

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

In the Matter of the Application of Spire Missouri)
Inc. d/b/a Spire to Change its Infrastructure) File No. GO-2021-0030
System Replacement Surcharge in its Spire)
Missouri East Service Territory)

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**SPIRE MISSOURI INC'S RESPONSE
TO STAFF AND OPC'S RECOMMENDATION**

COMES NOW, Spire Missouri Inc., on behalf of its operating units, Spire East and Spire West ("Spire" or "the Company") and pursuant to the Commission's August 5 *Order Directing Notice, Setting Intervention Deadline, and Directing Filings, Setting Time for Responses and Suspending Tariff Sheets* and the October 14 *Order Directing Filing* in the above captioned matters, submits this Response to the Staff's October 2nd Recommendation and the Office of Public Counsel's ("OPC") Response to Staff Recommendation. Due to an oversight, Spire missed the initial deadline set by the Commission to respond in these cases. The Company appreciates this additional opportunity to respond. In support of its Response thereof, Spire respectfully states as follows:

**SPIRE RESPONSE TO STAFF RECOMMENDATION
SPIRE EAST (FILE NO. GO-2021-0030)**

1. On October 2, 2020, Staff filed its Recommendation and attached memoranda recommending an adjustment to Spire's ISRS revenues to exclude work order costs to replace cast iron, bare steel, copper and plastic pipe. Staff concludes that Spire provided insufficient evidence to establish the worn out or deteriorated condition of these facilities. Spire disagrees with this assessment of the evidence.

2. Spire's evidence included the direct testimonies of Craig Hoeflerlin, Vice President of Operations Services and Tim Goodson, Vice President of Field Operations for Spire. In Mr.

Hoeflerlin's testimony he discussed the Commission's previous findings regarding the nature of the cast iron and bare steel facilities being in a worn out or deteriorated condition and the industry-wide recognition of the problematic characteristics of these facilities from a gas safety standpoint. Mr. Goodson further discussed generally the nature of the facilities being replaced in Spire's service territory, how these facilities deteriorate over time through a process called graphitization, and also addresses the inherent safety reasons these facilities should be replaced as expeditiously as possible. In addition to the testimonies, the Company provided 43 photographs of pipe replaced specific to this ISRS case depicting the clear worn out or deteriorated nature of these cast iron facilities. These photos show how ferrous materials such as cast iron are susceptible to localized forms of corrosion, including pitting. This type of corrosion typically occurs when the passivated film has deteriorated from the surface of the pipe and is exposed to the surrounding electrolytic environment. The more anodic areas of the cast iron will begin to corrode in an effort to preserve the more cathodic areas and create pits or creviced areas. This electrochemical condition in combination with loss of wall thickness due to graphitization pose the risk of pipe failure. This form of corrosion was discussed in the final metallurgical report originally submitted in Case Nos. GO-2020-0229 and GO-2020-0230 and which was re-submitted in this proceeding in response to Staff Data Request 24.

3. The deteriorated condition of the pipes depicted in these photographs are also noted by Mr. Goodson in his testimony. Staff noted that the Company did not provide any photos of its steel, plastic or copper facilities. As stated in the testimony of Mr. Goodson, Spire utilizes a strategic replacement program to replace its facilities rather than a piece meal approach. This being the case, Spire does not dig up all of its facilities but rather, abandons the facilities in place. It is not prudent for the Company to dig up streets to locate its abandoned facilities for the mere purposes of photographing their condition. The Company has made the pipes available for the Parties to visually inspect, and the Commission is also welcome to view the pipes.

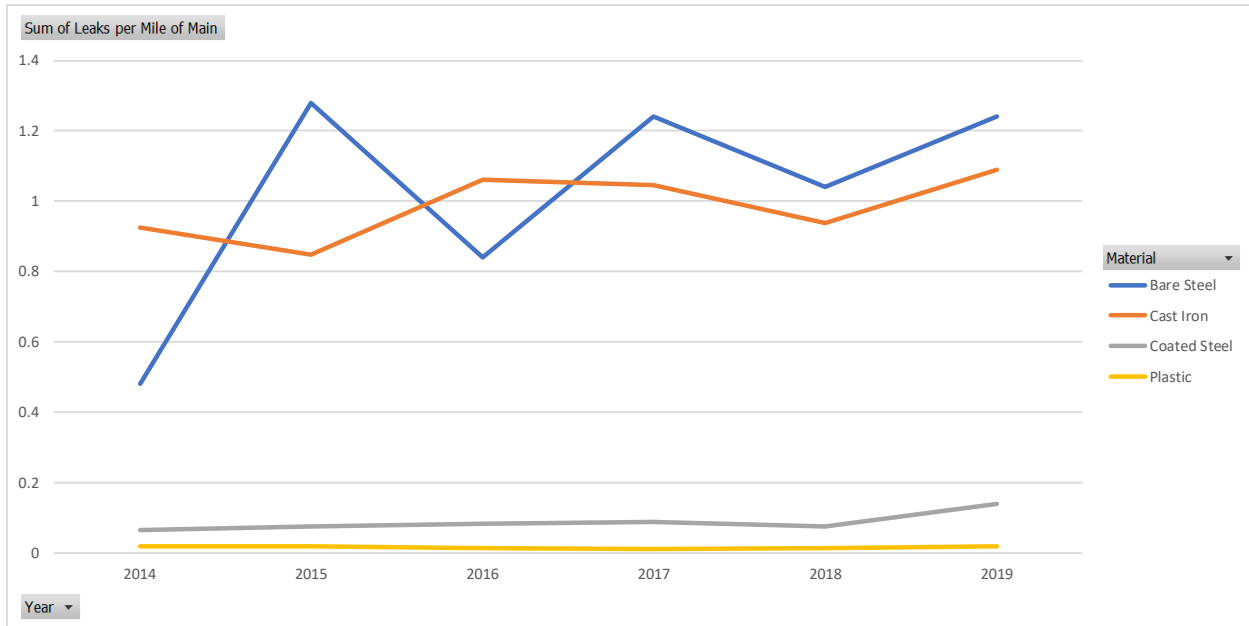
4. Spire has also submitted several responses to Staff Data Requests that support the deteriorated condition of these facilities. This would include a metallurgist report on cast iron and bare steel pipe completed earlier this year by David M. Norfleet, referenced above, which has been attached to this Response. In Mr. Norfleet’s report, he describes the factors that contribute to the pace and degree of deterioration of cast iron and steel pipes. He specifically discusses graphitization, the most common cause of failure for cast iron pipe. Mr. Norfleet also discusses how graphitization can be influenced by the condition of soils. The report analyzed soil samples from Spire’s service territory and ultimately concluded that the majority of soil samples were acidic and supportive of graphitic corrosion.

5. Through informal data requests, Spire provided information to Staff regarding the age of the pipe replaced in this ISRS. The results concluded that 84% of the cast iron being replaced is over 90 years old. The table provided to Staff is included below.

ISRS Retirement Summary Information		
Cast Iron Main Retirements		
Vintage	Footage	%
1900-1910	137314	52.29%
1911-1920	27972	10.65%
1921-1930	54458	20.74%
1931-1940	14876	5.66%
1941-1950	7784	2.96%
1951-1960	18113	6.90%
1961-1970	2076	0.79%
1971-1980	5	0.00%
1981-1990	0	0.00%
1991-2000	0	0.00%
2001-2010	0	0.00%
2010-2020	0	0.00%
Total	262598	

6. Spire has also provided the Staff, through informal data requests, information regarding the level of leaks associated with aging cast iron and bare steel pipes as compared to newer

plastic facilities. The chart below demonstrates that aging cast iron and bare steel pipes have a much higher propensity to fail than plastic, with cast iron being 60 times more likely to leak than plastic. The higher rate of leaks from these facilities again demonstrate the worn out or deteriorated nature of cast iron and bare steel and why they qualify for replacement under ISRS.



7. The Company has provided testimony in past ISRS cases from Robert Leonberger, who was the former manager of the Commission’s Gas Safety Division for over 20 years. Mr. Leonberger addressed the history of the gas pipeline replacement programs in Missouri and how regulations were put in place in response to a series of gas explosions due to leaks from corroded service lines. He emphasized the importance of replacing these facilities as a matter of public safety, and concluded that the cast iron and steel facilities based on his experience and as is recognized across the industry, lose their integrity over time and must be replaced. He testified that this was a motivating factor for the Commission to mandate the replacement of these facilities three decades ago and was also the impetus for the development of the ISRS in 2003. Mr. Leonberger concluded that the cast iron and bare steel facilities being replaced were absolutely worn out or deteriorated. He further testified that “. . . when the Commission passed rules three decades ago to specifically

require that cast iron and bare steel facilities be replaced or remediated, it did so because such facilities were already in a deteriorated condition in that they had become sufficiently “inferior in quality or value compared to their original condition” that they posed a risk to public safety. As someone who had become all too familiar with the flaws inherent in these materials, and their consequences for public safety, I can say without reservation that such facilities were in a deteriorated condition even then.”¹ While Spire did not submit Mr. Leonberger’s testimony with this ISRS filing, the Company is prepared to do so again.

8. The evidence provided by Spire strikes a balance between what is logical to provide and what is truly needed for the Commission to determine the worn out and deteriorated nature of these facilities. While the Company could dig up every inch of pipe, from an economic standpoint that would not be a prudently incurred cost. What the Company did do was obtain a sampling of 20 pipes associated with projects included in this ISRS filing, provided information showing the significant age of these pipes ranging from 90 to well over 100 years old, and provided testimony from expert witnesses regarding the propensity of cast iron and steel facilities to deteriorate over time.

9. In addition, it is worth noting that the ISRS law recently changed to include cast iron and bare steel facilities as ISRS eligible *without* a requirement that the utility prove its worn out or deteriorated nature, because it is clear to at least the Missouri Legislature that these types of pipes should unquestionably be replaced through the ISRS.

10. It is worth noting again, that it has been the Commission’s long-standing position that cast iron and bare steel are worn out or in a deteriorated condition and that the cost to replace these facilities are recoverable under ISRS. The Commission has found in previous ISRS orders that cast

¹ Direct Testimony of Robert Leonberger, Case Nos. GO-2018-0309 and GO-2018-0310, pg 10

iron pipes are unsafe to use due to graphitization, making the pipes brittle and subject to cracking and leaking.

11. The Company agrees with the Staff's adjustment to exclude the cost of plastics as appropriate under the current law.

12. The Company also agrees with Staff's recommendation regarding the inclusion of costs related to civic improvements, angle of repose situations, blanket work orders, service transfers and header mains.

13. The Company also agrees with Staff's adjustment for the exclusion of coated steel facilities.

14. Spire generally agrees with Staff's alternative calculation of \$5,001,212 with the exception of Staff's treatment of income taxes. The Company has reviewed Staff's calculation and found that Staff applied their methodology correctly. The difference between Staff's calculation and Spire's calculation is the inclusion of income taxes in the revenue requirement. Spire's Appendix B supports an ISRS revenue requirement of \$5,684,300, and \$24,517,768 in total cumulative ISRS charges.

**RESPONSE TO STAFF RECOMMENDATION
SPIRE WEST (FILE NO. GO-2021-0031)**

15. On October 2, 2020, Staff filed its recommendation and memoranda for Spire West. Spire agrees with and supports Staff's recommendation for pre-tax ISRS revenues of \$1,788,274 and total current and cumulative ISRS charge of \$23,297,106.

RESPONSE TO OPC RESPONSE

16. On October 13, 2020, the OPC filed its Response to the Staff's Recommendation, supporting the disallowance of cast iron, bare steel, copper and plastic pipe. For the reasons already stated above, Spire disagrees with the OPC that these ISRS costs should be excluded.

17. The OPC also discusses the one-time bill credit customers received as part of the unanimous settlement agreement reached in the ISRS remand cases as it relates to an issue that has been raised regarding treatment of local sales tax. Since taxes are a pass through for the Company, Spire maintains that it has received no benefit as a result of the treatment of the ISRS credit as below the line. The alleged benefit, if any, would have accrued to the local taxing authorities. The Company is working with the OPC and Staff as this issue is explored further. Spire believes this issue can be preserved for ratemaking treatment in a future case while the parties analyze the complexities presented.

GENERAL RESPONSE

18. Both Staff and OPC state that they will continue to review evidence presented by Spire regarding the worn out or deteriorated condition of the facilities subject to this ISRS. Spire is engaged in further discussions with the Staff and OPC to provide further support regarding the ISRS eligibility of the Company's facilities in Spire East, and has also been engaged in ongoing discussions with these parties regarding a potential settlement of these cases.

WHEREFORE, Spire Missouri Inc. respectfully requests the Commission accept this Response and based on its own findings, reject Staff and OPC's adjustments to exclude the costs incurred by the Company to replace these and other facilities.

Respectfully submitted,

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ATTORNEYS FOR Spire Missouri Inc.

CERTIFICATE OF SERVICE

The undersigned certifies that a true and correct copy of the foregoing Response was served on the General Counsel of the Staff of the Missouri Public Service Commission and the Office of the Public Counsel on this 16th day of October 2020 by hand-delivery, fax, electronic or regular mail.

/s/ Goldie T. Bockstruck _____
Goldie T. Bockstruck