Exhibit No.: Issues: Witness: Type of Exhibit: Sponsoring Parties: Case No.: Date Testimony Prepared:

Cost of Service; Rate Design Brian C. Collins Direct Testimony MIEC and Vicinity GR-2021-0108 May 26, 2021

BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

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

Case No. GR-2021-0108

Direct Testimony and Schedule of

Brian C. Collins

On behalf of

Missouri Industrial Energy Consumers and Vicinity Energy Kansas City, Inc.

May 26, 2021



Project 11068

BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

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

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Case No. GR-2021-0108

STATE OF MISSOURI

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COUNTY OF ST. LOUIS

Affidavit of Brian C. Collins

Brian C. Collins, being first duly sworn, on his oath states:

1. My name is Brian C. Collins. 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 and Vicinity Energy Kansas City, Inc. 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-2021-0108.

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.

Sua C. Callins

Brian C. Collins

Subscribed and sworn to before me this 26th day of May, 2021.



Sally Q Wilhelms

BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

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

Case No. GR-2021-0108

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

Case No. GR-2021-0108

Direct Testimony of Brian C. Collins

1 I. Introduction

2 Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

- 3 A Brian C. Collins. My business address is 16690 Swingley Ridge Road, Suite 140,
- 4 Chesterfield, MO 63017.

5 Q WHAT IS YOUR OCCUPATION?

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

8 Q PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.

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

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

11 A This testimony is presented on behalf of the Missouri Industrial Energy Consumers 12 ("MIEC") and Vicinity Energy Kansas City, Inc. ("Vicinity"). The MIEC is a non-profit 13 corporation that represents the interests of industrial customers in matters involving 14 utility issues. Those interests include the interests of large industrial consumers of Spire Missouri Inc. ("Spire" or "Company"). Vicinity is a "heating company" and a
 "public utility" as those terms are defined in Sections 386.020(20) and 386.020(43).
 Vicinity, therefore, is not only a customer of Spire, but also a competitor with Spire.
 Vicinity is one of the largest users and transporters of natural gas on the Spire system.

5 Q WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?

6 A My testimony addresses the Company's class cost of service ("CCOS") study, the 7 allocation of any allowed gas distribution rate increase, and the Transportation class 8 rate design. I have examined the testimony and schedules presented by the Company 9 in this proceeding with respect to class cost of service, class revenue allocation, and 10 rate design, and will comment on the propriety of its proposals and make certain 11 recommendations.

12 My silence on any aspect of the Company's filing should not be construed as 13 an endorsement of, or agreement with, the Company's position.

14 Q PLEASE PROVIDE A BRIEF SUMMARY OF YOUR CONCLUSIONS AND

15 **RECOMMENDATIONS IN THIS PROCEEDING.**

- 16 A My conclusions and recommendations are 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. However, Spire has filed a CCOS study only for its combined system and not individually for the Spire East and Spire West Systems.¹
- 23
 24
 25
 26
 2. Though the CCOS study filed by Spire shows that the Transportation customers in Spire East and Spire West on average should receive a non-gas rate **decrease** of approximately 18.6%, Spire proposes to **increase** the non-gas rates of the Transportation class by 23.5% on

¹Spire East refers to the service territory previously called Laclede Gas Company. Spire West refers to the service territory previously called Missouri Gas Energy ("MGE").

- 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.
- 4 3. With regard to rate design in the Transportation rate schedule, Spire has made a movement to a single rate design for Transportation customers 5 6 across its combined service territories without adequate cost support. Spire 7 has eliminated the two-block volumetric rate design for Transportation customers in both Spire East and Spire West. As a result, some 8 9 Transportation customers will see dramatic increases at proposed rates, in excess of 80%, even though its CCOS study indicates Transportation 10 11 customers' rates should be decreased on average. In particular, Vicinity 12 would see an increase of over 85% in its non-gas costs.
- Spire has not justified the above average increases for Transportation customers or its flattening of the Transportation rates, which results in disproportionately above average increases to larger customers.
- As a result, I recommend that the respective existing rate designs for
 Transportation customers in Spire West and Spire East be maintained.
- 6. Because the single CCOS study indicates that existing Transportation rates should be reduced, I recommend that the existing rates of Transportation customers in Spire West and Spire East be reduced by approximately 18.6%. Because the Company unilaterally chose to file its CCOS study on only a consolidated or combined basis, sufficient data does not currently exist to enable different Transportation rate adjustments to be proposed for Spire West and Spire East.
- 7. Because the Company's CCOS study indicates that all classes but the
 Residential class should receive a rate decrease, the difference in revenues
 resulting from my proposed revenue allocation should be collected from the
 Residential class.
- 29 8. I recommend that in future rate cases, the Missouri Public Service 30 Commission ("Commission") require Spire to file a CCOS study or studies consistent with the Commission order in this case. For example, to the 31 extent the Commission finds that separate rates for Spire East and Spire 32 33 West should continue, the Company should file separate CCOS studies for Spire East and Spire West in the next rate case. This will allow parties to 34 35 measure the adequacy of the rates for each class in both service areas and 36 evaluate the reasonableness of any rate consolidation proposals - an undertaking that could not be conducted in this proceeding due to the lack 37 38 of documentation filed by Spire in support of its movement toward consolidated rates. Such an approach was ordered by the Commission in 39 the recently completed Missouri-American Water Company rate case. 40

1 II. Class Cost of Service and Rate Design Principles

2 Q COULD YOU PLEASE EXPLAIN THE RATEMAKING PROCESS AND THE DESIGN 3 OF RATES?

4 А The ratemaking process has three steps. First, we must determine the utility's total 5 revenue requirement and the extent to which an increase or decrease in revenues is 6 necessary. Second, we must determine how any increase or decrease in revenues is 7 to be distributed among the various customer classes. A determination of how many 8 dollars of revenue should be produced by each class is essential for obtaining the 9 appropriate level of rates. Third, individual tariffs must be designed to produce the 10 required amount of revenues for each class of service and to reflect the cost of serving 11 customers within the class.

12 The guiding principle at each step should be cost of service. In the first step, 13 determining revenue requirements, it is universally agreed that the utility is entitled to 14 a revenue increase only to the extent that its actual cost of service has increased. If 15 current rate levels exceed the utility's revenue requirement, a rate reduction is required. 16 In short, rate revenues should equal actual cost of service. The same principle should 17 apply in the second and third steps. Each customer class should, to the extent 18 practicable, produce revenues equal to the cost of serving that particular class, no more 19 and no less. This may require a rate increase for some classes and a rate decrease 20 for other classes. The standard tool for performing this exercise is a CCOS study that 21 shows the cost to serve each class, as well as the rates of return for each class of 22 service. The goal is to modify rate levels so that each class of service provides 23 approximately the same rate of return. Finally, in designing tariffs for individual classes, 24 the goal also should be to align the rate design with the cost of service so that each

customer class's rate tracks, to the extent practicable, the utility's cost of providing
 service to that customer class.

Q WHY IS IT IMPORTANT TO ADHERE TO BASIC COST OF SERVICE PRINCIPLES IN THE RATEMAKING PROCESS?

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

7 Q PLEASE DISCUSS THE EQUITY CONSIDERATION.

8 A When rates are based on cost of service, each customer class pays what it costs the 9 utility to serve that customer class, no more and no less. But when rates are not based 10 on cost of service, then some classes are required to contribute disproportionately to 11 the utility's revenues by subsidizing the service provided to other customer classes. 12 This is inherently inequitable.

13 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.

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

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

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

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

12 A The basic purpose of a CCOS study is to determine the costs that a utility incurs to 13 provide service to different classes of customers. After the utility's overall cost of 14 service (or revenue requirement) is determined, a CCOS study is used, first, to allocate 15 the cost of service between the utility's jurisdictional and non-jurisdictional (if any) 16 businesses and between service territories. Then, second, to allocate the jurisdictional 17 cost of service among the utility's customer classes.

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

6 Reliance on a properly prepared CCOS study in designing or consolidating 7 rates serves to minimize improper price signals and cross-subsidization issues 8 between rate classes and customers within a rate class. All rate design proposals 9 should not be adopted when the CCOS study supports a class or classes' rate 10 reduction but the filed tariff change results in a significant overall increase to the class 11 or classes and disproportionate increases to certain customers within that class or 12 classes.

13 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.

After the assignment of costs to demand, commodity and customer categories,
 each cost category must be allocated to classes. Fixed costs are those costs that tend

1 to remain constant over the short run irrespective of changes in output, and are generally considered to be demand-related. Fixed costs include those costs that are a 2 3 function of the size of the utility's investment in facilities, and those costs that are 4 necessary to keep the facilities "on line." Variable costs, on the other hand, are 5 basically those costs that tend to vary with throughput (or usage), and are generally 6 considered to be commodity-related. Customer-related costs are those costs that are 7 most closely related to the number of customers served, rather than the demands 8 placed upon the system or the quantity of gas consumed.

9

III. The Company's CCOS Study

10 Q HAVE YOU REVIEWED THE CCOS STUDY FILED BY THE COMPANY IN THIS 11 PROCEEDING USED TO ESTABLISH RATES?

12 A Yes. I reviewed the Company's CCOS study sponsored by Mr. Wesley E. Selinger.

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

A Based on the information provided by the Company, I have summarized the results of the CCOS study in Table 1 below. Table 1 shows the increases necessary to bring classes' rates to cost of service for Spire on a combined Spire East and Spire West basis. 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 Spire CCOS Study Results <u>At Equal Percent Rate of Return</u>							
Current RevenuesCCOS Increase/LineRate ClassISRS)1 (1)Revenues2\$ (0)(1)(2)(3)(4)							
1	Residential	\$450,417,204	\$589,116,333	\$138,699,129	30.8%		
2	SGS	\$46,392,223	\$44,131,017	\$(2,261,206)	-4.9%		
3	LGS	\$43,710,934	\$24,344,961	\$(19,365,973)	-44.3%		
4	Transportation	\$30,017,548	\$24,420,986	<u>\$(5,596,562)</u>	<u>-18.6%</u>		
5	Total	\$570,537,909	\$682,013,298	\$111,475,389	19.5%		
Source:							

1 Q CAN YOU EXPLAIN THIS TABLE?

A This table shows that Spire is seeking an increase of approximately \$111.5 million above the amount of revenues produced by current base rates. The current revenues in the above table do not reflect the approximately \$47.3 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 \$138.7 million while the other classes should receive a combined decrease of \$27.2 million. 1

Q HOW WAS THE COMPANY'S CCOS STUDY PERFORMED?

A The Company's CCOS study was performed on a combined basis for Spire East and
Spire West. Separate CCOS studies were not performed for Spire East and Spire
West.

5

Q WHY ARE SEPARATE CCOS STUDIES IMPORTANT?

A It is important because it would allow parties to measure – and the Commission to
understand – how all customer classes' existing rates in both Spire East and Spire
West are performing in terms of collecting their cost of service.

9 Q SHOULD RATES IN SPIRE EAST AND SPIRE WEST BE DESIGNED ON THEIR 10 RESPECTIVE CLASS COST OF SERVICE?

11 A Yes. The Spire West and Spire East systems were separately planned, designed, and 12 constructed. As a result, their rates have historically been based on separate cost of 13 service. Furthermore, it is likely that the customers in each system have different usage 14 characteristics which would drive different rates. For instance, customers of one 15 system may have a higher load factor (i.e., the customers have higher usage for each 16 unit of demand). Therefore, rates should continue to be based on each service 17 territory's cost of service. This will properly reflect cost causation.

18 Q WHEN SELECTING A CLASS COST OF SERVICE METHODOLOGY, SHOULD THE

19 METHODOLOGY APPROPRIATELY REFLECT COST CAUSATION?

A Yes. In selecting a particular class cost of service 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.²

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

10 STUDY?

- 11 A Based on my review of the CCOS study, I conclude that the CCOS study incorporates
- 12 generally accepted cost of service principles but should not have been prepared solely
- 13 on a consolidated basis. Specifically, the Company's CCOS study appropriately
- 14 allocates the costs of distribution mains to the Company's customer classes based on
- 15 both (1) the contribution of each class to the system design day demand (the Coincident
- 16 Demand method) and (2) the number of customers served within each class. The
- 17 Company's largest investment in terms of cost is distribution mains,³ thus it is especially
- 18 important that the allocation of these costs follow class cost causation.

²NARUC Gas Distribution Rate Design Manual at 20 (emphasis added).

³According to Mr. Selinger's Appendix C of his testimony, distribution mains represent 45% of utility plant investment for Spire.

1QSETTING ASIDE THE ISSUE OF SEPARATE STUDIES FOR SPIRE EAST AND2SPIRE WEST, PLEASE EXPLAIN WHY THE COMPANY'S CCOS STUDY3PROPERLY REFLECTS CLASS COST CAUSATION WITH RESPECT TO4DISTRIBUTION MAINS.

5 А When a gas distribution utility installs distribution mains to establish/expand the 6 capacity of its system, there are two factors that it must consider. First, the utility must 7 design its system to ensure that it will be capable of meeting customers' demand on 8 the system peak day (or "design day"). The expected demand on the system peak day 9 is the key consideration. It dictates the proper size (in diameter) of the distribution 10 mains to be installed to provide reliable service-and that, in turn, dictates the costs 11 that the utility must incur. Thus, the costs incurred by the utility are a function of design 12 day demand, because when the distribution system is designed to meet the coincident 13 design day demand of the utility's rate classes, the utility is able to meet its firm 14 customers' demands each and every day of the year.

15 Second, the utility must also design its system in such a way that all customers 16 are physically connected to the system. While the diameter of the mains installed 17 depends upon design day demand, the total length of the mains depends upon the 18 number of customers being served. To illustrate, a much greater level of investment in 19 distribution main is needed to serve 10,000 customers with individual coincident peak 20 demands of 1 Mcf located at various geographical locations than what is needed to 21 serve one customer with a demand of 10,000 Mcf at a single geographic location. Thus, 22 the costs that a gas distribution utility incurs to provide service are driven by both design 23 day demand (diameter of the main) and the number of customers connected to the 24 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 cost-causation principles, and are reasonable for the purpose of setting rates in this proceeding.

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

10 As explained above, when a gas distribution utility designs its system, the key А 11 consideration is the expected demands of the customer classes on the design day. 12 The expected demands on the design day dictate both the proper size of the mains, 13 and that in turn directly impacts the total cost of the system. The cost of the system is 14 therefore a function of the design day demand, and that cost is the same regardless of 15 how much gas customers are expected to use throughout the year. The cost of serving 16 the peak is the same regardless of whether customers are expected to use gas 17 consistently throughout the entire year, or during only part of the year (e.g., the winter 18 months).

19QWHY DOES ALLOCATING DISTRIBUTION MAIN COSTS PARTIALLY ON A20CUSTOMER BASIS REFLECT SOUND COST OF SERVICE PRINCIPLES?

A Classifying a portion of main costs as customer-related recognizes that a portion of main costs is incurred to connect customers to the system and is related to the length of mains necessary to connect those customers rather than the demand of those 1 customers. Classifying a portion of main costs as customer related and allocating those 2 costs on a customer basis appropriately reflects cost of service. Spire has classified a 3 portion of distribution mains as customer related using the zero-inch analysis. The 4 zero-inch approach calculates a hypothetical zero or minimum size main necessary to 5 connect customers to the system and thus affords customers the opportunity to take 6 gas delivery service as desired. The results of Spire's zero-inch analysis determined 7 that approximately 34.1% of the investment in mains is customer related for Spire. 8 Therefore, the demand related portion of mains investment is 65.90%.

9 Q IS ANNUAL USAGE A DESIGN CRITERION FOR A TYPICAL GAS DISTRIBUTION

10 COMPANY FACILITY?

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

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.

20 Q DOES SPIRE'S CCOS STUDY ALSO PROPERLY ALLOCATE THE COSTS OF 21 STORAGE TO CLASSES?

A Yes. Transportation customers on the Spire system manage their own gas supply and
 are not allowed to use Spire's gas storage assets for injecting or withdrawing their own

gas supply. As a result, the costs of underground storage are not allocated by Spire to
 the Transportation class customers.

3 Spire's costs of its own underground storage, both capital and expenses, are 4 incurred for the construction and operation of assets designed to store natural gas used 5 to meet the demands of its sales customers who purchase both gas supply and delivery 6 service from Spire. These costs are not incurred by Spire to provide delivery service 7 to Transportation customers. As a result, Spire's allocation of underground storage in 8 its CCOS study best reflects cost causation because Spire does not incur the cost of 9 underground storage in providing distribution delivery service to Transportation 10 customers.

11 IV. Class Revenue Allocation

12 Q HAVE YOU REVIEWED SPIRE'S PROPOSED CLASS REVENUE ALLOCATION?

13 A Yes. Spire's proposed class revenue allocation is shown below in Table 2.

TABLE 2 Spire's Class Revenue Allocation								
$\begin{array}{c c} Current \\ Revenues \\ (without \\ Line \\ \hline (1) \\ \end{array} \begin{array}{c} Current \\ Revenues \\ (without \\ (2) \\ \hline (3) \\ \end{array} \begin{array}{c} Ccos \\ Proposed \\ Revenues^3 \\ \hline (4) \\ \hline (5) = [(4) -(2)] / (2) \end{array}$								
1	Residential	\$450,417,204	\$589,116,333	\$533,636,681	18.48%			
2	SGS	\$46,392,223	\$44,131,017	\$57,305,034	23.52%			
3	LGS	\$43,710,934	\$24,344,961	\$53,993,027	23.52%			
4	Transportation	\$30,017,548	\$24,420,986	\$37,078,555	<u>23.52%</u>			
5	Total	\$570,537,909	\$682,013,298	\$682,013,297	19.53%			
^{1,2} S	Sources: ^{1,2} Schedule WES-2, page 1 of 66. ³ Schedule WES-3.							

Brian C. Collins Page 16

1 Q DO YOU AGREE WITH LACLEDE'S PROPOSED CLASS REVENUE 2 ALLOCATION?

3 No, I do not. As shown in Table 1, Spire's CCOS study clearly shows that all rate А 4 classes except the Residential class require rate decreases to bring their rates to their 5 respective class cost of service. Instead of moving the SGS, LGS, and Transportation 6 classes closer to cost of service. Spire moves these classes away from cost of service 7 under its proposed rates. Specifically, Spire proposes to increase rates for these 8 classes by a higher percentage than it proposes for the Residential class. Thus, these 9 classes provide even higher rates of return at proposed rates than they do at current 10 rates. Furthermore, even though these classes should receive a rate decrease, Spire 11 has proposed a higher percentage increase in rates for these classes than for the 12 Residential class, as shown in Table 2.

This movement away from cost of service in terms of rate of return is shown in
Table 3 below. Class rates of return at current rate revenues, cost of service revenues,
and proposed Spire rate revenues are compared in the table.

	TABLE 3 Spire Class Rates of Return							
<u>Line</u>	CurrentRevenuesCompany(withoutCCOSLineRate ClassISRS)RevenuesRevenues							
		ROR	ROR	ROR				
1	Residential	2.60%	7.23%	5.52%				
2	SGS	8.09%	7.23%	11.97%				
3	LGS	16.63%	7.23%	20.46%				
4	Transportation	<u>10.12%</u>	<u>7.23%</u>	<u>13.17%</u>				
5	Total	4.18%	7.23%	7.23%				

With respect to the Transportation class, its rate of return would increase to 13.2%,
 which is higher than its rate of return at current rates of 10.1%, and nearly double that
 of the proposed system average rate of return of 7.23%.

When a class produces a rate of return higher than the system average, it is
subsidizing another class or classes. Under Spire's proposed class revenue allocation,
the SGS, LGS, and Transportation classes will subsidize the Residential class by
approximately \$55.5 million annually and pay more than their respective class cost of
service under proposed rates.

9 Q WHAT IS YOUR PROPOSED CLASS REVENUE ALLOCATION?

10 A Table 4 below shows my recommended class revenue allocation for Spire. I propose
11 to move all classes to cost of service. As a result, all classes would produce a rate of
12 return of 7.23% at proposed rates.

TABLE 4 <u>MIEC/Vicinity Proposed Class Revenue Allocation for Spire</u>								
<u>Line</u>	<u>Rate Class</u> (1)	Current Revenues <u>(without ISRS)¹</u> (2)	CCOS <u>Revenues²</u> (3)	MIEC/Vicinity Proposed <u>Revenues</u> (4)	Increase/ (Decrease) <u>%</u> (5) = [(4) –(2)] / (2)			
1	Residential	\$450,417,204	\$589,116,333	\$589,116,333	30.8%			
2	SGS	\$46,392,223	\$44,131,017	\$44,131,017	-4.9%			
3	LGS	\$43,710,934	\$24,344,961	\$24,344,961	-44.3%			
4	Transportation	\$30,017,548	\$24,420,986	\$24,420,986	<u>-18.6%</u>			
5	Total	\$570,537,909	\$682,013,298	\$682,013,298	19.5%			
Sources:								
^{1,2} Schedule WES-2, page 1 of 66.								

Brian C. Collins Page 18

1 Q PLEASE EXPLAIN WHY YOUR PROPOSED CLASS REVENUE ALLOCATION FOR 2 SPIRE IS REASONABLE.

A My proposal for class revenue allocation is reasonable because it moves all classes to their respective cost of service in the combined service territories. This is based on the single class cost of service study. Specifically for the Transportation class, because the Company has only provided a single class cost of service study, I recommend that each volumetric block charge under the existing rates for Transportation customers be decreased by an equal percent so that the Transportation class receives an 18.6% decrease.

10 Q SHOULD SEPARATE CLASS COST OF SERVICE STUDIES BE PERFORMED IN

11 THE NEXT RATE CASE FOR BOTH SPIRE EAST AND SPIRE WEST IN ORDER TO 12 GUIDE THE CLASS REVENUE ALLOCATION?

A Yes. This will allow the rates in each service territory to be compared to each territory's
 respective class cost of service. A similar provision was recently ordered by the
 Commission in the Missouri-American Water Company rate case (WR-2020-0344).

16 VI. Proposed Transportation Rate Design for Spire

17 Q PLEASE DESCRIBE THE CURRENT RATE DESIGN FOR THE SPIRE WEST AND

18

SPIRE EAST TRANSPORTATION CLASS?

A The current Spire West Transportation tariff (the Large Volume or LV tariff) provides for
 a customer charge with all other costs recovered through a seasonal two-block
 volumetric consumption charge. The first block applies to the first 30,000 Ccf of
 customer monthly usage and is equal to 3.441¢/Ccf during the summer and 5.512¢/Ccf

during the winter. For all usage in excess of 30,000 Ccf/month, the customer is charged
 2.280¢/Ccf during the summer and 4.300¢/Ccf during the winter.

The current Spire East Transportation tariff is similar. The Spire East tariff has a customer charge, a reservation charge per billing demand therm, and a two-block volumetric consumption charge. Specifically, the first block of 2.509¢/therm applies to the first 36,000 therms of customer monthly usage. The second block of 1.050¢/therm applies to all usage in excess of 36,000 therms.⁴

8 Q DO YOU BELIEVE THAT THE CURRENT TWO-BLOCK TRANSPORTATION RATE 9 STRUCTURE IS REASONABLE?

10 Yes. Current Transportation rates collect a significant level of fixed costs through the А 11 volumetric consumption charges. One major problem with the collection of fixed costs 12 through a variable charge is that customers with a larger amount of usage will likely 13 end up paying for more than their share of fixed costs. Conversely, those 14 Transportation customers with a smaller level of usage will likely end up paying less 15 than the amount of fixed costs incurred to provide them service, so that large customers 16 will be subsidizing the smaller customers in the Transportation rate class. The reduced 17 second block in Spire's existing rate design attempts to reflect this fact by reducing the 18 volumetric consumption charge for the higher usage customers after they exceed the 19 second block usage threshold.

⁴Notice that the current Spire East tariff measures usage in therms. In contrast, the Spire West tariff measures usage in Ccf. Spire proposes to convert the Spire East tariff so that it is also measured in Ccf. I do not have any objection to this change such that usage is measured in consistent units in both Spire East and Spire West.

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

2 TRANSPORTATION CLASS IN SPIRE EAST AND SPIRE WEST?

A Yes, I have reviewed the Company's proposed rate designs for the Transportation
 class and disagree with the Company's proposed approach. The Company has not
 justified its proposed rate designs nor has it demonstrated that its rate design proposal
 properly reflects class cost of service for the Transportation class.

7 Q DOES THE COMPANY PROPOSE TO MOVE TOWARD A SINGLE VOLUMETRIC

8 **RATE FOR TRANSPORTATION CUSTOMERS?**

9 A Yes. Spire's existing rate design for Spire West and Spire East Transportation
10 customers includes a two-block volumetric rate. Based on its proposal in this rate case,
11 Spire proposes to eliminate the two volumetric blocks and include only a single block
12 rate in its rate design proposal for the Transportation class.

13 Q WHY IS A SINGLE VOLUMETRIC RATE FOR THE TRANSPORTATION 14 CUSTOMERS NOT APPROPRIATE?

15 А Single volumetric rates tend to over-collect fixed costs from large users of natural gas. 16 This creates subsidies between large users and small users in the class as shown in 17 Schedule BCC-1. Schedule BCC-1 shows that large usage Transportation customers 18 receive much larger increases than smaller usage Transportation customers in both 19 Spire East and Spire West under the Company's proposed rate design that contains a 20 single volumetric block. As a result, large users such as Vicinity will face increased 21 costs that are not based on cost of service. In addition, a single block rate will adversely 22 affect Vicinity's ability to maintain its competitiveness. This is particularly troublesome

because Spire is a direct competitor with Vicinity in regard to Vicinity's steam heating
 service.

Q DOES SPIRE ALSO PROPOSE TO ELIMINATE THE EXISTING SEASONAL BLOCK RATES FOR SPIRE WEST TRANSPORTATION CUSTOMERS? A Yes. I oppose the Company's proposal to eliminate the seasonal block charges in Spire West for Transportation customers absent any justification and impact analysis

7 for the Transportation class.

8 Q HAS THE COMPANY JUSTIFIED ITS TRANSPORTATION RATE DESIGN 9 PROPOSAL?

A No. Spire filed a single CCOS study. As a result, it is impossible to determine how
 close the current revenues collected under Spire's existing rates are to actual cost of
 service for Transportation customers in both Spire East and Spire West. Spire has also
 failed to offer a reasonable basis for or demonstrate an immediate need to collapse the
 Transportation rate from a two-block rate structure to a single block.

15 Q DID THE COMPANY EXAMINE THE IMPACT OF ITS TRANSPORTATION RATE

16 DESIGN PROPOSAL ON TRANSPORTATION CUSTOMERS IN SPIRE EAST AND 17 SPIRE WEST?

A No. Responses to data requests make it clear that the Company did not examine the
 impacts of its rate design proposal on Transportation customers at all. For example,
 when asked in Vicinity Data Request 1e to describe all analyses of the non-gas rate
 impacts to existing Transportation customers of Spire's proposal to change the rate

- design from a two-block structure to a single block, the Company responded with the
 following:
- **Response:** The Company's goal was to simplify the tariffs under one
 Spire Missouri, and the Company did not perform any analysis that is
 responsive to this request.
- 6 Q HOW DO YOU RESPOND?
- 7 А For Spire to dramatically change the existing Transportation rate design structures 8 without understanding the impacts to its largest customers for the sake of simplifying 9 its tariffs is not a good business practice nor is it reflective of proper customer relations. 10 To not perform such analysis results in an unawareness on Spire's behalf of the 11 impacts of these significant changes on the costs that would be imposed on its largest 12 customers. As a result, Spire has neither determined nor proven in this case that its 13 proposed rate design structure is reflective of cost of service for its Transportation 14 customers.

15 Q WILL SPIRE'S TRANSPORTATION RATE DESIGN PROPOSAL RESULT IN 16 SIGNIFICANT IMPACTS TO TRANSPORTATION CUSTOMERS?

17 А Yes. Based on the Company's rate design proposal, some customers will see 18 increases in excess of 80%. This is because the proposed rate design coupled with 19 the Company's proposed class revenue allocation collects revenues drastically in 20 excess of class cost of service. In addition as previously discussed, if Spire's rate 21 design proposal were to be adopted, a competitive advantage would be transferred to 22 Spire by imposing significantly higher costs on and causing Vicinity to face even greater 23 pricing competition for its existing steam customers.

- 1 In its application to intervene⁵ at 4, Vicinity discussed the severe impact of
- 2 Spire's proposed rate increase and rate design recommendation, as follows:

3 5. And that impact is huge. As noted above, Vicinity is currently billed 4 through a two-block rate. Because it is such a large customer, almost all 5 of its volumes are billed at the lower second-block rate. That second-block 6 rate is now \$0.0430 per Ccf in the winter and \$0.0228 per Ccf in the 7 summer. In this case, Spire proposes to collapse the two blocks into one, 8 eliminate the summer/winter differential, and charge all volumes at \$0.0604 9 per Ccf. Without divulging customer-specific usage data in this public filing, 10 the impact of such a proposed rate structure change on a customer like 11 Vicinity that takes the vast majority of its volumes at the second-block rate 12 of going from an unweighted average second block rate of \$0.03290 ((\$0.0430 + \$0.0228)/2=\$0.03290) to a rate of \$0.0604 would be 13 Preliminary calculations show that the increase to 14 devastating. 15 Vicinity will be greater than 85%. This 85% or greater increase would 16 generally flow to Vicinity's customers, which are already likely to be 17 struggling with the impacts on their businesses from Covid 19. [Original 18 Emphasis]

19 Q IS THE ABOVE ESTIMATED IMPACT TO VICINITY CONSISTING OF AN 85% OR

- 20 GREATER INCREASE STILL VALID?
- 21 A Yes.

22 Q WOULD THE 85% OR GREATER INCREASE ESTIMATED FOR VICINITY BE

23 ABSORBED BY VICINITY AS AN OPERATING COST?

- A No. These costs must be passed onto Vicinity's customers dollar for dollar, thus
- 25 supporting the concern about the competitive disadvantage Vicinity faces from this rate
- 26 case. Because these costs are passed onto Vicinity customers, Spire has essentially
- 27 proposed that Vicinity's individual customers should receive an 85% increase. This is
- 28 hardly fair when compared with other Spire customers. By adopting my recommended

⁵Application to Intervene Out of Time of Vicinity Energy Kansas City, Inc., filed February 16, 2021. The results of these unweighted "preliminary calculations" have not been revised, in part to protect the confidential nature of Vicinity's Transportation volumes.

rate design proposal, the impact to Vicinity and the individual customers served by
 Vicinity will be limited to a more reasonable impact.

3 Q ARE YOUR CONCERNS LIMITED SOLELY TO VICINITY?

A No. The Spire proposal to collapse the current two-block Transportation rate design
into a single rate block will be acutely felt by all Transportation customers that currently
have usage priced in the lower rate second block.

7 Q WHAT IS YOUR RECOMMENDATION REGARDING THE TRANSPORTATION 8 CLASS RATE DESIGN?

9 A Spire clearly has not justified its proposed changes to the existing structures of the 10 Transportation rates. In addition, Spire East and Spire West are completely separate 11 service territories. The Spire East and Spire West systems were separately planned, 12 designed, and constructed. As a result, their rates have historically been based on 13 separate cost of service. Rates should continue to be based on each service territory's 14 cost of service. This will properly reflect cost causation.

15 I recommend the existing separate Transportation rate designs be maintained 16 in both Spire East and Spire West and that each volumetric block charge under the 17 existing rates for Transportation customers be decreased by an equal percent so that 18 the Transportation class receives an 18.6% decrease as shown in the Company's 19 single class cost of service study. Even if the Commission does not agree with my 20 proposal to reduce rates for Transportation customers to align those rates with the cost 21 of service, it should still reject the Company's unsupported proposal to eliminate the 22 second volumetric block rate.

1 Q DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

2 A Yes, it does.

Qualifications of Brian C. Collins

1	Q	PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.
2	А	Brian C. Collins. My business address is 16690 Swingley Ridge Road, Suite 140,
3		Chesterfield, MO 63017.
4	Q	WHAT IS YOUR OCCUPATION AND BY WHOM ARE YOU EMPLOYED?
5	А	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 STATE YOUR EDUCATIONAL BACKGROUND AND WORK
8		EXPERIENCE.
9	А	I graduated from Southern Illinois University Carbondale with a Bachelor of Science
10		degree in Electrical Engineering. I also graduated from the University of Illinois at
11		Springfield with a Master of Business Administration degree. Prior to joining BAI, I was
12		employed by the Illinois Commerce Commission and City Water Light & Power
13		("CWLP") in Springfield, Illinois.
14		My responsibilities at the Illinois Commerce Commission included the review of
15		the prudence of utilities' fuel costs in fuel adjustment reconciliation cases before the
16		Commission as well as the review of utilities' requests for certificates of public
17		convenience and necessity for new electric transmission lines. My responsibilities at
18		CWLP included generation and transmission system planning. While at CWLP, I
19		completed several thermal and voltage studies in support of CWLP's operating and
20		planning decisions. I also performed duties for CWLP's Operations Department,
21		including calculating CWLP's monthly cost of production. I also determined CWLP's

Brian C. Collins Appendix A Page 1 allocation of wholesale purchased power costs to retail and wholesale customers for
 use in the monthly fuel adjustment.

3 In June 2001, I joined BAI as a Consultant. Since that time, I have participated 4 in the analysis of various utility rate and other matters in several states and before the 5 Federal Energy Regulatory Commission ("FERC"). I have filed or presented testimony 6 before the Arkansas Public Service Commission, the California Public Utilities 7 Commission, the Delaware Public Service Commission, the Public Service 8 Commission of the District of Columbia, the Florida Public Service Commission, the 9 Georgia Public Service Commission, the Idaho Public Utilities Commission, the Illinois 10 Commerce Commission, the Indiana Utility Regulatory Commission, the Kentucky 11 Public Service Commission, the Public Utilities Board of Manitoba, the Minnesota 12 Public Utilities Commission, the Mississippi Public Service Commission, the Missouri 13 Public Service Commission, the Montana Public Service Commission, the North 14 Dakota Public Service Commission, the Public Utilities Commission of Ohio, the 15 Oregon Public Utility Commission, the Rhode Island Public Utilities Commission, the 16 Public Service Commission of Utah, the Virginia State Corporation Commission, the 17 Public Service Commission of Wisconsin, the Washington Utilities and Transportation 18 Commission, and the Wyoming Public Service Commission. I have also assisted in 19 the analysis of transmission line routes proposed in certificate of convenience and 20 necessity proceedings before the Public Utility Commission of Texas.

In 2009, I completed the University of Wisconsin – Madison High Voltage Direct
 Current ("HVDC") Transmission Course for Planners that was sponsored by the
 Midwest Independent Transmission System Operator, Inc. ("MISO").

BAI was formed in April 1995. BAI and its predecessor firm has 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.

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 Phoenix, Arizona and Corpus Christi, Texas.

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Brian C. Collins Appendix A Page 3

BRUBAKER & ASSOCIATES, INC.

Spire West Customers Transportation

	Current	Rates	Proposed Rates			
Line	Total Annual Use Ccf (1)	Bill Without Taxes (\$) (2)	Total Annual Use (Ccf) (3)	Bill Without Taxes (\$) (4)	Increase in Non-Gas Costs (\$) (5)	Increase in Non-Gas Costs (%) (6)
1	31,708,930	1,039,617	31,708,930	1,928,587	888,970	85.5%
2	12,810,740	427,844	12,810,740	787,137	359,293	84.0%
3	12,625,570	476,457	12,625,570	775,952	299,495	62.9%
4	12,413,200	411,247	12,413,200	763,125	351,878	85.6%
5	7,750,600	277,472	7,750,600	481,504	204,032	73.5%
6	6,965,800	253,070	6,965,800	434,102	181,032	71.5%
7	6,264,350	216,388	6,264,350	391,735	175,347	81.0%
8	5,398,470	188,615	5,398,470	339,436	150,821	80.0%
9	5,008,880	182,996	5,008,880	315,904	132,908	72.6%
10	3,759,340	141,170	3,759,340	240,432	99,262	70.3%
11	3,516,060	141,138	3,516,060	225,738	84,600	59.9%
12	3,464,310	133,007	3,464,310	222,612	89,605	67.4%
13	3,154,310	122,417	3,154,310	203,888	81,471	66.6%
14	2,970,110	115,245	2,970,110	192,763	77,518	67.3%
15	2,893,790	112,408	2,893,790	188,153	75,745	67.4%
16	2,780,130	108,515	2,780,130	181,288	72,773	67.1%
17	2,435,850	100,928	2,435,850	160,493	59,565	59.0%
18	2,380,020	100,266	2,380,020	157,121	56,855	56.7%
19	2,358,620	94,744	2,358,620	155,829	61,085	64.5%
20	2,341,110	98,436	2,341,110	154,771	56,335	57.2%

Source: Spire's Response to MIEC 2.7

Spire East Customers

Transportation

	Current	Rates	Proposed Rates			
Line	Total Annual Use Therms	Bill Without Taxes (\$)	Total Annual Use Ccf	Bill Without Taxes (\$)	Increase in Non-Gas Costs (\$)	Increase in Non-Gas Costs (%)
	(1)	(2)	(3)	(4)	(5)	(6)
1	14,680,598	657,255	14,392,743	840,545	183,290	27.9%
2	12,771,413	817,209	12,520,993	975,436	158,227	19.4%
3	10,594,830	373,155	10,387,088	502,809	129,654	34.7%
4	5,915,105	363,618	5,799,123	431,839	68,221	18.8%
5	5,810,761	266,042	5,696,824	332,893	66,851	25.1%
6	5,449,046	215,444	5,342,202	277,547	62,103	28.8%
7	5,329,865	364,673	5,225,358	425,211	60,538	16.6%
8	3,992,233	192,227	3,913,954	235,206	42,979	22.4%
9	3,568,331	202,176	3,498,364	239,591	37,415	18.5%
10	3,197,998	227,088	3,135,292	259,641	32,553	14.3%
11	3,263,628	180,977	3,199,635	214,391	33,414	18.5%
12	3,382,167	183,950	3,315,850	218,920	34,970	19.0%
13	3,080,686	157,456	3,020,280	188,469	31,013	19.7%
14	2,893,611	245,492	2,836,874	274,049	28,557	11.6%
15	2,610,467	145,139	2,559,281	170,159	25,020	17.2%
16	2,315,014	124,217	2,269,622	145,178	20,961	16.9%
17	2,182,843	119,229	2,140,042	138,455	19,226	16.1%
18	2,125,516	115,027	2,083,840	133,501	18,474	16.1%
19	2,087,823	113,191	2,046,886	131,170	17,979	15.9%
20	1,949,056	190,214	1,910,839	206,371	16,157	8.5%

Source: Spire's Response to MIEC 2.7