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Witness: Jason Humphrey
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Date Testimony Prepared: November 3, 2026

MISSOURI PUBLIC SERVICE COMMISSION

CASE NO.: ER-2027-0077

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DIRECT TESTIMONY

OF

JASON HUMPHREY

ON BEHALF OF

EVERGY MISSOURI WEST

Kansas City, Missouri
November 2026

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DIRECT TESTIMONY

OF

JASON HUMPHREY

Case No. ER-2027-0077

I. INTRODUCTION

Q. Please state your name and business address.

A: My name is Jason Humphrey. My business address is 1200 Main, Kansas City, Missouri 64105 and 818 S. Kansas Ave, Topeka, Kansas 66612.

Q: By whom and in what capacity are you employed?

A: I am employed by Evergy Kansas Central, Inc., and serve as Vice President, Development for Evergy Metro, Inc. d/b/a Evergy Missouri Metro ("EMM") and Evergy Metro, Inc. d/b/a Evergy Kansas Metro ("EKM") (collectively, "Evergy Metro"), Evergy Missouri West, Inc. d/b/a Evergy Missouri West ("EMW" or "Company"), and Evergy Kansas Central, Inc. and Evergy Kansas South, Inc., collectively d/b/a Evergy Kansas Central ("EKC") the operating utilities of Evergy, Inc.

Q: On whose behalf are you testifying in this docket?

A: I am testifying on behalf of Evergy Missouri West.

Q: What are your responsibilities as Vice President of Development for the Evergy operating utilities?

A: My responsibilities include the development, acquisition, construction, and commissioning of generating assets, both renewable and conventional, for EMW and the other Evergy operating utilities. These responsibilities encompass early-stage development in support

of self-developed and third-party developed projects, the preparation and evaluation of requests for proposal, negotiation of contracts, monitoring of asset construction, and eventual testing and commissioning of the assets ahead of commercial operation. Upon commissioning, these assets are transferred to our generation operations team under Evergy's Senior Vice President of Generation.

Q: Please summarize your education background.

A: I graduated magna cum laude from Kansas State University in May 2008 with a Bachelor of Science degree in Mechanical Engineering with a Nuclear Engineering option. In May 2017, I received a Master of Business Administration degree with honors from Baker University.

Q: Please summarize your relevant employment experience.

A: I joined Evergy Kansas Central as a Power Plant Engineer in June 2008 and was later named Supervisor, Electrical Maintenance in March 2011 and Plant Manager, Emporia Energy Center in May 2012. In May 2013, I was named Director of Natural Gas Fired Generation, which involved oversight of all Evergy Kansas Central's natural gas and oil-fired power plant operations. Beginning in August 2015, I served as Director of Performance Excellence and became Director of Integration Success upon the formation of Evergy in June 2018. In May 2020, I was named Senior Director Finance and, in December 2020, became Assistant Treasurer. In September 2021, the position of Senior Director of Renewables was added to my responsibilities. In January 2023, I was promoted to Vice President, Development & Assistant Treasurer. The Assistant Treasurer position was removed from the scope of my responsibilities in October 2023 in order to enhance

oversight and focus on the significant amount of generation development included in our integrated resource plans ("IRP") over the next decade and beyond.

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 testified before the MPSC on several occasions including EMW's Application for Certificate of Convenience and Necessity ("CCN") in Docket No. EA-2025-0075 for the Mullin Creek #1 , McNew Energy Center ("McNew") and Viola Energy Center ("Viola"), renamed Chisholm Trail Energy Center ("Chisholm Trail"), combined cycle natural gas-fired electrical generating plants, in Docket No. EA-2024-0292 regarding the Foxtrot and Sunflower Sky solar facilities, and in Docket No. EA-2026-0343 regarding Buchanan Bluffs Energy Center Unit 2 and Foxtrot surplus battery energy storage system. I have also testified in cases related to Winter Storm Uri's securitization and the Metro nuclear decommissioning trust at the Missouri Public Service Commission and in several dockets at the Kansas Corporation Commission.

Q: What is the purpose of your direct testimony?

A: I describe the generating facilities that EMW is adding to its portfolio and that are reflected in the Company's revenue requirement in this case. Those facilities are the Foxtrot Solar and Sunflower Sky Solar projects and three natural gas-fired generating facilities in which EMW holds an ownership interest, which are Chisholm Trail, McNew, and Buchanan Bluffs Energy Center Unit 2. For each facility I describe what it is, where it is located, how it is being developed and constructed, the ownership interest EMW holds, and the schedule on which it is expected to reach commercial operation. I also describe the conditions the

Commission placed on the certificates it granted and the Company's compliance with those conditions.

The facilities fall into two groups, though neither group is in commercial operation at the time of Missouri West's direct filing. Foxtrot and Sunflower Sky are nearing completion and are expected to reach commercial operation at or near the true up date in this case , and the Company reflects them as additions to plant in service as the forecast supports inclusion in rate base subject to satisfaction of the Commission's in-service criteria. Company witness Aron Branson addresses the ratemaking treatment of these costs and how the solar facilities satisfy the requirements for inclusion in rate base in this case. Chisholm Trail, McNew, and Buchanan Bluffs Energy Center Unit 2 are at earlier stages of construction, and are reflected as construction work in progress ("CWIP") as they will not complete for several more years. Company witnesses Klote and Gunn address the recovery of CWIP as permitted under Senate Bill 4.

Q: Please identify the facilities you describe and the certificate authority supporting each.

A: Foxtrot and Sunflower Sky were authorized in Case No. EA-2024-0292, in which the Commission granted certificates of convenience and necessity on July 31, 2025. Chisholm Trail and McNew were authorized in Case No. EA-2025-0075, in which the Commission granted certificates by report and order effective August 10, 2025. Buchanan Bluffs Energy Center Unit 2 is the subject of an application EMW and Evergy Missouri Metro filed on August 31, 2026 in Case No. EA-2026-0343, which remains pending before the Commission. EMW has requested a Commission order in Case No. EA-2026-0343 by the end of April 2027.

II. SOLAR FACILITIES

Q: Please provide a detailed overview of Foxtrot Solar and Sunflower Sky Solar facilities.

A: Both facilities were selected from Evergy's 2023 All-Source Request for Proposal, and together they satisfy the approximately 150 MW of solar capacity that EMW's 2024 IRP Preferred Plan identified as needed before the summer 2027 season. Foxtrot Solar Energy LLC, located in Jasper County, Missouri, is an approximately 109 MW solar facility, consisting of 100 MW of base capacity plus 7 MW of flex-up capacity and an additional 2 MW of capacity and associated energy we were able to add during construction. EMW is acquiring Foxtrot through a Build Transfer Agreement with Invenergy Renewables, LLC, under which the developer constructs the facility and EMW takes ownership through a short-form merger and consolidation of the project entity into EMW. The Foxtrot site benefits customers in two primary ways. First, the project is sited in an Energy Community as a result of the retirement of a nearby coal plant, which allows additional bonus credits to be realized under the Inflation Reduction Act ("IRA"). Second, the site is located close to new, high-voltage transmission lines being built in the Southwest Power Pool ("SPP"), which will allow for better grid access for the project over time.

Sunflower Sky Solar Project, LLC is an approximately 65 MW solar facility located in Wilson County, Kansas. Sunflower Sky is being developed under a different commercial structure than Foxtrot. It is a pre-notification to proceed project, in which early-stage development was handled by others but EMW contracts directly for the major equipment and for engineering, procurement and construction. The Kansas site qualifies for a ten-year property tax abatement, which lowers the cost of owning and operating the facility over its

life and directly benefits EMW customers, and the site's favorable location on the electric grid reduced the cost of interconnection compared to the alternatives.

Q: What is the status of the two solar facilities?

A: Both facilities remain under construction. The project schedule currently forecasts commercial operation for Foxtrot in March , 2027 and for Sunflower Sky in late March or early April 2027. The Company currently anticipates that both facilities will be placed in-service before the true-up date in this case. Company witness Branson addresses the requirements for including the facilities in rate base and the treatment of their costs.

Q: What conditions did the Stipulation include on the certificates for the solar facilities?

A: The Unanimous Stipulation and Agreement the Commission approved in Case No. EA-2024-0292 placed a number of conditions on the certificates.[1] The conditions that fall within my responsibilities concern construction reporting, project execution, and the contracting for and commissioning of the facilities.

Under paragraph 5(a),EMW agreed to work with Staff to create a format for quarterly construction progress reports for the Facilities. Reports were to include, but were not be limited to, quarterly progress reports on permitting, plans, specifications, and construction progress for the Projects, cost and project milestone updates, and impacts from any legislative or executive actions including any such actions related to the imposition of tariffs.

Under paragraph 5(b),EMW must file a site-specific Emergency Action Plan and Operations and Maintenance Plan for the facilities within sixty days of their being placed in service.

[1] Unanimous Stipulation and Agreement, Docket No. EA-2024-0292, (May 29, 2025).

Under paragraph 5(c).EMW agreed to use the in-service criteria set out in Confidential Schedule 1 and the capacity test procedure detailed in Confidential Schedule 2 of the agreement.

Several conditions address cost. Under paragraph 5(m),EMW agreed to notify the Signatories and provide an explanation for any budget deviation of more than five percent, including draws on contingency, on identified project cost items. For Foxtrot, those items are the Build Transfer Agreement, SPP network upgrades and interconnection facilities, and associated key procurement items. For Sunflower Sky, they are the panel supply, SPP network upgrades and interconnection facilities, substation costs, and the engineering, procurement and construction agreement. The same condition applies to a deviation of fifteen percent of the planned spend within a quarterly budget.

Two further conditions concern the equipment and the contracts. Under paragraph 5(n), EMW agreed to increase the inverter warranty period from five years to ten years to the extent commercially available, and the cost estimates in the agreement include an additional $1.3 million for Foxtrot and an additional $900,000 for Sunflower Sky for that extended warranty. Under paragraph 5(o), EMW agreed to include cybersecurity and supply chain risk management clauses consistent with North American Electric Reliability Corporation Critical Infrastructure Protection (“NERC CIP”) requirements and industry standard practices in the Foxtrot Build Transfer Agreement, the Sunflower Sky engineering, procurement and construction agreement, and the relevant equipment supply contracts, in order to provide commercially reasonable assurance that no unauthorized foreign communication devices are attached to the facilities. EMW also agreed to file the

relevant portions of those contracts in Case No. EA-2024-0292 at least two weeks prior to the in-service dates of the facilities.

Q: Has EMW satisfied those conditions?

A: Yes. Missouri West filed quarterly reports throughout construction on the specific costs identified within the report. The Sunflower Sky and Foxtrot inverter warranties were also successfully extended from five to ten years. We have provided updates each quarter on the budget status of the projects as well as draws on contingency for the specific project categories. Finally, we are currently projecting that both projects, even with the uncertain inflation and tariff environment, will come in below the 105% threshold identified in the order. We plan to file all contractual items at least two weeks ahead of the in-service testing at the sites.

Q: Are there conditions from Case No. EA-2024-0292 that apply specifically to this rate case?

A: Yes. Two conditions are triggered by the Company seeking recovery of these facilities here. Paragraph 5(f) states:

> In any future rate case in which either project is proposed to be included in rate base, the Company must provide the analysis demonstrating that the tax strategy ultimately chosen for each solar project was the most beneficial to customers.

And Paragraph 5(m)(1) states:

> The Company must provide a detailed reconciliation of budget and actual spend as of the cut-off date for Staff's direct filing and as of the true-up date in any rate case in which the Company requests cost recovery of the Facilities.

Company witness Melissa Hardesty addresses the tax strategy for each solar project in her direct testimony. Company witness Branson addresses the detailed reconciliation of budget to actual spend.

III. NATURAL GAS-FIRED FACILITIES

Q: What is a combined cycle generation facility?

A: Simply stated, a combined cycle generation facility is made up of a natural gas-fired combustion turbine or turbines together with equipment that captures the exhaust heat coming off the turbines and converts that heat into steam, which then drives a steam turbine on the back end. The equipment that recovers the exhaust heat is known as a heat recovery steam generator. A combined cycle facility tends to be more efficient at converting fuel to electricity than a standard combustion turbine because the waste heat from the turbines is used to generate additional electricity instead of being exhausted to the atmosphere.

Q: Please provide a detailed overview of the Chisholm Trail, McNew, and Buchanan Bluffs Energy Center Unit 2 combined cycle natural gas-fired generating facilities.

A: The Chisholm Trail Energy Center, which was identified as the Viola Generating Station at the time its certificate was sought and granted, is an approximately 710 MW combined cycle gas turbine ("CCGT") facility being built on a greenfield site in Sumner County, Kansas, near Conway Springs. It is scheduled for commercial operation before the SPP summer season of 2029. Chisholm Trail is jointly owned by Evergy Kansas Central and EMW, with each utility holding a 50 percent interest in the generating asset and Evergy Kansas Central acting as operator.

The McNew Generating Station, is an approximately 710 MW CCGT facility being built on a greenfield site in Reno County, Kansas, near Hutchinson. It is scheduled for

commercial operation before the SPP summer season of 2030. McNew is jointly owned by Evergy Kansas Central and EMW, with each utility holding a 50 percent interest, and the Commission granted EMW a certificate covering its 50 percent ownership interest in the generating asset and Evergy Kansas Central acting as operator.

Buchanan Bluffs Energy Center Unit 2 is an approximately 710 MW advanced class CCGT facility to be located in Buchanan County, Missouri. It will be owned 50% by Evergy Missouri Metro and 50% by EMW, so that EMW's share is approximately 355 MW. The facility uses advanced combustion turbine technology and advanced emissions controls designed to minimize emissions while providing firm, dispatchable power. EMW's 2026 Preferred Plan, filed in its May 2026 Integrated Resource Plan Annual Update and in the August 2026 Revised Resource Plan, identifies Buchanan Bluffs Energy Center Unit 2 as EMW's next new resource following the facilities approved in Case Nos. EA-2024-0292 and EA-2025-0075.

Q: How were the sites for the natural gas facilities selected?

A: In late 2022 and early 2023, Evergy began to see a potential need for new, firm dispatchable power for our retail customers. To address that need, we engaged Power Engineers to perform siting and technology studies for new natural gas generation. Throughout 2023, Power Engineers conducted an extensive siting study to locate, investigate, and evaluate potential sites for large-scale generation builds within Evergy's Kansas and Missouri service areas. That study informed Evergy's selection of the Chisholm Trail and McNew sites. Evergy subsequently conducted an additional siting study in 2025, which informed the selection of the Buchanan Bluffs site. Across these studies, the primary considerations included proximity to natural gas pipelines and fuel supplies, the accessibility and cost of

transmission interconnections, civil construction buildability, and Evergy's existing ownership of or ability to contract for the land.

Q: What approach is EMW using to construct the natural gas facilities?

A: Evergy is using a self-development approach on these projects. Following a request for proposal and our subsequent selection of Kiewit Power Contractors as the engineering, procurement and construction contractor for Chisholm Trail and McNew, we negotiated a master service agreement with Kiewit that defined the key contractual terms, including limitation of liability, liquidated damages, change order processes, insurance, owner's rights, and schedule, performance and cost guarantees. Kiewit has indicated it will honor the terms of that master agreement for Buchanan Bluffs Energy Center Unit 2.

IV. STATUS, COSTS, AND CERTIFICATE CONDITIONS FOR THE NATURAL GAS-FIRED FACILITIES

Q: What is the construction status of each of the natural gas-fired facilities?

A: Chisholm Trail and McNew are each proceeding on schedule, and the Company reports on both quarterly in Case No. EO-2026-0031. As described in the second quarter 2026 reports, which the Company submitted on August 10, 2026, Chisholm Trail held its public groundbreaking ceremony on May 12, 2026, marking a significant milestone in the Company's investment in new baseload generation for Evergy Missouri customers. Construction advanced substantially during the quarter and included completion of the warehouse and craft lunchroom buildings, placement of the steam turbine drains pit foundation, completion of the tower crane foundation, installation of embedded conduits at the water treatment facility, and the start of carbon steel pipe welding.

McNew is at an earlier stage. On-site construction began in August of 2026 and is focusing on early civil works at site. The Kansas Corporation Commission issued an order

approving the construction route and need for the generator transmission line on April 9, 2026, and an amended order on April 28, 2026, clarifying the Company's ability to adjust the approved route during construction.

Evergy has secured long-lead power island equipment for Buchanan Bluffs with reservation agreements with Mitsubishi and has issued a limited notice to proceed for with Kiewit for the Buchanan Bluffs site, authorizing early engineering and design, project management activities, and the procurement of long-lead equipment.

Q: What conditions did the Commission place on the certificates granted in Case No. EA-2025-0075 for Chisholm Trail and McNew?

A: In its Report and Order issued July 31, 2025, the Commission granted the certificates subject to the conditions in paragraphs 9 through 18 of the Stipulation and Agreement filed on May 29, 2025. The Commission also established compliance docket Case No. EO-2026-0031 and directed EMW to file quarterly progress reports for each project.

The conditions that fall within my responsibilities are these.

- Under paragraph 9, EMW must file quarterly progress reports in the compliance docket, covering permitting, plans, specifications, construction cost and project milestone updates, and updates regarding any impacts from legislative or executive actions including tariffs, and EMW was to collaborate with Staff on a reporting template before initiating those reports.
- Under paragraph 18, EMW must submit a compliance filing once all natural gas transportation arrangements have been finalized, including copies of the precedent agreements, all interstate pipeline evaluations and documentation

related to the mainline transportation and any laterals, and all Evergy gas procurement supply and transportation evaluations.

Q: Has EMW satisfied those conditions?

A: Yes. EMW collaborated with Staff on a reporting template and has filed quarterly construction progress reports for each project in Case No. EO-2026-0031. The most recent reports, covering the second quarter of 2026, were submitted on August 10, 2026. Each report addresses permitting, plans and specifications, construction progress, project milestone and cost reporting, change orders, and the impacts of legislative or executive actions, as the Agreement requires.

As to paragraph 18, because the arrangements have not yet been finalized, the filing is not yet due. EMW will make the required filing promptly after finalization.

Q: Did the Commission establish cost estimates for the facilities certificated in Case No. EA-2025-0075?

A: Yes. The Stipulation and Agreement the Commission approved in that case established cost estimates, excluding allowance for funds used during construction, of $788.75 million for EMW's 50% share of the Chisholm Trail facility and $800.5 million for EMW's 50% share of the McNew facility, excluding AFUDC. The Signatories agreed that amounts spent in excess of those estimates would be subject to execution and cost prudence review in the general rate case in which the facilities are requested for inclusion in rate base, and that the Company would bear the burden of proof to show that any amount it incurs above those estimates is prudently incurred and is just and reasonable to recover from customers.

Q: Are the projects tracking within those cost estimates?

A: Yes. As of this filing date both projects are projecting within their estimated costs. These costs will continue to be monitored, and updates will be filed quarterly as required by the CCN order authorizing those plants.

Q: Does the fact that the certificate for Buchanan Bluffs Energy Center Unit 2 remains pending affect your description of that facility?

A: No. The facility I describe is the same facility that is the subject of the application EMW and Evergy Missouri Metro filed on August 31, 2026 in Case No. EA-2026-0343, and the costs EMW has incurred to date are actual expenditures on that project. The Company has requested the Commission to issue an order by end of April 2027 which is before the requested true-up date in this case, as well as, well before rates become effective in this proceeding in October 2027. Because that case remains pending, no certificate conditions have yet been established for Buchanan Bluffs Energy Center Unit 2. The costs reflected in rates are addressed by Company witnesses Gunn and Klote.

V. CONCLUSION

Q: Please summarize your testimony.

A: EMW is adding two solar facilities, Foxtrot and Sunflower Sky, which the Commission certificated in Case No. EA-2024-0292 and which are contractually scheduled to reach commercial operation by May 15, 2027, and are anticipated to be in-service by late March or early April of 2027. The Company reflects those facilities as additions to plant in service. EMW also holds ownership interests in three combined cycle natural gas-fired facilities at earlier stages of construction: Chisholm Trail and McNew, both certificated in Case No. EA-2025-0075, and Buchanan Bluffs Energy Center Unit 2, for which a certificate

application is pending in Case No. EA-2026-0343. Those three facilities will not reach commercial operation until 2029 or later, and the Company reflects the costs it has incurred in constructing them as construction work in progress. The Company has complied with the Commission's conditions imposed in the CCN order, and reports on the facilities progress quarterly.

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-2027-0077

AFFIDAVIT OF JASON HUMPHREY

STATE OF MISSOURI)
) ss
COUNTY OF JACKSON)

Jason Humphrey, being first duly sworn on his oath, states:

1. My name is Jason Humphrey. I work in Kansas City, Missouri and Topeka, Kansas and I am employed by Evergy Metro, Inc. as Vice President, Development.

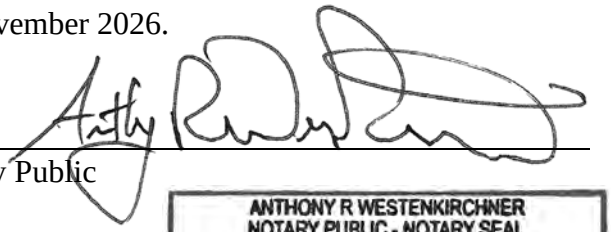
2. Attached hereto and made a part hereof for all purposes is my Direct Testimony on behalf of Evergy Missouri West consisting of fifteen (15) pages, having been prepared in written form for introduction into evidence in the above-captioned docket.

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.



Jason Humphrey

Subscribed and sworn before me this 3rd day of November 2026.



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