

Exhibit No.:

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Witness: Jason Humphrey

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MISSOURI PUBLIC SERVICE COMMISSION

CASE NO.: EA-2026-0154

SURREBUTTAL TESTIMONY

OF

JASON HUMPHREY

ON BEHALF OF

EVERGY MISSOURI METRO

Kansas City, Missouri

October 2026

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SURREBUTTAL TESTIMONY

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JASON HUMPHREY

Case No. EA-2026-0154

I. INTRODUCTION

Q: Are you the same Jason Humphrey who filed direct testimony in this case on May 14, 2026?

A: Yes. I previously submitted direct testimony on behalf of Evergy Metro, Inc. d/b/a Evergy Missouri Metro (“Evergy Missouri Metro,” “EMM,” or the “Company”).

Q: What is the purpose of your surrebuttal testimony?

A: I discuss the Non-Unanimous Stipulation and Agreement (“Agreement”) filed by the Company, Staff of the Commission (“Staff”), Renew Missouri Advocates d/b/a Renew Missouri (“Renew Missouri”), and Midwest Energy Consumers Group (“MECG”) (collectively the “Signatories”) to resolve all issues among the Signatories in this proceeding.¹ I also respond to Office of the Public Counsel (“OPC”) witnesses Jordan Seaver and Geoff Marke, who discuss the drivers of the need for Mullin Creek #2 Energy Center (“Mullin Creek #2” or the “Project”).

II. THE STIPULATION AND AGREEMENT

Q: What is the Stipulation and Agreement?

A: As described by Company witness Kevin Gunn, the Signatories have filed the Agreement to resolve all issues among the Signatories in this case, which requests that the Commission grant EMM a Certificate of Convenience and Necessity (“CCN”) to construct Mullin Creek #2, subject to the conditions set out in the Agreement, and to approve the Agreement without

¹ See Agreement at ¶¶ 2, 5, 6, 7, 13, 15, 16, 18, 21, Case No. EA-2026-0154 (EFIS No. 56; Oct. 2, 2026).

1 modification. My direct testimony, along with Company witness Cody VandeVelde's direct
2 testimony, explained that the need for Mullin Creek #2 is driven by increased demand, new
3 capacity accreditation methods, and increased reserve-margin requirements, and that building
4 now mitigates cost-escalation and supply-chain risk. It also explained that the Mullin Creek
5 Energy Center was developed as a two-unit site from its inception, with land, interconnection,
6 and air permitting pursued for both units.

7 **Q: How will the Company keep the Commission and the parties informed of the Project's**
8 **progress during construction?**

9 A: The Agreement states that the Commission should establish a compliance docket for this case
10 and require EMM to file quarterly progress reports for the Project, using the reporting template
11 used for Mullin Creek #1 as modified in collaboration with Staff, with reports covering
12 construction and permitting progress, pipeline-lateral updates, and budget by construction cost
13 component.² As discussed in Kyle Olson's direct testimony, EMM plans to submit quarterly
14 project status updates addressing schedule, cost, and key risk items, consistent with the
15 reporting approach used for Mullin Creek #1.³ While comprehensive, the Company considers
16 this reporting a reasonable means of maintaining transparency into the Project's progress, and
17 reasonable in the context of the Stipulation as a whole.

² See Agreement at ¶ 5.

³ See Olson Direct at 28.

1 **Q: How will the Company determine when Mullin Creek #2 is fully operational and used for**
2 **service?**

3 A: The Agreement states that the Company will apply the in-service criteria provided by Staff
4 witness Brodrick Niemeier in Schedule BAN-r2 — which are based on the criteria established
5 for Mullin Creek #1 — to determine when Mullin Creek #2 is fully operational and used for
6 service.⁴ The Company considers these in-service criteria a reasonable and objective basis for
7 confirming that Mullin Creek #2 is ready for service. These in-service criteria identified in the
8 Agreement incorporates Staff suggestions and builds on the criteria the Commission ordered
9 for Mullin Creek #1 that Company witness Olson discussed in his Direct Testimony.⁵ Those
10 criteria confirm, through a defined sequence of operational demonstrations, that the unit can
11 reliably start, shut down, and sustain load before it is declared in service.⁶

12 **Q: What has the Company agreed to regarding the emergency and operational plans for the**
13 **Project?**

14 A: The Agreement states the Company will file in the compliance docket an overview site-specific
15 Emergency Action Plan and an Operations and Maintenance Plan for the Project ninety days
16 before the in-service date, and to file the final versions of those plans within sixty days after
17 the Project is placed in service.⁷ The Company recognizes the importance of emergency
18 preparedness and operational readiness at a generating facility of this size, illustrated by the
19 Signatories, and considers these planning and filing requirements a reasonable means of
20 addressing that interest. As discussed in Mr. Olson's direct testimony, EMM will operate and

⁴See Agreement at ¶ 6.

⁵See Olson Direct at 26-27.

⁶Id.

⁷See Agreement at ¶ 7.

1 maintain the Project under an ongoing operations and maintenance program, coordinated
2 across the substantially similar Mullin Creek units.⁸

3 **Q: What has the Company agreed to regarding the engineering, procurement, and**
4 **construction contract for the Project?**

5 A: The Agreement calls for the Company to file the finalized engineering, procurement, and
6 construction Statement of Work in the compliance docket within thirty days after it is executed.
7 As discussed in Mr. Olson's direct testimony, EMM selected Kiewit as the engineering,
8 procurement, and construction ("EPC") contractor for the Project and intends to negotiate a
9 fixed-price, fixed-schedule EPC contract reflecting a detailed scope of work. The Signatories
10 recognized the importance of filing the finalized statement of work as a reasonable step that
11 supports transparency into the Project's development.

12 **Q: What has the Company agreed to regarding the Project's interconnection to the**
13 **transmission system?**

14 A: The Agreement directs the Company to file the Generator Interconnection Agreement for the
15 Project in the compliance docket within thirty days after it is executed. As discussed in Mr.
16 Olson's direct testimony, EMM submitted its interconnection request for the Project through
17 the Southwest Power Pool, Inc. ("SPP") Expedited Resource Adequacy Study process, and my
18 direct testimony addressed the resulting Interconnection Facilities and Network Upgrade costs.

⁸ See Olson Direct at 15-16.

1 **Q: What has the Company agreed to regarding permitting for the Project's back-up fuel**
2 **capability?**

3 A: The Agreement directs the Company to make a filing in the compliance docket affirming that
4 all permitting required to operate and tune the Project on back-up fuel has been received. Mr.
5 Olson's direct testimony explains how the Project is designed to operate on liquid fuel as a
6 back-up to natural gas, and EMM has submitted its air permit application for the Project and
7 expects to receive the permit by the end of 2026 or early 2027.

8 **Q: How will the Company provide for the Project's liquid fuel back-up supply?**

9 A: The Agreement calls for the Company to complete its plans for the delivery, storage, and
10 unloading of the liquid fuel back-up supply within sixty days after the Project is placed in
11 service.⁹ Mr. Olson's direct testimony further explained how the Project will include a liquid
12 fuel tank sized for forty-eight hours at full load, together with fuel unloading stations,
13 providing a safeguard against natural gas supply disruptions.¹⁰

14 **Q: What has the Company agreed to regarding as-built documentation for the Project?**

15 A: The Agreement directs the Company to provide the Project's as-built drawings in the
16 compliance docket within sixty days after Mullin Creek #2 enters service.¹¹ The Company
17 considers providing as-built drawings a reasonable and customary element of documenting a
18 completed generating facility. As discussed further in Mr. Olson's direct testimony, EMM will
19 maintain project controls and reporting throughout construction and will keep the Commission
20 apprised of the Project's status through its quarterly project status updates.¹² This is reasonable
21 to illustrate that the Project is on time to begin commercial operation so it is able to provide all
22 EMM customers with safe and adequate service.

⁹ See Agreement at ¶ 18.

¹⁰ See Olson Direct at 25-26.

¹¹ See Agreement at ¶ 21.

¹² See Olson Direct at 28.

1 **III. OPC WITNESS JORDAN SEAVER**

2 **Q: In response to Mr. Seaver’s rebuttal testimony, does EMM need the Project only to serve**
3 **large-load customers?**

4 A: No. Mr. Seaver asserts that the addition of the “Mullin Creek #2 plant is solely due to the
5 addition of large load customers.”¹³ However, as discussed in my direct testimony, Evergy’s
6 utilities as a whole are seeing the significant impacts of increased demand, new methods of
7 capacity accreditation by Southwest Power Pool, Inc. (“SPP”), as well as increased SPP reserve
8 margin requirements.¹⁴ Staff confirms these accreditation and reserve margin changes,
9 explaining that SPP began using a performance-based accreditation methodology for
10 conventional resources in the Summer 2026 planning season and separated its summer and
11 winter planning reserve margins, increasing the winter margin requirements.¹⁵

12 **Q: How did Mr. Seaver characterize your direct testimony regarding the benefits of the**
13 **Project for large-load customers?**

14 A: My direct testimony discussed how Mullin Creek #2 will provide benefits to all customers, not
15 only large-load customers. However, Mr. Seaver misquoted my statement that “building now
16 supports Governor Kehoe’s economic development objectives and enables Evergy to provide
17 safe and adequate service to large-load customers”¹⁶ My testimony in that sentence
18 continued: “... while preserving reliability and affordability for all customers in the utilities’
19 service territory.”¹⁷

20 Mullin Creek #2 is the next generation resource in EMM’s “balanced” energy strategy
21 to provide “all customers’ needs” with safe and adequate service, “plus backup generation for

¹³ See Seaver Rebuttal at 14.

¹⁴ See J. Humphrey Direct at 5.

¹⁵ See Rucker Rebuttal at 2-3.

¹⁶ See Seaver Rebuttal at 2.

¹⁷ See J. Humphrey Direct at 5.

intermittent renewables.”¹⁸ EMM satisfies the resource adequacy requirements of SPP for its system as a whole, and the 2026 IRP Annual Update Preferred Plan does so through a diversified portfolio in which the Project provides “flexible, reliable, and dispatchable generation that complements renewables.”¹⁹ The Project is a necessity because the lack of service is such an inconvenience.²⁰

IV. OPC WITNESS GEOFF MARKE

Q: In response to Dr. Marke’s rebuttal testimony at page 16 and its footnote 21, why did you attach the Standard & Poor’s (“S&P”) Global article to your direct testimony as Schedule JH-1?

A: I cited the article to demonstrate the scale of natural gas-fired development underway nationally and its effect on the market for new generation. The article reported that the U.S. power sector is planning 155 GW of fossil fuel capacity to meet rising demand, noting a major turbine manufacturer’s order backlog. This helped to explain the price escalation that Evergy Missouri Metro has experienced in the electric utility industry and the importance of proceeding with the Project now.²¹ Dr. Marke quotes a different passage in this article regarding the uncertainty of data center demand in 2030.²²

Q: Does the uncertainty in national data center demand forecasts undermine EMM’s planning for the Project?

A: No. The passage cited by Dr. Marke describes the difficulty of predicting how much power data centers will ultimately consume nationwide.²³ EMM’s planning does not rest on national forecasts. A large load is included in EMM’s base load IRP planning process only after it has

¹⁸ See Seaver Rebuttal at 8.

¹⁹ See J. Humphrey Direct at 17-18.

²⁰ See Rucker Rebuttal at 11.

²¹ See J. Humphrey Direct at 13, Schedule JH-1 at 1.

²² See Marke Rebuttal at 16 & n.21.

²³ See J. Humphrey Direct, Schedule JH-1 at 4.

1 recently commenced service, executed an energy services agreement under the Large-Load
2 Power Service tariff, or completed an SPP load addition study and expects to execute such an
3 agreement within six months.²⁴ Staff agrees that a signed agreement means the customer's
4 load can reasonably be expected to be added to EMM's system.²⁵ The S&P Global article
5 confirms that utilities across the country are moving now to add gas-fired capacity at scale and
6 that the cost and schedule risks of waiting are real.²⁶

7 **V. CONCLUSION**

8 **Q: Please summarize your testimony.**

9 A: The Commission should reject the positions and recommendations from OPC and approve the
10 Agreement to grant EMM a CCN for Mullin Creek #2. The Project addresses increased
11 demand, new SPP capacity accreditation methods, and increased reserve margin requirements.
12 Building now mitigates cost-escalation and supply-chain risks facing the electric utility
13 industry. The Mullin Creek generating station was developed as a two-unit site from its
14 inception to capture operational and construction efficiencies, and the Project was selected
15 through the IRP capacity expansion model as the most economical resource to meet EMM's
16 needs.

17 **Q: Does that conclude your testimony?**

18 A: Yes, it does.

²⁴ See VandeVelde Direct at 13.

²⁵ See Rucker Rebuttal at 11.

²⁶ See J. Humphrey Direct at 13.

