Exhibit No:ISRS Eligible ProjectsIssue:ISRS Eligible ProjectsWitness:Kent ThaemertType of Exhibit:Direct TestimonySponsoring Party:Spire Missouri Inc.Case No.:GO-2022-Date Testimony Prepared:December 23, 2021

SPIRE MISSOURI INC. CASE NO. GO-2022-DIRECT TESTIMONY OF KENT THAEMERT DECEMBER 23, 2021

TABLE OF CONTENTS

DIRECT TESTIMONY OF KENT THAEMERT	. 1
PURPOSE OF TESTIMONY	. 2
CHANGES TO ISRS LAW	. 2
SPIRE'S ISRS PROJECTS	. 3
CONCLUSION	. 5

1	DIRECT TESTIMONY OF KENT THAEMERT				
2	Q.	PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.			
3	A.	My name is Kent Thaemert, and my business address is 700 Market Street, Saint Louis,			
4		Missouri 63101.			
5	Q.	WHAT IS YOUR PRESENT POSITION?			
6	А.	I am the Manager of Construction Engineering for Spire Missouri Inc. ("Spire" or "the			
7		Company").			
8	Q.	PLEASE STATE HOW LONG YOU HAVE HELD YOUR POSITION AND BRIEFLY			
9		DESCRIBE YOUR RESPONSIBILITIES.			
10	A.	I have been the Manager of Construction Engineering for Spire Missouri since February 1,			
11		2016. In my current position I am responsible for overseeing the design and estimation of			
12		work orders for the replacement of main in Missouri. Prior to that I served in other engineering			
13		roles within Spire's Construction Engineering, System Planning, and Mapping Departments.			
14	Q.	PLEASE BRIEFLY DESCRIBE YOUR PREVIOUS PROFESSIONAL EXPERIENCE			
15		PRIOR TO JOINING SPIRE.			
16	A.	I have been with the Company for 30 years. Laclede Gas Company, now Spire, was my first			
17		employer out of college.			
18	Q.	WHAT IS YOUR EDUCATIONAL BACKGROUND?			
19	A.	I received my Bachelor of Science in Mechanical Engineering from the University of Missouri			
20		– Rolla (now known as Missouri S&T).			
21	Q.	HAVE YOU PREVIOUSLY FILED TESTIMONY BEFORE THE MISSOURI			
22		PUBLIC SERVICE COMMISSION ("COMMISSION")?			
23	A.	No.			

1		PURPOSE OF TESTIMONY				
2	Q.	WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?				
3	A.	The purpose of my Direct Testimony is to give an overview of the Company's Infrastructure				
4		System Replacement Surcharge ("ISRS") Projects, and how those projects are determined to				
5		be ISRS eligible in accordance with recent changes that have been made to the ISRS statute.				
6	CHANGES TO ISRS LAW					
7	Q.	ARE YOU FAMILIAR WITH THE MOST RECENT CHANGES THAT HAVE				
8		BEEN MADE TO THE MISSOURI ISRS LAW SPECIFIC TO PROJECT				
9		ELIGIBILITY?				
10	А.	Yes, I am.				
11	Q.	PLEASE BRIEFLY DESCRIBE THOSE CHANGES.				
12	A.	In 2020 the Missouri legislature enacted changes to the ISRS law to, among other things,				
13		better define the type of projects that may be recovered under the ISRS. In addition to				
14		allowing recovery for facilities installed to comply with state or federal safety requirements				
15		considered to be in a worn out or deteriorated condition, the statute also allows for recovery				
16		of:				
17		(1) facilities that can no longer be installed under currently applicable safety				
18		requirements;				
19		(2) cast iron facilities;				
20		(3) steel facilities; and				
21		(4) associated facilities replaced as part of a qualifying ISRS project where there is				
22		no incremental cost compared to tying into or reusing the existing facilities.				
23	Q.	WHY ARE THESE CHANGES IMPORTANT TO SPIRE AND ITS CUSTOMERS?				

A. The new ISRS statute represents a significant acknowledgement by the Missouri general
 assembly of the importance of replacing aging gas infrastructure in a manner that is both cost
 efficient and enhances infrastructure system safety. For Spire, these changes further enhance
 the ability of the Company to continue to accelerate the replacement of its aging infrastructure
 for the benefit of all our customers.

- 6 An infrastructure replacement program gives the Company the ability to enhance the safety 7 of its system by greatly reducing leaks which in turn reduces greenhouse gas emissions. In 8 fact, over the last five years, Spire has reduced leaks by 66% per 1,000 system miles and have 9 reduced methane emissions by 39% since 2005.
- Both the historic, and new, ISRS law has been integral in allowing the Company to make these
 important replacements in a manner that advances safety, reduces emissions, and permits
 timely recovery for the Company's investment.

13 Q. WHAT IMPACT HAS THIS CHANGE MADE TO SPIRE'S IMPLEMENTATION OF 14 ISRS PROJECTS?

15 The new statute is more specific and includes that cast iron and steel facilities which are A. 16 included in a qualifying replacement project are now considered ISRS eligible. This revision 17 to the ISRS language has made the determination of ISRS eligibility not only more efficient 18 but provides more clarity for both the Company and the regulators. In addition, the new ISRS 19 law has provided a solution to the issue of whether or not interspersed plastic or other facilities 20 should be included as part of the Company's ISRS. The expansion of the new legislation 21 supports the Company's incremental cost approach to be the most reasonable and cost-22 effective method to replace the aging infrastructure.

23

SPIRE'S ISRS PROJECTS

Q. PLEASE DISCUSS THE TYPE OF ISRS PROJECTS THAT HAVE BEEN INCLUDED IN THIS FILING.

A. In this current filing, the Company has included projects that include cast iron and steel main
 replacements and copper service replacements. In addition, projects for main and service
 relocations that are related to civic improvement projects are also included.

•

6 Q. HOW DOES THE COMPANY DETERMINE THAT A PROJECT IS ELIGIBLE FOR 7 RECOVERY UNDER ISRS?

A. The Engineering Department reviews work plans and makes a determination of whether the
project is eligible under the statute based on the Company's analysis of the types of projects
that are ISRS eligible. If questions arise as to whether a project would qualify under the ISRS
statute, then the Engineering Department consults with the Company's Regulatory team. Once
it is determined to be an ISRS eligible project, it is coded for the type of work involved.

Q. IS THE COMPANY REPLACING INTERSPERSED PLASTIC OR OTHER FACILITIES REGARDLESS OF AGE OR CONDITION UNDER ISRS?

A. Yes, the Company is replacing interspersed facilities associated with qualifying replacement
 projects as allowed under the new ISRS law. Spire has included costs associated with these
 replacements in its ISRS application after a determination has been made that there is no
 incremental cost associated with its inclusion.

Q. PLEASE DESCRIBE THE ANALYSIS USED BY THE COMPANY TO DETERMINE THE INCREMENTAL COST TO A PROJECT VERSUS TYING IN OR REUSING EXISTING FACILITIES.

A. As to each ISRS eligible project that contains either interspersed plastic or some other facility
 that on its own would not be considered eligible under the ISRS statute, the Company conducts
 a cost analysis. This is done by estimating the cost of the project using the existing
 plastic/other facilities and also estimating the cost of the project where we do not utilize those

1 facilities. A cost analysis is done at the end of each design. The Company utilizes what are 2 referred to as compatible units ("CU's") to calculate its estimate of the costs associated with 3 a project under each scenario. CU's provide an estimated cost for each of the different items 4 and variations of items underlying a project such as pipe materials and fittings, indirect overheads, labor hours, and other equipment. The CU's and their associated costs estimates 5 6 are updated on a periodic basis for accuracy and are used by the Company's Construction 7 Engineering group when designing replacement and other types of projects. This creates an 8 estimate-to-estimate comparison of the engineering decision that would be made 9 when planning these projects. The CU's are the basis for deriving the amounts that make 10 up the larger cost categories of labor, materials, tools, and overheads. The Company's 11 Construction Engineering group applied the appropriate units of measurement, whether that 12 be hours, feet, units, etc., to each required CU to complete its estimates. In addition to the 13 cost estimates, a supplemental design drawing is created to depict the scope of work 14 required to tie-in or reuse the existing facilities and compare the differences in the final 15 design. These drawings are filed as workpapers and are provided to the Staff and the Office 16 of Public Counsel concurrent with this filing.

17 It is my understanding that if the analysis shows that an incremental cost is associated with 18 the replacement of the interspersed facilities, this incremental cost is removed from the ISRS 19 application so that only the cost of ISRS eligible facilities is included in the Company's 20 application. Spire witness Trisha Lavin will also discuss the incremental costs analysis in her 21 testimony.

22

CONCLUSION

Q. IN YOUR OPINION, ARE THE PROJECTS INCLUDED IN THIS APPLICATION RECOVERABLE UNDER THE ISRS?

25 A. Yes, they are.

26 Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

1 A. Yes, it does.

BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the Matter of Spire Missouri Inc.'s) Request to Implement an Infrastructure) System Replacement Surcharge for the) File No. GO-2022-Company's Missouri Service Areas)

AFFIDAVIT

STATE OF MISSOURI)	
)	SS.
CITY OF SAINT LOUIS)	

Kent Thaemert, of lawful age, being first duly sworn, deposes and states:

1. My name is Kent Thaemert. I am Manager of Construction Engineering for Spire Missouri Inc. My business address is 700 Market Street, Saint Louis, Missouri 63101.

2. Attached hereto and made a part hereof for all purposes is my direct testimony on behalf of Spire Missouri Inc.

3. Under penalty of perjury, I declare that the foregoing is true and correct to the best of my knowledge and belief.

<u>/s/ Kent Thaemert</u> Kent Thaemert

December 23, 2021 Date