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MISSOURI PUBLIC SERVICE COMMISSION

CASE NO. EA-2026-0343

DIRECT TESTIMONY

OF

CODY VANDEVELDE

ON BEHALF OF

EVERGY MISSOURI METRO & EVERGY MISSOURI WEST

**Kansas City, Missouri
August 2026**

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DIRECT TESTIMONY

OF

CODY VANDEVELDE

Case No. EA-2026-0343

1 **I. INTRODUCTION**

2 **Q: Please state your name and business address.**

3 A: My name is Cody VandeVelde. My business address is 818 S. Kansas Avenue, Topeka,
4 Kansas.

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

6 A: I am employed by Evergy Kansas Central, Inc. and serve as Senior Director, Strategy and
7 Long-Term Planning – Energy Resource Management for Evergy Metro, Inc. (“Evergy
8 Metro”) d/b/a Evergy Missouri Metro (“Evergy Missouri Metro” or “EMM”), Evergy
9 Missouri West, Inc. d/b/a Evergy Missouri West (“Evergy Missouri West” or “EMW”),
10 Evergy Metro, Inc. d/b/a Evergy Kansas Metro (“Evergy Kansas Metro”), and Evergy
11 Kansas Central, Inc. and Evergy Kansas South, Inc., collectively d/b/a Evergy Kansas
12 Central (“Evergy Kansas Central” or “EKC”). These are the operating utilities of Evergy,
13 Inc. (“Evergy”).

14 **Q: Who are you testifying for?**

15 A: I am testifying on behalf of Evergy Missouri Metro and Evergy Missouri West
16 (collectively, the “Applicants” or “Companies”).

17 **Q: What are your responsibilities?**

18 A: My responsibilities include overseeing the development of Evergy’s corporate strategy,
19 Evergy’s Early-Stage Generation Development, and Evergy’s long-term planning,
20 including the Energy Resource Management division, which is responsible for completing

1 the Applicants' Integrated Resource Plans ("IRP"). Specifically related to this testimony,
2 Evergy's corporate strategy monitors the execution of Evergy's strategic initiatives, one of
3 which is the advancement of transitioning Evergy's generation portfolio, including new
4 resource development and preparation for future retirements.

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

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

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

11 A: Yes. I have offered testimony before the PSC, the Kansas Corporation Commission
12 ("KCC"), and the Federal Energy Regulatory Commission ("FERC").

13 **Q: What is the purpose of your direct testimony?**

14 A: The purpose of my direct testimony is to describe how the 2026 Annual IRP Updates of
15 Evergy Missouri Metro and Evergy Missouri West¹ and Evergy Missouri West's August
16 2026 Revised Resource Plan² support the Applicants' Certificate of Convenience and
17 Necessity ("CCN") Applications in this case. I will explain how the following two
18 resources will help advance the Applicants' Preferred Plans:

19 (1) An approximately 710 megawatt ("MW") advanced class combined-cycle gas
20 turbine ("CCGT") electric generating plant known as the Buchanan Bluffs Energy Center

¹ See EMM 2026 IRP Annual Update, In re Evergy Missouri Metro's 2026 Integrated Resource Plan Annual Update Filing, No. EO-2026-0188 (May 7, 2026), ("EMM IRP Annual Update"); EMW 2026 IRP Annual Update, In re Evergy Missouri West's 2026 Integrated Resource Plan Annual Update Filing, No. EO-2026-0189 (May 7, 2026), ("EMW IRP Annual Update").

² This filing was made pursuant to Section 22.080(12)(B) of the Commission's Electric Utility Resource Planning regulations, 20 CSR 4240-22.

1 Unit 2, to be located in Buchanan County, Missouri and to be owned 50% by Evergy
2 Missouri Metro and 50% by Evergy Missouri West; and

3 (2) An approximately 109 MW battery energy storage system (“BESS”) known as
4 the Foxtrot BESS Project, to be located in Jasper County, Missouri, next to the Foxtrot
5 Solar Project, which was granted a CCN by the Commission in Case No. EA-2024-0292
6 on July 31, 2025, and to be owned 100% by Evergy Missouri West.

7 These generation resources are collectively referred to as the “Projects.”

8 I will explain how the Applicants proposed ownership shares of the Projects will
9 enable them to meet their future capacity and energy obligations to serve significant new
10 load growth and to meet increasing Southwest Power Pool (“SPP”) planning reserve
11 margin requirements while hedging against the uncertain and at times volatile SPP
12 wholesale energy market. I will also explain how the Projects fit within the Companies’
13 broader long-term “all-of-the-above” resource strategy to meet these growing capacity
14 needs through flexible, reliable, dispatchable, as well as renewable generation resources
15 that are affordable.

16 **II. THE IRP PROCESS AND THE APPLICANTS’ PREFERRED RESOURCE**
17 **PLANS**

18 **Q: How does the IRP process operate in Missouri?**

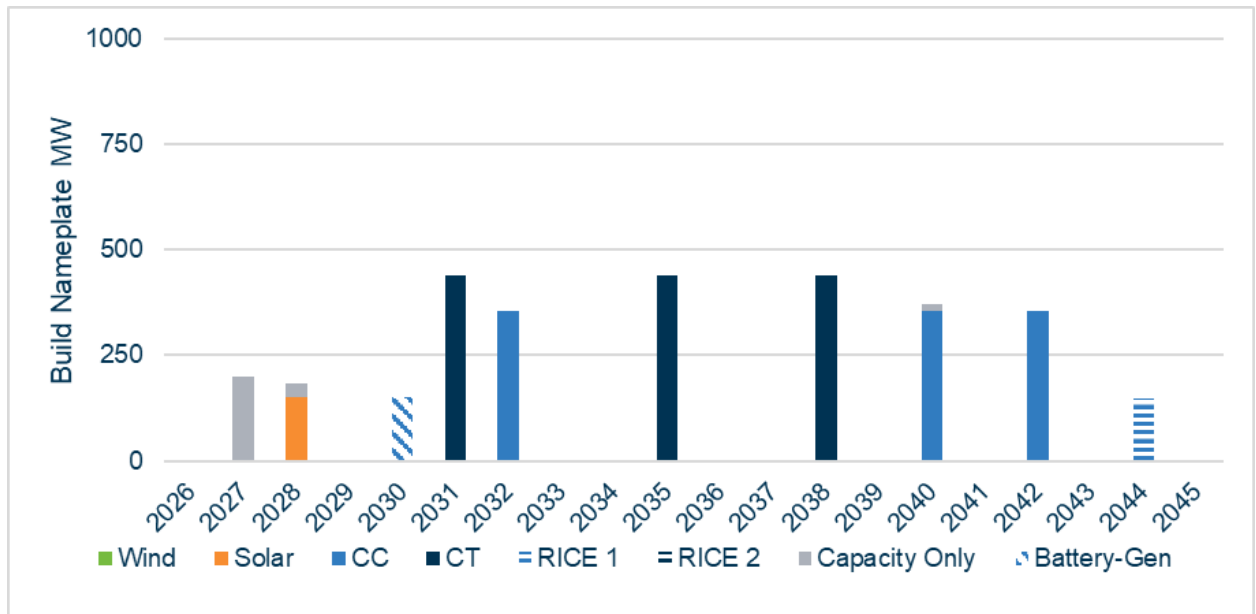
19 A: The IRP process is carried out in accordance with the Commission’s Electric Utility
20 Resource Planning Rules that are contained in Chapter 22 (Electric Utility Resource
21 Planning) found in 20 Missouri Code of State Regulations (CSR), Division 4240. The IRP
22 process ultimately results in the selection of a Preferred Plan that reflects the combination
23 of supply-side and demand-side resources that a utility will use to meet forecasted customer
24 load requirements for the next twenty years.

1 **Figure 1: Evergy Missouri Metro May 2026 Preferred Plan – Plan ACAA (tabular)**

Year	Wind (MW)	Solar (MW)	Battery (MW)	Thermal (MW)	Capacity (Summer MW)	DSM (Summer MW)	Retirements (MW)
2026	0	0	0	0	0	143	0
2027	0	0	0	0	201	169	0
2028	0	150	0	0	32	192	0
2029	0	0	0	0	0	151	0
2030	0	0	150	0	0	150	0
2031	0	0	0	440	0	150	0
2032	0	0	0	355	0	148	0
2033	0	0	0	0	0	146	0
2034	0	0	0	0	0	146	0
2035	0	0	0	440	0	145	0
2036	0	0	0	0	0	144	0
2037	0	0	0	0	0	141	0
2038	0	0	0	440	0	137	375
2039	0	0	0	0	0	134	0
2040	0	0	0	355	16	134	0
2041	0	0	0	0	0	133	0
2042	0	0	0	355	0	132	0
2043	0	0	0	0	0	130	0
2044	0	0	0	148 ³	0	129	0
2045	0	0	0	0	0	130	0

³ EMM's 2026 IRP Annual Update selected a 148 MW Reciprocating Internal Combustion Engine ("RICE") unit in 2044. Id. at 4.

Figure 2: Evergy Missouri Metro May 2026 Preferred Plan – Plan ACAA (graphical)



Q: Is Buchanan Bluffs Energy Center Unit 2 contained in the Evergy Missouri Metro Preferred Plan filed in May 2026?

A: Yes. As depicted above in Figures 1 and 2, the 2026 IRP Preferred Plan ACAA shows 355 MW of thermal resources to be added in 2032 which represents one-half of the Buchanan Bluffs Energy Center Unit 2 generating unit.

Q: How does the cost of Buchanan Bluffs Energy Center Unit 2 compare to the cost assumption for a 2032 CCGT in the 2026 IRP?

A: According to Evergy Witness Kyle Olson, the Buchanan Bluffs Energy Center Unit 2 is currently estimated to cost ****[REDACTED]****, or approximately ****[REDACTED]**/kw**. The

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2026 IRP cost assumption for a CCGT resource with commercial operations starting in 2032 was **[REDACTED]**/kW.

Q: Is Buchanan Bluffs Energy Center Unit 2 still considered essential for Evergy Missouri Metro to implement its Preferred Plan?

A: Yes. The Project is vital to meeting Evergy Missouri Metro's capacity and energy requirements. This resource helps to address the most pressing capacity deficits and was consistently selected across majority of the alternative resource plans, while also confirming the need for other projects listed within EMM's 2025 IRP Annual Update, which also selected the CCGT in 2032.⁴

Q: What is Evergy Missouri Metro's need for capacity resources as it relates to the Buchanan Bluffs Energy Center Unit 2?

A: Evergy Missouri Metro's capacity needs are expected to grow over time because of increasing SPP planning reserve margin requirements and significant large load growth, as discussed by Evergy witness Zachary Gladhill (Vice President of Strategy and Long-Term Planning). The summer planning reserve margin increases from 16% for summer 2026 to 17% for summer 2029, and the winter margin increases from 36% to 38% between the 2026/27 and 2029/30 winter seasons.⁵ SPP has also added a separate winter resource adequacy requirement under which utilities must show they have enough accredited winter capacity or otherwise are subject to deficiency payments.⁶ SPP's loss-of-load analyses indicate that larger winter reserve margins will be needed in later years as cold-weather outages, variability in winter peak, and overlapping planned outages increase.⁷ Evergy

⁴ See EMM 2026 IRP Annual Update at 3-4, 114-115.

⁵ Id. at 11-12.

⁶ Id. at 41.

⁷ Id.

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1 Metro's 2026 IRP forecasts that winter capacity needs will exceed 300 MW by winter
2 2028/29, growing to almost 700 MW by winter 2031/32 and 800 MW by winter 2033/34.⁸

3 Evergy Missouri Metro's summer peak is forecasted to grow from approximately
4 3.7 gigawatts ("GW") in 2026 to 4.6 GW (24%) by 2032 and 5.4 GW by 2045 (46%) in
5 system peak growth.⁹ A significant portion of this growth is driven by large-load
6 customers. The 2026 capacity balance shows that EMM is short of summer capacity
7 starting in 2027 and that this shortfall grows from 2030 through 2032. The shortfall then
8 levels off beginning in 2033 when the extended service life of coal plant LaCygne #1 is
9 added to the forecast.¹⁰ After 2030, Evergy Missouri Metro is projected to need greater
10 amounts of summer capacity, exceeding 700 MW in the 2030's.¹¹

11 Increasing SPP planning reserve margins, as well as winter and summer load
12 growth demonstrate that Evergy Missouri Metro needs the owned, dispatchable, and
13 accredited generation provided by the Buchanan Bluffs Energy Center Unit 2, rather than
14 continued dependence on a tightening and increasingly costly SPP wholesale market for
15 capacity.

16 **Q: How will the Buchanan Bluffs Energy Center Unit 2 contribute to meeting these**
17 **capacity needs?**

18 A: The Buchanan Bluffs Energy Center Unit 2 is a firm-fueled, dispatchable CCGT unit that
19 will provide its accredited capacity in both the summer and winter seasons. Under SPP's
20 Performance-Based Accreditation, a new CCGT resource with firm fuel supply is expected

⁸ Id. at 73.

⁹ Id. at 6.

¹⁰ Id. at 72.

¹¹ Id. at 71.

1 to receive approximately 97% accreditation in the early years of operation.¹² As with all
2 dispatchable generation in the SPP, Buchanan Bluffs Energy Center Unit 2’s future
3 accreditation will be determined based on operating performance of the unit. Buchanan
4 Bluffs Energy Center Unit 2 “adds efficient baseload energy and capacity as the system
5 transitions from a net energy seller to a position requiring new generation to match growing
6 customer consumption,”¹³ as well as meeting SPP’s planning reserve margin in the winter
7 and summer.

8 **Q: Is SPP changing its resource accredited capacity methodology for solar and battery**
9 **storage?**

10 A: Yes. Beginning in the summer of 2026, the accredited capacity of renewable and storage
11 resources is determined by SPP’s Effective Load Carrying Capability (“ELCC”)
12 methodology.¹⁴ ELCC methodology accounts for a resource’s variability, its duration
13 limitations, and its availability, and it measures how effectively the resource produces
14 energy at the times needed to meet load.¹⁵ ELCC accreditation varies by season and
15 changes over time. Compared with prior estimated ELCC degradation curves, both new
16 solar and new storage resources now are generally expected to have better accreditation in
17 the winter throughout the 20-year IRP planning horizon. In the summer, both resources
18 are forecasted to have somewhat lower accreditation in the early years, with more favorable
19 values in the later years of the planning horizon.¹⁶

¹² Id. at 50.

¹³ Id. at 115.

¹⁴ See EMM 2026 IRP Annual Update at 43.

¹⁵ Id. at 43, 47.

¹⁶ Id. at 48.

1 **Q: What are the criteria or cut-off points that determine which large-load customers are**
2 **included as inputs to Evergy Missouri Metro’s 2026 IRP Annual Update ?**

3 A: Evergy has a robust pipeline of prospective large-load customer projects, but none are
4 included in base load planning until key criteria on Evergy’s internal review process has
5 been met, in order to avoid exposing the Preferred Plan to unnecessary risks. Generally,
6 for a large load to be included in base load IRP planning, Evergy expects that a large-load
7 customer project has met at least one of these criteria: (1) has recently commenced electric
8 service from Evergy, (2) has executed an energy services agreement (“ESA”) under the
9 Large-Load Power Service (“LLPS”) tariff, or (3) has a finalized SPP load addition study
10 (typically Attachment AQ) and expects to execute an LLPS ESA within the next 3–6
11 months.

12 **Q: What large-load customers were evaluated and ultimately included as inputs into**
13 **Evergy Missouri Metro’s 2026 Annual IRP Update?**

14 A: As Mr. Gladhill addresses in more detail, EMM is seeing an increase in large-load customer
15 interest. Evergy Metro, Inc. has three large-load customer projects that met the base load
16 planning criteria and therefore, were carried through every load forecast scenario, low, mid,
17 and high, in EMM’s 2026 IRP Annual Update. The total combined peak of these three
18 large load customer projects is projected to be approximately 900 MW at steady state.¹⁷
19 The largest of the three customers is located in Evergy Missouri Metro’s service territory
20 and was previously incorporated into Evergy Missouri Metro’s 2025 Annual Update
21 Preferred Plan load forecast. This customer is currently using electricity for active site
22 construction and executed an LLPS ESA in the first quarter of 2026.

¹⁷ Id. at 23-24.

1 Additionally, there is a second, smaller customer project that is located in EMM's
2 territory that is also online. This customer is receiving service under an existing Large
3 Power Service tariff due to its current peak MW load being projected under the 75 MW
4 threshold for LLPS tariff qualification. When and if this customer's project expands,
5 leading to exceeding the 75 MW threshold, Evergy will transition the customer to the LLPS
6 tariff. Combined, these two aforementioned EMM customers account for nearly 90% of
7 the total large load incorporated into Evergy Missouri Metro's 2026 IRP base load forecast.

8 The third large load is in Evergy Kansas Metro's territory and accounts for the
9 remaining 10% of the total large load included in the 2026 IRP load forecast. This
10 customer's project is not yet online, but it has completed the required SPP load addition
11 study (Attachment AQ). The project is in the final commercial negotiation stage, nearly
12 completing Evergy's large load process. This customer's project qualifies for the LLPS
13 tariff and is expected to have an ESA executed later in 2026.

14 **Q: Is the Buchanan Bluffs Energy Center Unit 2 needed to provide service to Evergy**
15 **Missouri Metro's large load customers?**

16 **A:** Yes. Buchanan Bluffs Energy Center Unit 2 provides firm dispatchable energy and
17 capacity by adding in 2032 "efficient baseload energy and capacity as the system
18 transitions from net energy seller to a position requiring new generation to match growing
19 customer consumption."¹⁸

¹⁸ See EMM 2026 IRP Annual Update at 115.

Q: Are there alternative plans with a lower NPVRR than Plan ACAA in the May 2026 Update?

A: Yes. For Metro’s 2026 IRP Annual Update, Evergy Missouri Metro tested alternative resource plans, and two of them, Plans ACEA and ACCA, produced a lower NPVRR than EMM’s Preferred Plan ACAA, as shown in Figure 3.¹⁹

Figure 3 – NPVRR Rankings for Alternative Resource Plans

Rank	Plan	NPVRR	Difference	Description
1	ACEA	32,824		No 2032 CCGT
2	ACCA	32,824	0	No 2030 Storage
3	ACAA	32,839	15	Base Builds
4	ACBA	32,929	105	No 2028 Solar
5	ACDA	33,069	245	No Mullin Creek #2

When compared to Plan ACAA, Plans ACEA and ACCA continue to select a 150 MW solar facility in 2028 and Mullin Creek #2 in 2031,²⁰ but substitute a 150 MW solar for the 150 MW of battery storage in 2030, and move the half CCGT (Buchanan Bluffs Energy Center Unit 2) commercial operation date from 2032 to 2031.²¹

As a result, Plans ACEA and ACCA select two major thermal projects (Mullin Creek #2 and Buchanan Bluffs Energy Center Unit 2) in the same construction year and substitute solar for battery storage.

¹⁹ Id. at 83.

²⁰ EMM has a pending CCN Application for a 440 MW simple-cycle natural gas (“SCGT”) generating plant known as Mullin Creek #2. See Application, In re Evergy Mo. Metro CCN App. for a Natural Gas Facility, No. EA-2026-0154 (May 14, 2026).

²¹ See EMM 2026 IRP Annual Update at 82.

1 **Q: Why did Evergy Missouri Metro select Plan ACAA despite the higher cost?**

2 A: The cost difference is insignificant while the practical advantages of Plan ACAA were
3 substantial as both Plans ACEA and ACCA present execution and construction concerns.
4 On a probability-weighted NPVRR basis, the difference between Plan ACAA and the
5 lowest-cost plans is “less than \$15 million — or less than 0.05% of the 20-year revenue
6 requirement.”²²

7 Regarding execution and construction concerns, Plans ACEA and ACCA require
8 Mullin Creek #2 and Buchanan Bluffs Energy Center Unit 2 to reach commercial operation
9 in the same year, 2031. These plans would require Evergy Missouri Metro to “concentrate
10 capital deployment and construction within overlapping timelines during a period of
11 constrained Engineering, Procurement, and Construction (‘EPC’) availability and gas
12 turbine lead times of five to seven years.”²³

13 Additionally, the lower-cost plans also substitute a second solar project for battery
14 storage in 2030, but solar development federally and in Missouri “faces growing permitting
15 challenges, including local zoning restrictions, organized community opposition, and
16 proposed state legislation that could further constrain siting.”²⁴ Constructing a solar facility
17 in 2030 would increase the risk of the facility not qualifying for production tax credit or
18 investment tax credit under the One Big Beautiful Bill Act’s (H.R. 1, 119th Congress)
19 (“OBBBA”) accelerated phase-out of these credits, thereby substantially increasing the net
20 cost of the solar facility above what was modeled.²⁵ As discussed in EMM’s 2026 IRP
21 Annual Update, “Evergy has identified a viable solar project for the 2028 addition but has

²² See EMM 2026 IRP Annual Update at 5.

²³ Id. at 114.

²⁴ Id.

²⁵ Id.

fewer executable options for a second project in the 2029–2030.”²⁶ Moreover, as discussed, battery storage provides superior winter capacity and accreditation under ELCC.²⁷

As Evergy Missouri Metro’s 2026 IRP Annual Update explains, “Plan ACAA delivers a more diverse near-term resource portfolio — solar, battery storage, SCGT, and CCGT— that hedges against technology-specific risks and is consistent with Missouri Senate Bill 4’s emphasis on firm, dispatchable generation. The \$15 million cost premium is a prudent investment in plan executability and resilience that protects customers from the consequences of project delays, permitting failures, or stranded tax credit eligibility in a rapidly changing development environment.”²⁸ Overall, Plan ACAA is the resource portfolio that best satisfies EMM’s resource planning necessary to provide safe, reliable, and efficient energy services at just and reasonable rates that is in the public interest.²⁹

Q: Are there risks associated with delaying the Buchanan Bluffs Energy Center Unit 2?

A: Yes. There are significant risks to both cost and reliability. If Evergy Missouri Metro cannot add this owned, accredited capacity on schedule, it faces a significant rise in expenses. The cost of new gas turbines has increased substantially due to supply chain constraints, inflation, limited manufacturing capacity, and strong demand growth driven by data center investment nationwide. S&P Global has reported wait times of 5–7 years for gas-turbine orders and cost increases of over 200% compared to a few years ago.³⁰ Evergy Missouri Metro’s 2026 Annual IRP Update estimates total costs for new natural

²⁶ Id.

²⁷ Id. at 113-114.

²⁸ Id. at 114.

²⁹ See EMM 2026 IRP Annual Update at 111.

³⁰ Anderson, Jared, “Wait Times for US Gas-Fired Turbines Averaging 5-7 Years, Costs Up Sharply,” S&P Capital IQ (May 25, 2025).

1 gas-fired additions are approximately **[REDACTED]**% higher than forecasted just one year ago
2 in the 2025 Annual Update.³¹

3 Any delay could push the Buchanan Bluffs Energy Center Unit 2 beyond the
4 window needed to meet Metro's capacity requirements, forcing reliance on expensive and
5 scarce market capacity purchases and exposing customers to reliability risk and potential
6 SPP deficiency payments.

7 **IV. EVERGY MISSOURI WEST'S IRP, AND THE BUCHANAN BLUFFS ENERGY**
8 **CENTER UNIT 2 AND FOXTROT BESS PROJECTS**

9 **Q: Please describe Evergy Missouri West's most recent Preferred Plan.**

10 **A:** Evergy Missouri West's most recent Preferred Plan, its August 2026 Revised Resource
11 Plan, was filed on August 31, 2026, and modified the 2026 Preferred Plan that was
12 presented in its 2026 IRP Annual Update, filed on May 7, 2026, in Case No. EO-2026-
13 0189.

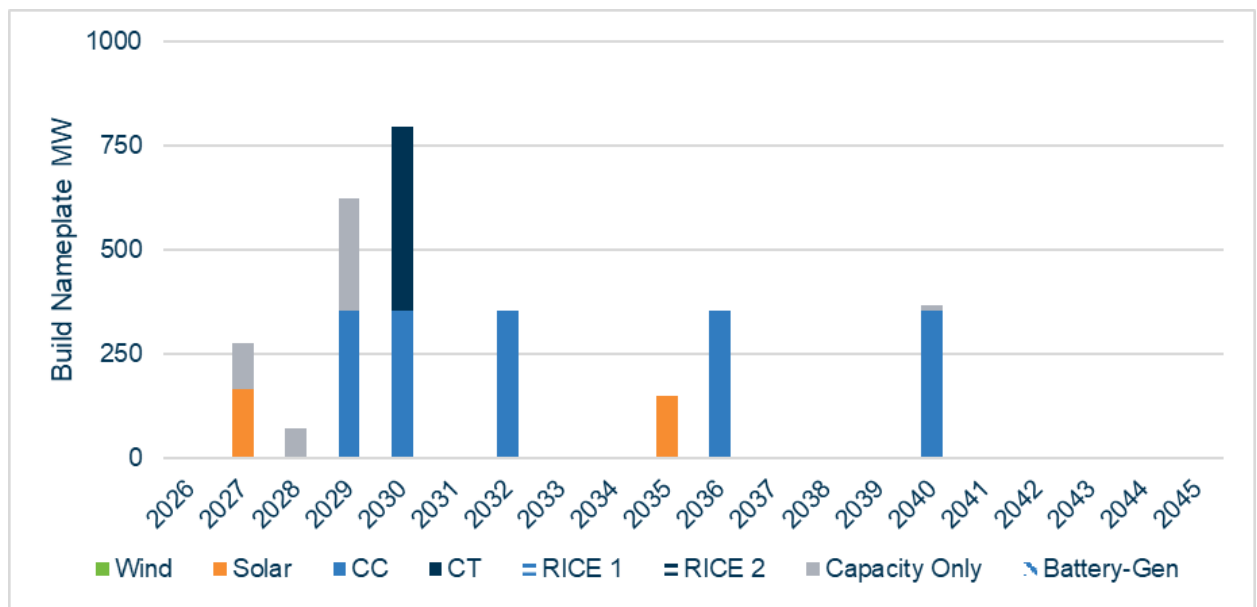
14 The plan submitted in May 2026, shown below, is known as Plan ADAA which
15 identified the need for a half CCGT (355 MW) in 2032 which is Buchanan Bluffs Energy
16 Center Unit 2.³²

³¹ See EMM 2026 IRP Annual Update at 18-19.

³² Id. at 4-5.

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Figure 4: Evergy Mo. West May 2026 Preferred Plan – Plan ADAA (graphical)



Plan ADAA produced the lowest probability-weighted NPVRR among the retirement plans modeled by Evergy Missouri West, at \$23,277 million.³³ Evergy Missouri West’s near-term additions were selected consistently across the alternative resource plans tested, and EMW has already obtained CCNs for those resources. The Commission approved EMW’s CCN requests for Sunflower Sky Solar Facility and the Foxtrot Solar Facility in No. EA-2024-0292, as well as its request for three natural gas facilities in No. EA-2025-0075.

Q: Why did Evergy Missouri West revise the Preferred Plan that was submitted in May 2026 and replace it with the August 2026 Revised Resource Plan?

A: Evergy Missouri West’s prospective load continued to increase, driven by the data center economy, as well as its Large Load Power Service tariffs. In June 2026, roughly a month after EMW filed its 2026 IRP Annual Update, Evergy amended the Electric Service Agreement (“ESA”) of a large load customer, which was included in the 2026 Preferred

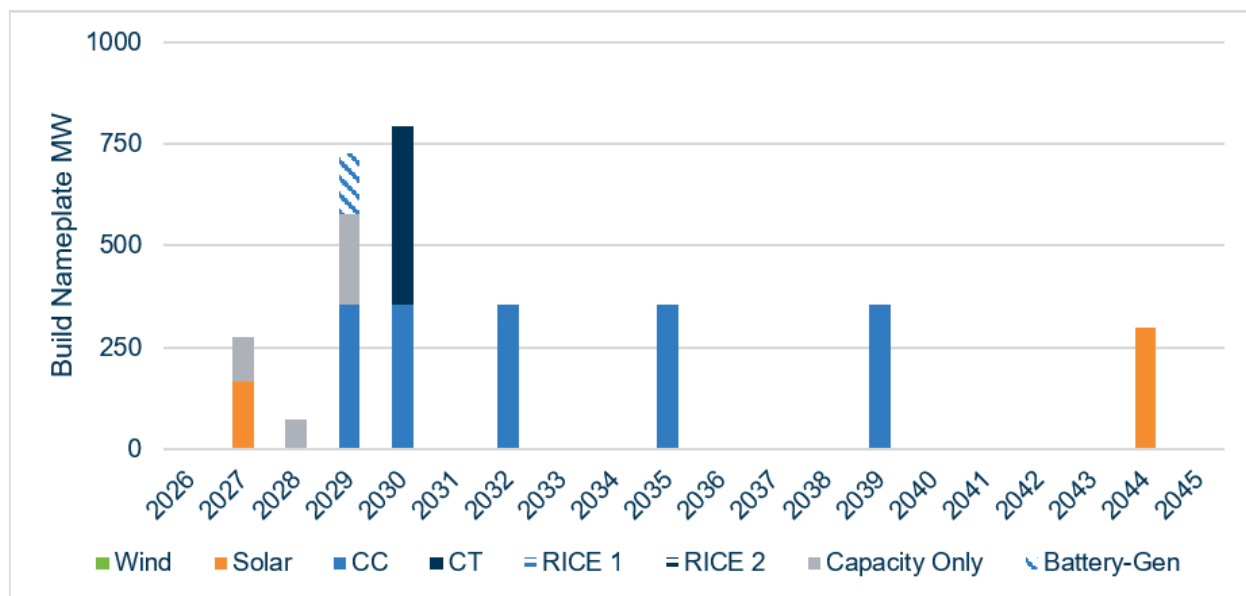
³³ See EMW 2026 IRP Annual Update at 111.

Plan, increasing the customer's total peak demand by 75 MW. Consequently, EMW conducted additional modeling and analysis over the summer of 2026 which indicated that adjustments to its Preferred Plan were appropriate. Figures 5 and 6 below depict the August 2026 Revised Resource Plan for Evergy Missouri West that was submitted on August 31, 2026, which is known as Plan IDAA.

Figure 5: Evergy Missouri West August 2026 Revised Resource Plan – Plan IDAA (tabular)

Year	Wind (MW)	Solar (MW)	Battery (MW)	Thermal (MW)	Capacity (Summer MW)	DSM (Summer MW)	Retirements (MW)
2026	0	0	0	0	0	98	0
2027	0	165	0	0	110	113	0
2028	0	0	0	0	71	123	0
2029	0	0	150	355	268	90	0
2030	0	0	0	795	0	90	0
2031	0	0	0	0	0	90	0
2032	0	0	0	355	0	89	0
2033	0	0	0	0	0	89	0
2034	0	0	0	0	0	89	0
2035	0	0	0	355	0	89	0
2036	0	0	0	0	0	89	59
2037	0	0	0	0	0	89	0
2038	0	0	0	0	0	88	89
2039	0	0	0	355	0	88	0
2040	0	0	0	0	0	88	0
2041	0	0	0	0	0	87	0
2042	0	0	0	0	0	87	0
2043	0	0	0	0	0	87	0
2044	0	150	0	0	0	87	0
2045	0	0	0	0	0	124	0

Figure 6: Evergy Missouri West August 2026 Revised Resource Plan – Plan IDAA (graphical)



Q: What is Evergy Missouri West’s need for capacity resources as it relates to Buchanan Bluffs Energy Center Unit 2?

A: The Buchanan Bluffs Energy Center Unit 2 is needed to satisfy Evergy Missouri West’s capacity needs in both the winter and summer periods. EMW’s 2026 Annual Update shows that it needs an additional 100 MW in the 2026/27 winter, rising to almost 600 MW by the 2028/29 winter.³⁴ Its summer peak is expected to rise from approximately 2.2 GW in 2026 to 2.9 GW by 2032, approximately 32% growth driven by higher SPP requirements and load growth.³⁵

In the near term, Evergy Missouri West bridges its capacity position through market capacity purchases of up to 250 MW in the summer and 500 MW in the winter during 2026 through 2029.³⁶ However, this is no longer a prudent long-term substitute given the market

³⁴ Id. at 70.

³⁵ Id. at 112.

³⁶ Id.

1 dynamics of historic load growth and tightening market capacity available. As the
2 Commission recognized in its Report and Order in Case No. EA-2025-0075, Evergy
3 Missouri West needs to “invest in its own generation, especially dispatchable resources,
4 instead of relying on power purchase agreements and the wholesale electricity markets.”³⁷

5 **Q: How does Buchanan Bluffs Energy Center Unit 2 help to serve Evergy Missouri**
6 **West’s large-load customers?**

7 A: Buchanan Bluffs Energy Center Unit 2 is “a critical addition that addresses the residual
8 capacity gap emerging as large load customers ramp to steady-state consumption which
9 approaches 800 MW of peak demand by 2032.”³⁸

10 Evergy Missouri West’s base load planning reflects these customers directly, as
11 there are currently five large-load customers that meet the criteria for base load planning
12 and which were incorporated in all load forecast scenarios, low, mid, and high, for its 2026
13 IRP Annual Update.³⁹ As discussed further by Mr. Gladhill, these large load customers
14 had a total combined steady state peak projected at approximately 800 MW in the May
15 2026 IRP filing.⁴⁰ With a June 2026 LLPS ESA amendment raising one of the customer’s
16 peak demand by 75 MW, increasing the total combined peak projection to now nearly
17 900 MW.

³⁷ See Report & Order at 24, In re Evergy Mo. West, Inc. CCN App. for Three Natural Gas Facilities, No. EA-2025-0075 (July 31, 2025).

³⁸ See EMW 2026 IRP Annual Update at 111.

³⁹ Id. at 23-24.

⁴⁰ Id.

1 **Q: How does the cost of Buchanan Bluffs Energy Center Unit 2 compare to the cost**
2 **assumption for a 2032 CCGT in the 2026 IRP?**

3 A: According to Evergy Witness Kyle Olson, the Buchanan Bluffs Energy Center Unit 2 is
4 currently estimated to cost ****[REDACTED]****, or approximately ****[REDACTED]**/kw**. The
5 2026 IRP cost assumption for a CCGT resource with commercial operations starting in
6 2032 was ****[REDACTED]**/kw**.

7 **Q: How does the 109 MW Foxtrot BESS Project relate to the 150 MW storage addition**
8 **identified in Plan IDAA?**

9 A: Plan IDAA identifies a modeled need for 150 MW of four-hour storage beginning in 2029.
10 The Foxtrot BESS Project would satisfy approximately 109 MW of that modeled need.
11 Foxtrot is a specifically identified, executable project that meets a substantial portion of
12 the storage need selected by the revised Preferred Plan.

13 **Q: How will the Foxtrot BESS Project contribute to meeting Evergy Missouri West's**
14 **capacity needs?**

15 A: The approximately 109 MW Foxtrot BESS Project will provide superior summer and
16 winter capacity to Evergy Missouri West beginning in fourth quarter of 2028 when acute
17 deficits could be faced. It is an essential resource as it provides dispatchable, operational
18 flexibility essential to satisfy EMW's winter and summer capacity requirements during the
19 years of greatest near-term deficit⁴¹ Under SPP's ELCC framework, Evergy estimates that
20 a four-hour BESS resource, like Foxtrot BESS, will receive summer capacity accreditation
21 of approximately 70% to 90% and winter accreditation of approximately 50% to 70% in
22 the first decade of operation.

⁴¹ See Evergy Missouri West 2026 Revised Resource Plan at 3-4 (August 2026).

1 **Q: Why does the need for Foxtrot BESS appear in EMW's August 2026 Revised**
2 **Resource Plan when it was not in the May 2026 Preferred Plan Update?**

3 A: As noted above, shortly after EMW filed its Preferred Plan IRP Annual Update in May
4 2026, Evergy Missouri West amended the ESA of a large load customer taking service
5 under its Large Load Power Service ("LLPS") tariff which increased its total peak demand
6 by 75 MW in both the summer and winter seasons, beginning with the winter 2028-2029
7 planning season.

8 **Q: How does the cost of Foxtrot BESS compare to the cost assumption for 2029 battery**
9 **used in the 2026 IRP?**

10 A: According to Evergy Witness John Carlson, the Foxtrot BESS project is currently
11 estimated to cost ****[REDACTED]****, or approximately ****[REDACTED]**/kw**. The 2026 IRP cost
12 assumption for a CCGT resource with commercial operations starting in 2032 was
13 ****[REDACTED]**/kw**.

14 **Q: Are there tax benefits available to lower the cost of the Foxtrot BESS?**

15 A: Yes. The 2030 Foxtrot BESS Project qualifies for a 50% investment tax credit ("ITC"), as
16 discussed in detail by Evergy witness John Grace (Senior Director of Corporate Planning
17 and Financial Performance). Unlike the recent phase-out of production tax credits for wind
18 and solar projects, the ITC for storage facilities is available for projects like the Foxtrot
19 BESS that begin construction before 2034.

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1 **V. RETIREMENT AND REPLACEMENT OF FACILITIES, AND SECTION**
2 **393.401⁴² (WATT FOR WATT) REQUIREMENTS**

3 **Q: How does Evergy Missouri Metro's Preferred Plan treat existing plant retirements?**

4 A: EMM's Preferred Plan ACAA defers several coal retirements so that accredited capacity
5 remains on the system while the Projects are constructed. Evergy Missouri Metro delays
6 the La Cygne # 1 retirement date to March 2038 from March 2033 in EMM's 2025 IRP
7 Annual Update.⁴³ The La Cygne # 2 and Iatan # 1 retirement dates, which were March
8 2040 in the 2025 Annual Update, are delayed beyond the 20-year planning horizon which
9 avoids the cost and reliability risk of replacing these units during a period of elevated
10 construction costs.⁴⁴

11 Retaining La Cygne 1 through March 2038 does not substitute for Buchanan Bluffs
12 Energy Center Unit 2. Buchanan Bluffs Energy Center Unit 2 addresses the Companies'
13 growing capacity and energy needs beginning in 2032, while the La Cygne 1 extension
14 avoids creating an additional replacement need immediately thereafter. Together, the new
15 resource and the retirement extension improve EMM's capacity position through a period
16 of increasing load, tighter resource-adequacy requirements, and constrained availability of
17 new generation. It also reduces Evergy Missouri Metro's reliance on the SPP wholesale
18 market which is a less viable option ⁴⁵[OBJ] The 2026 IRP reflects Evergy Metro's
19 expectation that market capacity available for purchase will decline dramatically beyond
20 2030. SPP is in the process of significantly tightening resource adequacy requirements,
21 including raising reserve margins, reducing capacity accreditation through performance-

⁴² Statutory citations are to the Missouri Revised Statutes (2016), as amended.

⁴³ See EMM 2026 IRP Annual Update at 4.

⁴⁴ Id. at 4, 115.

⁴⁵ Id. at 123.

1 based and effective load carrying capability (ELCC) methodologies, and imposing
2 penalties for failing to meet winter requirements.⁴⁶ Evergy expects market capacity to
3 be scarce relative to recent history, limiting potential purchases beyond current
4 assumptions.

5 **Q: How does Evergy Missouri West’s Preferred Plan treat existing plant retirements?**

6 A: EMW’s August 2026 Revised Resource Plan – Plan IDAA defers coal retirements to help
7 absorb near-term load growth, as did the May 2026 Preferred Plan ADAA.⁴⁷ Evergy
8 Missouri West’s 2026 IRP Annual Update Preferred Plan ADAA showed that it needs
9 additional summer capacity in 2027 through 2029.⁴⁸ With the thermal additions approved
10 in No. EA-2025-0075 in commercial operation by 2030, EMW will be “in balance” in
11 2030, but then is projected to be slightly short again beginning in summer 2033 and
12 beyond.⁴⁹ Therefore, moving the Jeffrey # 3 coal plant retirement from March 2031 to
13 March 2036, as well as shifting the Lake Road Unit 4/6 natural gas plant retirement from
14 December 2030 to March 2038 provide Evergy Missouri West with 131 MW of capacity
15 to offset the load growth in that period.⁵⁰

16 Deferring these retirements also reduces EMW’s reliance on power purchase
17 agreements and the SPP wholesale market which the Commission has found to be in the
18 public interest.⁵¹ As its 2026 IRP Annual Update explains, with high load growth expected
19 over the next few years, planned retirements, and expiring wind purchase power

⁴⁶ Id. at 42-43, 51. See SPP Media Release, “SPP Board approves New Planning Reserve Margins to Protect against High Winter, Summer Use” (Aug. 6, 2024); Order Accepting Tariff Revisions, Southwest Power Pool Inc., No. ER24-2397-000 (FERC, Nov. 4, 2024) (approving addition of a Winter Season Resource Adequacy Requirement). ELCC refers to effective load carrying capability.

⁴⁷ See EMW 2026 IRP Annual Update at 121-24.

⁴⁸ Id. at 69.

⁴⁹ Id.

⁵⁰ Id.

⁵¹ See Report & Order at 24, 34, No. EA-2025-0075 (July 31, 2025).

1 agreements, Evergy Missouri West does not expect other utilities in SPP to build
2 generation to serve the needs of its customers.⁵²

3 **Q: How does deferring these retirements relate to Missouri’s watt-for-watt replacement**
4 **provision of Section 393.401?**

5 A: Section 393.401 requires a replacement of “current capacity with dispatchable sources of
6 energy prior to decommissioning an existing power plant, ensuring Missouri continues to
7 have reliable power generation resources” which has been commonly referred to as the
8 watt-for-watt requirement.

9 Compliance is measured not by nameplate capacity, but by the relevant regional
10 transmission⁵³ operator’s average summer and winter accredited capacity for both the
11 retiring facility and the replacement resources. Before decommissioning, the utility must
12 certify to the Commission that it has secured and placed on the grid replacement capacity
13 equal to or greater than the retiring plant’s accredited capacity, taking into account any
14 anticipated loss of load. In addition, Section 393.401.2 requires that at least 80% of the
15 replacement portfolio’s average accredited capacity consist of dispatchable resources, so
16 that the replacement capacity is not only sufficient in accredited terms but also
17 operationally controllable to meet reliability needs.

18 By deferring the decommissioning dates of Evergy Missouri Metro and Evergy
19 Missouri West assets, as discussed above, the Applicants avoid triggering the Section
20 393.401 framework governing the recovery of retired plant costs during the period in which
21 their individual capacity positions are most acute. The units whose retirements have been
22 extended will continue to provide accredited capacity that will enable the Companies to

⁵² See EMW 2026 IRP Annual Update at 39.

⁵³ For the Evergy utilities, the relevant RTO is Southwest Power Pool, Inc.

1 meet SPP's resource adequacy requirements. Those continuing operations will avoid any
2 Section 393.401 implications until Buchanan Bluffs Energy Center Unit 2 and the Foxtrot
3 BESS Project are fully online, along with any other replacement capacity, and the
4 Companies can manage generation retirements without incurring any reliability risk.

5 **VI. CONCLUSION**

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

7 A: The Companies' 2026 Integrated Resource Plan analyses demonstrate a substantial and
8 growing need for accredited capacity and energy driven by increasing customer demand,
9 including committed large-load growth, higher Southwest Power Pool summer and winter
10 resource-adequacy requirements, and declining reliance on market capacity as a prudent
11 long-term planning solution. The analyses also show that the Companies must pursue a
12 diversified and executable portfolio that includes demand-side resources, renewable
13 generation, storage, retained existing generation, and efficient firm, dispatchable resources.

14 Buchanan Bluffs Energy Center Unit 2 is consistent with both EMM's 2026
15 Preferred Plan and EMW's August 2026 Revised Resource Plan. The Project will be a full,
16 approximately 710 MW combined-cycle generating facility, with each Company owning
17 an approximately 355 MW share. It will provide efficient, dispatchable energy and highly
18 accredited summer and winter capacity at a time when both Companies project significant
19 capacity and energy needs. Its continued selection across the Companies' planning
20 analyses confirms that it is not dependent on a single load forecast or isolated modeling
21 result.

22 EMW's August 2026 Revised Resource Plan also identifies a near-term need for
23 battery storage following a 75 MW increase in the forecast demand of a large-load
24 customer with an executed ESA. The Foxtrot BESS Project will satisfy a substantial

1 portion of that identified storage need and will provide dispatchable capacity, rapid
2 operational flexibility, and a resource whose operating characteristics complement EMW's
3 thermal and renewable resources. Its location is adjacent to the previously approved Foxtrot
4 Solar Project and its expected eligibility for investment tax credits further support its value
5 to customers.

6 The Companies are not asking the Commission to rely on the IRPs alone. The IRPs
7 establish the integrated portfolio need and planning context, while the other testimony in
8 this case provides project-specific evidence concerning cost, execution, fuel supply, siting,
9 financing, customer protections, and risk. Taken together, that evidence demonstrates that
10 the Projects are needed, are consistent with prudent long-term resource planning, and will
11 help the Companies provide safe and reliable service at just and reasonable rates while
12 retaining flexibility to respond to future changes in load, technology, fuel markets, and
13 public policy.

14 For these reasons, approval of the requested CCNs for Buchanan Bluffs Energy
15 Center Unit 2 and the Foxtrot BESS Project is in the public interest.

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

17 **A:** Yes, it does.

In the Matter of the Application of Evergy Metro,)
 Inc., d/b/a/ Evergy Missouri Metro and Evergy)
 Missouri West, Inc. d/b/a Evergy Missouri West)
 For Permission and Approval of Certificates of)
 Convenience and Necessity Authorizing them to)
 Construct, Install, Own, Operate, Manage,)
 Maintain, and Control Natural Gas and Solar)
 Electrical Production Facilities and a Battery)
 Energy Storage System)

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

Evergy Metro West, Inc. d/b/a Evergy Missouri West

Docket No.: EA-2026-0343

Date: August 31, 2026

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Document/Page	Reason for Confidentiality from List Below
VandeVelde Direct, p. 6, ln. 12	3, 4, and 6
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VandeVelde Direct, p. 20, lns. 4 and 6	3, 4, and 6
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