

BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the Matter of Missouri-American Water Company's Request for Authority to Implement General Rate Increase for Water and Sewer Service Provided in Missouri Service Areas

)

Case No. WR-2017-0285

STATE OF MISSOURI

SS

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 in this proceeding on their behalf.

2. Attached hereto and made a part hereof for all purposes are my direct testimony and schedules which were prepared in written form for introduction into evidence in Missouri Public Service Commission Case No. WR-2017-0285.

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

Bur C. Collin

Brian C. Collins

Subscribed and sworn to before me this 13th day of December, 2017.

MARIA E. DECKER Notary Public - Notary Seal STATE OF MISSOURI SI. Louis City My Commission Expires: May 5, 2021 Commission # 13706793

Maria E. Derfil

BRUBAKER & ASSOCIATES, INC.

BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

)

)

١

In the Matter of Missouri-American Water Company's Request for Authority to Implement General Rate Increase for Water and Sewer Service Provided in Missouri Service Areas

Case No. WR-2017-0285

Table of Contents to theDirect Testimony of Brian C. Collins

<u>Page</u>

Company's Proposal for Consolidated Pricing	2
Class Revenue Allocation	9
Rate Design	10
Commission's Report and Order in File No. WU-2017-0296	
Qualifications of Brian C. CollinsAp	pendix A

Schedule BCC-1 and Schedule BCC-2

BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

)

In the Matter of Missouri-American Water Company's Request for Authority to Implement General Rate Increase for Water and Sewer Service Provided in Missouri Service Areas

Case No. WR-2017-0285

Direct Testimony of Brian C. Collins

- 1 Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.
- 2 A Brian C. Collins. 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 of Brubaker &
- 6 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 I am testifying on behalf of the Missouri Industrial Energy Consumers ("MIEC").
- 11 Companies whose interests the MIEC represents purchase substantial amounts of
- 12 water from Missouri-American Water Company ("MAWC" or "Company").

1

Q

WHAT IS THE SUBJECT MATTER OF YOUR TESTIMONY?

A I will respond to the Company's proposal for consolidated pricing for its operating
 districts throughout Missouri.

For the reasons described in my testimony, I recommend that the Company's proposal for consolidated pricing be rejected and that the Company maintain the three separate District structure (District 1, District 2, and District 3), where each District's rates are based on its respective cost of service, as established and approved by the Missouri Public Service Commission ("Commission") in the Company's last rate case.

10 Based on the results of the class cost of service study prepared by my 11 colleague, Ms. Jessica A. York, I will also propose an alternative to the Company's 12 proposed class revenue all ocation and rate design.

Finally, I address the appropriate treatment of residential service lateral costs
 as included in the Commission's Report and Order in File No. WU-2017-0296.

15 My silence on any issues addressed by the Company in its testimony should 16 not be taken as tacit approval or agreement with that issue.

17 Company's Proposal for Consolidated Pricing

Q WHAT IS THE COMPANY'S PROPOSAL IN THIS CASE WITH RESPECT TO CONSOLIDATED PRICING FOR ITS WATER OPERATIONS?

- 20 A Company witness Mr. Brian W. LaGrand states at page 17 of his direct testimony that 21 the Company is proposing consolidated water tariffs. The Company proposes to fully 22 consolidate all water customers into one statewide tariff group.
- 23 Specifically, the Company proposes to eliminate Rate A and replace it with 24 separate residential and non-residential rate structures. The non-residential rate will

cover all commercial, industrial and other public authority customers. The new
 residential and non-residential rates will be uniform throughout the Company's
 statewide service area. However, for Rate B customers, the Company is proposing
 two rates: one rate for District 1 and one rate for District 2 and District 3 customers.
 For Rate J customers, the Company is also proposing two rates: one rate for
 District 1 and one rate for District 2 and District 3 customers.

7 Q DOES MR. LAGRAND STATE WHY THE COMPANY IS PROPOSING 8 CONSOLIDATED PRICING FOR ALL OF ITS DISTRICTS?

- 9 A Mr. LaGrand defers to Company witness Mr. James M. Jenkins for a detailed
 10 discussion of consolidated rates.
- 11 Q WHAT REASONS DOES MR. JENKINS PROVIDE IN HIS TESTIMONY FOR THE 12 COMPANY'S PROPOSAL FOR CONSOLIDATED PRICING?

A Mr. Jenkins recommends consolidated pricing primarily based on public policy benefits, which he claims result in the form of reduced inefficiencies by consolidating smaller water systems with larger water systems. Moreover, Mr. Jenkins claims at page 44 of his direct testimony that the economic benefits of more closely connecting costs with prices (i.e., district-specific pricing) are not likely to be significant in this case.

1 Q DOES MR. JENKINS PROVIDE ANY ECONOMIC ANALYSIS RELATED TO THE 2 FACTS OF THIS CASE AND THE COMPANY'S SITUATION TO SUPPORT HIS 3 CONCLUSION THAT THE ECONOMIC BENEFITS OF DISTRICT-SPECIFIC 4 PRICING WOULD NOT BE SIGNIFICANT?

- 5 A No, he does not.
- Q DOES ANY OTHER MAWC WITNESS SUPPORT THE COMPANY'S PROPOSAL
 FOR CONSOLIDATED PRICING?

8 A Yes. Company witness Ms. Constance E. Heppenstall indicates at page 16 of her 9 direct testimony that variances between allocated costs of the districts do not warrant 10 the use of separate rate schedules. However, similar to Mr. Jenkins, she does not 11 provide any analysis specific to MAWC to support her claim.

Ms. Heppenstall claims that charging one group of customers higher rates because they may be served by a newer plant whose original cost exceeds that of other plants is not logical. She further opines that the electric industry reflects the concept of consolidated pricing when it serves customers in geographically dispersed areas.

17 Q DO YOU AGREE WITH MS. HEPPENSTALL'S LOGIC?

18 A No. Ms. Heppenstall's argument ignores the principle of cost causation. A particular 19 water district's rates should be based on the costs that MAWC incurs to provide that 20 district with service. Furthermore, the system of an electric utility serving 21 geographically dispersed customers is an integrated system. For example, one 22 electric generating plant can theoretically serve any customer in the service areas of 23 its electric utility owner because of the interconnected nature of the electric grid. 1 MAWC's water system is not an integrated system, and to compare it to an electric 2 utility's system is erroneous. Ms. Heppenstall's argument ignores the fact that not all 3 of the MAWC's water districts are interconnected and thus the Company cannot serve 4 all of its districts with the same group of water treatment plants or other plant 5 investment.

6 Q IS THE COMPANY'S PROPOSAL FOR CONSOLIDATED PRICING 7 REASONABLE?

8 A No, it is not.

9 Q PLEASE EXPLAIN WHY THE COMPANY'S PROPOSAL FOR CONSOLIDATED 10 PRICING IS NOT REASONABLE.

11 А Consolidated pricing is inappropriate for several reasons. First, there is no common 12 or economic cost structure across the three Company districts throughout the state. 13 Specifically, the districts are not interconnected to the same (or group of same) water 14 treatment plants. Water treatment plants serving the districts are supplied from 15 district-specific raw water sources (including both groundwater and surface water), 16 which impact water treatment costs. Contrary to power plants in a geographically 17 dispersed electric system, which Ms. Heppenstall compares to water treatment plants 18 for justification of the Company's consolidated pricing proposal, a water treatment 19 plant in Joplin or St. Joseph, for example, cannot provide treated water to the 20 St. Louis Metro District since those districts are not interconnected. The water 21 treatment plants, distribution networks, pumping equipment and even the electric 22 utilities serving the various MAWC territories are distinct across the state, and the 23 various geographic characteristics of each MAWC service territory impact costs

related to storage, pressure, pumping, chemicals and other costs associated with
 providing water service in those areas.

3 Second, consolidated pricing ignores the differences in costs of providing 4 service in each non-interconnected water district including, but not limited to, water 5 treatment and supply, labor force, and delivery. Consolidated pricing also ignores the 6 differences in rate base investment that have occurred to provide water service in 7 each operating district. Consolidated pricing is inconsistent with traditional cost of 8 service principles and ignores the concept of cost causation. In essence. 9 consolidated pricing results in price subsidies to customers in a high-cost district at 10 great cost to customers in a low-cost district. For example, the cost to install water 11 pipe in a district with rocky soil is higher than the cost to install water pipe in a district 12 without rocky soil. Under consolidated pricing, the customers in the lower-cost district 13 with non-rocky soil would subsidize a portion of the cost to install pipe in the 14 higher-cost district with rocky soil.

Moreover, the unjust cross-subsidies created by consolidated pricing could 15 16 erode the efficiency of the water system. These rate subsidies would erode the 17 economic incentive for customers in high-cost districts to be more efficient in placing 18 demands on the water utility because the prices they pay do not accurately reflect the 19 cost of receiving water service. Hence, customers with subsidized prices may impose 20 greater and less efficient demand on a high-cost district, which could cause greater 21 cost at the high-cost district and increase customer subsidies to bring that district 22 price down to the consolidated rate. To better reflect cost causation, it is appropriate 23 for the Company's rates in each district to be compensatory and free of subsidies.

1 Q PLEASE ELABORATE ON HOW CONSOLIDATED PRICING CAN ERODE 2 SYSTEM EFFICIENCY.

3 А Consolidated pricing could provide the Company disincentives for cost control within 4 a high-cost operating district because all costs would be averaged across the state. If 5 rates were to be consolidated, there would be no reason to maintain separate books 6 and records for each operating district. This could inhibit management from 7 effectively managing each of its districts because district-specific costs will not be 8 maintained or managed. Due to the loss of transparent operating and financial data 9 for each operating district, it would be very difficult to evaluate the efficiency and 10 effectiveness of each operating district. As a result, the Commission would lose 11 some of its ability to exercise proper regulatory oversight of the Company's 12 operations. Consolidated pricing will not allow the Company to properly manage its 13 different geographical operating districts and will prevent it from identifying high-cost 14 operating districts in the future.

15 Q DO YOU HAVE ANY OTHER CONCERNS WITH CONSOLIDATED PRICING?

16 A Yes. Consolidated pricing greatly reduces the Company's incentive to perform due 17 diligence before acquiring new water systems and may also impact the price MAWC 18 is willing to pay for new systems. New systems could be acquired without adequate 19 consideration as to whether the costs to operate those systems are economical since 20 those costs would be rolled into existing rates under consolidated pricing.

21 Q DOES THE COMPANY CITE RATE AFFORDABILITY AS A REASON FOR 22 CONSOLIDATED PRICING?

23 A Yes.

1 Q CAN ADJUSTMENTS BE MADE TO A PARTICULAR WATER DISTRICT'S RATES 2 AFTER ITS COST OF SERVICE IS DETERMINED TO ADDRESS ANY 3 AFFORDABILITY ISSUES?

Yes. It is important that the starting point for determining rates is cost of service. 4 А 5 However, after cost of service rates are determined, if a particular water district's 6 rates for certain customer classes require mitigation to address affordability issues, this can occur in the class revenue allocation and rate design process. 7 Rate 8 mitigation has occurred in past MAWC rate cases after the cost of service of each 9 district was determined. This process allows a quantification of any subsidy included 10 in a particular water district's rates and allows one to measure how close final class 11 rates for each district are to class cost of service.

12 Q WHAT DO YOU RECOMMEND REGARDING THE COMPANY'S CONSOLIDATED 13 PRICING PROPOSAL?

A I recommend that the Company's proposal for consolidated pricing be rejected and
 that the three pricing districts as approved by the Commission in the last rate case be
 maintained. I recommend that the respective revenue requirement for District 1,
 District 2, and District 3 each be recovered in proposed rates based on each District's
 respective cost of service.

1 Class Revenue Allocation

2 Q DO YOU RECOMMEND THAT THE STATEWIDE CLASS REVENUE ALLOCATION 3 BE BASED ON THE RESULTS OF MS. YORK'S MODIFIED CLASS COST OF 4 SERVICE STUDY RESULTS?

5 A Yes. I propose that each rate class at proposed rates be brought to its respective 6 class cost of service as calculated by my colleague, Ms. York. My proposed class 7 revenue allocation is shown on Schedule BCC-1. To the extent that the Commission 8 approves a total Company revenue requirement that differs from the Company's 9 proposal, the allocated class revenues should be adjusted accordingly.

As shown on Schedule BCC-1, under the Company's claimed revenue deficiency and my proposed class revenue allocation, Rate J rates would increase by \$2,115,835, or 13.94%, as compared to present revenues on a statewide basis. The Non-Residential Class rates would increase by \$12,703,665, or 22.03%, as compared to present revenues on a statewide basis. Both classes would see increases in present revenues lower than the system average increase of 32.97%, which are supported by Ms. York's class cost of service study.

Under my proposal, Residential rates would increase by \$73.6 million or
41.56%. This would result in a Residential class increase of 1.26 times the system
average increase of 32.97%, which is also supported by Ms. York's class cost of
service study.

Brian C. Collins Page 9

BRUBAKER & ASSOCIATES, INC.

1QBASED ON YOUR PROPOSAL TO MAINTAIN SEPARATE PRICING FOR2DISTRICTS 1, 2, AND 3 AS THEY CURRENTLY EXIST, HOW WOULD THE3STATEWIDE CLASS REVENUE FOR EACH RESPECTIVE CLASS BE4ALLOCATED TO DISTRICTS 1, 2, AND 3 UNDER YOUR PROPOSAL?

5 A Because I propose District-specific pricing for Districts 1, 2, and 3, under my proposal 6 to bring all classes to cost of service, each District's class revenue allocation would 7 be equal to its District-specific class cost of service.

8 Rate Design

9 Q DO YOU HAVE ANY RECOMMENDATIONS WITH RESPECT TO RATE DESIGN 10 FOR RATE J CUSTOMERS?

11 А Yes. Currently, Rate J customers pay a fixed monthly customer charge and a single 12 commodity charge. MAWC proposes to reduce the customer charge, and increase 13 the commodity charge for the Rate J customer class. As shown on Schedule BCC-2, under my proposed class revenue allocation, and at the Company's claimed revenue 14 15 deficiency, Rate J customers would receive an increase of \$2,115,835. This is about 16 \$392,000 less than the Company's proposed revenue increase of \$2,507,642 for 17 Rate J on a statewide basis. I recommend accepting the Company's proposed customer charge revenues, and reducing the Company's proposed commodity 18 19 charge revenue for Rate J customers by about \$392,000 to bring Rate J to cost of service on a statewide basis, based on the results of Ms. York's class cost of service 20 21 study.

1 Q WHAT WOULD BE THE SPECIFIC COMMODITY CHARGE FOR EACH 2 RESPECTIVE RATE J CUSTOMER CLASS IN DISTRICTS 1, 2 AND 3?

A I recommend that the respective commodity charge revenue for Rate J in Districts 1,
2, and 3 be based on each District's total class cost of service for Rate J, less the
revenue produced by the Company's proposed customer charges. The
District-specific commodity charge for each District's Rate J would be calculated by
dividing each District's Rate J commodity revenue by the respective District's
commodity billing determinants for Rate J.

9 Commission's Report and Order in File No. WU-2017-0296

10 Q WHAT WAS THE COMPANY'S PROPOSAL IN FILE NO. WU-2017-0296?

A MAWC proposed to replace the entire lead portion of service lines in St. Louis County
 from the Company's water mains to customers' homes when service lines containing
 lead are discovered.

14QWHAT WAS THE COMMISSION'S FINDING WITH RESPECT TO THE15TREATMENT OF COSTS ASSOCIATED WITH SERVICE LINE REPLACEMENT16NECESSITATED BECAUSE OF LEAD IN THE SERVICE LINE?

A The Commission determined that MAWC may defer and maintain these costs on its
books until the effective date of the Report and Order in its pending general rate
case, with any amortization beginning with the effective date of that Report and
Order.

1QIF THE COMMISSION DETERMINES THAT THE COSTS OF LEAD SERVICE LINE2REPLACEMENTS ARE TO BE INCLUDED IN THIS RATE CASE, HOW DO YOU

3 PROPOSE THESE COSTS BE ALLOCATED TO CUSTOMER CLASSES?

- A Because these costs are associated with residential service lines, these costs should
 be allocated to the residential customer class and recovered in residential class rates.
- 6 Q DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?
- 7 A Yes, it does.

Appendix A

Qualifications of Brian C. Collins

1 Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

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

4 Q WHAT IS YOUR OCCUPATION AND BY WHOM ARE YOU EMPLOYED?

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

7 Q PLEASE STATE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.

A I graduated from Southern Illinois University Carbondale with a Bachelor of Science
degree in Electrical Engineering. I also graduated from the University of Illinois at
Springfield with a Master of Business Administration degree. Prior to joining BAI, I
was employed by the Illinois Commerce Commission and City Water Light & Power
("CWLP") in Springfield, Illinois.

13 My responsibilities at the Illinois Commerce Commission included the review 14 of the prudence of utilities' fuel costs in fuel adjustment reconciliation cases before 15 the Commission as well as the review of utilities' requests for certificates of public 16 convenience and necessity for new electric transmission lines. My responsibilities at 17 CWLP included generation and transmission system planning. While at CWLP, I 18 completed several thermal and voltage studies in support of CWLP's operating and 19 planning decisions. I also performed duties for CWLP's Operations Department, 20 including calculating CWLP's monthly cost of production. I also determined CWLP's

> Appendix A Brian C. Collins Page 1

allocation of wholesale purchased power costs to retail and wholesale customers for use in the monthly fuel adjustment.

1

2

、

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

\ldoc\shares\pro!awdocs\schw\10440\lestimony-bai\334263.docx

Appendix A Brian C. Collins Page 3

BRUBAKER & ASSOCIATES, INC.

MISSOURI-AMERICAN WATER COMPANY

MIEC Proposed Revenue Allocation

Line	MIEC Increase / (Decrease) Customer Present <u>to Reach COS¹</u> <u>Class Revenues Amount</u> Percent			MIEC Proposed Class Revenue Allocation <u>Increase / (Decrease)²</u> Amount Percent Index			
	01855	(1)	(2)	(3)	(4)	(5)	(6)
1	Residential	\$ 177,161,196	\$ 73,623,664	41.56%	\$ 73,623,664	41.56%	1.26
2	Non-Residential	57,675,916	12,703,665	22.03%	12,703,665	22.03%	0.67
3	Rate J	15,173,474	2,115,835	13.94%	2,115,835	13.94%	0.42
4	Sales for Resale	6,865,390	83,730	1.22%	83,730	1.22%	0.04
5	Private Fire	<u>\$ 5,000,939</u>	<u>\$ (395,727)</u>	-7.91%	<u>\$ (395,727</u>)	-7.91%	-0.24
6	Total Sales	\$ 261,876,916	\$88,131,168	33.65%	\$88,131,168	33.65%	1.02
7	Other Revenues	\$ 3,420,164	\$ 733,943	21.46%	\$ 733,943	21.46%	0.65
8	Contract Revenues	5,022,927	247,187	4.92%	247,187	4.92%	0.15
9	Total	\$ 270,320,007	\$ 89,112,299	32.97% ³	\$ 89,112,299	32.97% ³	1.00

Sources and Notes

¹ Schedule JAY-3, Column (4).
 ² All classes have been brought to cost of service.
 ³ Includes \$79,471 Hickory Hill Sewer Transfer.

MISSOURI-AMERICAN WATER COMPANY

Comparison of Proposed Revenue Allocation MAWC vs. MIEC

				/C Proposed MIEC Pro			MIEC
<u>Line</u>	Customer <u>Class</u>	Present <u>Revenues</u> (1)	<u>Increase / (De</u> <u>Amount</u> (2)	<u>crease)'</u> <u>Percent</u> (3)	<u>Increase / (De</u> <u>Amount</u> (4)	<u>ecrease)²</u> <u>Percent</u> (5)	More (Less) <u>than MAWC</u> (6)
1	Residential	\$ 177,161,196	\$ 65,499,216	36.97%	\$ 73,623,664	41.56%	\$ 8,124,448
2	Non-Residential	57,675,916	19,263,797	33.40%	12,703,665	22.03%	(6,560,131)
3	Rate J	15,173,474	2,507,642	16.53%	2,115,835	13.94%	(391,807)
4	Sales for Resale	6,865,390	860,251	12.53%	83,730	1.22%	(776,521)
5	Private Fire	\$ 5,000,939	<u>\$ (758</u>)	-0.02%	<u>\$ (395,727)</u>	-7.91%	<u>\$ (394,969</u>)
6	Total Sales	\$ 261,876,916	\$ 88,130,148	33.65%	\$ 88,131,168	33.65%	\$ 1,021
7	Other Revenues	\$ 3,420,164	\$ 733,943	21.46%	\$ 733,943	21.46%	\$-
8	Contract Revenues	5,022,927	247,187	4.92%	247,187	4.92%	
9	Total	\$ 270,320,007	\$ 89,111,278	32.97% ³	\$ 89,112,299	32.97% ³	\$ 1,021

Sources and Notes

¹ Ms. Heppenstall's Exhibit CEH-1, Schedule A.

² Schedule BCC-1, Column (4).
 ³ Includes \$79,471 Hickory Hill Sewer Transfer.