Exhibit No.:

Issue(s) Depreciation/Smart Meters
Witness/Type of Exhibit: Robinett/Direct
Sponsoring Party: Public Counsel
Case No.: GR-2021-0108

## **DIRECT TESTIMONY**

### **OF**

## JOHN A. ROBINETT

Submitted on Behalf of the Office of the Public Counsel

## SPIRE MISSOURI, INC.

CASE NO. GR-2021-0108

# BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the Matter of Spire Missouri Inc.'s d/b/a	)	
Spire Request for Authority to Implement a	)	
General Rate Increase for Natural Gas	ĺ	Case No. GR-2021-0108
Service Provided in the Company's	)	<u>Cuse 110. GIT 2021 0100</u>
Missouri Service Areas	Ó	

### **VERIFICATION OF JOHN A. ROBINETT**

John A. Robinett, under penalty of perjury, states:

- 1. Attached hereto and made a part hereof for all purposes is my direct testimony in the above-captioned case.
- 2. My answer to each question in the attached direct testimony is true and correct to the best of my knowledge, information, and belief.

/s/ John A. Robinett

John A. Robinett Utility Engineering Specialist Office of the Public Counsel

### **TABLE OF CONTENTS**

Testimony	Page
Spire Missouri West Depreciation Recommendation	1
Spire Missouri East Depreciation Recommendation	3
Smart Meter Investment	7

# OF JOHN A. ROBINETT SPIRE MISSOURI

## **CASE NO. GR-2021-0108**

1	Q.	Please state your name and business address.
2	A.	John A. Robinett, PO Box 2230, Jefferson City, Missouri 65102.
3	Q.	By whom are you employed and in what capacity?
4	A.	I am employed by the Missouri Office of the Public Counsel ("OPC") as a Utility Engineering
5		Specialist.
6	Q.	Have you previously provided testimony before the Missouri Public Service
7		Commission?
8	A.	Yes. Both as a former member of Commission Staff and on behalf of the OPC.
9	Q.	Please describe your work and educational background.
LO	A.	A copy of my work and educational experience is attached to this testimony as Schedule
l1		JAR-D-1.
L2	Q.	What is the purpose of your direct testimony?
L3	A.	The purpose of this testimony is to address the appropriate depreciation rates for Spire
L4		Missouri East and West. Additionally, I will discuss Spire's conversion of its metering
L5		infrastructure.
L6	Spire	Missouri West Depreciation Recommendation
L7	Q.	What is your position regarding the depreciation rates for Spire Missouri West?
L8	A.	My position is that Spire West should be allowed to adopt the depreciation rates of Spire
L9		Missouri East, thereby creating one set of depreciation rates for the utility. This proposal

will have the effect of putting the individual rate district's plant on identical life parameters for the same type of plant instead of having two, sometimes wildly different, lives for an asset group.

- Q. Does your consolidation of depreciation rates contradict recommendations provided by other OPC witnesses in this case?
- A. No. In my opinion there is not a conflict between myself and Mr. Riley's testimony about the PGA and ISRS tariffs not being consolidated as there are many different cost drivers that affect each of those mechanisms one being depreciation expense. For example, Spire Missouri East uses in-house labor while Spire Missouri West utilizes outside contract labor for ISRS purposes. Similarly, it is my understanding that the sources of supply and storage capabilities vary between the two service territories that affect the PGA.

### Q. Why are you recommending West adopt East's depreciation rates?

A. The main reason is that I am more comfortable with the historical data from Spire Missouri

East (previously Laclede Gas) as opposed to Spire Missouri West (formerly Missouri Gas

Energy).

As has been discussed in previous rate cases, Spire Missouri West failed to receive historical data during a previous sale of the utility's assets. The Company's resulting limited historical mortality data, only available since 1994, has been problematic in performing a statistically valid actuarial analysis in this case and the Company's most recent rate cases: Case Nos. GR-2009-0355, GR-2006-0422, GR-2004-0209, GR-2001-292, and GR-98-140. The reason for the data inadequacy is that when Southern Union Company acquired Missouri Gas Energy in 1994 from WRI, WRI's plant retirement records were not transferred to the possession of Missouri Gas Energy. The failure to

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transfer the property records as part of the 1994 sale has hindered the ability to perform a statistically valid study to properly reflect the life of Missouri Gas Energy's (now Spire West's) assets.

### Spire Missouri East Depreciation Recommendation

- Q. What is your position regarding depreciation rates for Spire Missouri East?
- A. I recommend continued use of currently ordered depreciation rates for Spire Missouri East with a modification for Account 376.2 Mains Cast Iron. I also recommend the addition of rates that were previously agreed to in Case No. GO-2020-0416 to allow the setting up of depreciation rates and accounts for Spire's smart meter devices and smart meter installations.
- Q. What are you recommending as a change in depreciation rates for Account 376.2 Mains- Cast Iron and why?
  - Since Case No. GR-2010-0171, the plant account balance for Account 376.2 Mains Cast Iron has continued to increase. In Schedule 3 of Staff's Accounting Schedules in Case No. GR-2010-0171, the Staff reflected the plant in service balance for Account 376.2 Mains Cast Iron at \$14,241,880. Spire Missouri East's direct workpapers (excel file name: Rate Base at 9-30-20 MOE MOW Actuals w plant bal detail) provided by Spire to support the present case, however, indicates Account 376.2 Mains Cast Iron has a plant in service balance of \$32,999,803 as of September 30, 2020. OPC has previously outlined serious concerns with the fact that, despite plant being continuously removed from service under Spire Missouri East's Infrastructure System Replacement Surcharge ("ISRS"), the plant-in service is actually growing in amount on Spire's balance sheet. 20 CSR 4240- 40.030

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(15)(D) describes the replacement program to be developed by each operator. Specifically 20 CSR 4240- 40.030 (15)(D)2 states:

A long-term, organized replacement program and schedule shall also be established for cast iron pipelines not identified by the operator as being high priority.

Once the cast iron replacement program was implemented by the utility, the cast iron mains sub-account should have been considered a holding account in which little to no additions would be expected. When a utility begins replacing and retiring the cast iron mains, the associated plant in service balances should be decreasing with every retirement that occurs, but that is not what has been occurring for plant-in-service.

Throughout the course of several ISRS cases that arose since Spire's last general rate case (Case No. GR-2017-0215), I became aware that the Cast Iron Mains account was being driven by joint encapsulations that were being capitalized on cast iron mains 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 no longer are expected to last 80 years as the cast iron pipe with these joint encapsulations are expected to last 10 years or less. Given the latest update to the ISRS legislation, which included a sunset provision set for 2029, I would recommend using a remaining life technique for this account of 8 years 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

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needed cost of removal values based on the most recent 10 year average. This recommendation will result in a revenue requirement increase of approximately \$23.2 million dollars on an annual basis for just this one account. Utilizing the current authorized depreciation rates for Spire Missouri East will require 35 more years of recovery with no additional additions just to recover the original investment. For Spire Missouri West to recover original cost using current depreciation rates will require 49 years assuming no further investment or retirements.

- Q. Why are you taking a position that will ultimately result in a significant increase in revenue requirement in this case?
  - My goal with depreciation rates is to match recovery to the useful life of the assets in each account. My depreciation recommendation will build depreciation reserve more quickly and make up for the account that is currently under accrued. Ultimately, this will reduce the rate base of the utility and reduce the overall return in future cases. In addition, there is 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 has been retired from the systems, the remaining reserve could be reallocated to a similar type asset. In this scenario I would likely recommend steel main accounts for East and West to receive the reallocation of excess reserves.
- 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 530 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

This table shows the remaining miles of cast iron mains reported by Spire Missouri East to PHMSA. However, while cast iron pipe is being reported to PHMSA as being removed, plant in service balances continues to increase for Account 376.2 Mains - Cast Iron. It is likely the same phenomenon is occurring in Spire Missouri West's territory; however, this is the first case were the types are mains are starting to be booked by type instead of in one single mains account where it is much harder to see the cast iron and joint encapsulation issue when plant-in-service and reserves for all main types were previously comingled. The next table shows Spire Missouri West's progress at removing cast iron mains since ISRS was enacted in 2003:

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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

Total Miles of Cast Iron Main

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.

#### **Smart Meter Investment**

- Q. What is OPC's position related to Spire's smart meter investment?
- A. I will discuss part of OPC's concern about the smart meter infrastructure and OPC's position will be further discussed in the direct testimony of Dr. Geoff Marke.
- Q. What is the current level of investment in the current meter infrastructure?
- A. The following numbers are as of September 30, 2020, and are pulled from the direct work papers (excel file name: Rate Base at 9-30-20 MOE MOW Actuals w plant bal detail) provided by Spire to support their case. For Spire Missouri East plant-in-service balances for meters is \$142,036,933.88. Accumulated reserves for meters is \$35,723,733.94. Net plant

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investment equals plant-in-service less accumulated reserves, so Spire East's net plant for meters is \$106,313,199.94.

For Spire Missouri West, the plant-in-service balances for meters is \$ 44,787,909.93 and \$101,396,796.27 for meter installations. Accumulated reserves for meters is \$7,326,309.71 and meter installations is \$46,548,080.05. Thus, the net plant for meters in Spire Missouri West is \$37,461,600.22 and the net plant for meter installations is \$54,856,716.22.

### Q. What depreciation rates should be used for the smart meter investment?

- A. OPC supports the depreciation rates agreed to and ordered from the depreciation authority order case GO-2020-0416. Those rates are reflective of the expected life for the new smart meters. Since the Commission has ordered these rate there is no significant history data to change the rates in this case.
  - 1. 5.0% for Account 381.100 Smart Meters Based on a 20-year service life and no net salvage
  - 2. 5.0% for Account 382.100 Smart Meter Installations Based on a 20-year service life and no net salvage

### Q. What concerns do you have about the smart meter investment for Spire Missouri?

As was laid out in the OPC's response to Staff's recommendation filed in the Depreciation Authority Order Case GO-2020-0416, I have serious concerns related to the capabilities of the replacement smart meters when compared to the current used meters. Attached as Schedule JAR-D-2 is OPC's response. Included in that response are attached data requests with answers provided by Spire in Case No. GO-2020-0416 that confirm the proposed smart meter system 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 AMI meters but does not appear to be able to send signals to the 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

**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 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 AMI technology until the investment in the AMI network and AMI software integration has occurred.

- Q. Does this conclude your direct testimony?
- A. Yes, it does.

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### John A. Robinett

I am employed as a Utility Engineering Specialist for The Missouri Office of the Public Counsel (OPC). I began employment with OPC in August of 2016. In May of 2008, I graduated from the University of Missouri-Rolla (now Missouri University of Science and Technology) with a Bachelor of Science degree in Mechanical Engineering.

During my time as an undergraduate, I was employed as an engineering intern for the Missouri Department of Transportation (MoDOT) in their Central Laboratory located in Jefferson City, Missouri for three consecutive summers. During my time with MoDOT, I performed various qualification tests on materials for the Soil, Aggregate, and General Materials sections. A list of duties and tests performed are below:

- Compressive strength testing of 4" and 6" concrete cylinders and fracture analysis
- Graduations of soil, aggregate, and reflective glass beads
- Sample preparations of soil, aggregate, concrete, and steel
- Flat and elongated testing of aggregate
- Micro-deval and LA testing of aggregate
- Bend testing of welded wire and rebar
- Tensile testing of welded, braided cable, and rebar
- Hardness testing of fasteners (plain black and galvanized washers, nuts, and bolts)
- Proof loading and tensile testing of bolts
- Sample collection from active road constructions sites
- Set up and performed the initial testing on a new piece of equipment called a Linear Traverse / Image Analysis
- Wrote operators manual for the Linear Traverse / Image Analysis Machine
- Trained a fulltime employee on how to operate the machine prior to my return to school
- Assisted in batching concrete mixes for testing, mixing the concrete, slump cone testing, percent air testing, and specimen molding of cylinders and beams

Upon graduation, I accepted a position as an Engineer I in the Product Evaluation Group for Hughes Christensen Company, a division of Baker Hughes, Inc. (Baker), an oil field service company. During my employment with Baker, I performed failure analysis on oil field drill bits as well as composed findings reports which were forwarded to the field engineers in order for them to report to the company the conclusions of the failure causes.

I previously was employed as a Utility Engineering Specialist I, II, III for the Missouri Public Service Commission (Commission). My employment with the Commission spanned from April of 2010 to August of 2016. My duties involved analyzing deprecation rates and studies for utility companies and presenting expert testimony in rate cases before the Commission.

Listed below are the cases in which I have supplied testimony, comments, and/or depreciation rates accompanied by a signed affidavit.

Company	Case Number	Issue	Party
Missouri American Water Company	WR-2020-0344	Rebuttal, Surrebuttal Testimony Depreciation Expense	Office of the Public Counsel (OPC)
Ameren Missouri	EO-2021-0069	IRP Special issues	OPC
Empire District Electric Company	EO-2021-0066	IRP Special issues	OPC
Evergy Missouri West Evergy Missouri Metro	EO-2021-0067 EO-2021-0068	IRP Special issues	OPC
Evergy Missouri West	EO-2020-0281	Integrated Resource Plan Comments	OPC
Evergy Missouri Metro	EO-2020-0280	Integrated Resource Plan Comments	OPC
Spire Missouri	GO-2020-0416	Depreciation Authority Order	OPC
Empire District Electric Company	EO-2020-0284	Integrated Resource Plan Comments	OPC
Spire Missouri East Spire Missouri West	GO-2018-0309 GO-2018-0310	On Remand Direct and Rebuttal Testimony ISRS Refund	OPC
Empire District Electric Company	ER-2019-0374	Direct, Rebuttal, Surrebuttal, and True- up Direct Testimony Depreciation, Operations and Maintenance Expense	OPC
Ameren Missouri	ER-2019-0355	Direct Testimony Depreciation	OPC
Summit Natural Gas of Missouri	GE-2020-0009	Depreciation Study Waiver	OPC
Spire Missouri East Spire Missouri West	GO-2019-0356 GO-2019-0357	Direct and Live Rebuttal Testimony ISRS	OPC
Ameren Missouri Gas Company	GR-2019-0077	Rebuttal Testimony Depreciation and General Plant Amortization	OPC
Spire Missouri East Spire Missouri West	GO-2019-0115 GO-2019-0116	Direct and Live Rebuttal Testimony ISRS	OPC
Empire District Electric Company	EA-2019-0010	Rebuttal, Surrebuttal, and Live Testimony CCN Application	OPC
Kansas City Power & Light Company Greater Missouri Operations	EU-2019-0197 EC-2019-0200	Affidavit for an Accounting Order for plant retirement	OPC
Ameren Missouri	EA-2018-0202	Surrebuttal Testimony Depreciation Life	OPC
Spire Missouri East Spire Missouri West	GO-2018-0309 GO-2018-0310	Direct and Live Rebuttal Testimony ISRS	OPC
Kansas City Power & Light Company	ER-2018-0145	Direct and Rebuttal, Surrebuttal, and True-up direct Testimony, Depreciation and O&M expense related to retired generation units, ONE CIS Allocation	OPC
Kansas City Power & Light Company Greater Missouri Operations	ER-2018-0146	Direct and Rebuttal, Surrebuttal, and True-up direct Testimony, Depreciation and O&M expense related to retired generation units, ONE CIS Allocation, Removal of Additional Amortization	OPC
Empire District Electric Company	EO-2018-0092	Rebuttal, Surrebuttal, Affidavit in Opposition, additional Affidavit and Live Testimony	OPC

Page 2 of 5 Schedule JAR-D-1

Company	Case Number	Issue	Party
Liberty Utilities (Midstates Natural Gas) Corp. d/b/a Liberty Utilities	GR-2018-0013	Rebuttal and Surrebuttal Testimony depreciation, general plant amortization	OPC
Laclede Gas Company Missouri Gas Energy Spire Missouri East Spire Missouri West	GO-2016-0332 GO-2016-0333 GO-2017-0201 GO-2017-0202 GR-2017-0215 GR-2017-0216	ISRS Over collection of depreciation expense and ROE based on Western District Opinion Docket No. WD80544	OPC
Gascony Water Company, Inc.	WR-2017-0343	Rebuttal, Surrebuttal, and Live Testimony rate base, depreciation NARUC USoA Class designation	OPC
Missouri American Water Company	WR-2017-0285	Direct, Rebuttal, Surrebuttal, and Live Testimony depreciation, ami, negative reserve, Lead Line	OPC
Indian Hills Utility Operating Company, Inc.	WR-2017-0259	Direct, Rebuttal, Surrebuttal, and Live Testimony Rate Base (extension of electric service, leak repairs)	OPC
Laclede Gas Company Missouri Gas Energy	GR-2017-0215 GR-2017-0216	Direct, Rebuttal, Surrebuttal, True-up Rebuttal, and Live Testimony depreciation, retirement work in progress, combined heat and power, ISRS	ОРС
Empire District Electric Company	EO-2018-0048	IRP Special issues	OPC
Kansas City Power & Light Company	EO-2018-0046	IRP Special issues	OPC
Kansas City Power & Light Company Greater Missouri Operations	EO-2018-0045	IRP Special issues	OPC
Kansas City Power & Light Company Greater Missouri Operations	EO-2017-0230	2017 IRP annual update comments	OPC
Empire District Electric Company	EO-2017-0065	Direct, Rebuttal, Surrebuttal, and Live Testimony FAC Prudence Review Heat Rate	OPC
Ameren Missouri	ER-2016-0179	Direct, Rebuttal, Testimony Heat Rate Testing &Depreciation	OPC
Kansas City Power & Light Company	ER-2016-0285	Direct, Rebuttal, Surrebuttal, and Live Testimony Heat Rate Testing &Depreciation	OPC
Empire District Electric Company Merger with Liberty	EM-2016-0213	Rebuttal Testimony	Missouri Public Service Commission (MOPSC)
Empire District Electric Company	ER-2016-0023	Depreciation Study, Direct, Rebuttal, and Surrebuttal Testimony	MOPSC
Hillcrest Utility Operating Company, Inc.	SR-2016-0065	Depreciation Review	MOPSC
Hillcrest Utility Operating Company, Inc.	WR-2016-0064	Depreciation Review	MOPSC
Missouri American Water Company	WR-2015-0301	Depreciation Study, Direct, Rebuttal, and Surrebuttal Testimony	MOPSC

Page 3 of 5 Schedule JAR-D-1

Company	Case Number	Issue	Party
Bilyeu Ridge Water Company, LLC Midland Water Company, Inc. Moore Bend Water Utility, LLC Riverfork Water Company Taney County Water, LLC Valley Woods Utility, LLC(Water) Valley Woods Utility, LLC(Sewer) Consolidated into Ozark International, Inc.	WR-2015-0192 WR-2015-0193 WR-2015-0194 WR-2015-0195 WR-2015-0196 WR-2015-0197 SR-2015-0198 Consolidated into WR-2015-0192	Depreciation Review  *filed depreciation rates not accompanied by signed affidavit	MOPSC
I. H. Utilities, Inc. sale to Indian Hills Utility Operating Company, Inc.	WO-2016-0045	Depreciation Rate Adoption CCN	MOPSC
Missouri American Water Company CCN City of Arnold	SA-2015-0150	Depreciation Rate Adoption CCN	MOPSC
Empire District Electric Company	ER-2014-0351	Direct, Rebuttal, and Surrebuttal Testimony	MOPSC
West 16th Street Sewer Company, W.P.C. Sewer Company, Village Water and Sewer Company, Inc. and Raccoon Creek Utility Operating Company, Inc.	SM-2015-0014	Depreciation Rate Adoption	MOPSC
Brandco Investments LLC and Hillcrest Utility Operating Company, Inc.	WO-2014-0340	Depreciation Rate Adoption, Rebuttal Testimony	MOPSC
Liberty Utilities (Midstates Natural Gas) Corp. d/b/a Liberty Utilities	GR-2014-0152	Direct, Rebuttal, Surrebuttal and Live Testimony	MOPSC
Summit Natural Gas of Missouri, Inc	GR-2014-0086	Depreciation Study, Direct and Rebuttal Testimony	MOPSC
P.C.B., Inc.	SR-2014-0068	Depreciation Review	MOPSC
M.P.B., Inc.	SR-2014-0067	Depreciation Review	MOPSC
Roy-L Utilities	WR-2013-0543	Depreciation Review	MOPSC
Roy-L Utilities	SR-2013-0544	Depreciation Review	MOPSC
Missouri Gas Energy Division of Laclede Gas Company	GR-2014-0007	Depreciation Study, Direct and Rebuttal Testimony	MOPSC
Central Rivers Wastewater Utility, Inc.	SA-2014-00005	Depreciation Rate Adoption	MOPSC
Empire District Electric Company	ER-2012-0345	Depreciation Study, Direct, Rebuttal, and Surrebuttal Testimony	MOPSC
Empire District Electric Company	WR-2012-0300	Depreciation Review	MOPSC
Laclede Gas Company	GO-2012-0363	Depreciation Authority Order Rebuttal, Surrebuttal and Live Testimony	MOPSC
Moore Bend Water Company, Inc. sale to Moore Bend Water Utility, LLC (Water)	WM-2012-0335	Depreciation Rate Adoption	MOPSC
Oakbrier Water Company, Inc.	WR-2012-0267	Depreciation Review	MOPSC
Lakeland Heights Water Co., Inc.	WR-2012-0266	Depreciation Review	MOPSC
R.D. Sewer Co., L.L.C.	SR-2012-0263	Depreciation Review	MOPSC

Page 4 of 5 Schedule JAR-D-1

Company	Case Number	Issue	Party
Canyon Treatment Facility, LLC	SA-2010-0219	Depreciation Rate Adoption- CCN	MOPSC
Taney County Water, LLC	WR-2012-0163	Depreciation Review	MOPSC
Sale of Saddlebrooke Water and Sewer Infrastructure, LLC to Missouri American Water Company (Sewer)	SA-2012-0067	Rebuttal Testimony	MOPSC
Sale of Saddlebrooke Water and Sewer Infrastructure, LLC to Missouri American Water Company (Water)	WA-2012-0066	Rebuttal Testimony	MOPSC
Midland Water Company, Inc.	WR-2012-0031	Depreciation Review	MOPSC
Sale of KMB Utility Corporation to Algonquin Water Resources of Missouri, LLC, d/b/a Liberty Water (Sewer)	SO-2011-0351	Depreciation Rate Adoption	MOPSC
Sale of KMB Utility Corporation to Algonquin Water Resources of Missouri, LLC, d/b/a Liberty Water (Water)	WO-2011-0350	Depreciation Rate Adoption	MOPSC
Sale of Noel Water Company, Inc. to Algonquin Water Resources of Missouri, LLC, d/b/a Liberty Water (Water)	WO-2011-0328	Depreciation Rate Adoption	MOPSC
Sale of Taney County Utilities Corporation to Taney County Water, LLC (Water)	WM-2011-0143	Depreciation Rate Adoption	MOPSC
Empire District Electric Company	ER-2011-0004	Depreciation Study, Direct, Rebuttal, and Surrebuttal Testimony	MOPSC
Rex Deffenderfer Enterprises, Inc.	WR-2011-0056	Depreciation Review	MOPSC
Tri-States Utility, Inc	WR-2011-0037	Depreciation Review	MOPSC
Southern Missouri Gas Company, L.P.	GE-2011-0096	Depreciation Study Waiver	MOPSC
Southern Missouri Gas Company, L.P.	GR-2010-0347	Depreciation Review	MOPSC
KMB Utility Corporation (Sewer)	SR-2010-0346	Depreciation Review	MOPSC
KMB Utility Corporation (Water)	WR-2010-0345	Depreciation Review	MOPSC
Middlefork Water Company	WR-2010-0309	Depreciation Review	MOPSC

Page 5 of 5 Schedule JAR-D-1

# BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the Matter of Spire Missouri Inc.'s  Verified Application for Issuance of a  Depreciation Authority Order Related  to Smart Meter Devices	Case No. GO-2020-0416
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#### RESPONSE TO STAFF RECOMMENDATION

**COMES NOW** the Office of the Public Counsel ("OPC") and for its *Response to Staff Recommendation*, states as follows:

- 1. On June 25, 2020, Spire Missouri Inc. ("Spire") filed an application before this Commission seeking a depreciation authority order to establish annual depreciation rates for the plant accounts related to its new smart meter devices: Account 381.100 Smart Meters and Account 382.100 Smart Meters Installation.
- 2. Spire requested the Commission approve a 5% depreciation rate for each account based on a 20 year service life with no net salvage value.
- 3. On August 27, 2020, the Staff of the Commission ("Staff") filed its *Recommendation*, which recommended the Commission approve Spire's application and issue the depreciation authority order as requested.
- 4. The OPC does not oppose the depreciation rates for accounts 381.100 and 382.100 as proposed by Spire and recommended by Staff.
- 5. However, the OPC does hold serious concerns regarding the prudency of the smart meter investments for which Spire is seeking this depreciation authority

order. A memorandum outlining the nature of those concerns has been included as

Attachment A.

6. The OPC recognizes that this depreciation authority order request

docket is not the proper venue to challenge the prudency of Spire's investments

(which is a matter to be decided in Spire's next general rate case), but has chosen to

nevertheless raise its concerns here first to put Spire and all other stakeholders on

notice of the problems the OPC perceives with these investments and second to

ensure the OPC's decision not to challenge this depreciation authority order is not

taken as an admission of the prudency of these investments.

7. However, to reiterate, the OPC is not challenging the actual

depreciation rates for accounts 381.100 and 382.100 as proposed by Spire and

recommended by Staff and is not asking for a hearing in this case.

WHEREFORE, the Office of the Public Counsel respectfully requests the

Commission accept this response to Staff's Recommendation and grant such other

relief as it deems just.

Respectfully submitted,

/s/ John Clizer

John Clizer (#69043)

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## CERTIFICATE OF SERVICE

I hereby certify that copies of the forgoing have been mailed, emailed, or
hand-delivered to all counsel of record this twenty-eighth day of August,
2020.

/s/ John Clizer
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#### Attachment A

#### **MEMORANDUM**

To: Missouri Public Service Commission Official Case File,

Case No. GO-2020-0416

From: Geoff Marke, Chief Economist

Missouri Office of the Public Counsel

John Robinett, Engineering Specialist Missouri Office of the Public Counsel

Subject: Notice of prudency concerns regarding natural gas Advanced Metering

Infrastructure ("AMI") investment

Date: August 28, 2020

**Background:** On June 25, 2020, Spire Missouri Inc. ("Spire Missouri" or "Company") filed an Application with the Missouri Public Service Commission ("Commission") requesting the Commission issue a Depreciation Authority Order ("DAO") assigning new annual depreciation rates for two of the Company's plant accounts for the depreciation of the Company's smart meter devices. These new depreciation rates are as follows:

- 1. 5.0% for Account 381.100 Smart Meters Based on a 20-year service life and no net salvage
- 2. 5.0% for Account 382.100 Smart Meter Installations Based on a 20-year service life and no net salvage

Approximately two months later, Staff submitted a two-page analysis in which it agreed with the Company in total. The purpose of this memorandum is not to raise any concerns about the specific request Spire has made or challenge the proposed depreciation rates. Instead, OPC's memorandum raises the larger question of why such rates are even being considered in the first place.

<u>Functionality Concern:</u> OPC would like the Commission to be aware that, while it does not have a concern with the depreciation lives and rates of these new smart meters, at this current time the meters will function no differently than the Company's current meters. Attached to this memorandum are Spire's responses to the OPC's data requests 8509, 8510 and 8511. OPC points

#### **Attachment A**

out that the two-way capability of these new smart meters will not be possible without the investment in a network as described by Spire in response to OPC data request 8509. Further, Spire's response states that "[t]he current estimate for Spire Missouri West is that [the network investments] will be completed over the next several years." Data request 8511, meanwhile, indicates that Spire's current software packages can read the meters just as the AMR system functions now. Therefore, it will take several years before customers will see the benefits, if any, arising from these new smart meters. Until then, these smart meters will be functionally identical to the existing ones.

Pre-Investment Prudency Concern: OPC would like the Commission to be aware, prior to the Company's large capital investment, that it does not believe AMI capital costs are a prudent use of ratepayer dollars. To date there are two utilities (Evergy Missouri Metro and Evergy Missouri West) in Missouri with utility-wide AMI investment. AMI deployment for these two electric utilities began in 4<sup>th</sup> quarter of 2010 with 1,000 remaining AMI meter exchanges scheduled to be complete by the end of the 3<sup>rd</sup> Quarter of 2020. An almost decade-long deployment schedule. During that time, customers have gradually paid a return on and of that investment through an inflated rate base driven by both \$100s of millions of dollars in hardware (AMI) and software (billing system). Despite increased shareholder earnings, there have been no Time-of-Use Rates for customers to utilize in order to take advantage of that AMI hardware. Moreover, due to Plantin-Service Accounting adoption, there will be no opportunities for consumer advocates to propose tariff changes for a Time-of-Use offering for some time. In short, the benefits produced by this AMI deployment have entirely fallen on the utility-side of the regulatory compact.

In Case Nos. GO-2020-0416, Spire East and Spire West have requested new annual depreciation rates for "smart meter devices." It is unclear what "smart meter devices" constitute, as OPC's discovery regarding Spire's pending capital investments were objected to over relevance, but the OPC is operating under the assumption that these smart meters are functionally identical to AMI meters. Regardless, Smart Meter infrastructure can be a serious capital investment undertaken by a utility. To date, any benefits customers have realized from Evergy Metro and Evergy West's investments in AMI are dwarfed by the increased costs those customers have had to shoulder. Perhaps most perplexing about Spire's presumably near-term decision to add "smart meter

#### Attachment A

devices" to its rate base is what benefits its customers could actually experience. On the electric side, TOU rates are theoretically utilized to incentivize customers to consume energy during times when the cost of generating electricity is cheap, and to disincentive energy consumption when the cost of generating electricity is high. No such option exists with a natural gas utility. So what do customers get? This question is put forward now in the hope that Spire East/West will engage stakeholders as to the rationale behind their potential investment.

A recent white paper from the American Council for an Energy-Efficient Economy ("ACEEE") titled "Leveraging Advanced Metering Infrastructure to Save Energy" concludes the value-statement for AMI is questionable at best because utilities do not choose to maximize the benefits available from AMI. In 2019, regulators in Virginia rejected Dominion Energy's proposed smart meter rollout, and utility commissions in New Mexico, Massachusetts and Kentucky all rejected utility proposals. Based on those recent results, it would appear unwise to automatically assume AMI would be a prudent investment. When the seemingly most beneficial gain to be obtained from AMI is not even possible because you're a natural gas utility, the logic of investing millions of dollars is suspect at best.

Conclusion: OPC hopes that Spire will do the proper analysis before making its investments and provide the empirical and objective justifications prior to seeking recovery. It is much more of a challenge for everyone involved and a greater risk to shareholders and ratepayers alike to raise prudency issues on an investment that is already operational. Missouri is not a pre-approval state, however, and OPC is not requesting any prudency disallowance for Spire's investments at this time. This memorandum merely serves as a placeholder to put Spire on notice that its planned capital investments raise considerable concern for OPC, as we are highly skeptical that such an investment would be deemed prudent by a reasonable person.

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<sup>&</sup>lt;sup>1</sup> York, D. (2020) Smart meters gain popularity, but most utilities don't optimize their potential to save energy. *ACEEE* <a href="https://acee.org/blog/2020/01/smart-meters-gain-popularity-most">https://acee.org/blog/2020/01/smart-meters-gain-popularity-most</a>

<sup>&</sup>lt;sup>2</sup> Walton R. (2020) Most utilities aren't getting full value from smart meters, report warns. *Utilitydive*. <a href="https://www.utilitydive.com/news/most-utilities-arent-getting-full-value-from-smart-meters-report-warns/570249/">https://www.utilitydive.com/news/most-utilities-arent-getting-full-value-from-smart-meters-report-warns/570249/</a>

# BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the Matter of Spire Missouri Inc.'s Verified	)	
Application for Issuance of a Depreciation	)	Case No. GO-2020-0416
Authority Order Related to Smart Meters Devices	)	
	)	

# RESPONSE OF SPIRE MISSOURI TO THE OFFICE OF PUBLIC COUNSEL'S DATA REQUESTS 8500 - 8523

On July 8, 2020, the Office of Public Counsel submitted 24 data requests to Spire Missouri: 8500 through 8523. On July 13, 2020, Spire Missouri submitted its objections to the OPC regarding DRS 8500 through 8509 and 8511 through 8523. On July 20, the OPC responded that they will concede to Spire Missouri's objections except as to DRS 8509 and 8511. Without waiving its previously submitted objections, Spire Missouri provides the following responses attached and below to OPC DRS 8509, 8510, and 8511. Spire Missouri has never objected to responding to OPC DR 8510.

#### **RESPONSES**

<u>DR8509</u> - Will Spire need additional investment beyond the meters themselves? If yes please provide a description of the assets needed and a rough cost estimate and timeframe for expenditures.

**Response:** The AMI system is comprised of two components: the meters and the network. The meters send and receive data and commands from a network canopy of collectors. The network assets will be installed throughout our distribution territory. The network assets will be primarily comprised of network routers mounted at designed locations and heights. In some cases, this will require a tower or pole that is installed and will always require a power feed. The actual timeline and expenditure will be confirmed as the detailed design of the system is completed. The current estimate for Spire Missouri West is that this will be completed over the next several years with an overall expense of approximately \$5M to \$8M.

<u>DR8510</u> - Please provide the brand and model information for the proposed AMI meter infrastructure. Additionally please provide any technical specifications or resources that indicate internal battery life expectancy.

**Response**: Please see Attachment OPC DR 8510-1 and Attachment OPC DR 8510-2 for the Itron Intelis Smart Meter and Itron 500G Ert technical information sheets.

<u>DR8511</u> - 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 Spire customers. The AMI meter equipment can be read by the Company's current system until the AMI network and network software are deployed.

# BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the Matter of Spire Missouri Inc.'s	)	
Verified Application for Issuance of a	)	Case No. GO-2020-0416
Depreciation	)	

### **VERIFICATION OF GEOFF MARKE**

Geoff Marke, under penalty of perjury, states:

- 1. Attached hereto and made a part hereof for all purposes is my memorandum in the above-captioned case.
- 2. The information in the attached memorandum is true and correct to the best of my knowledge, information, and belief.

Geoff Marke

Chief Economist

Office of the Public Counsel

# BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the Matter of Spire Missouri Inc.'s	)	6
Verified Application for Issuance of a	)	Case No. GO-2020-0416
Depreciation	)	

### **VERIFICATION OF JOHN A. ROBINETT**

John A. Robinett, under penalty of perjury, states:

- 1. Attached hereto and made a part hereof for all purposes is my memorandum in the above-captioned case.
- 2. The information in the attached memorandum is true and correct to the best of my knowledge, information, and belief.

John A. Robinett

Utility Engineering Specialist

Office of the Public Counsel