Exhibit No.: _____ Issues: Rate Design Witness: Paul R. Herbert Exhibit Type: Supplemental Sponsoring Party: Missouri-American Water Company Case No.: WR-2015-0301 SR-2015-0302 Date: February 10, 2016

MISSOURI PUBLIC SERVICE COMMISSION

CASE NO. WR-2015-0301 CASE NO. SR-2015-0302

SUPPLEMENTAL TESTIMONY

OF

PAUL R. HERBERT

ON BEHALF OF

MISSOURI-AMERICAN WATER COMPANY

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

IN THE MATTER OF MISSOURI-AMERICAN) WATER COMPANY FOR AUTHORITY TO) FILE TARIFFS REFLECTING INCREASED) CASE NO. WR-2015-0301 RATES FOR WATER AND SEWER) CASE NO. SR-2015-0302 SERVICE)

AFFIDAVIT OF PAUL R. HERBERT

Paul R. Herbert, being first duly sworn, deposes and says that he is the witness who sponsors the accompanying testimony entitled "Supplemental Direct Testimony of Paul R. Herbert"; that said testimony was prepared by him and/or under his direction and supervision; that if inquiries were made as to the facts in said testimony, he would respond as therein set forth; and that the aforesaid testimony is true and correct to the best of his knowledge.

Paul R. Herbert

Commonwealth of Pennsylvania County of Cumberland SUBSCRIBED and sworn to Before me this <u>944</u> day of <u>*February*</u> 2016.

Notary Public

My commission expires:

COMMONWEALTH OF PENNSYLVANIA NOTARIAL SEAL Cheryl Ann Rutter, Notary Public East Pennsboro Twp., Cumberland County My Commission Expires Feb. 20, 2019 MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

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1			WITNESS INTRODUCTION
2 3	1.	Q.	Please state your name and address.
4		Α.	My name is Paul R. Herbert. My business address is 207 Senate Avenue,
5			Camp Hill, Pennsylvania.
6	2.	Q.	By whom are you employed?
7		Α.	I am employed by Gannett Fleming Valuation and Rate Consultants, LLC.
8	3.	Q.	Please describe your position with Gannett Fleming Valuation and Rate
9			Consultants, LLC and briefly state your general duties and
10			responsibilities.
11		Α.	I am President. My duties and responsibilities include the preparation of
12			accounting and financial data for revenue requirement and cash working
13			capital claims, the allocation of cost of service to customer classifications, and
14			the design of customer rates in support of public utility rate filings.
15	4.	Q.	Have you presented testimony earlier in this rate proceeding?
16		Α.	Yes. I submitted direct testimony concerning cost of service allocation and
17			rate design with the rate filing in July 2015.
18	5.	Q.	What is the purpose of your supplemental testimony?
19		A.	The purpose of my supplemental testimony is to respond on behalf of
20			Missouri-American Water Company ("MAWC" or "Company") to the
21			Commission Order issued February 3, 2016, to address the Water Utility Rate
22			Design Analysis submitted by Staff on June 16, 2015.
23	6.	Q.	Which of the rate structure analysis concepts are you addressing in
24			your testimony?

1		A.	I will address concepts 1 through 4, as follows:
2			1. Increases to Customer Charges.
3			2. Corresponding Decreases in Volumetric Charges.
4			3. Inclining Block Rates for Residential Customers.
5			4. Level Rates for Commercial and Industrial Customers.
6			Other Company witnesses will address the remaining items 5, 6 and 7.
7			
8			1. Customer Charge Increases
9	7.	Q.	Please discuss increases to customer charges.
10		Α.	Customer charges are those rendered each month or quarter to customers
11			based on the size of the water meter to recover the fixed costs of serving
12			customers without regard to the amount of water used. Volumetric charges
13			are added to the customer charge based on the amount of water usage.
14	8.	Q.	How are customer charges determined?
15		Α.	Customer charges at a minimum should recover the customer costs that the
16			Company incurs to serve each customer.
17	9.	Q.	Explain what costs are considered customer costs.
18		Α.	Customer costs include the operation and maintenance expenses associated
19			with customer meters and service lines, meter reading, and customer billing
20			and collecting expenses. An allocable portion of administrative and general
21			expenses and payroll related expenses should also be included. In addition
22			to operating expenses, the depreciation expense and return on rate base and
23			associated income taxes for meters and service line investment should also
24			be included in customer costs.

1

10. Q. What other costs should be included in customer charges?

- A. To the extent that public fire rates do not recover the allocated cost of service associated with providing public fire service, the customer charges should include the unrecovered public fire costs since these are fixed costs that do not vary with water usage.
- 6 **11. Q.** Have you determined the customer costs that the Company incurs to 7 serve each customer?
- A. Yes. On page II-35 of my Exhibit Schedule No. PRH-1, I calculate the
 monthly customer costs for all districts for 5/8-inch meters at \$17.42 per
 month. Costs for meter sizes larger than 5/8-inch would be higher to reflect
 the higher costs of larger meters and service lines.
- 12 12. Q. Do Missouri-American existing customer charges recover the allocated
 13 customer costs?
- A. They do in Joplin, Brunswick and some of the small districts but not in others
 and not in the largest district, St. Louis Metro. The existing monthly customer
 charge in St. Louis Metro for a 5/8-inch meter is \$14.42 per month.
- 17 13. Q. What is the Company's proposed monthly rate?
- A. The Company proposed a 5/8-inch customer charge of \$17.40 per month in
 this case.

20 **14. Q.** Why is it important to recover at least the customer costs in the 21 customer charge?

A. If the customer costs are not fully recovered in the customer charge, those unrecovered costs would have to be included in volumetric charges. This would result in customers with larger usage volumes to be over-charged for

customer related costs and subsidize low-use customers who would not be
 paying their share of the fixed customer costs required to serve them.

3 15. Q. What other fixed costs could conceivably be recovered in a fixed 4 charge?

- Α. In the Staff's analysis, it seems to accept water companies' estimates that up 5 to 75-80% of their costs are fixed. For Missouri-American, in the all districts 6 cost of service study, the true variable costs are only 7.3% of the total cost of 7 service, leaving 92.7% of the costs being fixed. MAWC's proposed customer 8 9 charges in this case represent less than 30% of the total revenue. This leaves a wide range of additional fixed costs that could be recovered in a 10 fixed charge. Some of the additional fixed costs that could be considered 11 would include capital costs associated with the distribution system, such as a 12 portion of depreciation expense and/or a portion of the return and income 13 taxes on the Company's investment. Such costs do not vary with the amount 14 of water produced. 15
- 16

2. Corresponding Decreases to Volumetric Charges

- 17 16. Q. Please explain the second item related to corresponding decreasing
 18 volumetric charges.
- A. Given the same revenue requirement, if the customer charges or fixed charges are increased, the volumetric charges or consumption charges would have to decrease. In the Staff's example, the approximate doubling of the customer charge would reduce the volumetric charge from about \$5.17 per thousand gallons to about \$3.60 per thousand. Tripling the customer charge would further reduce the volumetric charge to about \$1.80 per thousand

1 gallons. With declining usage that the Company and many other water 2 utilities across the country have experienced over the last 20 years, having a 3 larger portion of the revenue recovered in fixed charges and putting less 4 revenue in the variable rate would provide a more stable revenue stream for 5 the Company which, I believe, is a benefit to both the Company and the 6 customer.

- 7
- 8

3. Inclining Block Rate for Residential Customers

9 17. Q. Please explain the third item related to inclining block rates for residential customers?

A. As Staff's analysis indicates, inclining block rates have become more common, especially where water supplies have become depleted, such as California, as part of an overall conservation program. Inclining block rates provide the customer an incentive to conserve since usage above certain levels are priced higher, sometimes significantly, in order curb discretionary use such as outdoor watering or other summer use.

17 **18. Q.** How would an inclining block rate design be structured?

A. Staff suggested a two block structure however I believe a three block structure would be most appropriate. In a 3-block structure, the first block would be set at about 4 thousand gallons per month. This would include most indoor or winter usage and provide the basic needs of a household at the lowest price. The second block would include usage up to about 10,000 gallons per month. This would include additional indoor usage for larger families as well as some discretionary use such as moderate outdoor

watering. The second block would be priced at about 30-50% higher than the
 first block. The third block would include usage above 10,000 gallons per
 month that targets excessive outdoor usage or waste and would be priced at
 the highest rate. This rate would be twice the first block rate or higher if the
 conservation goal was significant.

6

19. Q. Is an inclining block structure appropriate for Missouri American?

- A. I do not believe it is necessary. Water supplies are generally sufficient
 throughout the Company's service area. The Company is proposing a
 uniform volumetric rate in each of the rate zones which provides customers
 enough of an incentive to conserve if they choose to do so.
- 11

12

4. Level Rates for Commercial and Industrial Customers

20. Q. Please address the fourth item concerning level rates for commercial and industrial customers?

Historically, a declining block rate structure applicable to all classes was used Α. 15 to satisfy cost of service principals. A properly designed 3-block, declining 16 17 rate structure would include most of the residential usage in the first block, the second block would target the bulk of commercial usage, and the third block 18 would apply to larger customers such as industrial users. The rate for each 19 20 block would decrease to acknowledge the better load factor that larger customers generally exhibit in their usage patterns. If residential has its own 21 volumetric rate, a two block structure for commercial and industrial customers 22 23 would serve the same purpose.

24 The Company has proposed in this case the St. Louis Metro rate

1 structure for each of the 3 rate zones. The St. Louis Metro rate structure has been effective for many years. Rate A has a single volumetric rate applicable 2 to residential, and the smaller commercial, industrial, and public authority 3 classes. Rate J has a single volumetric rate applicable to large customers 4 such as large commercial and industrial customers. Rate B has a single 5 6 volumetric rate applicable to sales for resale customers. This rate structure satisfies the level volumetric rate with respect to commercial and industrial 7 customers and also acknowledges the better load factor for larger users with 8 the lower rate under the Rate J classification. 9

21. Q. What do you conclude with respect to the rate design concepts listed in
 the Commission's Order and the rate structure that the Company
 proposed in this case?

A. The Company's proposed rate structure includes customer charges that fully recover the minimum customer costs incurred by the Company to serve customers' individual service requirements. The proposed Rate A, B, and J rates in each rate zone address the allocated cost of service requirements of each class with uniform volumetric rates. The Company does not support inclining block rates for residential customers, as the proposed uniform volumetric rate provides sufficient incentive for customers to conserve.

20 22. Q. Does this complete your supplemental testimony at this time?

A. Yes, it does.