

Exhibit No.: _____
Issue: Depreciation
Witness: John J. Spanos
Sponsoring Party: Spire Missouri, Inc.
File No.: GR-2025-0107

MISSOURI PUBLIC SERVICE COMMISSION

FILE NO. GR-2025-0107

SURREBUTTAL TESTIMONY OF

JOHN J. SPANOS

ON BEHALF OF

SPIRE MISSOURI, INC.

Mechanicsburg, Pennsylvania

June 2025

JOHN J. SPANOS SURREBUTTAL

Table of Contents

I.	INTRODUCTION AND PURPOSE.....	- 1 -
II.	STAFF’S DIFFERENCES IN DEPRECIATION RATES	- 2 -
III.	SERVICE LIFE ESTIMATES FOR ACCOUNT 376.30	- 2 -
IV.	OPC ISSUES WITH ACCOUNT 376.20, MAINS – CAST IRON.....	- 2 -
V.	NET SALVAGE ESTIMATES	- 9 -
VI.	GENERAL PLANT AMORTIZATION	- 10 -

1 **I. INTRODUCTION AND PURPOSE**

2 **Q. PLEASE STATE YOUR NAME AND ADDRESS.**

3 A. My name is John J. Spanos. My business address is 300 Sterling Parkway,
4 Mechanicsburg, Pennsylvania (formerly 207 Senate Avenue, Camp Hill,
5 Pennsylvania).

6 **Q. ARE YOU THE SAME JOHN J. SPANOS WHO PREFILED DIRECT,**
7 **SUPPLEMENTAL DIRECT AND REBUTTAL TESTIMONY IN THIS**
8 **MATTER?**

9 A. Yes.

10 **Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?**

11 A. The purpose of my surrebuttal testimony is to respond to the rebuttal testimonies filed
12 by Missouri Public Service Commission Staff (“Staff”) witness Malachi Bowman and
13 Office of the Public Counsel (“OPC”) witness John A. Robinett related to
14 depreciation.

15 **Q. WHAT IS THE SUBJECT OF YOUR SURREBUTTAL TESTIMONY?**

16 A. The primary subject of my testimony is depreciation. More specifically, my testimony
17 will discuss depreciation concepts and methods as they relate to Staff’s and OPC’s
18 positions on how to achieve the most appropriate depreciation rates for each account.
19 I will address the alternative depreciation rates proposed by Staff and OPC. The
20 alternative depreciation rates are the result of changes in average service life and net
21 salvage estimates from Staff witness Bowman for some accounts. Additionally, I will
22 address both Staff and OPC’s challenges to the appropriate recovery for cast iron and
23 plastic mains. I will complete the surrebuttal by addressing general plant amortization.

1 **II. STAFF’S DIFFERENCES IN DEPRECIATION RATES**

2 **Q. CAN YOU EXPLAIN THE CAUSE OF THE DIFFERENCES IN**
3 **DEPRECIATION RATES THAT STAFF PROPOSES?**

4 A. There are multiple reasons for the differences in depreciation rates that Staff Witness
5 Bowman has presented in his rebuttal testimony. First, Staff has not presented the
6 correct average service lives and survivor curve for each account that I have
7 recommended based on my rebuttal testimony. There were changes to the survivor
8 curve estimates for some accounts based on the corrected data. Second, Staff has
9 proposed different average service life and survivor curves for a handful of accounts.
10 Third, Staff has proposed different net salvage percentages for a handful of accounts.
11 Finally, Staff has arbitrarily adjusted the results of depreciation rates because Witness
12 Bowman did not like the impact.

13 **Q. CAN YOU ADDRESS SOME OF THE ISSUES?**

14 A. Yes. First, depreciation is not an arbitrary development of a rate. Staff Witness
15 Bowman makes adjustments to depreciation rates because he does not like the impact
16 of the change, however, that is not a systematic and rational recovery pattern that is
17 fair to all ratepayers. If the life or net salvage changes to cause an increase or decrease
18 in the rate or there are changes to the plant balances then the full service value needs
19 to be recovered equitably over the life of the assets. Mr. Bowman’s proposed changes
20 to rates due to the fact he does not like the change impact is not appropriate. Second,
21 determining life or net salvage estimates without considering the combination of all
22 statistical data and informed judgment is also not appropriate.

23 **III. SERVICE LIFE ESTIMATES FOR ACCOUNT 376.30**

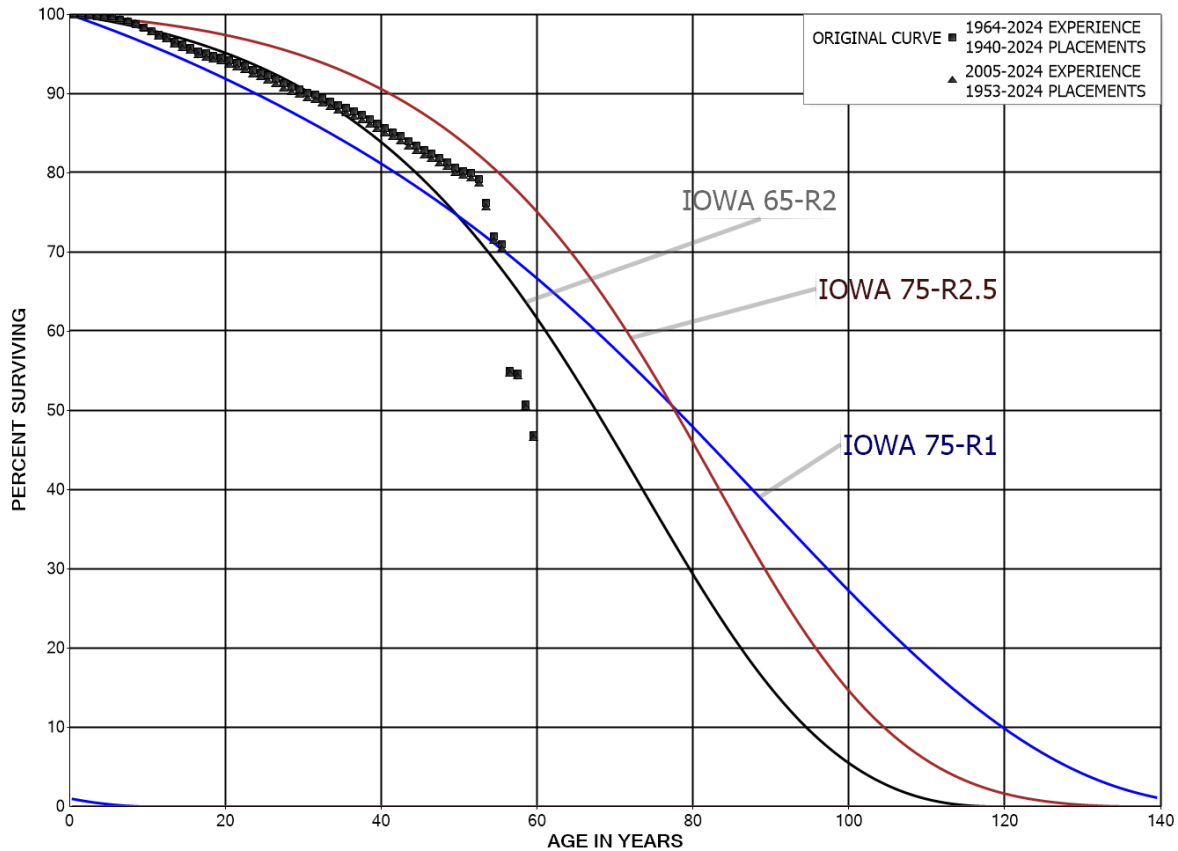
1 **Q. DO STAFF AND OPC RECOMMEND AN ALTERNATIVE SERVICE LIFE**
2 **ESTIMATE FOR ACCOUNT 376.30, MAINS – PLASTIC AND COPPER?**

3 A. Yes. After numerous presentations of his analysis, Staff witness Bowman
4 recommends a 75-R2.5 survivor curve for Account 376.30, Mains – Plastic and
5 Copper. OPC witness Robinett provides an average service life of 75 years but does
6 not determine a type curve so there is no way to determine his calculated accrued
7 depreciation levels by vintage. However, based on prior cases on this topic I believe
8 he is estimating a 75-R1 type curve.

9 **Q. HAVE BOTH PARTIES PROPERLY PRESENTED THE COMPANY’S**
10 **POSITION ON THE LIFE CHARACTERISTICS FOR ACCOUNT 376.30,**
11 **MAINS – PLASTIC AND COPPER?**

12 A. No. Both parties state the Company position is a 60-year average life which is not
13 consistent with the position provided in rebuttal testimony which includes the updated
14 date files. The Company position is a 65-R2 survivor curve. The figure below sets
15 forth a visual comparison of each parties survivor curve along with the key experience
16 and placement bands. Clearly, the 65-R2 type curve is the best representation of the
17 historical data through 2024.

Figure 1. Comparison of Life Estimates for Account 376.30, Mains - Plastic and Copper



Q. PLEASE DETAIL YOUR DISAGREEMENTS IN THE OTHER PARTIES' POSITIONS.

A. First, Account 376.30, Mains – Plastic and Copper, includes both plastic pipe and copper pipe. Additionally, the plastic pipe has various types that have different life characteristics. Noting the different types of pipe in the account is important when determining a life characteristic and more importantly when understanding the data you are analyzing. Plastic pipe was not installed until at least the 1970s, and the statistical analysis includes vintages back to 1940. Second, the causes of retirement for all mains is more than just physical wear and tear or age. Third, the overall life cycle of plastic and copper mains recommended by witness Bowman is 75 years,

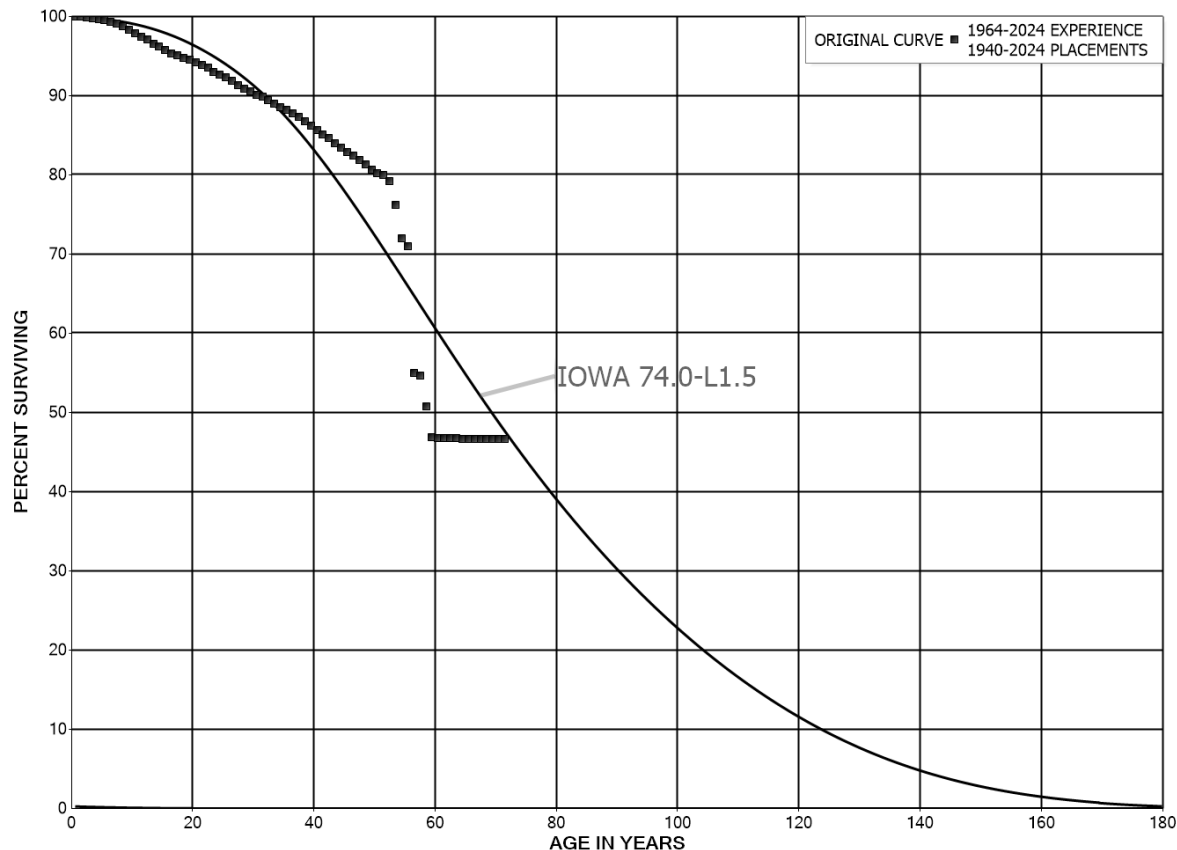
JOHN J. SPANOS SURREBUTTAL

1 which is not realistic when considering the type of asset and how it will be utilized by
2 the Company. I suspect with OPC witness Robinett's estimate his overall life cycle is
3 even longer than witness Bowman's. Witness Robinett did not do any analysis for
4 Account 376.30. He simply uses a previous case position of a 75-year life span. He
5 also takes out of context the Spire witnesses' comments related to the expected life of
6 plastic mains compared to cast iron mains. Again, he does not consider all the forces
7 of retirement when commenting on the life comparisons of types of mains. There are
8 many other gas companies that estimate average service lives less than 75 years.
9 Additionally, he does not consider what statistically has occurred for the assets in
10 Account 376.30 in the most recent years which goes back prior to the East and West
11 consolidation.

12 **Q. IS WITNESS BOWMAN'S ANALYSIS REASONABLE FOR ACCOUNT**
13 **376.30, MAINS – PLASTIC AND COPPER?**

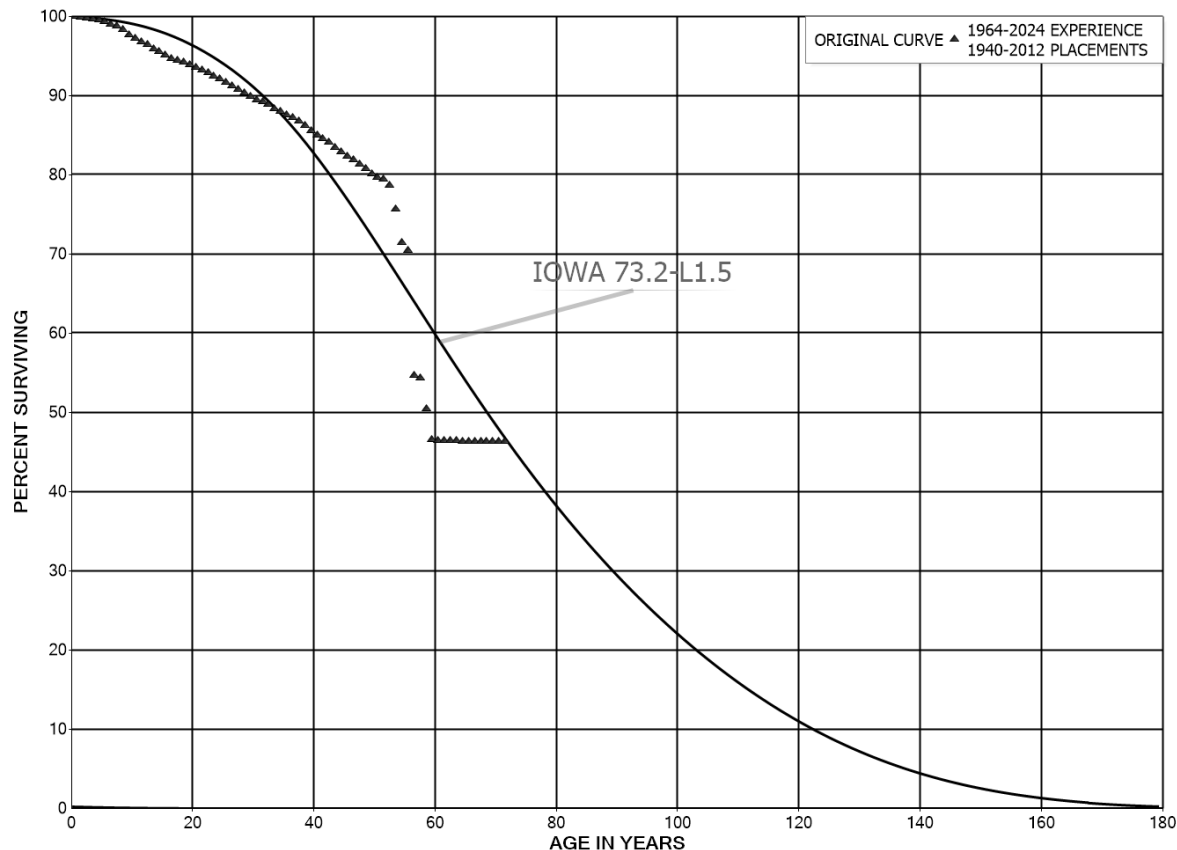
14 A. No. First, Mr. Bowman segregates or eliminates some of the data which has no basis
15 for determining the most likely expectation of the future. Second, Mr. Bowman does
16 not properly consider what the survivor curve he is plotting does for recovery and
17 development of the theoretical reserve. His estimates anticipate an unrealistic life
18 cycle which then creates a theoretical reserve that is too low and the depreciation
19 expense will not achieve full recovery over the life of the asset class. Third, the curve
20 provided in Figures 2 through 4 set forth the curve recommended by Witness Bowman
21 and original life table for Account 376.30 with the various bands. These curves will
22 not meet the matching principle which should be matching asset utilization with asset
23 recovery.

Figure 2. Staff Analysis with 1964-2024 Experience Band and 1940-2024 Placement Band



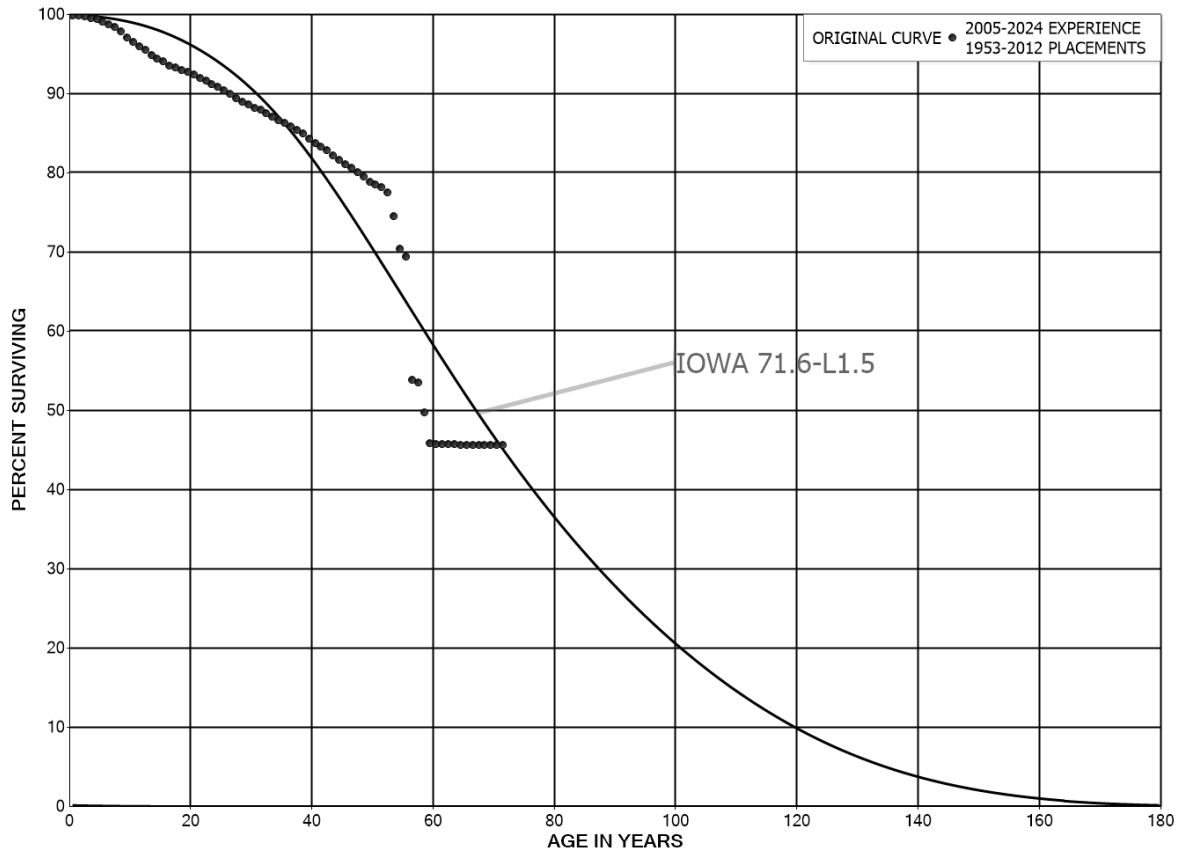
The 74-L1.5 survivor curve that Witness Bowman selected in Figure 2 is a relative reasonable fit for the first 70 ages, however, it then assumes that the rates of retirement will slow down after age 70 and some plastic and copper main will stay in service for 190 years. This is not a reasonable expectation and will produce under recovery and intergenerational inequities.

Figure 3. Staff Analysis with 1964-2024 Experience Band and 1940-2012 Placement Band



The 73-L1.5 survivor curve has the same issues as the curve in Figure 2, however, why would we exclude the most recent last 12 years of installations. The plastic pipe installed in the last 12 years is most indicative of future plans for plastic and copper mains.

Figure 4. Staff analysis with 2005-2024 Experience Band and 1940-2012 Placement Band



The estimate in Figure 4 has the same flaws, however, in this case not only has Witness Bowman only focused on the last 20 years of transactional data but then eliminates most of the vintages during that time period. Thus, minimizing the statistical significance of the available data.

IV. OPC ISSUES WITH ACCOUNT 376.20, MAINS – CAST IRON

Q. HAS OPC WITNESS ROBINETT PROPERLY REPRESENTED THE RECOVERY FOR ACCOUNT 376.20, MAINS – CAST IRON?

A. No. On pages 3 through 6 of his rebuttal testimony, Witness Robinett gives his opinion as to whether the proposed rates in the Company Depreciation Study and Staff Witness Bowman position, will fully recover the cast iron mains investment for both

1 East and West by the anticipated truncation dates. There are two ways to prove the
2 accuracy of the calculations which ensures full recovery of the service value by the
3 time cast iron mains are expected to be retired. I will use the Spire East calculation to
4 illustrate the recovery. With the 65-R2.5 survivor curve, negative 150 percent net
5 salvage, December 31, 2028 probable retirement date (or date cast iron is scheduled
6 to be retired) and the vintage age distribution as of September 30, 2024, the weighted
7 average service life is 13.1 years. Therefore, the original cost times (1-net salvage)
8 divided by weighted average service life produces the 19.07 percent rate. Another
9 way to consider if the rate or resulting expense is correct to confirm recovery by end
10 of 2028 would be to consider the remaining life concept. All the same parameters, but
11 we know that as of September 30, 2024 we will have 4.25 years left to recover the
12 remaining investment. If you take the original cost plus the 150 percent of net salvage
13 you will have approximately \$74.25 million to recover but the theoretical accumulated
14 depreciation is \$50.8 million so there is about \$23.5 million to recover over 4.25 years
15 which equates to \$5.5 million which is in line with the study results. The same type
16 of calculation for Spire West will support the fact that the depreciation rates in the
17 Depreciation Study will achieve full recovery.

18 **V. NET SALVAGE ESTIMATES**

19 **Q. DOES WITNESS BOWMAN RECOMMEND ALTERNATIVE NET**
20 **SALVAGE ESTIMATES FOR ANY ACCOUNTS?**

21 A. Yes. Staff witness Bowman recommends different net salvage estimates for a few
22 accounts.

23 **Q. WHY ARE THE NET SALVAGE ESTIMATES FROM THE DEPRECIATION**
24 **STUDY THE MOST APPROPRIATE?**

JOHN J. SPANOS SURREBUTTAL

1 A. The estimates proposed in the Depreciation Study were determined in a manner
2 similar to that of the service life analysis. Mathematical analyses of the Company's
3 historic net salvage data were performed to provide perspective on past trends, and
4 other information was gathered related to future expectations such as discussions with
5 Company personnel. The resulting combination of statistical analysis and informed
6 judgment are the net salvage estimates provided in the study.

7 **Q. WHY HAS WITNESS BOWMAN PROPOSED DIFFERENT ESTIMATES**
8 **FOR THE FEW ACCOUNTS?**

9 A. He has stated that the reason is that he did not see a reason to change the estimate from
10 those currently in place or he did not understand how the net salvage was determined
11 in the Depreciation Study. First, it is not appropriate to ignore the most recent data.
12 Second, an explanation of how net salvage is determined in the Depreciation Study as
13 well as in my rebuttal testimony previously in this case.

14 **VI. GENERAL PLANT AMORTIZATION**

15 **Q. HAS STAFF SUPPORTED THE CONTINUED USE OF GENERAL PLANT**
16 **AMORTIZATION?**

17 A. Yes. Witness Bowman discussed OPC's issues related to general plant but eventually
18 agreed with maintaining general plant amortization. However, Staff's support of the
19 methodology required recording retirements to all vintages that are outside of the
20 amortization period for each account.

21 **Q. DOES STAFF APPLY THE AMORTIZATION RATES PROPERLY TO THE**
22 **CORRECT VINTAGE BALANCES?**

23 A. No. The rates that Staff recommends are the proper amortization rates for the
24 amortization period applied, however, those rates should only be applied to the plant

1 balances within the amortization period. Additionally, Staff does not recommend a
2 reserve adjustment that would be necessary after the required retirements.

3 **Q. HAS OPC CHANGED ITS POSITION RELATED TO GENERAL PLANT**
4 **AMORTIZATION?**

5 A. No. There was no discussion in the rebuttal testimony of Witness Robinett, however,
6 his discussions ignored the reasons for why amortization accounting was first
7 implemented all across the country.

8 **Q. DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?**

9 A. Yes.

In the Matter of Spire Missouri Inc. d/b/a Spire’s)
Request for Authority to Implement a General)
Rate Increase for Natural Gas Service Provided) File No. GR-2025-0107
In the Company’s Missouri Service Areas)

COMMONWEALTH OF PENNSYLVANIA)
) SS.
COUNTY OF CUMBERLAND)

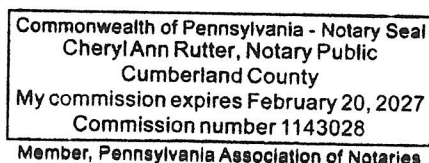
1. My name is John J. Spanos. I am the President of Gannett Fleming Valuation and Rate Consultants, LLC. My business address is 300 Sterling Parkway, Suite 200, Mechanicsburg Pennsylvania 17050.


2. This affidavit is attached to my surrebuttal testimony, which is filed on behalf of Spire Missouri Inc.

3. I hereby swear and affirm that my answers to the questions contained in my surrebuttal testimony are true and correct to the best of my knowledge, information, and belief.

John J. Spanos
John J. Spanos

Subscribed and sworn to before me this 26th day of June 2025.




Notary Public

My Commission expires: February 20, 2027