Exhibit No.:	
Issue:	Distribution System; Storm Reserve
Witness:	Ryan Mulvany
Type of Exhibit:	Direct Testimony
Sponsoring Party:	Evergy Missouri West
Case No.:	ER-2027-0077
Date Testimony Prepared:	November 3, 2026

MISSOURI PUBLIC SERVICE COMMISSION

CASE NO.: ER-2027-0077

DIRECT TESTIMONY

OF

RYAN P. MULVANY

ON BEHALF OF

EVERGY MISSOURI WEST

Kansas City, Missouri
November 2026

DIRECT TESTIMONY

OF

RYAN P. MULVANY

Case No. ER-2027-0077

I. INTRODUCTION

Q: Please state your name and business address.

A: My name is Ryan P. Mulvany. My business address is 1200 Main, Kansas City, Missouri 64105.

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

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

Q: Who are you testifying for?

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

Q: What are your responsibilities?

A: My responsibilities include oversight of construction, operation, and maintenance functions for Distribution throughout Evergy, Inc.'s jurisdictional territories. This includes the execution of distribution projects identified as part of Evergy's capital plan, as well as all customer outage restoration field activities.

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

A: I received a bachelor's degree with a major in Business Administration from the University of Kansas in 2001 and a master's degree in Business Administration in 2006. I began my career as a Staff Auditor for the Kansas Corporation Commission ("KCC") in 2001. I have worked for Evergy (including one of its predecessors, KCP&L) since 2003. During my tenure with the Company, I have gained broad experience across many functions in both administrative areas and utility operations. My present position includes responsibility for all distribution plant and operations.

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

A: Yes. I have previously testified before this Commission as well as before the Kansas Corporation Commission.

Q: What is the purpose of your direct testimony?

A: My testimony: (a) describes Evergy Missouri West's distribution system, (b) identifies and discusses reliability performance, (c) describes specific challenges to maintaining and/or improving EMW's distribution system reliability, (d) explains EMW's distribution system investment strategy to prioritize investments that balance affordability, reliability, and customer value, (e) identifies the major investments and programs that are the product of this strategic process, and (f) discusses EMW's external review process for its distribution assets and urges approval of a storm reserve for EMW.

II. DISTRIBUTION SYSTEM: MAGNITUDE, COMPONENTS AND PERFORMANCE

Q: What are the major components of Evergy Missouri West's distribution system?

A: The Evergy Missouri West distribution system includes approximately14,803 primary and secondary line-miles, 284,338 distribution poles, 70,335 overhead distribution transformers, 43,898 pad-mounted distribution transformers, and serves approximately 352,500 residential and commercial customers.

Q: What is the average age of Evergy Missouri West's distribution assets?

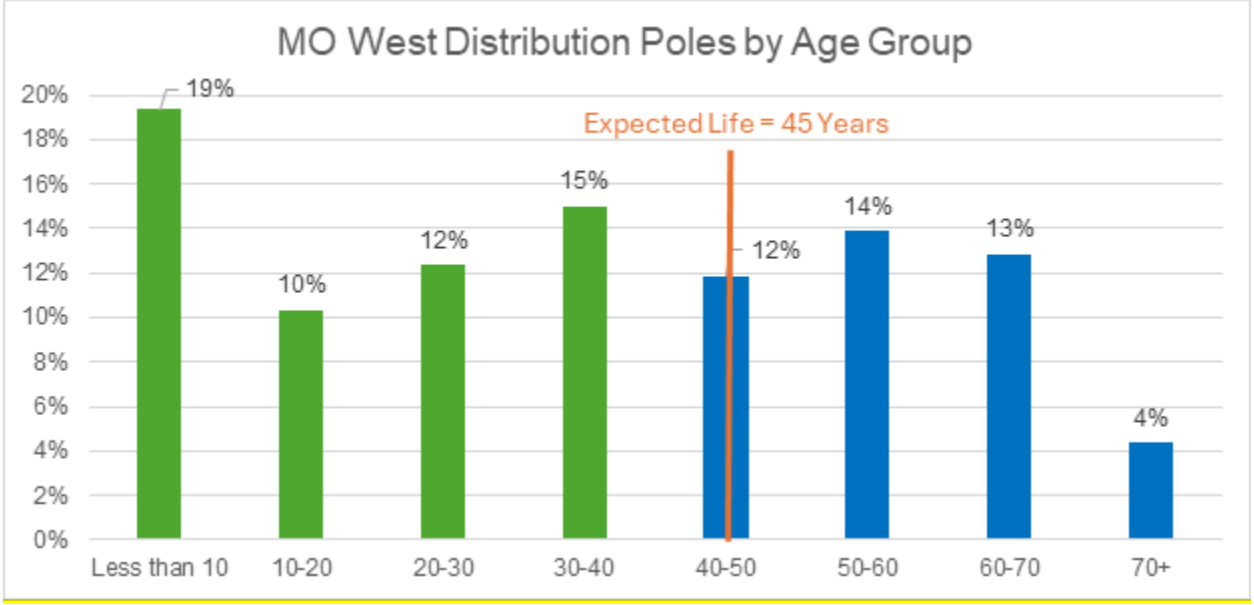
A: **Table 1** below shows the average age of key asset types (conductors, poles, and transformers) for Evergy Missouri West, as well as the expected lives of those asset types.

Table 1: Average Age and Expected Life of Key Asset Types for EMW

Key Asset Types	Average Age (Years)	Expected Life (Years)
Overhead Conductors	36	30
Underground Conductors	27	30
Poles	36	40-45
Line Transformers	31	20
Pad-mounted Transformers	31	20

Figure 1 below contains a more granular display of the age of distribution poles by a 10-year age grouping.

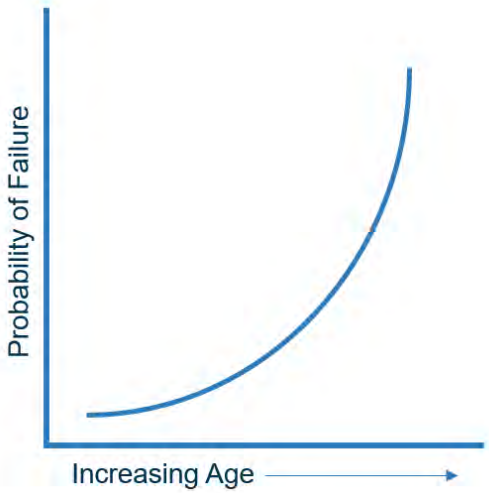
Figure 1: Missouri West Distribution Pole Age Grouping



Q: Does the age of key assets affect reliability of performance?

A: Yes. A common characteristic of all asset classes is that the rate of failure increases dramatically as they age — ultimately occurring at an exponential rate. An illustration of the failure curve is displayed in **Figure 2** below.

Figure 2: Failure Curve



To avoid the negative age-driven impacts on system reliability, assets should be replaced at a pace that stays ahead of their respective failure curve. Accomplishing this objective in a manner that is consistent with the Company's focus on affordability and maximizing customer value is an important element of our distribution system investment strategy.

Q: Have historical asset replacement levels been adequate to address system needs related to aging infrastructure?

A: No. Evergy Missouri West's level of investment in distribution assets has not kept pace with the aging distribution infrastructure. As shown in **Table 1**, the average age of several key distribution assets is beyond the expected lives of those assets.

III. RELIABILITY PERFORMANCE MEASURES AND CHALLENGES

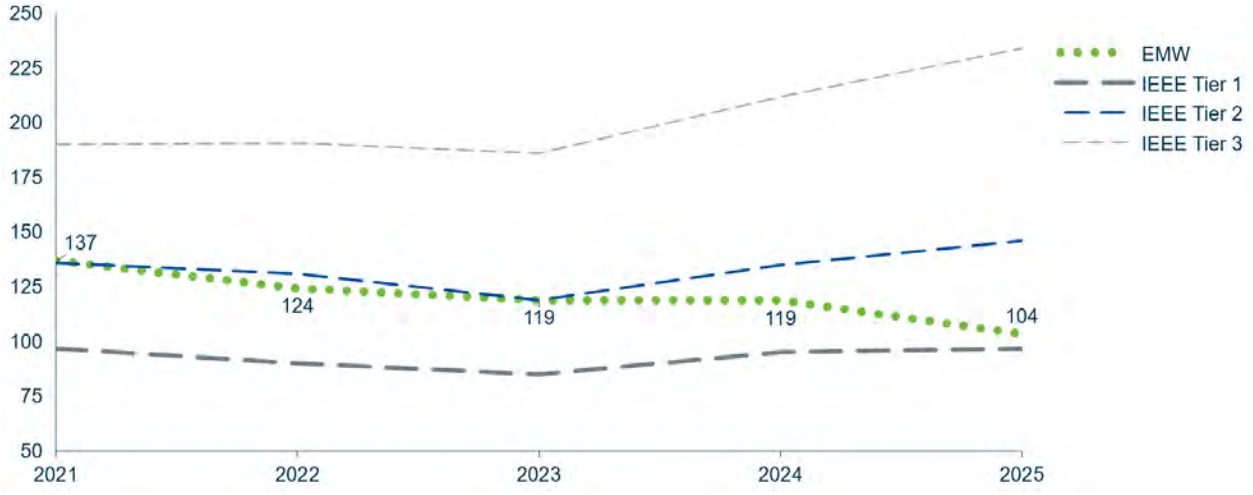
Q: What industry metrics are generally utilized to assess an electric utility's reliability performance?

A: The most common industry metric used to track a utility's reliability performance is the System Average Interruption Duration Index ("SAIDI"). SAIDI measures the total duration of average customer interruption. SAIDI reflects both the frequency and duration of service interruptions, and its two primary components are the Customer Average Interruption Duration Index ("CAIDI") and the System Average Interruption Frequency Index ("SAIFI"). CAIDI measures the average time to restore service and SAIFI measures how often customers, on average, experience a sustained service interruption over a predefined period. Multiplying CAIDI and SAIFI generates the Company's SAIDI, which provides a comprehensive view of the customer experience.

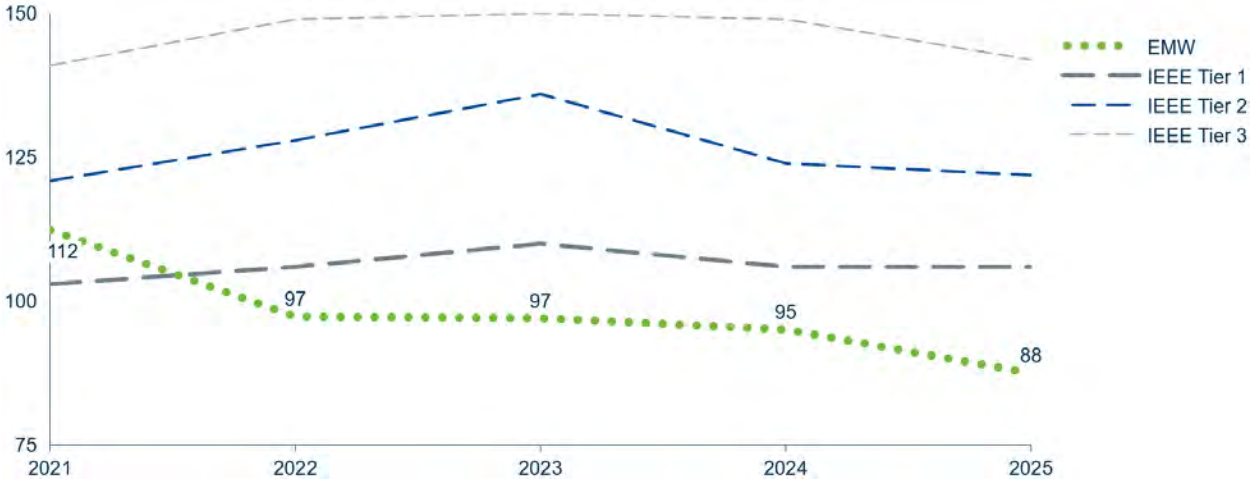
Q: What are the historical metrics for Evergy Missouri West compared to IEEE benchmarking?

A: EMW benchmarks its reliability performance using industry data from IEEE's annual reliability benchmarking study. Tier 1 represents the strongest reliability performance compared to the industry benchmark, followed by Tier 2 and Tier 3. Historical SAIDI, CAIDI, and SAIFI performance for Evergy Missouri West compared to IEEE is shown in **Figure 4** below:

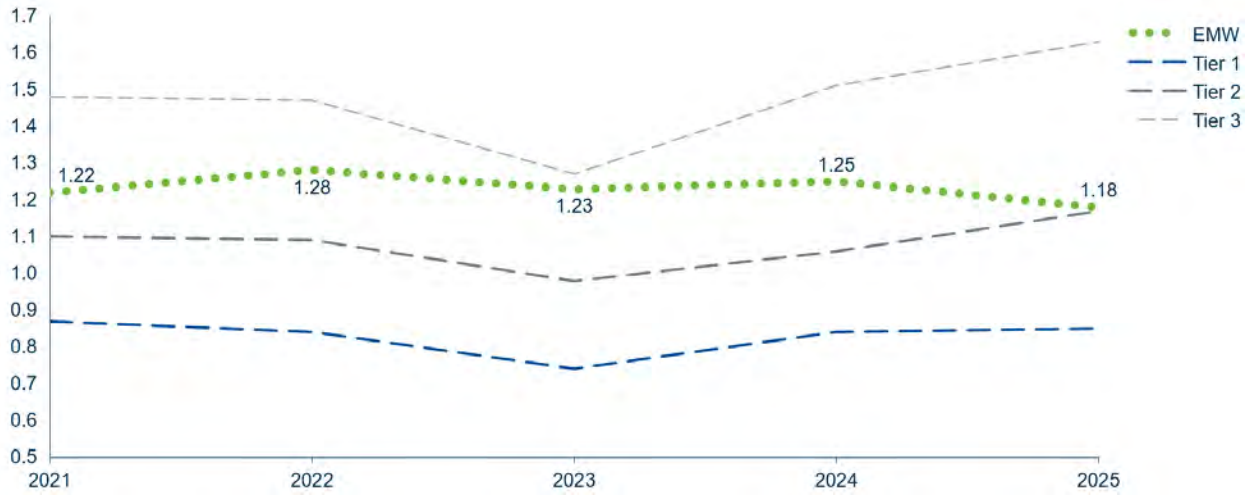
Figure 4: Historical IEEE Normalized SAIDI Comparison



Historical IEEE Normalized CAIDI Comparison



Historical IEEE Normalized SAIFI Comparison



Q: How has SAIDI performance for Evergy Missouri West compared historically with the industry generally?

A: Over the past five years, EMW has performed consistently within Tier 2, except for 2021, when EMW finished just outside of Tier 2 and was as the top Tier 3 performer. Importantly, EMW's SAIDI results have continued to improve year over year and are trending toward Tier 1 performance.

Q: How has EMW's CAIDI performance compared historically with the industry generally?

A: Reliability benchmarking shows the EMW's normalized CAIDI performance consistently demonstrated strong results when compared to the industry. Over the past five years, EMW performed within Tier 1, except for 2021, when EMW finished within Tier 2. EMW's CAIDI results have continued to improve, reinforcing the Company's strong performance in restoring service to customers following an outage.

Q: How has EMW's SAIFI performance compared historically with the industry generally?

A: Reliability benchmarking indicates that EMW's normalized SAIFI performance has consistently performed within Tier 3 Incremental progress has been made over the five year period with performance approaching Tier 2 performance in 2025.

Q: What trends do you draw from these metrics?

A: Two primary trends emerge from EMW's reliability performance over the past five years. First, EMW has demonstrated strong and improving performance in restoring service once an outage occurs. This is reflected in EMW's CAIDI results, which have consistently performed within Tier 1 since 2022 and have continued to improve year over year. That strong restoration performance has also contributed to improved SAIDI results, which is trending toward Tier 1 performance. Second, EMW's reliability metrics demonstrate that outage frequency has experienced modest improvement. In my view, that performance reflects the ongoing challenge of addressing the conditions that contribute to customer outages. Continued, targeted investment in the distribution system is therefore important to manage the condition of aging infrastructure, reduce the risk of equipment-related outages, improve system resiliency, and ultimately improve the reliability experienced by our customers.

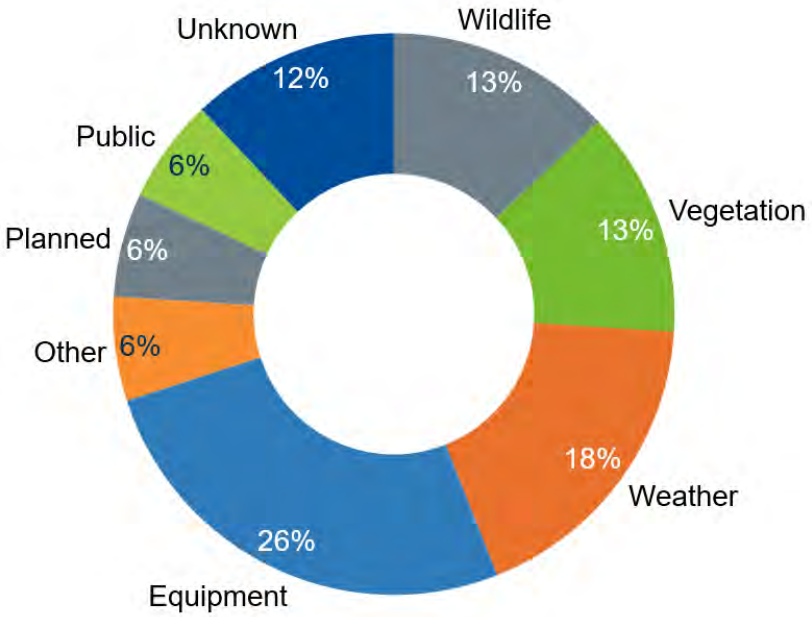
Q: What are the most significant factors affecting Evergy Missouri West's reliability performance?

A: There are a number of factors affecting the Company's reliability performance. As discussed, the age and condition of distribution assets are significant factors. Other factors include weather, vegetation, wildlife, public interference, and several other causes that can

result in customer interruptions. **Figure 5** below shows the relative percentage of customer outages by cause for EMW in the past five years.

Figure 5: Drivers of Customer Outage by Cause – 5 Year Average

Institute of Electrical and Electronics Engineers (IEEE) normalized percent of EMW SAIFI



Q: What specific challenges do you perceive to maintaining and improving Evergy Missouri West's system reliability and overall quality of service?

A: From a distribution perspective, there are three broad challenges EMW must address to continue meeting the reliability and service expectations of our customers: (1) managing and replacing aging infrastructure; (2) improving our ability to withstand more severe weather patterns; and (3) efficiently deploying new cost-effective technologies that enhance outage performance and improve our predictive maintenance capability. EMW's ability to meet these challenges is largely investment dependent.

IV. DISTRIBUTION SYSTEM INVESTMENT STRATEGY PROCESS

Q: What is Evergy's distribution asset management strategy?

A: Evergy's distribution investment strategy focuses on maintaining a safe and reliable distribution system while balancing the cost impact to customers. The strategy is primarily focused on replacing aging infrastructure, improving reliability, modernizing the grid, and addressing other system needs. EMW uses a combination of asset data, reliability performance, inspections, engineering analysis, field experience, and analytical tools to identify potential investments. For certain asset classes and programs, specific analytical tools, such as AssetLens, are used to evaluate asset risk and compare the expected benefits of an investment with its estimated cost. Importantly, these analytical tools support, but do not replace, engineering judgement. Potential projects are further evaluated by Company personnel and, where appropriate, validated through field inspections before the final project scope is established. This process allows EMW to combine data-driven analysis with the experience and judgement of engineering and operations personnel.

Q: Why is proactive investment strategy important for EMW's distribution system?

A; EMW operates a large distribution system with infrastructure of varying ages and conditions. Waiting until equipment fails before replacing it can result in additional customer outages, emergency restoration work, safety risks, and potentially higher costs. EMW's strategy is therefore to identify and address higher-risk assets and system needs before failure occurs, where it is reasonable and cost-effective to do so. This does not mean EMW replaces assets simply because they reach a certain age. Rather, age is considered along with asset conditions, reliability history, consequence of failure, customer impact, and other available information to determine where investment should be prioritized.

Q: What types of asset management programs exist for distribution assets?

A: Within Distribution there are multiple programs that support EMW's asset management strategy.

- The Distribution System Performance Program includes feeder and lateral improvements targeting aging infrastructure, excessive outage events, and customer complaints generated from these events. In 2020, a risk-based investment model (AssetLens) was developed to identify overhead distribution primary conductor and poles for replacement in Missouri. The model uses several sources of data, including asset characteristics, asset condition, and historical outage information. In 2021, the risk-based investment model was expanded to include underground and network equipment across all areas.
- The Distribution Pole Replacement or Reinforcement Program is a capital program focused on wood pole replacement or pole reinforcement based on the results from the annual intrusive wood pole inspections. These inspections are required per the PSC on a 12-year cycle. The intrusive inspection includes ground line inspection via soil excavation, bore/plug, and chemical treatment. This program improves the reliability and resiliency of EMW's system by replacing or reinforcing poles at an increased risk of failure.
- The Proactive Cable Replacement/Rehabilitation Program targets direct buried underground residential distribution ("URD") primary cables that are shown to have elevated risk of failure based on historical cable failure

analysis. The program targets high-risk URD cables, which are identified based on age, condition, and performance, among other factors. High-risk cable segments are evaluated using partial discharge testing to determine the cable's condition. Based upon the results of these tests, cable segments are selected to be replaced. Replacement of these cable segments prevents failures on the system and reduces customer outage minutes.

- The Underground Distribution Replacement Program focuses on degraded underground manhole ceilings identified during the detailed manhole inspections. The manholes are inspected on an 8-year cycle as mandated in Missouri by the PSC. Replacement of these manhole vault tops prevents damage to installed underground electrical equipment and reduces public safety concerns.
- The High Outage Count Customers Program, also known as the "Worst Performing Circuit" Program, is a circuit-based program addressing service reliability issues associated with customers experiencing abnormally high outage counts, based upon PSC regulatory standards. Evergy Missouri West identifies high outage count customers, investigates their outage events, and develops solutions to improve their circuit reliability. Analyzing annual outage management system records and field ultrasound inspection results assists in understanding root causes and the ensuing action required to mitigate future incidents.
- The Customers Experience Multiple Interruptions (CEMI) Improvement Program focuses on making repairs and improvements for customers

experiencing six or more interruptions over a 12-month period. Interruption cause code data is analyzed to determine the root causes and appropriate corrective actions required to mitigate future incidents. This program was developed and rolled out in 2021 in the Missouri jurisdictions.

V. STORM RESERVE

Q: Is EMW proposing to establish a storm reserve?

A: Yes. A storm reserve would provide a systematic method to collect revenues to be used for extraordinary storm operating and maintenance expenses. The adequacy of the reserve would be reviewed in each general rate proceeding. In this proceeding, the Company is requesting to establish a storm reserve for EMW.

Q: How does a storm reserve benefit customers and the Company?

A: The storm reserve benefits customers by smoothing out major storm expenses year-over-year to be recovered in rates. This smoothing of storm expenses creates less rate volatility between rate cases and helps stabilize the cost of these events in customer rates. The unpredictable nature of storms and the amount of damage they cause create volatility in expenses. A storm reserve helps flatten the effects of these in customer rates. The reserve also eliminates the possibility of the Company over-collecting storm costs if the actual costs of the storm damage are lower than what has been established in rates. This is done through evaluation in each general rate case of available storm reserves remaining as compared to expected requirements in determining annual amounts to be included in rates to maintain adequate reserves. Similarly, the Company benefits from the reserve because it also realizes a smoothing of storm expense from an operating perspective. This, in turn, reduces the volatility in earnings associated with significant storm events.

VI. CONCLUSION

Q: Does that conclude your testimony?

A: Yes, it does.

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of Evergy Missouri West, Inc. d/b/a Evergy Missouri West's Request for Authority to Implement A General Rate Increase for Electric Service	))))	Case No. ER-2027-0077

AFFIDAVIT OF RYAN P. MULVANY

STATE OF MISSOURI)
) ss
COUNTY OF JACKSON)

Ryan P. Mulvany, being first duly sworn on his oath, states:

1. My name is Ryan P. Mulvany. I work in Kansas City, Missouri, and I am employed by Evergy Metro, Inc. as Vice President Distribution – Power Delivery Administration.

2. Attached hereto and made a part hereof for all purposes is my Direct Testimony on behalf of Evergy Missouri West consisting of fourteen (14) pages, having been prepared in written form for introduction into evidence in the above-captioned docket.

3. I have knowledge of the matters set forth therein. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded, including any attachments thereto, are true and accurate to the best of my knowledge, information and belief.

Ryan P. Mulvany

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

Notary Public

My commission expires: April 26, 2029

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