Exhibit No.:
Issue: Crossroads
Witness: Cody VandeVelde
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Sponsoring Party: Evergy Missouri West
Case No.: ER-2024-0189
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MISSOURI PUBLIC SERVICE COMMISSION

CASE NO.: ER-2024-0189

REBUTTAL TESTIMONY

OF

CODY VANDEVELDE

ON BEHALF OF

EVERGY MISSOURI WEST

Kansas City, Missouri
August 2024

REBUTTAL TESTIMONY

OF

CODY VANDEVELDE

Case No. ER-2024-0189

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 submitted direct testimony on February 2, 2024?

A: Yes.

Q: On whose behalf are you testifying?

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

Q: What is the purpose of your testimony?

A: The purpose of my testimony is to respond to Crossroads specific testimony from Missouri Public Commission Staff ("Staff"), Office of Public Counsel ("OPC"), and Midwest Energy Consumers Group ("MECG").

Q: What is your reaction to the direct testimony of Keith Majors (Staff), Lena Mantle (OPC), and Greg Meyer (MECG)?

A: The direct testimony of these witnesses is generally focused on historical events and Commission decisions from 2011 and 2013 regarding Crossroads. Evergy is not challenging these decisions or asking for the recovery of any past costs that were denied by the Commission. Of note, the issues that were litigated over a

decade ago have very little relevance to the Crossroads decisions that must be made today. Given EMW's need for accredited capacity and dispatchable energy in the context of increasing focus on resource adequacy in Missouri and the Southwest Power Pool, it is time for the Commission to take a fresh look at the benefits that Crossroads provides EMW customers. Since the Commission's past decisions on Crossroads, numerous thermal generating plants have retired, renewable resources that require dispatchable support are more abundant, load growth expectations have increased to substantially higher levels, and severe weather events are becoming more frequent. These and other transformative and disruptive events are driving the focus on resource adequacy and underscore the need for dispatchable generation that EMW and integrated electric utilities across the nation require. As a result, the value proposition of Crossroads for EMW customers is more compelling and significantly differentiated from when this asset was transferred in 2008 and when this issue was evaluated in 2011 and 2013.

Q: Why is keeping Crossroads in EMW's resource portfolio and allowing the recovery of its costs, including transmission path expenses, preferrable to replacing the 300 MW of generating capacity with building a new gas-fired power plant in EMW's service territory and its associated costs?

A: EMW's 2024 Integrated Resource Plan ("IRP") has studied the alternatives to Crossroads. The results show that keeping Crossroads, including its transmission costs, in the portfolio beyond February 2029 when its firm transmission path agreements expire is more cost-effective for customers.

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

A: Yes, but only if the transmission path expenses to bring Crossroads' capacity and energy benefits from the Midcontinent Independent System Operator ("MISO") regional transmission organization ("RTO") to Southwest Power Pool ("SPP"), the RTO that the Company is a member of, are included in customer rates.

Q: How was the retirement of Crossroads studied in EMW's 2024 IRP?

A: As described in Volume 6 on pages 57-59 of EMW's 2024 IRP filing in Case 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 to 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 includes current and future MISO transmission expense. As shown in Figure 1, 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: NPVRR COMPARISON OF CROSSROADS EARLY RETIREMENT[1]

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

**NPVRR represented as $ in millions*

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 MWs combined-cycle gas plant in 2028 that is not included in EMW's Preferred Plan. This approach to build new, replacement generation is 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: 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

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

like Winter Storms Uri (February 2021) and Elliott (December 2022).[2] The inclusion of Crossroads in EMW's generating portfolio increases geographic diversification that, given pricing variability and weather extremes, can help insulate customers from regionally specific risk exposure.

Q: Do you agree with the issues and risks regarding SPP's generator interconnection queue that OPC witness Geoff Marke discusses in his direct testimony?

A: Generally, yes. He notes on pages 6-9 that there is very little dispatchable generation currently in the SPP generation interconnection queue, there are no guarantees that new generation resources will be approved by SPP, and that SPP is currently dealing with interconnection request backlogs of 5-plus years. These are all important considerations and provide additional reasons why retaining Crossroads reduces risks for EMW customers.

Q: How does Crossroads' location as a generating asset located in Mississippi benefit EMW customers relative to the complexities of the SPP generator interconnection queue?

A: Crossroads is located in the town of Clarksdale in northwestern Mississippi which 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 2, Texas Gas commodity prices have been lower in the range of $0.09 to $0.41/Dth compared to

[2] I discuss these issues in greater detail in my Direct Testimony at page 6-7.

prices in western Missouri. Additionally, Crossroads connects to the less congested Texas Gas Transmission ("TGT") pipeline which collects gas in eastern Texas and Louisiana, and delivers it to points in northwest Mississippi, Tennessee, Kentucky, and Ohio, which does not require firm transmission reservation costs in the same fashion as plants located on pipelines closer to the EMW customer base.[3]

FIGURE 2: NATURAL GAS PRICES AT PIPELINES THAT DELIVER TO EMW PLANTS

Avgerage Gas Daily Marginal Price 3/1/14 - 6/10/24	$/Dth
Texas Gas	$ 3.03
Henry Hub	$ 3.20
Panhandle	$ 3.12
Southern Star	$ 3.44

Additionally, as shown in Figure 3 the SPP locational marginal prices, for both the day-ahead and real-time, have been consistently higher than that of other similar EMW plants; the Crossroads LMPs have averaged approximately $3/MWh higher than the LMP for EMW load. This difference in marginal revenues is beneficial to EMW customers as it is returned through the EMW fuel adjustment clause ("FAC") for each MWh that Crossroads generates and sells into the market at its locational price, but particularly when its selling locational marginal price is a higher market price than the locational price EMW is paying SPP for its load.

[3] Further explained in VandeVelde Direct, ER-2024-0189, pg. 8 ln. 12 through pg. 9 ln 13.

FIGURE 3: SPP LOCATIONAL MARGINAL PRICES AT EMW PLANTS

Avgerage Locational Marginal Price ($/MWh) 3/1/14 - 5/18/24	Day Ahead	Real-time
Crossroads	$ 33.90	$ 30.73
South Harper	$ 30.18	$ 26.07
Dogwood	$ 30.53	$ 26.52
Ralph Green	$ 30.95	$ 27.01
EMW Load	$ 31.10	$ 27.31

Q: In his Direct testimony Staff witness Keith Majors states that Crossroads is a generating station 525 miles away from Evergy Missouri West's headquarters. Is this relevant?

A: No, not in terms of evaluating the need for MISO transmission service nor for assessing the relative benefits of retaining the Crossroads plant versus retiring it at the end of 2028 before the expiration of the firm point-to-point transmission service agreement in February 2029. In addition, the number of miles away between Evergy's headquarters in Kansas City and Crossroads in northwestern Mississippi is irrelevant to determining the cost of MISO transmission. The fact that Crossroads is located in the MISO footprint and not in SPP footprint (the RTO that the Company is a member of) is the determining factor. Additionally, while the distance away from the Company's headquarters and the location of the asset do necessarily impact the cost and methodology of transmitting the energy to Missouri customers, those costs have been incorporated into the Company's IRP analysis, thereby assessing its value to Missouri relative to all other options.

Q: How far is Crossroads located from its point of interconnection with SPP?

A: Crossroads is located approximately 150 miles from the Southwestern Power Administration ("SPA") interface where it interconnects with the SPP system.

Q: Are you aware of generating resources owned by other Missouri regulated electric utilities that operate in the MISO footprint, yet provide capacity and energy to Missouri customers in the SPP footprint?

A: Yes. The Plum Point Energy Station ("Plum Point") is a 680 MW coal-fired unit that is co-owned by Empire District Electric Company, d/b/a Liberty Utilities ("Liberty") and is located outside of Osceola, Arkansas in the MISO footprint. Plum Point serves Liberty's Missouri customers, as well as its customers in Arkansas, Kansas, and Oklahoma, all of whom reside in the SPP footprint.

Q: How far outside of the SPP footprint is Plum Point located?

A: Approximately 90 miles.

Q: Do these circumstances require Liberty to incur the cost of a MISO transmission path to allow Plum Point's capacity and energy to serve Missouri Customers?

A: Yes. Just as Crossroads requires EMW to incur the cost of a MISO transmission path to flow power into SPP, Plum Point similarly requires Liberty to incur MISO transmission path costs to bring power into SPP.

Q: Is Liberty in the same situation as EMW where it is denied the recovery of its MISO transmission path expenses for Plum Point?

A: No. Liberty has been recovering its MISO transmission costs for the 100 MW of Plum Point's capacity for many years. The Commission discussed these issues in its July 23, 2020 Amended Report and Order in Liberty's rate case, No. ER-2019-0374. This order noted at page 61 that "Empire incurs MISO transmission costs for 100 MWs of the Plum Point Power Plant in Arkansas." This is based on its

ownership share of 50 MW of Plum Point and a purchased power contract for the capacity and generation of another 50 MW. It also stated: "Since [Empire's] purchased power contract is for 50 percent of its total capacity of the Plum Point Power Plant, Empire is currently able to include 50 percent of its MISO costs in its FAC [fuel adjustment clause]." Based on statements in an earlier Staff Report on Empire's cost of service in Case No. ER-2012-0345, prepared on November 30, 2012, it appears that Liberty recovers the other 50 percent in base rates. So even though both generating plants are located outside of the SPP footprint (with one plant approximately 90 miles distant, and the other approximately 150 miles distant), Liberty is allowed to recover the costs of its MISO transmission path from its customers, while Evergy Missouri West is forced to bear all the costs of MISO transmission for which its customers pay nothing.

Q: Has MPSC Staff ever acknowledged this inconsistent treatment of MISO transmission recovery?

A: Yes. Former Staff auditor Cary G. Featherstone, whose testimony on Crossroads' issues was discussed by MECG witness Mr. Meyer in his direct testimony at page 7, presented Rebuttal Testimony in EMW's 2016 rate case (No. ER-2016-0156) where he addressed this inconsistent treatment starting on page 29.

Q: How did Mr. Featherstone justify the inconsistent treatment?

A: Generally, he cites four main reasons to support Liberty recovering MISO transmission costs:

1. Liberty's ownership of Plum Point was always intended to be a regulated facility, while Crossroads was constructed as a merchant plant and was not initially intended to be part of regulated utilities operations.

2. Plum Point is a base load unit that generates a significant amount of Liberty's energy needs, while Crossroads is a peak load unit whose limited usage increases the transmission costs on a per megawatt hour basis.

3. Plum Point serves customers for each of the four states that Liberty operates in, including Arkansas where it is located.

4. Plum Point is a base load unit that requires large amounts of land and water to operate and at the time of decisional prudence Liberty was perceived to be too small of a utility to be able to build its own base load. In Mr. Featherstone's view, Liberty was therefore required to partner with others to participate in large scale projects. Because Crossroads is a peaking plant, a review of whether EMW was a large enough utility to build its own generating resources was never conducted.

Q: Do these points support an argument that the Commission should deny the Company's request to recover Crossroads' transmission costs in this case?

A: No. None of Mr. Featherstone's historical reasons are relevant to the Crossroads' issues before the Commission today. The opinions of witnesses regarding events that occurred years ago have no bearing on Crossroads' current and future benefits to EMW or whether customers should pay the costs of service today, including MISO transmission expenses, so they can continue to receive benefits from the

Crossroads plant. With that said, I will address each of Mr. Featherstone's reasons in the order that I have summarized them above.

1. The fact that Aquila originally built Crossroads as a merchant plant in 2002 has no relevance to the current and future benefits that Crossroads will provide to EMW customers. This asset has been serving regulated customers for over a decade, so Aquila's original intent in building the plant is a moot point. Crossroads is clearly an asset intended to meet EMW's operational requirements and customer needs today.

2. Transmission costs should not be evaluated by relying on the calculated transmission cost per megawatt hour generated from the associated resource. Rather, the all-in costs of Crossroads (including transmission) to be recovered in EMW's cost of service are a more valid basis for an apples-to-apples comparison of all options as part of long-term integrated resource modeling over an appropriate planning horizon. As represented above and in our IRP, EMW's modeling demonstrates that Crossroads, including MISO transmission costs, is cost-effective for customers compared to its being replaced with a new resource.

3. Both Plum Point and Crossroads are outside of the SPP footprint and require a MISO transmission path to allow their capacity and energy to serve Missouri customers. The fact that Liberty has customers in Arkansas where Plum Point is located is irrelevant because all of

Liberty's customers are located in the SPP footprint. The bottom line is that both assets serve Missouri customers and have proven to be important components of each company's resource requirements.

4. Mr. Featherstone's point regarding Empire's size is irrelevant as EMW is not asking the Commission to determine whether EMW was or is of an appropriate size to build its own generating plant. Though EMW has the financial ability to construct new generating resources, at the current time, economic analysis shows that retaining Crossroads at its full cost of service is beneficial to customers and more cost-effective relative to building a new comparable plant.

Q: What difference does the fact that Plum Point is a baseload resource and Crossroads is a peaking plant make?

A: There is no difference. Diversified generation portfolios typically have baseload, intermediate, and peaking resources. Each category provides unique benefits to meeting customer demand and an "all of the above" approach to meeting customer demand is typical for utilities and peaking resources like Crossroads play a vital role in resource adequacy. As such, there is no logical reason why it the Commission should require Missouri customers to pay for MISO transmission costs to deliver one type of resource (baseload), but not require customers to pay for another resource (peaking).

Q: Please summarize your testimony.

A: Keeping the 300 MWs of capacity and energy from Crossroads in Evergy Missouri West's resource portfolio is cost-effective compared to the replacement options and maintains an existing asset that does not face the higher costs and incremental risks that would come with building an alternative new resource.

There is precedent for Missouri utility customers covering the costs of a MISO transmission path (Liberty / Plum Point) for capacity resources located outside of the SPP footprint. Allowing EMW to recover these transmission expenses would enable the continuation of the MISO transmission path that allows Crossroads to serve EMW customers beyond February 2029, which is in their best interest. This is especially true given the importance of reliable thermal resources as demand increases, non-dispatchable resources proliferate, and extreme weather events become more common. Notwithstanding the references by Staff or other witnesses to past events or arguments related to the recovery of Crossroads' transmission costs, the issues before this Commission relate to the present and the future – not the past. If EMW is allowed to recover the MISO transmission costs, the Commission will have the ability to assess the costs when they are added to cost of service in rate cases or during FAC cases.

Evergy Missouri West does not endeavor to re-litigate the past or to recover any past disallowances. Rather, the Company seeks decisions that will guide its future resource planning to ensure that it delivers safe, reliable, and affordable power to EMW customers.

If the Commission does not allow EMW to recover the future MISO transmission expenses needed to bring Crossroads' benefits to customers, the Company will need to pursue alternative contingency resources in order to replace the unit's 300 MW capacity beyond February 2029 when the transmission service agreement with Entergy expires. To meet this in-service schedule, planning and development efforts will need to start imminently. That is why this rate case proceeding is the appropriate regulatory vehicle for EMW to hear from the Commission on the MISO transmission expense recovery issue, given the important resource adequacy issues facing the Company.

Q: Does this 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 Rebuttal Testimony on behalf of Evergy Missouri West consisting of fourteen (14) 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 6th day of August 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