

**Exhibit No.:**  
**Issue(s):**  
**Witness/Type of Exhibit:**  
**Sponsoring Party:**  
**Case No.:**

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Ultrasonic Meters  
Robinett/Rebuttal  
Public Counsel  
GR-2022-0179

**REBUTTAL TESTIMONY**

**OF**

**JOHN A. ROBINETT**

Submitted on Behalf of the Office of the Public Counsel

**SPIRE MISSOURI, INC.**

CASE NO. GR-2022-0179

October 7, 2022

## TABLE OF CONTENTS

| <b>Testimony</b>   | <b>Page</b> |
|--|-------------|
| Issues Regarding Depreciation and Associated Reserve Adjustments | 1           |
| Issues Related to the Deployment of Ultrasonic Meters            | 4           |

**REBUTTAL TESTIMONY**

**OF**

**JOHN A. ROBINETT**

**SPIRE MISSOURI  
CASE NO. GR-2022-0179**

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

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

3 **Q. Are you the same John A. Robinett who filed direct testimony on behalf of the Missouri**  
4 **Office of the Public Counsel (“OPC”) in this proceeding?**

5 A. Yes.

6 **Q. What is the purpose of your rebuttal testimony?**

7 A. First, I will discuss the effect and appropriateness of the depreciation recommendations  
8 and associated reserve adjustments described in the testimony of Staff witness Ms. Amanda  
9 Coffey. Next, I will address Staff’s concerns related to the deployment of ultrasonic meters  
10 that are raised in the direct testimonies of Staff witnesses Ms. Sarah L.K. Lange and Ms.  
11 Claire M. Eubanks, P.E.

12 **Issues Regarding Depreciation and Associated Reserve Adjustments**

13 **Q. Have you reviewed the direct testimony of Staff witness Ms. Amanda Coffey?**

14 A. Yes, I have.

15 **Q. Do you have any concerns with the information provided in Ms. Coffey’s direct**  
16 **testimony?**

17 A. Yes. I have several concerns.

18 **Q. What is your first concern?**

1 A. My first concern is related to the citation given on page 2 of Ms. Coffey's testimony for the  
2 definition of depreciation. Although I do not take issue with the definition itself, Staff has  
3 provided no rationale why the Federal Energy Regulatory Commission's (FERC) Uniform  
4 System of Accounts (USoA) for Electric Utilities applies to a natural gas company.  
5 Additionally this citation does not specifically reference which edition of the USoA Staff  
6 is relying on. My understanding is that Staff has historically utilized the 1992 FERC USoA.  
7 Most depreciation experts utilize the August 1996 National Association of Regulatory  
8 Utility Commissioners Public Utility Depreciation Practices manual as the "go to" citation  
9 for the definition of depreciation.

10 **Q. What is your next concern?**

11 A. My next concern is related to Ms. Coffey's recommendation to transfer accumulated  
12 depreciation reserves between accounts in order to remove negative reserve balances. Ms.  
13 Coffey provides zero detail or analysis in her testimony of the reserve transfers being  
14 recommended and does not identify if the balances being transferred are for excess  
15 reserves. Additionally it is unclear from Ms. Coffey's testimony whether these transfers are  
16 to be done for Spire Missouri West, Spire Missouri East, or both.

17 **Q. Did Ms. Coffey provide any work papers to support her adjustments?**

18 A. As part of direct work papers, no. I asked a series of data requests of Staff seeking  
19 clarification of whether there were work papers to support the testimony of Ms. Coffey. I  
20 also sought further clarification through data requests to better understand her position  
21 given that her rationale for making the reserve adjustments was opaque. I could not tell,  
22 for example, to which Spire Missouri entity/ies the reserve adjustments were to be applied.  
23 Attached as Schedule JAR-R-1 are select responses to the data requests I received to

1 provide the Commission and other parties a more clear understanding of Staff's reserve  
2 adjustment recommendations than what could be obtained from the simple reading of Ms.  
3 Coffe's testimony.

4 **Q. Do you support Ms. Coffe's reserve reallocation/ adjustment?**

5 A. No I do not.

6 **Q. Why?**

7 A. There are two main reasons why I do not support this treatment. First, the current direct  
8 accounting schedules filed by Staff are for the exact same time period as the final  
9 accounting schedules from Case No. GR-2021-0108. Thus, there is currently no reference  
10 point for how the plant-in-service and accumulated depreciation reserves have changed  
11 since the final run in the last Spire general rate case.

12 My second and more concerning issue is that the transfer of these reserves  
13 potentially hides an existing problem with the current depreciation rates that could become  
14 a major problem in a future case. We don't know why these reserve deficiencies are  
15 occurring, which is evidenced by Staff's responses to data requests I have submitted.  
16 Attached as Schedule JAR-R-2 are the responses of Staff's depreciation witness Ms. Coffe  
17 to my data requests asking for her understanding of what is driving the reserves in these  
18 accounts negative. Essentially those responses equate to Staff acknowledging they do not  
19 know and haven't looked into it. Transfers to account for reserve deficiencies should not  
20 be made until, at a minimum, the reason for the reserve deficiencies is understood so that  
21 any problems causing those deficiencies can be addressed. Otherwise, there is a potential  
22 that problems might end up being hidden until a major issue arises.

**Issues Related to the Deployment of Ultrasonic Meters**

**Q. Beginning at page 11 line 3 through page 12 line 10 of her direct testimony, Staff witness Ms. Sarah L.K. Lange discusses a discrepancy in Spire’s continuing property records (CPR) related to quantities of meters. Do you share in those concerns?**

A. Yes. As described by Ms. Lange in her direct testimony, she has identified that Spire has 24% more meters in its continuing property record than there are existing current Spire customers.

**Q. Have you asked for and reviewed the CPR or current property inventory records for meters as part of this case?**

A. Yes. I issued data request numbers 8524 and 8534 seeking information on this issue.<sup>1</sup> The records I received in response to these data requests caused me great concern. This concern is not just in relation to meters, but to Spire’s record keeping process as a whole. In reviewing the responses I have received to these two data requests, I have determined that there are numerous entries for both meters and non-meter assets that far exceed twice the average life of the assets. Attached Schedule JAR-R-3 is Spire’s response to OPC data request number 8524 and Schedule JAR-R-4 is Spire’s response to OPC data request 8534.

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<sup>1</sup> 8524. Please provide the continuing property record (or current property inventory record) for accounts 381 and sub-accounts and 397.2 for both the Spire East and Spire West service territories.

8534. Please provide for Spire Missouri East and West separately current plant balances and reserves as of 12/31/2020 and as of 13/31/2021 for all large Commercial and industrial customers meters that are included in account 381 meters and account 397.2 ERT Communication Equipment that will not be targeted for replacement by ultrasonic meters using existing ultrasonic meter technology.

1 **Q. What is the significance of exceeding twice the average service life of an asset?**

2 A. The average service life is the average life expectancy of assets within an account. Half of the  
3 plant will retire before and half will survive after that average service life. Because the  
4 average is the midpoint of the shortest lived and longest lived assets, doubling the average  
5 should cover everything that should be still in service. Anything exceeding this value should  
6 likely be retired.

7 **Q. So if you utilize the average service lives that Spire indicated in GR-2021-0108 and then**  
8 **double them, how much plant should be retired because it exceeds double the average**  
9 **service life?**

10 A. For Spire Missouri East, for account 381 meters there are 1,084 lines of plant-in-service  
11 (meters, gauge, and meter installations) that may or may not have values associated still on  
12 the books that exceed 38 years, which is double what Spire's witness testified was the  
13 average life the Company had been experiencing for meters in MO East during the  
14 Company's last rate case.

15 Also in the last case, account 397 was given a 15 year average service life. Doubling  
16 that would mean anything over 30 years should be retired. Based on that, anything in  
17 account 397 that was added prior to 1992 should be removed from the books. This results  
18 in an additional 64 lines of assets that should be retired. My only concern with these assets  
19 is that they appear to be generators or power supply units and transmitters that could still  
20 be possibly in use at this time. The pre-1992 communication equipment represents \$45,146  
21 worth of retirements and does not show any reserves tied to the assets.

22 For Spire Missouri West there are 15,306 lines of plant in service that may or may  
23 not have values associated still on the books that exceed 44 years, which is double what

1 Spire's witness testified was the average life the Company had been experiencing for  
2 meters in MO West during the Company's last rate case.

3 As with Spire East, account 397 for Spire West was also given a 15 year average  
4 service life. Doubling that would mean anything over 30 years should be retired. Again,  
5 this means that anything put into service prior to 1992 should be removed from the  
6 Company's books. This results in an additional 861 lines of assets that should be retired.  
7 The pre-1992 communication equipment represents \$320,130 worth of retirements and  
8 does not show any reserves tied to the assets.

9 **Q. Using double the average service life for Spire Missouri East and West, how many**  
10 **dollars of plant-in-service, dollars of accumulated reserves, and total number of meters**  
11 **are you recommending need to be retired?**

12 A. For Spire Missouri East, there are 143,514 meters, gauges, or meter installations that are  
13 pre-1984, which exceeds the 38 years or double the latest average service life of 18.8 years.  
14 This represents plant-in-service of \$9,304,544 with an associated accumulated depreciation  
15 reserve of \$3,607,326.

16 For Spire Missouri West there are 50,827 meters that are pre-1978, which exceeds the 44  
17 years or double the average service life of 22.1 years as was described by Spire in Case  
18 GR-2021-0108 as the average age of retired meters from 2018. These meters represent  
19 \$1,529,085 of plant-in-service with an associated accumulated depreciation reserve of  
20 \$495,906. I am recommending that these amounts represent what needs to be retired in this  
21 case.



1 **Q. In addition to the need to retire meters that should be well past their useful life, are there**  
2 **any other issues related to ultrasonic meters discussed by Staff witness that you would**  
3 **like to respond to?**

4 A. Yes. On page 7 lines 1-4 of her direct testimony, Staff witness Ms. Eubanks recommends that  
5 the Commission disallow the recovery of a percentage of ultrasonic meters and their  
6 associated ultrasonic meter installation costs that occurred from June 1, 2001 to May 31, 2022.  
7 Ms. Eubanks bases this disallowance on the retirement of diaphragm meters that are less than  
8 10 years old or for which Spire did not have documentation of the age being replaced by an  
9 ultrasonic meter.

10 **Q. Do you agree with the recommendation of Ms. Claire M. Eubanks, P.E., in her direct**  
11 **testimony?**

12 A. I personally do not. While I appreciate Staff's position in this case, I believe that the Staff  
13 recommendation could cause problems further down the line when we reach a point where  
14 the Company does not have dollars on its books to retire when ultrasonic meters begin to  
15 be removed from service. This is potentially creating the exact opposite problem than what  
16 we are currently seeing in the historic meter account where we have vintages that are still  
17 on the books whether they have dollars tied to them or not.

18 **Q. If you don't support Staff's disallowance what would you recommend?**

19 A. First, I would recommend that the Commission focus solely on Spire Missouri East as the  
20 most critical piece to address and allow Spire Missouri West to slowly transition to the new  
21 ultrasonic meter. I base this recommendation on my understanding that the majority of  
22 meters in the West are meters from the same manufacturer and are still capable of being  
23 read, meaning that they are not in urgent need of transition. Additionally, focusing on Spire

1 Missouri East instead of Spire Missouri West will allow for the potential reserve issue to  
2 come into a better picture as a slower transition may allow for more reserve to be  
3 accumulated and reduce the risk of the creation of a reserve deficiency. That being said I  
4 do still believe a reserve deficiency is likely to occur, but this proposal will at least reduce  
5 the severity of the potential deficiency.

6 The larger issue is in Spire Missouri East where the current contract with Landis &  
7 Gyr, who provides meter reading service, is expiring on April 1, 2025, and a more rapid  
8 conversion needs to take place. In order to effectuate this need, I would recommend the  
9 following:

- 10 1. Completely remove all small meters from plant in service and accumulated  
11 depreciation reserve accounts for mechanical meters for Spire East. This  
12 includes removing all depreciation expense for the mechanical small  
13 meters.
- 14 2. Set up a regulatory asset for the unrecovered balance as of September 30,  
15 2022 for the meters removed in step one. This regulatory asset will include  
16 a return for small mechanical meters based on net book value as of  
17 September 30, 2022, through the remainder of the Landis & Gyr contract.
- 18 3. Amortize the regulatory asset from step 2 over a period of 8 years.

19 As a second alternative, I would support disallowing the unrecovered balance of any retired  
20 mechanical meters. This would mean a write off would need to occur of the unrecovered  
21 reserve for any mechanical meter that is being retired that has not exceeded the average  
22 service life and has thus not been fully recovered. Greater detail on this proposal can be  
23 found in the rebuttal testimony of OPC witness Dr. Geoff Marke. This method would allow

1 for the new ultrasonic meters to be placed into plant-in-service and would allow for a write  
2 off of the unrecovered portion of the retired meter, which would solve the problem of  
3 driving the depreciation reserve negative for the diaphragm meters.

4 **Q. What does Ms. Eubanks say about early retirements of meters and their effect on**  
5 **depreciation rates?**

6 A. Ms. Eubanks says the following:

7 Q. Is it just and reasonable to retire meters prior to the end of their useful  
8 life?

9 A. Not without justification. The replacement of meters is not beneficial to  
10 ratepayers when there is no cost justification or need to retire the replaced  
11 plant. Ratepayers are harmed by the premature replacement of meters in that  
12 the ratepayers would be paying more than the cost of one meter. This can  
13 occur because of the delay between adding one meter and retiring another  
14 on the utility's books or simply that the item was retired before the end of  
15 its useful life and in turn reserve is removed from rate base prematurely.  
16 This causes the ratebase to falsely increase. Additionally, the unusual  
17 retirements will skew depreciation rates if not properly accounted for when  
18 completing future depreciation studies. Further, Staff Witness Sarah L. K.  
19 Lange identifies a discrepancy in the number of meters identified in the  
20 continuing property record and the number of Spire Missouri customers.  
21 Additional information and cooperation with Spire Missouri will be  
22 necessary to correct the records and accounts going forward.<sup>2</sup>

23 **Q. Do you agree with Ms. Eubank's statements above?**

24 A. Yes and no. The problem is not that reserve is being removed from rate base prematurely.  
25 Rather, the problem is the mass asset form of accounting for the meters that requires removing  
26 original cost from both plant-in-service and accumulated reserves at the time of retirement  
27 regardless of whether the plant balance has been fully accrued. So for the individual asset, say  
28 one meter that costs \$100, at the time of retirement one would remove \$100 from plant-in-  
29 service and \$100 from accumulated depreciation reserves. Let us assume, however, that the

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<sup>2</sup> Case No. GR-2022-0179 Direct Testimony of Staff Witness Claire M. Eubank, P.E., page 7 line 17 through page 8 line 6.

1 meter did not reach the end its average service life, having been removed only halfway  
2 through. This means that only a portion of the original cost would have been recovered. As  
3 such, the asset would only have accrued half, or \$50 worth, of its expected depreciation.  
4 Despite this, one would still subtract \$100 from both plant-in-service and accumulated  
5 depreciation reserves, leaving \$0 for that asset's entry in the plant-in-service account and  
6 (\$50) for the accumulated reserve account. Because net plant, on which the utility earns its  
7 return, is defined as plant-in-service less accumulated depreciation reserve, this would result  
8 in \$50 worth of net plant that still needs to be recovered (\$0 - -\$50). This is the "false increase"  
9 to the ratebase that Ms. Eubanks refers to in her testimony.

10 **Q. Do you believe that these premature retirements will skew future depreciation rates as**  
11 **Ms. Eubanks describes at page 8 of her direct testimony?**

12 A. Yes. As I described in Case No. GR-2021-0108 and numerous other Infrastructure System  
13 Replacement Surcharge cases, any time an account experiences a large amount of early  
14 retirements over time, that will drive depreciation rates up as they will reduce the average  
15 service life of those assets. However, this does not cause me great concern; as the  
16 Commission should be well aware of this and Ms. Eubanks spoke to it earlier in her direct  
17 testimony.

18 In Case No. GR-2021-0108, both Staff and the OPC became aware through  
19 discovery that the actual average of service years Spire had been experiencing for meters  
20 was 18.8 and 22.1 for "some time" despite Spire having requested average service lives of  
21 33 to 37 years for mechanical meters between 2003 and present day. This meant that the  
22 meters had over one third less of an actual life than the assets have been getting depreciated  
23 over. So yes, while these accelerated retirements may affect the depreciable average service

1 lives of the account; I already know that the account has not been matching up with the  
2 requested rate for some time so the movement of the depreciation rate will likely move  
3 toward where it should be based on average service lives for the meters Spire has been  
4 seeing for “some time”.

5 **Q. Does this conclude your rebuttal testimony?**

6 A. Yes, it does.

**BEFORE THE PUBLIC SERVICE COMMISSION  
OF THE STATE OF MISSOURI**

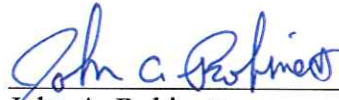
In the Matter of Spire Missouri, Inc. d/b/a Spire's )  
Request for Authority to Implement a General )  
Rate Increase for Natural Gas Service Provided )           Case No. GR-2022-0179  
in the Company's Missouri Service Areas           )

**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:

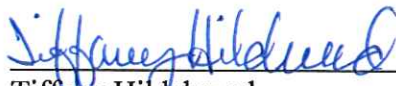
1. My name is John A. Robinett. I am a Utility Engineering Specialist for the Office of the Public Counsel.
2. Attached hereto and made a part hereof for all purposes is my rebuttal testimony.
3. I hereby swear and affirm that my statements contained in the attached testimony are true and correct to the best of my knowledge and belief.

  
\_\_\_\_\_  
John A. Robinett  
Utility Engineering Specialist

Subscribed and sworn to me this 7<sup>th</sup> day of October 2022.



TIFFANY HILDEBRAND  
My Commission Expires  
August 8, 2023  
Cole County  
Commission #15637121

  
\_\_\_\_\_  
Tiffany Hildebrand  
Notary Public

My Commission expires August 8, 2023.