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MISSOURI PUBLIC SERVICE COMMISSION

CASE NOS.: ER-2026-0143

REBUTTAL TESTIMONY

OF

JOHN J. SPANOS

ON BEHALF OF

EVERGY MISSOURI METRO

Kansas City, Missouri
August 2026

Table of Contents

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I. INTRODUCTION

Q. Please state your name and business address.

A. My name is John J. Spanos. My business address is 300 Sterling Parkway, Suite 200, Mechanicsburg, Pennsylvania, 17050.

Q. Are you the same John J. Spanos who submitted direct testimony in this docket in January 2026?

A. Yes.

Q. On whose behalf are you testifying?

A. I am testifying on behalf of Evergy Metro, Inc. d/b/a Evergy Missouri Metro ("Evergy Missouri Metro").

Q. What is the purpose of your rebuttal testimony?

A. The purpose of my testimony is to rebut the Direct Testimonies set forth by the Missouri Public Service Commission("Commission") Staff ("Staff") witnesses Amanda Arandia and Matthew R. Young and the Direct Testimonies of the Office of the Public Counsel ("OPC") witness John A. Robinett and Midwest Energy Consumers Group ("MECG") witness Brian C. Andrews.

Q. What are the subjects of your rebuttal testimony?

A. The overall subject of my testimony is depreciation; however, the specific areas relate to depreciation issues for Evergy Missouri Metro. The issues are: (1) the

most reasonable service life and net salvage parameters for a number of plant accounts; (2) probable retirement dates for Iatan Unit 1 and LaCygne Unit 2; (3) the handling of the amortization accounts' rate calculation and reserve adjustment including the issue of disallowed early retirements; and (4) the inclusion of a terminal net salvage component in the calculation of depreciation rates for production plant accounts.

The overall impact of depreciation expense that is the result of the changes by the other parties is a reduction compared to that presented in the Depreciation Study. Many of these changes are intertwined between multiple components but a high level impact by component has been developed. The impact of the change in survivor curves is approximately $5.3 million. The impact of the change in net salvage percentage for the mass property accounts is approximately $270,000. The impact of the reserve reclassification and amortization made by Staff for general plant accounts is a change of $1.0 million in annual expense but there are additional issues with the reserve reclassifications. This represents a combination of Staff calculating depreciation rates for the general plant amortization accounts by using the incorrect reserve and excluding the reserve amortization amount already determined in the Depreciation Study. The impact in expense related to the change in probable retirement date for Iatan Unit 1 and LaCygne Unit 2 is between $6.9 million and $7.5 million depending on the change proposed by MECG or OPC. Finally, the impact of terminal net salvage within depreciation rates is $8.0 million.

II. SERVICE LIFE AND NET SALVAGE ESTIMATES

Q. What are the different parties proposing related to service life, or survivor curve, estimates?

A. OPC and MECG witnesses do not propose different survivor curve estimates from what the Company proposed. Staff witness Arandia proposes different survivor curves from what the Company proposed for several plant accounts. For the accounts which Staff proposed a different estimate, a comparison of the currently approved survivor curve estimate, the Company proposed estimate and the Staff proposed estimate can be seen in Figure 1 below.

Figure 1: Comparison of Currently Approved, Company Proposed, and Staff Proposed Survivor Curve Estimates

	ACCOUNT	CURRENT	COMPANY	STAFF
311.00	STRUCTURES AND IMPROVEMENTS	85-S0.5	80-R2	85 S0.5
311.02	STRUCTURES AND IMPROVEMENTS	85-S0.5	80-R2	85 S0.5
315.00	ACCESSORY ELECTRIC EQUIPMENT	50-S0.5	50-S0.5	52 R1.5
315.01	ACCESSORY ELECTRIC EQUIPMENT	N/A	50-S0.5	52 R1.5
316.00	MISCELLANEOUS POWER PLANT EQUIPMENT	40-R1.5	45-S0.5	49 S0
316.01	MISCELLANEOUS POWER PLANT EQUIPMENT	40-R1.5	45-S0.5	49 S0
311.04	STRUCTURES AND IMPROVEMENTS	85-S0.5	80-R2	85 S0.5
315.04	ACCESSORY ELECTRIC EQUIPMENT	50-S0.5	50-S0.5	52 R1.5
316.04	MISCELLANEOUS POWER PLANT EQUIPMENT	40-R1.5	45-S0.5	49 S0
324.00	ACCESSORY ELECTRIC EQUIPMENT	50-S1.5	50-S0.5	60 S0
325.00	MISCELLANEOUS POWER PLANT EQUIPMENT	40-R0.5	45-R1	45 R0.5
338.040	PANELS - SOLAR	30-S2.5	30-S2.5	30 S2
338.050	COLLECTION SYSTEMS - SOLAR	N/A	30-S2.5	30 S2
338.070	INVERTERS - SOLAR	N/A	10-S2.5	10 S2
338.080	ACCESSORY ELECTRIC EQUIPMENT - SOLAR	N/A	25-S2.5	25 S2
338.210	STRUCTURES AND IMPROVEMENTS - WIND	60-R3	60-R3	60 R4
338.230	TURBINES - WIND	45-R3	45-R2.5	45 R3
338.290	ACCESSORY ELECTRIC EQUIPMENT - WIND	45-R3	45-R3	45 R4
338.330	MISCELLANEOUS POWER PLANT EQUIPMENT - WIND	N/A	35-S2.5	35 S3
341.00	STRUCTURES AND IMPROVEMENTS	70-R2	65-R2.5	70 R2
345.00	ACCESSORY ELECTRIC EQUIPMENT	50-R3	50-R2.5	50 R3
	ACCOUNT	CURRENT	COMPANY	STAFF

352.00	STRUCTURES AND IMPROVEMENTS	70-R3	65-R3	70 R3
354.00	TOWERS AND FIXTURES	70-R4	70-R4	80 R4
354.05	TOWERS AND FIXTURES - SUBTRANSMISSION	70-R4	70-R4	80 R4
356.00	OVERHEAD CONDUCTORS AND DEVICES	60-R2.5	60-R2.5	65 R2.5
357.00	OVERHEAD CONDUCTORS AND DEVICES - SUBTRANSMISSION	60-R2.5	60-R2.5	65 R2.5
357.05	UNDERGROUND CONDUIT	65-R4	65-R4	70 R4
358.00	UNDERGROUND CONDUIT - SUBTRANSMISSION	65-R4	65-R4	70 R4
358.05	UNDERGROUND CONDUCTORS AND DEVICES	60-R4	60-R4	65 R4
361.00	UNDERGROUND CONDUCTORS AND DEVICES - SUBTRANSMISSION	60-R4	60-R4	65 R4
362.00	STRUCTURES AND IMPROVEMENTS	60-R2	65-R2	70 R1.5
365.00	STATION EQUIPMENT	57-R1.5	53-R1.5	55 R1
366.00	OVERHEAD CONDUCTORS AND DEVICES	50-R1	52-R1	55 R0.5
367.00	UNDERGROUND CONDUIT	65-R2.5	65-R2.5	70 R2.5
368.00	UNDERGROUND CONDUCTORS AND DEVICES	53-R1.5	57-R1.5	60 R1.5
370.20	LINE TRANSFORMERS	42-L3	40-R2.5	43 L3
371.00	INSTALLATIONS ON CUSTOMERS' PREMISES	22-S1.5	23-R2.5	23-R2.5
390.00	STRUCTURES AND IMPROVEMENTS	45-S0	45-S0	50 S0
392.00	TRANSPORTATION EQUIPMENT - HEAVY TRUCKS	10-L2.5	10-L2.5	11 L2
396.00	POWER OPERATED EQUIPMENT	15-L2	15-L2	17 L2

Q. What is "visual curve matching"?

A. For visual curve matching, smooth survivor curves (normally Iowa survivor curves) are charted on the same graph as the original curve. By graphing the curves on the same graph, one can visually make a determination as to how close of a match the smooth curve is to the original curve.

Q. What is "mathematical curve matching"?

A. When performing mathematical curve matching, the difference between the smooth survivor curve and the original survivor curve is compared mathematically. This matching is typically performed using computer software. For mathematical curve matching, I have used a measure of fit called the "residual measure." A lower residual measure indicates a better mathematical fit of the data (and a residual

measure of 0.00 would indicate that every data point perfectly matches the fitted Iowa curve).

Q. Are there advantages and disadvantages to both visual and mathematical curve matching?

A. Yes. Visual curve matching offers a number of advantages over mathematical curve matching. Different ranges of data points can be given more or less emphasis depending on the characteristics of the account. It is easier to identify irregularities in the data when performing visual curve matching. Visual curve matching also allows the analyst to view the full Iowa survivor curve to assess whether the full life cycle forecasted by a given Iowa curve is reasonable for the property studied. Understanding the nature of the assets within the account and a reasonable full life cycle of the account must be considered.

Many years ago, a disadvantage of visual curve matching was that it was cumbersome because of the need to manually overlay standard curves on plots of original life tables. However, since the advent of computers with sophisticated graphical capabilities, visual curve matching has become easier and more efficient. As a result, in recent decades the advantages of visual curve matching have made it more prominent, and it is used by most depreciation analysts.

Although mathematical curve matching provides a numerical value reflecting the statistical "fit" of an Iowa curve to the OLT data, Staff does not consider the disadvantages of mathematical curve matching or the fact that mathematical curve matching can also introduce biases. One of the disadvantages of mathematical curve matching is that it treats every data point within a range of

fit equally. Different data points are typically based on different levels of data and different ages (e.g., older data points typically are based on much smaller levels of investment than earlier data points). There is not a good way to de-emphasize the irregularities in the data when performing mathematical curve matching, other than to exclude older data points entirely. However, excluding older data points when they present a full life cycle is not appropriate either. Mathematical curve matching can also introduce biases because of the nature of the statistical calculations. As previously explained, indicators of mathematical "fit" are typically calculated by squaring the differences between the OLT points and a given Iowa curve. As a result, the mathematical curve fitting routine will amplify larger differences between the Iowa curve and OLT. Because data irregularities are often common towards the end of the curve when smaller amounts of data are available, the real-world result is that mathematical curve matching will amplify less meaningful deviations towards the end or "tail" of the curve. That is, differences in curve fitting indicators are often the result of data irregularities and do not provide as meaningful an indication of the historical life characteristics. For this reason, if proper care is not taken when interpreting the results, mathematical curve fitting can mislead the analyst into selecting a curve that is not representative of the predominant mortality characteristics of the depreciable group being studied.

Q. What method did you use to analyze this service life data?

A. I used the retirement rate method. This is the most appropriate method when aged retirement data are available, because this method determines the average rates of

retirement actually experienced by the Company during the period of time covered by the study.

Q. What is an "Iowa-type survivor curve" and how did you use such curves to estimate the service life characteristics for each property group?

A. Iowa type curves are a widely used group of generalized survivor curves that contain the range of survivor characteristics usually experienced by utilities and other industrial companies. The Iowa curves were developed at the Iowa State College Engineering Experiment Station through an extensive process of observing and classifying the ages at which various types of property used by utilities and other industrial companies had been retired.

Iowa type curves are used to smooth and extrapolate original survivor curves determined by the retirement rate method. The Iowa curves and truncated Iowa curves were used in this study to describe the forecasted rates of retirement based on the observed rates of retirement and the outlook for future retirements.

The estimated survivor curve designations for each depreciable property group indicate the average service life, the family within the Iowa system to which the property group belongs, and the relative height of the mode. For example, the Iowa 53-R1.5 indicates an average service life of fifty-three years; a right-moded, or R, type curve (the mode occurs after average life for right-moded curves); and a moderate height, 1.5, for the mode (possible modes for R type curves range from 0.5 to 5).

Q. Should the estimation of service lives be based purely on mathematical results?

A. No. For example, NARUC makes clear that factors other than the statistical analysis must be considered. Chapter XIII of *Public Utility Depreciation Practices*, entitled "Actuarial Life Analysis" discusses and emphasizes the subjective nature of the process of estimating service lives. NARUC starts this chapter by explaining that the analysis of historical data is only one part of the process of estimating service lives:

> Actuarial analysis objectively measures how the company has retired its investment. The analyst must then judge whether this historical view depicts the future life of the property in service. The analyst takes into consideration various factors, such as changes in technology, services provided, or capital budgets.[1]

NARUC makes clear that the process of estimating service lives must go beyond any objective measurement of the past. In describing the determination of a survivor curve estimate (referred to as the "projection life" in this passage), NARUC states:

> The projection life is a projection, or forecast, of the future of the property. Historical indications may be useful in estimating a projection life curve. Certainly the observations based on the property's history are a starting point. Trends in life or retirement dispersion can often be expected to continue. Likewise, unless there is some reason to expect otherwise, stability in life or retirement dispersion can be expected to continue, at least in the near term.
>
> Depreciation analysts should avoid becoming ensnared in the mechanics of the historical life study and relying solely on mathematical solutions. The reason for making an historical life analysis is to develop a sufficient understanding of history in order to evaluate whether it is a reasonable predictor of the future. The importance of being aware of circumstances having direct bearing on the reason for making an historical life analysis cannot be understated. These circumstances, when factored into the analysis,

[1] National Association of Regulatory Utility Commissioners, *Public Utility Depreciation Practices*, 1996, p. 111.

> determine the application and limitations of an historical life analysis.[2]

Thus, NARUC strongly advises that "relying solely on mathematical solutions" should be avoided. NARUC further elaborates on the need for a subjective component to forecasting service lives:

> A depreciation study is commonly described as having three periods of analysis: the past, present, and future. The past and present can usually be analyzed with great accuracy using many currently available analytical tools. The future still must be predicted and must largely include some subjective analysis. *Informed judgment* is a term used to define the subjective portion of the depreciation study process. It is based on a combination of general experience, knowledge of the properties and a physical inspection, information gathered throughout the industry, and other factors which assist the analyst in making a knowledgeable estimate.
>
> The use of informed judgment can be a major factor in forecasting. A logical process of examining and prioritizing the usefulness of information must be employed, since there are many sources of data that must be considered and weighed by importance. For example, the following forces of retirement need to be considered: Do the past and current service life dispersions represent the future? Will scrap prices rise or fall? What will be the impact of future technological obsolescence? Will the company be in existence in the future? The analyst must rank the factors and decide the relative weight to apply to each. The final estimate might not resemble any one of the specific factors; however, the result would be a decision based upon a combination of the components.[3]

Q. Have you incorporated the various factors discussed by NARUC into your estimates?

A. Yes. My team has conducted site visits for this and prior studies as well as engaged in discussions with Company personnel to familiarize myself with the Company's assets and plans for the assets. In addition, throughout my career, I have performed

[2] National Association of Regulatory Utility Commissioners, *Public Utility Depreciation Practices*, 1996, p. 126. Emphasis added.

[3] National Association of Regulatory Utility Commissioners, *Public Utility Depreciation Practices*, 1996, p. 128. Emphasis added.

hundreds of depreciation studies for numerous utilities. The information obtained from this experience has also been incorporated into my recommendations.

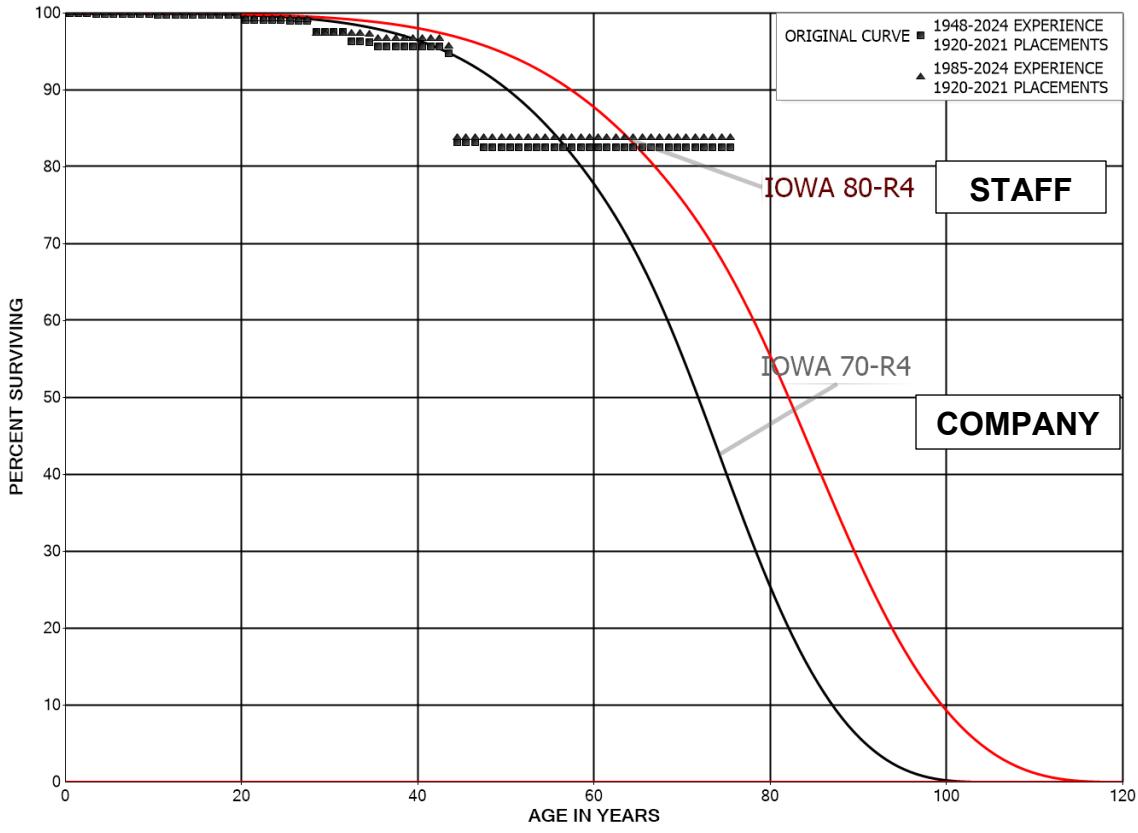
Q. Has Staff witness Arandia incorporated these same factors into her service life estimates?

A. For some accounts, yes, but for most of the accounts in which Witness Arandia proposes different survivor curves than the curves proposed in the Depreciation Study, she has not adequately considered all the necessary factors in her estimates.

Q. Provide an example of when Staff did not incorporate all of the relevant factors into their survivor curve estimate.

A. See Figure 2 below for a comparison of the Company Proposed and Staff proposed survivor curve estimates for Accounts 354.00 and 354.05, Towers and Fixtures.

Figure 2: Comparison of Company Proposed and Staff Proposed Survivor Curve Estimate for Accounts 354.00 and 354.05, Towers and Fixtures

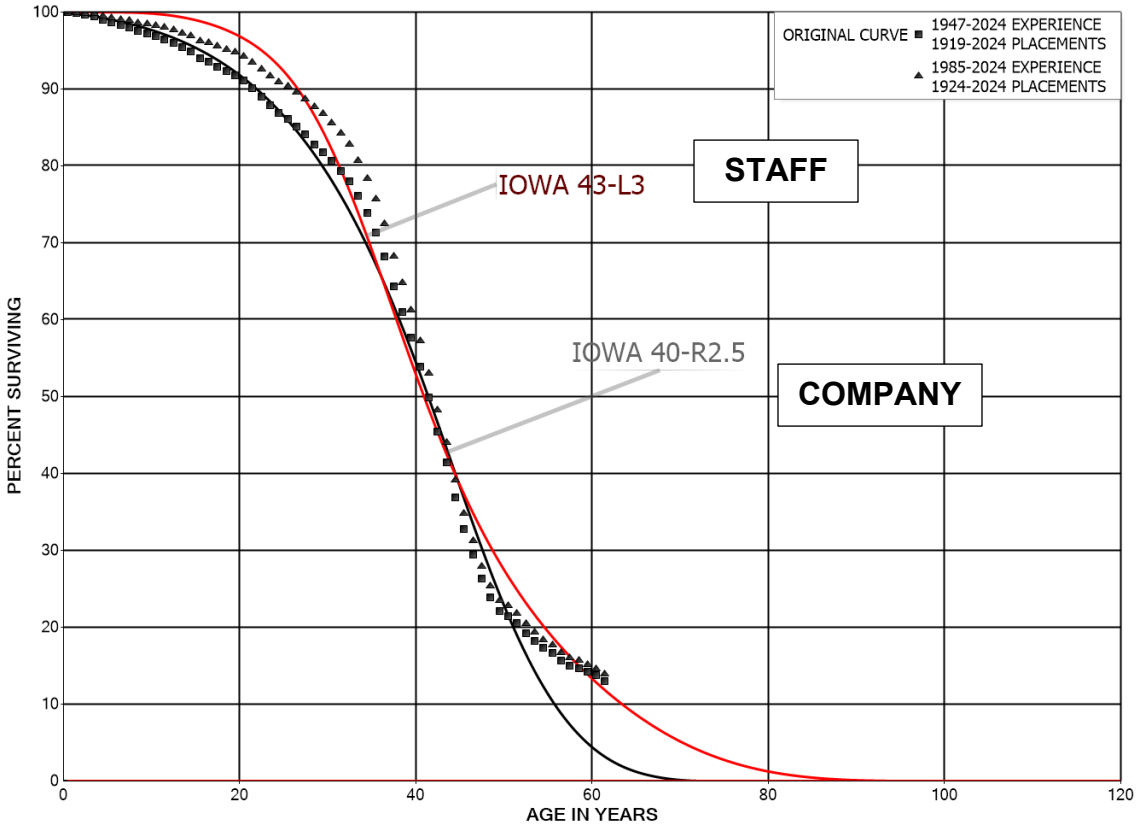


The currently approved service life estimate for this account is the 70-R4 survivor curve. There has been nothing in the data since the time of the last study when the 70-R4 was approved to warrant a change in service life. An 80-year average service life is on the upper end of the range of appropriate service lives for this account, based on estimates used by other companies throughout the industry. Also, the 80-R4 survivor curve projects that 10% of the assets in this account will last to be 100 years or older. That is not an appropriate situation to project for the types of assets that are in this account.

Q. Can you provide another example of when Staff did not incorporate all of the relevant factors into their survivor curve estimate?

A. Yes. Please see Figure 3 below for a comparison of the Company Proposed and Staff Proposed survivor curves for Account 368.00, Line Transformers.

Figure 3: Comparison of Company Proposed and Staff Proposed Survivor Curve Estimate for Account 368.00, Line Transformers



The two survivor curve estimates above look relatively similar, but there are a couple of differences that make the 40-R2.5 the better estimate for this account. The 40-R2.5 survivor curve clearly fits the overall data better through age 52. After that, the 43-L3 does fit the data somewhat better than the 40-R2.5. However, the data at ages past 52 is based on far less retirements than the data from earlier ages, making it less reliable than the data for earlier ages. The 43-L3 fits the wrong portion of the original life table data and is thus an inferior estimate.

Q. What do you recommend related to the estimation of service lives?

A. The service life estimates for the other accounts made by Staff that were developed did not consider all the key factors nor techniques and informed judgment described

above in this testimony. For that reason, I recommend that the survivor curves proposed by the Company in the Depreciation Study should be accepted.

Q. What are the other parties proposing related to net salvage estimates?

A. OPC and MECG witnesses do not propose different net salvage estimates from what the Company proposed. Staff witness Arandia proposes different net salvage estimates from what the Company proposed for a few plant accounts. She proposes negative 23% net salvage for Account 357.00, Underground Conduit instead of the negative 50% net salvage proposed in the Depreciation Study. She also proposes positive 23% net salvage for all the subaccounts of Account 392.00 Transportation Equipment, instead of the positive 20% proposed in the Depreciation Study.

Q. Please use the combined analysis for Account 392.00, Transportation Equipment to illustrate the most reasonable net salvage percentage.

A. First and foremost, the currently approved estimate for these accounts is negative 20 percent. Second, there has been $19.6 million retired to these accounts since the last study which represents approximately 25 percent of the total retirements. The most recent five years has a net salvage level of 21 percent which is slightly less positive than the five years prior when the current estimate was established. Third, the average age of the retirements in the last few years has been younger than the average so future retirements will be older in order to achieve the average so the expectation is that the salvage value will go down slightly. Staff has isolated their estimate to the overall period which does support positive 23 percent but the need to understand the future as compared to the past is why positive 20 percent is more appropriate for these accounts.

Q. What do you recommend related to net salvage estimates?

A. I recommend that the net salvage estimates proposed by the Company in the Depreciation Study be accepted.

Q. Please address the calculation date issue with Staff's calculations.

A. The Depreciation Study used plant balances and reserve as of June 30, 2025 to calculate depreciation rates for the various plant accounts, with a calculation date as of June 30, 2025. However, Staff has used that same plant and reserve data, but conducted their calculations of depreciation rates as of December 31, 2025. Staff did not update their plant and reserve balances to be through December 31, 2025. This oversight has caused inaccurate rates for every plant account in which Staff proposed a different rate than the Company. In situations where the account balance has increased in the six month period of time faster than the book reserve has increased then the rate Staff has recommended will be understated. This also makes an accurate comparison of Staff and Company proposed depreciation rates difficult to assess.

III. PRODUCTION FACILITY LIFE SPANS

Q. What approach did you use to estimate the lives of significant production facilities?

A. I used the life span technique to estimate the lives of significant facilities for which concurrent retirement of the entire facility is anticipated. In this technique, the survivor characteristics of such facilities are described using interim survivor curves and estimated probable retirement dates. The interim survivor curve describes the rate of retirement related to the replacement of elements of the facility,

such as, for a power plant, the retirement of assets such as pumps, motors and piping that occur during the life of the facility. The probable retirement date provides the rate of final retirement for each year of installation for the facility by truncating the interim survivor curve for each installation year at its attained age at the date of probable retirement. The use of interim survivor curves truncated at the date of probable retirement provides a consistent method for estimating the lives of the several years of installation for a particular facility inasmuch as a single concurrent retirement for all years of installation will occur when it is retired.

Q. Is this approach widely accepted for estimating the service lives of production facilities?

A. Yes. The life span has been used previously for Evergy Missouri Metro. My firm has also used the life span technique in performing depreciation studies presented to and accepted by many public utility commissions across the United States and Canada, including Missouri.

Q. What is the basis for the probable retirement year that you have estimated for each facility?

A. The basis for the probable retirement years are life spans for each facility that are based on judgment and incorporate consideration of the age, use, size, nature of construction, management outlook and typical life spans experienced and used by other electric utilities for similar facilities. Most of the life spans result in probable retirement years that are many years in the future. As a result, the retirements of these facilities are not yet subject to specific management plans. Such plans would be premature. At the appropriate time, detailed studies of the economics of

rehabilitation and continued use or retirement of the structure will be performed, and the results incorporated in the estimation of the facility's life span.

Q. What are the parties proposing related to the probable retirement dates of Evergy's production facilities?

A. Staff is not proposing any changes to the retirement dates of any of the Company's production facilities. MECG is proposing to extend the retirement date of the Wolf Creek nuclear plant by 20 years to 2065 based on the possibility that the extension will be granted[4]. MECG and OPC are proposing to extend the life spans of Iatan Unit 1 and LaCygne Unit 2 based primarily on the Company's 2026 Integrated Resource Plan (IRP).

Q. Do you agree with the proposals of the other parties to extend the probable retirement dates of three of the Company's production facilities?

A. No.

Q. Why do you disagree with the opinion that the Wolf Creek probable retirement date should be extended 20 years?

A. As discussed in the testimony of Company witness Darrin Ives, the Company has filed a notice of intent to potentially pursue a Subsequent License Renewal Application for an extension of the Wolf Creek nuclear plant. This Subsequent License Renewal Application has not been filed yet and most likely will not to occur to at least 2030 as Company witness Ives states. This means that the extension has not been considered or granted by regulatory authorities. Thus it is significantly premature to calculate depreciation rates as if it has approved and the

[4] Andrews Direct Testimony, p. 2, 22:25

extension was granted[5]. The same concept for determining the probable retirement date for Wolf Creek should apply to all production facilities. That means until there are plans or certainty to extend Wolf Creek then the probable retirement date consistent with the current license date is most appropriate. Year 2045 is the known and measurable currently approved probable retirement date for Wolf Creek and should continue to be used to calculate depreciation rates at this time. Making a change before the relicense extension is known will create unnecessary swings in the depreciation rates as larger capital additions will be expected at the time relicensing actually occurs.

Q. Why do you disagree with the opinion that the probable retirement dates of Iatan Unit 1 and LaCygne Unit 2 should be extended?

A. The retirement dates used in the Depreciation Study are the retirement dates that were determined given the information that was available at the time the study was being conducted and filed. The 2026 IRP was not information that was available at the time the depreciation rates were calculated for the rate case filing. Probable retirement dates should not be determined based strictly on a company's IRP, as both MECG and OPC have done for these two units. Retirement dates should be determined using a variety of factors and information as explained at the beginning of this section. The IRP is only one of those factors and does not consider all the necessary information to establish a probable retirement date in a Depreciation Study.

[5] Andrews Direct Testimony, p. 14, 10

Q. What is another issue with the MECG and OPC proposed probable retirement dates for Iatan Unit 1 and LaCygne Unit 2?

A. Both witnesses for MECG and OPC have based their retirement date estimates strictly on the Company's 2026 IRP, without consideration of any other factors. However, there are no specific retirement dates listed for those two units in the Company's 2026 IRP, which means their retirement is estimated to occur outside the timing scope of the IRP, which is 2045. Both parties have decided to use this scope limit year of 2045 as the basis for their probable retirement date estimate. There were no discussions with Company personnel, or other factors considered in their estimation of the probable retirement date, and that is not a proper way to determine an appropriate retirement date for a production facility.

Q. What do you recommend for the probable retirement dates of the production facilities discussed above?

A. I recommend that the probable retirement dates filed in the Depreciation Study be used in the calculation of depreciation rates for the Company.

IV. AMORTIZATION ACCOUNTS

Q. Did MECG or OPC propose any changes related to any of the plant accounts that use amortization accounting for calculating depreciation rates?

A. No. However Staff Witness Arandia did propose changes related to the amortization accounting plant accounts.

Q. What does Staff Witness Arandia propose related to the Reserve Adjustment for Amortization?

A. Staff Witness Arandia proposed a Reserve Adjustment for Amortization in the amount of $4.3 million. The Company's proposed Reserve Adjustment for Amortization is $9.1 million (which can be found in Table 1 on page VI-9 of the Depreciation Study). Staff's proposed $4.3 million reserve adjustment after the segregation of the reserve in the Depreciation Study in a sense ignoring the Company reserve reclassification. In effect developing a $13.4 million reserve adjustment. The purpose of the Reserve Adjustment for Amortization is to segregate the general plant amortization account reserves so that the annual depreciation rate is equal to one divided by the average service life (amortization period). For example, Account 397.010, Computer Hardware has an 8-SQ estimate, meaning an 8-year average service life (amortization period), so the annual accrual rate for that account after the segregations is 12.50% (or 1/8). These adjustments are made so that new additions to general plant amortization accounts are being depreciated at a rate appropriate to their estimated useful lives. Witness Arandia's additional adjustment of $4.3 million leads to a rate for Account 397.010 of 9.69%, meaning that new additions to this account will not be depreciated at the more appropriate rate of 12.50%. The Reserve Adjustment for Amortization shown in Table 1 of the Depreciation Study filed by the Company should be used for general plant amortization accounts, not the additional adjustments proposed by Staff, as these additional adjustments do not properly address the goal of the adjustment process and the concept of amortization accounting.

Q. Can you further detail the reserve adjustments for general plant made in the Depreciation Study as compared to what Staff has done?

A. Yes. The total book reserve for the general plant accounts subject to amortization on the company books is $71,411,595. In order to achieve the proper amortization rates for these accounts the book reserve in total needs to be $80,493,572. Therefore, the unrecovered reserve for amortization is $9,081,977. This amount is separately amortized over 5 years or $1,816,034 annually. Staff has not only ignored the $9,081,977 reserve reclassification but created an additional reserve adjustment to bring the actual book reserve for the general plant accounts to $84,859,579 which is what Staff considers as the theoretical reserve. Not only is the theoretical reserve that Staff uses inaccurate based on the ages of the assets in each account but it will change the calculated rate by account which will not produce the appropriate rate for each of the amortizable accounts

Q. Please continue discussing the issue with the rates Staff calculated for the FERC 898 amortization accounts with another example?

A. The rates for the FERC 898 amortization accounts are not being calculated by Staff properly. Staff doesn't oppose any of the amortization periods proposed by the Company in the filing, so it is unclear why Staff is even calculating different rates for these accounts. In addition, the rates Staff is calculating for these accounts are being calculated incorrectly. There are two main issues with the way Staff is calculating these rates; 1) the composite remaining life is being calculated incorrectly and 2) the actual annual depreciation rate is being calculated incorrectly.

In the tab "FERC 898 Amortizations" of the Staff file "Depreciation Workpaper", I will use rows 3 through 10 to demonstrate the errors in Staff's calculations. These rows display the calculations for Account 315.010 and the Hawthorn Common location. In cell Y3, Staff calculates a composite remaining life of 3.14 by using a ratio of the product of each vintage remaining life and the future accruals divided by the total future accruals. The proper way to calculate remaining life is to take the total future accruals divided by the annual accrual. For this example, that would mean dividing cell U10 by cell W10, or $48,078 divided by $17,095. This produces a composite remaining life 2.81, which is very different from the 3.14 calculated improperly by Staff.

Continuing with that same example in that same file, the annual depreciation rate calculated by Staff in cell Z3 is 4.13%. This calculation is done improperly by taking the net book value of the account (or the remaining dollars to depreciate) and dividing that by the product of the incorrectly calculated composite remaining life and the total original cost of the account. The way to calculate an annual accrual rate is to take the annual accrual divided by the original cost. For this example, that would be cell W10 divided by cell E10, or $17,095 divided by $370,376, which would be an annual rate of 4.62%. This is a much different rate than the rate of 4.13% calculated by Staff.

Q. What do you recommend related to the rates for the FERC 898 amortization accounts?

A. I recommend using the rates proposed in the Depreciation Study filed by the Company. The issues related to the composite remaining life and depreciation rate

calculations presented above are prevalent with every account and location calculation by Staff for FERC 898 amortization accounts. Staff is not proposing different service lives for any of these accounts, so the rates provided in the Depreciation Study are the most appropriate for these accounts.

Q. Are there additional issues related to Staff's position related to proper recovery of assets?

A. Yes. There are two issues which are discussed in Staff witness Young's testimony. First, Staff witness Young has made adjustments to general plant amortization accounts related to depreciation expense and reserve amounts associated with the retirements. Second, there are many other retirements that Staff witness Young considers as early retirements and does not agree with the reserve treatment.

Q. Please discuss the recovery of the general plant amortization retirements that have been challenged by Staff witness Young.

A. General Plant amortization requires retirements to be booked at the end of their amortization period. In other words, if an account has a 10 year amortization period then the assets stay on the books until the 10^{th} year and the full asset value and comparable reserve amount are reduced from plant and accumulated depreciation. One of the major issues in Witness Young's position is that he has incorrectly established the wrong amortization period for a large portion of the assets that were transferred into Account 397.01 from Account 391.02. These assets are computer equipment and have an 8 year life, however, witness Young categorizes these assets in the 35 year category. When properly categorizing these assets into the 8 year subaccount, it will clearly show there is no early retirement nor is the development

of the accumulated depreciation handled incorrectly in the Company's position. Company has calculated errors in the calculation of Staff's under-accrual totaling $12.8M due to using the incorrect authorized rate of which $11.7M is related to the computer equipment discussed.

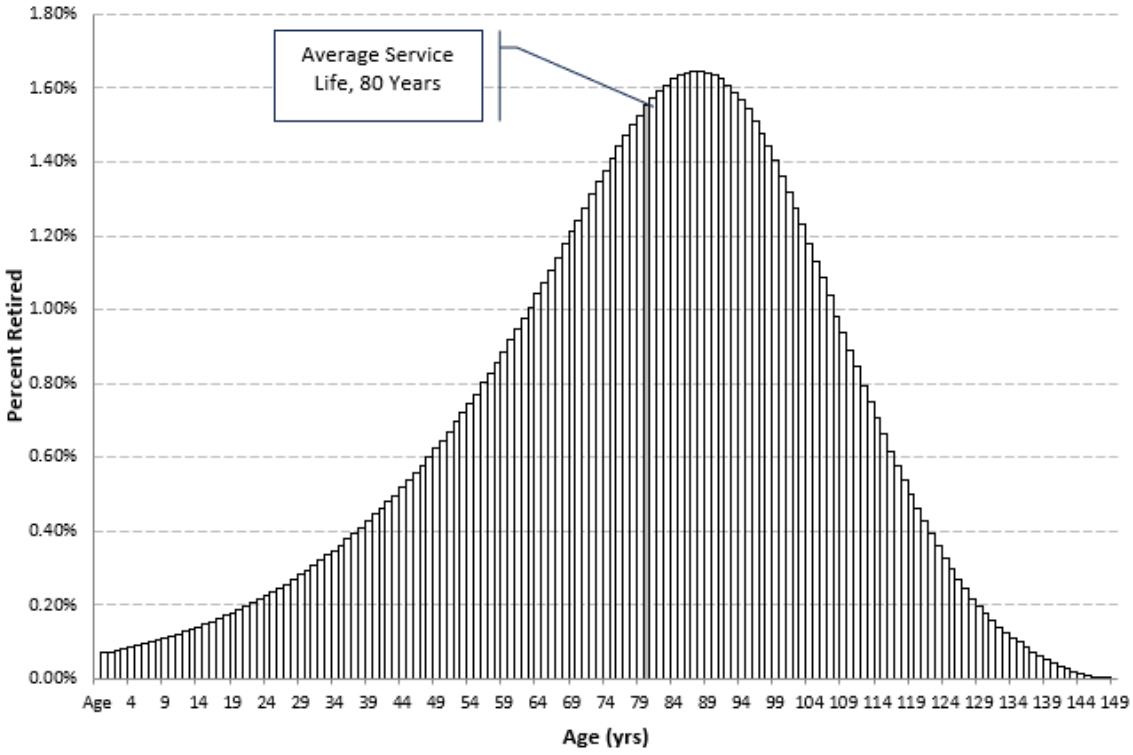
Q. Should reserve adjustments for general plant accounts be done immediately?

A. No. It is important to understand that you cannot change the total book reserve as that represents what has been properly recovered to date. However, developing a mechanism in the fixed asset system that will allow for the segregation of the reserve as recommended in the Depreciation Study needs to be done as soon as approved so based on the remaining life technique proper vintage recovery and amortization retirements are made properly.

Q. Please address the other mass property retirements that Staff Witness Young has disallowed as early retirements.

A. Witness Young declared that many other assets were disallowed due to his position that these assets were early retirements. This is not correct. All assets except the amortized assets, are depreciated based on a survivor curve or in the case of generation accounts, an interim survivor curve. This means there is group depreciation and recovery is based on an average service life and mortality curve. For example, if an account has a survivor curve of 80-R2.5 then only 1.55% of the assets will be retired at age 80. The chart below sets forth the ages of all retirements expected with an 80-R2.5 survivor curve.

Figure 4. Percent Retired by Age Based on 80-R2.5 Survivor Curve



As can be seen from Figure 1, there are many assets to be retired before age 80 and many after age 80. Therefore, retirements that retire earlier than age 80 should not be disallowed as that would disregard the concept of group depreciation and recovery based on the survivor curve. As Company witness Klote discusses, the survivor curve for each account represents the mortality dispersion of each asset class which reflects retirements that will occur before the average service life and after the average service life. Attempting to remove only the retirements that occur before the average service life violates the life estimation process and purpose for developing depreciation rates based on group depreciation and the remaining life concept. Staff witness Young inappropriately excludes retirements from many accounts based on his position that there should not be retirements before the average life. This is an incorrect assumption.

V. TERMINAL NET SALVAGE

Q. What is terminal net salvage?

A. Terminal net salvage is the net salvage (i.e., gross salvage less cost of removal) related to the final or terminal retirement of life span property. Life span property is the term used to describe assets (such as power plants) for which all assets associated with a facility will eventually be retired concurrently. The retirements that occur at the end of the life of an entire power plant are referred to as "final" or "terminal" retirements. These contrast with the retirements that occur throughout the life of the plant (e.g., the replacement of individual components of the plant such as piping or pumps), which are referred to as "interim" retirements. The "life span method" is used for life span property. For the life span method, service life estimates are made for the final retirement of a facility as well as for the interim retirements expected to occur throughout the life of the facility.

There are typically net salvage costs associated with both types of retirements. Costs associated with interim retirements, such as the costs incurred to replace piping or pumps throughout the life of the facility, are referred to as "interim net salvage." The costs related to the final retirement of the facility, such as the demolition of the superstructure and the remediation of ash ponds, are referred to as "final net salvage" or "terminal net salvage."

Q. Has the life span method been previously approved for Evergy generating facilities?

A. Yes, it has.

Q. Does the utilization of the life span method for generating plants coincide with the need to incorporate terminal net salvage in order to properly recover the full service value of all generating assets?

A. Yes.

Q. What method for allocation of power plant service value has Evergy proposed in this proceeding?

A. The Company has proposed, consistent with authoritative texts and the Uniform System of Accounts ("USOA"), the use of the life span method of allocating the service value of power plants over the life of the facility.

Q. Do the other parties agree with the use of the life span method for assets such as power plants?

A. Yes. Staff, OPC and MECG agree with the use of the life span method for assets such as power plants, and agree with the life spans proposed in the Depreciation study, other than those specifically mentioned in Section II.

Q. Based on the definitions and instructions in the USOA, what do you conclude that it requires regarding power plant net salvage?

A. The USOA directs that power plant net salvage, as a component of its service value, must also be allocated or accrued over the service life of the property in a systematic and rational manner.

Q. Do authoritative texts on depreciation support your conclusion that net salvage should be accrued during the life of the related plant?

A. Yes, they do. Every authoritative text on the subject of depreciation supports the proposal to ratably accrue for net salvage during the life of the related property. The 1996 NARUC depreciation treatise, cited above, states:

> Closely associated with this reasoning is the accounting principle that revenues be matched with costs and the regulatory principle that utility customers who benefit from the consumption of plant pay for the cost of that plant, no more, no less. The application of the latter principle also requires that the estimated cost of removal of plant be recovered over its life.[6]

Depreciation Systems, also cited above, states the concept in this manner:

> The matching principle specifies that all costs incurred to produce a service should be matched against the revenue produced. Estimated future costs of retiring of an asset currently in service must be accrued and allocated as part of the current expenses.[7]

Q. What do the other parties propose related to the recovery of power plant net salvage?

A. Staff, OPC, and MECG all propose not recovering a terminal net salvage component for Evergy's production facilities, and to only recover an interim net salvage component. These proposals ignore the fact that there are significant costs to decommission a production facility at the end of the facility's life, and those costs should be recovered by the ratepayers who receive service from those facilities.

[6] Public Utility Depreciation Practices at p. 157 (National Association of Regulatory Utility Commissioners, 1996).
[7] Depreciation Systems, Frank K. Wolf and W. Chester Fitch at p. 7 (Iowa State University Press, 1994).

Q. In this regard, do customer equity considerations support the use of including terminal net salvage in the recovery of depreciation for power plants?

A. Yes, they do. MECG witness Andrews argues that even if terminal net salvage is excluded from current rates, it can be recovered in the future from future ratepayers.[8] There is a serious flaw in this argument. If those costs are recovered from future ratepayers, then those future ratepayers will be paying for something from which they never received service and that violates the concept of generational equity. There is no argument to be made that the cost to retire a generation facility will be $0. The amount estimated to be collected at the time of the retirement can be argued, however something should be collected related to terminal net salvage from current ratepayers for their use of the current facilities in service. Collecting $0 from current ratepayers for something that all parties agree will cost more than $0 in the future is not systematic nor rational.

Q. Should net salvage be included in depreciation?

A. Yes. Net salvage costs experienced at the end of an asset's service life are part of the service value of the asset. In order for customers to pay their fair share for electric service, depreciation must allocate the full service value (original cost less net salvage) over the service life of the assets. This concept is set forth in the electric USOA, which states in General Instruction 22:

> Utilities must use a method of depreciation that allocates in a systematic and rational manner the service value of depreciable property over the service life of the property.

[8] Andrews Direct Testimony, p. 18, 15:24

If net salvage is not included in depreciation, then the net salvage costs the company will incur upon the retirement of its assets will have to be paid by future customers after the assets are retired. Future customers will not be receiving service from assets that have already been retired, and should not have to pay for costs related to these retired assets. Therefore, excluding net salvage from depreciation results in intergenerational inequity because future customers will pay the costs of assets which have already been retired and from which they receive no benefit.

Q. Has the Commission ruled that net salvage should be included in depreciation?

A. Yes. The Commission addressed the issue of net salvage in Case No. GR-99-315 for Laclede Gas Company ("Laclede") and ruled that net salvage should be included in depreciation. The Commission stated:

> The Commission finds that the fundamental goal of depreciation accounting is to allocate the full cost of an asset, including its net salvage cost, over its economic or service life so that utility customers will be charged for the cost of the asset in proportion to the benefit they receive from its consumption. The Commission further finds that the method utilized by Laclede is consistent with that fundamental goal.[9]

Q. Does the other parties agree that net salvage should be included in depreciation?

A. Yes, in general Staff, OPC and MECG appear to agree with this concept, as evidenced by their recommendations in this case (and in other cases). The other parties have recommended net salvage estimates for all of the Company's transmission, distribution and general plant accounts. The other parties have also recommended interim net salvage estimates for the Company's production plant

[9] Case No. GR-99-315, Third Report and Order, Issued January 11, 2005, p. 9 ("Laclede Order").

accounts. The other parties' transmission, distribution and general plant net salvage estimates, as well as their interim net salvage estimates, are therefore consistent with the Commission's decision in Laclede.

However, Staff and OPC have not included terminal net salvage in their recommendations despite the fact that Staff has acknowledged that terminal net salvage is likely to occur in the future as I will explain. Staff's recommendation for terminal net salvage is therefore not consistent with the USOA, nor is it consistent with the Commission's Order in Laclede.

Q. Why have other parties excluded terminal net salvage from their recommended depreciation rates?

A. The stated reasoning for excluding terminal net salvage is: "The Commission has not generally granted net salvage for terminal net salvage. The inclusion of these terminal net salvage costs are speculative and they cannot be considered known and measurable." No party is stating terminal net salvage costs do not exist, but believes the Commission should disallow the inclusion of these costs stating they are speculative. This is not justification for deviating from the Commission's stated objective of depreciation as set forth in the Laclede Order. Nor is it reasoning for eliminating the terminal net salvage costs calculated and proposed in the Company depreciation study. Recent experience has proven these costs can be and were calculated in the Decommissioning Cost Study prepared for the Company by 1898 & Co. Coal fired plants are being retired all across the country by all utilities and at a very high level since 2012. Also, many of these facilities have been decommissioned already so maintaining these activities as speculative is not

accurate. Additionally, Evergy has retired Hawthorn, Montrose and Sibley in recent years and have incurred costs to shut the facilities down.

Q. Please address other parties' reason for excluding terminal net salvage based on prior decisions of the Commission.

A. Staff cites the Commission's Order in Case No. ER-2016-0285 again stating "Because the cost of terminal net salvage is speculative, the Commission will not allow KCPL to recover those costs in this case." The Companies' inclusion of decommissioning costs calculated in the Decommissioning Cost Study and recent experience and costs associated with generation facilities that have been decommissioned, demolished and sites remediated proves terminal net salvage costs are not purely "speculative." Given the information above and the recent experience of other electric utilities decommissioning generating facilities the Company has proven terminal net salvage costs can be calculated within reason and are not purely "speculative," prior decisions regarding terminal net salvage should not apply to Evergy Metro's current case.

VI. CONCLUSION

Q. Please summarize your testimony.

A. Staff, MECG and OPC have made recommendations to reduce depreciation expense as compared to the Depreciation Study. For each instance that the other parties propose a change, the basis for the change is not supported by proper informed judgment or the detailed information available for each asset class. The survivor curves proposed in the Depreciation Study combine the statistical analysis with the proper informed judgment to arrive at the most appropriate match of asset

recovery to utilization of the asset in each account. The mass property net salvage percentage proposed in the Depreciation Study better represents the past experience and future expectations of cost of removal and gross salvage. Both MECG and OPC make proposals to change the life spans of generating facilities based on the IRP which is not designed as the only component for depreciation probable retirement dates. Staff has inappropriately adjusted the book reserve for general plant accounts subject to amortization and created an inaccurate reserve amortization component. Finally, terminal net salvage should be included in depreciation rates as defined by the Uniform System of Accounts.

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 Metro, Inc. d/b/a Evergy Missouri Metro's Request for Authority to Implement A General Rate Increase for Electric Service	))))	Case No. ER-2026-0143

AFFIDAVIT OF JOHN J. SPANOS

COMMONWEATLH OF PENNSYLVANIA)
) **ss**
COUNTY OF CUMBERLAND)

John J. Spanos, being first duly sworn on his oath, states:

1. My name is John J. Spanos. I work in Mechanicsburg, Pennsylvania and I am employed by Gannett Flemming Valuation and Rate Consultants, LLC as President.

2. Attached hereto and made a part hereof for all purposes is my Rebuttal Testimony on behalf of Evergy Missouri Metro consisting of thirty-two (32) 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.

John J. Spanos

John J. Spanos

Subscribed and sworn before me this 10th day of August 2026.

Commonwealth of Pennsylvania - Notary Seal
MEGAN LYNN ECKRICH - Notary Public
Cumberland County
My Commission Expires September 16, 2027
Commission Number 1264513

Notary Public

My commission expires: Sep. 16, 2027