MISSOURI PUBLIC SERVICE COMMISSION

STAFF

RECOMMENDATION

EVERGY MISSOURI WEST
EVERGY MISSOURI METRO

CASE NO. EA-2025-0075

Jefferson City, Missouri
April 25, 2025

** Denotes Confidential Information **

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I. Executive Summary

On November 15, 2024, Evergy Missouri West, Inc., d/b/a Evergy Missouri West ("EMW") and Evergy Metro, Inc., d/b/a Evergy Missouri Metro ("Evergy Missouri Metro" or "EMM") (collectively, "Evergy") filed a joint application for a Certificate of Convenience and Necessity ("CCN" or "Application") that authorizes EMW to construct, install, own, operate, manage, maintain, and control the following natural gas electrical production facilities: (1) an advanced class 710 megawatt ("MW") combined cycle gas turbine ("CCGT") generating facility,[1] known as the Viola Generating Station ("Viola"), located in Sumner County, Kansas; and (2) a 440 MW simple-cycle gas turbine ("SCGT") generating facility,[2] known as the Mullin Creek #1 Generating Station ("Mullin Creek #1"), located in Nodaway County, Missouri.

Additionally, as stated in the Application and witness testimony, Evergy requests a CCN that authorizes it to construct, install, own, operate, manage, maintain, and control a second advanced class 710 MW CCGT generating facility, known as the McNew Generating Station ("McNew"), and located in Reno County, Kansas.[3] Viola, Mullin Creek #1, and McNew are collectively referred to as the Projects.

[1] A CCGT is generating unit that generates electricity more efficiently by using two types of turbines, working together. Like a SCGT, a CCGT burns natural gas to spin a turbine and generate electricity. In addition, it utilizes the heat output of the SCGT to heat water to produce steam to make additional power in a Heat Recovery Steam Generator ("HRSG").

[2] A SCGT is a gas turbine engine, similar to a jet engine, which utilizes the combustion process to spin a turbine to generate electricity.

[3] Viola, Mullin Creek #1, and McNew may be referred to as the "Projects".

Figure 1 below depicts the Viola and McNew site locations in relation to EMW's service territory and EMM's service territory.[4]

Figure 1

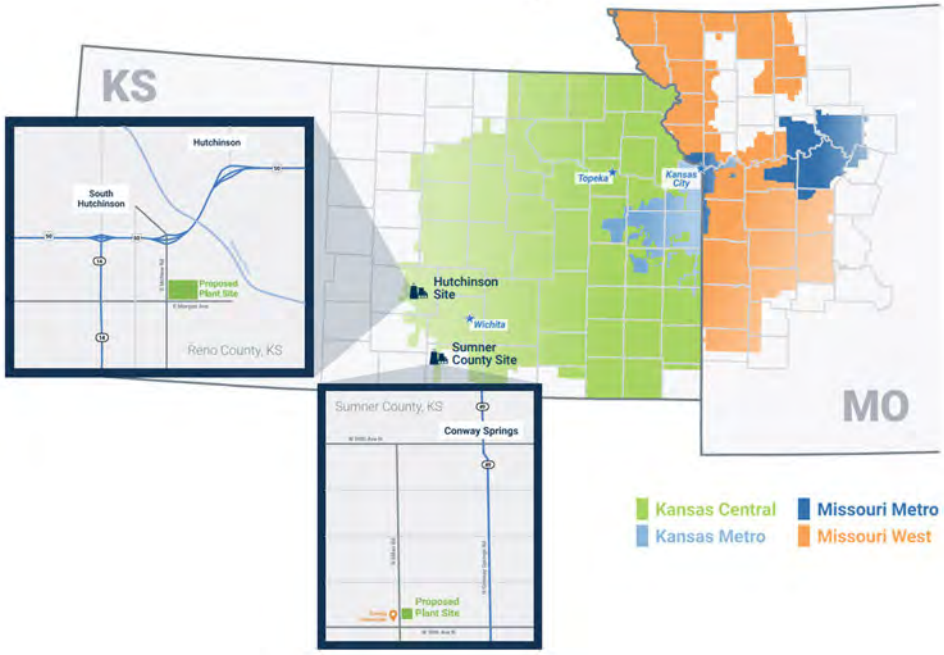
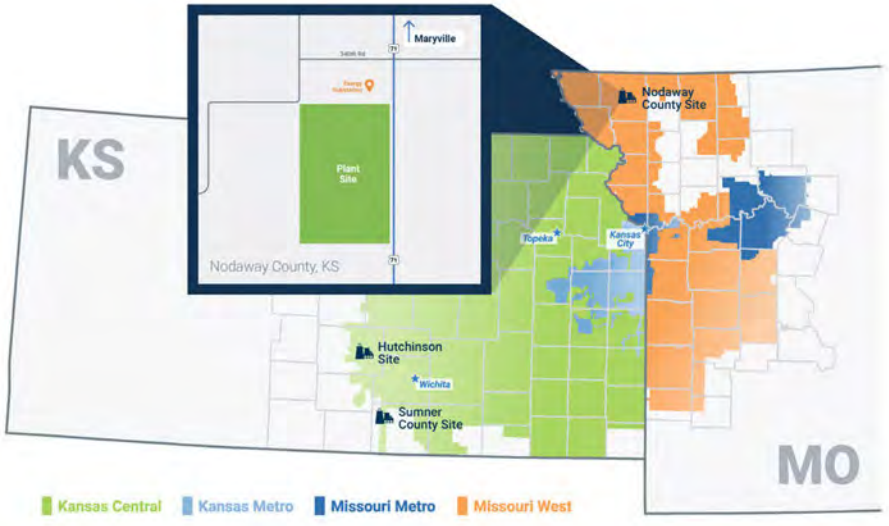


Figure 2 below depicts the Mullin Creek #1 site location in relation to EMW's service territory and EMM's service territory.[5]

Figure 2



[4] EA-2025-0075 Olson Direct, Schedule JKO-1, Page 1.
[5] EA-2025-0075 Olson Direct, Schedule JKO-1, Page 2.

Evergy seeks permission and authority to engage in the proposed self-development transactions; to construct, operate, and finance the Projects; to complete the acquisitions of the Projects by EMW and/or EMM as stated herein; for construction accounting; and for variances from Section (3)(C) of 20 CSR 4240-20.045 ("CCN Rule") to provide plans for restoration of safe/adequate service and as-built design drawings in a later submission. Evergy also requests that the Commission determine under the CCN Rule's Section (2)(C) that its decision to acquire, construct, and operate the Projects is prudent, and that the Commission issue an Order granting the relief requested in the Application by July 8, 2025.

On February 19, 2025, EMW and EMM filed supplemental direct testimony indicating the 50% ownership share of McNew would be EMW and not EMM.[6]

Staff reviewed EMW's CCN Application, Direct and Supplemental Direct Testimony based on the five factors the Commission listed in *In Re Tartan Energy*, GA-94-127, 3 Mo.P.S.C.3d 173, 177 (1994) ("Tartan Criteria"):

- Need,
- Qualifications to own, operate, control and manage the facilities and provide the service,
- Financial ability,
- Economic feasibility, and
- Promotion of the public interest.

These factors provide an over-arching general framework to organize discussion of the evidence when reviewing the various types of CCN applications that come before the Commission. Each CCN case must be evaluated in light of the regulatory context and operating circumstances of a project. The Commission's inquiry does not end at a surface level Tartan analysis.

[6] EA-2025-0075 Kevin Gunn Supplemental Direct, Page 10, lines 4-20.

In summary, based on Staff's review: 1) the Projects are needed; 2) EMW is qualified to construct, install, own, operate, maintain, and otherwise control and manage the Projects; 3) EMW has the financial ability to undertake the Projects; 4) Staff cannot determine that the Projects are economically feasible; and 5) the Projects are in the public interest with the conditions recommended by Staff. Based on this analysis, Staff recommends the Commission approve the CCNs with the conditions recommended by Staff. However, because Staff cannot determine that the Projects are economically feasible, Staff recommends the Commission reject EMW's request for decisional prudence as further discussed by Staff witness J Luebbert in Section IV of this report. Staff further recommends that EMW's request for construction accounting is no longer needed; Senate Bill 4, passed during the 2025 legislative session and signed by Governor Kehoe, allows Plant In-service Accounting to be utilized for new gas plants as further discussed by Staff witness Kimberly K. Bolin in Section V of this report.

Staff's recommended conditions are presented in the public interest section of this report and cover the following topics:

- Economic/IRP Conditions and
- Engineering Conditions.

II. Application Summary

Viola and McNew[7]

Evergy has selected Burns & McDonnell Engineering Company, Inc. ("BMcD") as its Owner's Engineer ("OE"), and is in the process of procuring Power Island Equipment ("PIE") manufactured by Mitsubishi Power Americas Inc. ("Mitsubishi") through a Reservation Agreement leading to a PIE Supply Agreement, along with an Engineer, Procure and Construct ("EPC") Contractor. Each of the 710 MW CCGT stations will consist of a 1x1

[7] EA-2025-0075 Application Paragraph 14 a. – Paragraph 16 a.

single-shaft advanced J-Class gas turbine, an electrical generator, a heat recovery steam generator, and a steam turbine with exhaust cooled by an air-cooled condenser. This is the major equipment included in PIE, and such equipment for these two facilities will be substantially the same. The estimated total cost to construct Viola, excluding allowance for funds used during construction ("AFUDC") is approximately ** [redacted] **. The updated capital cost estimate for Viola, as of supplemental direct testimony, is approximately ** [redacted] **.[8] The estimated total cost to construct McNew, excluding AFUDC, is approximately ** [redacted] **. The updated capital cost estimate, as of supplemental direct, for McNew is now approximately ** [redacted] **.[9] Applicants propose that one half of Viola (or 355 MW) will be owned by EMW, with the other half owned by Evergy Kansas Central ("EKC"). Evergy purports that these projects will be financed through EMW's[10] available utility financing resources, with each joint-owner financing their proportionate share of the Project during construction to ensure that each utility's customers pay for only the facilities from which they will receive benefits.

As of February 19, 2025, applicants propose that one half of McNew (or 355 MW) will be owned by EMW, with the other half owned by EKC.[11]

Mullin Creek #1[12]

This SCGT will consist of a single advanced class J Class gas turbine, electrical generator, and associated auxiliary equipment, which will be located inside of separate heated enclosures. The estimated total cost to construct Mullin Creek #1, excluding AFUDC, is ** [redacted] **.

[8] EA-2025-0075 Olson Supplemental Direct, Page 2, lines 18-20.
[9] EA-2025-0075 Olson Supplemental Direct, Page 3, lines 3-4.
[10] EA-2025-0075 Grace Supplemental Direct, Page 3, lines 1-17.
[11] EA-2025-0075 Gunn Supplemental Direct, Page 4, lines 16 through Page 7, line 11.
[12] EA-2025-0075 Application Paragraph 14 b. – Paragraph 16 b.

At this time, EMW plans to own 100% of this Project. The updated capital cost estimate, as of supplemental direct, which is based on the lower of the two bids received, is approximately ** [redacted] **.[13] The estimated cost of three items increased: Power Island Equipment: ** [redacted] **, EPC: ** [redacted] **, and Owner's Costs: ** [redacted] ** for a total estimated cost increase of ** [redacted] **.[14] EMW purports that these amounts will be financed through available utility financing resources with the intent that these assets will ultimately be included in rate base through the Commission's traditional ratemaking and cost of capital procedures.

Staff Witness: Shawn E. Lange, PE

EMW has included within its Application and Direct Testimony the minimum filing requirements of Commission Rules 20 CSR 4240-2.060, 20 CSR 4240-20.045(3), and 20 CSR 4240-20.045(6). Confidential Schedule 1 includes the filing requirements and Staff's review. In summary: to ensure the Commission and Staff receive a site-specific Emergency Action Plan and Operations and Maintenance Plan, Staff recommends the Commission order EMW to file in this docket a site-specific Emergency Action Plan as well as an Operations and Maintenance Plan for McNew, Mullin Creek #1, and Viola within 60-days of that facility being placed in service. Additionally, in order to facilitate tracking the status of various phases of completion: Staff recommends the Commission order EMW to provide quarterly reporting of the progress of construction of the Projects. This report shall include, but not be limited to: quarterly progress reports on permitting, plans, specifications, and construction progress for the Projects.

Staff Witness: Brodrick Niemeier

[13] EA-2025-0075 Olson Supplemental Direct, Page 3, lines 8-9.
[14] EA-2025-0075 Olson Supplemental Direct, Page 3, lines 10-12.

III. Five Tartan Criteria

A. Whether there is a need for the facilities and service

In evaluating whether a project is needed under the Tartan factors, Staff considers the following questions:

> (a) Is the project both important to the public convenience and desirable for the public welfare?
> (b) Or, is the project effectively a necessity because the lack of the service is such an inconvenience?

Evergy asserts in this case that the need for the Project is driven by EMW's and EMM's need for physical capacity and energy, and Evergy's ability to respond to projected load development in Missouri.

Capacity is the maximum output a generator can physically produce and is measured in megawatts ("MW"). The combined capacity of all the generation resources forms the capacity for an electric utility's system. Electric utilities must ensure there is enough power being produced and delivered to meet its customers' demand. No generation resource will always produce its maximum output (i.e. planned and unplanned outages are expected to occur); therefore, utilities are required to reasonably build more capacity to ensure there are enough resources available at times of peak demand. The relationship between demand on the system and capacity to serve that demand is referred to as capacity position.

Staff reviewed EMW's IRP Capacity Balance sheets in EO-2024-0154, as well as workpapers in EA-2024-0292 and EA-2025-0075, with regard to EMW's Summer and Winter Capacity positions. One element of the overall customer demand that has a significant impact to

resource planning is large customer additions. Evergy provided the following large customer load additions, in megawatts (MW), through 2036:[15]

**

[redacted]

**

Evergy is also working with potential customers, as illustrated in the example of those customers are shown below:[16]

**

[redacted]

**

[15] EA-2025-0075 Evergy Response to Staff DR 0034. Staff's March 25, 2025, DR 0092 in EO-2025-0154 requested an update on the information provided in Evergy's January 6, 2025, response to DR 0034 in EA-2025-0075, and for information describing the interconnection facilities and annual energy requirements of the prospective customers. On March 26, 2025, Evergy objected to that update request and to additional information request in its entirety. On April 14, 2025, Evergy provided its response to DR 0092, which consisted only of its objection letter and did not provide any update to the DR 0034 customer information.

[16] EA-2025-0075 Evergy Response to Staff DR 0034.

It is currently unclear which or how much additional capacity and/or energy those customers will require. These customers may have policies that incentivize obtaining power from low or zero carbon emission sources.[17]

The figure below shows Staff's estimate of EMW's Summer Capacity Position for 2025-2030, considering the potential change in the Southwest Power Pool ("SPP") capacity accreditation methodology, accounting for Dogwood and any known capacity contracts, and the SPP summer reserve margin change.[18] Staff will discuss each of these topics later in this report. Figure 3 below also depicts EMW's load as filed in its most recent IRP and its Supplemental Direct in Case No. EA-2025-0075:

Figure 3

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[17] The GHG Rule, if it were to continue as constituted, would either require hydrogen gas co-firing and/or Carbon Capture and Sequestration (CCS). If that were to happen, additional renewable energy resources may help replace the loss of fossil generation from the EPA's GHG Rule assuming it largely stays intact going forward.

[18] Please note, Staff did not develop its own load or DSM potentials amounts.

The space between the load line(s) and the stacked graph of generation, capacity contracts, and estimated Demand-Side Management ("DSM") represents an estimate of EMW's need for summer capacity.

It should be noted that EMW has another CCN case currently before the Commission (Case No. EA-2024-0292) requesting to add two solar facilities which, if approved, would decrease the need shown in the chart above.

For the winter season, the proposed projects can contribute when there is natural gas availability.

The figure below shows Staff's estimate of EMW's Winter Capacity Position for 2025-2030, considering the potential change in SPP capacity accreditation methodology, accounting for Dogwood and any known capacity contracts, and the SPP winter reserve margin change.[19] Staff will discuss each of these topics later in this report. Figure 4 below also depicts EMW's load as filed in its most recent Direct filing in this case and its Supplemental Direct in Case No. EA-2025-0075.

Figure 4

*

**

[19] Please note, Staff did not develop its own load or DSM potentials amounts.

Green House Gas Rule

The U.S. Environmental Protection Agency's ("EPA") New Source Performance Standards ("NSPS") aim to reduce greenhouse gas emissions from new and modified gas turbine power plants ("GHG Rule"). Originally set at 1,000 pounds of carbon dioxide ("CO2") per megawatt-hour ("MWh"), the standard under federal regulation 40 C.F.R. § 60, Subpart TTTTa[20] is currently 800 pounds per MWh, with a further reduction to 100 pounds per MWh beginning January 2032. These standards influence the decision between simple-cycle and combined-cycle plants, as they dictate whether plants can operate as baseload units or must operate at a lower imposed capacity factor if the above limits cannot be met. The standard introduces the concept of intermediate load facilities, with a required limit of 1,170 pounds per MWh and a capacity factor limit of 40%.[21]

The current GHG Rule, as constituted,[22] would either require hydrogen gas co-firing and/or Carbon Capture and Sequestration ("CCS"), or a reduction to the capacity factor of the units to 40%.

The table below shows how EMW's 2024 IRP modeling of the capacity factor of a modeled 2029 CCGT and a modeled 2030 SCGT.[23]

[20] 40 C.F.R. § 60.5525a.

[21] https://www.power-eng.com/gas/choosing-between-simple-cycle-and-combined-cycle-under-new-emissions-standards/ accessed 2/07/2025.
https://info.burnsmcd.com/article/choosing-between-simple-cycle-and-combined-cycle-under-new-emissions-standards accessed 2/07/2025.
https://blog.burnsmcd.com/the-future-of-gas-generation-in-an-increasingly-decarbonized-world accessed 2/07/2025.

[22] It is unclear how these rules may be altered under the current administration.

[23] EA-2025-0075 Evergy Confidential Response to Staff DR 0053.

** [redacted] **

Evergy expects to comply with GHG Rules at new natural gas facilities by capping output to a 40% capacity factor.[24] This means that Evergy may not get all market revenues associated with these advanced class turbines if they are trending near an annual capacity factor of 40%. Therefore, it is possible that the ratepayers may never see the full benefit(s) of these assets.

The GHG Rules would also affect Evergy's coal fleet. The GHG Rules require coal units to (1) retire before January 1, 2032, (2) retire before January 1, 2039 and co-fire with at least 40 percent gas starting on January 1, 2030, or (3) install carbon capture and storage with at least a 90 percent capture rate by January 1, 2032.[25]

SPP Accreditation Methodology

SPP oversees the bulk electric system and administers the wholesale power market on behalf of a group of electric utilities, including EMW. EMW, as a load-responsible entity ("LRE"), must ensure it has enough capacity to serve its load at peak times. SPP, through its tariffs, requires EMW to demonstrate its compliance with resource adequacy[26] requirements by identifying its owned resources or by procuring capacity through bilateral contracts.

[24] 25-EKCE-207-PRE Evergy Response to Curb DR 0029.

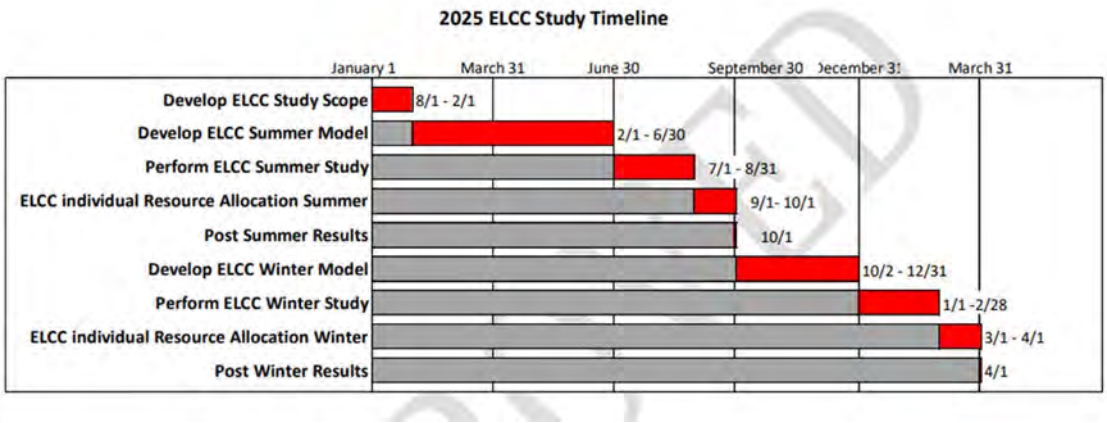
[25] 89 Fed. Reg. 38,798 (May 9, 2024).

[26] Resource adequacy is the ability of the electricity system to supply aggregate electric power and energy to meet the requirements of consumers at all times, taking into account scheduled and unscheduled outages of system components.

Capacity is the maximum output from a generating resource and no generation resource will always produce its maximum output (i.e. planned and unplanned outages are expected to occur and renewable resources are intermittent). Resource adequacy requirements are designed to consider the accredited capacity of a resource. Accredited capacity is used to compare the dependability of generation resources.

Currently, SPP accredits its wind and solar fleet using historical performance (which includes outages) and accredits conventional generation resources based on their installed capacity ("ICAP") rating.

SPP filed with the Federal Energy Regulatory Commission ("FERC") a proposal to implement the following accreditation methodology: (1) an effective load carrying capacity (ELCC)[27] accreditation methodology for wind resources, solar resources, and Electric Storage Resources (ESRs); and (2) a Performance Based Accreditation (PBA) methodology for thermal and other conventional resources, which would utilize a variant of the equivalent forced outage rate (EFORd) method. SPP proposed implementing this change on October 1, 2025, shown in the timeline below:[28]



[27] ELCC is defined as the amount of incremental load a resource can reliably serve, while also considering probabilistic parameters of unserved load.

[28] ER24-1317 SPP FERC Application filing dated 2/23/2024.

In the EMW 2024 IRP, EMW assumed a level of renewable generation accreditation summer capacity reduction due to the ELCC implementation. This resulted in a total reduction to the wind generation assets of approximately 147 MW in summer of 2026, as shown in the table below:[29]

Wind PPA	Nameplate MW	2024 Capacity	ELCC
Gray County	110	23	16
Ensign	99	40	27
Cimarron Bend III	130	100	20
Osborn	80	14	15
Rock Creek	120	21	27
Prairie Queen	110	32	23
Pratt	134	85	40
Total	**783**	**314**	**167**

Starting in winter of 2027, EMW shows ** [redacted] ** for those same units' winter capacity.[30]

EMW anticipates a ** [redacted] ** to existing fossil and solar resources' summer capacity of approximately ** [redacted] ** beginning in summer of 2026, and a ** [redacted] ** to existing fossil and solar resources' winter capacity of ** [redacted] ** beginning in winter of 2027.[31]

Staff Witness: Shawn E. Lange, PE

Planning Reserve Margin Increases

During its August 5-6, 2024, meetings, SPP's Regional State Committee and Board of Directors approved increases to the planning reserve margins[32] ("PRM") member utilities are required to maintain in support of regional grid reliability.

[29] EO-2024-0154 Evergy Missouri West Integrated Resource Plan Chapter 4, Page 46.

[30] EA-2025-0075 Confidential supplemental workpaper of Van de Velde "MOW CCN Supp Dir - No McNew and No 2031 Thermal Plan.xlsx".

[31] EA-2025-0075 Confidential supplemental workpaper of Van de Velde " MOW CCN Supp Dir - No McNew and No 2031 Thermal Plan.xlsx".

[32] PRM represents the amount of back-up capacity utilities must have to guard against unplanned conditions or events on the regional power grid.

SPP's Regional State Committee and Board of Directors approved minimum requirements of a 36% winter-season PRM and a 16% summer-season PRM, effective beginning summer 2026 and winter 2026/27.[33] This means that load responsible entities[34] in SPP's region must have access to enough generating capacity to serve their peak consumption with at least 36% margin during the winter season and at least 16% margin during the summer. The current 15% summer PRM requirement was previously applied to the winter season also.[35]

To determine these recommendations, SPP conducted the 2023 Loss of Load Expectation ("LOLE") study for the 2026 and 2029 study years, in accordance with the LOLE Study Scope approved by the Supply Adequacy Working Group ("SAWG"). A LOLE study is used to determine the probability that generation is sufficient to meet load. SPP's LOLE study considers its entire region. The assumptions and forecasts were developed with the members for the SPP Balancing Authority Area, to incorporate historical operational experiences of resource performance, energy consumption and system conditions as well as projected generating capacity and new generator development timelines. This was the first LOLE study in which SPP directly analyzed seasonal risk beyond the summer season. SPP, with support from the SAWG, performed additional sensitivities beyond those outlined in the 2023 LOLE study scope, which included consideration of reduced amounts of Incremental Cold Weather Outages (ICWO), incremental flexibility for planned and maintenance outages, and varying risks across winter and summer

[33] On April, 4, 2025, SPP provided a recommendation to the Markets and Operations Policy Committee for discussion and vote a proposal to increase the Planning Reserve Margin for Summer from 16% to 17% and for winter from 36% to 38% starting in planning year 2029/2030.

[34] In SPP, a Load Responsible Entity (LRE) is defined as an Asset Owner with registered load in the Integrated Marketplace. An LRE is accountable for ensuring that it has sufficient capacity to meet its forecasted peak electricity demand, plus a mandated planning reserve margin. This involves securing adequate generation resources or capacity contracts to cover both the expected load and additional reserves to maintain system reliability.

[35] https://www.spp.org/news-list/spp-board-approves-new-planning-reserve-margins-to-protect-against-high-winter-summer-use/ accessed 2/07/2025.

seasons. SPP also evaluated implications of a reduced solar penetration materializing by 2026, based on the solar resource mix that was modeled in the LOLE study.

The LOLE study and associated analysis demonstrated the following key observations:

1. The 2023 LOLE study results show that the current 15% requirement will not satisfy the required 1-in-10 LOLE threshold for the 2026 Summer Season or for any subsequent Winter Season.

2. Cold weather impacts, the resource mix, planned and maintenance outages, as well as the balance of risk in LOLE days and Expected Unserved Energy ("EUE"), amongst other factors, have significant impacts to the PRM.[36]

Staff Witness: Shawn E. Lange, PE

Reliability Standards

North American Electric Reliability Corporation (NERC), the Electric Reliability Organization (ERO) for North America, is subject to oversight by the FERC, and is developing new standards that will require grid planners and operators to assess their ability to consistently meet electricity energy demand at all times.

First, Project 2022-03 Energy Assurance with Energy-Constrained Resources creates a new standard, BAL-007-1, requiring Balancing Authorities[37] to assess the resources necessary to reliably supply energy to serve expected demand with operating reserves for a defined assessment period that is at minimum five days in duration, and at maximum six weeks in duration.

[36] https://www.spp.org/documents/71928/prm%20recommendation%207-2-24.pdf, Page 1.

[37] Balancing Authorities are entities responsible for maintaining the real-time balance between electricity supply and demand within a Balancing Authority Area.

Project 2024-02 Planning Energy Assurance is intended to require the industry to perform energy reliability assessments greater than one year out and determine actions to mitigate any energy deficiencies that are identified.

Planning Scenarios being evaluated by NERC:[38]• The rapid decline of traditional power plants and their replacement with variable generation resources without an assured fuel supply continues, creating a supply-demand imbalance. This imbalance, coupled with sharp increases in electricity use, leads to significant energy shortfalls. If the shortages cannot be resolved with flexible demand reduction requests and/or through energy stored on the system, the grid operator will be forced to resort to load shedding, or intentionally cutting off power to certain customers to maintain the balance of supply and demand. Load shedding is a last resort to prevent a possible system collapse. The use of load shedding to address energy shortfalls, like those seen during winter storms Elliott and Uri, is increasing and could occur under less severe weather conditions.

> • Two-day drought of wind and solar resource output, combined with planned maintenance outages of dispatchable generation, exceed energy storage capabilities and require load shedding to balance supply and demand for a multi-day period.
>
> • A large number of utilities rely on energy imports to meet expected increases in electricity demand in their resource planning efforts. This leads to a broad under development of new generation across the region. A system event occurs with limited energy availability across the entire SPP footprint, reducing the availability of import capacity and requiring operator-initiated load shedding to maintain supply and demand balance.

Actions to Address Risk evaluated by NERC:[39]

> • The retirement of traditional, dispatchable power plants must be carefully managed to ensure a reliable and sufficient supply of electricity.
>
> • Flexible, on-demand resources, currently provided by natural gas-fired generation, are crucial for addressing the intermittent nature of variable, weather dependent generation like wind and solar. On-demand resources are capable of filling multi-day supply gaps when variable output is low and will be needed to meet anticipated increases in demand.
>
> • Resource adequacy assessments should consider new metrics that go beyond the frequency-based criterion of the "Loss of Load Expectation" (LOLE), which determines resources needed to allow one-day of customer load loss in a ten-year period, and include supplemental criteria considering the size, timing, and duration of energy shortfalls. A co-sponsored NERC and National Academy of Engineers Section 6 report on Evolving Planning Criteria for a Sustainable Power Grid

[38] See Page 22 of MRO Regional Risk Assessment, January 2025 https://www.mro.net/document/mro-2025-regional-risk-assessment/?download

[39] See Pages 22-23 of MRO Regional Risk Assessment, January 2025 https://www.mro.net/document/mro-2025-regional-risk-assessment/?download.

identifies the need for more robust metrics and criteria for resource adequacy as well as identifies next steps to form an improved approach to resource adequacy.

• Improve load forecasting to comprehensively determine future load growth based on the likelihood and timing of deploying new end-uses of electricity, such as electric vehicles, electric space heating, and large, single-point loads like data centers and industrial facilities.

If and when required by NERC, utilities must plan for scenarios that evaluate a multi-day outage of solar and wind. Natural Gas generation plants are resources that may help with compliance.

Staff Witness: Shawn E. Lange, PE

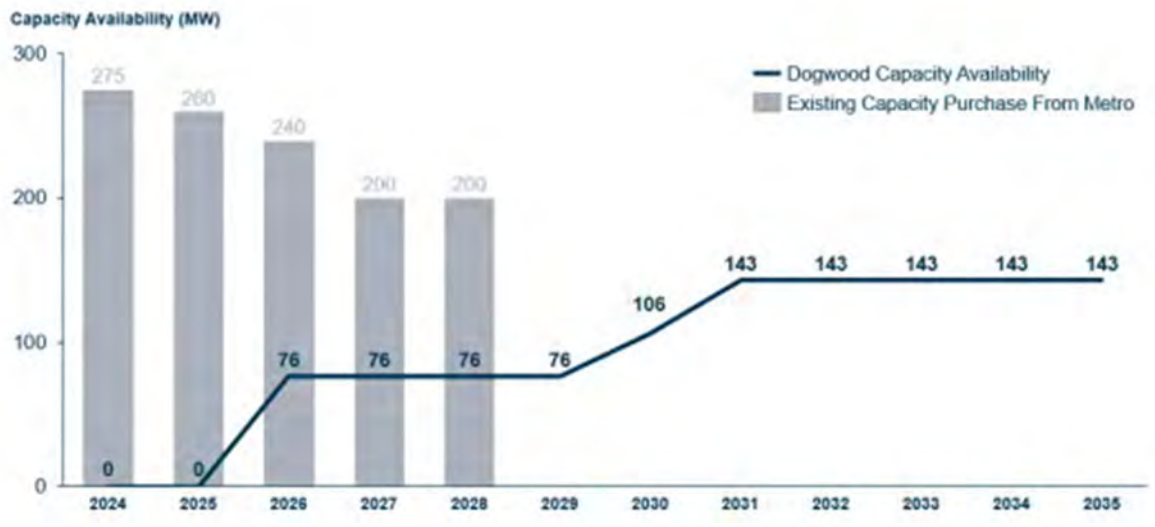
Dogwood

Staff is highlighting the recent Dogwood addition in particular because EMW recently acquired this resource in 2024. EMW's need in this case is predicated on its need for capacity beginning in 2025.[40] While the Dogwood resource in theory would help EMW with its 2025 capacity needs, due to contractual arrangements, EMW will not receive its total share of accredited capacity of Dogwood until 2031.

EMW's interest in the Dogwood facility equates to approximately 143 MW capacity.[41] However, the capacity from Dogwood phases in for EMW from 2026 to 2031, as existing capacity contracts roll off.[42]

The Chart below shows EMW's existing capacity purchase from Evergy Metro and the Dogwood Capacity availability:[43]

[40] EA-2024-0292 VandeVelde Direct, Page 6, lines 3-9.
[41] EA-2023-0291 John Carlson Direct, Page 6, lines 4-5.
[42] EA-2023-0291 John Carlson Direct, Page 4, lines 21-22.
[43] EA-2023-0291 Kayla Messamore Direct, Page 27, Figure 10.



In other words, while EMW may own the facility, Dogwood capacity is sold to other parties and will not be used to serve EMW customers until 2026. EMW is receiving revenues for the capacity that has already been sold to others for 2025. In 2026, the Dogwood capacity that is available to EMW will increase to at most 76 MW.[44]

Staff Witness: Shawn E. Lange, PE

Conclusion on Need

The Tartan Factors are an over-arching, general framework to organize discussion of the evidence provided in support of the various types of CCN applications that come before the Commission. Based on the discussion above, Staff concludes that the additional capacity is effectively a necessity because the lack of the service is such an inconvenience.

Staff Witness: Shawn E. Lange, PE

[44] The proposed accreditation methodology of SPP most likely will have Dogwood's accredited capacity less than the 143 MW illustrated.

B. Whether the applicant is qualified to construct, install, own, operate, maintain, and otherwise control and manage the Projects

Evergy has staff with the construction skills and the technical knowledge, expertise, and abilities that are needed to construct and to bring new natural gas-fired generating units on line and functional. Additionally, Evergy hired Power Engineers to help it conduct siting and technology studies for the natural gas-fired sites. Evergy intends to obtain its natural gas from existing natural gas pipelines for the CCGT generators, and to store diesel fuel on-site as a backup fuel for the SCGT generator.[45] Ownership of the various generation facilities, and the particular operating qualifications of natural gas-fired power generation plants have been detailed in Evergy's Direct Testimony.[46]

Staff concludes that Evergy is qualified to construct, install, own, operate, maintain, and otherwise control and manage the Projects.

Staff Witness: Donald A. Fontana, PE

C. Whether the applicant has the financial ability for the undertaking

Staff investigated the Applicants' financial ability to construct, install, own, operate, manage, maintain, and control the Projects.[47]

The estimated total cost to construct Viola, excluding AFUDC, is approximately ** [redacted] **.[48] The Viola project is being developed by Evergy.[49] The Viola Generating Station would be located in Viola, Kansas, co-owned by EMW and EKC (each with a 50%

[45] EA-2025-0075 Direct Testimony of Jason Humphrey, Page 9, lines 19-22 and Page 10, line 1.
[46] EA-2025-0075, Direct Testimony of Jason Humphrey, Page 12, lines 15-21, and Page 14, lines 1-16.
[47] Pages 1-2, The Application.
[48] Page 2, lines 19-20, Olson's Supplemental Direct.
[49] Page 5, paragraph 14a, The Application.

ownership share).[50] EMW's 50% share of Viola's total project cost estimate with AFUDC is ** [redacted] **.[51]

The estimated total cost to construct Mullin Creek #1, excluding AFUDC, is approximately ** [redacted] **.[52] Mullin Creek #1 Generating Station is a 440 MW-simple-cycle gas turbine to be located in Nodaway County, Missouri – owned 100% by EMW.[53]

The estimated total costs to construct McNew, excluding the AFUDC, is approximately ** [redacted] **.[54] The McNew Generating Station is planned to be located in Hutchinson, Kansas, and will be jointly owned 50%/50% by EMW and EKC.[55] The McNew project is being developed by Evergy.[56] EMW's 50% share of McNew's total project cost estimate with AFUDC is ** [redacted] **.[57]

The Projects will be financed using Evergy's existing debt and equity financing structure.[58] According the Application, EMW and EMM have the financial resources to acquire stakes in Viola, McNew, and Mullin Creek #1, as well as to construct, install, own, operate, manage, maintain, and control the Projects through rate base at EMW's and EMM's authorized weighted average cost of capital.[59] In response to Staff's Data Request ("DR"), EMW and EMM state that they have not undertaken, nor do they plan to undertake, individual project financing for these natural gas generation facilities, but will instead finance their investments along with changes in

[50] Page 3, lines 13-20, Grace' Direct
[51] Staff DR 0007.
[52] Page 3, line 9, Olson's Supplemental Direct.
[53] Page 4, lines 1-3, Grace' Direct Testimony
[54] Page 3, line 4, Olson's Supplemental Direct.
[55] Page 5, lines 10-12, Gunn's Supplemental Direct.
[56] Page 6, paragraph 14a, The Application.
[57] Staff DR 0007.
[58] Page 11, paragraph 23, The Application.
[59] Page 17, paragraph 38, The Application.

working capital in aggregate.[60] The common equity issuances will be used to maintain investment grade credit ratings at the operating utilities and at the consolidated Evergy level.[61] EMW and EMM will finance its cash needs in a manner that balances utilization of short-term debt capacity, while retaining adequate liquidity, and maintaining a long-term capital structure that is roughly 50% equity and 50% long-term debt.[62]

The Applicants' witnesses state that EMW, EMM, and affiliate utilities have the ability to finance the purchase and operation of the Projects because EMW and EMM have proven experience financing the purchase, construction, and operation of generating assets that serve Missouri customers.[63] Mr. Gracen testified that EMW has access to capital, including a $2.5 billion master credit facility from 2027 to 2028, $1.9 billion of long-term debt, $1.9 billion of shareholders' equity on its balance sheet as of September 30, 2024, and the $3.2 billion of long-term debt and $3.4 billion of shareholders' equity on EMM's balance sheet as of September 30, 2024.[64]

Staff conducted a pro forma analysis to understand the financial impact of the projects on EMW by investigating the financial statements and financial ratios. McNew will be co-owned by EMW and EKC, with each holding a 50% ownership share.[65] Further, ** [redacted] . **[66]

[60] Staff DR. 0008.
[61] Page 6, lines 16-17, Grace' Direct.
[62] Staff DR. 0008.
[63] Page 4, lines 9-10, Grace's Direct, and Page 22, lines 2-8, Gunn's Direct.
[64] Page 6, lines 4-6, Grace's Direct.
[65] Page 2, lines 9-10, Grace's Supplementary Direct.
[66] Staff DR 0003.1.

The pro forma adjustments give effect to the EMW Transactions. The pro forma adjustments are reflective of estimated project costs of the EMW Transactions and are not necessarily indicative of the results that might have been achieved had the transactions occurred on December 31, 2024, for balance sheet purposes. The EMW Transactions are assumed to occur over a multi-year period and the pro forma adjustments do not contemplate revenue increases related to the EMW Transactions. The pro forma adjustments include the use of estimates that are preliminary and subject to change.[67] ** [redacted] **[68] Under these assumptions, the pro forma analysis of EMW's capital structure is presented in Table 1.

Table 1. EMW Capital Structure[69]

** [redacted] **

Shown in Table 1, the pro forma effect on EMW's capital structure is improved in terms of financial risk due to an increase in the equity ratio, with a change of more than two (2) percentage points.

With the consideration of Evergy's, EMW's and EMM's financial capacity, the Applicants have the financial ability to purchase and operate the Projects. Standard & Poor's ("S&P") expects

[67] Staff DR 0003.1, Note 1 of Scenario #1 Proforma B.S., Q0003.1_CONF_MO West Viola, McNew, Mullins - Pro Forma Cap Structure.

[68] Ibid

[69] Ibid.

that EMW and EMM have a revolving credit facility availability of approximately $700 million and an estimated cash funds from operations ("FFO") of $510 million.[70] EMW and EMM are wholly owned subsidiaries of Evergy, and Evergy has an estimated cash FFO of approximately $2.2 billion and credit facility availability of $2.5 billion.[71] In addition, S&P reported it expected Evergy's capital spending to be approximately $2.4 billion in 2023, $2 billion in 2024, and $2.5 billion in 2025. In S&P's base-case scenario, over 2024-2028, Evergy plans to invest approximately $12.5 billion toward grid modernization and fleet transition.[72] S&P and Moody's rated EMW, EMM and Evergy as investment grade. S&P rated both EMW and Evergy as "BBB+", while Moody's rated both of them as "Baa2".[73] On the other hand, S&P assumed EMM's capital spending averaging around $725 million through 2025 in the base-case scenario.[74] EMM is rated "A-" and "Baa1" by S&P and Moody's, respectively.[75] In addition, S&P anticipated EMW will account for 20% of Evergy's $10.4 billion in consolidated capital spending through 2025.[76] Considering the fact that the proposed total cost is less than 30% of the overall expected consolidated capital spending through 2028, it is reasonable to conclude that EMW and EMM have the financial ability to purchase, operate, manage, maintain, and control the Projects.

Staff Witness: Seoung Joun Won, PhD

[70] Evergy Missouri West Inc, Ratings Score Snapshot, RatingsDirect, S&P Global Ratings. December 14, 2023.
[71] Evergy Inc. Ratings Score Snapshot, RatingsDirect, S&P Global Ratings. May 23, 2023.
[72] Evergy Inc. Ratings Score Snapshot, RatingsDirect, S&P Global Ratings. August 7, 2024.
[73] S&P Capital IQ Pro., Retrieved March 4, 2025.
[74] Evergy Metro Inc. Ratings Score Snapshot, RatingsDirect, S&P Global Ratings. December 13, 2023.
[75] S&P Capital IQ Pro., Retrieved March 4, 2025.
[76] Evergy West Inc. Ratings Score Snapshot, RatingsDirect, S&P Global Ratings. December 14, 2021.

D. Whether the proposal is economically feasible Summary

Introduction

Staff's view is that all the Tartan factors are interrelated. For example, when discussing the economic feasibility of a project, the Commission has to look at the generation resources the utility claims to have and determine whether it satisfies that need or not. The approach to address the need presented by the utility depends on the circumstances of the application, the utility, and the present operating and regulatory milieu.

Alternatively, if the service is not designated as mandatory or essential to utility operations, is the project so convenient to be necessary and justify the costs of the improvement (i.e., is it convenient)? It is worth pointing out that the term "necessity" does not mean "essential" or "absolutely indispensable," but that an additional service would be an improvement justifying its cost. A generating plant, whose primary mission in the IRP is strictly to sell energy in integrated electricity markets, is not necessary and should be subject to a stricter definition of need and economic feasibility to determine if the project is so convenient that it puts customers in a better place with the implementation of the project than without it.

The Cambridge Dictionary defines "economic feasibility" as "the degree to which the economic advantages of something to be made, done, or achieved are greater than the economic costs."[77] Feasibility studies should assess whether a proposed project or solution is financially viable and cost-effective with respect to given alternative solutions.

Staff finds the following questions to be appropriate in making its recommendation regarding the economic feasibility of the Projects:

[77] https://dictionary.cambridge.org/us/dictionary/english/economic-feasibility (21NOV2024).

a. Is the project of sufficient importance to warrant the expense of making it?

b. Or, is the project of such an improvement as to justify or warrant the expense of making the improvement?

EMW discusses economic feasibility in paragraph 37 of its Application. Several of the points confuse other Tartan criteria with economic feasibility or rely on the total Net Present Value of Revenue Requirement ("NPVRR") of alternative resource plans in the Evergy IRP analysis as the fundamental basis for justification of this project in its preferred plan. It is worth noting that the plan with the lowest NPVRR does not necessarily meet the economic feasibility criterion, and the IRP analysis should not be conflated as a review of the economic feasibility of individual generating assets.

The section on economic feasibility is divided into four sections as follows:

- Staff witness Justin Tevie introduces the concept of economic feasibility, discusses its definition, and provides an overview of uncertainties in resource adequacy and generator interconnection costs, and flaws in integrated resource planning;
- Staff witness Francisco Del Pozo explains how uncertainties in capacity factor, pricing and hedging, and capacity costs affect economic feasibility;
- Staff witness David M. Sommerer discusses the importance of natural gas procurement in the development of new combined cycle as well as simple cycle generation plants and its impact on economic feasibility; and,
- Staff witness Michael L. Stahlman discusses the impact of transmission cost on economic feasibility.

Staff Witness: Justin Tevie

Resource Adequacy Requirements Uncertainty

SPP requires all load-serving entities to meet Resource Adequacy Requirements ("RAR") based on forecasted non-coincident peak plus planning reserve margins. The applicants plan to

have sufficient capacity to meet SPP requirements every year in the planning horizon and expect significant changes to RAR. The Applicants expect SPP to file tariff changes to implement winter RAR, performance-based accreditation, and ELCC.[78] The Applicants expect SPP to change the winter reserve margin from 15% to 35%.[79] However, there is still some uncertainty surrounding this issue and that stakeholders will need to work through and finalize the proposal. If this change is implemented, the Applicants will have to acquire additional resources (capacity) which could impact the economic feasibility of the projects.

Staff Witness: Justin Tevie

Generator Interconnection Costs

Evergy submitted Generator Interconnection requests in October 2024 for the proposed projects.[80] While Evergy has provided cost estimates of interconnection costs, unless or until the studies are completed, those costs are not known. As the Commission saw when Union Electric Company, d/b/a Ameren Missouri ("Ameren Missouri") terminated the acquisition of the Brickyard Hills wind project (EA-2019-0021), transmission upgrades can lead to costs significantly higher than the projected interconnection costs, making the project untenable. With the Projects' interconnection costs not known until possibly November 16, 2026,[81] Staff recommends that the Commission order EMW to provide the Generation Interconnection Agreement ("GIA") for each and every project in this case within 30 days of a signed, executed GIA.

Staff Witness: Shawn E. Lange, PE

[78] EO-2024-0154 Evergy Missouri West Integrated Resource Plan, April 1, 2024, Volume 4, Page 24.
[79] EO-2024-0154 Evergy Missouri West Integrated Resource Plan, April 1, 2024, Volume 4, Page 25.
[80] EA-2025-0075 J Kyle Olson Direct, Pages 9-10.
[81] https://opsportal.spp.org/documents/studies/sppgistudyupdate_weekly.pdf.

Generator Interconnection Costs Uncertainty

The current estimated interconnection and upgrade cost estimate is ** [redacted] ** for Viola and ** [redacted] ** for Mullin Creek #1. The current estimates might not indicate the final costs determined by SPP. The cost of interconnecting, may run the risk of additional costs of interconnection depending on the backlog and higher queued interconnection requests withdrawals. The full financial impact (potential transmission system upgrades needed to grant interconnection) is an unknown at this point and this could impact the economic feasibility of the projects.

Staff Witness: Justin Tevie

Price Uncertainty and Energy Hedge

EMW witness Cody VandeVelde asserts that owning and operating generating capability in the form of energy resources will produce economic benefits for customers above other alternative plans, and will meet EMW's future capacity[82] and energy need.[83] In addition, Mr. VandeVelde highlights that when the Viola combined cycle plant and the Mullin Creek #1 simple cycle plant become fully operational, the plants will be critical elements to meet EMW's near-term requirement for capacity starting in 2029-2030[84] and will help advance EMW's long-term capacity needs by providing a hedge[85] against risks associated with energy and fuel

[82] Capacity is the maximum output a generator can physically produce and is measured in megawatts ("MW"). The capacity of all the resources together forms the capacity for an electric utility's system. Electric utilities must ensure there is enough power being produced and delivered to meet their customers' demand. No generation resource will always produce its maximum output (i.e. planned and unplanned outages are expected to occur); therefore, utilities are required to reasonably build more capacity to ensure there are enough resources available at times of peak demand.

[83] Cody VandeVelde Direct, Pages 8-9, lines 14-10.

[84] Cody VandeVelde Direct, Pages 7-8, lines 13-2.

[85] Hedging is a strategy that attempts to minimize risk.

prices. In addition, the 2025 IRP update includes a 50% share of a CCGT resource.[86] Staff inquired of EMW about the risk inherent to those variables considered to be hedged.[87] According to Mr. VandeVelde, variability of energy and fuel prices have financial implications on a utility's cost to serve customers and therefore have some level of inherent risk.

As an example, Mr. VandeVelde's response to a Staff Data Request asserts that "higher fuel prices can drive higher market energy prices, which could drive higher fuel and purchased power prices for customers, depending on their energy position in the marketplace."[88] While Staff agrees with that generic characterization of the energy market, EMW's response did not provide an estimated quantification of these risks.[89] Instead, Mr. VandeVelde points out that fuel prices were identified as a Critical Uncertain Factor in EMW's 2024 Triennial IRP,[90] where fuel price risk factor was integrated into the IRP. In addition, Mr. VandeVelde states the ownership of dispatchable energy[91] with a price that is driven by very competitive heat rates[92] acts as hedge protection against market energy prices. Staff is aware that, while the initial investment in CCGT generation units such as Viola and McNew may be higher, the lower fuel consumption per MWh of generation over the lifetime of the plant might lead to cost savings if the units are able to be dispatched more frequently.

[86] Evergy Missouri West supplemented its CCN filing on February 19, 2025, to include a 50% share of the McNew CCGT project to meet this planned need.

[87] Staff DR 0043

[88] EMW response (2) to Staff DR 0043.

[89] EMW response (3) to Staff DR 0043.

[90] Reference Section 2.3 of Volume 6 of EMW's 2024 Triennial IRP.

[91] The resources are dispatched in the model based on production costs. The production cost is heat rate x fuel price + variable O&M.

[92] The heat rate is the amount of energy used by an electrical generator/power plant to generate one kilowatt hour (kWh) of electricity. To calculate heat rate, divide the total thermal energy input (e.g., fuel energy) by the total electrical energy output (e.g., electricity generated), typically expressed in BTUs per net kWh.

Staff is concerned that the current uncertainty in the industry due to tariffs imposed on foreign materials could affect the overall cost of the materials and services for the construction and operation, as well as delays in the execution of those projects. In response to Staff DR 0028, EMW provided copies of several executed contracts between the Company and selected vendors. ** [redacted] **[93] according to specific clauses in each contract. However, where suspension of the work is related to the materials, the contract appears to allow adjustments to prices due to incidents that are not caused solely by the supplier as specified below:

** [redacted] [94] **

Staff has considered that the inherent risk of the price materials adds uncertainty to the economic feasibility of those projects.

Staff Witness: Francisco Del Pozo

Value of Capacity and Energy

EMW argues that the need for these Projects are driven by EMW's forecasted need for capacity requirements and energy needs[95] while ensuring system reliability and minimizing carbon

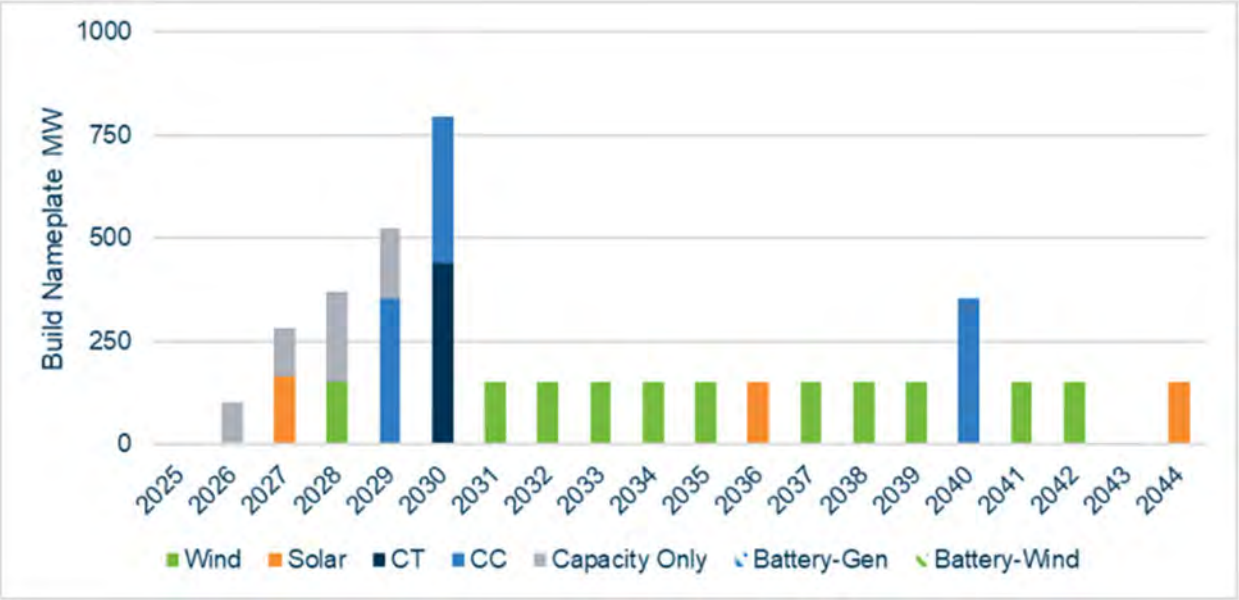
[93] ** [redacted] ** Direct Testimony of J Kyle Olson. Page 22, lines 3-11.

[94] ** [redacted] ** of EMW Supplementary response to DR 0028.

[95] EMW's Preferred Plan in the 2024 Triennial IRP, EO-2024-0153.

emissions. To meet the forecasted need, EMW supplemented its CCN filing on February 19, 2025, to include a 50% share of the McNew CCGT, in addition to the Viola Combined Cycle (355 MW) and the Mullin Creek #1 Combustion Turbine (440 MW) projects (Figure 5).

Figure 5: Evergy Missouri West 2025 Preferred Plan ACAA



Energy is the amount of electricity a generator produces over a specific time period. A generator's output may vary for a variety of reasons such as fuel availability and cost, market prices, and, for renewable resources, the variability of wind, sun, or water. The demand for electricity also varies over time and season.

Staff is concerned about the economic effect of the EPA's new power plant rules that require new natural gas plants operating over 40% of the time to achieve emissions reductions equivalent to 90% carbon capture and sequestration by 2032.[96] While EMW[97] states that capacity

[96] On February 5, 2025, the EPA submitted an unopposed motion asking the U.S. Circuit Court for the District of Columbia (DC Circuit Court) to hold in abeyance for 60 days the current case challenging the GHG Rule. On February 19, 2025, the DC Circuit Court granted EPA's motion. The Court ordered EPA to file motions governing further proceedings by April 21, 2025.

[97] EMW response (2) to Staff DR 0077.

factors of new thermal resources were limited to 40% in the EPA's Greenhouse Gas ("GHG") compliance scenarios discussed in Section 11 of the 2025 IRP Annual Update, this update also identified that:

> The GHG Rule would increase demand for natural gas and exert upward pressure on prices, and while the GHG Rule is intended to address carbon dioxide limits, Evergy chose to place a restriction on emissions to account for uncertainty in the long-term modeling forecasts.[98]

However, it appears that most of Evergy's modeling scenarios restrict fleet-wide GHG emissions as opposed to unit specific capacity factor or emissions restrictions that would result from the GHG Rule implementation.

Staff understands that imposing restrictions in the capacity factor could limit the energy being produced and delivered, and therefore that could affect the revenues generated. Likewise, a model (scenario) relies on predetermined inputs and constraints (assumptions). In response to Staff questions regarding alternative resource plans, EMW indicated that no specific constraint that addresses the GHG Rule was included in base case modeling:

** [redacted]

[redacted]

[redacted]

[98] 2025 IRP Annual Update, Page 110.

[redacted] ** [99]

If EMW does not account for the reduction in generation to meet the EPA GHG Standards, and therefore reduced SPP market revenue, the results of the IRP analysis will be skewed with revenues from natural gas units that are too high. If EMW does not account for the increased costs that would occur in order to meet the EPA GHG Standards for emissions, (i.e. the cost of carbon capture), then the results of the IRP analysis will be skewed with costs for natural gas units that are too low. EMW's base case model appears to have included both of these flaws. That scenario can skew results dramatically given costs associated with carbon capture and sequestration which are necessary to achieve required emissions reductions absent reduced generation.

Staff Witness: Francisco Del Pozo

Consideration of Locational Differences with Respect to Locational Marginal Pricing

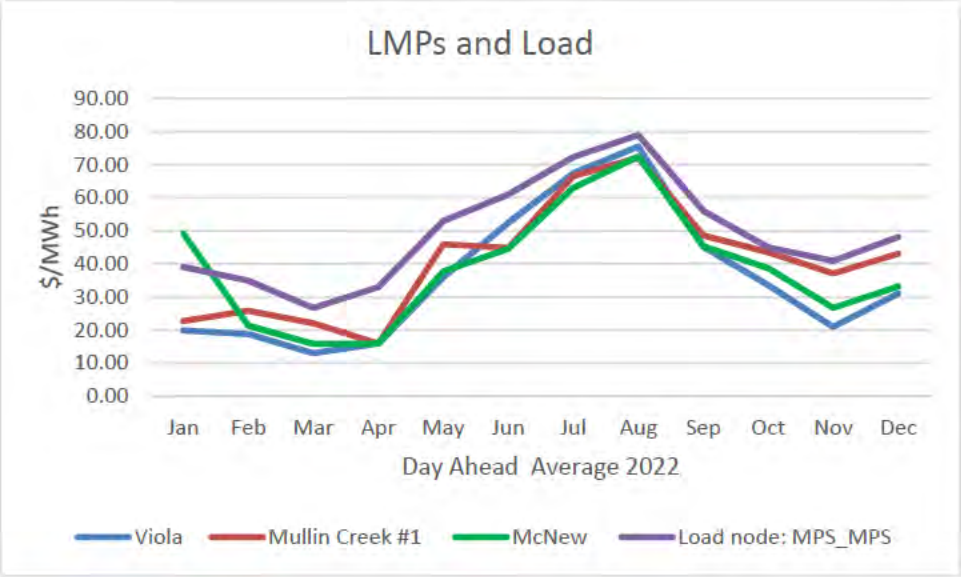
Locational Marginal Price (LMP) [100] is the price of one MWh of energy at a given location at a given point in time. LMPs are made up of three components: the marginal energy component, the marginal congestion component, and the marginal loss component. As the name suggests, LMP varies by location based upon system conditions. LMP also varies across time in a given location based upon system conditions.

The variation of LMP by time and location means that energy produced, or consumed, at the same location in different hours can have very different values. Likewise, energy produced, or consumed, in different locations at the same time can have very different values. Within those

[99] EMW response (2) to Staff DR 0077.
[100] https://www.spp.org/glossary/.

considerations, Staff conducted a review of the LMPs[101] of the proximal pricing nodes considered by EMW[102] for its geographic proximity to those projects. The Figure 6 shows the result of the monthly average LMPs for those projects.

Figure 6



The SPP pricing node analysis shows that, on average, prices increase during the summer for all four LMP nodes. While this pattern is consistent with the regular supply and demand market price behavior, it is important to consider that on average the EMW load node LMP exceeds the average price of all three proxy generation nodes.[103] Of the proxy node LMPs, the Viola node (WR.GEEC.GT2) exhibits the highest monthly average cost ($76) in September 2022. With regard to the other two proxy LMP nodes,[104] although both have on average similar high price ($66), they will have different production due to the heat rates and

[101] SPP data from year 2022.
[102] EMW response (2) to Staff DR 0066.
[103] January is an exception for McNew in the Figure 6 above.
[104] McNew (WR.HEC.GT2), Mullin Creek #1 (MPSLAKE_RDUN2).

locational differences discussed before. These differences in LMPs and the Load node (MPS_MPS[105]) highlight the importance of location-specific analysis of the economics of new generation additions. Furthermore, the cost of procuring firm transportation of natural gas for each facility, which will factor into the EMW bid for each plant into the SPP markets, is a critical aspect of the economics of each plant and is still largely uncertain as discussed by Staff witness David M. Sommerer in the natural gas procurement section.

Staff Witness: Francisco Del Pozo

Consideration of Locational Differences with Respect to Transmission Pricing

EMW evaluated the locations of the Kansas generators (McNew and Viola) as if they were located in its own service territory. While these generators are not in EMW's service territory, they are located at the western edge of Evergy Kansas Central's service territory.

EMW participates in SPP. It is expected that EMW will use Network Integration Transmission Service (NITS), Schedule 9 of SPP's Open Access Transmission Tariff (OATT). Historically, it has been advantageous to locate generation close to the load it was intended to serve in order to minimize transmission costs. However, the manner by which SPP sets transmission rates tends to hide the transmission costs and distort this price signal. NITS rates are set by zone. EMW is in Zone 9 and pays for NITS based on its proportion of monthly demand in its load zone. When EMW constructs generation outside of its load zone, it will be responsible for any upgrades to relieve constraints caused by that generation, but its NITS rates remain largely unaffected. Thus, by all appearances, the location of generation becomes irrelevant with the exception of

[105] Data from "NUCOR Tracking Report - Semi-Annual - Dec-2022.xlsx" of the EMW rate case ER-2024-0189.

differences in the non-energy components of Location Marginal Prices discussed by Staff witness Francisco Del Pozo.

What is not seen is the impact of new generation on long-range transmission plans. In October 2024, SPP announced its $7.7 billion 2024 Integrated Transmission Plan that proposes to add more than 2,000 miles of new and upgraded transmission lines. These transmission proposals are designed, in part, to more efficiently dispatch generation. Thus, while generation location may not impact EMW's short-term transmission expenses, the location of this generation can further exacerbate the West-to-East congestion issues that are consistently driving transmission expansion projects in SPP.[106] Therefore, future expansion projects will likely have higher evaluated benefit-to-cost ratios to Missouri and increase the assigned costs of the transmission expansion projects to Missouri utilities, while increasing the estimated benefits of participating in SPP, and increasing the exit fees to leave SPP.

Staff Witness: Michael L. Stahlman

IRP Assumptions

The preferred resource plan ("PRP") was compared in both the re-modeled 2025 IRP and the re-modeled 2024 IRP. Both, for the most part, were similar. Notable changes that occurred in the 2025 IRP were thermal additions of 355 MW combined cycles in both 2030 and 2040. These changes were in response to a purported increase in forecasted capacity needs due to anticipated increase in summer reserve margin requirements and the introduction of binding winter capacity requirements, load growth, and lower projections of demand-side resource contributions to capacity.

[106] These charges are typically part of the SPP's Schedule 11 OATT, Base Plan Zonal Charge and Region-Wide Charge.

Upon review of Evergy's 2025 IRP, some aspects of the plan did not include objective criteria. For example, the assignment of probabilities to critical, uncertain factors was subjective because these probabilities are assigned by subject matter experts chosen by Evergy's management and can differ from person to person. It is Staff's view that objective criteria should be established to assign probabilities. Staff is also of the view that the alternative resource plans may not be exhaustive and that certain constraints[107] chosen by Evergy for the modeling analysis may limit the selection of certain resources in specific years. Another limitation of the IRP assumptions is that the demand-side resources and the retirement dates of generation assets are not determined by the model, but by subject matter experts. Also, the model uses a single number to represent the low, medium, and high values of its critical uncertain factors. To make the results more robust, the applicants can establish a range of values to use for each level of the uncertain factors and then average over those values to derive a single end point. The reasonableness of the assumptions used in the IRP impact the cost of the project and for that matter its economic feasibility.

Staff Witness: Justin Tevie

Natural Gas Procurement

A key element in the request for a CCN with regard to the combined cycle units at Viola and McNew and the simple cycle unit at Mullin Creek #1 is the availability and cost of firm transportation to supply the generating facilities. Staff based its review of this area on the Direct Testimony of EMM and EMW witness J Kyle Olson, along with reviews of data request responses provided in this case. Staff also reviewed various aspects regarding natural gas

[107] Examples include fixed retirement dates, carbon restrictions, natural gas prices, and purchase power agreements as mentioned in the 2025 IRP.

procurement in a similar case filed before the Kansas Corporation Commission ("KCC") Docket No. 25-EKCE-207-PRE.[108]

Mr. Olson provided a high-level overview of EMW's and EMM's gas procurement plan on pages 34 and 35 of his Direct Testimony under the heading of "Fuel Gas Supply Plan." In essence, Evergy intends to acquire firm transportation for these units after conducting a bid process for pipelines in the area.

Mr. Olson further notes, on page 35, lines 10 through 13 of his direct testimony that "All desktop level estimates have been secured and Evergy is currently working with the pipelines to perform more detailed studies, sometimes referred to as Class 3 or Class 4 studies.[109] Evergy anticipates most of these studies will be completed in Q1 of 2025."

It is Staff's understanding that these more detailed studies from the pipelines and Evergy's evaluation of these studies are, at the earliest, expected at the ** [redacted], ** or perhaps later. In Staff's view, very little additional information has been available with regard to the expected detailed evaluations beyond the very preliminary information provided in the pipeline correspondence in answer to Staff data requests.

Questions still remain relating to the costs of possible laterals[110] that may be necessary to provide firm transportation from an interstate pipeline's mainline to the generation plant. Costs of extensions that do not benefit the pipeline's entire system and are dedicated to particular shippers tend to be recovered from that shipper. If a lateral is necessary, the cost would be in addition to

[108] *In the Matter of the Petition of Evergy Kansas Central, Inc., Evergy Kansas South, Inc. and Evergy Metro, Inc. for Determination of the Ratemaking Principles and Treatment that will Apply to the Recovery in Rates of the Cost to be Incurred for Certain Electric Generation Facilities Under K.S.A. 66-1239*, Application filed November 6, 2024.

[109] It is Staff's understanding that Class 3 and Class 4 studies (or estimates) would provide greater detail than the initial high-level desktop estimate initially provided.

[110] A pipeline lateral (sometimes called a spur) refers to a segment of pipeline that connects the pipeline's mainline system to a specific customer or subset of customers.

the fixed costs of the long-haul transportation agreement to move gas from a supply area to the location of the new lateral (pipeline expansion).

During a public presentation from Evergy (David Campbell, Chairman and Chief Executive Officer, and Chuck Caisley, Chief Customer Officer dated March 11, 2025) before the Kansas State Legislature's House Committee on Energy, Utilities, and Telecommunications, Mr. Campbell and Mr. Caisley provided, on pages 13 and 14, of their presentation:[111]

> Viola is located in Sumner County, Kansas in adjacent to a 345 kV substation. While electrical infrastructure is at the site, a ~20-mile gas spur will be required to run natural gas to the site. The gas pipeline is to be constructed and owned by the pipeline company…
>
> McNew is located in Reno County, Kansas in a salt production community adjacent to natural gas infrastructure. While natural gas is close to the site, an ~12-mile 345 kV generator tie line will be needed to get to the point of grid interconnection.

Mullin Creek #1, which was not mentioned in the Kansas updates cited above, has the same lack of detailed information with regard to gas procurement issues that the combined cycle plants lack. To Staff's knowledge, the detailed reviews with regard to natural gas transportation, gas laterals, gas supplies, and pipeline rates and routes are not known.

At this stage, Staff can offer some additional background into what is likely relevant to whether this project is economically feasible in terms of the gas procurement issue.

First, attached as Schedule 2 to the Staff report, is the Direct Testimony of Matt L. Robbins, Director of Gas Supply for Kansas Gas Service, a division of ONE Gas, Inc. ("KGS"). This testimony was filed in KCC Docket No. 25-EKCE-207-PRE on March 14, 2025. Mr. Robbins' testimony is important in that it gives gas procurement insight from the perspective

[111] The presentation's location is at the following link, last accessed on April 24, 2025.
https://kslegislature.gov/li/b2025_26/committees/ctte_h_energy_utilities_and_telecommunications_1/documents/testimony/20250311_01.pdf

of a large local distribution company ("LDC") operating in the areas of the planned locations of the combined cycle units. This testimony covers the Viola and McNew plants but not the simple cycle unit, Mullin Creek #1, which is proposed for Missouri.

In essence, Mr. Robbins expressed concerns over the present lack of available pipeline capacity of one of the main interstate pipelines in the area of Viola and McNew.

Southern Star Central Pipeline, one of the pipelines that is relatively near to the Viola and McNew plant sites, routinely posts updates about available capacity on its public informational postings website. Attached as Schedule 3 is a recent update with regard to available capacity on this pipeline. It is questionable that the production area capacity listed would be adequate for both combined cycle units. This point was emphasized in Mr. Robbin's testimony and Staff agrees with the stated concern.

Another issue discussed in the KGS testimony filed at the KCC was the importance of evaluating Storm Uri events that might happen in the future. Storm Uri occurred in February 2021, and created challenging delivery problems for the Southern Star Central system, evidenced by diminishing supplies and continued Operational Flow Orders.[112] In conjunction with the storm's potential impact on reliability, daily gas prices reported for the Southern Star Central system (as well as other Kansas and Oklahoma pipelines) were at all-time highs, in some instances exceeding $300 per MMBtu. Staff witness Shawn E. Lange, PE further discusses the development of new NERC standards related to energy assurance planning.

It does not appear that Viola or McNew will be capable of burning an alternative fuel, thus precise plans for dealing with both the reliability and cost impacts from such events are essential.

[112] An Operational Flow Order ("OFO") refers to an order issued by a pipeline to require certain actions by shippers to protect the integrity of the pipeline. An example might be where a shipper must balance its receipts and deliveries on the pipeline's system.

LDCs used storage to help address both issues of reliability and costs during Storm Uri. Generally speaking, no-notice storage (available without pre-ordering) is fully subscribed and not incrementally available on Southern Star Central. Natural gas storage may not be available at all, and this creates a unique challenge for large gas units that are required to meet load in the face of pipeline curtailments or Operational Flow Orders.

Overall, there is a general lack of detail with regard to Evergy's gas procurement plans. There are no detailed cost estimates regarding necessary pipeline spurs or laterals. The second stage of detailed pipeline bids ** [redacted] **. Additionally, questions remain related to: (1) what mainline rates will be offered, (2) what receipt and deliver points will be applicable, (3) what pipeline path on the pipeline will be used, (4) how long is the duration of any required firm transportation contract, (5) what will be the specific pipeline capacity level needed and contracted for to each plant, (6) what firm supply options have been considered, and (7) what definitive cost estimates are associated with building required laterals.

There are enough unknowns regarding the gas procurement plan that, to the extent that Evergy is seeking upfront approval regarding prudence in this application, Staff would not recommend it be given in this proceeding. Please see Section IV of this report for a further discussion of this issue.

In addition, with regard to the impact of natural gas procurement on the economic feasibility of Evergy's request, there is not enough detail provided by EMW to make a recommendation at this time with respect to reliability and cost impacts of this issue.

Staff Witness: David M. Sommerer

Other Considerations

As part of the supplemental direct testimony in this case, Evergy witnesses explain that one of the drivers for the decision to include the McNew combined cycle unit in EMW's fleet is the potential for load growth via economic development and/or large load customer interconnection. EMW and EMM recently filed an application in Case No. EO-2025-0154, regarding requests for approval of a Large Load Power Service exemplar tariff, as well as several optional programs or riders. Staff intends to address the majority of the issues related to that case within the EO-2025-0154 docket, but provides the following summary information regarding EMW's current investment levels and associated revenue requirements related to its production assets.[113]

Figure 7 below provides a graphical representation of the current EMW production fleet revenue requirement composition, including the current embedded cost of capacity.

Figure 7

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**

[113] EMW also participates in several wind contracts which are not reflected in these figures because the assets are not owned by Evergy. The MW values reflected in these figures are not adjected to the SPP accredited values, as those valuations are currently in flux. For consistency with the revenue requirement calculations provided in Evergy's workpapers in this case, Staff has omitted fuel and variable operations expenses from the legacy revenue requirement calculations. The valuations presented are based on Evergy's workpapers in its most recent rate case, and have not been adjusted for inflation or otherwise projected. Evergy's proposed solar generation projects are not included in these figures.

Figure 8 provides a view of the revenue requirement as well as the cost per MW of the existing EMW-owned production fleet.

Figure 8

**

**

Within the past few years, Evergy's estimated cost of building a new natural gas combined cycle generating unit has increased substantially, and according to other sections of this report the final costs of these proposed facilities is largely uncertain. Based upon the information provided by Evergy to date, Staff prepared a comparison of the costs of capacity of the existing owned generation fleet and what that same metric would be after the inclusion of the Viola and McNew plants for illustrative purposes. Figure 9 below provides an illustration of the changes in owned capacity costs from the current embedded costs to those costs after inclusion of the Viola and McNew plants, while Figure 10 provides a view of the future owned production fleet revenue requirement and cost per MW based upon a snapshot in time and assuming the cost estimates are accurate.

Figure 9

**

**

Figure 10

**

**

Clearly, the additions of the two combined cycle plants will have a substantial impact on not only the revenue requirement of the production fleet, but also on the cost of capacity. These costs will impact the bills of Evergy's current ratepayers by potentially doubling the revenue requirement of the owned production fleet and increasing the utility-owned cost of capacity by nearly ** [redacted] ** on a $/MW basis.[114]

Staff Witness: J Luebbert

Conclusion and Recommended Conditions

The lack of detail and specificity, transparency and inclusion of generic assumptions in the IRP render the CCN application inadequate to justify the economic feasibility of the projects; because the IRP is the starting point to identify any supply-side resources included in future CCNs, it is important to check for any flaws. Staff has observed in recent CCN cases that the costs utilized varied from the generic cost assumptions in the IRP. This is also true of the assumptions that alter the economics of the projects.

It is prudent that in order to move forward with a project, the costs and potential revenues are reasonably estimated over the planning horizon. The burden is on the utility to prove that each project listed in the CCN is economically feasible. This is especially true if cost increases deviate significantly from the assumptions included in the IRP or if circumstances are reasonably expected to limit revenues from generation (i.e. reduced capacity factors to meet regulatory standards). It is good practice to update any cost information that may impact the economic feasibility of the project. Failure to do so may lead to a misleading decision.

[114] It is important to note that the underlying analysis for Figures 7, 8, 9, and 10 do not address accredited capacity, does not include PPAs or new solar facilities, is a single year-in-time snapshot, and does not include fuel or variable operations costs (maintenance costs are captured).

The Commission should require EMW to demonstrate that specific projects are, and continue to be, economically feasible in the face of a changing economic milieu. EMW has the financial incentive to advance projects with large economic costs because ratepayers will be responsible for paying for the projects, and an allowed return on rate base, once included in rates. From Staff's review of the documents, EMW has not demonstrated that the projects are economically feasible.

Based upon the information that Staff reviewed as part of this case, Staff recommends that the Commission order include the following conditions:

1. The Applicants should re-model the capacity expansion aspect of its IRP and allow the model to select the retirement dates;
2. Given that the costs of these projects are very high, the Applicants should delay the retirements of their generation assets and conform to the model's selection date, to reduce the cost burden on rate payers;
3. The Applicants should consider establishing a range of values for each level of the critical uncertain factor to make the results more robust; and,
4. The Applicants should lower the annual capacity factor in the capacity expansion model for Viola, McNew, and Mullin Creek to no greater than the maximum allowable to comply with the EPA GHG regulation and allow the model to select alternative generation resources to meet resource adequacy requirements.

While Staff concludes that additional capacity is effectively a necessity because the lack of the service is such an inconvenience, the economic analyses provided by EMW are flawed, and deciding to move forward with the Projects based upon the results of such analysis introduces unnecessary risk for ratepayers. Staff's recommended conditions for approval of these CCNs would provide the Commission, as well as other parties to a general rate case, additional data points for determination of the prudence of the decision to move forward with the projects.

Staff Witness: Justin Tevie

E. Whether the proposal is in the Public Interest

Staff's public interest assessment for this case involves the evaluation of the other Tartan Criteria: need for the project, the project's economic feasibility, the company's qualifications to construct and operate the project, and the company's financial ability to finance the project. Staff evaluates each criterion separately, and then balances each when recommending whether or not a project promotes the public interest. Staff also reviews other considerations not included within the Tartan Criteria, which in this case are: the in-service criteria, the site of construction evaluations, and public engagement. Finally, Staff will recommend a number of conditions to the granting of the CCN.

Public Engagement

The Commission has received a total of six (6) consumer comments regarding this CCN request as of April 16, 2025, one of which was an almost word for word duplicate of another, both of which were submitted by the same individual. Two of the five individuals who submitted comments mentioned rate increases as a concern, with one recommending more coal generation to lower rates. Two other individuals mentioned their desires for only renewable projects, with one stating they would be fine with increased rates as a result. The final individual requested EMW to invest into Small Modular Reactors instead of natural gas turbines.

The Commission held a local public hearing on April 1, 2025. In summary, one individual had concerns about the proximity of the Mullin Creek #1 site to their home, including concerns with pollution. Two other individuals expressed sympathy for this individual's situation. Three individuals were concerned with increased rates as a result of the construction of additional generating units. One individual stated that residential electricity should be cheaper than

commercial electricity. And finally, one individual recommended that EMW not retire coal plants, as that could make additional natural gas or solar plants unnecessary.

Staff Witness: Brodrick Niemeier

Site of Construction

Evergy hired Power Engineers in 2023 to study and determine potential sites in Kansas and Missouri to build electrical generation facilities.[115] Four criteria were used to identify preferred potential construction sites:

1) Identifying electrical bus locations in the Kansas and Missouri study areas which would allow the greatest amount of electricity to be transferred before being limited by Evergy's transmission facility ratings;
2) Identifying if the potential sites closest to the preferred electrical bus locations were also within a fifteen-mile radius to adequate natural gas supplies and electrical interconnections;
3) Identifying and removing any locations from consideration that either may have, or would potentially create, any environmental justice concerns if the electrical bus fell near highly populated areas – or would likely encounter other environmental permitting issues; and,
4) Of what appeared to be the potentially most suitable sites, Power Engineers and Evergy then further identified those sites which offered larger available land area than would be required strictly for construction of the proposed electrical generation facilities.

Once this initial process was applied to the areas being considered, a total of 62 locations were selected for further evaluation. From those initial 62 sites, further screening and analysis reduced that number to 21 potentially suitable sites. In order to further refine and condense the number of potentially suitable sites, six (6) pertinent factors were used for additional analysis:

[115] EA-2025-0075, Direct Confidential Testimony of J. Kyle Olson, Section IV. Site Selection, Pages 12 – 17.

- Status of the property ownership (whether Evergy owned it, had a lease or option on the property, or whether it was privately owned at the time of analysis);
- The capacity of the bus generator for the potential site;
- The distance from the site under analysis to the location at which the bus would be potentially connected;
- The distance of a natural gas pipeline to the potential site;
- The size of the natural gas pipeline; and,
- The availability of natural gas at each of the sites being analyzed.

Once this process was completed, three (3) sites in Kansas, and three (3) sites in Missouri were identified as receiving the highest scores after being analyzed through a decision matrix utilized by Power Engineers. ** [redacted]

[redacted]

[redacted][116]

- [redacted]
- [redacted]
- [redacted]
- [redacted]
- [redacted]
- [redacted]

[redacted]

[redacted][117]

[redacted]

[116] EA-2025-0075, Staff DR 0061, CONF – 2023 Conventional Generation Siting Study.pdf.

[117] EA-2025-0075, Direct Confidential Testimony of J. Kyle Olson, Section IV. Site Selection, Page 15.

- [redacted]
- [redacted]
- [redacted]
- [redacted]
- [redacted]
- [redacted]
- [redacted]
- [redacted]
- [redacted]
- [redacted]
- [redacted]
- [redacted]
- [redacted]

[redacted]

[redacted]

[redacted]

[redacted] **

Staff concludes that Evergy has done its due diligence in evaluating, assessing, and selecting its proposed sites for the electrical generation facilities in Kansas and in Missouri.

Staff Witness: Donald A. Fontana, PE

In-Service Criteria

In-service criteria are a set of operational tests or operational requirements developed to determine whether a new unit is "fully operational and used for service." The phrase "fully operational and used for service" comes from Section 393.135, RSMo., a statute that was adopted by Initiative, Proposition No. 1, on November 2, 1976. Section 393.135, RSMo., provides as follows:

> Any charge made or demanded by an electrical corporation for service, or in connection therewith, which is based on the costs of construction in progress upon any existing or new facility of the electrical corporation, or

> any other cost associated with owning, operating, maintaining, or financing any property before it is **fully operational and used for service**, is unjust and unreasonable, and is prohibited. [Emphasis added.]

Staff recommends the Commission order the in-service criteria shown in Confidential Schedule 4 for use in determining whether the Projects are fully operational and used for service. Staff's recommended in-service criteria in Schedule 4 is consistent with the most recent similar generation projects including in-service criteria agreed to by the parties in Ameren Missouri's Case No. EA-2024-0237. Staff's recommendation differs from Evergy's[118] in the following ways:

- Staff's recommendations are based on the type of generation asset. Combined cycle in-service criteria are somewhat different than combustion turbine in-service criteria because the unit is expected to operate differently. Combined cycles operate more efficiently and thus tend to get dispatched more. Combustion turbines tend to have faster start-up times and tend to be used for peaking. Staff's in-service is more reflective of the difference in operations of the proposed generation units.
- There is a difference in the capacity factor test. Staff is proposing no capacity factor test for the Combustion turbine Mullin Creek and a 60% capacity factor over 168 hours for the combined cycle units of Viola and McNew. EMW proposed a 30% capacity factor over 72 hours for all units. Staff's in-service criteria is more reflective of how Evergy has modeled the Combined Cycle units as operating in the 2024 IRP.
- There is a difference in the contract guarantees. Staff includes a requirement that contract guarantees are met, whereas EMW excludes contract guarantees from the criteria. Ultimately, the utility's ratepayers are going to pay for the project that utility is authorized to construct. If the utility requires certain guarantees, particularly guarantees that may affect schedule and project cost, it is important that those items are sufficiently satisfied.

Staff Witness: Shawn E. Lange, PE

[118] EA-2025-0075 Olson Direct, Page 35, line 21 - Page 37, line 2.

Conclusion and Recommended Conditions

In summary, based on Staff's review above: 1) the Projects are needed; 2) EMW is qualified to construct, install, own, operate, maintain, and otherwise control and manage the Projects; 3) EMW has the financial ability to complete the Projects; 4) Staff cannot determine that the Projects are economically feasible; and 5) the Projects are in the public interest with conditions recommended by Staff.

Staff recommends the Commission approve the projects, subject to the following conditions, and that the Commission deny EMW's request for decisional prudence. Staff will discuss its reasoning for denying decisional prudence later in this report.

Staff Witness: Brodrick Niemeier

Economic Conditions

1. The Applicants should re-model the capacity expansion aspect of its IRP and allow the model to select the retirement dates;
2. Given that the costs of these projects are very high, the Applicants should delay the retirements of their generation assets and conform to the model's selection date, to reduce the cost burden on rate payers;
3. The Applicants should consider establishing a range of values for each level of the critical uncertain factor to make the results more robust; and,
4. The Applicants should lower the annual capacity factor in the capacity expansion model for Viola, McNew, and Mullin Creek to no greater than the maximum allowable to comply with the EPA GHG regulation and allow the model to select alternative generation resources to meet resource adequacy requirements.

Staff Witnesses: J Luebbert and Justin Tevie

Engineering Conditions

- EMW shall file in this docket a site-specific Emergency Action Plan as well as Operations and Maintenance Plan for McNew, Mullin Creek #1, and Viola within 60-days of that facility being placed in service.
- EMW shall provide quarterly reporting of the progress of construction of the Projects. This report shall include, but not be limited to: quarterly progress reports on permitting, plans, specifications, and construction progress for the Projects.
- EMW shall use the in-service criteria set forth in Confidential Schedule 4.

Staff Witnesses: Brodrick Niemeier, Shawn E. Lange, PE and Donald A. Fontana, PE

IV. Request for Decisional Prudence

Throughout this report Staff has identified several flaws within EMW's analyses that EMW contends justify approval of the application in this case. The costs and revenues utilized in EMW's analyses are still uncertain and, in some instances, unreliable estimates. Review of the economics of a specific generation project, including comparisons to reasonable alternatives for meeting identified needs, is important for the Commission to consider in determining whether it is appropriate to grant a CCN.

It is paramount that the economic justification for a specific project is complete and reliable prior to the Commission determining that the decision to move forward with the project is prudent. The costs of building an electric generating resource, the cost of fuel provision, and the expected market revenues from that resource are crucial elements in determining the project economics. EMW's analyses fail to properly account for the currently expected costs of the project and the revenues that may result from the SPP integrated marketplace. Unfortunately, EMW's decision-making process appears to be agnostic to actual revenues that are expected to result from generation assets.

The location and the expected timing and magnitude of generation from a given asset are important considerations, as those factors tie directly to the revenues that will result from that generation. As discussed in Section III.D of this report, EMW's IRP analysis that is utilized to select the preferred resource plan relied upon a far greater level of generation from natural gas resources than would be allowable under the current EPA GHG standards for compliance. Furthermore, to date, EMW has only provided high level estimates of the cost to provide firm natural gas transportation to the facilities. The presence of the approved Fuel Adjustment Clause largely shields EMW's shareholders from inaccurate revenue estimates and fuel supply cost estimates from new generating resources and places a vast majority of that risk onto ratepayers.

Staff is concerned that EMW has not provided the level of detail necessary to fully understand the cost implications associated with natural gas pipeline infrastructure or the cost of supplying each plant with long-term firm transportation of natural gas. Both of the aforementioned factors are location specific, further emphasizing the need to carefully consider the location of a given asset.

However, the lack of additional justification for moving forward with the projects should signal to the Commission EMW's approach to project economics and underscores Staff's recommendations that a finding of decisional prudence is neither justified nor reasonable in this case. EMW itself provides additional support for Staff's concerns within its *Response to Staff's Motion for Extension and to the Commission's Sua Sponte Order Granting Staff's Motion for Extension of Time* in Case No. EA-2024-0292. In paragraph 7 of EMW's response, the Company states:

> Because Evergy Missouri West expects increases in inflationary and competitive forces regarding material and supply chain disruptions from tariffs on steel and aluminum, there is considerable risk in the further delaying of these solar facilities.

Given the uncertainty that still exists with the costs of completing this project, the cost of natural gas pipeline infrastructure, ongoing costs of firm transportation of natural gas, and the unreliability of EMW's projections of market revenue, as well as the inflationary and competitive forces regarding material and supply chain disruptions from tariffs on steel[119] and aluminum,[120] it is inappropriate to determine the decision to move forward with this project is prudent. Staff recommends the Commission reject EMW's request for decisional prudence. If the Commission decides to approve EMW's application, it is appropriate to withhold the determination of prudence of this project until EMW includes the project in rates proposed in a general rate case where all factors can be reviewed. The Commission does not need to make this determination in the context of this case.

The determination of the prudence of a given project has typically been reserved for general rate cases. General rate cases include several advantages for Commission consideration when compared to the proceedings in a CCN docket. First, the case timeline for a general rate case is much longer, which allows for a more thorough discovery process for all parties. Next, general rate cases typically include additional interveners with a wide variety of interests. Finally, and most importantly, in a general rate case all parties to the case are provided the opportunity to file direct, rebuttal, and surrebuttal testimony, which affords a more substantial record for the Commission to consider all factors and costs prior to making a prudency determination on plants that cost billions of dollars and will be recovered from ratepayers for over 30 years. In contrast, Staff and other parties to this case are limited to filing rebuttal testimony, which is responsive to

[119] Maltais, K. (2025, March 29). *Commodities Report: Metals Prices Soar Amid Tariff War*. S&P Capital IQ. https://www.capitaliq.spglobal.com/apisv3/spg-webplatform-core/news/article?id=88270914&KeyProductLinkType=18.

[120] Maltais, K. (2025, February 21). *U.S. Aluminum Buyers Scramble for Metal as Trump Tariff Looms*. S&P Capital IQ. https://www.capitaliq.spglobal.com/apisv3/spg-webplatform-core/news/article?id=87673113&redirected=1.

the application and direct testimony of EMW, and surrebuttal, which will only respond to the rebuttal testimony of the other parties.

Based on the information that EMW has provided and Staff has reviewed, it is not possible to determine that moving forward with the project is a prudent decision. While Staff concludes that additional capacity is effectively a necessity because the lack of the service is such an inconvenience, the economic analyses provided by EMW are flawed, and deciding to move forward with the Projects based upon the results of such analysis introduces unnecessary risk for ratepayers. Staff's recommended conditions for approval of these CCNs would provide the Commission, as well as other parties to a general rate case, additional data points for determination of the prudence of the decision to move forward with the projects.

Staff Witness: J Luebbert

V. Request for Construction Accounting

Evergy requested approval of construction accounting for the Projects. Construction accounting, also known as plant in service accounting ("PISA"), is the deferral of depreciation and return on plant that is in service but is not currently reflected in rates. Under current Missouri Statute 393.1400, PISA is not allowed for natural gas generating units. However, with the passage of Senate Bill 4, signed by Missouri Governor Michael Kehoe on March 26, 2025,[121] electric utilities can utilize PISA for new natural gas generating units. Senate Bill 4 will be effective August 28, 2025; therefore, the Commission does not need to grant EMW and EMM construction accounting since PISA will now be available for natural gas generating units.

Staff Witness: Kimberly K. Bolin

[121] Governor Kehoe Signs SB 4 into Law, Securing Missouri's Energy Future and Economic Growth | Governor Mike Kehoe.

Schedule 1 - Summary of Application Filing Requirements - Confidential

Schedule 2 - Direct Testimony of Matt L. Robbins, KCC Docket No. 25-EKCE-207-PRE

Schedule 3 - Southern Star Available Capacity

Schedule 4 - In-Service Test Criteria - Confidential

Schedule 5 - Staff Credentials

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of the Application of Evergy Missouri West, Inc. d/b/a Evergy Missouri West and Evergy Metro, Inc. d/b/a Evergy Missouri Metro for Permission and Approval of a Certificate of Public Convenience and Necessity for Natural Gas Electrical Production Facilities	)))))))	Case No. EA-2025-0075

AFFIDAVIT OF KIMBERLY K. BOLIN

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

COMES NOW KIMBERLY K. BOLIN and on her oath declares that she is of sound mind and lawful age; that she contributed to the foregoing *Staff Recommendation* in Report form; and that the same is true and correct according to her best knowledge and belief.

Further the Affiant sayeth not.

Kimberly K. Bolin
KIMBERLY K. BOLIN

JURAT

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 24th day of April 2025.

D. SUZIE MANKIN
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: April 04, 2029
Commission Number: 12412070

D Suzie Mankin
Notary Public

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of the Application of Evergy Missouri West, Inc. d/b/a Evergy Missouri West and Evergy Metro, Inc. d/b/a Evergy Missouri Metro for Permission and Approval of a Certificate of Public Convenience and Necessity for Natural Gas Electrical Production Facilities	)))))))	Case No. EA-2025-0075

AFFIDAVIT OF FRANCISCO DEL POZO

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

COMES NOW FRANCISCO DEL POZO and on his oath declares that he is of sound mind and lawful age; that he contributed to the foregoing *Staff Recommendation* in Report form; and that the same is true and correct according to his best knowledge and belief.

Further the Affiant sayeth not.

FRANCISCO DEL POZO

JURAT

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 23rd day of April 2025.

D. SUZIE MANKIN
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: April 04, 2029
Commission Number: 12412070

Notary Public

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of the Application of Evergy Missouri West, Inc. d/b/a Evergy Missouri West and Evergy Metro, Inc. d/b/a Evergy Missouri Metro for Permission and Approval of a Certificate of Public Convenience and Necessity for Natural Gas Electrical Production Facilities	)))))))	Case No. EA-2025-0075

AFFIDAVIT OF DONALD A. FONTANA, PE

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

COMES NOW DONALD A. FONTANA, PE and on his oath declares that he is of sound mind and lawful age; that he contributed to the foregoing *Staff Recommendation* in Report form; and that the same is true and correct according to his best knowledge and belief.

Further the Affiant sayeth not.

Donald A. Fontana

DONALD A. FONTANA, PE

JURAT

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 18th day of April 2025.

D. SUZIE MANKIN
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: April 04, 2029
Commission Number: 12412070

D Suzie Mankin

Notary Public

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of the Application of Evergy Missouri West, Inc. d/b/a Evergy Missouri West and Evergy Metro, Inc. d/b/a Evergy Missouri Metro for Permission and Approval of a Certificate of Public Convenience and Necessity for Natural Gas Electrical Production Facilities	)))))))	Case No. EA-2025-0075

AFFIDAVIT OF SHAWN E. LANGE, PE

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

COMES NOW SHAWN E. LANGE, PE and on his oath declares that he is of sound mind and lawful age; that he contributed to the foregoing *Staff Recommendation* in Report form; and that the same is true and correct according to his best knowledge and belief.

Further the Affiant sayeth not.

Shawn E. Lange
SHAWN E. LANGE, PE

JURAT

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 23rd day of April 2025.

D. SUZIE MANKIN
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: April 04, 2029
Commission Number: 12412070

D Suzie Mankin
Notary Public

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

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AFFIDAVIT OF J LUEBBERT

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

COMES NOW J LUEBBERT and on his oath declares that he is of sound mind and lawful age; that he contributed to the foregoing *Staff Recommendation* in Report form; and that the same is true and correct according to his best knowledge and belief.

Further the Affiant sayeth not.

J LUEBBERT

JURAT

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 18th day of April 2025.

D. SUZIE MANKIN
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: April 04, 2029
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Notary Public

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of the Application of Evergy Missouri West, Inc. d/b/a Evergy Missouri West and Evergy Metro, Inc. d/b/a Evergy Missouri Metro for Permission and Approval of a Certificate of Public Convenience and Necessity for Natural Gas Electrical Production Facilities	)))))))	Case No. EA-2025-0075

AFFIDAVIT OF BRODRICK NIEMEIER

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

COMES NOW BRODRICK NIEMEIER and on his oath declares that he is of sound mind and lawful age; that he contributed to the foregoing *Staff Recommendation* in Report form; and that the same is true and correct according to his best knowledge and belief.

Further the Affiant sayeth not.

Brodrick Niemeier
BRODRICK NIEMEIER

JURAT

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 23rd day of April 2025.

D. SUZIE MANKIN
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: April 04, 2029
Commission Number: 12412070

D Suzie Mankin
Notary Public

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OF THE STATE OF MISSOURI

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AFFIDAVIT OF MICHAEL L. STAHLMAN

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

COMES NOW MICHAEL L. STAHLMAN and on his oath declares that he is of sound mind and lawful age; that he contributed to the foregoing *Staff Recommendation* in Report form; and that the same is true and correct according to his best knowledge and belief.

Further the Affiant sayeth not.

MICHAEL L. STAHLMAN

JURAT

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 18th day of April 2025.

D. SUZIE MANKIN
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: April 04, 2029
Commission Number: 12412070

Notary Public

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of the Application of Evergy Missouri West, Inc. d/b/a Evergy Missouri West and Evergy Metro, Inc. d/b/a Evergy Missouri Metro for Permission and Approval of a Certificate of Public Convenience and Necessity for Natural Gas Electrical Production Facilities	)))))))	Case No. EA-2025-0075

AFFIDAVIT OF DAVID M. SOMMERER

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

COMES NOW DAVID M. SOMMERER and on his oath declares that he is of sound mind and lawful age; that he contributed to the foregoing *Staff Recommendation* in Report form; and that the same is true and correct according to his best knowledge and belief.

Further the Affiant sayeth not.

David M. Sommerer
DAVID M. SOMMERER

JURAT

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 21st day of April 2025.

D. SUZIE MANKIN
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: April 04, 2029
Commission Number: 12412070

D Suzie Mankin
Notary Public

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of the Application of Evergy Missouri West, Inc. d/b/a Evergy Missouri West and Evergy Metro, Inc. d/b/a Evergy Missouri Metro for Permission and Approval of a Certificate of Public Convenience and Necessity for Natural Gas Electrical Production Facilities	)	Case No. EA-2025-0075

AFFIDAVIT OF JUSTIN TEVIE

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

COMES NOW JUSTIN TEVIE and on his oath declares that he is of sound mind and lawful age; that he contributed to the foregoing *Staff Recommendation* in Report form; and that the same is true and correct according to his best knowledge and belief.

Further the Affiant sayeth not.

JUSTIN TEVIE

JURAT

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 23rd day of April 2025.

D. SUZIE MANKIN
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: April 04, 2029
Commission Number: 12412070

Notary Public

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of the Application of Evergy Missouri West, Inc. d/b/a Evergy Missouri West and Evergy Metro, Inc. d/b/a Evergy Missouri Metro for Permission and Approval of a Certificate of Public Convenience and Necessity for Natural Gas Electrical Production Facilities	)))))))	Case No. EA-2025-0075

AFFIDAVIT OF SEOUNG JOUN WON, PhD

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

COMES NOW SEOUNG JOUN WON, PhD and on his oath declares that he is of sound mind and lawful age; that he contributed to the foregoing *Staff Recommendation* in Report form; and that the same is true and correct according to his best knowledge and belief.

Further the Affiant sayeth not.

SEOUNG JOUN WON, PhD

JURAT

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 18th day of April 2025.

D. SUZIE MANKIN
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: April 04, 2029
Commission Number: 12412070

Notary Public