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MAWC – Exhibit 27
Charles B. Rea
Rebuttal Testimony (Rate Design)
File No. WR-2022-0303

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

Q. Please state your name and business address.

A. My name is Charles B. Rea. My business address is 5201 Grand Avenue, Davenport, IA 52801.

Q. Are you the same Charles B. Rea who previously submitted Direct Testimony in this proceeding?

A. Yes.

Q. What is the purpose of your Rebuttal Testimony in this proceeding?

A. The purpose of my Rebuttal Testimony is to respond to various Public Service Commission Staff (MoPSC or Staff) witnesses regarding the following issues:

- Single Tariff Pricing
- Revenue Allocation to Customer Class
- General Rate Design

Specifically, I will be addressing the Direct Testimony filings of MoPSC Witness Keri Roth, and Midwest Industrial Energy Consumers (MIEC) Witness Jessica A. York.

II. SINGLE TARIFF PRICING

Q. Please summarize the Company's current water service rate design structure as it pertains to the issue of single tariff pricing.

A. The Company offers the following rates separately to St. Louis County and non-St. Louis County customers:

- Rate A: Rate A is a volumetric rate with fixed monthly charges for residential and most non-residential customers.

- Rate J: Rate J is a volumetric rate with fixed monthly charges for certain customer types defined as large water users using more than 450,000 gallons per month.
- Rate B: Rate B is a volumetric rate with fixed monthly charge for customers that are sales for resale customers.

For all three of the above rates, the monthly meter charges are the same. The volumetric charges are lower for St. Louis County customers than for other customers for Rate A and Rate J, but are identical for Rate B. The Company's volumetric rates for Rate A, B, and J are shown below:

Current Volumetric Rates	**St. Louis County**	**Other**	**Percentage 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%

Q. Please summarize the Company's rate design proposals regarding single tariff pricing in this proceeding.

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 rates for St. Louis County and non-St. Louis County customers closer together in the Rate J offering. The Company is proposing to maintain equal rates for the Rate B volumetric charge for St. Louis County and non-St. Louis County customers and the Company is 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, 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.

Q. Did MIEC provide testimony on the Company's proposed continued movement toward 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]

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]
- Consolidated tariff pricing (CTP) ignores the principle of cost causation because a particular water district's rate should be based on the costs that the Company incurs to provide that district with service[3] and that there could be significant differences in the cost of providing service to different water districts such as water sources, labor costs, varying hardness of soil, and other conditions that could dictate costs 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 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].
- Management teams in high-cost districts would have disincentives for cost control.[6]

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[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 cost-causation. 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?

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

The second point to make is that it will always be the case that certain groups of customers will be paying more or less than their absolute true cost to serve regardless of 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 service to each customer. This is true when considering customers across different operating districts and it is true when considering customers within a single operating district. Also, the fact that particular water districts are physically separated from each other and not connected to each other does not imply that their pricing structure should be separate.

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

A. Yes. Ms. York mentions that water treatment plants, distribution networks, pumping equipment, and electric rates can be distinct across the state and geographic characteristics can impact costs related to storage, pressure, pumping, chemicals and other costs associated with providing service.[9] She also mentions an example where the cost to install water pipe in a district with rocky soil may be higher than the cost to install water pipe in a district 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]

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

A. Yes. The average age of plant used to provide service in different communities can affect 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 communities with newer plant. Customer groups located farther away from a water treatment plant will have a higher cost of service than customer groups located closer to water will have a lower cost of service because there is likely less delivery assets needed to get water from the source to where it is used for customers closer to water treatment 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?

A. No. From a purely analytical perspective these myriads of differences will result in different revenue requirement calculations in different discreet geographic locations that 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 explain to customers why their rates are different from other similar groups of customers 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 "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.

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

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

The second point to make here is that under the "Base/Extra" cost allocation methodologies used in cost of service studies, larger customers will automatically be allocated more fixed cost than smaller customers in a cost of service study. Nobody would suggest that the fixed costs associated with water treatment plants, pumping equipment, and transmission and 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]

A. No, I disagree. If the temptation to overspend in a particular district knowing that those 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.

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 significant problem in the industry, and a driving factor that exacerbates this problem is an inability to adequately invest in smaller systems with relatively few customers because the 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 system is a far bigger problem in the industry that overspending in systems under single tariff pricing.

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]

A. I do not. Customers in communities with under invested-systems are already affectively paying single-district rates. Often it is this rate structure, and the associated large increases that would result from this rate structure, that prevent communities from making needed 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 this problem. Also, it is most often the case that agreements are put in place for acquisitions that leave existing rate structures in place for a period of time after the acquisition takes place, and only after approval from the Commission in a rate case are rates for these communities folded into the Company’s larger rate structure. This is done to avoid rate 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.

Q. What are your conclusions regarding the Company's single tariff pricing proposal in this proceeding?

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

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.

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

A. Yes. MIEC witness York directly addresses revenue allocation to customer class in her Direct Testimony.

Q. Have you reviewed Ms. York's Direct Testimony on this issue?

A. I have.

Q. Please summarize MIEC's position on revenue allocation to customer class?

A. It is important to note up front that MIEC only takes a position on the allocation of revenues to customer class for St. Louis County customers. MIEC does not take a position on revenue allocation to customer class for non-St. Louis County customers, other than to indirectly infer that the total revenue increase allocated to non-St. Louis County customers should be larger than the Company's proposal. This inference results from their stated 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 their opposition to single tariff pricing.

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 2[14]) shows a comparison of the revenue increase for St. Louis County customers proposed by the Company and MIEC:

Customer Class	**Company**	**Percentage Increase**	**MIEC**	**Percentage 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 non-St. Louis County customers in order to "minimize the impact on the different rate classes as much as possible".[15]

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

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

Q. Do you agree with Staff's approach to rate design that minimizes the impact on the 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.

overall increase requested in this case in order begin to bring those customers toward a reasonable cost based revenue allocation and to narrow the significant gap in volumetric rates for Rate J customers between St. Louis County and non-St. Louis County customers.

Q. What is your recommendation on the allocation of revenue increases to customer class?

A. My recommendation is that the Company's proposal for allocation of revenue increases to customer classes be approved as it most closely aligns with an accurate allocation of the cost of providing service to customers. If the Commission does not approve the Company's proposal, I recommend that the percentage increase to St. Louis Rate J customers should be at least 25% higher than the increase allocated to non-St. Louis County Rate J customers in order to bring St. Louis County Rate J customers closer to the true allocated cost of providing service and to reduce the significant gap in volumetric rate between St. Louis County and non-St. Louis County Rate J customers.

IV. GENERAL RATE DESIGN

Q. What intervenor witnesses in this proceeding address rate design?

A. Staff witness Roth presents Staff's proposed rate design along with Staff's proposed class cost service in her Direct Testimony.

Q. Have you reviewed this Ms. Roth's testimony regarding Staff's proposed rate design?

A. I have.

Q. Apart from your previous discussion on single tariff pricing where you point out that Staff's rate design does not include any consolidation of rates between St. Louis 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.

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.

Q. Does this conclude your Direct Testimony?

A. Yes.