Exhibit No.:	_____
Issue(s):	Cost Recovery Mechanism
Witness/Type of Exhibit:	Robinett/Direct
Sponsoring Party:	Public Counsel
Case No.:	GO-2019-0115 GO-2019-0116

DIRECT TESTIMONY

OF

JOHN A. ROBINETT

Submitted on Behalf of the Office of the Public Counsel

SPIRE MISSOURI INC.
SPIRE MISSOURI EAST SERVICE TERRITORY
SPIRE MISSOURI WEST SERVICE TERRITORY

CASE NO. GO-2019-0115
CASE NO. GO-2019-0116

March 29, 2019

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of the Application of Spire Missouri Inc. to Change its Infrastructure System Replacement Surcharge in its Spire Missouri East Service Territory	)))))	File No. GO-2019-0115
In the Matter of the Application of Spire Missouri Inc. to Change its Infrastructure System Replacement Surcharge in its Spire Missouri West Service Territory	)))))	File No. GO-2019-0116

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 29th day of March 2019.

NOTARY PUBLIC NOTARY SEAL STATE OF MISSOURI

JERENE A. BUCKMAN
My Commission Expires
August 23, 2021
Cole County
Commission #13754037

Jerene A. Buckman
Notary Public

My Commission expires August 23, 2021.

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DIRECT TESTIMONY
OF
JOHN A. ROBINETT

SPIRE MISSOURI EAST

SPIRE MISSOURI WEST

CASE Nos. GO-2019-0115 and GO-2019-0116

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

A. John A. Robinett, P.O. 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. Please see Schedule JAR-D-1.

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 direct testimony is to address Spire's Infrastructure System Replacement Surcharge ("ISRS") applications in Case Nos. GO-2019-0115 and GO-2019-0116. In this testimony I will first address Spire's lack of evidence to show the cast iron and bare steel mains and services it replaced as part of this ISRS request were worn out or deteriorated. Next, I will discuss how the service renewals in Spire East are not ISRS eligible as the primary driver behind those renewals is the movement of meters from inside of residences to outside. Next, I will address the error with Spire's claim that the plastic components it replaced are ISRS eligible just because Spire can provide evidence that it was more cost effective to

replace, rather than reuse, the existing plastic infrastructure. I will also discuss my opinion of Spire's efficiency metric. Finally, I will discuss how the inclusion of large portions of overhead expenses, which are being charged to each ISRS project, demonstrates a high potential for double recovery.

Q. Does your testimony maintain that all of the costs that Spire seeks to recover in these cases are not ISRS eligible?

A. No. After reviewing Spire's application and associated work papers, I have come to the conclusion that, for purposes of this case, there is no reason to conclude that the joint encapsulation projects and relocations Spire performed are not ISRS eligible due to Spire providing sufficient documentation to support these projects. This includes, for example, the various letters Spire received from entities with the power of eminent domain showing the need for relocations due to construction. I also do not challenge recovery of costs for replacements found in the blanket work orders to the extent that those replacements were done for the purpose of repairing leaks.

Eligibility of Cast Iron and Bare Steel Replacements

Q. Has Spire provided any evidence that the cast iron and bare steel mains and services, which it replaced and for which it is seeking recovery in this petition, are worn out or deteriorated?

A. No. Spire's verified application includes a chart that lists every work order for which Spire is seeking ISRS recovery and identifies what portion of the ISRS statue Spire is relying on to demonstrate eligibility for each work order. The vast majority of these work orders cite to

section 393.1009(5)(a) RSMo, which allows ISRS recovery for "mains, valves, service lines, regulator stations, vaults and other pipeline system components installed to comply with state or federal safety requirements as replacements for existing facilities that have worn out or are in deteriorated condition," as the basis for ISRS eligibility. However, Spire has failed to provide any tangible evidence that any of the pipes replaced under the work orders that rely on this section actually meet the definition of "worn out or in a deteriorated condition."

Q. What evidence could Spire have provided to demonstrate that the cast iron and bare steel mains and services that it replaced and is seeking recovery for as part of this petition are worn out or deteriorated?

A. Spire could have tested/provided analysis on the condition of the pipes that it abandoned through a number of different means and provided the results of those processes or procedures to the parties. Spire could also have provided leak history analysis or leak reporting related to each of the work orders or projects similar to the kind of information provided by the Missouri American Water Company as part of its last ISRS case.

Q. Has Spire provided any evidence of testing performed on replaced cast iron and bare steel mains and services?

A. No. I sent Spire several data requests ("DR") related to the subject of testing. One such request asked "For each project please provide evidence of physical testing Spire used to determine mains and services were in worn out and/or deteriorated condition." See DR 8529 in Schedule JAR-D-2. Spire responded by citing its answer to a previous request, wherein it clearly indicated that it had performed no testing because it believes "any effort to perform 'tests' on service lines that cannot be economically or operationally reused would serve no purpose,…."

I also directly requested that Spire "provide copies of any and all testing or other analysis related to interior diameter and outer diameter of any pipe that was retired," to which Spire responded that it "does not perform testing on the interior or outer diameters of pipe." See response to DR 8514 in Schedule JAR-D-3.

Q. Has Spire provided any evidence concerning leak history analysis or leak reporting regarding the cast iron and bare steel mains and services it replaced?

A. No. I sent Spire a data request seeking "all leak analysis or history on a project by project basis for all projects that are classified as strategic replacement." See OPC DR 8535 in Schedule JAR-D-2. Spire responded by stating that it "has generally plotted leak locations for MO East since approx. 2013 and for MO West since approx. 2015; however, the Company does not identify which specific main or service the leak is tied to." See response to OPC DR8535 in Schedule JAR-D-2. This response clearly indicates that Spire is either unable or unwilling to provide locations where previous leaks occurred in a manner that correlates to the projects in the current ISRS applications. In addition, I also requested that Spire "identify, by work order number, each and every work order undertaken for the purpose of repairing leaks that were not designated as a blanket work order." See OPC DR 8537 in Schedule JAR-D-3. Spire responded to this by stating that "as discussed in the Company's application, such leak repairs would be customarily charged to a blanket work order so the Company has not accumulated information for leak repairs not charged to a blanket work order and does not believe that there would be any material level of such repairs." See response to OPC DR 8537 in Schedule JAR-D-3. Therefore, Spire has fully admitted that none of replacements made outside of the blanket work orders were done on the basis of leak repair.

Q. Did Spire provide any indication as to why it was not performing any testing or leak analysis on the pipes it was replacing?

A. Yes. In response to numerous data requests (such as DR 8502 and DR 8503), Spire stated (in reference to the state or federal safety requirements mandating replacement) that "pipes subject to these mandates are by definition worn out or in deteriorated condition." See response to OPC DRs 8502 and 8503 in Schedule JAR-D-3. Therefore, Spire appears to be operating under the assumption that any pipe it replaces as part of a mandated replacement program is "by definition" worn out or deteriorated and that Spire, therefore, does not need to perform any testing or leak analysis to verify that fact.

Q. Is there any reason that Spire should be performing testing or leak analysis on its lines regardless of the definitional argument it makes?

A. Yes. In preparing for this case, I reviewed the "Commission Approved Replacement Plans" that Spire provided in response to my data request 8522. The case file numbers for the plans are GO-2002-50 for Spire West and GO-91-275 for Spire East. Both of these replacement plans included requirements for testing or leak analysis/reporting that Spire is supposed to be performing.

Q. What did the replacement plans that you reviewed say with regard to testing and leak analysis/reporting requirements?

A. The Spire West replacement plan (attached as Schedule JAR-D-4) filed July 30, 2001, in Case No. GO-2002-50 at page 4 paragraph 10 B, discusses how Spire West's predecessor Missouri Gas Energy was to collect a coupon (small sample of pipe) of every cast iron main break and then analyze it for graphitization/corrosion. Paragraph 10J and K also discuss annual leak

surveys for cast iron main 4-inch diameter and smaller, and semi-annual leak surveys on cast iron in business districts respectively. Paragraph 12 on page 8 of the application further discusses a protected bare-steel-replacement program designated as 5-5-3, which means that it triggers replacement of a minimum of 5 miles of pipes if 5 leaks within 500 feet are reported over a three-year period. Additionally, this approved plan included yearly reporting to Commission Gas Safety Staff as well as OPC. However, I am personally unaware of any such report having been developed for the duration of my employment with the OPC.

The Spire East "Commission Approved Replacement Plan" (attached as Schedule JAR-D-5) is found in Case No. GO-91-275 and was filed June 18, 1993. It discusses how Spire, (then Laclede Gas Company) had implemented annual flame-ionization mobile leak survey of all its cast iron mains with additional special surveys conducted when weather/ground conditions warranted.

Q. Are there any other factors that show Spire is seeking recovery for the replacement of pipes that are not worn out or deteriorated?

A. Yes. The service renewals being performed in the Spire East territory are not ISRS eligible.

Q. What is a service renewal?

A. As Spire itself stated in response to a data request I sent, a service renewal occurs when an existing service line is replaced in its entirety with a new service line. See response to OPC DR 8530 attached in Schedule JAR-D-2

Q. Why are these service renewals not ISRS eligible?

A. Based on conversations that I have had with Spire representatives, it is my understanding that these renewals are being performed in Spire East primarily in order to move meters from the

inside of private residences to the outside. This was clarified by the response Spire gave to my DR 8532, which asked if "Spire included as part of this ISRS application any costs associated with the moving of meters from inside of a residence to outside of a residence?" Spire responded, in part, by acknowledging that its "strategic replacement program typically involves the installation of smaller mains and an increase in system pressure, which in turn results in fewer regulator stations and more outside meters." See response to OPC DR 8532 in Schedule JAR-D-2. However, the fact that the service renewals are being done primarily because Spire is moving meters creates a problem for the renewal's eligibility under an ISRS as the current service lines are clearly not worn or deteriorated.

Q. Are there any other types of service line work that may not be ISRS eligible?

A. Yes. It is questionable whether the service transfers that Spire has performed are eligible for recovery under an ISRS.

Q. What is a service transfer?

A. A service transfer is the reconnection of a ratepayer's existing service line to a new main. It requires either the extension or retirement of part of the current service line depending on the location of the new main.

Q. Why might service transfers not be ISRS eligible?

A. While any reconnection will result in a small portion of the existing pipe being replaced, that does not mean that all of the pipe that was added to or subtracted from the existing service line would be a "replacement." Therefore, at least some portions of these service transfers would not be eligible under section 393.1009(5)(a), which, again, is the portion of the ISRS statute that Spire is relying on to establish ISRS eligibility for these projects.

Q. Are there any other considerations that need to be addressed regarding the eligibility of recovery under an ISRS for cast iron and bare steel mains and service replacements?

A. Yes, Spire has previously attempted to rely on the age of the pipes being replaced as a basis for claiming that they are worn out or deteriorated. However, age alone is insufficient to prove that any given segment of pipe is worn out or deteriorated, let alone sufficient to support an entire ISRS application.

Q. Is the statement that age alone is insufficient to prove pipes are worn out or deteriorated consistent with the position taken by the Commission Staff?

A. Yes, Staff's Safety Engineering Manager, Ms. Kathleen McNelis, PE, produced a memorandum that was filed in a Liberty Midstates Gas case (File No. GO-2019-0091) stating at one point that "age of . . . pipe does not meet the criteria used in Staff's evaluation because the age of pipe is not necessarily a safety concern; provided that the pipe is in good condition." While that case dealt specifically with PVC pipes, the logic of Ms. McNelis' conclusion should hold true with absolutely any material.

Q. Is there any other evidence that demonstrates why age alone is not a sufficient factor for determining whether pipes are worn out or deteriorated?

A. In the regulatory context, age of infrastructure is most commonly associated with the concept of depreciation.

> Depreciation as applied to depreciable utility plant, means the loss in service value not restored by current maintenance, incurred in connection with the consumption or perspective retirement of utility plant in the course of service from causes which are known to be in current operation and against which the utility is not protected by insurance. Among these causes to be given consideration are wear and tear, decay, action of the elements, inadequacy,

obsolescence, changes in art, changes in demand, and requirements of public authorities.[1]

The Public Utilities Depreciation Practices published by National Association of Regulatory Utility Commissioners, a publication on which utility depreciation experts commonly rely, define the factors that depreciation accounts for on pages 11 through 18. These pages are attached as Schedule JAR-D-6.

Q. Are there any other depreciation resources that discuss the factors of depreciation?

A. Yes. For example, those factors are discussed on Pages 70 through 73 of Depreciation Systems written by Frank K. Wolf and W. Chester Fitch published by the Iowa State University Press in 1994. Specifically, the authors discuss issues with the use of physical condition as a measure of depreciation. The first issue is that wear and tear do not account for all retirements. The second issue discussed is the difficulty of measuring physical condition. The paragraph ends with the following statement: "Though it is possible to measure directly the wear of railroad track and the corrosion of cast iron pipe, easily measurable wear is not characteristic of most industrial property." These specific pages are attached as Schedule JAR-D-7.

Another depreciation resource that references depreciation factors is the Introduction To Depreciation For Public Utilities and Other Industries published by Edison Electric Institute and American Gas Association in April 2013. The section I rely on in this text discusses the average service life of assets. Attached as Schedule JAR-D-8 is page 59. It

[1] Public Utility Depreciation Practices published by National Association of Regulatory Utility Commissioners, August 1996 page. 13. This definition is footnoted in previous document as sourced from Uniform System of Accounts for Class A and Class B Electric Utilities, 1958, rev.,1962.

defines service life of a unit of property as the number of years elapsing from the time a unit of property is placed into service until it is removed or abandoned. Additionally it defines average service life of an account as the average of the lives of all such units within a plant account.

Q. Why is average service life important?

A. The average service life is used for determining the depreciation rate for a particular account. As a depreciation expert, I expect approximately half of assets to be retired before the average service and half of them to exceed the average service life.

Q. What are the average service lives for Spire East and West for Mains and Services?

A. Attached as Schedule JAR-D-9 are the depreciation rates approved by the Commission in Case Nos. GR-2017-0215 and GR-2017-0216. The average service lives for Spire West are 50 years for mains and 40 years for services. Spire West currently does not have different average service lives by material type for its mains and services unlike Spire East. The average service lives for Spire East for Cast iron main is 80 years, steel mains is 80 years, and plastic mains is 70 years. Spire East's average service lives for steel, plastic, and copper services is 44 years.

Q. What conclusions do you draw from all of this information regarding depreciation and average service lives in relation to Spire's application?

A. All of the resources cited clearly reinforce the statement that age alone is insufficient to prove that any given segment of pipe is worn out or deteriorated. Therefore, the fact that a particular segment of pipe may be older than the average service life for that type of material does not mean that the pipe is in need of replacement.

Q. Does the retirement of plastic that was not worn out and deteriorated raise any other concerns regarding depreciation?

A. Over time the retirements of these portions and segments of plastic mains and services that are being retired that are not in a worn out and deteriorated will eventually affect the useful life of the main or service of plastic when added up over time. In other words, Spire's continued retirement of pipe that is not worn out or deteriorated will result in an inaccurate measure of the useful life of that plant.

Q. Is there anything that the Commission can do to remedy this potential issue from occurring?

A. Yes. For purposes of depreciation records, the Commission could order Spire to record all plastic main and services retired as part of ISRS projects as outlier retirements which are removed from the depreciation data when a future depreciation study is performed.

Q. Finally, did the recommendation filed by Staff in this case address the question of whether the cast iron and bare steel mains and services that Spire replaced were ISRS eligible?

A. No. Staff's recommendation did not cite to any evidence demonstrating that the cast iron and bare steel mains and services that Spire replaced were ISRS eligible. In fact, I separately issued data requests to Staff that specifically asked what evidence Staff relied on to determine that the cast iron and bare steel mains and services that Spire replaced were ISRS eligible, and Staff responded by simply citing to the company's work papers and avoided cost studies, none of which remotely address the question of ISRS eligibility for the cast iron and bare steel mains and services.

Spire's Attempt to Recover ISRS Ineligible Plastic

Q. Are both Spire Missouri East and Spire Missouri West seeking recovery of the cost of replacement of plastic mains and service lines that were not worn out or deteriorated from its customers?

A. Yes. In direct contradiction to the Missouri Court of Appeals Western Districts' ("Western District") mandate, Spire is seeking recovery of replacement costs for plastic that was not worn out or deteriorated as part of this ISRS filing for both its Missouri East and West territories.

Q. Why is Spire seeking to recover costs for the replacement of plastic that the Western District has held is not eligible?

A. Spire has presented numerous avoided cost studies that it argues show that it was more cost effective for it to replace, as opposed to reuse, the existing plastic pipes in many of the work projects that it undertook. Spire appears to be operating under the assumption that this fact alone makes these replacements ISRS eligible based on the Commission *Report and Order* issued in GO-2018-0309 and GO-2018-0310.

Q. Do you agree with Spire's assessment?

A. No. Due to the press of business and the limitations of our office, I have been unable to independently verify the accuracy of Spire's avoided cost studies. However, even assuming for the sake of argument that Spire's avoided cost studies are correct, such avoided costs would not make these plastic component replacements ISRS eligible. All that the avoided cost studies show is that it would have been *imprudent* for Spire to have reused as opposed to have replaced the plastic in those work orders for which it was cheaper to replace than to reuse.

The problem for Spire, though, is that ISRS eligibility does not turn on the question of prudence. In fact, Spire, as a regulated utility, is always required to perform its services in a prudent manner for its rate payers. Therefore, the fact that Spire chooses to act prudently as opposed to imprudently does not cure the lack of ISRS eligibility. Moreover, it should be pointed out that, to the best of my knowledge, the OPC did not challenge the operations or practices of Spire relating to the replacement of the plastic portions of mains as Spire stated it was a safety related issue because less connections equals a safer system. In other words, the OPC is not arguing that Spire should have reused existing plastic as opposed to replacing it. Instead, the OPC is challenging only Spire's ability to recover the costs associated with these replacements through an ISRS, based solely on the fact that they are not ISRS eligible because the plastic mains and services were not in a worn out or deteriorated condition, a point Spire has never denied.

Q. In your opinion, should Spire be allowed to recover any portion of the costs related to the replacement of plastic mains and services that were not worn out or in a deteriorated condition?

A. No. Counsel has advised that the Missouri Courts have spoken on this point and spoken clearly. Spire may not collect costs associated with the replacement of plastic components that are not worn out or in a deteriorated condition. As for Spire's claim that there are no costs associated with the replacement of plastic components, it is important to acknowledge that there will always be a cost under any method that is used for ineligible main replacement. For example, even if there is less pipe going into the ground, due to a modification of Spire's gas distribution system brought on by a change in pressure, that does not mean that it did not cost

something to replace that portion of main. Similarly, just because it is cheaper to replace the entire main rather than reuse an existing portion does not mean there were no costs associated with the replacement of that portion of main.

Q. Is it possible to calculate a specific disallowance for just the replacement of plastic mains and services?

A. In my opinion, the Commission should disallow cost recovery related to all the replacements Spire claims as ISRS eligible based on Spire's failure to show that those replacements were of infrastructure that was truly worn out or deteriorated. However, it is possible to calculate a disallowance for just the replacement of plastic infrastructure using the same methodology employed by Staff and ordered by the Commission in the GO-2018-0309 and GO-2018-0310 cases. Unfortunately, I have not been able to personally perform this calculation do to the press of business and the limitations of our office. Any such calculation would therefore have to be performed during a reconciliation as ordered by this Commission.

Problems Concerning Spire's Overhead Costs

Q. What issue do you take with the amount of overhead being charged to the ISRS projects for Spire East and West?

A. On many of the projects in this ISRS petition for both Spire East and West a large percentage of the projects costs are for overhead. In fact overhead makes up on average 55% and 45% of the total cost of each project performed in Spire East and West respectively. See Schedule JAR-D-10.

Q. Are these costs already being collected from ratepayers as part of rates set in Case GR-2017-0215 and GR-2017-0216?

A. More than likely yes. The Company has not been able to provide any evidence that these costs are not already being recovered from customers. Attached as Schedule JAR-D-11 is the data request seeking evidence that these expenses were not covered by rates currently being collected from rate payers. The Company responded to OPC data request number 1(c) by stating:

> Projects are flagged as ISRS eligible or non-ISRS eligible. Those projects that are deemed ISRS eligible are all projects that meet the requirements within the ISRS statute including the requirement that all projects "were not included in the gas corporation's rate base in its most recent general rate case." Therefore, overheads for projects that are deemed ISRS eligible are incremental to any overheads associated with projects that are included in the rate base used in the Company's current base rate revenue requirement….

See JAR-D-12.

However, this is not a satisfactory answer as explained in the direct testimony of Robert E. Schallenberg.

Q. What is your recommendation for overhead costs?

A. Overhead expenses sought to be recovered through these ISRS petitions should be disallowed for two reasons. First, it is evident they are imprudent, based on their size alone, given that they average to approximately 45 percent and 55 percent of all expenses in each project for Spire West and East respectively. Second, Spire has been unable or unwilling to provide information that would prove that these costs are not already being collected from rate payers as described in OPC witness Schallenberg's testimony. This reduction of overhead would significantly reduce the size of Spire's request in these ISRS petitions. In the event the

Commission chooses not to disallow these costs, then I would recommend opening an investigatory docket as described by OPC witness Schallenberg.

Conclusion

Q. Can you please summarize your testimony for the Commission?

A. The Commission should disallow recovery for the replacement of any cast iron, bare steel, or plastic mains or service lines that are not worn out or in a deteriorated condition and should further disallow the overhead costs that Spire has booked to any of its ISRS work orders since Spire has been unable to prove that they are not already collecting overhead expenses/charges for these ISRS projects in base rates.

Q. Is OPC recommending that Spire should receive no recovery for the projects subject to this ISRS petition?

A. No. First OPC is accepting, for purposes of this case, ISRS eligibility of any joint encapsulation projects and relocations due, in part, to Spire providing documentation from entities with the power of eminent domain that verify the need for such relocations. OPC is also not challenging the blanket work orders to the extent that they include any replacements which relate to the repair of leaks, as such leaks are themselves evidence that the pipes being replaced are worn out or in a deteriorated condition. More importantly OPC is not recommending that Spire never be allowed to recover costs associated with the remaining portions of these projects. OPC is simply stating that these costs are just not eligible for expedited recovery through ISRS. Spire may still file a general rate proceeding

to request that any capital additions that are not deemed eligible for recovery under the ISRS statue be included in new rates.

Q. Does this conclude your direct testimony?

A. Yes, it does.