

Exhibit No. 23

Missouri-American Water Company – Exhibit 23
Testimony of Charles B. Rea
Rebuttal/Surrebuttal/Sur-Surrebuttal
File No. WR-2024-0320

Exhibit No.:	
Issues:	Affordability, Universal Affordability Tariff, and Revenue Stabilization Mechanism
Witness:	Charles B. Rea
Exhibit Type:	Rebuttal/Surrebuttal/Sur-Surrebuttal
Sponsoring Party:	Missouri-American Water Company
Case No.:	WR-2024-0320
Date:	January 24, 2025

MISSOURI PUBLIC SERVICE COMMISSION

CASE NO. WR-2024-0320

REBUTTAL/SURREBUTTAL/SUR-SURREBUTTAL 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 Vice President, Enterprise-Wide Regulatory Pricing & Affordability for American Water Works Service Company, Inc., 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

Charles B. Rea

January 22, 2025

Dated

REBUTTAL/SURREBUTTAL/SUR-SURREBUTTAL TESTIMONY
CHARLES B. REA
MISSOURI-AMERICAN WATER COMPANY
CASE NO. WR-2024-0320

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REBUTTAL/SURREBUTTAL/SUR-SURREBUTTAL 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 3409 Research Parkway, Davenport, IA 52806.

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/Surrebuttal/Sur-Surrebuttal Testimony in this proceeding?

A. The purpose of my Rebuttal/Surrebuttal/Sur-Surrebuttal Testimony is to respond to testimony submitted by the Staff of the Public Service Commission (“Staff”), the Office of Public Council (“OPC”), the Missouri Industrial Energy Consumers (“MIEC”), the Midwest Energy Consumers Group (“MECG”) and the Consumers Council of Missouri (“CCM”) on the following issues:

- Affordability Analysis
- Universal Affordability Tariff
- Revenue Stability

Specifically, I will be addressing the Direct/Rebuttal Testimony filings of Staff witnesses Michael J. Abbott and Scott J. Glasgow, OPC witnesses Lena M. Mantle and Geoff Marke, MIEC/MECG Witness Jessica A. York, and CCM witness Roger D. Colton.

II. AFFORDABILITY

a. Background

Q. Please provide an overview of the Company’s affordability analyses that you provided in your Direct Testimony.

A. In my Direct Testimony, Schedule CBR-1 and Schedule CBR-2 provided a very robust, detailed, and balanced analysis of the affordability of Missouri-American Water Company’s (“MAWC”) water and wastewater service for our customers. These affordability analyses contained two components.

- The Enterprise-Level Analysis provided a long-term view of the overall affordability of the Company's water and wastewater service going back in time to 2012 and looking forward to proposed rates by comparing average residential bills by year for all residential customers to estimated median household income (“MHI”) for the Company’s customers, which is a high-level measure of household income for MAWC’s customers.
- The Community-Level Analysis provided a deeper dive into the affordability of water and wastewater service at the Company’s proposed rates in this case by community, and by income levels and household sizes within those communities, using a standard usage level of 50 gallons of water per household member per day.

Q. What do you mean when you refer to the Company’s affordability analyses as balanced?

A. The Company’s affordability analyses are balanced in the sense that they examine the affordability of water and wastewater service across the entire spectrum of the Company's residential customer population. While ultimately the focus turns to lower income

1 customers because that is where mitigation strategies for affordability are focused, and the
2 Company's affordability analyses provide a detailed view of affordability for lower
3 household income, it is important to understand the affordability of service across the entire
4 customer spectrum. The Company's affordability analyses do both of these things.

5 **Q. What witnesses address the Company's analysis of affordability that you will be**
6 **responding to in your Rebuttal/Surrebuttal/Sur-Surrebuttal Testimony?**

7 A. I will be responding to the Direct/Rebuttal Testimony of CCM witness Colton in my
8 Rebuttal/Surrebuttal/Sur-Surrebuttal Testimony.

9 **Q. What issues do CCM Witness Colton raise regarding the Company's affordability**
10 **analysis?**

11 A. Mr. Colton raises the following issues regarding the Company's affordability analysis that
12 I will respond to in my Rebuttal/Surrebuttal/Sur-Surrebuttal Testimony:

- 13 • Mr. Colton states that my conclusion, that the Company's water and wastewater
14 service has been, is, and is expected to continue to be affordable for the majority of
15 its residential customers, including under the rates proposed in this case, "is
16 misleading at best and is in fact incorrect."¹ He attributes this conclusion as an
17 interpretation of the results of the Company's Enterprise-Level Analysis.²
- 18 • Mr. Colton accuses me of downplaying both the breadth of unaffordability and the
19 depth of unaffordability and that my alleged effort to do so should be dismissed.³
- 20 • He states that the Enterprise-Level Analysis is fundamentally flawed from the

¹ Colton DT, p. 18, lines 9-16.

² Colton DT, p. 19, lines 19-21.

³ Colton DT, p. 18, line 17 through p. 19, line 2.

1 outset based primarily on the use of Median Household Income (“MHI”) as the
2 basis for my assessments of affordability, and thus, for the conclusions I draw about
3 affordability in MAWC’s service territory.⁴ He goes on to cite a number of
4 academic and research articles that criticize the use of MHI.⁵

- 5 • Mr. Colton criticizes the Enterprise-Level Analysis for primarily focusing on the
6 median household income of homeowners and states that it is particularly
7 inappropriate to use the Median Household Income of homeowners (“MHI-HO”)
8 as a basis for assessing the affordability of water service over time.⁶ Relatedly, he
9 states that I do not incorporate the median income of tenants in my affordability
10 analysis.⁷

- 11 • Mr. Colton claims that I inappropriately ignore MAWC’s ALICE data in my
12 affordability analysis.⁸ He states that the ALICE data supports a number of
13 conclusions that are at odds with use of MHI, focused on homeowner median
14 income, to support his broad conclusion that MAWC bills are generally affordable
15 for the vast majority of customers based on my Enterprise-Level Analysis.⁹

16 **Q. As you have previously testified, the Company’s affordability analysis is actually a**
17 **two part analysis consisting of an Enterprise-Level Analysis and a Community-Level**
18 **Analysis. Mr. Colton in his testimony comments extensively on the Company’s**
19 **Enterprise-Level Analysis. Does Mr. Colton comment on the Company’s**
20 **Community-Level Analysis?**

⁴ Colton DT, p. 20, lines 6-9.

⁵ Colton DT, p. 20, line 14 through p. 23, line 9 .

⁶ Colton DT, p. 25, lines 5 through 12.

⁷ Colton DT, p. 26, lines 1-3.

⁸ Colton DT, p. 31, line 13.

⁹ Colton DT, p. 35, lines 2-5.

1 A. He does not, and this is noteworthy because many of his criticisms of the conclusions that
2 I reach about the affordability of the Company's service are conclusions that he asserts I
3 based on the results of the Enterprise-Level Analysis, which is not the case. The primary
4 conclusion that I reach regarding the affordability of the Company's water and wastewater
5 service, namely that service is affordable for a large majority of the Company's residential
6 customers but that there are groups of customers, namely lower income customers, for
7 whom affordability of service can be challenging, comes from interpretations of the
8 Company's Community-Level Analysis, which Mr. Colton does not address in testimony.

9 **Q. Mr. Colton provides extensive testimony at pages 12-18 of his Direct Testimony**
10 **discussing what he describes as lessons learned from U.S. Census Bureau's PULSE**
11 **Household Survey for the State of Missouri for the period August 20, 2024, through**
12 **September 16, 2024. Do you have any commentary on his testimony regarding the**
13 **PULSE Survey data?**

14 A. What the discussion of PULSE data for Missouri shows is that the affordability of basic
15 household expenses is more challenging for lower income households than it is for higher
16 income households, which simply stands to reason. The Company's Community-Level
17 Analysis of affordability of water and wastewater service, which again Mr. Colton ignores,
18 gets to the very heart of this issue. This analysis looks at the affordability of service across
19 the Company's entire customer base, including the Company's lower income customers,
20 and provides useful information to develop strategies that help mitigate these affordability
21 concerns for the Company's most economically vulnerable customers.

22 **b. Criticisms of the Company's Affordability Analysis**

23 **Q. Do you believe that your conclusion in your Direct Testimony the Company's water**

1 **and wastewater service has been, is, and is expected to continue to be affordable for**
2 **the majority of its residential customers, including under the rates proposed in this**
3 **case, is misleading at best and is in fact incorrect?**

4 A. I do not. The data speaks for itself. As I have shown in my Direct Testimony on Chart 5
5 and 6, the percentage of residential customers for whom we expect Basic Water Service
6 (defined as 50 gallons of water per household member per day) to be less than 2% of
7 household income is 84% under proposed rates for water service and 81% under proposed
8 rates for wastewater service. Further, the Company estimates that there are approximately
9 71,900 residential water customers and 4,300 wastewater customers that will see bills for
10 Basic Water Service above 2% of their household income, which is approximately 16%
11 and 19% of the total customer population for water and wastewater service, respectively.
12 All of this information comes from the Company's Community-Level Analysis of
13 affordability which Mr. Colton does not comment on and does not dispute. Mr. Colton
14 may disagree with how I have characterized or presented this information, but again the
15 data speaks for itself.

16 **Q. How do you respond to Mr. Colton's assertions that the Company's affordability**
17 **analysis downplays the depth of unaffordability in the Company's service territory?**

18 A. This assertion is simply false. The Community-Level Analyses (which Mr. Colton ignores)
19 reflected in Schedule CBR-1 and CBR-2 provide enormous levels of detail on the
20 affordability of water and wastewater service across all income groups and also provide
21 data on Bill to Income ("BTI") Ratio for customers at different levels of household income
22 by increments of the FPL. While the Affordability Index that I introduce in my Direct
23 Testimony is a simple summary metric that describes the estimated percentage of

customers with bills less than 2% of annual household income and can be used to easily compare affordability of service across a variety of demographics (community, income level, household size, etc.), the data needed to fully analyze the depth and breadth of affordability is completely contained within the affordability analyses provided by the Company. Below is a table that represents the affordability data by household income level taken from the Company's Community-Level Analysis for water service.

TABLE 1

WATER AFFORDABILITY BY HOUSEHOLD INCOME AND BTI RATIO

Household Income	Customer Counts	BTI Range						Total
		0% - 1%	1% - 2%	2% - 3%	3% - 5%	5% - 10%	Over 10%	
0-50%	14,975					1.1%	2.3%	3.4%
50%-100%	22,478			0.2%	4.1%	0.8%		5.1%
100%-150%	32,068		0.2%	6.7%	0.4%			7.2%
150%-200%	35,472		7.3%	0.7%				8.0%
200%-250%	34,498		7.8%					7.8%
250%-300%	36,102	0.4%	7.8%					8.1%
300%-350%	32,380	6.1%	1.2%					7.3%
350%-400%	28,725	6.5%						6.5%
400%-450%	25,266	5.7%						5.7%
450%-500%	25,660	5.8%						5.8%
Over 500%	155,572	35.1%						35.1%
Total	443,195	59.6%	24.2%	7.5%	4.5%	1.9%	2.3%	100.0%

Table 1 shows the percentage of residential customers in each household income group and how those percentages extend out through various levels of BTI Ratios. This table shows that 83.8% of the Company's residential customers are likely to see the cost of Basic Water Service at between 0% and 2% of household income. The vast majority of customers for whom Basic Water Service is expected to be greater than 2% of household income are customers whose household income is less than 150% of Federal Poverty Level. This table clearly addresses both the depth and the breadth of affordability issues for the Company's residential customers.

Q. Given the criticisms of using MHI as a yardstick for affordability cited in the studies

1 **referenced in Mr. Colton’s testimony, why do you use MHI in your Enterprise-Wide**
2 **Analysis?**

3 A. The Enterprise-Level Analysis uses MHI for two reasons. The first is that MHI is a widely
4 recognized, well understood, and readily available measure of household income in
5 different communities and states and is available for different breakdowns of household
6 demographics. The second is that MHI is consistent in scope with the concept of average
7 monthly bills, which is the second input in the analysis. Average monthly bills encompass
8 all residential customers, not a subset. MHI also encompasses the entire residential
9 customer base, not a subset. It is important in any analysis of affordability that there is
10 consistency in assumptions between bills used in the analysis and household income
11 metrics used in the analysis. This is something that many analyses of affordability of water
12 and wastewater service do not consider. Use of MHI as a measure of total population
13 income brings that consistency to the analysis when paired with average monthly bills.

14 **Q. Are you saying that the criticisms of MHI are unfounded?**

15 A. No. It is true that MHI does not directly address low-income customers, and if the
16 Enterprise-Level analysis were the only analysis the Company presented in this case then
17 the criticisms of MHI might be relevant, but that is not the case. The Enterprise-Level
18 analysis is just one part of the Company’s comprehensive analysis of affordability in this
19 proceeding, and it is not intended to target any specific customer group. The Enterprise-
20 Level analysis is intended to show the long-term impact of changes in rates and usage on
21 the general affordability of water and wastewater service for our customers.

22 **Q. Why wouldn’t it be better to use a metric of household income more applicable to**
23 **lower-income customers, say 20th percentile household income?**

1 A. There is some appeal to using an income threshold that is more applicable to lower income
2 customers in a multi-year analysis, but the determination of 20th percentile household
3 income for the Company's direct customers is much more complicated because this statistic
4 is not easily provided separately for homeowners and renters in a community (which is
5 necessary for an accurate assessment of affordability for the Company's specific customer
6 population), and determination of average bills and average monthly usage that is
7 consistent with customers at the 20th percentile household income level is not easily done.
8 The use of MHI data and average monthly bills is appropriate because it is well understood
9 and easily retrievable data and provides a good overall picture of affordability as it relates
10 to the Company's entire residential customer group.

11 **Q. Do you believe that use of MHI yields results that are misleading?**

12 A. I do not. The point of the Enterprise-Level Analysis is not to indicate affordability of
13 service at any point in time for any particular group of customers, but rather to provide a
14 high-level historical perspective on how the affordability of service has been trending over
15 time for all customers and how it is expected to continue to trend under proposed rates in
16 this case. MHI compared to average monthly bills over the course of time is the best way
17 to show this.

18 **Q. How do you use MHI-HO in your Enterprise-Level Analysis?**

19 A. The MHI-HO metric is used in the Enterprise-Level Analysis as an input to the calculation
20 of the multiplier that converts state-level MHI data from the U.S. Census Bureau Table H-
21 8 to estimated MHI data for the Company's residential customer base. This multiplier is a
22 weighted-average calculation by zip code that incorporates the estimated percentage of
23 MAWC's customers that are homeowners, the estimated percentage of MAWC's

1 customers that rent, reported MHI for homeowners and rental households, and the total
2 number of customers by zip code, the result of which is a multiplier that is applied to state-
3 level MHI to yield an estimated MHI for the Company's customers. This estimated
4 multiplier is 1.3288 for water service and 1.2364 for wastewater service, meaning that the
5 Company estimates that MHI for the Company's residential water customers is 132.88%
6 of the total statewide MHI for the State of Missouri as reported by the U.S. Census Bureau,
7 and the MHI for the Company's residential wastewater customers is 123.64% of the total
8 statewide MHI. The differences in these two estimates reflect the differences in
9 socioeconomics and household demographics in the Company's water and wastewater
10 service territory.

11 The fact of the matter is that MHI-HO is relevant to the determination of overall
12 affordability because the majority of MAWC's residential customers are homeowners. If
13 all of the Company's residential customers were homeowners, then MHI-HO would be the
14 only relevant household income metric to use, by definition. If none of the Company's
15 residential customers were homeowners and all of them were renters, then MHI-HO would
16 be completely irrelevant and the MHI statistic for rented households would be the only
17 relevant metric to use. The fact is, however, that the Company's customers are both owned
18 and rented households, and the Company has made an estimate of the mix of customers
19 that are homeowners and renters. Because of this, both MHI metrics are used and they are
20 used in a weighted average calculation based on the percentage of estimated homeowners
21 and renters in the Company's residential customer group.

22 **Q. How do you respond to the criticisms laid out by Mr. Colton regarding MHI-HO?**

23 **A.** The criticisms that Mr. Colton makes against MHI-HO simply aren't relevant to the

1 calculation I just described. Mr. Colton's criticism regarding the incomes of homeowners
2 versus renters over time would only be relevant if these conditions result in systematic and
3 significant changes in the calculated multipliers over time. Mr. Colton has not made this
4 claim despite having access to the data necessary to investigate this, and in fact, estimates
5 of these multipliers going back over time show that the estimated relationship between
6 statewide MHI and estimated MHI for the Company's customers has remained very steady
7 over time.

8 **Q. How do you respond to the criticisms that you have not considered household income**
9 **of tenants in your analysis?**

10 A. I have, in fact, considered the household incomes of tenants in my analysis, but only to the
11 extent that tenants are direct customers of the Company. As I have described above, the
12 multiplier that I use to adjust from statewide MHI to a service territory specific MHI
13 contains a component for both homeowners and tenants, and weights them by zip code in
14 proportion to the estimated number of customers the Company actually has that are
15 homeowners or tenants. In total, we estimate that approximately 84% of the Company's
16 direct residential customer base are homeowners and approximately 16% are renters, and
17 the household incomes of homeowners and renters are considered in the Company's
18 affordability analyses in that same proportion.

19 **Q. How do you respond to the criticisms that you have not considered MAWC's ALICE**
20 **data in your analysis?**

21 A. The Asset Limited, Income-Constrained, Employed Household ("ALICE") data discussed
22 by Mr. Colton in his testimony tracks the cost of household necessities that matter most to
23 ALICE households which includes, among other things, housing, child care, food,

1 transportation, health care, and basic technology While there is appeal in considering these
2 types of costs at an overarching public policy level, these costs are not within the control
3 of the Company and should not from a legal perspective be a consideration when
4 determining water and wastewater rates in this case. The Company's affordability analysis
5 in this case is based on the cost of the service that the utility is providing and the perceived
6 ability (as measured by household income) of customers to pay for those costs. The cost
7 of other things our customers are also paying for should not be a consideration.

8 **c. Mr. Colton's Affordability Analysis**

9 **Q. Did Mr. Colton provide his own analysis of the affordability of water service I his**
10 **testimony?**

11 A. He does. This analysis is presented at pages 38 through 42 of his testimony. It is important
12 to note here, again, that this analysis is presented under the heading "The Impropriety of
13 Mr. Rea's Enterprise Level Conclusions" and is apparently in response to his assertions
14 that I have not done appropriate conclusions about affordability from the Enterprise-Level
15 Analysis.¹⁰ He does not mention and completely ignores the Company's Community-
16 Level Analysis where all of the detail-level information in the Company's affordability
17 analysis is provided that he apparently is attempting to provide.

18 **Q. Have you reviewed his analysis?**

19 A. Yes, I have.

20 **Q. Can you briefly discuss the methodology behind his analysis?**

21 A. Based on my review, my understanding of what Mr. Colton is attempting to do is to use

¹⁰ Colton DT, p. 38, lines 1-9.

1 the average monthly residential bills from the Company's Enterprise-Level Analysis for
2 2024 and projected rates and determine a level of household income that would be needed
3 to ensure that average monthly bills were no more than 2% of annual household income.¹¹
4 He then looks at census data from American Community Survey Table B19001 to estimate
5 by zip code the numbers and percentages of households that have incomes less than the
6 minimum levels of household income that he says is needed to afford the Company's
7 average monthly bills at 2% of household income, and then goes on the break down
8 households with lower incomes than his calculated standard into further levels of detail.¹²
9 He then goes on to discuss average levels of income at different household income quintiles
10 and extends his analysis back in time through 2021.¹³

11 **Q. Do you have any commentary on this analysis?**

12 A. There are three significant errors in the information presented by Mr. Colton that makes
13 his analysis unreliable and unrepresentative of the true picture of affordability in the
14 Company's service territory:

- 15 • First, use of average monthly bills from the Company's Enterprise-Level Analysis
16 used by Mr. Colton does not relate to usage likely associated with lower income
17 customers. Based on information provided by Company Witness McClellan,
18 approximately 20% of residential usage for the years used by Mr. Colton is seasonal
19 discretionary usage and is reflected in average residential monthly bills, as the use
20 of these average bills considers all residential usage, not just Basic Water Usage.

¹¹ Colton DT, p. 38, line 11 through p. 39, line 3 and Table 8 of p. 39.

¹² Colton DT, p. 38, line 4 through p. 40, line 6 and Chart 4.

¹³ Colton DT, p. 40, line 7 through p. 43, line 2.

1 As I showed in my Direct Testimony and as Mr. Colton agrees with in later sections
2 of his testimony¹⁴, lower-income customers are much less likely to use water for
3 seasonal discretionary purposes than higher income customers, which makes use of
4 average monthly bills, which includes all usage, particularly problematic for lower
5 income customers. The Company's Community-Level Analysis, which Mr. Colton
6 does not comment on, takes this directly into account. Also, data shows that lower-
7 income households tend to have fewer people in them than higher income
8 households and because indoor household water use is logically correlated with the
9 number of people in the home, average monthly bills across the entire service
10 territory even for just Basic Water Service would be overstated for lower income
11 customers.

- 12 • Mr. Colton uses income data from Table B19001 of the American Community
13 Survey but refers to this data in a number of places in his testimony as homeowner
14 data.¹⁵ Table B19001 is not homeowner data. There are other ACS tables that
15 provide homeowner income information, and I use that information in my
16 affordability analyses but Table B19001 provides household income data which is
17 a mix of homeowners and renters. This is important because as I have previously
18 testified, homeowners are more likely to be direct customers of the Company than
19 renters, and the mix of those two that the Company estimates to be direct customers
20 of the Company is accounted for appropriately in my analyses. They are not
21 accounted for in Mr. Colton's information which means that a significant
22 proportion of the households with incomes below \$35,000 that Mr. Colton

¹⁴ Colton DT, p.73-75.

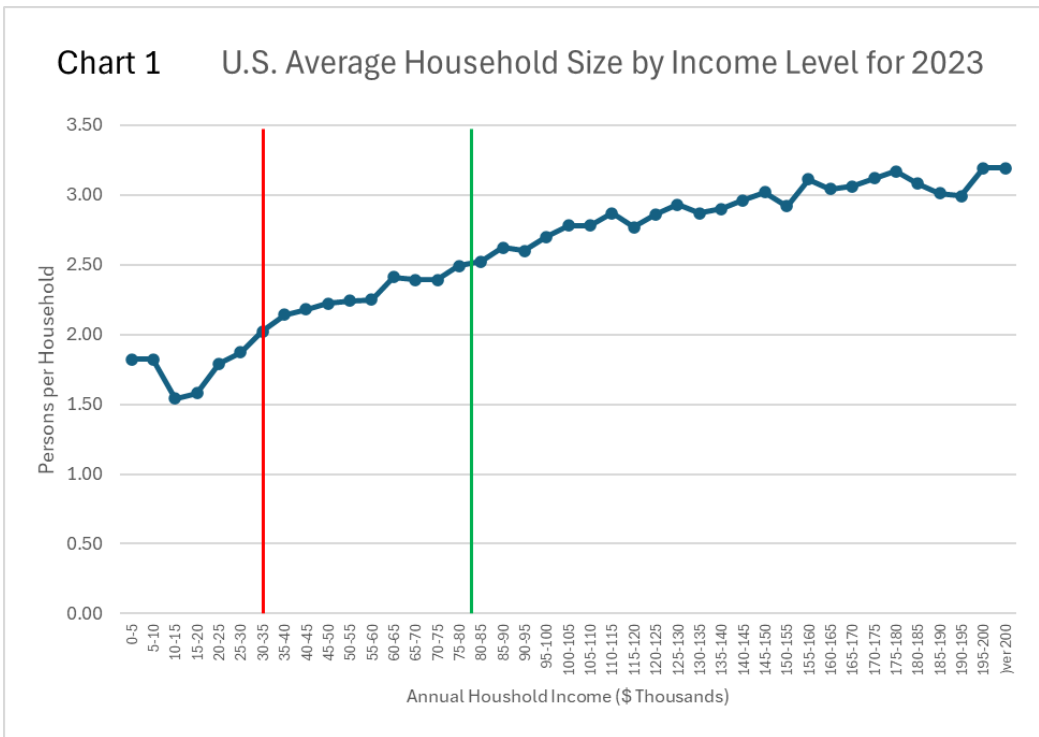
¹⁵ Colton DT, p. 39, lines 6, 8, and 17, and Chart 4.

discusses wouldn't even be customers of the Company.

- Finally, Mr. Colton's discussion of combined water and wastewater bills across the Company's service territory is misleading in that the Company's water and wastewater service territories are very different, with the Company's water service territory being significantly larger. While Mr. Colton discusses the affordability of combined service across all of the zip codes in the Company's service territory, combined water and wastewater bills only apply to a relatively small number of customers in a small subset of the Company's footprint.

Q. Can you expand on your discussion of household size and household income?

A. The chart below shows average household size by household income for the United States based on data from U.S. Census Bureau Table HINC-01 for 2023.

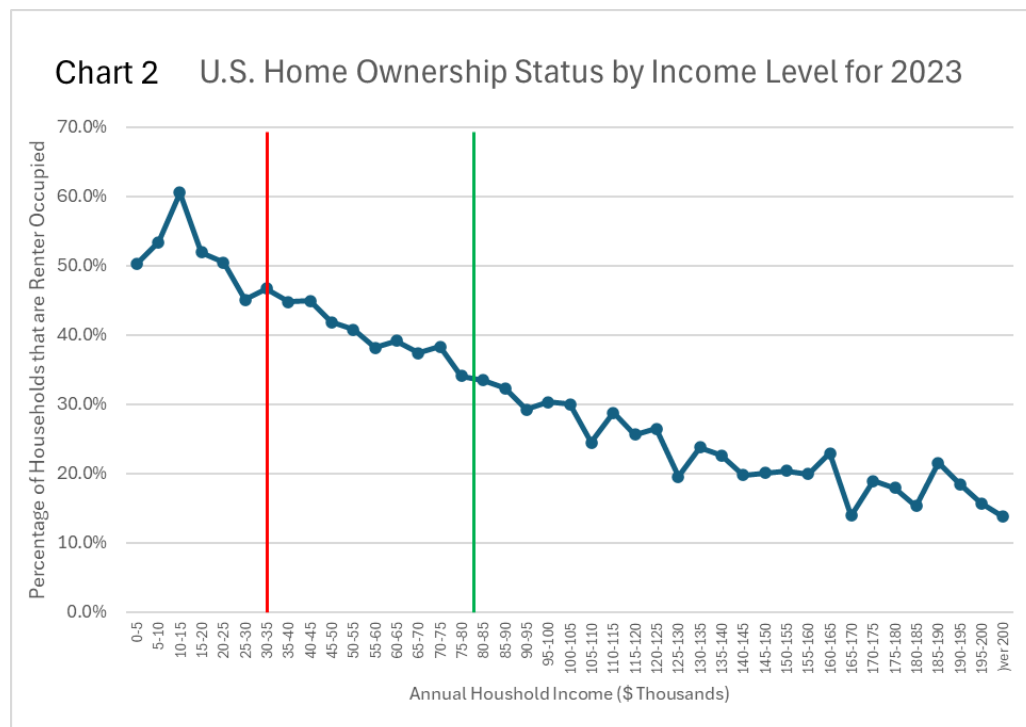


This chart shows that there is a strong correlation between household size and household income and household size tends to increase as income increases for nearly all households

in the country. Also, while the national average household size across all incomes is 2.51 persons per household, the average household size for households with incomes of \$35,000 a year or less is less than 2.00. If one extends the concept of water usage stated as a fixed number of gallons per person per day, the logical extension of that concept to households of different income sizes suggests that in general, water usage assumptions for lower income households should be considerably less than that for an average size household and certainly lower than for higher income households. Assuming a standard usage level for all households in a given community almost certainly overstates usage for lower income customers.

Q. Can you expand on your discussion of home ownership status and household income?

A. The chart below shows the percentage of households that are renter-occupied households by household income for the United States which is also based on data from U.S. Census Bureau Table HINC-01 for 2023.



1 This chart shows that there is a strong correlation between ownership status and household
2 income and shows that for lower income households that Mr. Colton's analysis addresses,
3 the majority of households are renter-occupied households. As I have explained in
4 testimony, these households are likely not direct customers of the company and therefore
5 wouldn't be included in any type of affordability analysis of water service. At the very least,
6 it is unlikely that households that mostly rent would see water bills anywhere close to the
7 average water bill for the Company's residential customers that includes seasonal water
8 use. A proper analysis of the affordability of water service for the Company would need
9 to recognize this fact.

10 **Q. To sum up, why is the Company's approach to looking at affordability of service**
11 **through its Community-Level Analysis superior to the information and analysis**
12 **provided by Mr. Colton?**

13 A. Like the information Mr. Colton provided, many studies of affordability simply calculate
14 an average bill for a given location, either based on an assumed level of usage or based on
15 average household size multiplied by an assumed level of usage per person, or in Mr.
16 Colton's case just an average monthly bill, and then estimates whether that single bill is
17 affordable at different levels of income. This approach completely ignores the fact that in
18 every community, there is an entire distribution of households across an entire range of
19 income levels, and all of the data we have shows that lower income households in a
20 community tend to have fewer people in them (see Chart 1) and likely have smaller
21 household sizes than an average household in that community. Applying the usage per
22 person per day standard to this reality results in lower usage levels and lower resultant bills
23 for smaller households and lower household incomes, and higher usage with higher

resultant bills for larger households and higher household incomes. Simply calculating an average bill in a location and comparing different levels of income to that bill completely ignores this relationship between household income and household size and overstates bills for lower income customers, thus making the affordability picture look more dire than it likely is in reality.

III. UNIVERSAL AFFORDABILITY TARIFF

a. Background

Q. Please review the Company’s proposal for a UAT in this proceeding.

A. The Company’s proposed Universal Affordability Tariff (“UAT”) for water service includes multiple tiers of discounts based on different levels of household income stated as multiples of the Federal Poverty Level (“FPL”).¹⁶ The tariff offers discounts on both the basic 5/8” meter charge and the volumetric charges for water service. The Company’s proposed discount schedule is as follows:

<i>TABLE 1</i> <i>Household Income</i>	Water Basic Service Discount	Water Volumetric Discount
<i>0% - 50% FPL</i>	75%	75%
<i>51% - 100% FPL</i>	55%	55%
<i>101% - 150% FPL</i>	25%	25%

The driving principle behind the Company's proposed UAT is to provide participating customers discounts such that the expected bill for Basic Water Service will be no more than 2% of their annual household income.

Q. What witnesses address the Company’s proposed UAT that you will be responding to

¹⁶ <https://aspe.hhs.gov/topics/poverty-economic-mobility/poverty-guidelines>

in your Rebuttal/Surrebuttal/Sur-Surrebuttal Testimony?

A. I will be responding to the Direct Testimonies of Staff witness Glasgow, OPC Witness Marke, and CCM witness Colton in my Rebuttal/Surrebuttal/Sur-Surrebuttal Testimony.

Q. Do any of the intervening witnesses oppose the Company's proposed UAT?

A. Mr. Glasgow states that while Staff does not oppose a payment assistance program designed and targeted to customers who find it difficult to pay for water, Staff does not recommend approval as the Company's UAT as currently proposed.¹⁷ Dr. Marke supports the Company's proposed UAT but shares the same concerns articulated by Mr. Glasgow.¹⁸ Mr. Colton recommends that the proposed UAT be approved as presented¹⁹ but proposes a number of changes to the Company's proposed program that I will address in my Rebuttal/Surrebuttal/Sur-Surrebuttal Testimony.

b. Response to Mr. Glasgow

Q. What issues do Staff witness Glasgow raise regarding the Company's proposed UAT that you will address in your Rebuttal/Surrebuttal/Sur-Surrebuttal Testimony?

A. Mr. Glasgow raises the following issues regarding the Company's proposed UAT that I will respond to in my Rebuttal/Surrebuttal/Sur-Surrebuttal Testimony:

- Mr. Glasgow states that there are very few program details in the Company's Direct Testimony or the proposed tariff and that the Company's testimony instead focuses more on the need for the program.²⁰ He notes, however, that details have been provided in response to Staff data requests.²¹

¹⁷ Glasgow DT/RT, p. 7, lines 11-14.

¹⁸ Marke DT/RT, p. 32, lines 5-8.

¹⁹ Colton DT/RT, p. 44, lines 6-7.

²⁰ Glasgow DT/RT, p. 2, line 19 through p. 3, line 2, p. 5, line 9 through p. 6, line 10.

²¹ Glasgow DT/RT Testimony p. 3, lines 3-15.

1 • Mr. Glasgow states that his understanding is that a program like the Company's
2 proposed UAT would need to be designated as a pilot program, which the Company
3 has not done.²²

4 • Mr. Glasgow states that it is unclear from my Direct Testimony and the Company's
5 proposed tariffs whether the proposed UAT applies to both water and wastewater
6 service or just water service.²³

7 **Q. Does Mr. Glasgow make any recommendations regarding the Company's proposed**
8 **UAT?**

9 A. Yes. Staff recommends that the Company:

10 • Develop and propose a program for approval to the Commission with program
11 details as mentioned in Mr. Glasgow's Direct Testimony.

12 • Develop a tariff that incorporates some of the basic information mentioned in his
13 Direct Testimony.

14 • Present the UAT as a pilot, with parameters such as a limit on the number of
15 participants, how long the pilot will last, how the pilot will be evaluated, and an
16 explanation of how a successful program would be determined.²⁴

17 **Q. How do you respond to Mr. Glasgow's concerns related to the perceived lack of details**
18 **regarding program operations in the Company's Direct Testimony and in the**
19 **Company's proposed tariffs?**

20 A. The Company's proposed tariffs are patterned after affiliate Company tariffs in other states
21 that also offer the same discount program. These tariffs contain the discount amounts,

²² Glasgow DT/RT, p. 3, lines 18-19.

²³ Glasgow DT/RT, p. 5, lines 9-18.

²⁴ Glasgow DT/RT, p. 6, line 23 through p. 7, line 7.

1 eligibility requirements, and any other terms or conditions that are specific to participation
2 in the program. Because these programs are administered through third-party
3 administrators, the tariffs generally do not contain operational or administrative details
4 such as application procedures or any other types of information that would be specific to
5 those administrators because these operational or administrative details would certainly be
6 subject to change over time, and requiring tariff changes would introduce potentially
7 significant levels of inefficiencies into the operation of the program.

8 **Q. Do you believe that the Company's proposed tariff should be proposed as a pilot**
9 **program as Mr. Glasgow suggests?**

10 A. While I am not an attorney, and I am not an expert in any sort of law or regulatory construct
11 that is specific to Missouri that would require a program such as this to be proposed as a
12 pilot program, other American Water companies operates programs like this in other states
13 (and some for many years) and has significant experience with third-party administrators
14 in the operation of these programs. From an operational standpoint, I see no need to operate
15 this program as a pilot program in the MAWC service territory apart from any law or
16 regulation that would require that.

17 **Q. Can you clarify whether the Company's proposed tariff applies to both water service**
18 **and wastewater service or just water service?**

19 A. While my testimony did not specifically address the UAT as it relates to wastewater
20 service, the billing determinants developed by Company Witness McClellan contain an
21 initial set of proposed discounts for wastewater service similar to that for water service and
22 at the same levels of discounts (75% discount for customers with incomes between 0% and
23 50% of FPL, 55% for incomes between 50% and 100% of FPL, and 25% for incomes

1 between 100% and 150% FPL). It is the Company's intent that the proposed UAT apply
2 to both water and wastewater service.

3 **Q. How do you respond to Mr. Glasgow's recommendations regarding the UAT?**

4 A. The Company is happy to work with Staff and other stakeholders on the operational details
5 of the program but does not believe that the perceived lack of detail and other information
6 described by Mr. Glasgow is a reason to reject the Company's proposed program in this
7 proceeding. The need to address affordability issues for lower income customers exists
8 now as I have identified in my Direct and Rebuttal/Surrebuttal/Sur-Surrebuttal Testimony,
9 and the effort to address that need should also begin with this proceeding. Experience with
10 these programs in other states shows that the development of the operational details can be
11 an ongoing effort, but the perceived lack of details should not hold up the start. The
12 Company urges the Commission to approve the Company's proposed UAT as we work
13 with stakeholders to evolve the program.

14 **c. Response to Mr. Colton**

15 **Q. You previously stated that Mr. Colton supports adoption of the Company's proposed**
16 **UAT but makes recommendations on changes to the program. What modifications**
17 **does Mr. Colton recommend?**

18 A. Mr. Colton recommends the following changes to the Company's proposed UAT:

- 19 • Mr. Colton proposes that the UAT also be applied to wastewater service in addition
20 to water service²⁵
- 21 • Mr. Colton recommends that MAWC extend its proposed UAT to a fourth tier for
22 customers with income greater than 150% FPL up to and including 200% FPL.

²⁵ Colton DT, p. 44, lines 18-19.

1 This fourth tier would receive a discount of 15% on both service charges and
2 volumetric charges for both water and wastewater service.²⁶

- 3 • Mr. Colton proposes that the Company should only be allowed to recovery the net
4 costs of the UAT discount, with the net cost being defined as administrative costs
5 and foregone revenue from discounts offered less cost reductions in the form of
6 improved collectability and reduced expenses. He states that the offer of the UAT
7 discount will not only generate some level of increased costs (in the form of
8 foregone revenue), but it will also generate some level of increased cost reductions
9 (in the form of improved collectability and reduced expenses), and that the
10 Company should not be allowed to collect the increased costs without also passing
11 on the increased savings.²⁷

- 12 • Mr. Colton recommends that while the Company should be permitted to recover
13 the full costs of the UAT, it should not be permitted to recover those costs through
14 its proposed Revenue Stabilization Mechanism (“RSM”). He states that the
15 proposed RSM is not structured to consider either changes in the collectability of
16 revenue or changes in expenses generated by the UAT.²⁸

- 17 • Mr. Colton recommends that the Company be allowed to defer the net, incremental
18 costs of the UAT for recovery in a future rate proceeding, but that this future rate
19 recovery be conditioned on the Company be directed to work with the Commission
20 Staff, with CCM, with OPC, and with other stakeholders who have an interest in
21 participating, to mutually develop the offsets that will be applied to ensure that rates

²⁶ Colton DT, p. 47, lines 11-14.

²⁷ Colton DT, p. 68, lines 13-18.

²⁸ Colton DT, p. 70, lines 5-9.

1 will only reflect the net incremental costs of the UAT.²⁹

2 **Q. Do you agree that the proposed UAT should be expanded to wastewater service?**

3 A. I do. As I testified previously, it is the Company's intent to offer this program to both
4 water and wastewater customers, and the proposed initial level of discounts is included for
5 both water and wastewater service in the Company's proposed billing determinants. To
6 the extent there is confusion on this issue, the Company will clarify that the proposed
7 program extends to both water and wastewater customers.

8 **Q. Do you agree that the proposed UAT should be extended to a fourth tier for customers**
9 **with income greater than 150% FPL up to and including 200% FPL which would**
10 **qualify for a discount of 15% on both service charges and volumetric charges for both**
11 **water and wastewater service?**

12 A. I do not. As I have shown in Table 1 of this Rebuttal/Surrebuttal/Sur-Surrebuttal
13 Testimony, rates are designed so that a large majority of customers with incomes between
14 150% and 200% of FPL are already expected to see bills for Basic Water Service at less
15 than 2% of household income, which is the target the Company is aiming for in its proposed
16 UAT. While there certainly may be customers in this group whose incomes are uncertain
17 or potentially fragile as Mr. Colton suggests, that can be said for many customers across
18 the spectrum. The proposed UAT is designed to get as many customers as possible under
19 2% of household income for bills for Basic Water Service under proposed rates, and as the
20 150%-200% FPL income group is already there to a large extent, I see no need to expand
21 the proposed UAT program to those customers and potentially incur more cost to the

²⁹ Colton DT, p. 70, lines 14-19.

1 program to help customers for whom the programs was not designed to help.

2 **Q. How do you respond to the suggestion that cost recovery for the proposed UAT should**
3 **only extend to the net costs of the program?**

4 A. Over the long run, the net costs will be recovered naturally without any mandate from the
5 Commission because any administrative cost will become part of the revenue requirement
6 going forward, discounts to the extent that they are not recovered through an RSM will be
7 part of present rate revenues going forward, and any reduction in uncollectible expense
8 will be a reduction to revenue requirements going forward. This will not happen in the
9 short run (before the next rate case), but the Company also has not included any proposed
10 administrative cost in revenue requirements in this case, so there is not now and will not
11 be any over-recovery of the net cost of the program in the future.

12 **Q. How do you respond to the suggestion that the Company should not be permitted to**
13 **recover the costs of the program through the proposed RSM?**

14 A. The Company's proposed RSM is a revenue reconciliation mechanism, and the costs
15 associated with the proposed UAT are primarily revenue-related. Changes in the
16 collectability of revenue should they occur will impact revenues, not cost, and the
17 Company is not asking to recover the administrative cost of the program in this proceeding.
18 Initially, the only changes that will occur to revenues or costs that the Company is asking
19 to recover will be changes to revenues, and that is specifically what the proposed RSM is
20 designed to do.

21 **Q. How do you respond to the proposal that future rate recovery be conditioned on the**
22 **Company be directed to work with the Commission Staff, with CCM, with the Office**
23 **of the Public Counsel, and with other stakeholders who have an interest in**

participating, to mutually develop the offsets that will be applied to ensure that rates will only reflect the net incremental costs of the UAT?

A. While the Company is happy to work with stakeholders to refine the program as time goes on, recovery of costs should be based on the prudence of those costs. There is no need to artificially determine some sort of offsets to rates in order to make sure that only net incremental costs of the UAT are recovered, because as I have previously testified, the net costs will become apparent over time on their own. If costs incurred to manage the program are prudently incurred, those costs should be recoverable, and any other changes to revenues because of the discounts offered or the refined collectability of revenue, or any other reductions to uncollectible revenues as a result of the program will become self-evident over time.

IV. REVENUE STABILITY

a. Background

Q. Please review the Company’s proposal for a Revenue Stabilization Mechanism in this proceeding.

A. In this proceeding, the Company is proposing a Revenue Stabilization Mechanism (“RSM”) consistent with Section 386.266.4, RSMo. This mechanism will align the Company’s net revenues (net of production cost and future acquisitions that have not yet been through a general rate case) going forward (i.e., beyond the conclusion of this proceeding) with the level of authorized revenue ultimately approved by the Commission in this proceeding. This mechanism stabilizes changes in revenues resulting from changes in volumes of water sold to customers on an ongoing basis due to factors largely beyond the control of the Company. The Company’s proposed RSM will adjust rates up or down

1 over time through a combination of a tracking mechanism and bill credits so that the
2 revenue the Company collects is consistent with the revenue requirement approved by the
3 Commission for water service in this proceeding. The RSM affords the Company the
4 ability to collect an annual revenue amount consistent with the authorized revenue amount
5 in this case and that customers in total pay the revenue level found appropriate to produce
6 just and reasonable rates. The RSM will apply to all residential, commercial, and public
7 authority customers, but will not apply to industrial, sales for resale, or contract customers.

8 **Q. What witnesses address the Company's proposed RSM that you will be responding**
9 **to in your Rebuttal/Surrebuttal/Sur-Surrebuttal Testimony?**

10 A. I will be responding to the Direct Testimonies of Staff witness Abbott, OPC witness
11 Mantle, and MIEC/MECG witness York, and CCM witness Colton in my
12 Rebuttal/Surrebuttal/Sur-Surrebuttal Testimony.

13 **Q. Do any parties in this case support the Company's proposed RSM?**

14 A. No. None of the intervening parties in this proceeding support the Company's proposed
15 RSM.

16 **b. Response to Mr. Abbott**

17 **Q. What issues does Staff witness Abbott raise regarding the Company's proposed RSM**
18 **that you will address in your Rebuttal/Surrebuttal/Sur-Surrebuttal Testimony?**

19 A. Mr. Abbott raises the following issues regarding the Company's proposed RSM that I will
20 respond to in my Rebuttal/Surrebuttal/Sur-Surrebuttal Testimony:

- 21 • Mr. Abbott states that if granted an RSM, MAWC will be essentially guaranteed to
22 recover a set amount of revenue resulting in real potential to cause a negative impact
23 to MAWC's customers. He states that this negative impact would be realized when

1 customers undertake actions to improve water efficiency to lessen their water bill
2 but then having to pay more under the RSM if the Commission approved revenue
3 requirement is not achieved. He states that the benefit of the proposed RSM would
4 be appreciated by MAWC and shareholders and not by customers.³⁰

- 5 • Mr. Abbott states that MAWC is already promoting conservation and water
6 efficiency practices to a certain degree without an RSM, and therefore the
7 Company's position that an RSM would allow for more promotion of conservation
8 is not valid.³¹

- 9 • Mr. Abbott states that an RSM is not needed because MAWC's revenues are not
10 decreasing.³²

- 11 • Mr. Abbott states that it is not appropriate for MAWC's customers to share revenue
12 risk with MAWC.³³

- 13 • Mr. Abbott states that the revenue certainty provided by the RSM reduces business
14 risk and therefore the Company should have proposed a reduced ROE to reflect that
15 fact.³⁴

16 **Q. Do you believe that the Company's proposed RSM, which results in a stable level of**
17 **revenue, is a negative for customers?**

18 A. I do not. Revenue stability for the Company is not a negative thing for customers, and
19 instability and unpredictability of revenues is not a good thing for customers. As I
20 explained in my Direct Testimony, the Company's ability to reliably recover its revenue

³⁰ Abbott DT/RT, p. 8, lines 4-12.

³¹ Abbott DT/RT, p. 9, line 11 through p. 11, line 2.

³² Abbott DT/RT, p. 11, line 16 through p. 13, line 4.

³³ Abbott DT/RT, p. 13, lines 17-23.

³⁴ Abbott DT/RT, p. 15, lines 6-9.

1 requirement over the long term through rates is an important part of the Company's ability
2 to properly operate, maintain, and invest in the water system, at a reasonable cost. This
3 ability to prudently manage the systems at a reasonable cost is in the long-term best
4 interests of our customers.

5 **Q. How do you respond to the concern that customers who undertake actions to improve**
6 **water efficiency to lessen their water bill could then have to pay more under the RSM?**

7 A. A customer who takes specific actions to reduce their water consumption will still enjoy
8 the benefits of a lower bill even with the implementation of the RSM because the impact
9 of potential surcharges, if any, from the RSM will be dwarfed by savings that a customer
10 will see through conservation actions taken on their own. If a customer takes actions to
11 reduce their water consumption by 5% per month (4,000 gallons to 3,800 gallons for
12 example), the resulting bill savings for an average use customer without the RSM would
13 be \$2.05 per month under the Company's proposed rates in this case, well above the
14 amount that the Company estimates an average use customer bill would increase due to
15 implementation of the RSM.

16 **Q. How do you respond to the concern that the Company's position that an RSM would**
17 **allow for more promotion of conservation is not valid?**

18 A. I disagree. It is common that conservations efforts and revenue stabilization or decoupling
19 mechanisms such as the Company's proposed RSM are paired together. While this is not
20 a requirement for either one of them to be effective, pairing them together can certainly
21 enhance the effectiveness and availability of conservation efforts across the board.

22 **Q. How do you respond to the concern that an RSM is not needed because MAWC's**
23 **revenues are not decreasing?**

1 A. Revenues are increasing over time because rates have increased over time. This is partly
2 because revenue requirements have increased over time and partly because customer usage
3 has been declining at a persistent rate over time. The proposed RSM is not intended to
4 address long term revenue trends. The proposed RSM is intended to address short-term
5 revenue instability while the rates approved in this case are in effect, and will last until
6 rates are reset again some time in the future.

7 **Q. Is it appropriate for the Company and its customers to share revenue risk under the**
8 **proposed RSM?**

9 A. Yes. As I explained in my Direct Testimony, over 90% of the Company's proposed
10 revenue requirement consists of fixed costs, yet under the Company's proposed rate design
11 in this case, only 26% of revenues are collected through fixed charges. This shows that in
12 general, the ability to reliably recover fixed costs is heavily weighted against the Company.
13 The proposed RSM mitigates this risk for the Company while leaving in place the largely
14 volumetric rate design facing our customers today. The RSM provides a better balance of
15 risk between the Company and its customers related to revenue requirement collection than
16 exists under the Company's current rate design.

17 **Q. How do you respond to the recommendation that the Company's proposed RSM**
18 **reduces business risk and that if the Commission approves the proposed RSM there**
19 **should be a reduction to the Company's ROE to reflect that reduced business risk?**

20 A. As discussed by Company witness Bulkley in her Rebuttal/Surrebuttal/Sur-Surrebuttal
21 Testimony, the adoption of a RSM does not warrant a corresponding reduction to ROE.

22 **c. Response to Ms. Mantle**

23 **Q. What issues does OPC witness Mantle raise regarding the Company's proposed RSM**

1 **that you will address in your Rebuttal/Surrebuttal/Sur-Surrebuttal Testimony?**

2 A. Ms. Mantle raises the following issues regarding the Company’s proposed RSM that I will
3 respond to in my Rebuttal/Surrebuttal/Sur-Surrebuttal Testimony:

4 • Ms. Mantle states that there are two critical factors for the Commission to consider
5 when determining whether it approves, modifies, or rejects MAWC’s request for a
6 RSM:

7 • Has the lack of a RSM resulted in MAWC having insufficient funds to
8 provide safe and adequate service and earn a sufficient rate of return
9 (“ROR”); and

10 • Would an RSM provide benefits to MAWC’s customers that are greater
11 than the increase in risks that they are being asked to assume?

12 • She states that MAWC has neither shown that a RSM is necessary for it to earn a
13 sufficient ROR nor that having an RSM would provide benefits to the Company’s
14 customers that outweighed the shift of risks to them.³⁵

15 • Ms. Mantle generally claims that the volatility of the Company’s billed revenue
16 over time has not been excessive and therefore does not justify an RSM.³⁶

17 • Ms. Mantle recommends that if an RSM is approved by the Commission, the actual
18 costs associated with the UAT program discounts not be captured through the RSM;
19 and that the authorized revenues of the RSM should be adjusted to account for the
20 expected revenue discounts provided to UAT participants just as it is modified to
21 remove the revenues for the industrial customer class.³⁷ She also states that an

³⁵ Mantle DT/RT, p. 5, lines 9-25.

³⁶ Mantle DT/RT, p. 13, line 5 through p. 14, line 10.

³⁷ Mantle DT/RT, p. 24, line 24 through p. 25, line 3.

1 RSM would not assure the Company of no volatility in its earned ROE.³⁸

- 2 • Ms. Mantle states that an RSM will introduce uncertainty to customers. She states
3 that customers would be faced with weather risks, small customers would face the
4 risk of having to replace revenue due to very large customers leaving MAWC, and
5 all customers would face the risk that their bills would be higher because other
6 customers used less water. She states that customers will lose the predictability of
7 how their actions affect their bills if the Commission approves a RSM for
8 MAWC.³⁹

- 9 • Ms. Mantle states that if the Commission approves a RSM that allows MAWC to
10 charge more when customers use less, this effort to reduce usage to reduce their
11 water bills will be futile and that it is unjust for customers who cannot reduce their
12 usage to have to pay more through the RSM for revenues to MAWC that customers
13 that can reduce their usage would no longer pay.⁴⁰

- 14 • Ms. Mantle states that an RSM would not guarantee that the Company will properly
15 operate, maintain, and invest in the water system or will prudently manage its water
16 system.⁴¹

- 17 • Ms. Mantle states generally that production costs should not be included or netted
18 out as a part of the RSM.⁴²

- 19 • Ms. Mantle states that a shortcoming of the proposed RSM is that it assumes all
20 customers covered by the RSM are homogeneous when in fact they are not. She

³⁸ Mantle DT/RT, p. 14, line 18.

³⁹ Mantle DT/RT, p. 15, lines 4-9.

⁴⁰ Mantle DT/RT, p. 17, lines 12-17.

⁴¹ Mantle DT/RT, p. 18, lines 1-9.

⁴² Mantle DT/RT, p. 19, line 23 through p. 24, line 7.

1 states that the mechanism assumes that each class is equally weather sensitive, i.e.
2 a St. Louis County residential customer reacts the same to a change in weather as
3 an Other Public Authority customer from St. Louis County, and also assumes that
4 the impact of a customer leaving the system is the same regardless of what class
5 the customer was in before leaving,⁴³

- 6 • Ms. Mantle expresses her concern that the treatment of revenue shortfalls under the
7 proposed RSM is different than the treatment of revenue excesses. She states that
8 in a shortfall situation, the surcharge would be volumetric with larger customers
9 having higher surcharge amounts and small customers having lower surcharge
10 amounts, but that in an excess situation, the credits that customers would receive
11 would be the same regardless of customer size.⁴⁴ She also states that contrary to
12 the Company's assertion, the proposed RSM is not symmetric for customers.⁴⁵

13 **Q. The issues you've identified are from Ms. Mantle's Direct Testimony filed December**
14 **6, 2024. In her rate design testimony she identifies a number of concerns she has with**
15 **the Company's proposed RSM tariffs. Will you also address those concerns?**

16 A. Yes. In this section of my Rebuttal/Surrebuttal/Sur-Surrebuttal Testimony I respond to
17 Ms. Mantle's testimony on policy issues regarding the Company's proposed RSM. I will
18 address her concerns related to tariff issues later in my Rebuttal/Surrebuttal/Sur-Surrebuttal
19 Testimony.

20 **Q. Can you comment on Ms. Mantle's assertions regarding her two-factor test for**
21 **approval of an RSM which includes a consideration of whether lack of a RSM**

⁴³ Mantle DT/RT, p. 26, lines 10-20.

⁴⁴ Mantle DT/RT, p. 29, lines 11-20.

⁴⁵ Mantle DT/RT, p. 32, lines 8-17.

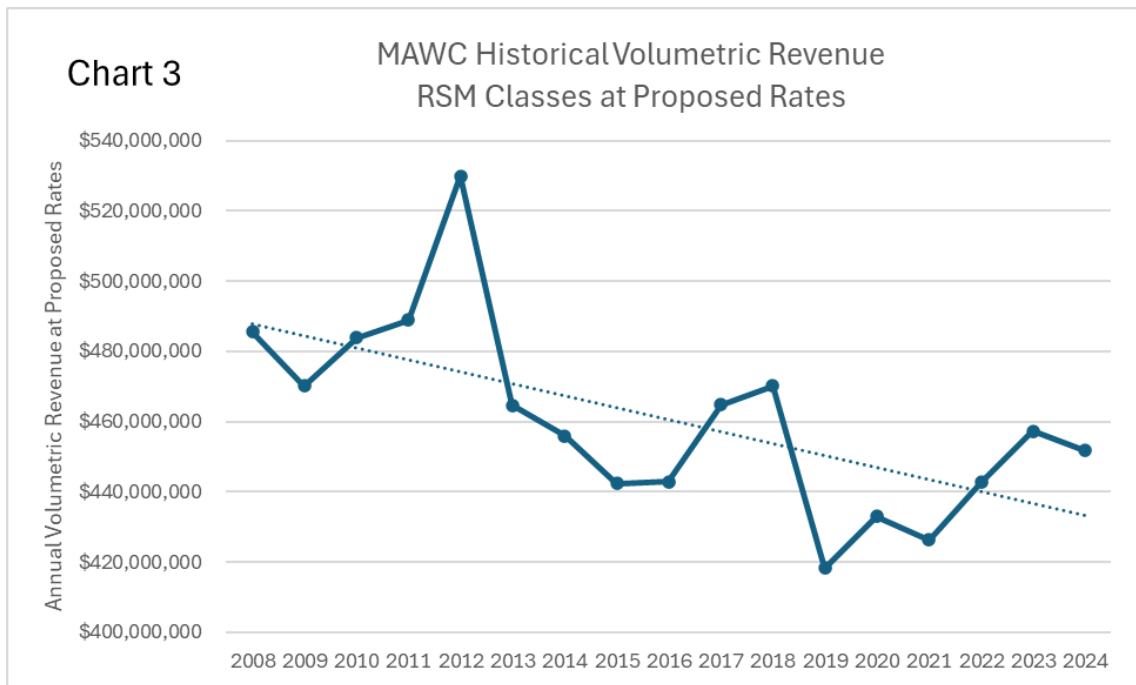
1 **resulted in MAWC having insufficient funds to provide safe and adequate service and**
2 **earn a sufficient rate of return and whether an RSM provide benefits to MAWC's**
3 **customers that are greater than the increase in risks that they are being asked to**
4 **assume?**

5 A. Ms. Mantle states that there are two critical factors for the Commission to consider when
6 determining whether it approves, modifies, or rejects MAWC's request for a RSM: Has
7 the lack of a RSM resulted in MAWC having insufficient funds to provide safe and
8 adequate service and earn a sufficient ROR; and would an RSM provide benefits to
9 MAWC's customers that are greater than the increase in risks that they are being asked to
10 assume. On the surface, these two concepts seem to be diametrically opposed to each other,
11 and in fact, the example that she raises in her testimony of the Company having credited
12 revenues back to customers if an RSM had been in place historically, and her claims that
13 this violates her first standard that the RSM would have been detrimental to the Company's
14 ROE is directly a benefit to customers, which speaks directly to her second standard of
15 providing benefits to MAWC customers. It should be noted that the standards that Ms.
16 Mantle proposes are her opinions; they are not standards set out in any provision in Section
17 386.266. It should also be noted that absent any accompanying significant changes in rate
18 design, which the Company has not proposed in this case, it is difficult if not impossible to
19 imagine a set of conditions that satisfy both of Ms. Mantle's proposed standards
20 simultaneously. In this proceeding, Ms. Mantle's suggested standards should be set aside
21 buy the Commission and the Commission should base a decision on the Company's
22 proposed RSM based on the provisions in Section 386.266.

23 **Q. How do you respond to the claim that the volatility of the Company's billed revenue**

over time has not been excessive and therefore does not justify an RSM?

A. The chart below provides an analysis and a depiction of what volumetric revenues would have been historically for the customer classes included in the RSM under the Company's proposed rates.



This analysis provides information on how historical changes in water volumes sold translate to potential annual changes in revenues under the Company's proposed rates. This analysis shows that there can certainly be significant swings and volatility in revenues from year to year depending on changes in weather conditions. An analysis of the historical data show that in any given year revenues can swing from the projected amount by as much as plus or minus \$50,000,000 (approximately) at the Company's proposed rates. A statistical analysis of the data shows that an 80% confidence upper and lower bound around projected annual revenues is plus or minus \$27M. This means that 80% of the time revenues are expected to be within plus or minus \$27M of forecast, but there is a

1 10% chance that revenues will be more than \$27M above the forecast, and a 10% chance
2 that revenues will be less than \$27M below the forecast. This revenue swing equates to
3 approximately 125 basis points in Return on Equity, and I am sure that all stakeholders
4 would agree that differences in 125 basis points in ROE are significant differences. The
5 RSM mitigates these swings in revenue and allows the Company to collect the revenue
6 authorized by the Board; neither profiting from over collections nor suffering shortfalls in
7 revenue needed to operate the system properly and efficiently and to fund necessary
8 construction, all without significantly affecting customers rates.

9 **Q. How do you respond to Ms. Mantle's proposal regarding treatment of the Company's**
10 **proposed UAT in the RSM?**

11 A. I do not agree that customers that are participating or would be expected to participate in
12 the Company's proposed UAT be exempted from the RSM, which is effectively what Ms.
13 Mantle's proposal in this regard accomplishes. To the extent that usage is declining for
14 residential customers, there is no evidence to suggest that the fundamental dynamics that
15 are causing usage to decline over time is more concentrated in higher income households
16 than lower income households. The move toward more efficient appliances, showerheads,
17 toilets, faucet aerators, etc. that use less water over time affects all customers, not just
18 higher income customers, and the replacement of this appliance stock is more commonly
19 due to replacement of equipment and appliances as these appliances fail than from
20 conscious decisions by higher income customers to replace functioning appliances with
21 more efficient appliances. This phenomenon affects all customers, not just higher income
22 customers.

23 It is true that higher income customers tend to use more water for outdoor seasonal

1 purposes and that water usage is dependent on weather which can fluctuate from year-to-
2 year and cause variations in revenue as compared to lower-income customers. There is no
3 evidence, however, to suggest that seasonal use of water is trending upward or downward
4 over time as there is with non-seasonal usage. The end result is that changes in revenue
5 over time come both from fluctuations in weather, which are more attributable to higher
6 income customers, and pervasive declines in consumption, which are attributable to all
7 residential customer groups.

8 **Q. Do you agree with Ms. Mantle that an RSM will introduce uncertainty to customers**
9 **and that customers will lose the predictability of how their actions affect their bills if**
10 **the Commission approves a RSM for MAWC?**

11 A. I do not. The magnitude of changes in bills associated with an individual customer's
12 decisions on how much water they should be using is expected to far outweigh the
13 magnitude of the bill impacts associated with any potential surcharges under the proposed
14 RSM. As I previously testified, a customer who takes specific actions to reduce their water
15 consumption will still enjoy the benefits of a lower bill even with the implementation of
16 the RSM because the impact of potential surcharges, if any, from the RSM will be dwarfed
17 by savings that a customer will see through conservation actions taken on their own.

18 **Q. Do you agree that efforts to reduce usage to reduce water bills will be futile and that**
19 **it is unjust for customers who cannot reduce their usage to have to pay more through**
20 **the RSM for revenues to MAWC that customers that can reduce their usage would**
21 **no longer pay?**

22 A. No. As I have testified, efforts to reduce water usage to save on water bills will not be
23 futile under the proposed RSM, as the amounts that customers could expect to save by

1 making even modest reductions to water usage are expected to far outweigh any changes
2 to rates that will result from surcharges or credits under the RSM. Additionally, history
3 shows that approximately 30% of the residential rate changes that have happened over time
4 for MAWC residential customers have happened because of changes in usage, and these
5 rate changes apply to all customers whether their individual usage levels change or not.
6 Rate changes under the proposed RSM are just a somewhat advanced (in time) change to
7 rates that would happen anyway in a future rate case regardless of changes in revenue
8 requirements, and those changes would apply to all customers regardless of individual
9 changes in usage, so it is not logical to single out customers who can reduce usage from
10 customers who can't or won't when considering the impacts of a proposed RSM when
11 these same changes would happen to all customers anyway in a future general rate case.

12 **Q. How do you respond to the assertion that an RSM would not guarantee that the**
13 **Company will properly operate, maintain, and invest in the water system or will**
14 **prudently manage its water system?**

15 A. I disagree. The proposed RSM has no impact at all on whether or not MAWC has an
16 incentive or disincentive to properly operate, maintain, and invest in its water and
17 wastewater systems. Managing the cost of providing service and achieving operational
18 efficiencies involves achieving the Commission's allowed Return on Equity in this
19 proceeding, and the RSM does not guarantee that the Company will achieve its allowed
20 ROE. The incentives to effectively invest in and manage water and wastewater systems is
21 just as compelling with a revenue stabilization mechanism such as the RSM as is without
22 one.

23 **Q. Do you agree with Ms. Mantle's position that production costs should not be included**

1 **or netted out as a part of the RSM?**

2 A. I do not. Specifically, the issue of production costs and whether these cost should be netted
3 out of the proposed RSM is addressed by Company Witness LaGrand.

4 **Q. How do you respond to Ms. Mantle's concerns regarding the homogeneity or lack**
5 **thereof in the Company's various customer classes?**

6 A. While it is certainly true that different customer classes in different geographic locations
7 have different usage characteristics and may impact the results of the RSM calculations in
8 different ways, both in terms of usage trends and volatility as well as potential gains or
9 losses of customers, this is not a reason to reject or modify the RSM. While different
10 classes may have different impacts on the proposed RSM, all customer classes that would
11 be subject to the RSM take service under the same, or nearly the same volumetric rate,
12 which is why the RSM treats these classes as homogeneous for the purpose of determining
13 surcharges or credits.

14 **Q. How do you respond to Ms. Mantle's concerns regarding the different treatment of**
15 **revenue shortfalls and revenue excesses under the Company's proposed RSM?**

16 A. Ms. Mantle's point regarding the different treatment of revenue shortfalls and excesses
17 under the Company's proposed RSM is a valid point. In the alternative, the Company is
18 willing to consider a volumetric credit mechanism similar to the mechanism proposed for
19 potential surcharges and as spelled out in the Company's proposed tariffs. In this
20 alternative, the surcharge/credit amount would be a negative charge instead of a positive
21 charge and would apply to customers in the same way that a potential surcharge would
22 apply.

d. Response to Ms. York

Q. What issues does MIEC/MECG Witness York raise regarding the Company's proposed RSM that you will address in your Rebuttal/Surrebuttal/Sur-Surrebuttal Testimony?

A. Ms. York raises the following issues regarding the Company's proposed RSM on behalf of MIEC and MECG that I will respond to in my Rebuttal/Surrebuttal/Sur-Surrebuttal Testimony:

- Ms. York states that the Company's proposed RSM engages in single issue ratemaking, as it only considers one component of operations and does not consider all relevant factors needed to establish its total revenue requirement.⁴⁶
- She states that the Company's proposal for an RSM has not been demonstrated to be necessary to provide the Company with an opportunity to fully recover its cost of service and earn a fair rate of return on infrastructure investments used to provide service.⁴⁷
- An RSM will also expose customers to bill adjustments outside of a rate case if revenues by class do not recover costs because of weather conditions or conservation by customers. Stated more specifically, an RSM would eliminate economic incentives for customers to undertake conservation-related investments on their own, to manage their water cost of service and to manage their household and/or business budgets.⁴⁸
- Ms. York states that customers' rates should only be changed to the extent there is

⁴⁶ York MIEC DT/RT, p. 34, lines 14-16.

⁴⁷ York MIEC DT/RT, p. 34, lines 16-19.

⁴⁸ York MIEC DT/RT, p. 34, lines 21-24.

1 proof that the Company's cost of service has changed.⁴⁹

- 2 • Ms. York states that the proposed RSM excludes increases in the number of
3 customers from the analysis, which concerns her as the addition of new customers
4 to the system may allow the utility to collect new revenues which could offset
5 increases in the Company's cost of providing service.⁵⁰

- 6 • Ms. York states that the RSM reduces the Company's incentive to effectively
7 manage its cost of providing service and shifts the risk of operational inefficiencies
8 from the Company to customers.⁵¹

9 **Q. How do you respond to the claim that the Company's proposed RSM engages in single**
10 **issue ratemaking, as it only considers one component of operations and does not**
11 **consider all relevant factors needed to establish its total revenue requirement?**

12 A. The RSM is authorized by statute⁵² and may be approved within the context of a base rate
13 proceeding, similar to other statutorily authorized mechanisms previously approved by this
14 Commission for electric and gas utilities. While the RSM is related only to revenues, the
15 argument that the RSM is prohibited as single issue ratemaking is not compelling and is
16 not a reason to reject the RSM.

17 **Q. How do you respond to Ms. York's claims that that the Company's proposal for an**
18 **RSM has not been demonstrated to be necessary to provide the Company with an**
19 **opportunity to fully recover its cost of service and earn a fair rate of return on**
20 **infrastructure investments used to provide service.**

⁴⁹ York MIEC DT/RT, p. 35, lines 3-4.

⁵⁰ York MIEC DT/RT, p. 35, lines 12-15.

⁵¹ York MIEC DT/RT, p. 36, lines 14-16.

⁵² Section 386.266.4, RSMo.

1 A. While I am not attorney, I am not aware of any provision in Section 386.266 that requires
2 a finding by the Commission that a mechanism for water utilities like the RSM proposed
3 by the Company in this case that the RSM is necessary to provide the Company with an
4 opportunity to fully recover its cost of service and earn a fair rate of return on infrastructure
5 investments used to provide service, but only that such a mechanism is reasonably designed
6 (emphasis added) to provide the utility with a sufficient opportunity to earn a fair return on
7 equity.⁵³ The standard is “reasonably designed”, not “necessary”. Ms. York’s standard in
8 this respect is a non-existent standard.

9 **Q. Is Ms. York correct in claiming that an RSM would eliminate economic incentives for**
10 **customers to undertake conservation-related investments on their own?**

11 A. No. As I stated previously, a customer who takes specific actions to reduce their water
12 consumption will still enjoy the benefits of a lower bill even with the implementation of
13 the RSM because the impact of potential surcharges, if any, from the RSM will be dwarfed
14 by savings that a customer will see through conservation actions taken on their own.

15 **Q. How do you respond to Ms. York’s claims that rates should only be changed to the**
16 **extent there is proof that the Company’s cost of service has changed?**

17 A. I disagree. Rates are a product of both the Company’s general cost of service and customer
18 accounts and volumes of water sold, and in fact, some of the changes in rates in the
19 Company’s water service over the years have resulted from changes in usage levels, not
20 changes in the cost of providing service. In fact, over time the Company estimates that
21 approximately 30% of the rate increases that have occurred for MAWC’s residential
22 customers are attributable to reductions in sales, not increases in cost. It is entirely

⁵³ Section 386.266.5(1), RSMo.

1 appropriate to make changes in rates in response to changes in usage in order to maintain
2 the Company's ability to recover its revenue requirement.

3 **Q. How do you respond to Ms. York's concerns that the proposed RSM excludes**
4 **increases in the number of customers from the analysis because the addition of new**
5 **customers to the system may allow the utility to collect new revenues which could**
6 **offset increases in the Company's cost of providing service?**

7 A. While it is true that adding new customers to the system will allow the utility to collect
8 new revenues, it is also likely that adding new customers to the system will add additional
9 costs specifically related to those additional costs, both in terms of acquisition costs and
10 new investments in the case of acquired customers, or new infrastructure investment in the
11 case of customer growth already in the Company's service territory. It is unlikely that
12 additional revenues, once the cost of serving those new customers is considered, would
13 also be available to reduce the cost of service for existing customers as well.

14 **Q. Do you have any comments on Ms. York's claims that the RSM reduces the**
15 **Company's incentive to effectively manage its cost of providing service and shifts the**
16 **risk of operational inefficiencies from the Company to customers?**

17 A. I disagree. Managing the cost of providing service and achieving operational efficiencies
18 involves achieving the Commission's allowed Return on Equity in this proceeding, and the
19 RSM does not guarantee that the Company will achieve its allowed ROE. As OPC witness
20 Mantle pointed out, in past years an RSM would have credited revenues back to customers,
21 which hardly is indicative of a reduction in the incentive to manage the business effectively
22 and to invest in the business prudently and is surely not indicative of a transfer of risk to
23 customers and away from the Company. Additionally, Ms. York's statement would

1 indicate that American Water affiliates operating with a revenue stabilization mechanism
2 are less well run than affiliates without a revenue stabilization mechanism, and there is no
3 reason to suspect, and no evidence presented in this case that would suggest this to be true.
4 The incentives to effectively invest in and manage water and wastewater systems is just as
5 compelling with a revenue stabilization mechanism such as the RSM as is without one.

6 **e. Response to Mr. Colton**

7 **Q. What issues do CCM Witness Colton raise regarding the Company's proposed RSM**
8 **that you will address in your Rebuttal/Surrebuttal/Sur-Surrebuttal Testimony?**

9 A. Mr. Colton raises the following issues regarding the Company's proposed RSM that I will
10 respond to in my Rebuttal/Surrebuttal/Sur-Surrebuttal Testimony:

- 11 • Mr. Colton believes that the proposed RSM will disproportionately adversely affect
12 low-income customers and should be disapproved.⁵⁴
- 13 • Mr. Colton states that the RSM proposed by MAWC examines only one aspect of
14 the ratemaking process, the determination of revenues, and that rates are not set
15 simply through an examination of the level of revenues, but rather through an
16 examination of the relationship between revenues and expenses.⁵⁵
- 17 • He states that if the RSM mechanism is not disapproved in its entirety, residential
18 customers taking service under the UAT discount should be exempted from the
19 RSM.⁵⁶
- 20 • He states that if the RSM mechanism is not disapproved in its entirety, and if

⁵⁴ Colton DT, p. 71, lines 1-3.

⁵⁵ Colton DT, p. 76, lines 14-17.

⁵⁶ Colton DT, p. 79, lines 19-20.

MAWC customers are not exempted from the RSM, the recovery of RSM revenues from UAT participants should be subject to the same UAT discounts that are applied to all other UAT volumetric bills.⁵⁷

Q. Do you agree with Mr. Colton that the proposed RSM will disproportionately adversely affect low-income customers and should be disapproved?

A. I do not, and I disagree for a couple of reasons. First, and as Ms. Mantle testified, customers would have seen revenue credits for a significant period of time if the RSM had been in place historically, so it is wrong to automatically assume that there will be an adverse impact to any other customer group due to the RSM. More importantly though, because lower-income customers tend to use less water than other customers and are therefore subject to lower levels of volumetric charges, lower income customers will actually be affected less by the proposed RSM than other customers in the event there are surcharges associated with the RSM.

Q. Do you agree with Mr. Colton that the RSM proposed by MAWC examines only one aspect of the ratemaking process, the determination of revenues, and that rates are not set simply through an examination of the level of revenues, but rather through an examination of the relationship between revenues and expenses?

A. As I stated previously, over time the Company estimates that approximately 30% of the rate increases that have occurred for MAWC's residential customers are attributable to reductions in sales, not increases in cost. It is entirely appropriate to make changes in rates in response to changes in usage in order to maintain the Company's ability to recover its revenue requirement. Mr. Colton's arguments are effectively that the RSM is single-issue

⁵⁷ Colton DT, p. 80, lines 3-6.

ratemaking, and I have addressed that issue in my Rebuttal/Surrebuttal/Sur-Surrebuttal Testimony.

Q. Do you agree with Mr. Colton that if the RSM mechanism is not disapproved in its entirety, residential customers taking service under the UAT discount should be exempted from the RSM?

A. I do not. As I stated previously in response to Ms. Mantle's testimony, I do not believe that customers participating in the UAT should be exempt from the RSM credits or surcharges.

Q. Do you agree with Mr. Colton that if MAWC customers are not exempted from the RSM, the recovery of RSM revenues from UAT participants should be subject to the same UAT discounts that are applied to all other UAT volumetric bills?

A. I do. This will naturally occur through the volumetric rate discounts afforded through the proposed UAT.

f. RSM Tariff Issues

Q. What issues does OPC Witness Mantle raise specifically regarding the Company's proposed RSM tariff in this case?

A. Ms. Mantle provides a list of issues she believes are problematic with the Company's proposed RSM tariffs that she provides in Table 1 and Table 2 of her rate design testimony. In addition to those tables, Ms. Mantle raises the following concerns:

- Ms. Mantle states that the terms for an annual true-up that I describe in my testimony are not clear in the proposed tariffs.⁵⁸

⁵⁸ Mantle Rate Design DT/RT, p. 6, lines 1-6.

- 1 • She states that the proposed tariffs are not clear on how short-term interest is treated
2 in the RSM calculations.⁵⁹
- 3 • She states that the proposed tariffs do not identify the specific information used to
4 calculate the specific rate charged if billed revenues were less than the revenue
5 requirement in the rate case.⁶⁰
- 6 • She states that the proposed tariffs do not describe the process outlined in my Direct
7 Testimony if actual billed revenues were greater than the Commission's approved
8 revenue requirement.⁶¹
- 9 • She states that the proposed tariffs do not show how the RSM would appear on
10 customers' bills.⁶²
- 11 • She states that the lack of detail that she claims exists in the Company's proposed
12 RSM tariff demonstrates that the Company has not thought through all of the details
13 of its proposed RSM, which provides yet another reason why the Commission
14 should not approve a RSM for MAWC.⁶³

15 **Q. Does the Company object to any of the tariff changes that Ms. Mantle proposes in**
16 **Table 1 or Table 2 of her Rate Design Testimony?**

17 A. The Company does not object to any of the proposed changes that Ms. Mantle suggest
18 should be made to its proposed RSM tariffs on tariff sheets RT 31.1 or RT 31.2. While I
19 do not agree that all of the changes are necessary, and that at least some of the changes
20 appear to be stylistic in nature as opposed to substantive changes, I do not object to any of

⁵⁹ Mantle Rate Design DT/RT, p. 7, lines 1-12.

⁶⁰ Mantle Rate Design DT/RT, p. 7, lines 13-18.

⁶¹ Mantle Rate Design DT/RT, p. 7, line 19 through p. 8 line 2.

⁶² Mantle Rate Design DT/RT, p. 8, lines 14-18.

⁶³ Mantle Rate Design DT/RT, p. 2, lines 13-16.

1 the changes that she proposes. Additionally, where Ms. Mantle identifies deficiencies or
2 ambiguous language but does not propose specific alternative language, the Company
3 agrees that if the Commission approves the Company's proposed RSM, those areas can be
4 addressed and clarified in the Company's proposed tariff, as further discussed below.

5 **Q. Does this include her recommendation at p. 2, lines 20-24, of her Rate Design Direct**
6 **Testimony where she states that the word "Availability" should be replaced with the**
7 **word "Applicability"?**

8 A. Yes, it does.

9 **Q. How does the Company propose to address the tariff changes that Ms. Mantle**
10 **proposes and the deficiencies that Ms. Mantle claims exist in the Company's proposed**
11 **RSM tariff?**

12 A. The Company proposes that upon approval of the proposed RSM by the Commission, the
13 Company would make changes to tariff sheets RT 31.1 and 31.2 to address the concerns
14 outlined by Ms. Mantle and provide those changes as part of the compliance tariff filing
15 process at the end of this proceeding. I would note that under the Company's proposal,
16 any surcharges or credits that would apply to customers would not be in effect until
17 calendar year 2026 so there will be ample time in calendar year 2025 to address any
18 concerns the parties may have with the Company's compliance tariffs for the RSM.

19 **Q. Do you agree with Ms. Mantle's assertion that the deficiencies that she claims exist**
20 **show that the Company has not sufficiently thought out its RSM proposal?**

21 A. I do not. There can always be differences of opinion regarding the level of detail and
22 specific language that should or should not be included in tariff sheets regarding a certain
23 component of rate design. This does not reflect on whether the underlying rate design

1 concept is necessary, important, or well considered. The Company has demonstrated the
2 need for the RSM and has shown that the RSM is in the public interest and has described
3 how the RSM would operate. Specific details to be included or not included in the tariff
4 that describe the RSM, and disagreements about what those details should be, does not
5 constitute a lack of consideration of the Company's proposal.

6 **g. Conclusion**

7 **Q. Please summarize why the Commission should approve the Company's proposed**
8 **RSM in this proceeding.**

9 A. As I stated in my Direct Testimony, adoption of an RSM is in the long-term best interest
10 of the Company and its customers. By allowing the Company to collect the revenues
11 authorized by the Commission, the RSM: 1) promotes water efficiency and conservation;
12 2) reduces the adverse impact of weather variability for both the utility and its customers;
13 and 3) reasonably provides that revenues for continued water efficiency investments are
14 available. The result is a better alignment of all stakeholder interests, and the Company
15 respectfully requests the Commission to authorize its proposed RSM.

16 **Q. Does this conclude your Rebuttal/Surrebuttal/Sur-Surrebuttal Testimony?**

17 A. Yes.