Exhibit No.:	
Issue(s):	**Depreciation**
Witness:	**John J. Spanos**
Type of Exhibit:	**Rebuttal Testimony**
Sponsoring Party:	**Spire Missouri Inc.**
Case Nos.	**GR-2025-0107**
Date Prepared:	**May 30, 2025**

SPIRE MISSOURI INC.

GR-2025-0107

REBUTTAL TESTIMONY

OF

JOHN J. SPANOS

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EXHIBITS:

I. INTRODUCTION AND PURPOSE

Q. PLEASE STATE YOUR NAME AND ADDRESS.

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

Q. ARE YOU THE SAME JOHN J. SPANOS WHO PREFILED DIRECT AND SUPPLEMENTAL DIRECT TESTIMONY IN THIS MATTER?

A. Yes.

Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

A. The purpose of my rebuttal testimony is to present revised results to the Depreciation Study in this case as well as respond to the testimonies filed by Missouri Public Service Commission Staff ("Staff") witness Malachi Bowman and Office of the Public Counsel ("OPC") witness John A. Robinett related to depreciation.

Q. WHAT IS THE SUBJECT OF YOUR REBUTTAL TESTIMONY?

A. The primary subject of my testimony is depreciation. More specifically, my testimony will discuss depreciation concepts and methods as they relate to Staff's and OPC's positions on how to achieve the most appropriate depreciation rates for each account. I will address the alternative service life and net salvage estimates proposed by Staff and OPC. Additionally, I will address both OPC's challenges to general plant amortization and Staff's position on the appropriate rate for general plant amortization accounts.

II. REVISED RESULTS

Q. PLEASE DISCUSS THE REVISIONS YOU ARE PRESENTING TO THE FILED DEPRECIATION STUDY.

A. When preparing rebuttal testimony and review of Staff's documentation related to service lives in this case, it was discovered that the database used for performing service life analysis contained some duplicate entries. For the revised results of the life analysis presented as part of this rebuttal testimony, these duplicate entries have been removed from the database to reflect the appropriate historic activity. As a result of this updated life analysis, several of the service life estimates have been revised. A summary of the revised results for the Depreciation Study is attached as Exhibit JJS-R1. The revised depreciation results set forth a reduction in depreciation expense from the supplemental depreciation study position.

III. SERVICE LIFE ESTIMATES

Q. DO STAFF AND OPC RECOMMEND ALTERNATIVE SERVICE LIFE ESTIMATES FOR ANY ACCOUNTS?

A. Yes. Staff witness Bowman recommends alternative service lives from the Depreciation Study for several accounts. Many of the alternative service lives are proposals to maintain the currently approved estimates based on Bowman's opinion that no justification was provided for changing these lives. OPC witness Robinett recommends an alternative service life only for plastic mains.

Q. FOR WHICH ACCOUNTS HAS STAFF PROPOSED AN ALTERNATIVE SERVICE LIFE ESTIMATE FROM THE DEPRECIATION STUDY?

A. A schedule comparing the service life proposals of Staff to the initial Depreciation Study as well as the revised analysis is attached as Exhibit JJS-R2.

Q. HAS STAFF USED THE SAME APPROACH TO ESTIMATING SERVICE LIVES THAT WAS USED IN THE DEPRECIATION STUDY?

A. No. While both Staff and I have used Iowa type survivor curves to calculate depreciation expense and used the retirement rate method to analyze historical data, the overall approach used by Staff differs from mine. This approach also differs from the correct and proper approach to estimating service lives that is set forth in depreciation textbooks such as NARUC's (National Association of Regulatory Utility Commissioners) *Public Utility Depreciation Practices*. Specifically, Mr. Bowman's testimony suggests that estimating service lives is simply a mathematical exercise in which computations of historical accounting data are all that is needed to determine reasonable estimates. This overall approach is incorrect. Depreciation, and particularly estimating service lives, is a forecast of the future rather than just a calculation of what has happened in the past.

Q. WHAT SUPPORT DOES MR. BOWMAN PROVIDE FOR REJECTING SOME OF THE SERVICE LIFE ESTIMATES FROM THE DEPRECIATION STUDY?

A. Mr. Bowman states only that, "Staff did not find justification in Spire Witness Spanos' testimony,"[1] to favor the estimates in the Study over the currently approved service lives. As an example, Mr. Bowman uses a graph of account 305.00, Structures and Improvements, to illustrate the superior fit of Staff's proposal for this account.

Q. IS THE STATISTICAL ANALYSIS THE ONLY FACTOR TO CONSIDER IN DETERMINING A SERVICE LIFE ESTIMATE?

[1] Direct Testimony of Malachi Bowman, Case No. GR-2025-0107, page 8, lines 8 and 9.

A. No. All asset classes should incorporate new historical data and informed judgment obtained while conducting the updated Depreciation Study. This is consistent with the practices of all authoritative texts in the field of depreciation. Even if the new historical data are consistent with past studies, the current life estimates would need to consider informed judgment and current practices and plans. For all accounts, informed judgment was utilized in the study which Staff does not appear to consider and which supports the survivor curve in the Depreciation Study as the most appropriate.

Q. PLEASE ELABORATE ON THE INFORMED JUDGMENT USED IN THE DEPRECIATION STUDY THAT STAFF DID NOT CONSIDER.

A. Account 353.00, Lines, is an example of an account where the current service life estimate (80 years) is a good mathematical fit of the available historic data; however, an 80-year average life is a less practical estimate when other factors are considered. The historic data for the account begins with transactional years in the early 1980s, so only about forty years of data are available for analysis. With this amount of data, points that are beyond the age of the experience band (i.e., beyond forty years in this example) become less reliable as indicators of future life characteristics. For this reason, the fit of the estimated curve in the earlier ages of the analysis was given more consideration than the fit to the points at later ages. Further, the service life estimates used for these assets by other gas utility companies are typically around 50 years and most often range from about 40 to 60 years. An average of 80 years is well beyond this range, and when considered the overall life cycle for all assets within the account, Staff's estimate is even less practical. The Company's expectation for the service life of these assets is less than 80 years. For these reasons, the life estimate proposed in the Deprecation Study is 70 years.

Q. CAN YOU PROVIDE ANOTHER EXAMPLE OF HOW INFORMED JUDGMENT WAS USED TO DETERMINE A SERVICE LIFE MORE APPROPRIATE THAN THE ESTIMATE PROPOSED BY STAFF?

A. Yes. For Account 376.10, Mains – Steel, Staff witness Bowman proposes an 80-year average service life. The life estimate from the Depreciation Study is a 75-R2 which is a good fit of the approximately sixty years of historic data. Typical causes of failure for steel mains are leaks due to factors such as corrosion or displacement. The industry range for average lives of these assets is typically 65 to 75 years. An 80-year average service life assumes that half of the assets will survive to 80 years and beyond. This assumption is not a reasonable expectation for these assets.

Q. DOES OPC PROPOSE ANY ALTERNATIVE LIFE ESTIMATES?

A. Yes, just one. OPC proposes a 75-year life estimate for Account 376.30, Mains – Plastic and Copper. Mr. Robinett, the OPC witness, argues that some of the replacements of plastic mains have been premature and should be excluded from the life analysis.

Q. WHY IS THE 65-R2 FROM THE DEPRECIATION STUDY A MORE APPROPRIATE LIFE ESTIMATE?

A. The 65-year service life estimate proposed in the updated Depreciation Study is based on analysis of the Company's available historic data, an understanding of the assets within the account and the expected forces of retirement. The 65-R2 is a reasonable fit of the original curve and reflects a life cycle that is within the industry range of 55 to 70 years for these assets. This life is consistent with the Company's expectations for the assets, and there were no indications that any of the retirements that are part of the historic data should be excluded from the analysis based on their cause of

retirement. Exhibit JJS-R3 sets forth a comparison of the proposed 65-R2 survivor curve and OPC estimate of a 75 year average life.

IV. NET SALVAGE ESTIMATES

Q. DO THE OTHER PARTIES RECOMMEND ALTERNATIVE NET SALVAGE ESTIMATES FOR ANY ACCOUNTS?

A. Yes. Staff witness Bowman recommends different net salvage estimates from the Depreciation Study for five accounts. These estimates are provided in the comparison schedule attached as Exhibit JJS-R2. For most of these estimates, Staff proposed the use of the currently approved net salvage percentage.

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

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

Q. PLEASE PROVIDE AN EXAMPLE OF WHY THE NET SALVAGE PERCENTAGES IN THE DEPRECIATION STUDY ARE MORE APPROPRIATE THAN THE STAFF POSITION.

A. I will use Account 376.30, Mains – Plastic and Copper. The currently approved estimate is negative 40 percent net salvage which was not only supported by the statistical analysis at that time but also the expectations of the cost to retire plastic mains. However, there was a trend beginning to show an increase in cost of removal.

Since the last study, there has been approximately $15 million in retirements which is about 38 percent of the total retirements for the account. Thus, a substantial amount in just the last four or five years. During that time, the net salvage percentage has been negative 67 percent. This trend has increased the overall percentage for the 1988-2024 period to negative 53 percent. Clearly the cost to retire plastic mains is increasing due to the required effort to retire pipe. This statistical support shows why just maintaining the estimate from the last case is not appropriate as Staff witness Bowman suggests.

V. GENERAL PLANT AMORTIZATION

Q. WHY HAS OPC CHALLENGED THE USE OF GENERAL PLANT AMORTIZATION?

A. OPC witness, Mr. Robinett, recommends not using amortization accounting for general plant accounts based on a perceived inability to determine retirement patterns of these assets. The amortization periods recommended for general plant assets are determined through informed judgment and are based on the appropriate useful lives of the assets in each account based on how they will be used. The concept of general plant amortization was initiated in the early 1990s. At that time, the FERC published Accounting Release 15 to further provide guidance on how reasonable amortization periods should be applied. Using general plant amortization, which eliminates incurring the high costs associated with maintaining physical inventories and the unnecessary tracking of low value, high volume assets, makes recovery more stable and allows accounting and operations staff to focus time on more critical assets. Mr. Robinett completely ignores the benefits of general plant amortization in making his recommendation that the Company use depreciation accounting. If assets in the account have a changed useful life or there is a substantially different asset mix, then

an amortization period can be changed. But there is no evidence that either of those scenarios exist, and my examination of the data when preparing the Depreciation Study confirms that those conditions do not exist.

Q. ARE THE PROPOSED RATES IN THE DEPRECIATION STUDY CONSISTENT WITH THE AMORTIZATION PERIODS FOR EACH ACCOUNT OR SUBACCOUNT?

A. Yes. The rates proposed for each amortized general plant account represent a composite rate of the "amortized" plant dollars that are younger than the amortization period as well as the "fully accrued" dollars that are older than the amortization period and have been fully recovered. These fully accrued assets have a depreciation rate of zero as illustrated in the attached schedule Exhibit JJS-R4. By segregating the vintages consistent with the amortization period, you ensure full recovery of all assets and make sure the existing and future assets are depreciated consistently. As shown in Exhibit JJS-R4, the composite rate properly applies the concept of amortization accounting and makes sure the total annual expense is consistent with the amortization concept.

Q. IS THERE ANY BASIS FOR THE COMMISSION TO DENY GENERAL PLANT AMORTIZATION DUE TO OPC WITNESS ROBINETT'S CLAIM THAT THE COMPANY WOULD BE ABLE TO RECEIVE "FUNDS FOR FULLY-ACCRUED PLANT"[2]?

A. No. As described above, the proposed depreciation rates use a net plant value of zero for assets beyond the amortization period and therefore do not accumulate any further depreciation.

[2] Direct Testimony of John A. Robinett, Case No. GR-2025-0107, page 9, lines 4 and 5.

Q. HAS STAFF CHALLENGED THE AMORTIZED GENERAL PLANT ACCOUNTS?

A. Staff witness Bowman does not challenge the use of general plant amortization, however he has proposed differing amortization periods for some of the subaccounts of Account 391. It appears from Staff's Schedule MB-d2[3] that Mr. Bowman may have mistakenly switched estimates between accounts 391.10 and 391.20. Given there is no mention of changes in the amortization periods in Staff's testimony, I believe Staff intends to use the same amortization periods as proposed in the Depreciation Study. This will create a change in the proposed expense in Staff's report. Additionally, it would not be appropriate to book the amortization rate to all assets in the account as Staff proposes.

Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

A. Yes.

[3] Direct Testimony of Malachi Bowman, Case No. GR-2025-0107, Schedule MB-d2.

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

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	)	

AFFIDAVIT

COMMONWEALTH OF PENNSYLVANIA	)	
	)	SS.
COUNTY OF CUMBERLAND	)	

John J. Spanos, of lawful age, being first duly sworn, deposes and states:

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, Mechanicsburg Pennsylvania 17050.

2. This affidavit is attached to my rebuttal 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 rebuttal testimony are true and correct to the best of my knowledge, information, and belief.

John Spanos
John Spanos (May 29, 2025 06:49 EDT)

John J. Spanos

29/05/25

Date

SPIRE MISSOURI, INC.

TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVE, NET SALVAGE PERCENT, ORIGINAL COST AND CALCULATED ANNUAL AND ACCRUED DEPRECIATION RELATED TO GAS PLANT AS OF SEPTEMBER 30, 2024

	DEPRECIABLE GROUP	SURVIVOR CURVE		NET SALVAGE PERCENT	ORIGINAL COST AS OF SEPTEMBER 30, 2024	CALCULATED ANNUAL ACCRUAL AMOUNT	CALCULATED ANNUAL ACCRUAL RATE	CALCULATED ACCRUED DEPRECIATION
	(1)	(2)		(3)	(4)	(5)	(6)=(5)/(4)	(7)
	GAS PLANT							
	MANUFACTURED GAS PLANT - LPG							
305.00	STRUCTURES AND IMPROVEMENTS	55-R1.5		(5)	1,101,750.99	21,054	1.91	279,095
307.00	OTHER POWER EQUIPMENT	50-R4		(5)	33,139.28	696	2.10	27,049
311.00	LIQUEFIED PETROLEUM GAS EQUIPMENT	30-R1	*	(5)	2,508,163.91	0	-	2,633,573
311.10	LIQUEFIED PETROLEUM GAS STORAGE CAVERNS	75-R4	*	(5)	4,870,172.59	0	-	5,113,681
	TOTAL MANUFACTURED GAS PLANT - LPG				**8,513,226.77**	**21,750**	**0.26**	**8,053,398**
	UNDERGROUND STORAGE PLANT							
350.20	RIGHTS OF WAY	80-R4		0	829,410.86	10,368	1.25	581,987
	STRUCTURES AND IMPROVEMENTS							
351.20	COMPRESSOR STATION	50-R1.5		(10)	809,124.78	17,801	2.20	508,343
351.40	OTHER STRUCTURES	50-R1.5		(10)	1,187,040.88	26,115	2.20	739,803
	TOTAL ACCOUNT 351				1,996,165.66	43,916	2.20	1,248,146
352.00	WELLS	75-R3		(20)	10,018,403.91	159,894	1.60	4,342,628
352.10	STORAGE LEASEHOLDS AND RIGHTS	90-R3		0	2,126,881.60	23,608	1.11	1,288,951
352.20	RESERVOIRS	90-S2.5		0	245,023.20	2,720	1.11	135,253
352.30	NON-RECOVERABLE GAS	90-R4		0	9,663,558.60	107,266	1.11	2,170,620
352.40	WELLS - OIL AND VENT GAS	55-R2		(20)	3,472,097.21	75,831	2.18	858,777
	TOTAL ACCOUNT 352				25,525,964.52	369,319	1.45	8,796,229
353.00	LINES	70-R3		(25)	3,322,966.19	59,398	1.79	2,207,856
354.00	COMPRESSOR STATION EQUIPMENT	55-R3		(10)	2,828,868.75	56,634	2.00	1,437,650
355.00	MEASURING AND REGULATING EQUIPMENT	55-R2.5		(10)	10,950,026.10	219,220	2.00	1,799,126
356.00	PURIFICATION EQUIPMENT	50-S0.5		(15)	554,962.20	12,764	2.30	174,020
357.00	OTHER EQUIPMENT	30-L2		(5)	223,539.33	7,816	3.50	12,014
	TOTAL UNDERGROUND STORAGE PLANT				**46,231,903.61**	**779,435**	**1.69**	**16,257,028**

SPIRE MISSOURI, INC.

TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVE, NET SALVAGE PERCENT, ORIGINAL COST AND CALCULATED ANNUAL AND ACCRUED DEPRECIATION RELATED TO GAS PLANT AS OF SEPTEMBER 30, 2024

	DEPRECIABLE GROUP	SURVIVOR CURVE		NET SALVAGE PERCENT	ORIGINAL COST AS OF SEPTEMBER 30, 2024	CALCULATED ANNUAL ACCRUAL AMOUNT	CALCULATED ANNUAL ACCRUAL RATE	CALCULATED ACCRUED DEPRECIATION
	(1)	(2)		(3)	(4)	(5)	(6)=(5)/(4)	(7)
	TRANSMISSION PLANT							
371.70	OTHER EQUIPMENT	40-S2		(5)	9,293.80	244	2.63	9,378
	TOTAL TRANSMISSION PLANT				**9,293.80**	**244**	**2.63**	**9,378**
	DISTRIBUTION PLANT							
374.20	LAND RIGHTS	80-R4		0	7,913,239.08	98,915	1.25	1,572,620
375.00	STRUCTURES AND IMPROVEMENTS	50-S0		(10)	41,655,555.29	916,398	2.20	8,274,989
	MAINS							
376.10	STEEL	75-R2		(70)	648,127,993.08	14,654,174	2.26	307,776,209
376.21	CAST IRON - EAST	65-R2.5	**	(150)	29,739,096.52	5,664,082	19.05	50,870,809
376.22	CAST IRON - WEST	65-R2.5	***	(150)	36,108,426.80	4,033,386	11.17	65,362,179
376.30	PLASTIC AND COPPER	65-R2		(50)	1,928,558,710.67	44,549,706	2.31	373,372,502
	TOTAL ACCOUNT 376				2,642,534,227.07	68,901,348	2.61	797,381,699
378.00	MEASURING AND REGULATING STATION EQUIPMENT - GENERAL	40-L0.5		(40)	32,035,308.17	1,121,236	3.50	11,729,791
379.00	MEASURING AND REGULATING STATION EQUIPMENT - CITY GATE	45-S0.5		(20)	9,924,257.18	264,325	2.66	3,801,938
	SERVICES							
380.10	STEEL	45-R0.5		(110)	50,009,019.80	2,295,221	4.59	44,370,049
380.20	PLASTIC AND COPPER	45-R1.5		(80)	1,652,418,905.24	66,030,659	4.00	725,107,082
	TOTAL ACCOUNT 380				1,702,427,925.04	68,325,880	4.01	769,477,131
381.00	METERS	28-R1		0	178,580,434.86	6,319,548	3.54	56,657,727
381.10	SMART METERS	20-S3		0	160,086,110.32	8,004,306	5.00	14,563,161
382.00	METER INSTALLATIONS	60-R2		(2)	104,860,684.29	1,786,197	1.70	31,928,793
382.10	SMART METER INSTALLATIONS	20-S2		0	111,708,222.02	5,585,411	5.00	7,930,635
383.00	HOUSE REGULATORS	55-S2.5		0	55,176,572.29	1,004,214	1.82	19,576,631
385.00	INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT	43-R1.5		(15)	66,585,794.71	1,784,166	2.68	8,347,225
386.00	OTHER PROPERTY ON CUSTOMERS' PREMISES	15-L3		0	5,304.13	0	-	5,304
387.00	OTHER EQUIPMENT	50-R2.5		(10)	406,070.19	8,926	2.20	242,344
	TOTAL DISTRIBUTION PLANT				**5,113,899,704.64**	**164,120,870**	**3.21**	**1,731,489,988**

SPIRE MISSOURI, INC.

TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVE, NET SALVAGE PERCENT, ORIGINAL COST AND CALCULATED ANNUAL AND ACCRUED DEPRECIATION RELATED TO GAS PLANT AS OF SEPTEMBER 30, 2024

	DEPRECIABLE GROUP	SURVIVOR CURVE	NET SALVAGE PERCENT	ORIGINAL COST AS OF SEPTEMBER 30, 2024	CALCULATED ANNUAL ACCRUAL		CALCULATED ACCRUED DEPRECIATION
					AMOUNT	RATE	
	(1)	(2)	(3)	(4)	(5)	(6)=(5)/(4)	(7)
	GENERAL PLANT						
390.20	STRUCTURES AND IMPROVEMENTS	40-S0.5	0	873,066.41	20,750	2.38	409,195
391.00	OFFICE FURNITURE AND EQUIPMENT	20-SQ	0	8,692,024.97	418,382	4.81	3,681,061
391.10	DATA PROCESSING SOFTWARE/SYSTEMS	5-SQ	0	20,235,213.95	2,300,633	11.37	14,328,406
391.20	MECHANICAL OFFICE EQUIPMENT	15-SQ	0	375,309.50	25,033	6.67	121,628
391.30	DATA PROCESSING EQUIPMENT	10-SQ	0	10,380,738.55	1,024,995	9.87	5,561,736
391.95	ENTERPRISE SOFTWARE	10-SQ	0	194,870,132.64	11,119,915	5.71	149,436,325
391.96	ENTERPRISE HARDWARE	10-SQ	0	3,811,684.79	381,168	10.00	212,304
	TOTAL ACCOUNT 391			238,365,104.40	15,270,126	6.41	173,341,460
	TRANSPORTATION EQUIPMENT						
392.10	AUTOS	7-L2.5	20	8,465,063.05	967,726	11.43	3,238,833
392.20	TRUCKS	11-L3	20	74,463,435.08	5,414,981	7.27	21,535,503
	TOTAL ACCOUNT 392			82,928,498.13	6,382,707	7.70	24,774,336
393.00	STORES EQUIPMENT	30-SQ	0	955,350.81	21,469	2.25	636,586
394.00	TOOLS, SHOP AND GARAGE EQUIPMENT	25-SQ	0	49,881,721.56	1,812,823	3.63	19,463,301
395.00	LABORATORY EQUIPMENT	20-SQ	0	268,511.50	9,306	3.47	205,117
396.00	POWER OPERATED EQUIPMENT	13-L2.5	20	95,034,818.28	5,845,848	6.15	25,325,084
397.00	COMMUNICATION EQUIPMENT	15-SQ	0	20,457,073.04	1,198,187	5.86	9,174,420
397.10	COMMUNICATION EQUIPMENT - ERT	15-SQ	0	35,842,339.55	1,798,198	5.02	25,137,447
397.20	COMMUNICATION EQUIPMENT - AMR	7.5-SQ	0	16,624,219.88	0	-	16,624,220
	TOTAL ACCOUNT 397			72,923,632.47	2,996,385	4.11	50,936,087
398.00	MISCELLANEOUS EQUIPMENT	20-SQ	0	6,112,701.22	284,034	4.65	2,693,178
	TOTAL GENERAL PLANT			**547,343,404.78**	**32,643,448**	**5.96**	**297,784,344**
	TOTAL DEPRECIABLE PLANT			**5,715,997,533.60**	**197,565,747**	**3.46**	**2,053,594,136**

SPIRE MISSOURI, INC.

TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVE, NET SALVAGE PERCENT, ORIGINAL COST AND CALCULATED ANNUAL AND ACCRUED DEPRECIATION RELATED TO GAS PLANT AS OF SEPTEMBER 30, 2024

	DEPRECIABLE GROUP	SURVIVOR CURVE	NET SALVAGE PERCENT	ORIGINAL COST AS OF SEPTEMBER 30, 2024	CALCULATED ANNUAL ACCRUAL		CALCULATED ACCRUED DEPRECIATION
					AMOUNT	RATE	
	(1)	(2)	(3)	(4)	(5)	(6)=(5)/(4)	(7)
	NONDEPRECIABLE PLANT AND ACCOUNTS NOT STUDIED						
301.00	ORGANIZATION			18,101.57			
302.00	FRANCHISES AND CONSENTS			22,307.39			
303.00	MISCELLANEOUS INTANGIBLE PLANT			-			
304.00	LAND AND LAND RIGHTS			119,929.40			
350.10	LAND AND LAND RIGHTS			1,201,600.30			
360.00	LAND AND LAND RIGHTS			50,653.53			
361.00	STRUCTURES AND IMPROVEMENTS - OTHER			4,850.00			
362.00	GAS HOLDERS			-			
363.30	COMPRESSOR EQUIPMENT			-			
365.20	RIGHTS OF WAY - TRANSMISSION			41,152.62			
374.00	LAND AND LAND RIGHTS			3,632,157.82			
375.21	STRUCTURES AND IMPROVEMENTS - LEASED PROPERTY			2,166,019.23			
389.00	LAND AND LAND RIGHTS			1,058,065.19			
390.11	STRUCTURES AND IMPROVEMENTS - MARKET LH			6,000,926.28			
390.30	STRUCTURES AND IMPROVEMENTS - LEASED PROPERTY - STC			81,528.44			
390.71	STRUCTURES AND IMPROVEMENTS - LEASED PROPERTY - MN			147,052.03			
390.81	STRUCTURES AND IMPROVEMENTS - LEASED PROPERTY - FRK			268,384.44			
	TOTAL NONDEPRECIABLE AND ACCOUNTS NOT STUDIED			**14,812,728.24**			
	TOTAL GAS PLANT			**5,730,810,261.84**	**197,565,747**		**2,053,594,136**

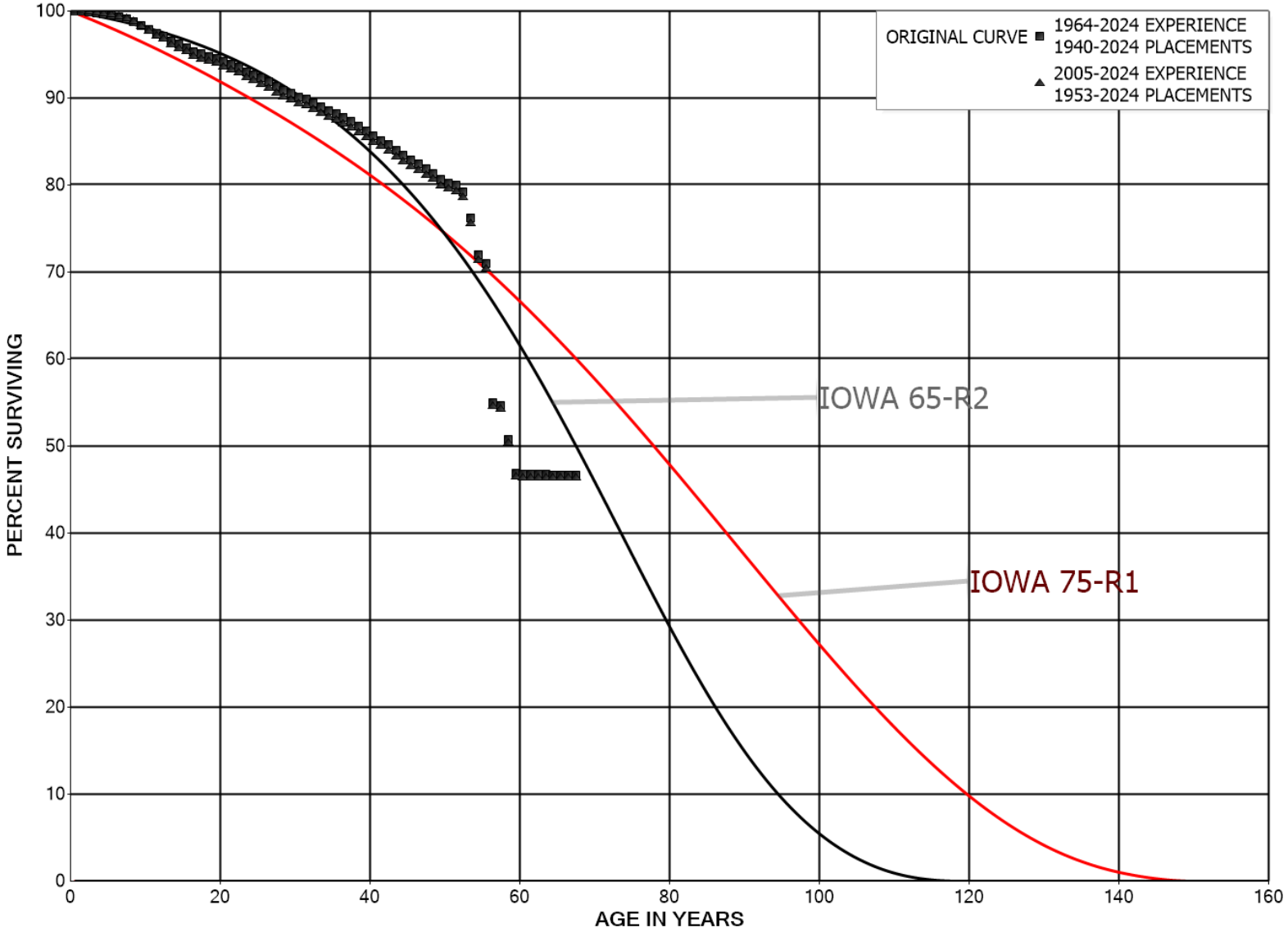
* PROPANE ASSETS TO BE CLASSIFIED AS NON-UTILITY
** CAST IRON REPLACEMENT PROGRAM TO CONTINUE THROUGH 12/2028.
*** CAST IRON REPLACEMENT PROGRAM TO CONTINUE THROUGH 12/2030.

SPIRE MISSOURI, INC.

COMPARISON OF ESTIMATED SURVIVOR CURVE AND NET SALVAGE PERCENT
RELATED TO GAS PLANT AS OF SEPTEMBER 30, 2024

		SUPPLEMENTAL TESTIMONY ESTIMATES		STAFF (BOWMAN'S) ESTIMATES		REVISED DEPRECIATION STUDY ESTIMATES	
	DEPRECIABLE GROUP	SURVIVOR CURVE	NET SALVAGE PERCENT	SERVICE LIFE	NET SALVAGE PERCENT	SURVIVOR CURVE	NET SALVAGE PERCENT
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	MANUFACTURED GAS PLANT - LPG						
305.00	STRUCTURES AND IMPROVEMENTS	55-R1.5	(5)	65	(15)	55-R1.5	(5)
307.00	OTHER POWER EQUIPMENT	50-R4	(5)	50	(5)	50-R4	(5)
311.00	LIQUEFIED PETROLEUM GAS EQUIPMENT	30-R1	(5)	30	(5)	30-R1	(5)
311.10	LIQUEFIED PETROLEUM GAS STORAGE CAVERNS	75-R4	(5)	75	(5)	75-R4	(5)
	UNDERGROUND STORAGE PLANT						
350.20	RIGHTS OF WAY	80-R4	0	80	0	80-R4	0
	STRUCTURES AND IMPROVEMENTS						
351.20	COMPRESSOR STATION	50-R1	(10)	55	(10)	50-R1.5	(10)
351.40	OTHER STRUCTURES	50-R1	(10)	55	(10)	50-R1.5	(10)
352.00	WELLS	75-R3	(20)	75	(20)	75-R3	(20)
352.10	STORAGE LEASEHOLDS AND RIGHTS	90-R3	0	90	0	90-R3	0
352.20	RESERVOIRS	90-S2.5	0	90	0	90-S2.5	0
352.30	NON-RECOVERABLE GAS	90-R4	0	90	0	90-R4	0
352.40	WELLS - OIL AND VENT GAS	55-R2	(20)	55	(20)	55-R2	(20)
353.00	LINES	70-R3	(25)	80	(25)	70-R3	(25)
354.00	COMPRESSOR STATION EQUIPMENT	55-R3	(10)	55	(10)	55-R3	(10)
355.00	MEASURING AND REGULATING EQUIPMENT	55-R2.5	(10)	55	(10)	55-R2.5	(10)
356.00	PURIFICATION EQUIPMENT	50-S0.5	(15)	50	(15)	50-S0.5	(15)
357.00	OTHER EQUIPMENT	30-L2	(5)	30	(5)	30-L2	(5)
	TRANSMISSION PLANT						
371.70	OTHER EQUIPMENT	40-S2	(5)	50	(5)	40-S2	(5)
	DISTRIBUTION PLANT						
374.20	LAND RIGHTS	80-R4	0	75	0	80-R4	0
375.00	STRUCTURES AND IMPROVEMENTS	50-S0	(10)	50	(20)	50-S0	(10)
	MAINS						
376.10	STEEL	70-R1.5	(70)	80	(70)	75-R2	(70)
376.21	CAST IRON - EAST	65-S0.5	(150)	65	(150)	65-R2.5	(150)
376.22	CAST IRON - WEST	65-S0.5	(150)	65	(150)	65-R2.5	(150)
376.30	PLASTIC AND COPPER	60-R1	(50)	60	(40)	65-R2	(50)
378.00	MEASURING AND REGULATING STATION EQUIPMENT - GENERAL	35-L0.5	(40)	35	(40)	40-L0.5	(40)
379.00	MEASURING AND REGULATING STATION EQUIPMENT - CITY GATE	40-S0.5	(20)	40	(20)	45-S0.5	(20)
	SERVICES						
380.10	STEEL	39-O1	(110)	39	(110)	45-R0.5	(110)
380.20	PLASTIC AND COPPER	40-R1	(80)	40	(80)	45-R1.5	(80)
381.00	METERS	26-R1	0	32	3	28-R1	0
381.10	SMART METERS	20-S3	0	20	0	20-S3	0
382.00	METER INSTALLATIONS	60-R2	(2)	60	(2)	60-R2	(2)
382.10	SMART METER INSTALLATIONS	20-S2	0	20	0	20-S2	0
383.00	HOUSE REGULATORS	50-S2.5	0	50	0	55-S2.5	0
385.00	INDUSTRIAL MEASURING AND REGULATING STATION EQUIPMENT	37-R1	(15)	37	(15)	43-R1.5	(15)
386.00	OTHER PROPERTY ON CUSTOMERS' PREMISES	15-L3	0	15	0	15-L3	0
387.00	OTHER EQUIPMENT	50-R2.5	(10)	50	(10)	50-R2.5	(10)
	GENERAL PLANT						
390.20	STRUCTURES AND IMPROVEMENTS	40-S0.5	0	35	0	40-S0.5	0
391.00	OFFICE FURNITURE AND EQUIPMENT	20-SQ	0	20	0	20-SQ	0
391.10	DATA PROCESSING SOFTWARE/SYSTEMS	5-SQ	0	15	0	5-SQ	0
391.20	MECHANICAL OFFICE EQUIPMENT	15-SQ	0	5	0	15-SQ	0
391.30	DATA PROCESSING EQUIPMENT	10-SQ	0	10	0	10-SQ	0
391.95	ENTERPRISE SOFTWARE	10-SQ	0	10	0	10-SQ	0
391.96	ENTERPRISE HARDWARE	10-SQ	0	10	0	10-SQ	0
	TRANSPORTATION EQUIPMENT						
392.10	AUTOS	7-L2.5	20	7	20	7-L2.5	20
392.20	TRUCKS	11-L3	20	11	15	11-L3	20
393.00	STORES EQUIPMENT	30-SQ	0	30	0	30-SQ	0
394.00	TOOLS, SHOP AND GARAGE EQUIPMENT	25-SQ	0	25	0	25-SQ	0
395.00	LABORATORY EQUIPMENT	20-SQ	0	20	0	20-SQ	0
396.00	POWER OPERATED EQUIPMENT	13-L2.5	20	13	20	13-L2.5	20
397.00	COMMUNICATION EQUIPMENT	15-SQ	0	5	0	15-SQ	0
397.10	COMMUNICATION EQUIPMENT - ERT	15-SQ	0	15	0	15-SQ	0
397.20	COMMUNICATION EQUIPMENT - AMR	7.5-SQ	0	7.5	0	7.5-SQ	0
398.00	MISCELLANEOUS EQUIPMENT	20-SQ	0	20	0	20-SQ	0

SPIRE MISSOURI
ACCOUNT 376.30 MAINS - PLASTIC AND COPPER
ORIGINAL AND SMOOTH SURVIVOR CURVES



SPIRE MISSOURI, INC.

TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVE, NET SALVAGE PERCENT, ORIGINAL COST AND CALCULATED ANNUAL AND ACCRUED DEPRECIATION RELATED TO GAS PLANT AS OF SEPTEMBER 30, 2024

	DEPRECIABLE GROUP	SURVIVOR CURVE	NET SALVAGE PERCENT	ORIGINAL COST AS OF SEPTEMBER 30, 2024	CALCULATED ANNUAL ACCRUAL AMOUNT	CALCULATED ANNUAL ACCRUAL RATE	CALCULATED ACCRUED DEPRECIATION
	(1)	(2)	(3)	(4)	(5)	(6)=(5)/(4)	(7)
	GAS PLANT						
	GENERAL PLANT AMORTIZATION						
391.00	OFFICE FURNITURE AND EQUIPMENT						
	FULLY ACCRUED	-FA	0	324,389.81	0	-	324,388
	AMORTIZED	20-SQ	0	8,367,635.16	418,382	5.00	3,356,673
	TOTAL OFFICE FURNITURE AND EQUIPMENT			8,692,024.97	418,382	4.81	3,681,061
391.10	MECHANICAL OFFICE EQUIPMENT						
	FULLY ACCRUED	-FA	0	8,732,048.81	0	-	8,732,049
	AMORTIZED	5-SQ	0	11,503,165.14	2,300,633	20.00	5,596,357
	TOTAL MECHANICAL OFFICE EQUIPMENT			20,235,213.95	2,300,633	11.37	14,328,406
391.20	DATA PROCESSING SOFTWARE/SYSTEMS						
	FULLY ACCRUED	-FA	0	3.00	0	-	2
	AMORTIZED	15-SQ	0	375,306.50	25,033	6.67	121,626
	TOTAL DATA PROCESSING SOFTWARE/SYSTEMS			375,309.50	25,033	6.67	121,628
391.30	DATA PROCESSING EQUIPMENT						
	FULLY ACCRUED	-FA	0	130,792.76	0	-	130,793
	AMORTIZED	10-SQ	0	10,249,945.79	1,024,995	10.00	5,430,943
	TOTAL DATA PROCESSING EQUIPMENT			10,380,738.55	1,024,995	9.87	5,561,736
391.95	ENTERPRISE SOFTWARE						
	FULLY ACCRUED	-FA	0	83,670,982.16	0	-	83,670,982
	AMORTIZED	10-SQ	0	111,199,150.48	11,119,915	10.00	65,765,343
	TOTAL ENTERPRISE SOFTWARE			194,870,132.64	11,119,915	5.71	149,436,325
391.96	ENTERPRISE HARDWARE	10-SQ	0	3,811,684.79	381,168	10.00	212,304
	TOTAL ACCOUNT 391			238,365,104.40	15,270,126	6.41	173,341,460
393.00	STORES EQUIPMENT						
	FULLY ACCRUED	-FA	0	310,639.52	0	-	310,642
	AMORTIZED	30-SQ	0	644,711.29	21,469	3.33	325,944
	TOTAL STORES EQUIPMENT			955,350.81	21,469	2.25	636,586
394.00	TOOLS, SHOP AND GARAGE EQUIPMENT						
	FULLY ACCRUED	-FA	0	4,561,136.60	0	-	4,561,136
	AMORTIZED	25-SQ	0	45,320,584.96	1,812,823	4.00	14,902,165
	TOTAL TOOLS, SHOP AND GARAGE EQUIPMENT			49,881,721.56	1,812,823	3.63	19,463,301
395.00	LABORATORY EQUIPMENT						
	FULLY ACCRUED	-FA	0	82,385.97	0	-	82,386
	AMORTIZED	20-SQ	0	186,125.53	9,306	5.00	122,731
	TOTAL LABORATORY EQUIPMENT			268,511.50	9,306	3.47	205,117
	COMMUNICATION EQUIPMENT						
397.00	COMMUNICATION EQUIPMENT						
	FULLY ACCRUED	-FA	0	2,493,248.34	0	-	2,493,248
	AMORTIZED	15-SQ	0	17,963,824.70	1,198,187	6.67	6,681,172
	TOTAL COMMUNICATION EQUIPMENT			20,457,073.04	1,198,187	5.86	9,174,420
397.10	COMMUNICATION EQUIPMENT - ERT						
	FULLY ACCRUED	-FA	0	8,882,845.11	0	-	8,882,845
	AMORTIZED	15-SQ	0	26,959,494.44	1,798,198	6.67	16,254,602
	TOTAL COMMUNICATION EQUIPMENT - ERT			35,842,339.55	1,798,198	5.02	25,137,447
397.20	COMMUNICATION EQUIPMENT - AMR	7.5-SQ	0	16,624,219.88	0	-	16,624,220
	TOTAL ACCOUNT 397			72,923,632.47	2,996,385	4.11	50,936,087
398.00	MISCELLANEOUS EQUIPMENT						
	FULLY ACCRUED	-FA	0	432,027.70	0	-	432,028
	AMORTIZED	20-SQ	0	5,680,673.52	284,034	5.00	2,261,150
	TOTAL MISCELLANEOUS EQUIPMENT			6,112,701.22	284,034	4.65	2,693,178
	TOTAL GENERAL PLANT AMORTIZATION			**368,507,021.96**	**20,394,143**	**5.53**	**247,275,729**