Exhibit No.: Issues: Ulass Cost of Service/Rate Design Witness: Jessica A. York Type of Exhibit: Direct Testimony Sponsoring Party: Case No.: GR-2025-0107 Date Testimony Prepared: May 7, 2025 BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI In the Matter of Spire Missouri Inc. d/b/a Spire's Request for Authority to Implement a General Rate Increase for Natural Gas Service Provided in the Company's Missouri Service Area

Direct Testimony and Schedule of

Jessica A. York

On behalf of

Missouri Industrial Energy Consumers

May 7, 2025



Project 11770

BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the Matter of Spire Missouri Inc. d/b/a Spire's Request for Authority to Implement a General Rate Increase for Natural Gas Service Provided in the Company's Missouri Service Area

Case No. GR-2025-0107

STATE OF MISSOURI

COUNTY OF ST. LOUIS)

Affidavit of Jessica A. York

Jessica A. York, being first duly sworn, on her oath states:

SS

1. My name is Jessica A. York. I am a consultant with Brubaker & Associates, Inc., having its principal place of business at 16690 Swingley Ridge Road, Suite 140, Chesterfield, Missouri 63017. We have been retained by the Missouri Industrial Energy Consumers in this proceeding on their behalf.

2. Attached hereto and made a part hereof for all purposes are my direct testimony and schedule which were prepared in written form for introduction into evidence in Missouri Public Service Commission Case No. GR-2025-0107.

3. I hereby swear and affirm that the testimony and schedule are true and correct and that they show the matters and things that they purport to show.

in a. yh

Jessica A. York

Subscribed and sworn to before me this 7th day of May, 2025.

ADRIENNE J. FOLLETT Notary Public - Notary Seal STATE OF MISSOURI Jefferson County My Commission Expires: Mar. 22, 2029 Commission # 21989987

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BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

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In the Matter of Spire Missouri Inc. d/b/a Spire's) Request for Authority to Implement a General Rate Increase for Natural Gas Service Provided in the Company's Missouri Service Area

) Case No. GR-2025-0107

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BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

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In the Matter of Spire Missouri Inc. d/b/a Spire's Request for Authority to Implement a General Rate Increase for Natural Gas Service Provided in the Company's Missouri Service Area

Case No. GR-2025-0107

Direct Testimony of Jessica A. York

1 Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

- 2 A Jessica A. York. My business address is 16690 Swingley Ridge Road, Suite 140,
- 3 Chesterfield, MO 63017.

4 Q WHAT IS YOUR OCCUPATION?

- 5 A I am a consultant in the field of public utility regulation and a Principal with the firm of
- 6 Brubaker & Associates, Inc. ("BAI"), energy, economic and regulatory consultants.

7 Q PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.

8 A This information is included in Appendix A to this testimony.

9 Q ON WHOSE BEHALF ARE YOU APPEARING IN THIS PROCEEDING?

10 A This testimony is presented on behalf of the Missouri Industrial Energy 11 Consumers ("MIEC"), an association that represents the interests of large consumers 12 in Missouri rate matters. Those interests include the interests of large industrial 13 consumers of Spire Missouri Inc. ("Spire" or "Company").

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I. INTRODUCTION AND SUMMARY

2 Q WHAT IS THE PURPOSE OF YOUR TESTIMONY?

- A My testimony addresses the Company's proposals for its Spire East Class Cost of Service ("CCOS") study, the allocation of any allowed gas distribution rate increase, and the Transportation class rate design. I have examined the testimonies and schedules presented by the Company in this proceeding with respect to the CCOS study, class revenue allocation, and rate design, and will comment on the propriety of its proposals and make certain recommendations.
- - My silence on any aspect of the Company's filing should not be construed as
- 10 an endorsement of, or agreement with, the Company's position.

11 Q PLEASE SUMMARIZE YOUR TESTIMONY AND RECOMMENDATIONS.

- 12 A My testimony and recommendations may be summarized as follows:
- The CCOS study filed by the Company in this proceeding is generally based on fundamentally sound principles. For example, the CCOS study allocates the fixed costs of distribution mains to customer classes on the basis of a demand component and a customer component.
- Though the CCOS study filed by Spire shows that the Transportation customers in Spire East on average should receive a non-gas rate decrease of approximately 3.7%, Spire proposes to increase the non-gas rates of the Spire East Transportation class by 32.1% on average. As a result of its class revenue allocation proposal, Spire moves the Transportation class's rates even further away from cost of service than they are now.
- I support Spire's proposal to maintain separate rate designs for Transportation customers in Spire East and Spire West.
- 4. The Company's proposed revenue allocation moves each class 10% toward cost of service, relative to an across-the-board increase. In other words, the Company identified the difference between class revenues at cost of service and class revenues at an across-the-board increase. Then, 10% of this difference was added to the class revenues resulting from a uniform increase. This calculation is shown in Figure 16 of Timothy Lyons' CCOS testimony.

- 5. The Company's proposed revenue allocation does not make a meaningful movement toward cost of service and should be rejected.
- 3 6. Table 3 of my Direct Testimony shows the class revenue apportionment resulting
 4 from a 50% movement toward cost of service. I recommend that all classes be
 5 moved 50% of the way toward cost of service.
- 7. The Company's proposed transportation rate design reduces the amount of costs recovered through the monthly customer charge relative to current rates. This proposal unjustifiably shifts costs between customers in the class, and should be rejected. Instead, I recommend that each element of the transportation rate structure be increased by an equal percent.

11II. CLASS COST OF SERVICE12AND RATE DESIGN PRINCIPLES

13 Q COULD YOU PLEASE EXPLAIN THE RATEMAKING PROCESS AND THE DESIGN

14 OF RATES?

15 А The ratemaking process has three steps. First, we must determine the utility's total 16 revenue requirement and the extent to which an increase or decrease in revenues is 17 necessary. Second, we must determine how any increase or decrease in revenues is 18 to be distributed among the various customer classes. A determination of how many dollars of revenue should be produced by each class is essential for obtaining the 19 20 appropriate level of rates. Third, individual tariffs must be designed to produce the 21 required amount of revenues for each class of service and to reflect the cost of serving 22 customers within the class.

The guiding principle at each step should be cost of service. In the first step, determining revenue requirements, it is universally agreed that the utility is entitled to a revenue increase only to the extent that its actual cost of service has increased. If current rate levels exceed the utility's revenue requirement, a rate reduction is required. In short, rate revenues should equal actual cost of service. The same principle should apply in the second and third steps. Each customer class should, to the extent 1 practicable, produce revenues equal to the cost of serving that particular class, no more 2 and no less. This may require a rate increase for some classes and a rate decrease 3 for other classes. The standard tool for performing this exercise is a CCOS study that 4 shows the cost to serve for each class, as well as the rates of return for each class of 5 service. The goal is to modify rate levels so that each class of service provides approximately the same Rate of Return ("ROR"). Finally, in designing tariffs for 6 7 individual classes, the goal also should be to align the rate design with the cost of 8 service so that each customer class's rate tracks, to the extent practicable, the utility's 9 cost of providing service to that customer class.

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IN THE RATEMAKING PROCESS?

A The basic reasons for using cost of service as the primary factor in the ratemaking
process are equity and stability.

WHY IS IT IMPORTANT TO ADHERE TO BASIC COST OF SERVICE PRINCIPLES

14 Q PLEASE DISCUSS THE EQUITY CONSIDERATION.

15 A When rates are based on cost of service, each customer class pays what it costs the 16 utility to serve that customer class, no more and no less. But when rates are not based 17 on cost of service, then some classes are required to contribute disproportionately to 18 the utility's revenues by subsidizing the service provided to other customer classes. 19 This is inherently inequitable.

20 Q PLEASE DISCUSS THE STABILITY CONSIDERATION.

A When rates are closely tied to costs, the earnings impact on the utility associated with
 changes in numbers of customers and their usage patterns will be minimized as a result

of rates being designed in the first instance to track changes in the level of costs. Thus,
 cost-based rates provide an important enhancement to a utility's earnings stability,
 thereby reducing the utility's need to file for future rate increases.

4 From the perspective of the customer, cost-based rates provide a more reliable 5 means of determining future levels of costs. If rates are based on factors other than 6 costs, it becomes much more difficult for customers to translate expected utility-wide 7 cost changes (i.e., expected increases in overall revenue requirements) into changes 8 in the rates charged to particular customer classes (and to customers within the class). 9 From the customer's perspective, this situation reduces the attractiveness of 10 expansion, as well as continued operations, because of the lessened ability to plan. 11 Cost-based rates provide accurate price signals that provide customers with important 12 information necessary to make expansion decisions as well as decisions regarding 13 continued operations, thus, improving their ability to plan.

14 Q WHEN YOU SAY "COST," TO WHAT TYPE OF COST ARE YOU REFERRING?

A I am referring to the utility's "embedded" or actual accounting costs of rendering service;
that is, those costs that are used by the Missouri Public Service Commission
("Commission") in establishing the utility's overall revenue requirement.

18 Q WHAT IS THE BASIC PURPOSE OF A CCOS STUDY?

19 A The basic purpose of a CCOS study is to determine the costs that a utility incurs to 20 provide service to different classes of customers. After the utility's overall cost of 21 service (or revenue requirement) is determined, a CCOS study is used, first, to allocate 22 the cost of service between the utility's jurisdictional and non-jurisdictional (if any) businesses and between service territories. Then, second, to allocate the jurisdictional
 cost of service among the utility's customer classes.

3 A CCOS study shows the extent to which each customer class contributes to 4 the total cost of the system. For example, when a class produces the same ROR as 5 the total system, it returns to the utility just enough revenues to cover the costs incurred 6 in serving that class (including a reasonable authorized return on investment). If a class 7 produces a ROR below the system average, the revenues it provides to the utility are 8 insufficient to cover all relevant costs. If, on the other hand, a class produces a ROR 9 above the average, then that class pays revenues sufficient to cover the costs 10 attributable to it, and it also pays for part of the costs attributable to other classes that 11 produce below-average RORs. The CCOS study, therefore, is an important tool 12 because it shows the revenue requirement for each class along with the ROR under 13 current rates and any proposed rates.

Reliance on a properly prepared CCOS study in designing or consolidating
 rates serves to minimize improper price signals and cross-subsidization issues
 between rate classes and customers within a rate class.

17 Q WHAT ARE THE MAIN ELEMENTS OF A CCOS STUDY?

A Cost of service is a basic and fundamental ingredient to proper ratemaking. In all
 CCOS studies, certain fundamental concepts should be recognized. Of primary
 importance among these concepts are the functionalization, classification, and
 allocation of costs.

Functionalization is the determination and arrangement of costs according to
 major functions, such as production, storage, transmission and distribution.

Classification involves identifying the nature of these costs according to whether
 the costs vary with the demand placed upon the system, the quantity of gas consumed,
 or the number of customers being served.

4 After the assignment of costs to demand, commodity and customer categories, 5 each cost category must be allocated to classes. Fixed costs are those costs that tend 6 to remain constant over the short run irrespective of changes in output, and are 7 generally considered to be demand-related. Fixed costs include those costs that are a 8 function of the size of the utility's investment in facilities, and those costs that are 9 necessary to keep the facilities "on line." Variable costs, on the other hand, are 10 basically those costs that tend to vary with throughput (or usage), and are generally 11 considered to be commodity-related. Customer-related costs are those costs that are 12 most closely related to the number of customers served, rather than the demands 13 placed upon the system or the quantity of gas consumed.

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III. THE COMPANY'S CCOS STUDY

15 Q HAVE YOU REVIEWED THE CCOS STUDY FILED BY THE COMPANY IN THIS 16 PROCEEDING USED TO ESTABLISH RATES?

17 A Yes. I reviewed the Company's CCOS study sponsored by Mr. Timothy Lyons. The
18 Company's CCOS study is generally reasonable.

19 Q WHAT ARE THE RESULTS OF THE COMPANY'S CCOS STUDY?

A Table 1 shows the increases necessary to bring classes' rates to cost of service for Spire East. It should be noted that the increases shown in the table are calculated with respect to current revenues, which only includes current base rate revenues and excludes Infrastructure System Replacement Surcharge ("ISRS") revenues.

				TABLE 1			
	<u>C</u>	lass	Cost of Service	Spire East e vs. Proposed R	evenue Al	location	
Delivery Revenues Rate at Current			Increase / (Decrease) to Reach Cost of Service		Spire Proposed Increase / (Decrease)		
Line	Schedule		Rates	Amount	Percent	Amount	Percent
			(1)	(2)	(3)	(4)	(5)
1 2 3 4 5 6 7 8	Residential SGS LGS LV LVTS General LP UG Total	\$	310,267,458 37,745,314 28,767,046 803,248 13,814,997 698 48,443 391,447,203	\$121,157,296 13,079,730 7,792,522 (223,091) (517,042) 222 (30,302) \$141,259,335	39.0% 34.7% 27.1% -27.8% -3.7% 31.8% -62.6% 36.1%	\$112,883,744 13,566,817 10,122,153 238,568 4,435,101 249 12,703 \$141,259,335	36.4% 35.9% 35.2% 29.7% 32.1% 35.7% 26.2% 36.1%
Sourc	e: Direct Testim	ony o	of Timothy Lyons	s, Figure 16.			

1 Q CAN YOU EXPLAIN THIS TABLE?

A This table shows that for Spire East, the Company is seeking an increase of approximately \$141.3 million above the amount of revenues produced by current base rates. The current revenues in the above table do not reflect the approximately \$18.5 million that would be recovered on an annualized basis through the current ISRS surcharge. The table also shows that, in order to reach cost of service, Residential rates need to be increased by \$121.2 million while rate decreases are warranted for the Large Volume ("LV") and Large Volume Transportation Service ("LVTS") classes.

> Jessica A. York Page 8

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Q HOW WAS THE COMPANY'S CCOS STUDY PERFORMED?

A The Company performed separate CCOS studies for each of its service areas, one for
Spire East, and another for Spire West.

4 Q WHY ARE SEPARATE CCOS STUDIES IMPORTANT?

A It is important because it allows parties to measure – and the Commission to
 understand – how all customer classes' existing rates in each service area are
 performing in terms of collecting their cost of service.

8 Q SHOULD RATES IN SPIRE EAST AND SPIRE WEST BE DESIGNED ON THEIR

9 **RESPECTIVE CCOS**?

10 Yes. The Spire East and Spire West systems were separately planned, designed, and А 11 constructed. As a result, their rates have historically been based on separate cost of 12 Furthermore, the customers in each system have different usage service. 13 characteristics which would drive different rates. For instance, customers of one 14 system may have a higher load factor (i.e., the customers have higher usage for each 15 unit of demand). Therefore, rates should continue to be based on each service 16 territory's cost of service. This will properly reflect cost-causation.

17 Q WHEN SELECTING A CCOS METHODOLOGY, SHOULD THE METHODOLOGY

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APPROPRIATELY REFLECT COST-CAUSATION?

A Yes. In selecting a particular CCOS study methodology, the fundamental question is
 whether that methodology properly reflects cost-causation. In other words, costs
 should be allocated to the utility's customer classes based on how the costs are
 incurred. The *Gas Distribution Rate Design Manual* published by the National

Association of Regulatory Utility Commissioners ("NARUC") describes this principle as
 follows:

Historic or embedded cost of service studies attempt to apportion total costs to the various customer classes in a manner consistent with the incurrence of those costs. This apportionment must be based on the fashion in which the utility's system, facilities and personnel operate to provide the service.¹

8 Q WHAT IS YOUR CONCLUSION WITH RESPECT TO THE COMPANY'S CCOS 9 STUDY?

Based on my review, I conclude that the Spire East CCOS study incorporates generally 10 А 11 Specifically, the Spire East CCOS study accepted cost of service principles. 12 appropriately allocates the costs of distribution mains to the Company's customer 13 classes based on both: (1) the contribution of each class to the system design day 14 demand (the Coincident Demand method), and (2) the number of customers served 15 within each class. The Company's largest investment in terms of cost is distribution 16 mains,² thus, it is especially important that the allocation of these costs follow class 17 cost-causation.

18 Q PLEASE EXPLAIN WHY THE COMPANY'S CCOS STUDY PROPERLY REFLECTS

19 CLASS COST-CAUSATION WITH RESPECT TO DISTRIBUTION MAINS.

20 A When a gas distribution utility installs distribution mains to establish/expand the 21 capacity of its system, there are two factors that it must consider. First, the utility must 22 design its system to ensure that it will be capable of meeting customers' demand on

¹NARUC *Gas Distribution Rate Design Manual* at page 20 (Emphasis Added). ²Direct Testimony of Timothy Lyons at page 15, lines 19-20.

the system peak day (or "design day").³ The expected demand on the system peak day is the key consideration. It dictates the proper size (in diameter) of the distribution mains to be installed to provide reliable service—and that, in turn, dictates the costs that the utility must incur. Thus, the costs incurred by the utility are a function of design day demand because when the distribution system is designed to meet the coincident design day demand of the utility's rate classes, the utility is able to meet its firm customers' demands each and every day of the year.

8 Second, the utility must also design its system in such a way that all customers 9 are physically connected to the system.⁴ While the diameter of the mains installed 10 depends upon design day demand, the total length of the mains depends upon the 11 number of customers being served. To illustrate, a much greater level of investment in 12 distribution main is needed to serve 10,000 customers with individual coincident peak 13 demands of 1 Mcf located at various geographical locations than what is needed to 14 serve one customer with a demand of 10,000 Mcf at a single geographic location. Thus, 15 the costs that a gas distribution utility incurs to provide service are driven by both design 16 day demand (diameter of the main) and the number of customers connected to the 17 system (length of the main).

Consistent with this, the Company's CCOS study allocates the costs of distribution mains to customer classes on the basis of both: (1) each class's contribution to the total design peak day demand of the system (the Coincident Demand method), and (2) the number of customers within each class. The CCOS study, therefore, allocates costs based on how they are incurred, consistent with

³Spire's Response to MIEC Data Requests 1-11 and 1-18. Included as Schedule JAY-1 at pages 1-2. ⁴Id.

cost-causation principles, and are reasonable for the purpose of setting rates in this
 proceeding.

3 Q WHY DOES PARTIALLY ALLOCATING DISTRIBUTION MAIN COSTS ON A 4 DESIGN DAY DEMAND BASIS REFLECT SOUND COST OF SERVICE 5 PRINCIPLES?

6 А As explained above, when a gas distribution utility designs its system, the key 7 consideration is the expected demands of the customer classes on the design day. 8 The expected demands on the design day dictate the proper size of the mains, and 9 that, in turn, directly impacts the total cost of the system. The cost of the system is, 10 therefore, a function of the design day demand, and that cost is the same regardless 11 of how much gas customers are expected to use throughout the year. The cost of serving the peak is the same regardless of whether customers are expected to use gas 12 13 consistently throughout the entire year, or during only part of the year (e.g., the winter 14 months).

15QWHY DOES ALLOCATING DISTRIBUTION MAIN COSTS PARTIALLY ON A16CUSTOMER BASIS REFLECT SOUND COST OF SERVICE PRINCIPLES?

17 А Classifying a portion of main costs as customer-related recognizes that a portion of 18 main costs is incurred to connect customers to the system and is related to the length 19 of mains necessary to connect those customers rather than the demand of those 20 customers. Classifying a portion of main costs as customer-related and allocating 21 those costs on a customer basis appropriately reflects cost of service. Spire 22 determined the customer-related portion of distribution mains by averaging the results 23 of a Zero-Intercept (or zero-inch) analysis, and a Minimum System Study. The

zero-inch approach calculates a hypothetical zero or minimum size main necessary to
 connect customers to the system and, thus, affords customers the opportunity to take
 gas delivery service as desired. The Minimum System Study prices out all distribution
 mains at the historical unit cost of the smallest main installed in the system, and that
 portion of distribution main costs is classified as customer-related. The Company's
 approach determined that 44.75% of distribution mains investment is customer-related.
 Therefore, the demand-related portion of mains investment is 55.25%.

8 Q IS ANNUAL USAGE A DESIGN CRITERION FOR A TYPICAL GAS DISTRIBUTION 9 COMPANY FACILITY?

10 A No, it is not. To be sure, annual usage (or average demand) is certainly a factor that 11 should be and is considered in allocating the variable cost of operating the gas system. 12 However, annual usage does not determine the amount of system capacity that is 13 necessary to provide firm (i.e., non-interruptible) service to every customer every day 14 of the year. Rather, the actual physical size of the distribution mains, compressors, 15 and related equipment is based on customers' contributions to the system design day 16 demand.

The system's capacity to serve customer classes must be sized for design day demand, so that all firm customers can utilize that capacity to receive firm, uninterrupted supply of gas on the day of the system peak demand. Only if the system is designed to meet the design day demand of all the Company's rate classes will the Company be able to deliver gas each and every day of the year to meet its customers' demands. If transmission and distribution main capacity were designed to meet average demand, then the Company would not be able to provide firm service on days 1 2 when demand exceeds the average. In this scenario, the Company would fail to achieve the objective of meeting all customer demands for natural gas at all times.

3 Q BUT DOESN'T THE COMPANY'S DISTRIBUTION SYSTEM ALLOW CUSTOMERS 4 TO RECEIVE VOLUMES OF GAS THROUGHOUT THE YEAR?

5 A Yes. After the distribution system is designed and constructed to meet design day 6 demand, the capacity is adequate to serve the demands of customers on all other days.

7 It is the design day demand which drives the capacity-related cost incurred in 8 order to design, construct, implement and maintain a distribution system that is 9 adequate to provide firm service throughout the year, including the system peak design 10 day, to all customers that want firm service. Distribution systems are sized based on 11 design day demands which will ensure that firm gas supply can actually be delivered 12 every single day of the year. Because cost-causation is driven by design day demand, 13 distribution-related demand or capacity-related costs should be allocated based on 14 design day demand.

15 If the distribution system can meet the design day demand of its customers, it 16 can meet the demand of its customers on every other day of the year. Daily needs 17 must be met, but the only way to ensure that will happen is through a system that is 18 designed to meet the design day demand. A system designed to simply meet average 19 demand would fail to serve customers on many cold days.

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IV. CLASS REVENUE ALLOCATION

Q HAVE YOU REVIEWED SPIRE'S PROPOSED CLASS REVENUE ALLOCATION? A Yes. The Company's proposed class revenue allocation for Spire East is shown in Table 2.

TABLE 2						
Company Proposed Revenue Allocation for Spire East						
		Delivery Revenues				
	Rate	at Current	Spire CCOS ¹		Proposed	
Line	Schedule	Rates	Revenues	Increase	Revenues	Increase
		(1)	(2)	(3)	(4)	(5)
1	Residential	\$310,267,458	\$431,424,754	39.0%	\$423,151,202	36.4%
2	SGS	37,745,314	50,825,044	34.7%	51,312,130	35.9%
3	LGS	28,767,046	36,559,568	27.1%	38,889,199	35.2%
4	LV	803,248	580,157	-27.8%	1,041,816	29.7%
5	LVTS	13,814,997	13,297,954	-3.7%	18,250,098	32.1%
6	General LP	698	920	31.8%	946	35.7%
7	UG	48,443	18,142	-62.6%	61,146	26.2%
8	Total	\$391,447,203	\$532,706,537	36.1%	\$532,706,537	36.1%
Sourc	e: Direct Testim	ony of Timothy Ly	ons, Figure 16.			

1 Q DO YOU AGREE WITH SPIRE'S PROPOSED CLASS REVENUE ALLOCATION?

2 А No. Cost of service should be the primary factor used to establish class revenue requirements and to design rates. However, the Company's proposed revenue 3 4 apportionment does not make meaningful movement toward cost of service, as it 5 effectively maintains the status quo in which the Residential class would continue to be 6 priced below cost of service, while other major rate classes would be priced significantly 7 above cost of service. Indeed, the Spire East CCOS study clearly shows that all rate 8 classes, except Residential, would require increases below the system average 9 increase, or rate decreases, to bring their rates to their respective CCOS. However, 10 Spire proposes to move classes only 10% of the way between CCOS and a uniform 11 increase.

1 There is no justification for overpricing the transportation class to such a large 2 extent. Fundamentally, there is no justification at all, but the amount of overpricing here 3 is extreme, and Spire has provided no justification for not taking more significant steps 4 to correct this unreasonable circumstance.

5 Q ARE YOU RECOMMENDING AN ALTERNATIVE CLASS REVENUE ALLOCATION 6 FOR SPIRE EAST?

7 А Yes. Table 3 below shows the revenue allocation that would result from a 50%

8 movement toward cost of service.

					Alternative Revenue Allocation for Spire East						
	Rate	Delivery Revenues at Current	Spire CC	cos	50% Movement Toward COS						
Line	Schedule	Rates	Revenues	Increase	Revenues	Increase					
		(1)	(2)	(3)	(4)	(5)					
1 2 3 4 5 6 7	Residential SGS LGS LV LVTS General LP UG	\$310,267,458 37,745,314 28,767,046 803,248 13,814,997 698 48,443	\$431,424,754 50,825,044 36,559,568 580,157 13,297,954 920 18,142	39.0% 34.7% 27.1% -27.8% -3.7% 31.8% -62.6%	\$426,828,336 51,095,647 37,853,807 836,634 16,049,145 934 42,033	37.6% 35.4% 31.6% 4.2% 16.2% 33.9% -13.2%					
8	Total	\$391,447,203	\$532,706,537	36.1%	\$532,706,537	36.1%					

9 I propose to move all classes 50% of the way toward cost of service, instead of 10 10% as proposed by the Company. My recommended revenue apportionment makes 11 a more meaningful movement toward cost of service for all rate classes than the 12 Company's proposal, while still reflecting the need for gradualism. To the extent the

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- Commission approves a revenue requirement increase less than the amount requested by the Company, my recommended revenue allocation should be scaled accordingly.
- 3QWHAT IS THE IMPACT OF YOUR PROPOSED REVENUE ALLOCATION ON THE4RESIDENTIAL CLASS, RELATIVE TO THE COMPANY'S PROPOSAL?

5 А As shown in Table 3, my proposal would produce an increase of 37.6% for the Spire 6 East Residential class, instead of the 36.4% proposed by the Company, at the 7 Company's claimed revenue deficiency. This equates to approximately an additional \$0.50⁵ per Residential customer per month at the Company's claimed revenue 8 9 deficiency. To the extent the Commission approves an increase less than the amount 10 proposed by the Company, the impact would be less. For example, if the Commission 11 approves 75% of the Company's requested revenue increase as recommended by 12 MIEC, the impact would be reduced to about \$0.37 per Residential customer per 13 month.

14 Q SHOULD SEPARATE CCOS STUDIES CONTINUE TO BE PERFORMED IN THE

15 NEXT RATE CASE FOR BOTH SPIRE EAST AND SPIRE WEST IN ORDER TO 16 GUIDE THE CLASS REVENUE ALLOCATION?

17 A Yes. This will allow the rates in each service territory to be compared to each territory's
18 respective CCOS.

⁵(\$426.8 million - \$423.2 million) / 615,125 residential customers / 12 = \$0.50.

V. PROPOSED TRANSPORTATION RATE DESIGN FOR SPIRE

Q PLEASE DESCRIBE THE CURRENT RATE DESIGN FOR THE SPIRE EAST 4 TRANSPORTATION CLASS.

5 A The current Spire East Transportation tariff (rate LVTS) has a customer charge, a 6 reservation charge per billing demand Ccf, and a two-block volumetric consumption 7 charge. Specifically, the first block of 2.559¢/Ccf applies to the first 36,000 Ccf of 8 customer monthly usage. The second block of 1.071¢/Ccf applies to all usage in 9 excess of 36,000 Ccf.

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Q DO YOU BELIEVE THAT THE CURRENT TWO-BLOCK TRANSPORTATION RATE

11 STRUCTURE IS REASONABLE?

12 А Yes. Current Transportation rates collect a significant level of fixed costs through the 13 volumetric consumption charges. One major problem with the collection of fixed costs 14 through a variable charge is that customers with a larger amount of usage will likely 15 end up paying for more than their share of fixed costs. Converselv. those 16 Transportation customers with a smaller level of usage will likely end up paying less 17 than the amount of fixed costs incurred to provide them service, so that large customers 18 will be subsidizing the smaller customers in the Transportation rate class. The reduced 19 second block in the Company's existing rate design attempts to reflect this fact by 20 reducing the volumetric consumption charge for the higher usage customers after they 21 exceed the second block usage threshold.

1 Q HAVE YOU REVIEWED THE COMPANY'S PROPOSED RATE DESIGN FOR THE

2 TRANSPORTATION CLASS IN SPIRE EAST?

- A Yes, I have reviewed the Company's proposed rate design for the Spire East
 Transportation class. I support the Company's proposal to maintain the existing rate
 structure. However, I disagree with the Company's proposal to increase the Spire East
 LV transportation customer charge by only 1.7%, while increasing the demand and
 consumption charges by about 43.5%.
- 8 The Company's proposal would reduce the amount of fixed costs recovered 9 through the customer charge, and shift revenues between customers within the class.

10 Q WHAT IS YOUR RECOMMENDATION REGARDING THE TRANSPORTATION

11 CLASS RATE DESIGN?

12 A I recommend that each element of the Spire East transportation rate structure be 13 increased by an equal percent. This proposal will ensure that all customers within the 14 class will be treated the same, and maintains an appropriate level of cost recovery 15 through the monthly customer charge.

16 Q DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

17 A Yes, it does.

Qualifications of Jessica A. York

1 Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A Jessica A. York. My business address is 16690 Swingley Ridge Road, Suite 140,
Chesterfield, MO 63017.

4 Q PLEASE STATE YOUR OCCUPATION.

5 A I am a consultant in the field of public utility regulation and a Principal with the firm of
6 BAI, energy, economic and regulatory consultants.

7 Q PLEASE IDENTIFY THE JURISDICTIONS IN WHICH YOU HAVE PREVIOUSLY

8 **SPONSORED TESTIMONY.**

9 A I have sponsored expert testimony in front of the Idaho Public Utilities Commission, the
10 Illinois Commerce Commission, Indiana Utility Regulatory Commission, the Iowa
11 Utilities Commission, the Kansas Corporation Commission, the Michigan Public
12 Service Commission, the Minnesota Public Utilities Commission, the Missouri Public
13 Service Commission, the Public Utilities Commission of Nevada, the Oklahoma
14 Corporation Commission, the Virginia State Corporation Commission, and the Public
15 Service Commission of Wisconsin.

16 Q PLEASE STATE YOUR EDUCATIONAL BACKGROUND AND PROFESSIONAL 17 EMPLOYMENT EXPERIENCE.

A I graduated from Truman State University in 2008 where I received my Bachelor of
 Science Degree in Mathematics with minors in Statistics and Actuarial Science. I
 earned my Master of Business Administration Degree with a concentration in Finance
 from the University of Missouri-St. Louis in 2014.

I joined BAI in 2011 as an analyst. Then, in March 2015, I joined the consulting
 team of BAI.

3 I have worked in various electric, natural gas and water and wastewater 4 regulatory proceedings addressing cost of capital, sales revenue forecasts, revenue 5 requirement assessments, class cost of service studies, rate design, and various policy 6 issues. I have also conducted competitive power and natural gas solicitations on behalf 7 of large electric and natural gas users, have assisted those large power and natural 8 gas users in developing procurement plans and strategies, assisted in competitive 9 contract negotiations, and power and natural gas contract supply administration. In the 10 regulated arena, I have evaluated cost of service studies and rate designs proffered by 11 other parties in cases for various utilities, including in Idaho, Illinois, Indiana, Kansas, 12 Wisconsin and others. I have conducted bill audits, rate forecasts and tariff rate 13 optimization studies.

I have also provided support to clients with facilities in deregulated markets,
 including drafting supply requests for proposals, evaluating supply bids, and auditing
 competitive supply bills. I have also prepared and presented to clients reports that
 monitor the electric market and recommend strategic hedging transactions.

BAI was formed in April 1995. BAI and its predecessor firm have participated
in more than 700 regulatory proceedings in forty states and Canada.

BAI provides consulting services in the economic, technical, accounting, and financial aspects of public utility rates and in the acquisition of utility and energy services through RFPs and negotiations, in both regulated and unregulated markets. Our clients include large industrial and institutional customers, some utilities and, on occasion, state regulatory agencies. We also prepare special studies and reports, forecasts, surveys and siting studies, and present seminars on utility-related issues.

> Appendix A Jessica A. York Page 2

- In general, we are engaged in energy and regulatory consulting, economic
 analysis and contract negotiation.
- In addition to our main office in St. Louis, the firm also has branch offices in
 Corpus Christi, Texas; Louisville, Kentucky and Phoenix, Arizona.

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Appendix A Jessica A. York Page 3

BRUBAKER & ASSOCIATES, INC.

<u>DR 1-11</u>

Does Mr. Lyons agree or disagree that the Company designs its natural gas facilities to serve the aggregate peak demand for all customers' loads to ensure reliable and uninterrupted natural gas service? If Mr. Lyons disagrees, please provide a detailed explanation supporting the disagreement, along with all documents relied upon by Mr. Lyons to reach his conclusion.

Response:

It is Mr. Lyons understanding that the Company generally designs its natural gas facilities to provide customer access to the natural gas system and to serve aggregate peak demand for all firm customer loads to ensure safe, reliable, and uninterrupted natural gas service.

It is Mr. Lyons understanding that transmission mains and related facilities, for example, are generally designed to meet design day demands; as a result, transmission mains were classified as demand.

It is also Mr. Lyons understanding that distribution mains and related facilities are generally designed to provide customer access to the natural gas system and to meet design day demands; as a result, distribution mains were classified as customer and demand.

Signed by: Tim Lyons

<u>DR 1-18</u>

Does the Company's cost to construct distribution mains vary with the annual volume of natural gas delivered by the Company? If yes, please provide a detailed explanation supporting the response. If no, please explain why annual volume of delivered gas is not a load characteristic that causes the cost of installing distribution mains to vary.

Response:

The cost to install distribution mains is generally based on size or diameter of distribution mains, material type and length or footage of distribution mains.

The size, diameter and material of mains is related to customer demands. Mains are designed with certain sizes or diameters to ensure they have sufficient capacity to serve customers on the peak day.

The length or footage of mains is related to customer location or distance from existing mains. Mains are designed with certain length or footage to connect customers to the distribution system.

Signed by: Julie Johnson