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| **Exhibit No.:** | |
| **Issue(s):** | Depreciation |
| **Witness/Type of Exhibit**: | Robinett/Direct |
| **Sponsoring Party**: | Public Counsel |
| **Case No**.: | GR-2025-0107 |

# DIRECT TESTIMONY

# OF

# JOHN A. ROBINETT

Submitted on Behalf of the Office of the Public Counsel

## SPIRE MISSOURI, INC.

FILE NO. GR-2025-0107

** _____ **
Denotes Confidential Information that has been redacted.

April 23, 2025

# PUBLIC

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**DIRECT TESTIMONY**

**OF**

**JOHN A. ROBINETT**

**SPIRE MISSOURI**

**CASE NO. GR-2025-0107**

**Q. What is your name and what is your business address?**

A. John A. Robinett, PO Box 2230, Jefferson City, Missouri 65102.

**Q. By whom are you employed and in what capacity?**

A. I am employed by the Missouri Office of the Public Counsel ("OPC") as a Utility Engineering Specialist.

**Q. Have you previously provided testimony before the Missouri Public Service Commission?**

A. Yes. I have testified in front of the Missouri Public Service Commission ("Commission") in both my former occupation with Commission Staff ("Staff") and in my current position with OPC.

**Q. What is your work and educational background?**

A. A copy of my work and educational experience is attached to this testimony as Schedule JAR-D-1.

**Q. What is the purpose of your direct testimony?**

A. The purpose of this testimony is to provide information related to my concerns about the adoption of general plant accounting for certain general plant accounts. I will additionally address the findings of the 3rd party audit that was stipulated to in the last rate proceeding and the recovery of the filed depreciation study. I also address concerns related to Spire's conversion to ultrasonic meters and the reserve deficiency it has created and will continue to increase until total conversion is completed and potential concerns related to its method



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of adding reading modules on to existing meters that do not qualify to be removed for testing as they have not yet reached 10 years of age. I will finally address recommendations related to account 376.2 cast iron mains and account 376.3 plastic mains.

**Depreciation Definitions**

**Q. Is there terminology the Commission should know to better understand your ultimate recommendations?**

A. Yes. For this testimony, the following depreciation terms need to be defined: cost of removal, depreciation, amortization, vintage year, final retirement, gross salvage, interim retirements, interim salvage, net salvage, and retirement.

**Q. From where are you drawing your definitions?**

A. I will be citing two different sources. The first source is the Public Utility Depreciation Practices published by the National Association of Regulatory Utility Commissioners ("NARUC") in August, 1996, pages 313 through 327. The second source is Introduction to Depreciation for Public Utilities and Other Industries ("Introduction to Depreciation"), published by the Edison Electric Institute ("EEI") and the American Gas Association ("AGA") from April, 2013, beginning at page 165.

**Q. How does NARUC define depreciation?**

A. Depreciation is the loss in service value not restored by current maintenance, incurred in connection with the consumption or prospective retirement of utility plant in the course of service from causes that are known to be in current operation, against which the company is not protected by insurance, and the effect of which can be forecast with reasonable accuracy. Among the causes to be considered are wear and tear, decay, action of the

elements, inadequacy, obsolescence, changes in the art, changes in demand, and the requirement of public authorities.

**Q. How does NARUC define amortization?**

A. The process of allocating a fixed amount, such as the total cost of an asset, to an expense account over future accounting periods.

**Q. How does NARUC define a vintage year?**

A. Year of placement of a group of property.

**Q. How does NARUC define a final retirement?**

A. A final retirement is the retirement of a major structure unit in its entirety, or a very large part of it, as opposed to interim retirements.

**Q. How does NARUC define gross salvage?**

A. Gross salvage is the amount recorded for the property retired due to the sale, reimbursement, or reuse of the property.

**Q. How does NARUC define an interim retirement?**

A. An interim retirement is the retirement of component parts of a major structure prior to the complete removal of the retirement unit from service.

**Q. How does NARUC define interim salvage?**

A. Interim salvage is the salvage received from the disposition of plant as a result of interim retirements.

**Q. How does NARUC define net salvage?**

A. Net salvage is the gross salvage for the retired property less its cost of removal.

**Q. How does NARUC define a retirement?**

A. A retirement is the sale, abandonment, destruction, or withdrawal of assets from service.

**Q. How does Introduction to Depreciation define cost of removal?**

A. Cost of removal is the costs to demolish, dismantle, tear down, or otherwise remove plant from service, including the cost of handling and transportation. Cost of removal is also used interchangeably with cost of retirement for assets that are retired in place, such as a gas pipeline.

**Q. How does Introduction to Depreciation define an interim retirement?**

A. Introduction to Depreciation defines interim retirements as the retirement of individual assets occurring prior to the retirement of the overall property group.

**Q. How does Introduction to Depreciation define net salvage?**

A. Net salvage is defined as the difference between the value of salvage and cost of removal resulting from the removal, abandonment, or other disposition of plant. Positive net salvage results when salvage values exceed removal costs. Negative net salvage results when removal costs exceed the salvage value. Positive net salvage decreases the cost to be recovered through depreciation expense and negative net salvage increases it.

**Q. How does Introduction to Depreciation define a retirement unit?**

A. A retirement unit is the smallest unit of plant for which addition and retirement records are maintained as defined by utility process and procedures manuals.

**General Plant Amortization/Vintage Year Accounting**

**Q. What is General Plant Amortization or Vintage Year Accounting?**

A. General Plant Amortization and Vintage Year Accounting are just two different names for the same method of amortizing a utility's assets by specifying the defined period that the Company may recover costs for capital investments in specific accounts. What is unique about General Plant Amortization and Vintage Year Accounting is that the amortization is not tied

to the actual life of the assets in those accounts. This differs from calculating depreciation rates using the historical experience of the average lives of the assets contained in an account.

**Q. Can you please provide a little more explanation on how General Plant Amortization works?**

A. To demonstrate how General Plant Amortization works, I will use account 391, Office Furniture and Equipment, as an example. The end of the update period for plant additions in this case is May 31, 2025, and Mr. Spanos' recommended average service life for account 391, Office Furniture and Equipment, is 20 years. Therefore, any asset in account 391 that was placed into service before May 31, 2005, would now exceed the average service life of the account. So, if the Commission approves General Plant Amortization, any plant in this account with an in-service date older than May 31, 2005, would need to be retired. Assets placed into service before that date exceed the amortization period and the Company is deemed to have fully recovered those investments.

**Q. Do you know whether Spire intends to seek general plant amortization for any plant accounts in this case?**

A. Spire is requesting amortization of 13 general plant account/sub-accounts in this case.

**Q. Has the Federal Energy Regulatory Commission ("FERC") provided any guidance on the issue of General Plant Amortization or Vintage Year Accounting?**

A. Yes. On January 1, 1997, FERC issued Accounting Release Number 15 (AR-15), *Vintage Year Accounting for General Plant Accounts*, for electric, natural gas, oil, and hydropower companies. AR-15 allows utilities to use a simplified method of accounting for general plant assets, (referred to as "General Property") excluding structures and improvements, for three reasons:

1) it allows high-volume, low-cost assets to be amortized over their associated useful life;

2) it eliminates the need to track individual assets; and

3) it allows a retirement to be booked at the end of the theoretical depreciable life.

FERC's AR-15 also provides a list of certain general plant accounts that could reasonably use the Vintage Year Accounting. However, I am not aware of any requirement to utilize general plant amortization. It is just an option utilities may seek.

**Q. Do you recommend using General Plant Amortization or Vintage Year Accounting for General Plant Accounts?**

A. No, I do not.

**Q. What concerns are driving your recommendation against moving towards General Plant Amortization?**

A. There are two major problems that I see with General Plant Amortization. The first problem is that General Plant Amortization, without unitized record-keeping, hinders the Commission from performing an effective prudence review of plant added to these accounts because it eliminates the need for the company to record *per retirement unit* information. Under the General Plant Amortization method, only two values matter: (1) the total additions for an account in a vintage year and (2) the amortization period over which the original investment can be recouped. Because only the total plant additions matter under General Plant Amortization, a utility using this method does not record (nor does its plant accounts reflect) the costs of capital investments on a *per retirement unit* basis. In other words, an auditor looking at the account will only see the total dollar amount

spent in a year but will be unable to see *how* those dollars were spent. This is a problem because it prevents other parties from auditing these additions based on the cost per unit.

The second issue with General Plant Amortization is that it does not yield actual historical data for the depreciation rate in the select account. This is because General Plant Amortization is tracking only the dollars added to an account over a period of time, and not whether the actual assets underlying those dollars are still used and useful. As a result, any future depreciation study that might be performed to determine the average useful life of the assets in such an account could not properly analyze the actual lives of those assets and match them with an appropriate depreciation rate.

Under General Plant Amortization, amortization periods are not necessarily related to the useful life and retirement of the company's assets. Instead, the retirement that the company records in its accounting book relates to the retirement of dollars. Depreciation, as a regulatory concept, is designed to determine the appropriate amount of time for customers to repay the company's shareholders' return of investment based on the useful lives of the company's assets. With General Plant Amortization, however, a company may retire some plant assets prior to the amortization period while utilizing other assets for years beyond the amortization period.

Because this method of accounting does not follow specific assets, and instead follows dollars, regulators cannot identify the appropriate recovery period for Spire Missouri's assets for accounts that use General Plant Amortization. Any recorded data would merely create a loop of identical information feeding the depreciation study data going forward.

**Q. How does Spire's use of General Plant Amortization cause future depreciation studies data to create this "information loop"?**

A. Depreciation studies determine depreciation rates using the experienced mortality, *i.e.*, the documented historical retirement data of the assets in an account. In other words, the auditing party reviews the company's records of how long plant is lasting before it needs to be retired to determine its average usable or "service" life. However, under the General Plant Amortization method of accounting, plant is retired, from a bookkeeping perspective, as soon as it is "fully accrued" (*i.e.* the accumulated depreciation reserve has met or exceeded the original cost of the plant). Therefore, plant will be recorded as "retired" at the end of its calculated average service life regardless of whether the asset itself is still in use. Because the retirements are being driven by the average service life and the average service life is the time before the plant is retired, a circular loop is created where the retirement dictates the average service life, and the average service life dictates the retirement.

**Q. How would a depreciation expert faced with this information loop be able to change a General Plant Amortization in a future rate proceeding?**

A. In order to accurately determine an account's General Plant Amortization rate in the future, two pieces of information are needed. The first would be the retirement data for the plant in the account that is requested to be changed. However, that account will only show that the current ordered amortization period is the appropriate value for the retirement rate. The depreciation expert would therefore need to use the second piece of information, which would be the ordered depreciation rates for similar utilities in order to recommend a change in amortization period.

**Q. Are there any other aspects of changing General Plant Amortizations that may cause concern?**

A. Yes. If Spire Missouri's request to implement Generalized Plant Amortization for its gas service is approved, the Company would be able to continue receiving funds for fully-accrued plant. Spire Missouri must retire any asset that remains on the books past its amortization period in the accounts for which it is requesting to use General Plant Amortization. Unless ordered to retire these fully-accrued assets, the switch from depreciation expense to General Plant Amortization would allow the Company to continue charging customers for fully-reimbursed assets.

Also, I note that additional amortizations may be needed on an account-by-account basis to correct for reserve imbalances if Spire Missouri's request to use General Plant Amortization is approved.

**Q. Do you have any recommendations if the Commission determines that General Plant Amortization is appropriate?**

A. Yes. If the Commission approves Spire Missouri's request for General Plant Amortization, it should order Spire Missouri to keep recording the original cost and associated retirement units for all additional assets to the relevant accounts. Additionally, Spire Missouri should retire all general plant that exceeds the amortization period.

**Q. Please summarize your recommendation related to General Plant Amortization or Vintage Year Accounting.**

A. I recommend the Commission deny Spire Missouri's request for General Plant Amortization for the reasons discussed above. If the Commission nevertheless authorizes General Plant Amortization, it should order Spire Missouri to keep recording the original cost and associated

retirement units for all additional assets to the relevant accounts and retire all general plant that exceeds the amortization period.

**Depreciation Study Recovery Period**

**Q. What recovery period do you recommend for the depreciation Study provided by Spire Missouri in this rate case?**

A. I recommend recovery for the cost of the depreciation study supplied in this case over a five-year period.

**Q. Why do you recommend recovery over a five-year period?**

A. 20 CSR 4240-40.090 provides the Commission's requirements for the submission of natural gas utility depreciation studies. Natural gas utilities are required to file a depreciation study, depreciation data base, and property unit catalog every five years. Because the study is required every five years, it should be amortized over five years to coincide the recovery period with the expected repetition/use of each study.

**Third Party Independent Audit of Continuing Property Records ("CPR")**

**Q. What initiated this third-party audit of the continuing property records?**

A. In Case Number GR-2022-0179 parties reached a full unanimous stipulation and agreement. Paragraphs 35-44 of the stipulation address Spire's agreement to undertake an audit of its continuing property records and the details of how that audit would be conducted.

**Q. What did this third-party audit review?**

A. The purpose of this audit was to verify assets and inventory levels of assets in the accounts related to meters, mains, meter installations, and customer services for both Spire Missouri East and West. Stipulation paragraphs 38 and 39 state:

> The audits will examine Spire Missouri's legacy assets and its continuing property record to ensure that the existing assets are operational and properly accounted for. … The audit reports shall express an independent opinion on the degree and accurate accountability of Spire Missouri's legacy assets and continuing property record as well as provide recommendations, if appropriate, regarding unverifiable assets.

**Q. What were the findings of the audit?**

A. The third-party independent audit performed by Grant Thornton produced a report that identified issues and provided recommendations for Spire to implement. A copy of this report is attached as Schedule JAR-D-2C.

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**Q. What are your recommendations in light of the audit finding?**

A. Spire should implement the recommendation of the independent audit if it has not already done so. In addition, all of the items that Grant Thornton was not able to find and verify during the audit should be removed from the books and records of Spire Missouri.

**Meter Infrastructure**

**Q. Were meters an issue in the last two rate cases?**

A. Very much so. OPC witness Dr. Geoff Marke and I discussed in our testimonies our concerns related to the deployment of ultrasonic meters and with the disconnect between recommended depreciable lives from the actual lives being experienced by Spire Missouri. Ultimately these issues were taken before the Commission for a decision in that case.

**Q. Did the Commission highlight any finding or expectations for Spire's next rate case?**

A. Yes. At pages 56 and 57 of the Commission's *Report and Order* in Case No. GR-2021-0108, the Commission, in its decision on issue 24 Depreciation, provides the following observation.

> Lastly, the Commission is presented in this case with evidence that the real-world life expectancy of Spire Missouri's diaphragm meters is falling short of the historical life expectancy of diaphragm meters assigned for depreciation purposes. Stranded assets result when a meter with expected life is replaced earlier than the expiration of its expected service life. Although it came to light during testimony regarding ultrasonic meters, this

> situation of stranded assets was not created by the introduction of ultrasonic meters. Because the stranded assets issue was discovered tangential to another issue in the case, it did not receive sufficient attention from the parties for the Commission to make an informed finding. Therefore, the Commission will allow the evidence on this issue to continue to develop and will look forward to Spire Missouri's proposed solution in its next rate case.

The Commission clearly asked for, and expects, a solution to be presented in this current case.

**Q. Why are you addressing ultrasonic meters again in this case?**

A. First and foremost, I am addressing ultrasonic meters again in this case to avoid being accused of hindsight analysis or "Monday morning quarterbacking" in future rate cases. Identifying this issue in the last case, with the very likely position of a reserve shortfall, has allowed the issue to be tracked as it continues.

**Q. What issues did you raise in the last two cases related to meters?**

A. My direct, rebuttal, surrebuttal, and live testimony primarily focused on the plant-in-service and accumulated depreciation reserve of the mechanical meters as well as the discrepancies between the recommended depreciable lives for meters and the lives that Spire said it has been experiencing for many years. Additionally, I identified the likelihood of creating a stranded asset based on Spire switching metering technology.

My direct testimony in Case No. GR-2021-0108 focused on the current plant-in-service balances and accumulated depreciation reserves for existing meter infrastructure as of September 30, 2020. Additionally, I addressed the position taken in my testimony and the Commission's order from a depreciation authority order case, Case No. GO-2020-0416, that set the expected lives for the new ultrasonic meters to 20 years. The final discussion from my direct testimony in Case No. GR-2021-0108 was my concern related to the similar

functionality of the new ultrasonic meters to the existing mechanical meters until the secondary investment of the new network could unlock the remote disconnect function of the new meters.

**Q. Are the issues you raised in testimony in the last case still a problem in the current case?**

A. Yes.

**Q. What is the current plant-in-service balance for meters for Spire Missouri West and Spire Missouri East?**

A. The following tables are created from Spire's responses to Staff data request number 0027.1 the plant-in-service and accumulated depreciation reserves as of December 31, 2024.

| Spire Missouri East | | 12/31/2024 | 12/31/2024 |
|---|---|---|---|
| Account Number | Account Description | Plant-in-service | Accumulated Depreciation Reserves |
| 381 | Meters | 136,917,991.98 | 1,436,053.28 |
| 381.1 | Ultrasonic Meters | 116,691,336.35 | 7,457,522.19 |
| 382.1 | Ultrasonic Installations | 92,598,296.32 | 4,332,511.08 |
| 397.1 | Communication Equipment AMR/ERT | 16,624,219.88 | 15,705,985.76 |
| | | | |
| Spire Missouri West | | 12/31/2024 | 12/31/2024 |
| Account Number | Account Description | Plant-in-service | Accumulated Depreciation Reserves |
| 381 | Meters | 46,168,678.11 | -2,446,795.75 |
| 381.1 | Ultrasonic Meters | 62,272,206.52 | 4,049,635.59 |
| 382.1 | Ultrasonic Installations | 99,721,466.26 | 49,860,730.93 |
| 397.1 | Communication Equipment AMR/ERT | 35,826,280.95 | 11,271,869.52 |



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**Q. What are the current reserve balances for meters for Spire Missouri West and Spire Missouri East?**

A. In response to OPC data request number 8503 attached in Schedule JAR-D-3, Spire provided reserve balances for account 381 meters for its East and West Missouri Divisions. As of December 31, 2024, the reserve balances for Spire Missouri East meters was $1,741,778[1] and ($2,446,796) for Spire Missouri West. I requested that these balances be updated and provided to OPC quarterly for this case. OPC received the first update to this data request accumulated reserve balances as of March 31, 2025. Spire Missouri East has seen reserve drop by approximately $19 million dollars and it is now a negative balance of ($17,903,233) and for Spire Missouri West a negative reserve balance of ($2,746,245).

**Q. What are the current reserve balances for meter installation for Spire Missouri West and Spire Missouri East?**

A. Meter installation reserve has seen a similar trend as the meter accounts with the retirement of meters in the Eastern district. In response to OPC data request number 8504 attached in Schedule JAR-D-3, Spire provided reserve balances for account 381 meters for its East and West Missouri Divisions. As of December 31, 2024, the reserve balances for Spire Missouri East meter installations was ($305,725) and $49,860,895 for Spire Missouri West. I requested that these balances be updated and provided to OPC quarterly for this case. OPC received the first update to this data request accumulated reserve balances as of March 31, 2025. Spire Missouri East has seen reserve drop by approximately $14 million

[1] Response provided to OPC data request 8503 does not tie with Spire Response to Staff data request number 27.1 for the same information and date.

dollars and is now a negative balance of ($14,202,457) and for Spire Missouri West a reserve balance of $50,331,774.

**Q. Has Spire indicated how many more meters in Spire Missouri East it plans to replace with ultrasonic meters?**

A. As part of the initial transition Spire stated in response to OPC data request 8505 attached in Schedule JAR-D-3, that It plans to replace 89,570 meters; and install new modules on 24,762 active meters that haven't reached the sample eligible age of 10 years.

**Q. What concerns do you have about the ultrasonic meter investment for Spire Missouri?**

A. As was first laid out in the OPC's response to Staff's recommendation filed in the Depreciation Authority Order Case GO-2020-0416 (attached as Schedule JAR-D-4), there are serious concerns related to the capabilities of the replacement ultrasonic meters when compared to the current used meters. Included in that response are attached data requests with answers provided by Spire in Case No. GO-2020-0416 that confirm the proposed ultrasonic meter system (referred to as AMI meters in the response) will consist of two components: the meters and a network. As is identified by Spire in its response to OPC data request 8511, issued in Case No. GO-2020-0416, Spire's current system can read the new ultrasonic/AMI meters but does not appear to be able to send signals to the ultrasonic/AMI meters to trigger, for example, a remote shutoff:

> DR8511 - Does Spire currently have software capable of sending and receiving signals from AMI meters or will that be an additional investment.
>
> **Response**: The AMI system comes with a vendor provided network management software system. This software replaces and modernizes the meter reading and billing systems we utilize today. There will be investment to configure this software for Spire and integrate it with our existing systems. This software will be utilized to manage AMI technology for all



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> Spire customers. The AMI meter equipment can be read by the Company's current system until the AMI network and network software are deployed.

Therefore, based on the information provided by Spire, it will not be able to fully utilize the ultrasonic/AMI technology until the investment in the network and software integration has occurred.[2]

**Q. Do you have other concerns related to the ultrasonic/AMI meters?**

A. Yes. Spire in its response to OPC data requests 8506 and 8507 attached in Schedule JAR-D-3 stated that the meters are still being read in drive by mode, meaning this is a cost savings not realized but promised with the roll out of ultrasonic/AMI. Additionally, Spire in its response discusses benefits and data that cannot be achieved until a network is established. Spire stated that they have seen auto-shutoff triggered on the meter. But they are currently unable to track the different possible reasons why a meter would have shutoff. Spire stated they are in the process of developing an app to bridge gap until network is established.

**Q. In light of the previous discussions, what recommendations do you have related to Spire's meter reserve deficiency, its replacement methodology, and the Company not being able to produce the benefits to date for the conversion to ultrasonic meters from the mechanical meters?**

A. My recommendations are as follows:

1. Spire Missouri should be granted a non-rate base asset for the reserve deficiency related to the conversion to ultrasonic meters. This means Spire will be allowed to collect for the original cost of the meters but not be allowed to earn a return on the investment. I

[2] Case No. GR-2021-0108 OPC Direct Testimony of John A. Robinett page 8 line16 through page 9 line 16

would recommend at a minimum a 20-year amortization based on the current balances discussed and the simple fact that reserve deficiency will only continue to grow until the transitions to ultrasonic AMI meters in Spire Missouri East is completed.

2. The Commission should disallow return on the investment in Spire Missouri East for account 397.1 Communication ERT/AMR. It is my opinion that Spire by its replacement actions are creating a reserve deficiency by placing new modules on existing meters not yet to the sampling 10 year date that will not reach the expected lives of the modules.

3. The Commission should disallow 50% of the return on the ultrasonic meters in-service to date because Spire's customers have not seen the benefits that were promised by the conversion. Meters are still being read by van routes. Spire admits that the functions and interval reading of the meters does not happen without the network which has not been established.

**Mains Average Service Life – Plastic**

**Q. What is the current average service life for plastic mains?**

A. In Case Number GR-2021-0108 the Commission found the following related to the average service life for plastic mains:

> The Commission finds that the depreciable life of plastic mains should remain at 75 years, as this has been established as the lifespan in prior Commission cases, and no argument was raised to cause the Commission to change the authorized service life of plastic mains.

In Case number GR-2021-0108 Staff direct testimony shows that it is currently recommending a 60-year life for plastic mains. Spire Missouri consultant Mr. John J. Spanos' depreciation study attached to his rebuttal testimony also recommended a 60-year life for plastic mains. Spire's direct testimony recommended a 2.34% depreciation rate with

no detail on the average service life or net salvage percentages that make up the depreciation rate. I recommended again a 75-year averages service life and accept Spire's recommended net salvage percentage of negative 50% since the 10-year average is negative 55.6% net salvage. The Commission agreed with my recommendation in Case Number GR-2021-0108 and as a stipulation term in Case Number GR-2022-0179. The rates ordered in GR-2021-0108 are still the authorized rates for Spire Missouri. I am now recommending the same methodology just updated for the new net salvage percentage recommendation.

**Q. What have been the most recent depreciation lives for Mains – Plastic in depreciation studies?**

A. The depreciation study for Laclede Gas Company for gas plant as of September 30, 2003, indicated a 70-year average service life with a -15% net salvage. The depreciation study for Laclede Gas Company for gas plant as of September 30, 2009, indicated a 70-year average service life with a -15% net salvage. The depreciation study for Laclede Gas Company for gas plant as of September 30, 2012, indicated a 75-year average service life with a -25% net salvage. The depreciation study for Laclede Gas Company for gas plant as of September 30, 2016, indicated a 75-year average service life with a -30% net salvage. The depreciation study for Spire Missouri for gas plant as of September 30, 2020, indicated a 60-year average service life with a -40% net salvage. The current filed depreciation study in this case analyses plant as of September 30, 2024, and recommended a 60-year average service life with a -50% net salvage. Attached as Schedule JAR-D-5 are the depreciation tables from the studies received from Laclede Gas Company now Spire Missouri East.

**Q. What conclusions/considerations do you draw from this information regarding the average service life for Account 376.3 Mains-Plastic?**

A. There is a developing continuous trend to recommend a decrease in the average service life for plastic mains, which does not make sense when compared to other types of mains.

**Q. Can you please explain what you mean?**

A. Spire undertook a massive replacement program designed to replace cast-iron mains with plastic mains and repeatedly told the Commission that these plastic mains would last longer. Now, however, the average service life for these plastic mains (60 years) is shorter than the average service life of the cast-iron mains (65 years) they are replacing based on the depreciation study provided by Spire Missouri in this case.

**Q. Can you provide any reason for why this decrease in the average service life for plastic mains may be occurring?**

A. In Case No. GR-2017-0215 and 0216, I raised concerns that the accelerated nature of the ISRS and the retiring of sections of new plastic patches would have a negative impact on the average service life of the mains - plastic account. Spire Missouri's practice of replacing cast-iron mains with plastic mains, which began in 2011, resulted in the Company replacing and abandoning large amounts of plastic pipe before the useful life of those pipes has ended. Many of the replaced pipes were in the ground only a few years before being abandoned. Over time these multiple short lived asset retirements will cumulatively decrease the overall estimated average service life of plastic pipe installed in the entire system. This distortion in the average service life on this plant by continuous early retirements is, in my opinion, what has caused the skewed and abnormal relationship between the plant and reserve balance. This skewed and abnormal relationship, if not noted

and removed from the depreciation study, will likely indicate an increase in depreciation rates when no increase is needed. This potential increase in depreciation rates will increase Spire Missouri's cost of service artificially and unnecessarily.

**Q. How do you propose Spire Missouri address this concern?**

A. The Commission should order Spire Missouri to record the early retirements of plastic pipe being replaced under Spire Missouri ISRS as transaction code 7 "outlier retirements" for purposes of the depreciation study data base. By recording early retirements in this manner, the early retirements will not skew future depreciation studies.

**Q. Do you have a depreciation recommendation for Account 376.3 Mains-Plastic?**

A. Yes. For Account 376.3 Mains– Plastic, I recommend utilizing a 75-year average service life, which is consistent with the September 30, 2012 and 2016 depreciation studies performed by Mr. Spanos on behalf of Spire Missouri East. Consistent with the current depreciation study that has seen an increase in cost of removal, I recommend utilizing the -50% net salvage as calculated by Mr. Spanos. Utilizing the -50% net salvage and 75-year average service life, I recommend a depreciation rate of 2.00% for Account 376.3 Mains- Plastic. Based on using Spire's response to Staff data request 0027.1 plant in service balances as of December 31, 2024, this would be a increase of depreciation expense of approximately $1.17 million for Spire Missouri East and a $1.39 million increase for Spire Missouri West when compared to the current ordered rates.

**<u>Cast Iron Mains</u>**

**Q. To what account are Spire's cast iron mains booked?**

A. Cast iron mains are booked in account 376.2.

**Q. Does negative reserve exist at December 31, 2024, for account 376.2?**

A. Yes. Review of Spire's response to Staff data request 0027.1 for Spire MO east at December 31, 2024, has a negative reserve of $5,970,559.01.

**Q. Do you know what has caused the negative reserve?**

A. Throughout the course of several ISRS cases that arose since Spire's general rate case GR-2017-0215, I became aware that the Cast Iron Mains account was experiencing significant plant additions that were being driven by capitalization of joint encapsulations projects. These joint encapsulations were being done to allow for existing mains to continue to operate while new infrastructure was being installed in the adjacent areas. The large capitalizations of joint encapsulations in the cast iron account has drastically changed how the account has historically functioned. The vast majority of the asset values in the account are no longer expected to last the 80 years over which the account is currently being depreciated because the cast iron pipe joint encapsulations are expected to extend the life of the plant 10 years or less. As a result, this account is now seeing significant capital additions that are being retired long before they can be fully recovered under the currently ordered depreciation rates.

**Q. Have you previously provided testimony to fix the issues related?**

A. In Case No. GR-2021-0108 I recommended using a remaining life technique for this account of 8 years related to the sunset of the ISRS rule with a net salvage percentage of -188% based on the average of the last 10 years of cost of removal experience. Based on the work papers provided by Spire and their depreciation study sent to OPC, I recommend a depreciation rate of 35.87% in order to collect the plant-in-service value and needed cost of removal values based on the most recent 10-year average. This recommendation would

have resulted in a revenue requirement increase of approximately $23.2 million dollars on an annual basis for just this one account in the Case No. GR-2021-0108.

**Q. Why did you take a position that would have ultimately resulted in a significant increase in revenue requirement in the 2021 rate case?**

A. My goal with depreciation rates is to match recovery to the useful life of the assets in each account. My depreciation recommendation would have accrued depreciation reserve more quickly and made up for the account that is currently under accrued. Ultimately, this would have reduced the rate base of the utility and reduced the overall return in future cases. In addition, there was a potential for excess depreciation reserves to occur if the current trend on cost of removal does not remain at nearly two times original cost once the joint encapsulations are retired with the cast iron mains. If the excess reserve came to exist once all the cast iron main had been retired from the systems, the remaining reserve could have been reallocated to a similar type of asset. In this scenario, I would likely recommend in the future that the steel main accounts 376.1 for East and West to receive the reallocation of excess reserves.

**Q. If you were to recommend rates in a similar fashion to GR-2021-0108 what would those rates look like?**

A. I performed a similar calculation for recommended rates. I utilized Spire's recommended net salvage percentage of negative 150% and a 5-year remaining life for East and a 7-year remaining life for West. The calculated rates to recover the original cost plus the net salvage would be 54.03% for East and 30.90% for West. If 4-year remaining life for East and 6-year are used for West, the depreciation rates would be 67.54% for East and 36.05% for West.

**Q. Why is this not your recommendation in this case?**

A. There are two reasons why I don't recommend this depreciation rate and methodology in this case. First is that this is likely too large of an increase in depreciation expense. I made a smaller recommendation in terms of a depreciation rate four years ago in Case No. GR-2021-0108 that the Commission determined was not needed. Since then, the accumulated depreciation reserve has gone negative, and the current recommendation would be higher than what I recommended in the 2021 rate proceeding. Instead, the Commission ordered Spire's lower depreciation rate in that case, which has not fixed the issue. The second reasoning is that, based on its current recommendation, Spire does not seem to desire to fix the issue. My reasoning is based on the fact that Spire's hired consultant has provided a recommendation that will not recover the current plant-in-service prior to the end of the replacement program footnoted in his study. Mr. Spanos in his depreciation study recommended a reduced life of 65 years for cast iron mains from his previous recommendations. Spire's own hired expert's recommended depreciation rates will not recover the original cost plus the needed cost of removal by the end of the replacement program for either Spire Missouri East or West. Spire Missouri West has the chance of recovering the original cost by the end of the replacement program but that will heavily depend on how much plant is needed to get the mains to last through the replacement program.

**Q. Is the ISRS working at removing cast iron pipe from Laclede's system?**

A. According to the Pipeline and Hazardous Material Safety Administration (PHMSA) data I reviewed, Spire Missouri East has removed approximately 683 miles of cast iron main

since 2004. The following table was created from data available on the PHMSA website, specifically the Gas Distribution Annual Data.

| YR | NAME | Total Miles of Cast Iron Main |
|---|---|---|
| 2004 | LACLEDE GAS COMPANY | 890 |
| 2005 | LACLEDE GAS COMPANY | 886 |
| 2006 | LACLEDE GAS COMPANY | 880 |
| 2007 | LACLEDE GAS COMPANY | 871 |
| 2008 | LACLEDE GAS COMPANY | 864 |
| 2009 | LACLEDE GAS COMPANY | 854 |
| 2010 | LACLEDE GAS COMPANY | 844 |
| 2011 | LACLEDE GAS COMPANY | 829 |
| 2012 | LACLEDE GAS COMPANY | 769 |
| 2013 | LACLEDE GAS COMPANY | 734.95 |
| 2014 | LACLEDE GAS COMPANY | 703.371 |
| 2015 | LACLEDE GAS COMPANY | 621.84 |
| 2016 | LACLEDE GAS COMPANY | 587.27 |
| 2017 | SPIRE MISSOURI INC. EAST | 531.46 |
| 2018 | SPIRE MISSOURI INC. EAST | 477.051 |
| 2019 | SPIRE MISSOURI INC. EAST | 421.61 |
| 2020 | SPIRE MISSOURI INC. EAST | 360.12 |
| 2021 | SPIRE MISSOURI INC. EAST | 309.896 |
| 2022 | SPIRE MISSOURI INC. EAST | 251.86 |
| 2023 | SPIRE MISSOURI INC. EAST | 207.03 |

According to the Pipeline and Hazardous Material Safety Administration (PHMSA) data I reviewed, Spire Missouri West has removed approximately 279 miles of cast iron main since 2004. The following table was created from data available on the PHMSA website, specifically the Gas Distribution Annual Data.

| YR | NAME | Total Miles of Cast Iron Main |
|---|---|---|
| 2004 | MISSOURI GAS ENERGY | 386 |
| 2005 | MISSOURI GAS ENERGY | 382 |
| 2006 | MISSOURI GAS ENERGY | 373 |
| 2007 | MISSOURI GAS ENERGY | 369.311 |
| 2008 | MISSOURI GAS ENERGY | 366.517 |
| 2009 | MISSOURI GAS ENERGY | 360.678 |
| 2010 | MISSOURI GAS ENERGY | 355.285 |
| 2011 | MISSOURI GAS ENERGY | 347.281 |
| 2012 | MISSOURI GAS ENERGY | 342.188 |
| 2013 | MISSOURI GAS ENERGY | 334.289 |
| 2014 | MISSOURI GAS ENERGY | 322.891 |
| 2015 | MISSOURI GAS ENERGY | 293.5 |
| 2016 | MISSOURI GAS ENERGY | 288.88 |
| 2017 | SPIRE MISSOURI INC. WEST | 264.96 |
| 2018 | SPIRE MISSOURI INC. WEST | 241.012 |
| 2019 | SPIRE MISSOURI INC. WEST | 208.26 |
| 2020 | SPIRE MISSOURI INC. WEST | 192.34 |
| 2021 | SPIRE MISSOURI INC. WEST | 170.59 |
| 2022 | SPIRE MISSOURI INC. WEST | 142.278 |
| 2023 | SPIRE MISSOURI INC. WEST | 107.06 |

This table shows the remaining miles of cast iron mains reported by Spire Missouri West (Formerly Missouri Gas Energy) to PHMSA. Spire (Laclede) first reported to PHMSA in 2014 for the MGE assets.

**Q. How long would you expect the remaining cast iron mains to be removed from service?**

A. Based on the 10-year and 5-year averages of replacement of mileage of cast iron mains by Spire Missouri the East region would be four or five years of replacement. Spire Missouri West would have four or five years as well if the current average replacement rate continued.

**Q. What does the current depreciation study say about the remaining replacement?**

A. The depreciation study filed by Spire states the replacement program for Spire Missouri East will continue through December 2028 and December 2030 for Spire Missouri West.[3]

**Q. What would your recommendation be in this case then?**

A. At this time, I recommend that the Commission order the creation of a regulatory asset with no rate base treatment and grant recovery of the negative reserve balance at December 31, 2024. The regulatory asset would be approximately $6 million to bring the current reserve deficiency back to zero and I recommend a three-year amortization of that balance. Additionally, any future shortfall or negative reserve should also be treated as a non-rate base regulatory asset and only be granted a return of not on.

**Conclusion**

**Q. Please Summarize all of your recommendations.**

A. I recommend the Commission deny Spire Missouri's request for general plant amortization for the reasons discussed above. If the Commission nevertheless authorizes general plant amortization, it should order Spire Missouri to keep recording the original cost and associated retirement units for all additional assets to the relevant accounts and retire all general plant that exceeds the amortization period.

I recommend recovery for the cost of the depreciation study supplied in this case over a five-year period consistent with the filing requirements of a depreciation study in Commission Rule 20 CSR 4240-40.090.

[3] Schedule JJS-2S – 2024 Supplemental Depreciation Study Page VI-7 attached to the Supplemental direct testimony of Spire consultant John J. Spanos.

I recommend Spire implement the recommendations of the independent audit if it has not already done so. In addition, all of the items that Grant Thornton was not able to find and verify during the audit should be removed from the books and records of Spire Missouri.

I recommend that Spire Missouri should be granted a non- rate base asset for the reserve deficiency related to the conversion to ultrasonic meters. This means Spire will be allowed to collect for the original cost of the meters but not be allowed to earn a return on the investment. I recommend at a minimum of a 20-year amortization based on the current balances discussed and the simple fact that reserve deficiency will only continue to grow until the transitions to ultrasonic AMI meters in Spire Missouri East is completed.

I recommend the Commission disallow the return on the investment in Spire Missouri East for account 397.1 Communication ERT/AMR. It is my opinion that Spire by its replacement actions will likely create a reserve deficiency by placing new modules on existing meters not yet to the sampling 10-year date that will not reach the expected lives of the modules.

I recommend the Commission disallow 50% of the return on the ultrasonic meters in-service to date because Spire's customers have not seen the benefits that were promised by the conversion. Meters are still being read by van routes. Spire admits that the network to unlock the functions and interval reading of the meters does not happen without the network which has not been established.

I recommend a depreciation rate of 2.00% be ordered for account 376.3 plastic mains which is calculated by using a 75-year average service life and -50% net salvage value.

I recommend that the Commission order the creation of a regulatory asset with non-rate base treatment and grant recovery of the negative reserve balance at December 31, 2024, for cast iron mains in Missouri East. The regulatory asset would be approximately $6 million to bring the current reserve deficiency back to zero and I recommend a three-year amortization of that balance.

**Q. Does this conclude your direct testimony?**

A. Yes, it does.

**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 in the Company's Missouri Service Areas | ) ) ) ) | Case No. GR-2025-0107 |

**AFFIDAVIT OF JOHN A. ROBINETT**

**STATE OF MISSOURI** )
) **ss**
**COUNTY OF COLE** )

John A. Robinett, of lawful age and being first duly sworn, deposes and states:

1. My name is John A. Robinett. I am a Utility Engineering Specialist for the Office of the Public Counsel.

2. Attached hereto and made a part hereof for all purposes is my direct testimony.

3. I hereby swear and affirm that my statements contained in the attached testimony are true and correct to the best of my knowledge and belief.

John A. Robinett
Utility Engineering Specialist

Subscribed and sworn to me this 22nd day of April 2025.

TIFFANY HILDEBRAND
NOTARY PUBLIC - NOTARY SEAL
STATE OF MISSOURI
MY COMMISSION EXPIRES AUGUST 8, 2027
COLE COUNTY
COMMISSION #15637121

Tiffany Hildebrand
Notary Public

My Commission expires August 8, 2027.