Exhibit No.:	
Issues:	Single Tariff Pricing, Revenue
	Allocations to Customer Class,
	General Rate Design
Witness:	Charles B. Rea
Exhibit Type:	Rebuttal
Sponsoring Party:	Missouri-American Water Company
Case No.:	WR-2022-0303
Date:	January 25, 2023

MISSOURI PUBLIC SERVICE COMMISSION

CASE NO. WR-2022-0303

REBUTTAL TESTIMONY

OF

CHARLES B. REA

ON BEHALF OF

MISSOURI-AMERICAN WATER COMPANY

AFFIDAVIT

I, Charles B. Rea, under penalty of perjury, and pursuant to Section 509.030, RSMo, state that I am Senior Director for American Water Works Service Company, that the accompanying testimony has been prepared by me or under my direction and supervision; that if inquiries were made as to the facts in said testimony, I would respond as therein set forth; and that the aforesaid testimony is true and correct to the best of my knowledge and belief.

Charles B. Rea

[Witness Name]

January 25, 2023 Dated

REBUTTAL TESTIMONY CHARLES B. REA MISSOURI-AMERICAN WATER COMPANY CASE NO. WR-2022-0303 CASE NO. SR-2022-0304

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REBUTTAL TESTIMONY

CHARLES B. REA

I. INTRODUCTION

1	Q.	Please state your name and business address.
2	A.	My name is Charles B. Rea. My business address is 5201 Grand Avenue, Davenport, IA
3		52801.
4	Q.	Are you the same Charles B. Rea who previously submitted Direct Testimony in this
5		proceeding?
6	A.	Yes.
7	Q.	What is the purpose of your Rebuttal Testimony in this proceeding?
8	A.	The purpose of my Rebuttal Testimony is to respond to various Public Service Commission
9		Staff (MoPSC or Staff) witnesses regarding the following issues:
10		- Single Tariff Pricing
11		- Revenue Allocation to Customer Class
12		- General Rate Design
13		Specifically, I will be addressing the Direct Testimony filings of MoPSC Witness Keri
14		Roth, and Midwest Industrial Energy Consumers (MIEC) Witness Jessica A. York.
15		II. SINGLE TARIFF PRICING
16	Q.	Please summarize the Company's current water service rate design structure as it
17		pertains to the issue of single tariff pricing.
18	A.	The Company offers the following rates separately to St. Louis County and non-St. Louis
19		County customers:
20		• Rate A: Rate A is a volumetric rate with fixed monthly charges for residential and

1	most non-residential customers.
2	• Rate J: Rate J is a volumetric rate with fixed monthly charges for certain customer
3	types defined as large water users using more than 450,000 gallons per month.
4	• Rate B: Rate B is a volumetric rate with fixed monthly charge for customers that
5	are sales for resale customers.
6	For all three of the above rates, the monthly meter charges are the same. The volumetric
7	charges are lower for St. Louis County customers than for other customers for Rate A and
8	Rate J, but are identical for Rate B. The Company's volumetric rates for Rate A, B, and J
9	are shown below:

Current	St. Louis		Percentage
Volumetric Rates	County	Other	Difference
Rate A	\$0.56290	\$0.62469	11.0%
Rate J	\$0.17797	\$0.28268	58.8%
Rate B	\$0.26194	\$0.26194	0.0%

10 Q. Please summarize the Company's rate design proposals regarding single tariff pricing

11 in this proceeding.

12 A. In this proceeding, the Company is proposing to equalize volumetric rates for Rate A between St. Louis County and non-St. Louis County customers and to move volumetric 13 14 rates for St. Louis County and non-St. Louis County customers closer together in the Rate 15 J offering. The Company is proposing to maintain equal rates for the Rate B volumetric 16 charge for St. Louis County and non-St. Louis County customers and the Company is 17 proposing to maintain equal monthly meter charges across all right offerings. The proposed volumetric charge for Rate B. The Company's volumetric rates for Rate A, B, 18 19 and J are shown below:

Current Volumetric Rates	St. Louis County	Other	Percentage Difference
Rate A	\$0.85672	\$0.85672	0.0%
Rate J	\$0.29638	\$0.37672	27.1%
Rate B	\$0.32639	\$0.32639	0.0%

The Company's proposal in this case eliminates the difference in volumetric rates for Rate A between St. Louis County and non-St. Louis County customers and cuts the percentage difference in Rate J volumetric rates by approximately one half.

Q. Does Staff incorporate any elements of single tariff pricing in their proposed rate design?

A. Staff does not incorporate any elements of single tariff pricing in their proposed rate design.
While Staff testimony does not specifically address further consolidation, Staff's proposed
rate design incorporates separate volumetric charges for Rate A and Rate J, and proposes
separate volumetric charges for Rate B customers and separate sets of meter charges for
St. Louis County and non-St. Louis County customers, thus moving backward from the
partially consolidated rate design currently approved and in place to a completely separate
pricing structures for St. Louis County and non-St. Louis County customers.

10Q.Did MIEC provide testimony on the Company's proposed continued movement11toward single tariff pricing?

- A. Yes. MIEC Witness York opposes the Company's proposal to continue moving to single
 tariff pricing and recommends that the Commission reject any further consolidation of the
 Company's districts and customer classes.¹
- 15 Q. What policy issues does MIEC raise regarding single tariff pricing?

¹ York DT, p. 22, lines 8-11.

- A. Ms. York makes the following claims in support of MIEC's position that no further
 consolidation toward single tariff pricing be approved:
- St. Louis County customers would subsidize other customers outside of the county
 because St. Louis County customers use significantly higher levels of water than
 other customers which would lead to St. Louis customers paying a significant level
 of fixed costs for services provided outside of the county.²
- 7 Consolidated tariff pricing (CTP) ignores the principle of cost causation because a 8 particular water district's rate should be based on the costs that the Company incurs to provide that district with service³ and that there could be significant differences 9 10 in the cost of providing service to different water districts such as water sources, 11 labor costs, varying hardness of soil, and other conditions that could dictate costs 12 being different from district to district that would justify different rates. Ms. York claims that subsidies would occur from St. Louis County to non-St. Louis County 13 14 customers if these differences in parts are not recognized in rates.
- Unjust cross subsidies created by CTP could erode the efficiency of the water
 system.⁴
- Economic incentives for customers in high-cost districts to be more efficient in
 placing demands on the utility would be removed by CTP.⁵.
- 19

• Management teams in high-cost districts would have disincentives for cost control.⁶

20

² York DT, pp. 23, line 16 – 24, line 4

³ York DT, p. 25, lines 1-7.

⁴ York DT, p. 26, lines 16-18..

⁵ York DT, p. 26, lines 16-25.

⁶ York DT, p.27, lines 1-7

The Company's incentive to perform due diligence before acquiring new systems would be reduced.⁷.

Q. Ms. York claims that the Company's proposal for single tariff pricing ignores costcausation. Specifically, she states that a particular water district's rates should be based on the costs that the Company incurs to provide that district with service.⁸ How do you respond to this argument?

A. This argument is a very common argument against single tariff pricing. The argument
comes back to the policy choices I outlined earlier, which are, should water customers in
different communities <u>completely pay for</u>, and <u>only pay for</u>, the present and future costs of
owning, operating, and maintaining the water production and delivery systems in their
communities, or should water customers across the state help pay for all of the present and
future costs of owning, operating, and in maintaining the water production and delivery
systems in all of the communities served in the state?

14 There are two points to make here. The first is that the concept of single tariff 15 pricing has already been established in the Company's rate structure. There are more than 16 20 separate operating districts in the MAWC service territory all taking service under a 17 single consolidated rate structure that is the non-St. Louis County rate. These districts all 18 have different sizes, operating characteristics, customer usage characteristics, investment 19 histories and requirements, O&M requirements, population densities, cost structures, etc. 20 They are also independent and disconnected from one another. Yet they are all taking 21 service on the same rate structure as approved by the Commission. The question before

⁷ York DT, p. 27, lines 10-11

⁸ York DT, p. 25, lines 1-7.

the Commission in this case is not whether single tariff pricing is appropriate. That has
 already been established in the affirmative. The question before the Commission is whether
 St. Louis County customers should be included in that single tariff pricing structure or
 continue to be withheld from that structure and considered separately, and if so, why.

5 The second point to make is that it will always be the case that certain groups of 6 customers will be paying more or less than their absolute true cost to serve regardless of 7 whether single tariff pricing is in place or not. It is not possible to design rates in a way that sends price signals to all customers that directly and precisely reflect the cost of providing 8 9 service to each customer. This is true when considering customers across different 10 operating districts and it is true when considering customers within a single operating 11 district. Also, the fact that particular water districts are physically separated from each other 12 and not connected to each other does not imply that their pricing structure should be 13 separate.

Q. Does Ms. York discuss different characteristics that can affect the cost of providing water service to different communities?

16 A. Yes. Ms. York mentions that water treatment plants, distribution networks, pumping 17 equipment, and electric rates can be distinct across the state and geographic characteristics 18 can impact costs related to storage, pressure, pumping, chemicals and other costs associated 19 with providing service.⁹ She also mentions an example where the cost to install water pipe 20 in a district with rocky soil may be higher than the cost to install water pipe in a district 21 without rocky soil and that non-rocky soil customers could end up subsidizing rocky soil

⁹ York DT, pp. 25, line 23 – 24, lines 1-4.

customers under a CPP pricing structure.¹⁰

2 Q. Are there other operating characteristics than can affect the cost of providing service 3 to different groups of customers?

4 Yes. The average age of plant used to provide service in different communities can affect A. 5 the calculated cost of providing service in different communities. Communities with older vintage plant tend to have a lower cost of service from a rate base perspective then 6 7 communities with newer plant. Customer groups located farther away from a water 8 treatment plant will have a higher cost of service than customer groups located closer to 9 water will have a lower cost of service because there is likely less delivery assets needed 10 to get water from the source to where it is used for customers closer to water treatment 11 plants than for customers farther away.

Q. Are these differences in characteristics a valid reason to establish separate pricing structures in areas that have these differences?

14 No. From a purely analytical perspective these myriads of differences will result in A. 15 different revenue requirement calculations in different discreet geographic locations that 16 would suggest that different rates could be justified, but from a practical perspective these differences are not a valid reason for having different rates. If you cannot in good faith 17 18 explain to customers why their rates are different from other similar groups of customers 19 for the same service, your reasons for having different rates are probably not valid. It would be unreasonable to suggest having a "rocky soil rate", or an "old plant rate", or a 20 21 "high labor cost rate", or a "far away from the river rate" because cost of service supports

¹⁰ York DT, p. 8, lines 22-25.

that distinction. Likewise, explaining to customers that their rates are higher in Jefferson
 City than they are in St. Louis County because their soil is rockier is likely not a satisfactory
 explanation. Customers are more likely to expect fair and consistent rates for the same
 service regardless of where they are in Missouri than they are to expect cost-based rates.

5 Q. How do you respond to Ms. York's argument about subsidization based on the 6 relative sizes of customers?

7 There are two important points to make regarding Ms. York's claim regarding customer A. 8 usage. The first point is because a much higher majority of the Company's revenue 9 requirement is fixed than is proposed to be recovered through fixed charges (meaning that 10 a significant amount of fixed cost recovery comes from revenue collected through 11 volumetric rates), it is necessarily the case that bigger higher-volume customers will 12 contribute more toward the Company's fixed cost recovery than smaller customers. This 13 is by design, not my accident. If this condition is to be called a "subsidy", it is caused by a 14 faulty rate design with fixed charges that are too low and don't collect enough fixed 15 charges, and not by single tariff pricing. The remedy to this "subsidy" is to significantly 16 increase monthly fixed charges. It is also the case that even under the two-district pricing 17 scheme, this so-called subsidy will still exist where larger customers are contributing more 18 towards fixed costs than smaller customers.

19 The second point to make here is that under the "Base/Extra" cost allocation methodologies 20 used in cost of service studies, larger customers will automatically be allocated more fixed 21 cost than smaller customers in a cost of service study. Nobody would suggest that the fixed 22 costs associated with water treatment plants, pumping equipment, and transmission and 23 distribution mains should be allocated to customer classes in a cost of service study based on the number of customers in each class, but that is the argument that Ms. York is making
 when she says it is an unfair "subsidy" that larger St. Louis County customers would be
 unfairly paying more fixed costs than smaller non-St. Louis County customers.

Q. Ms. York states that unjust cross subsidies created by CTP could erode the efficiency
of the water system by removing the economic incentive for customers and high-cost
districts to be more efficient in placing demands on the water utility.¹¹. How do you
respond?

A. It is important to note that rate design is effectively a zero-sum game meaning that given a
fixed revenue requirement, every price decline given to a group of customers (in this case
a price decline due to single tariff pricing) means a price increase for a different group of
customers. If Ms. York's claims were accepted as true, single tariff pricing would improve
economic incentives for the efficient use of water for far more customers in St. Louis
County whose average usage is already high, as Ms. York points out than it would decrease
economic incentives for customers outside of St. Louis County.

Q. Do you agree with Ms. York's claim that consolidated tariff pricing could provide
 management teams in high-cost districts disincentives for cost control because those
 costs would be commingled with other lower cost districts across the state?¹²

18 A. No, I disagree. If the temptation to overspend in a particular district knowing that those
 19 costs would be spread over all customers in the service territory would result in

¹¹ York DT, p. 9, lines 1-10.

¹² York DT, p. 27, lines 1-5.

disincentives for cost control, we would already have seen this effect. So far, there has
 been none.

3 Overinvestment in water systems is not generally seen as a problem today. Rather, the opposite is true. It is well understood that underinvestment in water systems is a 4 5 significant problem in the industry, and a driving factor that exacerbates this problem is an 6 inability to adequately invest in smaller systems with relatively few customers because the 7 necessary rate increases in those systems would be untenable. Underspending in small systems where rates are based solely on the revenue requirement associated with that 8 9 system is a far bigger problem in the industry that overspending in systems under single tariff pricing. 10

Q. Do you agree with Ms. York's claims that single tariff pricing reduces the Company's incentive to perform due diligence before acquiring new water systems?¹³

13 A. I do not. Customers in communities with under invested-systems are already affectively 14 paying single-district rates. Often it is this rate structure, and the associated large increases 15 that would result from this rate structure, that prevent communities from making needed 16 investments in their systems in the first place. Leaving single-district rates in place for these communities and eschewing the concept of single tariff pricing does nothing to solve 17 18 this problem. Also, it is most often the case that agreements are put in place for acquisitions 19 that leave existing rate structures in place for a period of time after the acquisition takes 20 place, and only after approval from the Commission in a rate case are rates for these 21 communities folded into the Company's larger rate structure. This is done to avoid rate 22 shock for these customers because their rates are most often underpriced and can't support

¹³ York DT, p. 27, lines 10-11.

the investments needed on their own. The Company's due diligence in acquiring systems
 takes this into account. Thus, while the concept of single tariff pricing is one factor in the
 due diligence process, it is by no means the only or most important factor.

What are your conclusions regarding the Company's single tariff pricing proposal in

4

5

Q.

this proceeding?

6 The Commission should complete the process of consolidating tariffs across the A. 7 Company's service territory for Rate A and approve the Company's proposal to make 8 significant steps to consolidate the volumetric rates for Rate J. Single tariff pricing has 9 been shown to be in the long-term best interest of our customers and results in a rate design 10 that is logical and sensible from the customer's perspective. The principles of cost 11 causation, which are more commonly applied to allocation of revenue requirement to 12 customer classes than it is to differentiation of pricing by geography, is not destroyed 13 through single tariff pricing. Economic efficiencies are not destroyed, and "subsidies" are 14 no more created through single tariff pricing than they are through averaging rates for 15 customers in other ways that are deemed completely reasonable, such as the volumetric 16 rate for Rate A which applies to residential, commercial and some industrial customers, all 17 of whom may have different costs of service. The Commission has already adopted single 18 tariff pricing in the Company's service territory for a large number of independent operating 19 districts, and the Commission should continue to move toward consolidation of rates into 20 a single tariff pricing structure in this proceeding.

21

III. REVENUE ALLOCATION TO CUSTOMER CLASS

Q. Please review the Company's approach to rate design in this proceeding as it pertains
to revenue allocation to customer class.

- A. The Company in this proposing to allocate its proposed increase in water service revenues
 according to the following guidelines:
- Increases to St. Louis County Rate J customers are capped at 150% of the overall
 water revenue increase requested in this case to bring those customers gradually
 toward cost of service. Rate J rates for Non-St. Louis County customers are
 increased at approximately 75% of the overall revenue increase in order to bring
 those customers to approximately cost of service level rates.
- Increases to Private Fire rates likewise are capped at 150% of the overall water
 revenue increase requested in this case to bring those customers gradually toward
 cost of service.
- Rate B proposed revenues are set at cost of service with the volumetric rates for
 Rate B for St. Louis County and non-St. Louis County being set equal to each other.
 The remaining revenue requirement, after calculation of specific contract rates, is
 spread to Rate A customers by increasing the volumetric rate for Rate A service
- with the volumetric rates for Rate A for St. Louis County and non-St. Louis County
 being set equal to each other.

17 Q. Did any other party directly address revenue allocation to customer class?

- 18 A. Yes. MIEC witness York directly addresses revenue allocation to customer class in her
 19 Direct Testimony.
- 20 Q. Have you reviewed Ms. York's Direct Testimony on this issue?
- 21 A. I have.
- 22 Q. Please summarize MIEC's position on revenue allocation to customer class?

1 A. It is important to note up front that MIEC only takes a position on the allocation of revenues 2 to customer class for St. Louis County customers. MIEC does not take a position on 3 revenue allocation to customer class for non-St. Louis County customers, other than to 4 indirectly infer that the total revenue increase allocated to non-St. Louis County customers 5 should be larger than the Company's proposal. This inference results from their stated 6 position that the revenue increase to St. Louis County customers should only be equal to the amount indicated by cost of service for St. Louis County customers in keeping with 7 their opposition to single tariff pricing. 8

Having said that, MIEC proposes a much smaller revenue increase to Rate J
customers than the Company, driven largely by the cost of service analysis MIEC proposes
that Company witness Wesley Selinger addresses in his Rebuttal Testimony and MIEC's
position on single tariff pricing which results in a lower revenue increase to St. Louis
County customers generally. The table below (taken from York DT Tables 1 and 2¹⁴)
shows a comparison of the revenue increase for St. Louis County customers proposed by
the Company and MIEC:

		Percentage		Percentage
Customer Class	Company	Increase	MIEC	Increase
Rate A	\$80,727,726	48.3%	\$74,419,119	44.5%
Non-Residential	\$25,506,820	51.6%	\$18,560,733	37.6%
Rate J	\$4,076,417	65.2%	\$1,317,680	21.1%
Rate B	\$1.041,295	24.6%	-\$436,345	-10.3%
Rate P	\$0	0.0%	\$928,000	23.3%
Private Fire	\$1,712,529	45.6%	\$1,935,539	51.5%
Total	\$113,064,788	48.1%	\$96,724,526	41.2%

¹⁴ York DT, pp. 4 and 6.

Q. Does Staff also address the issue of revenue allocation to customer class?

A. Staff indirectly addresses this issue. Ms. Roth states that Staff made adjustments between
Rate A, B, and J proposed commodity charge revenues for both St. Louis County and nonSt. Louis County customers in order to "minimize the impact on the different rate classes
as much as possible".¹⁵

6 Q. Do you agree with Ms. York's position on revenue allocation to customer class?

7 I do not. MIEC's revenue increase allocation to Rate J customers is based on a cost of A. 8 service analysis that significantly understates the allocated cost of serving those customers 9 as Company witness Selinger points out in this Rebuttal Testimony. The allocation of 10 revenue increases to St. Louis County Rate J customers should be significantly higher than 11 proposed by MIEC, especially when considering the approximate 50% gap in rates for Rate 12 J customers between St. Louis County and non-St. Louis County customers. There is no 13 valid reason for industrial customers in the Company's non-St. Louis County service territory to pay rates that are 50% higher than similar industrial customers in St. Louis 14 County. 15

16 Q. Do you agree with Staff's approach to rate design that minimizes the impact on the 17 different rate classes as much as possible?

A. I do not. While gradualism and rate shock are important rate design considerations, it is
 also important to recognize that Rate J customers in particular are significantly below cost
 of service by both the Company's cost of service analysis and Staff's cost of service
 analysis. In this proceeding, it is entirely justified to increase rates for Rate J customers,
 particularly those in St. Louis County, at a percentage that is significantly higher than the

¹⁵ Roth DT, p. 10, lines 8-19.

1		overall increase requested in this case in order begin to bring those customers toward a
2		reasonable cost based revenue allocation and to narrow the significant gap in volumetric
3		rates for Rate J customers between St. Louis County and non-St. Louis County customers.
4	Q.	What is your recommendation on the allocation of revenue increases to customer
5		class?
6	A.	My recommendation is that the Company's proposal for allocation of revenue increases to
7		customer classes be approved as it most closely aligns with an accurate allocation of the
8		cost of providing service to customers. If the Commission does not approve the Company's
9		proposal, I recommend that the percentage increase to St. Louis Rate J customers should
10		be at least 25% higher than the increase allocated to non-St. Louis County Rate J customers
11		in order to bring St. Louis County Rate J customers closer to the true allocated cost of
12		providing service and to reduce the significant gap in volumetric rate between St. Louis
13		County and non-St. Louis County Rate J customers.
14		IV. GENERAL RATE DESIGN
15	Q.	What intervenor witnesses in this proceeding address rate design?
16	A.	Staff witness Roth presents Staff's proposed rate design along with Staff's proposed class
17		cost service in her Direct Testimony.
18	Q.	Have you reviewed this Ms. Roth's testimony regarding Staff's proposed rate design?
19	A.	I have.
20	Q.	Apart from your previous discussion on single tariff pricing where you point out that
21		Staff's rate design does not include any consolidation of rates between St. Louis
22		County and non-St. Louis County customers and even retreats from the current level

of consolidation, do you have any issues you would like to address regarding Staff's proposed rate design.

A. I do, as it relates to customer charges. Staff is proposing to maintain the current customer
charge for St. Louis County customers of \$9 per month for a 5/8" meter and proposes to
increase the current customer charge for non-St. Louis County customers to \$12.60 which
Ms. Roth states is closer to the amount calculated in their proposed cost of service.

7 Q. Do you agree with Staff's proposed monthly meter charges?

A. I do not. There is no reason for meter charges for St. Louis County and non-St. Louis
County customers to be different given that they are currently the same. The Company's
cost of service analysis supports a 5/8" meter charge for both St. Louis County and non-St.
Louis County customers well over the \$12 level the Company has proposed in this case.
The current level of fixed charges was set in Case No. WR-2017-0285 and was not
modified in the last rate case. The Commission should approve the Company's proposal
to increase the 5/8" monthly meter charge for all customers to \$12 per month.

15 Q. Does this conclude your Direct Testimony?

16 A. Yes.