1	CAAA	11,086		PP 2023 retirement dates
2	CFAA	11,208	121	Retire Crossroads 2028

Q: What is the primary reason for the higher expected cost?

A: If the Company were to retire Crossroads and exclude it as a resource option, the optimal resource plan calls for the construction of an additional 325 MW combined-cycle gas plant in 2028 that is not included in EMW's Preferred Plan. As of the 2024 Triennial IRP, this approach to build new, replacement generation was estimated to cost $121 million more than EMW continuing to operate Crossroads and recovering all of its costs, including transmission expenses. The plan to add a 325 MW combined-cycle unit would also add potential supply chain, construction, financing, siting, interconnection, and other business risks that are not quantified in the table in Figure 1. Retaining Crossroads past 2028 under the Preferred Plan costs less for customers and does not carry these additional risks.

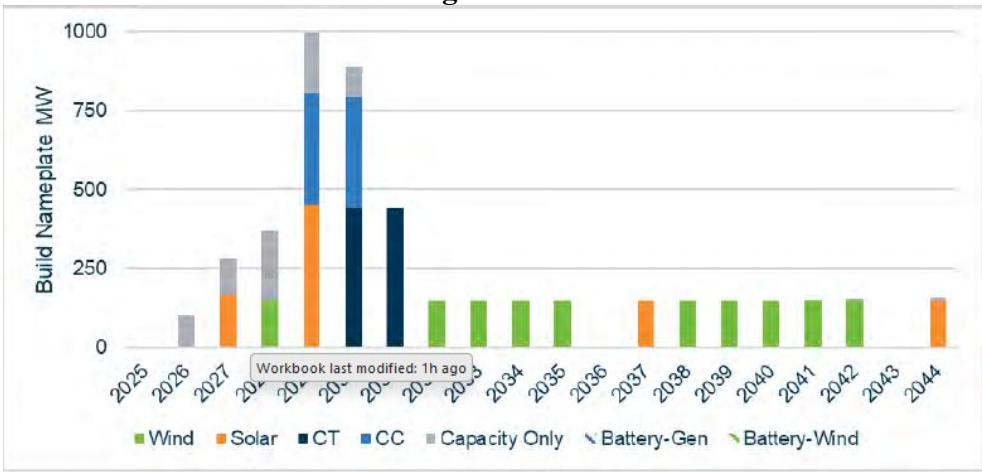
Q: Did EMW's 2025 Annual IRP Update confirm its 2024 IRP?

A: Yes. Similar to EMW's 2024 Triennial IRP, the 2025 IRP Annual Update studied an alternative resource plan, Plan ACCB in Figure 2 below, that assessed the cost of the Company retiring Crossroads at the end of 2028 (before the expiration of the firm point-to-point transmission service agreement in February 2029), saving the projected future long-term transmission expense and any future capital and O&M expenses. As discussed

[3] Figure 1 is depicted as Table 25 on page 58 in Volume 6 (Integrated Resource Plan and Risk Analysis) of EMW's 2024 IRP.

in Section 10.3 of EMW's 2025 IRP, in the absence of Crossroads' capacity and energy Plan ACCB included 450 MW of additional solar resources in 2029, as well as an additional 440 MW of simple cycle gas turbine in 2031.

FIGURE 2: 2025 IRP Crossroads Retires, Allow Higher Early Solar & Storage Plan ACCB[4]



As shown in Figure 3, Plan ACCB in the 2025 IRP had an expected 20-year NPVRR that was $362 million higher than EMW's 2025 Preferred Plan (ACAA), which included the extension of Crossroads.

FIGURE 3: 2025 IRP NPVRR COMPARISON OF CROSSROADS EARLY RETIREMENT

Rank	Plan	NPVRR	Difference	Description
1	ACAA	14,124		Crossroads
2	ACCB	14,486	362	No Crossroads

[4] Figure 2 is Figure 49 on page 105 in EMW's 2025 Annual IRP Update.

III. BLACK & VEATCH RELOCATION STUDY

Q: Did Evergy conduct any further studies pertaining to Crossroads?

A: Yes. Per Section 5 of the Unanimous Stipulation and Agreement in this case, Evergy consulted with Black & Veatch to conduct a Crossroads Relocation Study, as described by Company witness Peter Rogge.

Q: Based on the results of the Crossroads Relocation Study, what is the most prudent option regarding Crossroads?

A: Based on the Black & Veatch study and other considerations, the Company concluded that the most prudent option for EMW and its customers is for Crossroads to remain at its location in Mississippi and for the Company's customers to pay for the current recoverable costs, plus the MISO transmission expense at a 4.2% Compound Annual Growth Rate ("CAGR") (equivalent to 2014-2024 CAGR). The Company compared this option with two other options: (1) selling Crossroads and building a facility in Evergy's SPP service territory (20-year NPVRR equal to $620,559,000), or (2) relocating the current Crossroads facility to SPP (20-year NPVRR equal to $525,893,000). The NPVRR for Crossroads to remain in Mississippi and include the MISO transmission expense is $343,401,000. This comparison on a levelized cost of capacity per kilo-watt month showed: (1) selling Crossroads and building a facility in Evergy's SPP service territory ($19.11/kW-mo.); (2) relocating the current Crossroads facility to SPP ($15.26/kW-mo.); and (3) Crossroads to remain in Mississippi and include the MISO transmission expense ($11.61/kW-mo.)

Q: What are the current cost projections to build new dispatchable generation similar to Crossroads?

A: Part of the Black & Veatch Crossroads relocation study included replacing the asset with similar new generation. The study utilized the General Electric 7E.03 turbines and estimated the total cost of 4, equivalent to approximately 300 MW of nameplate capacity, to be $668,250,000 (or $2,228/kW). This study provides a relevant third-party estimate of the costs to replace Crossroads with a similar generation technology, but, as Evergy stated in its stakeholder presentation, the study does not necessarily reflect what Evergy would pay to build new generation if Crossroads were to be retired.

Q: Are there other factors that the Commission should take into consideration beyond the projected lower costs to continue to operate the plant?

A: Yes. There is capacity (reliability and certainty) and energy (dispatchable electricity) value in Crossroads continuing as an existing steel-in-the-ground generating plant that is not located in Missouri. This is especially true when peak load conditions occur during hot summers, as well as during extreme winter events like Winter Storms Uri (February 2021) and Elliott (December 2022). The inclusion of Crossroads in EMW's generating portfolio takes advantage of the plant's location in Mississippi that, given pricing variability and weather extremes, can help insulate customers from exposure to weather risks in Missouri.

Q: What are the specific benefits that EMW customers receive from Crossroads being in Mississippi?

A: Crossroads is located in the town of Clarksdale in northwestern Mississippi, approximately 150 miles from the Southwestern Power Administration ("SPA") interface where it

interconnects with the SPP system. The facility's location allows EMW to take advantage of the natural gas transmission pipelines flowing from east Texas and Louisiana into Mississippi, Tennessee and beyond. These pipelines frequently have lower prices than the pipeline systems that supply EMW's gas-fired plants in its Missouri service territory. As shown in Figure 4, Texas Gas commodity prices have been lower in the range of $0.05 to $0.34/Dth compared to prices in western Missouri.

FIGURE 4: NATURAL GAS PRICES AT PIPELINES THAT DELIVER TO EMW PLANTS

Avgerage Gas Daily Marginal Price 3/1/14 - 9/5/2025	$/Dth
Texas Gas	$ 3.00
Henry Hub	$ 3.17
Panhandle	$ 3.05
Southern Star	$ 3.34

Additionally, Crossroads is supplied by the Texas Gas Transmission ("TGT") pipeline which provides geographic, and fuel diversity compared to other natural gas plants located within EMW's service territory. The portion of the TGT pipeline in Mississippi that supplies Crossroads is closer to natural gas production zones than other pipelines within EMW's service territory in western Missouri. This has usually resulted in cheaper all-in natural gas costs due to lower gas transportation fees. Importantly, the TGT pipeline has less congestion and lower reservation fees when scheduling natural gas to the plant. Since the TGT pipeline has less congestion, EMW customers are not required to pay for firm transport like they are for plants located on pipelines closer to EMW. Instead, EMW can purchase firm delivered gas call options. Rather than paying for firm transportation,

which is an expense that is incurred regardless of whether the commodity is purchased and flowed to the plant, EMW pays to receive gas supplied by TGT only when the firm delivered gas call option is exercised. This means the cost of firm transport is only incurred at the time the commodity is flowed to the plant and the full costs (transport plus natural gas fees) are included in the commodity charge.

As evidenced during Winter Storm Uri in February 2021, the geographic diversity of Crossroads' gas supply allows the plant to sell power into SPP in times of peak conditions when SPP prices reflect elevated natural gas costs. When Crossroads is dispatched by the SPP and is able to capture its market opportunity potential, the margins benefit EMW customers by partially offsetting other fuel and load costs.

As shown in Figure 5, the SPP locational marginal prices for both day-ahead and real-time energy have been consistently higher than that of other similar EMW plants. Crossroads' Locational Marginal Prices ("LMP") have averaged approximately $3.05/MWh (Day Ahead) and $3.63/MWh (Real-time) higher than the LMPs for the Company's load. This difference in marginal revenues benefits EMW customers as it is returned through the fuel adjustment clause ("FAC") for each MWh that Crossroads generates and sells into the market at its locational price. This is particularly true when the LMP is a higher market price than the locational price EMW is paying SPP for its load.

FIGURE 5: SPP LOCATIONAL MARGINAL PRICES AT EMW PLANTS

Avgerage Locational Marginal Price ($/MWh) 3/1/14 - 9/5/2025	Day Ahead	Real-time
Crossroads	$ 33.80	$ 30.84
South Harper	$ 29.82	$ 26.03
Dogwood	$ 30.18	$ 26.48
Ralph Green	$ 30.62	$ 26.97
EMW Load	$ 30.75	$ 27.21

Q: What is EMW's future capacity position?

A: EMW has a clear near-term capacity need. The need for capacity has been discussed at length in previous EMW IRPs, applications for Certificate of Convenience and Necessity, Fuel Adjustment Clause prudence reviews, and in previous rate cases. EMW is making progress on shoring up its capacity position by developing its ownership in solar resources Foxtrot and Sunflower Sky Solar, and the natural gas plants of Viola, McNew, and Mullin Creek #1. Evolving resource adequacy rules at SPP and the ongoing historic load growth opportunities from large load customers requesting to locate in EMW's service territory are expected to increase and prolong the need for capacity.

Q: Why are SPP's planning reserve margin requirements and related capacity issues important in this case?

A: The SPP Board and the SPP Regional State Committee have approved raising the minimum Planning Reserve Margin ("PRM") requirements for both the summer and winter planning seasons. These requirements are effective beginning with the summer of 2026 (summer PRM of 16%) and the winter of 2026-2027 (winter PRM of 36%). In the summer

of 2029, the summer PRM will increase to 17% and the winter 2029-2030 PRM will increase to 38%. FERC recently approved SPP's proposal for these separate summer and winter planning reserve margins.[5] These SPP changes are important to this case because the PRM increases are a significant factor that reaffirms EMW's need for incremental capacity. If EMW's transmission service agreements with Entergy that bring the Crossroads benefits to Missouri are not renewed in 2029, the loss of Crossroads' 300 MW of capacity exacerbates this need in the same year when SPP's PRM requirements will increase.

Q: What are the expected on-going benefits of Crossroads?

A: SPP will need dispatchable units like Crossroads to maintain a diverse generation portfolio to meet increasing economic development activities and support grid reliability as more intermittent renewable resources are interconnected to the system over time.[6] Crossroads' ability to burn readily available natural gas will play a critical role in maintaining reliable operations while new technologies like hydrogen generation, battery storage, and small modular nuclear reactors become commercially available at scale and economically viable.

Q: What are the implications for EMW and its customers if Crossroads is lost as a capacity resource in 2029?

A: EMW's current and future capacity obligations, as well as SPP's reserve margin requirements, will not change regardless of the Commission's decision on the recovery of

[5] Order Accepting Tariff Revisions, Southwest Power Pool, Inc., 192 FERC ¶61,161 (Aug. 21, 2025).
[6] Southwest Power Pool, "Our Generational Challenge: A Reliability Future for Electricity" at 3-4 (Summer 2024), Sched. CV-2.

the MISO transmission path expense. Thus, EMW will need to replace Crossroads with another resource, ideally with a resource of similar dispatch characteristics. While this resource will likely be situated in the Southwest Power Pool and thereby avoid the equivalent transmission costs of Crossroads, this new resource is also likely to be more expensive overall. As I discussed earlier in this testimony, the 2024 and 2025 IRPs both analyzed alternative resource plan scenarios that contemplated the retirement and replacement of Crossroads. In both cases the 20-year NPVRR was higher to replace Crossroads compared to leaving it in place and allowing EMW to recover the plant's full cost of service, including its future MISO transmission expenses.

Q: What does the SPP Generational Challenge Report advise its members about the siting of new generation resources?

A: The report warns that "members can't just add new generation anywhere." "Any new power plants or new areas of high electricity supply and demand need to be carefully studied. Too much energy flowing over lines in the same location can overload the system." See Schedule CV-2, SPP Report, "Our Generational Challenge" at 11-12 (Summer 2024). It also describes the lengthy and complex interconnection process that "can take years for the generator to go into service." Id. at 12. The SPP Report cites the need for state regulators to support development of "diverse energy resource portfolios," as well as the "need [for] critical reliability attributes that a diverse mix of generation resources provides." Id. at 31. SPP also states: "Maintaining a reliable and affordable grid requires tackling challenges that are difficult in the short-term but will provide long-term benefits for the entire region." Id. at 32.

Q: Is Crossroads located in a constrained or congested location that causes the transmission expense to be higher?

A: No. The firm transmission rate that EMW pays to Entergy is the same rate that any transmission customer would pay for firm exports from the Entergy system into SPP. As long as the transmission system has the capacity available for firm service – which the Crossroads path from Mississippi in MISO to SPP does – the price is the same. The price that EMW pays is governed by a tariff approved by the Federal Energy Regulatory Commission (FERC) and has nothing to do with congestion.

Q: Is EMW requesting the recovery of any other new Crossroads cost in addition to the MISO transmission path expense?

A: No. EMW requests full recovery of future MISO firm point-to-point transmission path expenses to allow EMW customers to continue to benefit from energy being delivered from Crossroads in Mississippi to Missouri. The Company does not request recovery of any *past* disallowed costs of either MISO transmission expenses or *past* rate base disallowances regarding the plant.

The annual retail revenue requirement expense attributable to the MISO transmission path in this case is approximately $18.1 million. This equates to an estimated increase of $0.002/KWh for EMW's total retail customer rate, or an approximate 2% increase to EMW's existing revenue requirement.[7] The alternatives of either relocating Crossroads to SPP or building new generation to replace Crossroads would increase retail

[7] This comparison is relative to EMW's revenue requirement in its 2024 rate case, No. ER-2024-0189.

rates by an estimated $0.006 to 0.008/KWh, or a 7% to 9% increase to existing revenue requirement.

IV. CONCLUSION

Q: What should the Commission conclude from your testimony?

A: The time has come for the capacity and energy benefits provided by Crossroads to be recognized in rates, and for customers to be charged for the security and reliability that the Company has provided to them at a significant discount for the past 15 years. As Evergy plans for the future generation needs of its service areas, Evergy Missouri West requires clarity regarding the prudence of the four transmission path agreements necessary for its customers to receive the benefits of Crossroads. Without a Commission order that determines it would be prudent for the Company to extend the transmission path agreements with Entergy when they expired in 2029, and that authorizes EMW to recover the Crossroads transmission costs, given the more costly alternatives, Evergy Missouri West will not extend those contracts which the Commission currently deems to be imprudent.

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 Missouri West, Inc. d/b/a Evergy Missouri West's Request for Authority to Implement A General Rate Increase for Electric Service	))))	Case No. ER-2024-0189

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 Direct Testimony on behalf of Evergy Missouri West consisting of twenty-two (22) 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 15th day of September 2025.

Notary Public

My commission expires: April 26, 2029

ANTHONY R WESTENKIRCHNER
NOTARY PUBLIC - NOTARY SEAL
STATE OF MISSOURI
MY COMMISSION EXPIRES APRIL 26, 2029
PLATTE COUNTY
COMMISSION #17279952