Exhibit No.:

Issue(s): IRP and

Crossroads Planning

Witness: Brad J. Fortson

Sponsoring Party: MoPSC Staff
Type of Exhibit: Rebuttal Testimony

Case No.: ER-2024-0189

Date Testimony Prepared: August 6, 2024

MISSOURI PUBLIC SERVICE COMMISSION

INDUSTRY ANALYSIS DIVISION

ENERGY RESOURCES DEPARTMENT

REBUTTAL TESTIMONY

OF

BRAD J. FORTSON

EVERGY MISSOURI WEST, INC., d/b/a Evergy Missouri West

CASE NO. ER-2024-0189

Jefferson City, Missouri August 6, 2024

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1		REBUTTAL TESTIMONY	
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3		BRAD J. FORTSON	
4		EVERGY MISSOURI WEST, INC.,	
5		d/b/a Every Missouri West	
6		CASE NO. ER-2024-0189	
7	Q.	Please state your name and business address.	
8	A.	My name is Brad J. Fortson, and my business address is Missouri Public Service	
9	Commission, P. O. Box 360, Jefferson City, Missouri 65102.		
10	Q.	By whom are you employed and in what capacity?	
11	A.	I am employed by the Missouri Public Service Commission ("Commission") as	
12	the Regulatory Compliance Manager of the Energy Resources Department.		
13	Q.	Please describe your educational background and work experience.	
14	A.	Please refer to the attached Schedule BJF-r1.	
15	Q.	Have you previously filed testimony before this Commission?	
16	A.	Yes. Please also refer to the attached Schedule BJF-r1 for a list of cases in which	
17	I have previously participated in.		
18	EXECUTIV	E SUMMARY	
19	Q.	What is the purpose of your rebuttal testimony?	
20	A.	The purpose of my rebuttal testimony is to briefly explain Evergy Missouri	
21	West, Inc. d/b/a Evergy Missouri West's ("EMW") Integrated Resource Planning ("IRP") in		
22	regards to the Crossroads Energy Center ("Crossroads"). I will also briefly respond to the direct		
23	testimony of EMW witness Mr. Cody VandeVelde.		

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- Q. Does any other Staff witness discuss Crossroads in this case?
- A. Yes. Staff witness Mr. Keith Majors provided discussion about Crossroads valuation, history, and transmission costs in his direct testimony, filed on June 27, 2024.
 - Q. What is EMW proposing in this case in regards to Crossroads?
 - A. Without preapproval of different rate treatment for the MISO¹ transmission expense starting in this rate case, EMW does not plan to renew or extend the four 75 MW firm point-to-point MISO transmission path agreements beyond February 2029.²

IRP AND CROSSROADS

- Q. How has EMW historically treated Crossroads in its IRP?
- A. In its 2012 IRP, in Case No. EO-2012-0324, EMW included the four 75 MW simple-cycle ("SC"), gas-fired generating units located at Crossroads in its generation fleet through the entirety of the planning horizon (2012 2031). In its 2015 IRP, in Case No. EO-2015-0252, EMW included the four 75 MW SC, gas-fired generating units in its generation fleet through the entirety of the planning horizon (2015 2034). In its 2018 IRP, in Case No. EO-2018-0269, EMW included the four 75 MW SC, gas-fired generating units in its generation fleet through the entirety of the planning horizon (2018 2037). In its 2021 IRP, in Case No. EO-2021-0036, EMW included the four 75 MW SC, gas-fired generating units in its generation fleet through the entirety of the planning horizon (2021 2040).
 - Q. How did EMW treat Crossroads in its most recent 2024 IRP?
- A. For the first time that I am aware of in an EMW IRP, an alternative resource plan ("ARP") was created to evaluate the economics of procuring the transmission versus

¹ Midcontinent Independent System Operator.

² Direct Testimony of Cody VandeVelde, pg. 12, lines. 16 – 18.

- retiring the resource.³ Since Crossroads is located in MISO, EMW currently purchases long-term-firm transmission from MISO to SPP to ensure capacity deliverability to its customers. The existing transmission contract expires in February 2029, and EMW will be faced with a decision of whether to pursue another long-term contract or retire the units.⁴ EMW's most recent 2024 IRP was filed on April 1, 2024, in Case No. EO-2024-0154. This case is still pending.
- Q. How does the ARP that does not include Crossroads after 2028⁵ compare to the currently selected preferred resource plan ("PRP") that includes Crossroads for the remainder of the planning horizon (2024 2043)?
- A. The ARP that retires Crossroads is more expensive than the PRP. This indicates that the replacement cost is expected to be higher than the costs associated with continued operation of Crossroads.⁶ This plan represents the likely contingency plan which would be implemented if the request in the current EMW rate case to recover transmission expenses associated with Crossroads is not granted.⁷
- Q. What is the magnitude of cost difference between the ARP that retires Crossroads at the end of 2028 compared to the currently selected PRP that includes Crossroads for the remainder of the planning horizon?
- A. Based on EMW's modeling and analysis in its most recent IRP, the ARP that does not include Crossroads after 2028 would cost ratepayers approximately \$121 million more than the PRP that includes Crossroads.

³ Evergy Missouri West Letter of Transmittal and Integrated Resource Plan, 2024 Volume 6, pg. 58.

⁴ *Id.*, pgs. 57 – 58.

⁵ The transmission contract expires in February 2029, but EMW modeled an ARP that retires Crossroads at the end of 2028.

⁶ *Id.*, pg. 58.

⁷ *Id*.

RESPONSE TO EMW WITNESS MR. VANDEVELDE

- Q. Is Crossroads currently providing EMW customers with benefits?
- A. The following excerpts from EMW witness Mr. VandeVelde details

4 those benefits:

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Customers receive the full value of capacity and energy produced from Crossroads via a long-term power agreement. 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.⁸ [emphasis added]

Crossroads has been an integral resource to meeting EMW's capacity obligation. Without it EMW would have been short on capacity. [emphasis added]

Crossroads provides energy to the SPP market, typically in peak conditions when customer demand for power is high. Over the past three summers (June through August 2021–2023) Crossroads was dispatched 555 times, with 100% start reliability, and operated 4,258 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 market load 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.¹⁰ (footnote omitted) [emphasis added]

Customers also receive the benefit of energy market revenues, which lowers the cost to serve their load. 11 [emphasis added]

As evidenced during Winter Storm Uri in February 2021, the **geographic** diversity of Crossroads' gas supply allows the plant to sell power into

⁸ *Direct Testimony of Cody VandeVelde*, pgs. 4 – 5.

⁹ *Id.*, pg. 5.

 $^{^{10}}$ *Id.*, pgs. 6-7.

¹¹ *Id.*, pg. 7.

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. [emphasis added]

...natural gas units like Crossroads are a **critical** bridge technology to enable decarbonization over time... SPP will **need dispatchable units like Crossroads** to **maintain a diverse generation portfolio** as more intermittent renewable resources are interconnected to the system over time... 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. ¹³ [emphasis added]

- Q. If Crossroads is benefiting EMW customers to the extent presented by Mr. VandeVelde, why would EMW want to retire Crossroads at the end of 2028?
- A. The previously mentioned existing long-term-firm transmission contract expires in February 2029. There is a cost associated with that contract that is not currently recovered by EMW. Staff witness Mr. Majors provides additional detail about those costs and their exclusion from recovery in his direct and rebuttal testimony. However, on page 3 of Mr. VandeVelde's direct testimony, he states:

If the Commission denies recovery of the MISO transmission costs, the Company will not be able to absorb the future cost of this service and will decline to renew the firm point-to-point transmission path agreements beyond 2029, which will require the Company to seek alternative resources to replace the capacity and energy of Crossroads.

Mr. VandeVelde further states, on page 12 of his direct testimony:

Without preapproval of different rate treatment for the MISO transmission expense starting in this rate case, Evergy does not plan to renew or extend the four 75 MW firm point-to-point MISO transmission path agreements beyond February 2029. This would effectively render the Crossroads generating plant useless as far as its capacity value to EMW customers.

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¹² *Id.*, pg. 9

¹³ Direct Testimony of Cody VandeVelde, pgs. 9 – 10.

Q. What additional supply-side generation is needed in the ARP that excludes 1 2 Crossroads compared to the PRP that includes Crossroads? 3 A. EMW's currently selected PRP, that includes Crossroads, anticipates the need 4 for 325 MWs of natural gas combined-cycle ("CC") in 2029 and 415 MWs of natural gas 5 combustion turbines in 2030. The ARP that excludes Crossroads after 2028 includes the need 6 for an additional 325 MWs of natural gas CC in 2028 in addition to the new supply-side in 7 the PRP. 8 Q. Has EMW filed an application for a certificate of convenience and necessity 9 ("CCN") to construct the 325 MWs of natural gas CC in 2028? 10 A. No. I am assuming EMW is awaiting the outcome of this issue in this general 11 rate case. 12 Q. How long has EMW had rights to the MISO transmission path that allows for 13 its customers to receive full capacity and energy benefits? 14 A. There are currently four separate 75 MW firm point-to-point MISO transmission 15 paths that were granted on December 18, 2013. 16 Q. If EMW knew there was a good possibility it would retire a used and useful 17 dispatchable generating resource well before the end of its useful life, could it have more timely 18 filed a CCN to replace that resource? 19 A. I would think so. EMW has put the Commission in a difficult situation. If the 20 Commission goes against its previous orders, and allows for recovery of the transmission costs, 21 ratepayer costs increase. If the Commission continues to not allow for recovery of the 22 transmission costs, EMW is going to retire Crossroads and build a more expensive plant, 23 increasing costs to ratepayers. However, if instead of waiting until the eleventh hour to force

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- the Commission to make this decision, EMW had come to the Commission earlier, for example in the last few years, this issue may have been avoided, or at least better prepared for.
 - Q. Does Staff have concerns with EMW's potential early retirement of Crossroads?
 - A. Yes. At a time when resource adequacy in Missouri is as hot of a topic as it has likely ever been, now seems to be a very inopportune time to forego 300 MW of needed capacity at the expense of the numerous benefits EMW itself recognizes its ratepayers receive and the reliability to the system it provides. The useful life of Crossroads is at least through 2043. Staff struggles with the concept of EMW retiring a plant(s) with at least twenty years of remaining useful life that provides EMW ratepayers benefit and reliability.
 - Q. What is Staff's recommendation in this case in regards to Crossroads?
 - A. Consistent with the Commission's findings in Case Nos. ER-2010-0356 and ER-2012-0175, and as further discussed in Staff Witness Mr. Majors' direct testimony, Staff recommends the removal of all Crossroads transmission expenses.
 - Q. Does this conclude your Rebuttal testimony?
 - A. Yes it does.

¹⁴ It is likely longer than this, but 2043 is the last year of the current planning horizon in EMW's most recent IRP.

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 BR	RAD J. FORTSON		
STATE OF MISSOURI)) ss. COUNTY OF COLE)			
COMES NOW BRAD J. FORTSON and or lawful age; that he contributed to the foregoing <i>F</i> the same is true and correct according to his best lawful age.			
Further the Affiant sayeth not. BRA	D. FORTSON		
JUR	AT		
Subscribed and sworn before me, a duly constituted and authorized Notary Public, in and for the County of Cole, State of Missouri, at my office in Jefferson City, on this day of 2024.			
D. SUZIE MANKIN Notary Public - Notary Seal State of Missouri Commissioned for Cole County My Commission Expires: April 04, 2025 Commission Number: 12412070	Musiclankin ry Public		