Exhibit No.:

Issue: ISRS Rates

Witness: David M. Sommerer

Sponsoring Party: MoPSC Staff
Type of Exhibit: Direct Testimony

Case No.: GO-2018-0310

Date Testimony Prepared: August 22, 2018

# MISSOURI PUBLIC SERVICE COMMISSION COMMISSION STAFF DIVISION PROCUREMENT ANALYSIS

**DIRECT TESTIMONY** 

**OF** 

**DAVID M. SOMMERER** 

SPIRE MISSOURI, INC. - (WEST)

CASE NO. GO-2018-0310

Jefferson City, Missouri August 22, 2018

#### 1 DIRECT TESTIMONY 2 **OF** 3 DAVID M. SOMMERER 4 **SPIRE MISSOURI, INC. (Spire West)** 5 CASE NO. GO-2018-0310 6 Q. Please state your name and business address. 7 A. David M. Sommerer, P.O. Box 360, Jefferson City, MO. 65102. 8 Q. By whom are you employed and in what capacity? 9 I am employed by the Missouri Public Service Commission ("Commission") as A. 10 the Manager of the Procurement Analysis Department, which, among other duties, is responsible 11 for part of the Staff's recommendation in natural gas ISRS cases. 12 Q. Please describe your education, background, and work experience. 13 A. Please see Schedule DMS-d1, for my education, background, and work 14 experience, attached to my testimony. Have you previously filed testimony before this Commission? 15 Q. 16 A. Yes. Please see Schedule DMS-d1, for a list of cases and the issues I have 17 addressed in testimony, attached to my testimony. **EXECUTIVE SUMMARY** 18 19 Q. What is the purpose of your direct testimony? 20 A. My direct testimony will explain that Staff continues to support its 21 recommendation (a copy of which is attached as Schedule DMS-d2), as updated and corrected, 22 that addressed the Infrastructure System Replacement Surcharge ("ISRS") application filed by

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Spire Missouri, Inc. ("Company") in Case No. GO-2018-0310. Staff witnesses Kimberly K. Bolin and Ali Arabian are also addressing the ISRS application. Staff witness Caroline Newkirk will address the ISRS application filed by Spire Missouri for its Spire East Service Territory in Case No. GO-2018-0309.

- Q. Are you the same David Sommerer who contributed to the Memorandum attached as Appendix A and Appendix B of the Staff Recommendation filed in Case No. GO-2018-0310?
  - A. Yes.
- Q. Is the information contained in the Staff Recommendation still true and accurate to the best of your knowledge?
- A. Yes, as updated below and by certain adjustments sponsored by the Staff Auditing Section.

#### STAFF RATE DESIGN FOR THE GAS ISRS

- Q Please describe Staff's proposed rate design.
- A. Staff's proposed rates are consistent with the methodology used to establish the Company's past ISRS rates and consistent with the overall methodology used to establish ISRS rates for Missouri's other natural gas utilities. Staff originally proposed the ISRS rates contained in Appendix B of the Staff Memorandum, filed on August 6, 2018, and attached to my testimony as Schedule DMS–d2. Staff used the billing determinants from the most recent Spire West rate case (Case No. GR-2017-0216) to provide the basis of the rate design, which was prepared under my supervision.

 Q. Have you updated the rate design schedule for this testimony?

A. Yes. The updated rate design schedule is attached to my testimony as Schedule DMS-d3.

- Q. Can you provide more detail about what has changed for the Appendix B rate design (now Schedule DMS-d3) since the Staff memorandum was filed?
- A. The revenue requirement that serves as the basis of the rate design has been updated for certain tax adjustments further discussed in Staff witness Ali Arabian's testimony. Consistent with the Staff memorandum filed in this case, it includes an adjustment for any replaced plastic mains and services related to this current ISRS filing. This is addressed in Kimberly K. Bolin's testimony. I have updated the original rate design in a revised schedule, designated as Schedule DMS-d3 to address these adjustments.
- Q. Does Schedule DMS-d3 also include the proposed staff adjustment related to the remanded cases (Case Nos. GO-2016-0332; GO-2016-0333; GO-2017-0201; and GO-2017-0202) for plastic mains and services?
- A. Yes. The proposed remand adjustment has been used as an offset to Staff's recommended revenue requirement in the current ISRS cases (Case No. GO-2018-0310 and Case No. GO-2018-0309). The effect of this adjustment is to include the credit recommended in the remanded cases as part of the current rate calculation. Since the rate design calculation assumes the rates will be in effect for an annual period, the same duration of the remand credit is assumed for purposes of returning the remand refund to the customer classes. Any over or under recovery can be addressed in a subsequent ISRS reconciliation.

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## **Quantifying the Appropriate Adjustment**

- What is the purpose of this section of your testimony? Q.
- A. My testimony in this section is to support Staff witness Kimberly K. Bolin's percentage approach used to quantify the adjustment related to the replacement of plastic. In summary, the Company has provided Staff with limited information when asked for detailed plans regarding the "systematic" approach to pipeline replacement. A more sophisticated approach to allocating plastic out of the ISRS calculation would require extensive "before and after" design information from Spire Missouri that might explain the differences in the old and new systems.
  - Has the Staff ever asked for master planning documents for Spire West? Q.
- A. Yes. I found at least two instances where Staff submitted data requests in ISRS cases related to Spire West's master planning documents. In Missouri Gas Energy Case No. GO-2016-0197, Staff Data Request No. 0001 the Company provided a slide presentation from 2015 but in the Case of Spire West did in fact include additional summary material with the slide presentation. In the current case (GO-2018-0310) in Staff Data Request No. 0001, the Company provided a more detailed 2018 "summary" slide presentation, in addition to a one page map.
- Q. Why is it critical for the Company to provide comprehensive and detailed planning documents with regard to their replacement strategy?
- A. Detailed "before and after" design schematics and planning narratives could shed additional light on the complexity of a program that has so many facets. In light of the Court of Appeal's decision to re-examine ISRS eligibility based on the terms "worn out" and "deteriorated condition" as they relate to plastic mains and services, detailed plans might explain why the older bare steel system and the Spire West looped systems use different lengths of pipe.

Q. Do you believe the information provided in the response to DR 0001 in this case, and the previous information provided in GO-2016-0197, is sufficient to explain important aspects of why the distribution system being replaced differs in design and function from the newly constructed distribution system?

- A. No. The provided "plans" are high level overviews, essentially in a slide presentation format.
- Q. Do high level overviews provide enough context and detail to assist in developing a full understanding on why certain lengths of main are being retired while other differing lengths of new main are being used or placed in new locations or under a new design?
- A. No. Had sufficient detailed plans been provided, a more accurate or more comprehensive plastic adjustment may have been available. This really is not an option without a significant amount more background on the existing distribution system design as compared to the new construction.
- Q. Can you provide a situation related to Spire West that illustrates why this case is complex from a technical or operational standpoint?
- A. Yes. Prior to 2015, the Company's approach was not the extensive redesign discussed in recently provided 2018 documentation.

It is not totally clear when new main is being added to facilitate new interstate pipeline take-points versus having some additional purpose of replacing part of the existing "worn out" system.

Q. Why did Staff's position change regarding the inclusion or exclusion of plastic mains and services?

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- A. Previously Staff took the approach that plastic replacements were indeed incidental to the replacement of the entire cast iron system. However, although I am not an attorney, my understanding of the Court of Appeal's direction is to establish instances where plastic mains and services were not worn out or deteriorated. Upon identifying those situations, the ISRS would then need to be reduced by those replacement costs.
  - Q. Does this conclude your direct testimony?
  - A. Yes, it does.

#### OF THE STATE OF MISSOURI

In the Matter of the Application of Spire Missouri Inc. to Establish an Infrastructure System Replacement Surcharge in its Spire Missouri West Service Territory	) Case No. GO-2018-0310 )
AFFIDAVIT OF I	DAVID M. SOMMERER
STATE OF MISSOURI )	
COUNTY OF COLE ) ss.	
COMES NOW DAVID M. SOMMEDI	
COMES NOW DAVID M. SOMMERI	ER and on his oath declares that he is of sound mind
and lawful age; that he contributed to the fo	regoing Direct Testimony; and that the same is true
and correct according to his best knowledge	and belief.

#### **JURAT**

Subscribed and sworn before me, a duly constituted and authorized Notary Public, in and for August, 2018.

D. SUZIE MANKIN
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: December 12, 2020
Commission Number: 12412070

Further the Affiant sayeth not.

In the Matter of the Application of Spire

#### David M. Sommerer

#### **Educational Background and Work Experience**

In May 1983, I received a Bachelor of Science degree in Business and Administration with a major in Accounting from Southern Illinois University at Carbondale, Illinois. In May 1984, I received a Master of Accountancy degree from the same university. Also, in May 1984, I sat for and passed the Uniform Certified Public Accountants examination. I am currently a licensed CPA in Missouri. Upon graduation, I accepted employment with the Commission.

From 1984 to 1990 I assisted with audits and examinations of the books and records of public utilities operating within the state of Missouri. In 1988, the responsibility for conducting the Actual Cost Adjustment (ACA) audits of natural gas utilities was given to the Accounting Department. I assumed responsibility for planning and implementing these audits and trained available Staff on the requirements and conduct of the audits. I participated in most of the ACA audits from early 1988 to early 1990. On November 1, 1990, I transferred to the Commission's Energy Department, Until November of 1993, my duties consisted of reviews of various tariff proposals by electric and gas utilities, Purchased Gas Adjustment (PGA) reviews, and tariff reviews as part of a rate case. In November of 1993, I assumed my present duties of managing a newly created department called the Procurement Analysis Department. This Department was created to more fully address the emerging changes in the gas industry especially as they impacted the utilities' recovery of gas costs. My duties have included managing the Procurement Analysis staff, reviewing ACA audits and recommendations, participating in the gas integrated resource planning project, serving on the gas project team, serving on the natural gas commodity price task force, and participating in matters relating to natural gas service in the state of Missouri. In July of 2006, the Federal Issues/Policy Analysis Section was transferred to the Procurement Analysis Department. That group analyzes filings made before the Federal Energy Regulatory Commission (FERC). During the reorganization in August 2011, the Federal Issues/Policy Analysis Section was transferred to the Secretary/ General Counsel Division. In 2015, I assumed the responsibility for the rate design aspects of the Gas Infrastructure System Replacement Surcharge (ISRS) process. The Gas ISRS allows for a more expedited process of including eligible pipeline replacements in rates prior to general rate cases.

# **CASES WHERE TESTIMONY**

# WAS FILED

## DAVID M. SOMMERER

COMPANY	CASE NO.	ISSUES	
Missouri Gas Energy	GR-2017-0216	Gas Inventory Carrying Cost and Service Agreements	
Laclede Gas Company	GR-2017-0215	Gas Inventory Carrying Cost and Service Agreements	
Laclede Gas Company	GO-2016-0333	ISRS rates	
Missouri Gas Energy	GO-2016-0332	ISRS rates	
Laclede Gas Company (MGE)	GO-2016-0197	ISRS rates	
Laclede Gas Company	GO-2016-0196	ISRS rates	
Liberty Utilities (Midstates Natural Gas) Corp d/b/a Liberty Utilities	GR-2014-0152	Special Contact Customers Gas Contract	
Missouri Gas Energy	GR-2014-0007	Gas Supply Incentive Plan Property Tax PGA Recovery	
Laclede Gas Company	GR-2010-0171	Bad Debt in PGA, CAM	
Atmos Energy Corporation	GR-2009-0417	Affiliated Transactions	
Atmos Energy Corporation	GR-2008-0364	Affiliated Transactions	
Missouri Gas Energy	GR-2009-0355	PGA tariff	
Laclede Gas Company	GT-2009-0026	Tariff Proposal, ACA Process	
Missouri Gas Utility	GR-2008-0060	Carrying Costs	
Laclede Gas Company	GR-2007-0208	Gas Supply Incentive Plan, Off-system Sales, Capacity Release	
Laclede Gas Company	GR-2005-0284	Off-System Sales/GSIP	
Laclede Gas Company	GR-2004-0273	Demand Charges	
AmerenUE	EO-2004-0108	Transfer of Gas Services	
Aquila, Inc.	EF-2003-0465	PGA Process, Deferred Gas Cost	

# cont'd David M. Sommerer

COMPANY	CASE NO. ISSUES		
Missouri Gas Energy	GM-2003-0238	Pipeline Discounts, Gas Supply	
Laclede Gas Company	GT-2003-0117	Low-Income Program	
Laclede Gas Company	GR-2002-356	Inventory, Off-System Sales	
Laclede Gas Company	GR-2001-629	Inventory, Off-System Sales	
Laclede Gas Company	GR-2001-387	ACA Price Stabilization	
Missouri Gas Energy	GR-2001-382	ACA Hedging/Capacity Release	
Laclede Gas Company	GT-2001-329	Incentive Plan	
Laclede Gas Company	GO-2000-394	Price Stabilization	
Laclede Gas Company	GT-99-303	Incentive Plan	
Laclede Gas Company	GC-99-121	Complaint PGA	
Laclede Gas Company	GR-98-297	ACA Gas Cost	
Laclede Gas Company	GO-98-484	Price Stabilization	
Laclede Gas Company	GR-98-374	PGA Clause	
Missouri Gas Energy	GC-98-335	Complaint Gas Costs	
United Cities Gas Company	GO-97-410	PGA Clause	
Missouri Gas Energy	GO-97-409	PGA Clause	
Missouri Gas Energy	GR-96-450	ACA Gas Costs	
Missouri Public Service	GA-95-216	Cost of Gas	
Missouri Gas Energy	GO-94-318	Incentive Plan	
Western Resources Inc.	GR-93-240	PGA tariff, Billing Adjustments	
Union Electric Company	GR-93-106	ACA Gas Costs	
United Cities Gas Company	GR-93-47	PGA tariff, Billing Adjustments	
Laclede Gas Company	GR-92-165	PGA tariff	
United Cities Gas Company	GR-91-249	PGA tariff	
United Cities Gas Company	GR-90-233	PGA tariff	
Associated Natural Gas Company	GR-90-152	Payroll	

# cont'd David M. Sommerer

COMPANY	CASE NO.	ISSUES	
KPL Gas Service Company	GR-90-50	Service Line Replacement	
KPL Gas Service Company	GR-90-16	ACA Gas Costs	
KPL Gas Service Company	GR-89-48	ACA Gas Costs	
Great River Gas Company	GM-87-65	Lease Application	
Grand River Mutual Tel. Company	TR-87-25	Plant, Revenues	
Empire District Electric Company	WR-86-151	Revenues	
Associated Natural Gas Company	GR-86-86	Revenues, Gas Cost	
Grand River Mutual Telephone	TR-85-242	Cash Working Capital	
Great River Gas Company	GR-85-136	Payroll, Working Capital	
Missouri-American Water Company	WR-85-16	Payroll	

#### MEMORANDUM

**TO:** Missouri Public Service Commission Official Case File

Case No. GO-2018-0310 - Tariff Tracking No. YG-2018-0164

Spire Missouri Inc.-West

**FROM:** Ali Arabian, Regulatory Auditor, Auditing Department

Kimberly K. Bolin, Regulatory Auditor, Auditing Department Michael J. Ensrud, Rate & Tariff Examiner, Procurement Analysis

/s/ Mark L. Oligschlaeger 08/06/18

Auditing Department / Date

/s/ David M. Sommerer 08/06/18 /s/ Jeffrey A. Keevil 08/06/18
Commission Staff Division / Date Staff Counsel's Office / Date

SUBJECT: Staff Report and Recommendation Regarding the Verified Application and

Petition of Spire Missouri Inc. to Establish an Infrastructure System Replacement

Surcharge for its Spire Missouri West Service Territory

**DATE:** August 6, 2018

#### **BACKGROUND**

On June 7, 2018, Spire Missouri Inc. ("Spire West" or "Company") filed the "Verified Application and Petition of Spire Missouri Inc. to Establish an Infrastructure System Replacement Surcharge for its Spire Missouri West Service Territory" with the Missouri Public Service Commission ("Commission"). The Application proposes to increase Spire West's Infrastructure System Replacement Surcharge (ISRS) rates and implement a revised Tariff Sheet with a proposed effective date of July 7, 2018.

Spire West made its filing pursuant to Sections 393.1009, 393.1012 and 393.1015 of the Revised Statutes of Missouri and Commission Rules 4 CSR 240-2.060, 2.080, and 3.265, which allow Missouri natural gas corporations to file a petition and proposed rate schedule with the Commission to recover certain infrastructure system replacement costs outside a formal rate case, through a surcharge on customers' bills.

Spire West requested ISRS recovery for plant from October 1, 2017 through April 30, 2018, with pro forma ISRS costs updated through June 30, 2018.

Spire West requested an increase in ISRS revenue requirement in the amount of \$7,085,762 in this ISRS filing.

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#### **RELEVANT HISTORY**

On April 30, 2018, Spire West filed "Spire Missouri Inc.'s Request for Waiver of Rule 4 CSR 4.017(1) For ISRS Case Filings, Or in The Alternative, Notice of Intended Case Filing".

On May 14, 2018, the Office of the Public Counsel filed a "Motion to Late File and Motion to reject Spire Missouri Inc.'s Request for Waiver of Rule 4 CSR 240.017(1) for ISRS Case Filings or Motion to Reject Sua Sponte".

On May 24, 2018, the Commission issued an "Order Granting Requests for Waiver".

On June 7, 2018, Spire West filed the "Verified Application and Petition of Spire Missouri Inc. to Establish an Infrastructure System Replacement Surcharge for its Spire Missouri West Service Territory".

On June 8, 2018, the Commission issued an "Order Directing Notice, Setting Intervention Deadline, and Directing Filing". The deadline for Staff's recommendation memo is August 6, 2018.

In a separate order – issued on the same day - the Commission issued an "Order Suspending Tariffs" until October 5, 2018.

On June 27, 2018, Spire West filed "Request for Approval of Customer Notices and Bills" and supplied copies of the new language of various notices and bills.

On July 10, 2018, the Commission issued its "Order Approving Customer Notice" that approved the customer notices and bills that was filed on June 27, 2018.

#### STAFF REVIEW AND REVENUE CALCULATIONS

On June 7, 2018, Spire Missouri, Inc. ("Spire" or "Company") filed its Verified Application and Petition in Case No. GO-2018-0310 to establish an Infrastructure System Replacement Surcharge (ISRS) for its Spire West service territory (formerly known as Missouri Gas Energy). This is the first ISRS filing since Spire West's most recent general rate case, Case No. GR-2017-0216.

Section 393.1015.3, RSMo, states, "A gas corporation may effectuate a change in its rate pursuant to the provisions of this section no more often than two times every twelve months." The Spire West tariffs filed with this Application have been suspended until October 5, 2018. In Case No. GO-2016-0332, which was filed in September of 2016, the effective date for Spire West's revised ISRS rates was January 28, 2017. Since that date, Spire West has changed its

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ISRS surcharge one additional time, in Case No. GO-2017-0201, with the effective date of June 1, 2017. Based upon Spire West's previous ISRS filings and the statute, Staff asserts that since this ISRS filing will be going into effective later than January 28, 2018, that the Company is in compliance with the statute.

Commission Rule 4 CSR 240-3.265(18), Natural Gas Utility Petitions for Infrastructure System Replacement Surcharges, states:

The Commission shall reject an ISRS petition after a commission order in a general rate proceeding unless the ISRS revenues required in the petition, on an annualized basis, will produce ISRS revenues of at least the lesser of one-half of one percent (1/2%) of the natural gas utility's base revenue level approved by the commission in the natural gas utility's most recent general rate case proceeding or one (1) million dollars, but not in the excess of ten percent (10%) of the subject utility's base revenue level approved by the commission in the utility's most recent general rate proceeding.

Spire West's requested ISRS revenues exceed one-half of one percent of the natural gas utility's base revenue level approved by the commission in the most recent Spire West rate case, and Spire West's cumulative ISRS revenues, including this filing, do not exceed ten percent of the base revenue levels approved by the commission in the last Spire West rate case.

In this Application, Spire West filed to recover ISRS qualifying replacement costs incurred during the period October 1, 2017, through June 30, 2018. The ISRS recovery requested for May and June 2018 plant in service additions was included on an estimated basis at the time Spire's Application was filed, but documentation supporting actual ISRS plant addition costs for these months was supplied by Spire West during the course of Staff's audit.

As part of its examination of Spire West's application, Auditing Staff reviewed supporting workpapers, work order authorizations and a sample of invoices supporting the work order authorizations for the period of October 1, 2017, through April 30, 2018. Staff also communicated with Spire personnel to clarify Spire application when necessary. Staff also determined the amount of plastic mains and services replaced for these months in order to exclude the associated replacement costs from the ISRS request consistent with the recent Western District Court of Appeals decision. For this purpose, Staff used the same methodology it recently applied in the remand proceedings for Case Nos. GO-2016-0332, GO-2016-0333, GO-2017-0201 and GO-2017-0202.

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In the past, Staff has included ISRS eligible costs for the requested update period in its review of the Company's ISRS request. However, due to the Western District Court of Appeals opinion in Cases Nos. GO-2016-0332 and GO-2016-0333 Staff's workload has significantly increased in relation to both the initial months and the requested update months. Due to the increased workload in this case, and Spire West's delay in providing Staff work order authorizations and workpapers for the update period, Staff was unable to conduct a review of sample invoices supporting the requested cost for recovery for the update months of May and June 2018, prior to the filing of Staff's Recommendation. Staff will perform the review of a sample of invoices for May and June 2018 costs subsequent to the filing of its Recommendation, and will update its Recommendation if necessary.

The following documentation was provided to Staff on the following dates:

- June 8, 2018 -Work order authorizations over \$50,000 for the months of October 2017 through April 2018.
- June 19, 2018 Work order authorizations between \$25,000 and \$50,000 for October 2017 through April 2018
- June 19, 2018 Work order Charge Details for October 2017 through April 2018
- July 3, 2018 A sample of invoices for October 2017 through April 2018
- July 18, 2018 Work order authorizations over \$50,000 for May and June 2018
- July 26, 2018 Work order authorizations between \$25,000 and \$50,000 for May and June 2018
- July 31, 2018 Work order Charge Details for May and June 2018

In this case, Spire West did not provide supporting information concerning the ISRS costs for the update period months of May and June 2018 until late in the audit process, as noted above. In the future, Staff requests that such information be provided to it as soon as possible after the costs are reasonably finalized to allow for continued use of the ISRS update period process for Spire West.

Commission Rule 4 CSR 240-3.265 Natural Gas Utility Petitions for Infrastructure System Replacement Surcharges sets forth the definitions of natural gas utility plant projects that are eligible for ISRS treatment. Staff concluded each of the projects reviewed meets the ISRS rule qualifications, with the exception of plastic mains and services referenced above.

The methodology used by the Auditing Staff allows for consideration of all accumulated depreciation and deferred income taxes on ISRS qualifying infrastructure replacement costs

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through September 30, 2018. This methodology is consistent with past reviews conducted by Auditing Staff and with Staff's view that the calculation of the ISRS revenue requirement should closely reflect the revenue requirement for ISRS qualifying plant as of the effective date of the ISRS rates.

In Spire East ISRS cases going back many years, both the Company and Staff have chosen to incorporate half of the value of certain income tax deductions in ISRS revenue requirement. This 50/50 split for Spire East was agreed to because there had been a previous dispute over the applicability of these particular deductions to ISRS plant additions. For Spire West in this case, Staff has reflected the same 50/50 split of the revenue requirement impact of these tax deductions for Spire West as it previously had for Spire East.

#### STAFF RECONCILIATION

Commission Rule 4 CSR 240-3.265(17) requires a reconciliation of the ISRS revenue Spire West collected from customers in the prior 12-month period to account for over or under-collection of previously approved ISRS revenue. Staff performed this reconciliation and found Spire West over-collected ISRS revenue by \$ 1,834,513 which is identical to the amount of over-collection calculated by Spire West. As a result of the reconciliation, Staff recommends including this amount of over-collected ISRS revenue in Spire West's ISRS rates as a reduction to the ISRS rate.

#### **SUMMARY AND CONCLUSIONS**

Based upon its review and calculations made in response to this ISRS Application, Staff recommends Spire West receive ISRS revenues of \$4,801,895 (see attached Appendix C to this memo). Staff would note that this amount could change based on Staff's review of the sample invoices for the update months referenced above, or based on the Commission's decision in the remand proceedings for Case Nos. GO-2016-0332, GO-2016-0333, GO-2017-0201 and GO-2017-0202.

Based upon its review and all of its calculations, Staff is recommending that Spire West receive ISRS revenues of \$4,801,895.<sup>1</sup> This is different than Spire West's requested ISRS-related revenue requirement of \$7,085,762 as sought. The difference is attributed to all the aforementioned revisions and corrections addressed above.

This amount could change based on Staff's review of the sample invoices for the update months

referenced above, or based on the Commission's decision in the remand proceedings for Case Nos. GO-2016-0332, GO-2016-0333, GO-2017-0201 and GO-2017-0202.

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The ISRS rates that Staff is proposing will re-establish a new ISRS revenue requirement in the amount of \$4,801,895<sup>2</sup> after the ISRS was reduced to zero as part of GR-2017-0216. This is a reduction of \$2,283,867 from the requested \$7,085,762 ISRS reimbursement.

#### THE ISRS RATE SCHEDULES

Staff's recommended rates are consistent with the methodology used to establish MGE's (Spire West's predecessor entity) past ISRS rates and consistent with the overall methodology used to establish ISRS rates for other gas utilities. Staff's recommended ISRS rates are contained in Appendix B, attached hereto and incorporated by reference.

Most ISRS filings utilize the most-current annual report figures to establish the customer-count used in the calculation of rates. These ISRS rates are calculated based on the customer-count used in the last rate case, Case No. GR-2017-0216. The relevant statute clearly allows for this substitution when it states the following.

393.1015. Documentation to be submitted — notice to be published — examination of proposal — authorization by commission, when — pretax revenues, factors to be considered — revised rate schedule, filed when — rulemaking authority. —

5. (1) The monthly ISRS charge may be calculated based on a reasonable estimate of billing units in the period in which the charge will be in effect, which shall be conclusively established by dividing the appropriate pretax revenues by the customer numbers reported by the gas corporation in the annual report it most recently filed with the commission pursuant to subdivision (6) of section 393.140, and then further dividing this quotient by twelve. Provided, however, that the monthly ISRS may vary according to customer class and may be calculated based on customer numbers as determined during the most recent general rate proceeding of the gas corporation so long as the monthly ISRS for each customer class maintains a proportional relationship equivalent to the proportional relationship of the monthly customer charge for each customer class. (Emphasis Added)

This change in method of calculation was necessary because of revisions that took place in the rate cases.

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<sup>&</sup>lt;sup>2</sup> See footnote above.

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Spire is current on its FY 2018 assessment. At this time, Staff cannot confirm whether it is current on its FY 2019 assessment. The PSC Annual Report is up to date. Staff is not aware of any other matter before the Commission that affects or is affected by this filing except as noted above.

#### RECOMMENDATION

Based upon the rationale stated above, Staff recommends the Commission issue an order in this case that:

- 1. Rejects Spire West's ISRS tariff sheet (YG-2018-0164) P.S.C. MO No. 8 Consolidated, First Revised Sheet No. 12 cancelling P.S.C. MO. No. 8 Consolidated, Original Sheet No. 12, as filed on June 7, 2018.
- 2. Approves the Staff's recommended ISRS surcharge revenues in this docket in the incremental pre-tax revenue amount of \$4,801,895 re-establishing a "new" ISRS rate.
- 3. Authorizes Spire West to file an ISRS rate for each customer class as reflected in Appendix B, which generates \$4,801,895 annually.

# SPIRE MISSOURI INC. -WEST CASE NO. GO-2018-0310 & YG-2018-0164

#### Staff's Total ISRS Rev Req

\$4,801,895

Customer Rate Class	Cust #	Customer Charge	Ratio To Residential	Weighted Cust #	<u>Customer</u> <u>Percentage</u>	<u>Cal</u> <u>ISRS</u> <u>Charge</u>	ISRS Revenues
Residential	469,947	\$20.00	1.0000	469,947	82.9794%	\$0.71	\$3,984,585
SGS (Small Gen. Service)	31,727	\$30.00	1.5000	47,591	8.4031%	\$1.06	\$403,510
LGS-Large Gen. Service	3,628	\$130.17	6.5085	23,613	4.1694%	\$4.60	\$200,208
LV-Large Volume Service	460	\$1,095.27	54.7635	25,191	4.4481%	\$38.69	\$213,591
TOTAL	505,762			566,342	100.00%	-	\$4,801,895

<sup>\*</sup> Due to rounding to the nearest penny, the designed ISRS rates will over-collect by \$1621. However, it should be noted that the total amount collected will be trued up at a later date.

Appendix B

#### **Spire Missouri West** ISRS Revenue Requirement Calculation

#### **ISRS Activity:**

Cross Additions	Gas Utility Plant Projects - Main Replacements and Other Projects Extending Useful Life of Work Orders Placed in Service	of Mains:
Deferred Taxes		59 /16 199
Accumulated Depreciation		, ,
State		, ,
Monk Orders Placed in Service   Service Line Replacements and Insertion Projects:   Work Orders Placed in Service   Gross Additions   1,739,396   (24,589)   (24,58	Accountation Depression	(401,202)
Mork Orders Placed in Service   (120,732)   (24,599)	Total Net	57,476,530
Mork Orders Placed in Service   (120,732)   (24,599)	Con Utility Plant Projects - Service Line Penlacements and Insertion Projects	
1,739,386		
Deferred Taxes		1 739 396
Accumulated Depreciation		
Total Net		, ,
Gas Utility Plant Projects - Regulator Stations:  Work Orders Placed in Service Gross Additions Deferred Taxes Accumulated Depreciation  Total Net  Gas Utility Plant Projects - Main Relocations net of Reimbursements:  Work Orders Placed in Service Gross Additions Deferred Taxes Accumulated Depreciation  Total Net  Carease in Accumulated Depreciation  Increase in Accumulated Depreciation Associated with Eligible Infrastructure System Replacements which are included in a Currently Effective ISRS Total Incremental Accumulated Depreciation Associated with Eligible Infrastructure System Replacements which are included in a Currently Effective ISRS Total Incremental Accumulated Depreciation Total Incremental Accumulated Depreciation Total ISRS Rate Base Overall Rate of Return per GR-2017-0216 UOI Required 1,738,310 Income Tax Conversion Factor Revenue Requirement Before Interest Deductibility 6,355,32  Total ISRS Rate Base Weighted Cost of Debt per GR-2017-0216 1,244,204 Marginal Income Tax Rate 1,244,204 Marginal Income Tax Conversion Factor Total Revenue Requirement Impact of Interest Deductibility 5,931,023 Depreciation Expense 1,086,754 Net Property Taxes 1,148,53  Total ISRS Revenue Overcollection January 2014 through May 2018 Total ISRS Revenues per Company  Total ISRS Revenues per Company	·	
Work Orders Placed in Service Gross Additions Deferred Taxes Accumulated Depreciation  Total Net  Gas Utility Plant Projects - Main Relocations net of Reimbursements:  Work Orders Placed in Service Gross Additions Deferred Taxes (48, 407) Accumulated Depreciation  Total Net  Care Increase in Accumulated Depreciation Accumulated Depreciation  Increase in Accumulated Deferred Income Taxes and Accumulated Depreciation Associated with Eligible Infrastructure System Replacements which are included in a Currently Effective ISRS Total Incremental Accumulated Depreciation Total ISRS Rate Base Coverall Rate of Return per GR-2017-0216 Total ISRS Rate Base Total ISRS Rate Base Overall Rate Of Return per GR-2017-0216 1.34135 Revenue Requirement Before Interest Deductibility 6.355.30.85 Weighted Cost of Debt per GR-2017-0216 1.244,204 Marginal Income Tax Rate 1.254,482% Income Tax Reduction due to Interest Deductibility Total ISRS Rate Base Income Tax Conversion Factor Revenue Requirement Impact of Interest Deductibility Total Revenue Requirement mpact of Interest Deductibility Total Revenue Requirement mpact of Interest Deductibility Total Revenue Requirement on Capital Depreciation Expense 1.086,754 Net Property Taxes 1.14,938 ISRS Revenue Overcollection January 2014 through May 2018 Total ISRS Revenues per Company  Total ISRS Revenues per Company	Total Net	1,594,075
Work Orders Placed in Service Gross Additions Deferred Taxes Accumulated Depreciation  Total Net  Gas Utility Plant Projects - Main Relocations net of Reimbursements:  Work Orders Placed in Service Gross Additions Deferred Taxes (48, 407) Accumulated Depreciation  Total Net  Care Increase in Accumulated Depreciation Accumulated Depreciation  Increase in Accumulated Deferred Income Taxes and Accumulated Depreciation Associated with Eligible Infrastructure System Replacements which are included in a Currently Effective ISRS Total Incremental Accumulated Depreciation Total ISRS Rate Base Coverall Rate of Return per GR-2017-0216 Total ISRS Rate Base Total ISRS Rate Base Overall Rate Of Return per GR-2017-0216 1.34135 Revenue Requirement Before Interest Deductibility 6.355.30.85 Weighted Cost of Debt per GR-2017-0216 1.244,204 Marginal Income Tax Rate 1.254,482% Income Tax Reduction due to Interest Deductibility Total ISRS Rate Base Income Tax Conversion Factor Revenue Requirement Impact of Interest Deductibility Total Revenue Requirement mpact of Interest Deductibility Total Revenue Requirement mpact of Interest Deductibility Total Revenue Requirement on Capital Depreciation Expense 1.086,754 Net Property Taxes 1.14,938 ISRS Revenue Overcollection January 2014 through May 2018 Total ISRS Revenues per Company  Total ISRS Revenues per Company	Gas Utility Plant Projects - Regulator Stations:	
Gross Additions Deferred Taxes Accumulated Depreciation  Total Net  Gas Utility Plant Projects - Main Relocations net of Reimbursements:  Work Orders Placed in Service Gross Additions Deferred Taxes Accumulated Depreciation Accumulated Depreciation Accumulated Depreciation  Increase in Accumulated Deferred Income Taxes and Accumulated Depreciation Associated with Elicible Infrastructure System Replacements which are included in a Currently Effective ISRS Total Incremental Accumulated Deferred Taxes  Total ISRS Rate Base Overall Rate of Return per GR-2017-0216  UOI Required Income Tax Conversion Factor Revenue Requirement Before Interest Deductibility  Total ISRS Rate Base  65,830,885 Weighted Cost of Debt per GR-2017-0216  Interest Deduction Marginal Income Tax Rate Income Tax Rate Cost of Debt per GR-2017-0216 Interest Deduction Interest Deduction due to Interest Income Tax Reduction due to Interest Income Tax Reduction due to Interest Income Tax Reduction due to Interest Deductibility  Total Revenue Requirement Impact of Interest Deductibility  Total Revenue Requirement Impact of Interest Deductibility  Total Revenue Requirement Impact of Interest Deductibility  Total Revenue Requirement Orapital Depreciation Expense  1,086,754 1,434,53 1,086,754 1,086,7		
Deferred Taxes Accumulated Depreciation  Total Net  Gas Utility Plant Projects - Main Relocations net of Reimbursements:  Work Orders Placed in Service Gross Additions Deferred Taxes Accumulated Depreciation Accumulated Depreciation Accumulated Depreciation  Total Net  Increase in Accumulated Deferred Income Taxes and Accumulated Depreciation Associated with Eligible Infrastructure System Replacements which are included in a Currently Effective ISRS Total Incremental Accumulated Depreciation Associated with Eligible Infrastructure System Replacements which are included in a Currently Effective ISRS Total Incremental Accumulated Depreciation Associated with Eligible Infrastructure System Replacements which are included in a Currently Effective ISRS Total Incremental Accumulated Depreciation Associated with Eligible Infrastructure System Replacements which are included in a Currently Effective ISRS  Total Incremental Accumulated Depreciation Associated with Eligible Infrastructure System Replacements which are included in a Currently Effective ISRS  Total Incremental Accumulated Depreciation Associated with Eligible Infrastructure System Replacements which are included in a Currently Effective ISRS  Total Incremental Accumulated Depreciation Associated with Eligible Infrastructure System Replacements which are included in a Currently Incremental Accumulated Depreciation Face Income Tax Conversion Factor Associated with Eligible Infrastructure System Replacements Income Tax Conversion Factor Associated with Eligible Infrastructure System Replacement Income Tax Conversion Factor Associated with Eligible Infrastructure System Replacement Income Tax Conversion Factor Associated with Eligible Infrastructure System Replacement Income Tax Conversion Factor Associated with Eligible Infrastructure System Replacement Income Tax Conversion Factor Associated with Eligible Infrastructure System Replacement Income Tax Conversion Factor Associated with Eligible Infrastructure System Replacement Income Tax Conversion Factor Asso		_
Accumulated Depreciation		_
Total Net         - Gas Utility Plant Projects - Main Relocations net of Reimbursements:           Work Orders Placed in Service           Gross Additions         6,865,186           Deferred Taxes         (48,407)           Accumulated Depreciation         (56,499)           Increase in Accumulated Depreciation           Associated with Eligible Infrastructure System Replacements which are included in a Currently Effective ISRS		_
Mork Orders Placed in Service   Gross Additions   Deferred Taxes   (48,407)   Accumulated Depreciation   (56,499)		
Nork Orders Placed in Service   Gross Additions   6,865,186   Deferred Taxes   (48,407)   Accumulated Depreciation   (56,499)	Total Net	
Nork Orders Placed in Service   Gross Additions   6,865,186   Deferred Taxes   (48,407)   Accumulated Depreciation   (56,499)	Con Utility Plant Projects Main Polocetions not of Poimburgements	
Cross Additions   Deferred Taxes   (48, 407)     Accumulated Depreciation   (56, 499)     Total Net   6,760,280     Increase in Accumulated Deferred Income Taxes and Accumulated Depreciation     Associated with Eligible Infrastructure System Replacements which are included in a Currently Effective ISRS     Total Incremental Accumulated Depreciation   - Total Incremental Accumulated Deferred Taxes   - Total IsRS Rate Base   65,830,885     Overall Rate of Return per GR-2017-0216   7,20%     UOI Required   4,738,310     Income Tax Conversion Factor   1,34135     Revenue Requirement Before Interest Deductibility   6,355,732     Total ISRS Rate Base   65,830,885     Weighted Cost of Debt per GR-2017-0216   1,8900%     Interest Deduction   1,244,204     Marginal Income Tax Rate   25,4482%     Income Tax Rouversion Factor   1,34135     Revenue Requirement Impact of Interest Deductibility   424,709     Total Revenue Requirement Impact of Interest Deductibility   424,709     Total Revenue Requirement Impact of Interest Deductibility   5,931,023     Depreciation Expense   1,086,754     Net Property Taxes   214,988     ISRS Revenue Overcollection January 2014 through May 2018   (1,834,513)     Total ISRS Revenues per Company   5,398,252     Total ISRS Revenues per Staff   4,205,539		
Deferred Taxes		6 965 196
National Net   Nati		, ,
Increase in Accumulated Deferred Income Taxes and Accumulated Depreciation Associated with Eligible Infrastructure System Replacements which are included in a Currently Effective ISRS Total Incremental Accumulated Depreciation Total Incremental Accumulated Deferred Taxes  Total ISRS Rate Base  Overall Rate of Return per GR-2017-0216  UOI Required Income Tax Conversion Factor Revenue Requirement Before Interest Deductibility  Total ISRS Rate Base  65,830,885  Weighted Cost of Debt per GR-2017-0216  1.8900% Interest Deduction Income Tax Rate Occurrent Income Tax Rate Income Tax Reduction due to Interest Income Tax Conversion Factor Total Revenue Requirement Impact of Interest Deductibility  Total Revenue Requirement on Capital Depreciation Expense  1,086,754 Net Property Taxes ISRS Revenue Overcollection January 2014 through May 2018  Total ISRS Revenues per Company  5,398,252  Total ISRS Revenues per Staff  4,205,539		1 1
Increase in Accumulated Deferred Income Taxes and Accumulated Depreciation Associated with Eliqible Infrastructure System Replacements which are included in a Currently Effective ISRS Total Incremental Accumulated Depreciation Total Incremental Accumulated Deferred Taxes  Total ISRS Rate Base Overall Rate of Return per GR-2017-0216 UOI Required Income Tax Conversion Factor Revenue Requirement Before Interest Deductibility  Total ISRS Rate Base  65,830,885 Weighted Cost of Debt per GR-2017-0216 1.8900% Interest Deduction 1.244,204 Marginal Income Tax Rate Income Tax Reduction due to Interest Income Tax Reduction due to Interest Income Tax Conversion Factor 1.34135 Revenue Requirement Impact of Interest Deductibility  Total Revenue Requirement on Capital Depreciation Expense 1.086,754 Net Property Taxes ISRS Revenue Overcollection January 2014 through May 2018  Total ISRS Revenues per Company 5,398,252  Total ISRS Revenues per Staff 4,205,539	Accumulated Depreciation	(50,499)
Associated with Eligible Infrastructure System Replacements which are included in a Currently Effective ISRS	Total Net	6,760,280
Associated with Eligible Infrastructure System Replacements which are included in a Currently Effective ISRS		
Associated with Eligible Infrastructure System Replacements which are included in a Currently Effective ISRS		
Currently Effective ISRS           Total Incremental Accumulated Depreciation         -           Total Incremental Accumulated Deferred Taxes         -           Total ISRS Rate Base         65,830,885           Overall Rate of Return per GR-2017-0216         7.20%           UOI Required         4,738,310           Income Tax Conversion Factor         1.34135           Revenue Requirement Before Interest Deductibility         6,355,732           Total ISRS Rate Base         65,830,885           Weighted Cost of Debt per GR-2017-0216         1.8900%           Interest Deduction         1,244,204           Marginal Income Tax Rate         25,4482%           Income Tax Reduction due to Interest         316,628           Income Tax Conversion Factor         1.34135           Revenue Requirement Impact of Interest Deductibility         424,709           Total Revenue Requirement on Capital         5,931,023           Depreciation Expense         1,086,754           Net Property Taxes         214,988           ISRS Revenue Overcollection January 2014 through May 2018         (1,834,513)           Total ISRS Revenues per Company         5,398,252           Total ISRS Revenues per Staff         4,205,539		
Total Incremental Accumulated Depreciation Total Incremental Accumulated Deferred Taxes         -           Total ISRS Rate Base         65,830,885           Overall Rate of Return per GR-2017-0216         7.20%           UOI Required         4,738,310           Income Tax Conversion Factor         1.34135           Revenue Requirement Before Interest Deductibility         6,355,732           Total ISRS Rate Base         65,830,885           Weighted Cost of Debt per GR-2017-0216         1.8900%           Interest Deduction         1,244,204           Marginal Income Tax Rate         25,4482%           Income Tax Reduction due to Interest         316,628           Income Tax Conversion Factor         1.34135           Revenue Requirement Impact of Interest Deductibility         424,709           Total Revenue Requirement on Capital         5,931,023           Depreciation Expense         1,086,754           Net Property Taxes         214,988           ISRS Revenue Overcollection January 2014 through May 2018         (1,834,513)           Total ISRS Revenues per Company         5,398,252           Total ISRS Revenues per Staff         4,205,539		
Total ISRS Rate Base         65,830,885           Overall Rate of Return per GR-2017-0216         7,20%           UOI Required         4,738,310           Income Tax Conversion Factor         1,34135           Revenue Requirement Before Interest Deductibility         6,355,732           Total ISRS Rate Base         65,830,885           Weighted Cost of Debt per GR-2017-0216         1,8900%           Interest Deduction         1,244,204           Marginal Income Tax Rate         25,4482%           Income Tax Reduction due to Interest         316,628           Income Tax Conversion Factor         1,34135           Revenue Requirement Impact of Interest Deductibility         424,709           Total Revenue Requirement on Capital         5,931,023           Depreciation Expense         1,086,754           Net Property Taxes         214,988           ISRS Revenue Overcollection January 2014 through May 2018         (1,834,513)           Total ISRS Revenues per Company         5,398,252           Total ISRS Revenues per Staff         4,205,539		
Total ISRS Rate Base         65,830,885           Overall Rate of Return per GR-2017-0216         7.20%           UOI Required         4,738,310           Income Tax Conversion Factor         1.34135           Revenue Requirement Before Interest Deductibility         6,355,732           Total ISRS Rate Base         65,830,885           Weighted Cost of Debt per GR-2017-0216         1.8900%           Interest Deduction         1,244,204           Marginal Income Tax Rate         25,4482%           Income Tax Reduction due to Interest         316,628           Income Tax Conversion Factor         1.34135           Revenue Requirement Impact of Interest Deductibility         424,709           Total Revenue Requirement on Capital         5,931,023           Depreciation Expense         1,086,754           Net Property Taxes         214,988           ISRS Revenue Overcollection January 2014 through May 2018         (1,834,513)           Total ISRS Revenues per Company         5,398,252           Total ISRS Revenues per Staff         4,205,539	Associated with Eligible Infrastructure System Replacements which are included in a Currently Effective ISRS	
Overall Rate of Return per GR-2017-0216         7.20%           UOI Required         4,738,310           Income Tax Conversion Factor         1.34135           Revenue Requirement Before Interest Deductibility         6,355,732           Total ISRS Rate Base         65,830,885           Weighted Cost of Debt per GR-2017-0216         1.8900%           Interest Deduction         1,244,204           Marginal Income Tax Rate         25,4482%           Income Tax Reduction due to Interest         316,628           Income Tax Conversion Factor         1.34135           Revenue Requirement Impact of Interest Deductibility         424,709           Total Revenue Requirement on Capital         5,931,023           Depreciation Expense         1,086,754           Net Property Taxes         214,988           ISRS Revenue Overcollection January 2014 through May 2018         (1,834,513)           Total ISRS Revenues per Company         5,398,252           Total ISRS Revenues per Staff         4,205,539	Associated with Eligible Infrastructure System Replacements which are included in a Currently Effective ISRS	-
Overall Rate of Return per GR-2017-0216         7.20%           UOI Required         4,738,310           Income Tax Conversion Factor         1.34135           Revenue Requirement Before Interest Deductibility         6,355,732           Total ISRS Rate Base         65,830,885           Weighted Cost of Debt per GR-2017-0216         1.8900%           Interest Deduction         1,244,204           Marginal Income Tax Rate         25,4482%           Income Tax Reduction due to Interest         316,628           Income Tax Conversion Factor         1.34135           Revenue Requirement Impact of Interest Deductibility         424,709           Total Revenue Requirement on Capital         5,931,023           Depreciation Expense         1,086,754           Net Property Taxes         214,988           ISRS Revenue Overcollection January 2014 through May 2018         (1,834,513)           Total ISRS Revenues per Company         5,398,252           Total ISRS Revenues per Staff         4,205,539	Associated with Eligible Infrastructure System Replacements which are included in a  Currently Effective ISRS  Total Incremental Accumulated Depreciation	-
UOI Required       4,738,310         Income Tax Conversion Factor       1.34135         Revenue Requirement Before Interest Deductibility       6,355,732         Total ISRS Rate Base       65,830,885         Weighted Cost of Debt per GR-2017-0216       1.8900%         Interest Deduction       1,244,204         Marginal Income Tax Rate       25,4482%         Income Tax Reduction due to Interest       316,628         Income Tax Conversion Factor       1.34135         Revenue Requirement Impact of Interest Deductibility       424,709         Total Revenue Requirement on Capital       5,931,023         Depreciation Expense       1,086,754         Net Property Taxes       214,988         ISRS Revenue Overcollection January 2014 through May 2018       (1,834,513)         Total ISRS Revenues per Company       5,398,252         Total ISRS Revenues per Staff       4,205,539	Associated with Eligible Infrastructure System Replacements which are included in a  Currently Effective ISRS  Total Incremental Accumulated Depreciation  Total Incremental Accumulated Deferred Taxes	-
Income Tax Conversion Factor         1.34135           Revenue Requirement Before Interest Deductibility         6,355,732           Total ISRS Rate Base         65,830,885           Weighted Cost of Debt per GR-2017-0216         1.8900%           Interest Deduction         1,244,204           Marginal Income Tax Rate         25,4482%           Income Tax Reduction due to Interest         316,628           Income Tax Conversion Factor         1.34135           Revenue Requirement Impact of Interest Deductibility         424,709           Total Revenue Requirement on Capital         5,931,023           Depreciation Expense         1,086,754           Net Property Taxes         214,988           ISRS Revenue Overcollection January 2014 through May 2018         (1,834,513)           Total ISRS Revenues per Company         5,398,252           Total ISRS Revenues per Staff         4,205,539	Associated with Eligible Infrastructure System Replacements which are included in a  Currently Effective ISRS  Total Incremental Accumulated Depreciation Total Incremental Accumulated Deferred Taxes  Total ISRS Rate Base	
Revenue Requirement Before Interest Deductibility         6,355,732           Total ISRS Rate Base         65,830,885           Weighted Cost of Debt per GR-2017-0216         1.8900%           Interest Deduction         1,244,204           Marginal Income Tax Rate         25,4482%           Income Tax Reduction due to Interest         316,628           Income Tax Conversion Factor         1.34135           Revenue Requirement Impact of Interest Deductibility         424,709           Total Revenue Requirement on Capital         5,931,023           Depreciation Expense         1,086,754           Net Property Taxes         214,988           ISRS Revenue Overcollection January 2014 through May 2018         (1,834,513)           Total ISRS Revenues per Company         5,398,252           Total ISRS Revenues per Staff         4,205,539	Associated with Eligible Infrastructure System Replacements which are included in a  Currently Effective ISRS  Total Incremental Accumulated Depreciation Total Incremental Accumulated Deferred Taxes  Total ISRS Rate Base  Overall Rate of Return per GR-2017-0216	7.20%
Total ISRS Rate Base       65,830,885         Weighted Cost of Debt per GR-2017-0216       1.8900%         Interest Deduction       1,244,204         Marginal Income Tax Rate       25.4482%         Income Tax Reduction due to Interest       316,628         Income Tax Conversion Factor       1.34135         Revenue Requirement Impact of Interest Deductibility       424,709         Total Revenue Requirement on Capital       5,931,023         Depreciation Expense       1,086,754         Net Property Taxes       214,988         ISRS Revenue Overcollection January 2014 through May 2018       (1,834,513)         Total ISRS Revenues per Company       5,398,252         Total ISRS Revenues per Staff       4,205,539	Associated with Eligible Infrastructure System Replacements which are included in a  Currently Effective ISRS  Total Incremental Accumulated Depreciation Total Incremental Accumulated Deferred Taxes  Total ISRS Rate Base Overall Rate of Return per GR-2017-0216 UOI Required	7.20% 4,738,310
Weighted Cost of Debt per GR-2017-0216       1.8900%         Interest Deduction       1,244,204         Marginal Income Tax Rate       25.4482%         Income Tax Reduction due to Interest       316,628         Income Tax Conversion Factor       1.34135         Revenue Requirement Impact of Interest Deductibility       424,709         Total Revenue Requirement on Capital       5,931,023         Depreciation Expense       1,086,754         Net Property Taxes       214,988         ISRS Revenue Overcollection January 2014 through May 2018       (1,834,513)         Total ISRS Revenues per Company       5,398,252         Total ISRS Revenues per Staff       4,205,539	Associated with Eligible Infrastructure System Replacements which are included in a  Currently Effective ISRS  Total Incremental Accumulated Depreciation Total Incremental Accumulated Deferred Taxes  Total ISRS Rate Base  Overall Rate of Return per GR-2017-0216  UOI Required Income Tax Conversion Factor	7.20% 4,738,310 1.34135
Interest Deduction         1,244,204           Marginal Income Tax Rate         25.4482%           Income Tax Reduction due to Interest         316,628           Income Tax Conversion Factor         1.34135           Revenue Requirement Impact of Interest Deductibility         424,709           Total Revenue Requirement on Capital         5,931,023           Depreciation Expense         1,086,754           Net Property Taxes         214,988           ISRS Revenue Overcollection January 2014 through May 2018         (1,834,513)           Total ISRS Revenues per Company         5,398,252           Total ISRS Revenues per Staff         4,205,539	Associated with Eligible Infrastructure System Replacements which are included in a  Currently Effective ISRS  Total Incremental Accumulated Depreciation Total Incremental Accumulated Deferred Taxes  Total ISRS Rate Base  Overall Rate of Return per GR-2017-0216  UOI Required Income Tax Conversion Factor	7.20% 4,738,310 1.34135
Interest Deduction         1,244,204           Marginal Income Tax Rate         25.4482%           Income Tax Reduction due to Interest         316,628           Income Tax Conversion Factor         1.34135           Revenue Requirement Impact of Interest Deductibility         424,709           Total Revenue Requirement on Capital         5,931,023           Depreciation Expense         1,086,754           Net Property Taxes         214,988           ISRS Revenue Overcollection January 2014 through May 2018         (1,834,513)           Total ISRS Revenues per Company         5,398,252           Total ISRS Revenues per Staff         4,205,539	Associated with Eligible Infrastructure System Replacements which are included in a  Currently Effective ISRS  Total Incremental Accumulated Depreciation Total Incremental Accumulated Deferred Taxes  Total ISRS Rate Base Overall Rate of Return per GR-2017-0216 UOI Required Income Tax Conversion Factor Revenue Requirement Before Interest Deductibility	7.20% 4,738,310 1.34135 6,355,732
Marginal Income Tax Rate       25.4482%         Income Tax Reduction due to Interest       316,628         Income Tax Conversion Factor       1.34135         Revenue Requirement Impact of Interest Deductibility       424,709         Total Revenue Requirement on Capital       5,931,023         Depreciation Expense       1,086,754         Net Property Taxes       214,988         ISRS Revenue Overcollection January 2014 through May 2018       (1,834,513)         Total ISRS Revenues per Company       5,398,252         Total ISRS Revenues per Staff       4,205,539	Associated with Eligible Infrastructure System Replacements which are included in a  Currently Effective ISRS  Total Incremental Accumulated Depreciation Total Incremental Accumulated Deferred Taxes  Total ISRS Rate Base Overall Rate of Return per GR-2017-0216 UOI Required Income Tax Conversion Factor Revenue Requirement Before Interest Deductibility  Total ISRS Rate Base	7.20% 4,738,310 1.34135 6,355,732 65,830,885
Income Tax Conversion Factor         1.34135           Revenue Requirement Impact of Interest Deductibility         424,709           Total Revenue Requirement on Capital         5,931,023           Depreciation Expense         1,086,754           Net Property Taxes         214,988           ISRS Revenue Overcollection January 2014 through May 2018         (1,834,513)           Total ISRS Revenues per Company         5,398,252           Total ISRS Revenues per Staff         4,205,539	Associated with Eligible Infrastructure System Replacements which are included in a  Currently Effective ISRS  Total Incremental Accumulated Depreciation Total Incremental Accumulated Deferred Taxes  Total ISRS Rate Base Overall Rate of Return per GR-2017-0216 UOI Required Income Tax Conversion Factor Revenue Requirement Before Interest Deductibility  Total ISRS Rate Base Weighted Cost of Debt per GR-2017-0216	7.20% 4,738,310 1.34135 6,355,732 65,830,885 1.8900%
Income Tax Conversion Factor         1.34135           Revenue Requirement Impact of Interest Deductibility         424,709           Total Revenue Requirement on Capital         5,931,023           Depreciation Expense         1,086,754           Net Property Taxes         214,988           ISRS Revenue Overcollection January 2014 through May 2018         (1,834,513)           Total ISRS Revenues per Company         5,398,252           Total ISRS Revenues per Staff         4,205,539	Associated with Eligible Infrastructure System Replacements which are included in a  Currently Effective ISRS  Total Incremental Accumulated Depreciation Total Incremental Accumulated Deferred Taxes  Total ISRS Rate Base Overall Rate of Return per GR-2017-0216 UOI Required Income Tax Conversion Factor Revenue Requirement Before Interest Deductibility  Total ISRS Rate Base Weighted Cost of Debt per GR-2017-0216 Interest Deduction	7.20% 4,738,310 1.34135 6,355,732 65,830,885 1.8900% 1,244,204
Total Revenue Requirement on Capital 5,931,023 Depreciation Expense 1,086,754 Net Property Taxes 214,988 ISRS Revenue Overcollection January 2014 through May 2018 (1,834,513)  Total ISRS Revenues per Company 5,398,252  Total ISRS Revenues per Staff 4,205,539	Associated with Eligible Infrastructure System Replacements which are included in a  Currently Effective ISRS  Total Incremental Accumulated Depreciation Total Incremental Accumulated Deferred Taxes  Total ISRS Rate Base Overall Rate of Return per GR-2017-0216 UOI Required Income Tax Conversion Factor Revenue Requirement Before Interest Deductibility  Total ISRS Rate Base Weighted Cost of Debt per GR-2017-0216 Interest Deduction Marginal Income Tax Rate	7.20% 4,738,310 1.34135 6,355,732 65,830,885 1.8900% 1,244,204 25.4482%
Depreciation Expense         1,086,754           Net Property Taxes         214,988           ISRS Revenue Overcollection January 2014 through May 2018         (1,834,513)           Total ISRS Revenues per Company         5,398,252           Total ISRS Revenues per Staff         4,205,539	Associated with Eligible Infrastructure System Replacements which are included in a  Currently Effective ISRS  Total Incremental Accumulated Depreciation Total Incremental Accumulated Deferred Taxes  Total ISRS Rate Base Overall Rate of Return per GR-2017-0216 UOI Required Income Tax Conversion Factor Revenue Requirement Before Interest Deductibility  Total ISRS Rate Base Weighted Cost of Debt per GR-2017-0216 Interest Deduction Marginal Income Tax Rate Income Tax Reduction due to Interest	7.20% 4,738,310 1.34135 6,355,732 65,830,885 1.8900% 1,244,204 25.4482% 316,628
Depreciation Expense         1,086,754           Net Property Taxes         214,988           ISRS Revenue Overcollection January 2014 through May 2018         (1,834,513)           Total ISRS Revenues per Company         5,398,252           Total ISRS Revenues per Staff         4,205,539	Associated with Eligible Infrastructure System Replacements which are included in a Currently Effective ISRS  Total Incremental Accumulated Depreciation Total Incremental Accumulated Deferred Taxes  Total ISRS Rate Base Overall Rate of Return per GR-2017-0216 UOI Required Income Tax Conversion Factor Revenue Requirement Before Interest Deductibility  Total ISRS Rate Base Weighted Cost of Debt per GR-2017-0216 Interest Deduction Marginal Income Tax Rate Income Tax Reduction due to Interest Income Tax Conversion Factor	7.20% 4,738,310 1.34135 6,355,732 65,830,885 1.8900% 1,244,204 25,4482% 316,628 1.34135
Net Property Taxes 214,988 ISRS Revenue Overcollection January 2014 through May 2018 (1,834,513)  Total ISRS Revenues per Company 5,398,252  Total ISRS Revenues per Staff 4,205,539	Associated with Eligible Infrastructure System Replacements which are included in a  Currently Effective ISRS  Total Incremental Accumulated Depreciation Total Incremental Accumulated Deferred Taxes  Total ISRS Rate Base Overall Rate of Return per GR-2017-0216 UOI Required Income Tax Conversion Factor Revenue Requirement Before Interest Deductibility  Total ISRS Rate Base Weighted Cost of Debt per GR-2017-0216 Interest Deduction Marginal Income Tax Rate Income Tax Reduction due to Interest Income Tax Conversion Factor Revenue Requirement Impact of Interest Deductibility	7.20% 4,738,310 1.34135 6,355,732 65,830,885 1.8900% 1,244,204 25,4482% 316,628 1.34135 424,709
ISRS Revenue Overcollection January 2014 through May 2018  Total ISRS Revenues per Company  5,398,252  Total ISRS Revenues per Staff  4,205,539	Associated with Eligible Infrastructure System Replacements which are included in a  Currently Effective ISRS  Total Incremental Accumulated Depreciation Total Incremental Accumulated Deferred Taxes  Total ISRS Rate Base Overall Rate of Return per GR-2017-0216 UOI Required Income Tax Conversion Factor Revenue Requirement Before Interest Deductibility  Total ISRS Rate Base Weighted Cost of Debt per GR-2017-0216 Interest Deduction Marginal Income Tax Rate Income Tax Reduction due to Interest Income Tax Conversion Factor Revenue Requirement Impact of Interest Deductibility  Total Revenue Requirement on Capital	7.20% 4,738,310 1.34135 6,355,732 65,830,885 1.8900% 1,244,204 25.4482% 316,628 1.34135 424,709 5,931,023
Total ISRS Revenues per Company 5,398,252  Total ISRS Revenues per Staff 4,205,539	Associated with Eligible Infrastructure System Replacements which are included in a  Currently Effective ISRS  Total Incremental Accumulated Depreciation Total Incremental Accumulated Deferred Taxes  Total ISRS Rate Base Overall Rate of Return per GR-2017-0216 UOI Required Income Tax Conversion Factor Revenue Requirement Before Interest Deductibility  Total ISRS Rate Base Weighted Cost of Debt per GR-2017-0216 Interest Deduction Marginal Income Tax Rate Income Tax Reduction due to Interest Income Tax Conversion Factor Revenue Requirement Impact of Interest Deductibility  Total Revenue Requirement on Capital Depreciation Expense	7.20% 4,738,310 1.34135 6,355,732 65,830,885 1.8900% 1,244,204 25.4482% 316,628 1.34135 424,709 5,931,023
Total ISRS Revenues per Staff 4,205,539	Associated with Eligible Infrastructure System Replacements which are included in a  Currently Effective ISRS  Total Incremental Accumulated Depreciation Total Incremental Accumulated Deferred Taxes  Total ISRS Rate Base Overall Rate of Return per GR-2017-0216 UOI Required Income Tax Conversion Factor Revenue Requirement Before Interest Deductibility  Total ISRS Rate Base Weighted Cost of Debt per GR-2017-0216 Interest Deduction Marginal Income Tax Rate Income Tax Reduction due to Interest Income Tax Conversion Factor Revenue Requirement Impact of Interest Deductibility  Total Revenue Requirement on Capital Depreciation Expense Net Property Taxes	7.20% 4,738,310 1.34135 6,355,732 65,830,885 1.8900% 1,244,204 25.4482% 316,628 1.34135 424,709 5,931,023 1,086,754
Total ISRS Revenues per Staff 4,205,539	Associated with Eligible Infrastructure System Replacements which are included in a  Currently Effective ISRS  Total Incremental Accumulated Depreciation Total Incremental Accumulated Deferred Taxes  Total ISRS Rate Base Overall Rate of Return per GR-2017-0216 UOI Required Income Tax Conversion Factor Revenue Requirement Before Interest Deductibility  Total ISRS Rate Base Weighted Cost of Debt per GR-2017-0216 Interest Deduction Marginal Income Tax Rate Income Tax Reduction due to Interest Income Tax Conversion Factor Revenue Requirement Impact of Interest Deductibility  Total Revenue Requirement on Capital Depreciation Expense Net Property Taxes	7.20% 4,738,310 1.34135 6,355,732 65,830,885 1.8900% 1,244,204 25.4482% 316,628 1.34135 424,709 5,931,023 1,086,754 214,988
	Associated with Eligible Infrastructure System Replacements which are included in a Currently Effective ISRS  Total Incremental Accumulated Depreciation Total Incremental Accumulated Deferred Taxes  Total ISRS Rate Base Overall Rate of Return per GR-2017-0216 UOI Required Income Tax Conversion Factor Revenue Requirement Before Interest Deductibility  Total ISRS Rate Base Weighted Cost of Debt per GR-2017-0216 Interest Deduction Marginal Income Tax Rate Income Tax Reduction due to Interest Income Tax Conversion Factor Revenue Requirement Impact of Interest Deductibility  Total Revenue Requirement on Capital Depreciation Expense Net Property Taxes ISRS Revenue Overcollection January 2014 through May 2018	7.20% 4,738,310 1.34135 6,355,732 65,830,885 1.8900% 1,244,204 25.4482% 316,628 1.34135 424,709 5,931,023 1,086,754 214,988 (1,834,513)
	Associated with Eligible Infrastructure System Replacements which are included in a Currently Effective ISRS  Total Incremental Accumulated Depreciation Total Incremental Accumulated Deferred Taxes  Total ISRS Rate Base Overall Rate of Return per GR-2017-0216 UOI Required Income Tax Conversion Factor Revenue Requirement Before Interest Deductibility  Total ISRS Rate Base Weighted Cost of Debt per GR-2017-0216 Interest Deduction Marginal Income Tax Rate Income Tax Reduction due to Interest Income Tax Conversion Factor Revenue Requirement Impact of Interest Deductibility  Total Revenue Requirement on Capital Depreciation Expense Net Property Taxes ISRS Revenue Overcollection January 2014 through May 2018	7.20% 4,738,310 1.34135 6,355,732 65,830,885 1.8900% 1,244,204 25.4482% 316,628 1.34135 424,709 5,931,023 1,086,754 214,988 (1,834,513)
Average of Company and Staff Recommendations 4,801,895	Associated with Eligible Infrastructure System Replacements which are included in a Currently Effective ISRS  Total Incremental Accumulated Depreciation Total Incremental Accumulated Deferred Taxes  Total ISRS Rate Base Overall Rate of Return per GR-2017-0216 UOI Required Income Tax Conversion Factor Revenue Requirement Before Interest Deductibility  Total ISRS Rate Base Weighted Cost of Debt per GR-2017-0216 Interest Deduction Marginal Income Tax Rate Income Tax Reduction due to Interest Income Tax Conversion Factor Revenue Requirement Impact of Interest Deductibility  Total Revenue Requirement on Capital Depreciation Expense Net Property Taxes ISRS Revenue Overcollection January 2014 through May 2018  Total ISRS Revenues per Company	7.20% 4,738,310 1.34135 6,355,732 65,830,885 1.8900% 1,244,204 25.4482% 316,628 1.34135 424,709 5,931,023 1,086,754 214,988 (1,834,513) 5,398,252
	Associated with Eligible Infrastructure System Replacements which are included in a Currently Effective ISRS  Total Incremental Accumulated Depreciation Total Incremental Accumulated Deferred Taxes  Total ISRS Rate Base Overall Rate of Return per GR-2017-0216 UOI Required Income Tax Conversion Factor Revenue Requirement Before Interest Deductibility  Total ISRS Rate Base Weighted Cost of Debt per GR-2017-0216 Interest Deduction Marginal Income Tax Rate Income Tax Reduction due to Interest Income Tax Conversion Factor Revenue Requirement Impact of Interest Deductibility  Total Revenue Requirement on Capital Depreciation Expense Net Property Taxes ISRS Revenue Overcollection January 2014 through May 2018  Total ISRS Revenues per Company	7.20% 4,738,310 1.34135 6,355,732 65,830,885 1.8900% 1,244,204 25.4482% 316,628 1.34135 424,709 5,931,023 1,086,754 214,988 (1,834,513) 5,398,252

Schedule DMS-d2 Page 9 of 12 Appendix C

# OF THE STATE OF MISSOURI

In the Matter of the Application of Spire ) Missouri Inc. to Establish an Infrastructure ) File No. GO-2018-0310 System Replacement Surcharge in its Spire ) Missouri West Service Territory )					
AFFIDAVIT OF ALI ARABIAN					
STATE OF MISSOURI ) ) ss. COUNTY OF COLE )					
COMES NOW ALI ARABIAN and on his oath declares that he is of sound mind and lawful age; that he contributed to the foregoing Staff Recommendation in Memorandum form; and that the same is true and correct according to his best knowledge and belief.					
Further the Affiant sayeth not.  ALI ARABIAN					
JURAT					
Subscribed and sworn before me, a duly constituted and authorized Notary Public, in and for the County of Cole, State of Missouri, at my office in Jefferson City, on this day of August, 2018.					
D. SUZIE MANKIN Notary Public - Notary Seal State of Missouri Commissioned for Cole County My Commission Expires: December 12, 2020 Commission Number: 12412070  D. SUZIE MANKIN Notary Public Notary Public					

# **OF THE STATE OF MISSOURI**

In the Matter of the Application of Spire Missouri Inc. to Establish an Infrastructure System Replacement Surcharge in its Spire Missouri West Service Territory	) File No. GO-2018-0310 )
AFFIDAVIT OF K	XIMBERLY K. BOLIN
STATE OF MISSOURI )	
COUNTY OF COLE ) ss.	
	and on her oath declares that she is of sound mind foregoing Staff Recommendation in Memorandum ording to her best knowledge and belief.  Kindley K. Bolin  IMBERLY K. BOLIN
n	URAT
Subscribed and sworn before me, a duly co	onstituted and authorized Notary Public, in and for
the County of Cole, State of Missouri, at my o	
August, 2018.	
D. SUZIE MANKIN Notary Public - Notary Seal	
State of Missouri Commissioned for Cole County My Commission Exoires: December 12, 2020 Commission Number: 12412070	Notary Public

# OF THE STATE OF MISSOURI

In the Matter of the Application of Spire Missouri Inc. to Establish an Infrastructure System Replacement Surcharge in its Spire Missouri West Service Territory	) File No. GO-2018-0310 )
AFFIDAVIT OF M	ICHAEL J. ENSRUD
STATE OF MISSOURI )	
COUNTY OF COLE ) ss.	±
COMES NOW MICHAEL J. ENSRUD	and on his oath declares that he is of sound mind
and lawful age; that he contributed to the for	regoing Staff Recommendation in Memorandum
form; and that the same is true and correct accor-	rding to his best knowledge and belief.
Further the Affiant sayeth not.  M	Michael L. Ensud ICHAEL J. ENSRUD
$\mathbf{J}\mathbf{U}$	RAT
Subscribed and sworn before me, a duly co	nstituted and authorized Notary Public, in and for
the County of Cole, State of Missouri, at my of	n
August, 2018.	
D. SUZIE MANKIN  Notary Public - Notary Seal  State of Missouri  Commissioned for Cole County  My Commission Expires: December 12, 2020  Commission Number: 12412070	Aluxellanken Notary Public

# SPIRE MISSOURI INC. -WEST CASE NO. GO-2018-0310 & YG-2018-0164

# Staff's Total ISRS Rev Req

\$4,052,629

Customer Rate Class	Cust #	Customer Charge	Ratio To Residential	Weighted Cust #	Customer Percentage	<u>Cal</u> <u>ISRS</u> <u>Charge</u>	ISRS Revenues
Residential	469,947	\$20.00	1.0000	469,947	82.9794%	\$0.60	\$3,362,848
SGS (Small Gen. Service)	31,727	\$30.00	1.5000	47,591	8.4031%	\$0.89	\$340,548
LGS-Large Gen. Service	3,628	\$130.17	6.5085	23,613	4.1694%	\$3.88	\$168,969
LV-Large Volume Service	460	\$1,095.27	54.7635	25,191	4.4481%	\$32.66	\$180,263
TOTAL	505,762			566,342	100.00%	_	\$4,052,629