Exhibit No.:	
Issues:	Declining Usage, Total Revenues, Single Tariff Pricing, Cost of Service, Revenue Allocations to Customer Class, General Rate Design
Witness:	Max W. McClellan
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

MAX W. MCCLELLAN

ON BEHALF OF

MISSOURI-AMERICAN WATER COMPANY

AFFIDAVIT

I, Max McClellan, under penalty of perjury, and pursuant to Section 509.030, RSMo, state that I am a Principal Regulatory Analyst 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.

Max McClellan

Max W. McClellan

January 24, 2025
Dated

REBUTTAL/SURREBUTTAL/SUR-SURREBUTTAL TESTIMONY
MAX W. MCCLELLAN
MISSOURI AMERICAN WATER COMPANY
CASE NO.: WR-2024-0320

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REBUTTAL/SURREBUTTAL/SUR-SURREBUTTAL TESTIMONY

MAX. W. MCCLELLAN

I. INTRODUCTION

Q. Please state your name and business address.

A. My name is Max W. McClellan. My business address is 1 Water Street, Camden, NJ 08102.

Q. Are you the same Max W. McClellan 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 Missouri Industrial Energy Consumers ("MIEC"), the Midwest Energy Consumers Group ("MECG"), the Consumers Council of Missouri ("CCM"), and the Office of Public Council ("OPC") on the following issues:

- Residential Usage Normalization
- General Revenue Calculations
- Cost of Service
- Single Tariff Pricing
- Revenue Allocation to Customer Class
- General Rate Design

Specifically, I address the Direct/Rebuttal Testimony filings of Staff witnesses Jarrod J. Robertson, Ashley Sarver, Melanie Marek; MIEC Witness Jessica A. York; MECG Witness Jessica A. York; CCM Witness Caroline Palmer; and OPC Witness Dr. Geoff

Marke. I also address the Cross-Rebuttal/Surrebuttal Testimony of Staff Witness Robertson and the Cross-Rebuttal Testimony of OPC Witness Lena Mantle.

Q. Do you have any corrections to make to your Direct Testimony at this time?

A. Yes. In the present revenue calculations, there were several rates related to special contract customers that used the incorrect vintage for the twelve months ended December 2024 and the twelve months ended May 2025. These will be reflected in the Company's true-up.

II. RESIDENTIAL USAGE NORMALIZATION

Q. Please briefly describe the Company's approach to forecasting residential water consumption in this proceeding.

A. The Company is using a statistical linear regression analysis to model monthly residential usage over a historical 10-year period for both St. Louis County and non-St. Louis County customers and uses that statistical analysis to normalize the effects of weather and COVID-related usage anomalies to project residential use for the 12-month period ended December 31, 2023. This information is then used to project usage for the 12-month periods ended December 31, 2024 and May 31, 2025, incorporating the identified trends identified in the statistical analysis model. I described this statistical analysis in my Direct Testimony.[1]

Q. Does Staff also make a projection of residential customer usage since in their revenue calculations?

A. Yes. Staff Witness Robertson presents Staff's method of normalizing residential customer usage.

[1] McClellan DT, pp. 33-54.

Q. What is Mr. Robertson's approach to forecasting residential usage in his Direct Testimony?

A. Mr. Robertson proposes to use a five-year average of actual usage for the period January 2019 through December 2023 to calculate per residential customer, per day, and per district averages for residential usage.[2]

Q. What rationale does Mr. Robertson offer for his preferred methodology?

A. Mr. Robertson states that averaging the data over the most recent five-year period represents reliable data and provides evidence of recent trends in customer usage.[3] He states that this method is a reasonable approach that utilizes actual data to support an annualized level of usage and that averaging the data over the most recent five-year period produces reliable data and evidence of recent trends in customer usage such as installation of more efficient appliances, and changes in discretionary practices such as irrigation and lawn sprinkling which can change over time[4]. He also notes that usage may also be affected by external factors such as climate change[5]. He states that as these factors change over time, using the most recent five years of data provides for a reasonable determination of customers' usage habits, while avoiding using data too old to reflect the current situation[6].

Q. Does Mr. Robertson directly address the Company's statistical approach?

[2] Robertson DT/RT, p. 5, lines 11-12.
[3] Robertson DT/RT, p. 5, lines 13-14.
[4] Robertson DT/RT, p. 6, lines 1-5.
[5] Robertson DT/RT, p. 5, lines 16-17.
[6] Robertson DT/RT, p. 6, lines 5-7.

A. Yes. Mr. Robertson questions the validity of using a calendar month's weather data as an independent variable as a billing month does not necessarily run from the first day of the month to the last day of the month[7]. Mr. Robertson also disagrees with the length and/or timeframe of the COVID-19 independent variable included in MAWC's statistical linear regression analysis. He states that Staff believes the COVID-19 variable should have been removed as of June 2020 due to a June 11, 2020 announcement by Governor Mike Parson as well as a June 2020 publication by the United States Department of Labor.[8]

Q. Did the Company account for a billing month not necessarily reflecting the same time period of a calendar month with respect to weather data?

A. Yes, it did. The Company applies a lag to the weather data to account for a billing month not necessarily reflecting the same time period of a calendar month. Within the declining usage models, this lag results in the monthly weather data reflecting part of the current month as well as part of the prior month. Likewise, each month's residential billed sales reflect consumption within part of the current month as well as part of the prior month.

Q. Do you agree with Mr. Robertson that it would be more appropriate for the COVID-19 independent variable to span the months of April 2020 through June 2020?

A. No. This would only capture a period of increased government response of the Missouri government to the COVID-19 public health emergency such as stay-at-home orders. However, impacts on residential usage persisted beyond June 2020 due to customer

[7] Robertson DT/RT, pp. 7-8, lines 19-22.
[8] Robertson DT/RT, p. 9, lines 5-10.

behavioral changes as well as an increase in remote working and remote schooling. The federal public health emergency for COVID-19 did not expire until May 11, 2023.[9]

Q. Do you agree with Mr. Robertson's overall approach of using a five-year average to forecast residential customer usage; and if not, why not?

A. I do not. The use of a five-year average is appropriate in situations where there are positive and negative fluctuations in usage during the period but there is no significant upward or downward trend in the data. That is not the case for residential use per customer. Chart 1 and Chart 2 that I present in my Direct Testimony[10] demonstrate that there is a pervasive downward trend in normalized use per customer for both St. Louis County and non-St. Louis County customers during the entire ten-year historical period. Use of a five-year average over the last five years effectively ignores the effect of that pervasive downward trend and assumes that each of the last five years is representative of what usage is likely to be going forward. The data demonstrates that each of the last five years are not representative of what usage is likely to be going forward.

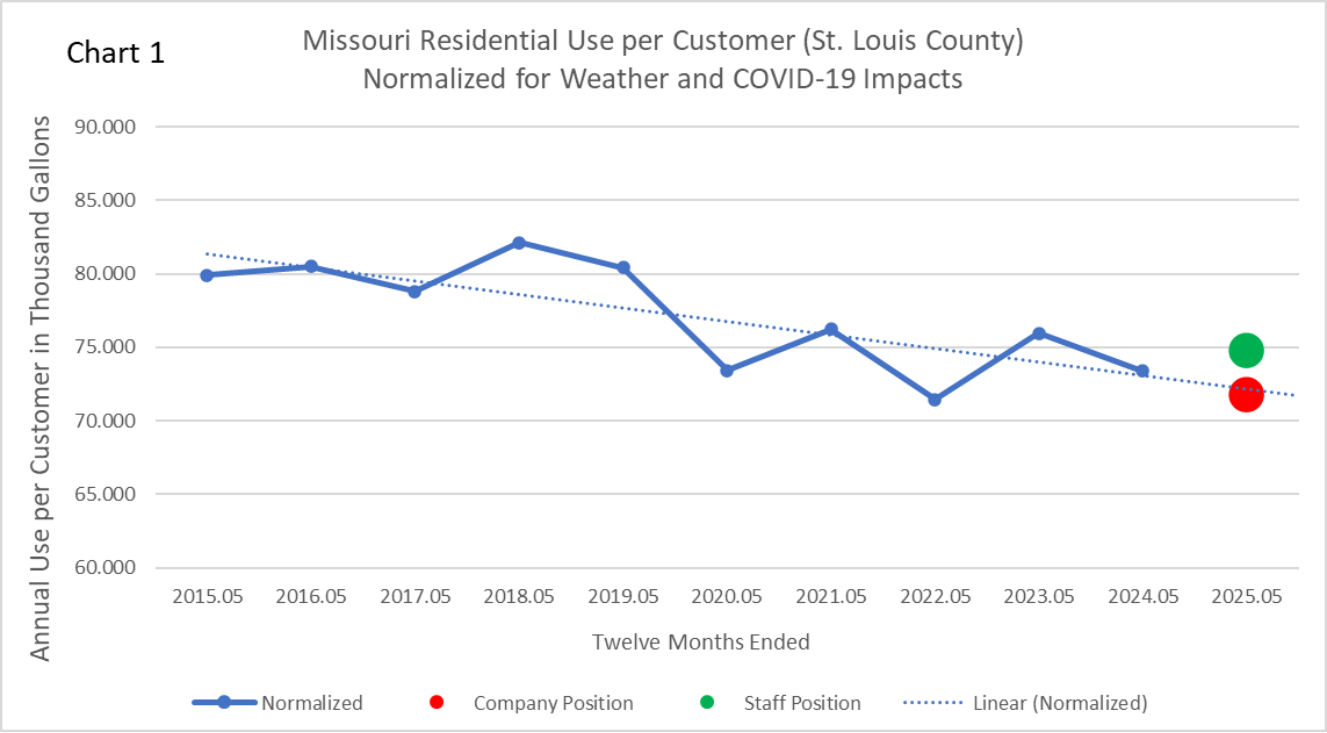
I would note that for the purpose of calculating billing determinants the Company has proposed using three-years of customer growth applied to residential, commercial, and OPA customer counts in order to recognize that there is significant organic growth in customer counts over time. In the same way, the Company's declining use calculation recognizes that there have been pervasive declines in customer usage over time for the residential class.

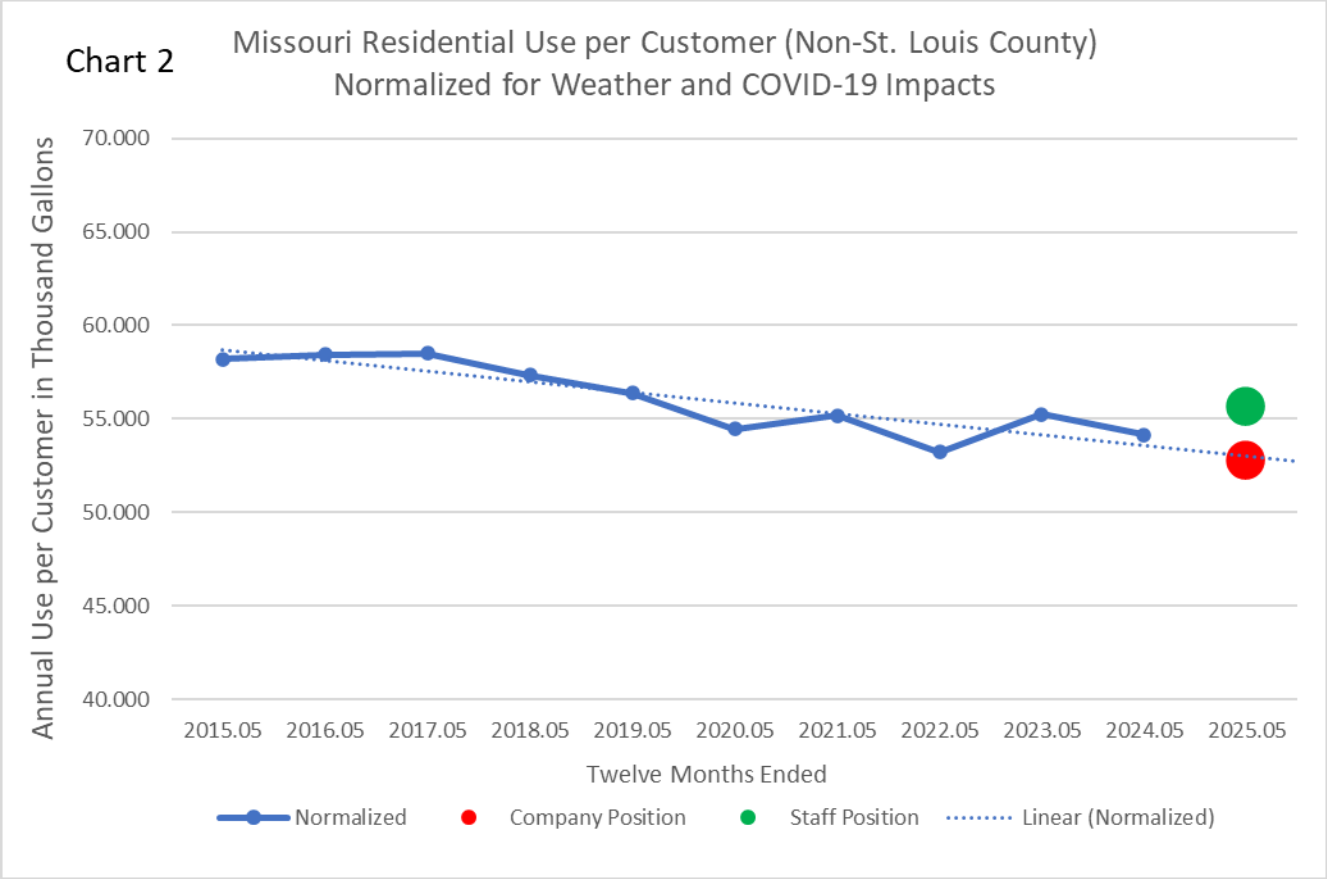
[9] U.S Department of Health and Human Services - https://www.hhs.gov/coronavirus/covid-19-public-health-emergency/index.html

[10] McClellan DT, pp. 51-52.

Q. Is there a difference in residential usage estimates between the Company and Staff due to the application of different methodologies?

A. Yes. Charts 1 and 2 below, for St. Louis County and non-St. Louis County residential usage respectively, show the historical normalized use per customer over the last 10 years. These charts also show the Company's projected usage for the 12-months ended May 31, 2025 based on its methodology, and the five-year average of residential use per customer based on Staff's methodology. As shown in these charts, the residential use per customer estimate for the 12-months period ended May 2025, as calculated by the Company's methodology, is much closer to the current level of residential normalized usage than Staff's methodology. The charts also show that there is a downward trend in residential usage per customer over the last ten years.





Q. What does this indicate to you?

A. Charts 1 and 2 show that the residential use per customer estimate for the 12-months period ended May 2025, as calculated by the Company's methodology, is much closer to the current level of residential normalized usage than Staff's methodology. The charts show that in each case. Staff's estimates of use per customer is higher than the five-year average of normalized use per customer over the time period that, according to Staff, represents the most important period of time to consider.

Q. Have you reviewed Mr. Robertson's Tables I[11] and II[12] in his Cross-Rebuttal/Surrebuttal Testimony?

A. Yes, I have.

Q. What does Mr. Robertson's Table I depict?

A. Table I shows a comparison between Staff's estimated total decline in usage and MAWC's estimated total decline in usage along with implied declines in revenue. As depicted by Mr. Robertson's Table I, both parties agree that there is an annual decline in usage over time for both St. Louis County and non-St. Louis County. For St. Louis County, Staff shows a greater annual decline in usage than MAWC. For non-St. Louis County, MAWC shows a greater annual decline in usage than Staff.

Q. Do you interpret Mr. Robertson's Table I to be generally supportive of a declining usage trend?

A. Yes, I do.

Q. What does Mr. Robertson's Table II depict?

A. Table B shows Staff's calculated usage per customer per day for the years 2019, 2020, 2021, 2022, and 2023. Staff's purpose of including these tables is to demonstrate that some years there is an increase in usage-per-customer year-over-year.[13]

Q. Do you agree that there is an increase in usage-per-customer year-over-year in some years?

A. Certainly. However, taking my Chart 1 and Chart 2 that I present in my Direct Testimony[14] as well as Chart 1 and 2 above into consideration, I think Staff's point that there are

[11] Robertson DT/RT, p. 11.
[12] Robertson DT/RT, p. 14.
[13] Robertson DT/RT p. 14, lines 3-17.
[14] McClellan DT, pp. 51-52.

increases in actual per day residential customer usage for some years lends to the idea that more years must be considered. There is a clear usage trend in place that exceeds five years The charts also demonstrate the need to normalize for known trends such as historical weather and the COVID-19 public health emergency's impact on residential customer usage. Unlike with Mr. Roberson's five-year average, if there is a year with more rain, a drought, or a public health emergency, those trends can be known and accounted for. The Company's regression analysis contains 120 observations, independent variables accounting for those trends, and is less susceptible to outlier years than Mr. Roberson's approach of using a five-year average.

Q. What is the revenue impact associated with the differences in residential usage estimates?

A. The revenue impact associated with the differences in residential usage is significant. For St. Louis County customers, the difference in estimates results in a usage per customer difference of approximately 3,000 gallons per year. Multiplying that by the number of St. Louis County residential customers and the current volumetric rate for St. Louis County Rate A yields a difference of approximately $7.5 million in present rate revenue between Staff's position and the Company's position, with Staff's methodology yielding a higher present rate revenue amount. The same is true for Non-St. Louis County customers. For Non-St. Louis County customers, the difference in estimates results in a usage per customer difference of approximately 2,900 gallons per year. Multiplying that by the number of Non-St. Louis County residential customers and the current volumetric rate for Non-St. Louis County Rate A yields a difference of approximately $3.0 million in present rate revenue between Staff's position and the Company's position, with Staff's methodology

yielding a higher present rate revenue amount. The total difference in present rate revenues between Staff's position and the Company's position is approximately $10.5 million.

Q. Do any other parties testify on the topic of Usage Normalization?

A. Yes. OPC Witness Mantle directly speaks to Usage Normalization in her Cross-Rebuttal Testimony.

Q. What is Ms. Mantle's position on Usage Normalization?

A. Ms. Mantle adopts Staff's methodology for determining normalized residential usage, but uses a three-year average instead of a five-year average. She also states that while she believes there is ambiguity in Mr. Robertson's direct/rebuttal testimony, his analysis shows that residential usage is actually increasing.[15]

Q. Did Mr. Robertson make corrections to his direct/rebuttal analysis?

A. Yes. Mr. Robertson filed cross-rebuttal/surrebuttal testimony with the purpose of addressing an error in his District 2 (non-St. Louis County) analysis.

Q. What is the nature of the error?

A. The error was that some average monthly customer counts were overstated. With inadvertently high customer counts, the usage per customer became understated in District 2 in some years.[16] This ultimately resulted in the analysis showing an increasing usage per customer trend. It also resulted in Mr. Robertson's five-year average approach showing a lower amount of residential customer usage per day.

Q. Does this error impact Ms. Mantle's analysis?

[15] Mantle C-RT, p. 2
[16] Robertson C-RT, pp. 1-2.

A. It does. Ms. Mantle's analysis uses the historical data from Mr. Robertson's direct/rebuttal workpaper "WR-2024-0320 Normalization-Declining Usage FILING", which has since been revised.

Q. Please address Ms. Mantle's statement that Mr. Robertson's residential usage analysis shows that residential usage is actually increasing.

A. Ms. Mantle's statement was based on Mr. Robertson's initial analysis, which contained the error discussed above. With the correction to his District 2 (non-St. Louis County) analysis, it is apparent that Mr. Robertson's analysis does *not* show that the residential usage is increasing.

Q. Did Ms. Mantle raise concerns about your position in her cross-rebuttal testimony filed in this case?

A. Yes.

A. Did she also raise concerns with your Direct Testimony in her direct/rebuttal testimony filed in this case?

A. No. Ms. Mantle did not file a response to my Direct Testimony in her direct/rebuttal testimony.

Q. Is Ms. Mantle's discussion of your Direct Testimony in response to testimony provided by any Intervenor, including Staff?

A. Some of Ms. Mantle's cross-rebuttal testimony responds to Staff witness Robertson, but a portion of that testimony responds to and focuses on my Direct Testimony. Even though she responds to my Direct Testimony, I am providing a response to Ms. Mantle's cross-rebuttal testimony throughout this testimony so the Commission has all relevant positions to analyze the issues.

Q. Does Ms. Mantle have any concerns about MAWC's residential usage normalization analysis?

A. Yes, several. Ms. Mantle claims that:

- It does not make sense that MAWC's average residential usage is declining.[17]
- The data does not support the assumption that customers in District 1 (St. Louis County) used more water during the COVID-19 public health emergency.[18]
- Staff's usage normalization model better reflects reality.[19]
- MAWC did not use weather variables that align with the billing month usage in its regression models.[20]

Q. Why does Ms. Mantle state that it does not make sense that MAWC's average residential usage is declining?

A. This is largely with respect to District 2 (non-St. Louis County). For District 1 (St. Louis County), she observes that "it is predictable that a model would estimate declining usage since half of the data points (2014 through 2018) do show a decline in usage"[21]. She also states that the model is likely to have estimated a greater decline if more historical years were added[22]. For District 2, Ms. Mantle utilizes the data from Mr. Robertson's analysis to show that annual average usage has definitely increased. As noted already, Mr. Robertson's data has since been revised.

[17] Mantle C-RT, pp. 3-4.
[18] Mantle C-RT, p. 10, lines 7-11.
[19] Mantle C-RT, p. 10, line 15.
[20] Mantle C-RT, p. 11.
[21] Mantle C-RT, p. 6, lines 7-8.
[22] Mantle C-RT, p. 6, lines 9-11.

Q. What would the figures from Ms. Mantle's Cross-Rebuttal Testimony look like after incorporating Mr. Robertson's corrections to historical usage per customer?

A. Please see Figure 1 below to see what Mantle's Figure 2's graph[23] reflects after including Mr. Robertson's corrections to his underlying data, with no other changes. Notably, the District 2 usage per customer (not normalized and with UPC data as prepared by Mr. Robertson) does show a decreasing trend after this modification.

Figure 1

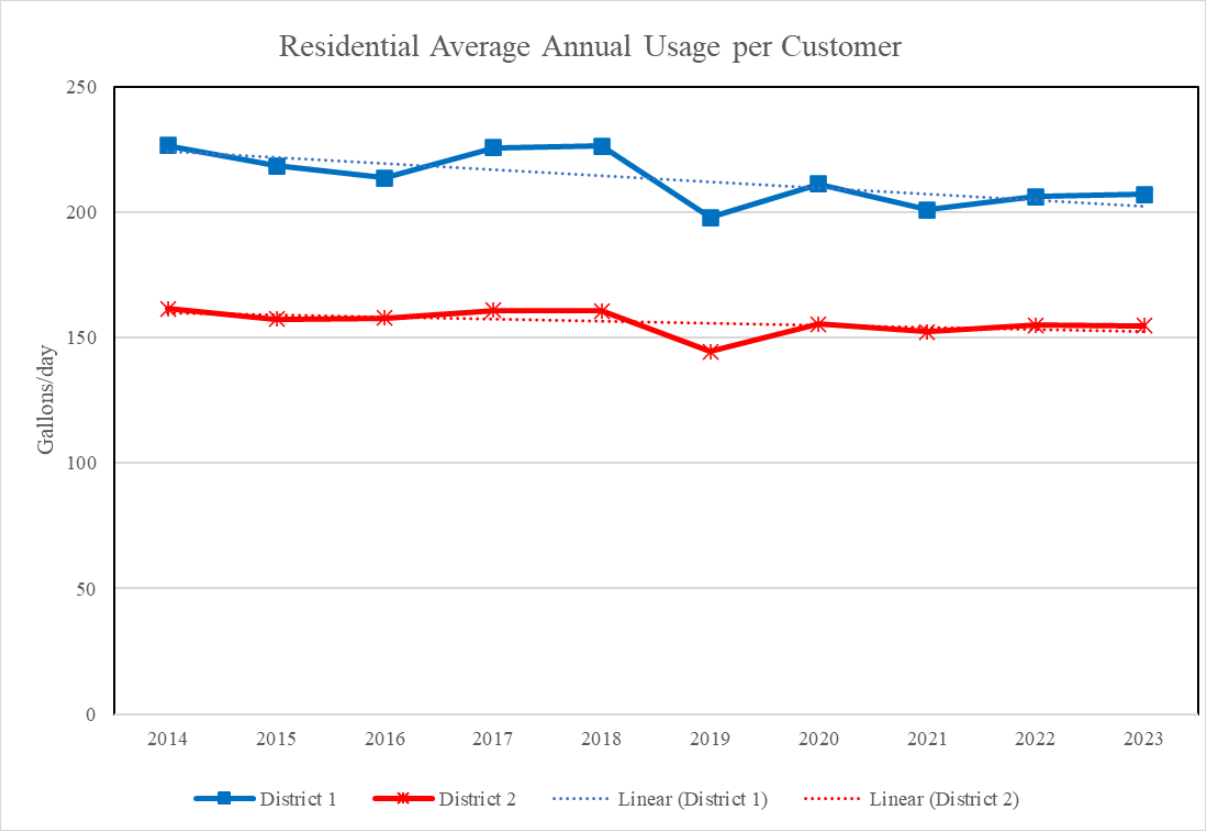
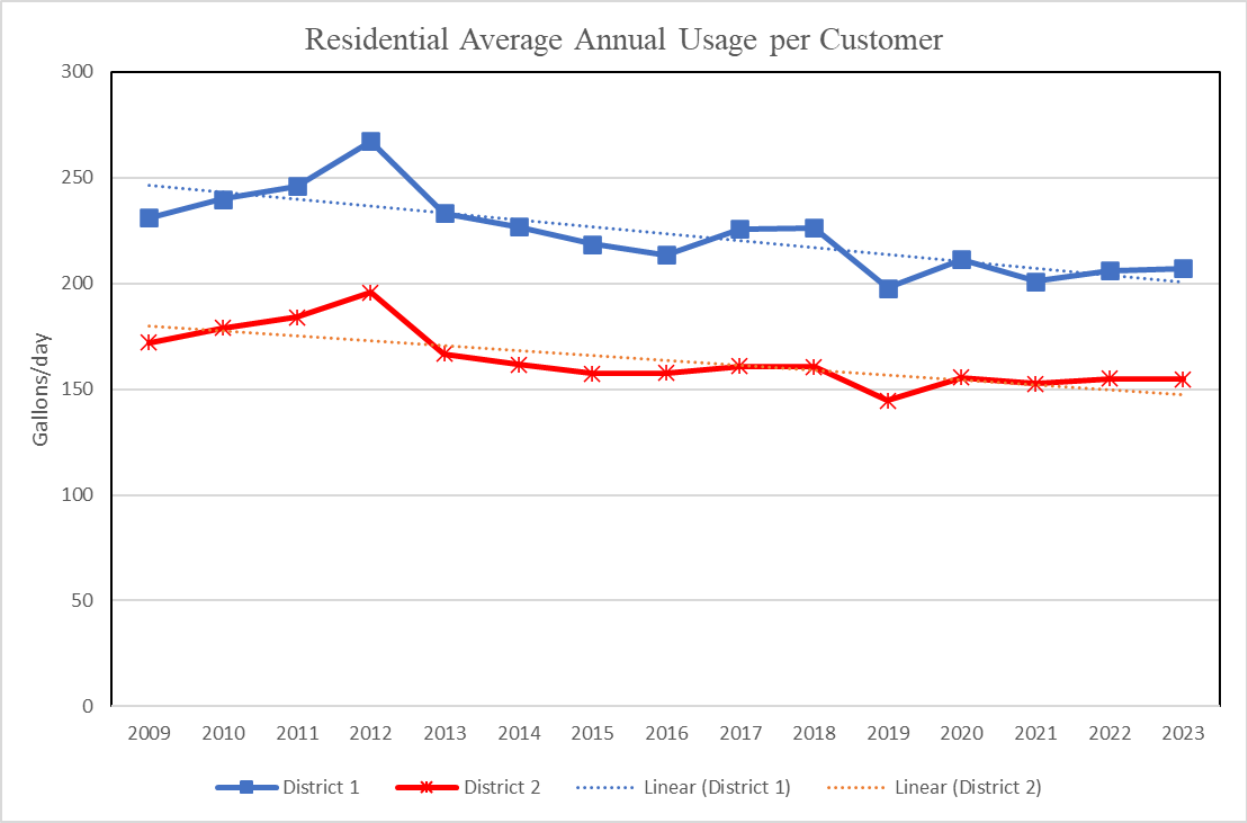


Figure 2 below, another revised graph from the Mantle Cross Rebuttal workpaper, demonstrates that this trend has persisted longer than the ten years above.

[23] Mantle C-RT, p. 5

Figure 2



Q. Do you agree that the data does not support the assumption that customers in District 1 (St. Louis County) used more water during the COVID-19 public health emergency?

A. In the case of MAWC's St. Louis County regression analysis, it would be fair to say that the data does not necessarily support the assumption that customers in District 1 used more water during the COVID-19 public health emergency, as the COVID independent variable shows a p-value that indicates the variable is not statistically significant. However, including any variable for forecasting purposes, even if it is statistically insignificant, will improve the R-Square. Due to our theoretical framework (i.e., that the COVID-19 public

health emergency created a situation where residential usage would increase), we should include it in the model to capture any potential effects that might be present due to the variable even if it is statistically insignificant.

Q. Do you agree that, if the impact of the COVID-19 public health emergency led to an increase in usage per customer in District 2 (non-St. Louis County), the impact has become a new normal and should not be removed from the usage to determine normalized revenue?

A. I do not. While I am not philosophically opposed to the idea that residential customer usage habits have permanently changed as the result of the COVID-19 public health emergency, it is not appropriate to conclude that a new normal as it exists today also existed during the public health emergency. The COVID-19 impact on residential usage per customer during that time period should be measured and accounted for.

Q. Do you agree that Staff's usage normalization model better reflects reality?

A. No. Staff's approach of using a five-year average usage-per-customer does not better reflect reality in this case. Their approach, an average of five data points, does not take into account known and measurable trends including historical weather, increased customer time at home due to the COVID-19 public health emergency, and an overall decline in usage trend that includes improvements in water efficiency over time. MAWC's approach evaluates the relationship between residential water usage per customer and all of these variables in order to forecast usage per customer under normal conditions.

Q. Do you agree that MAWC did not use weather variables that align with the billing month usage in its regression models?

A. No, I do not. Ms. Mantle observes that customer usage used in my analysis is by billing month, not by calendar month.[24] I agree with that. As discussed above in response to Mr. Robertson, the weather variable in use contains a combination of that month's historical weather data as well as the prior month's historical weather data in order to accommodate the difference between a calendar month and a billing month. In short, MAWC is not evaluating the relationship between a month's residential billed usage per customer and that calendar month's weather data. MAWC is evaluating the relationship between usage per customer on a billing month basis and an estimate of weather data during the billing month.

Q. What is your recommendation regarding the appropriate methodology for calculating residential billing determinants?

A. I recommend that the Commission adopt the Company's approach to calculating residential billing determinants, which includes adjustments for customer growth and adjustments for declining consumption, both of which have been demonstrated through the Company's analysis of usage and customer counts. It is important to recognize both positive and negative trends in usage, or components of usage, for the purpose of developing an accurate set of building determinants for rate making that reflects the current level of normalized usage. The Company's approach does just that. Conversely, using a simple multi-year average of residential use per customer ignores the pervasive downward trend in normalized residential usage that has persisted through the last ten years. Therefore, each of Staff's and OPC's approaches should be rejected.

[24] Mantle C-RT, p. 11, lines 14-16.

III. GENERAL REVENUE CALCULATIONS

Q. Has Staff addressed the general calculation of revenues in this proceeding?

A. Yes, I reviewed the Direct/Rebuttal Testimony of Staff Witness Sarver, which addresses the calculation of revenues in this proceeding.

Q. Other than the calculation of residential usage that you have already addressed in your Rebuttal/Surrebuttal/Sur-Surrebuttal Testimony, have you identified any significant differences in the calculation of revenues between the Company's proposed methodologies you outlined in your Direct Testimony and the methodologies described by Ms. Sarver?

A. I have not. The methodologies outlined by Ms. Sarver are generally consistent with the methodologies proposed by the Company.

Q. Are there any changes that you want to note at this time relating to the Company's proposed billing determinants?

A. Yes. The Company has one pending water acquisition and two pending divestitures (one a water system and the other a group of wastewater systems). The Company has proposed discrete adjustments to reflect the change to customer count/billing determinants that will result once these transactions close. Company witness Brian LaGrand provides additional information on these transactions in his Rebuttal/Surrebuttal/Sur-Surrebuttal Testimony.

IV. COST OF SERVICE

Q. Did the Company provide a cost of service study ("COSS") in this proceeding?

A. Yes. The Company provided three class cost of service analyses in this proceeding. These COSSs were attached to my direct testimony as Schedules MWM-1, MWM-2, and MWM-3.

Q. Did other parties comment on the Company's class cost of service analyses in this proceeding?

A. Yes. Staff Witness Marek, MIEC Witness York, MECG Witness York and CCM Witness Palmer comment on the Company's water class cost of service analyses.

Q. Please describe Staff's position regarding the Company's COSS.

A. Staff stated that it did not prepare a COSS for MAWC's water and sewer operations in this case because it appeared to them that there was not much difference in the allocations between MAWC's submitted COSS and the Staff prepared COSS from the last rate case.[25] It also observes that MAWC has not provided an updated COSS study based on the ordered historical test year's data.[26]

Q. Please describe MIEC's position regarding the Company's COSS?

A. MIEC Witness York states that the water COSS for St. Louis County is inaccurate and should not be relied upon to guide revenue apportionment. She states the following to be deficiencies with the water COSS for St. Louis County[27]:

- No Source of Supply or Water Treatment costs were allocated to the Public Fire class.
- Purchase power costs were allocated to customer classes based only on usage (Factor 1 in the cost of service analysis) and instead should allocate purchase power costs through a Base/Extra Allocator (Factor 3 in the cost of service analysis)[28].

[25] Marek DT/RT, p. 3, lines 8-10.
[26] Marek DT/RT, p. 4, lines 3-4.
[27] MIEC's York DT/RT, p. 2, lines 1-16.
[28] MIEC's York DT/RT, pp. 10-12.

- The Company's calculated Distribution Multiplier for the Rate J class of 0.11 is unsupported and should be 0.0117[29].
- The Company's system load factor on the maximum day, excluding fire, is based on an average over the three-year period from 2021 to 2023[30].
- The Company's system capacity factors are inconsistent with the customer class load characteristics suggested by the customer class maximum day and maximum hour peaking factors[31].
- 86.3% of depreciation expense and plant investment in the category of mains sized 10-inches to 16-inches be assigned to the Distribution functional cost category instead of Transmission.

Q. Please describe MECG's position regarding the Company's COSS?

A. MECG Witness York, who submitted separate testimony on behalf of MECG and MIEC, states that the water COSS for the Other MO (non-St. Louis County) water district is inaccurate and should not be relied upon to guide revenue apportionment. She states the following to be deficiencies with the water COSS for non-St. Louis County.[32]

- No Source of Supply or Water Treatment costs were allocated to the Public Fire class.
- Purchase power costs were allocated to customer classes based only on usage (Factor 1 in the cost of service analysis) and instead should allocate purchase power

[29] MIEC's York DT/RT, pp. 13-17.
[30] MIEC's York DT/RT, p. 18, lines 15-16.
[31] MIEC's York DT/RT, p. 18, lines 19-20.
[32] MECG's York DT/RT, pp. 2-3, lines 21-6.

costs through a Base/Extra Allocator (Factor 3 in the cost of service analysis).

- The Company's calculated Distribution Multiplier for the Rate J class of 0.11 should be 0.065.[33]
- The system load factor for the Other MO (non-St. Louis County) water district has increased significantly over time and is inconsistent with district-specific system load factors from WR-2015-0301.[34]
- The system load factor on the maximum day, excluding fire, is based on an average over the three-year period from 2021 to 2023.[35]
- The system capacity factors are inconsistent with the customer class load characteristics suggested by the customer class maximum day and maximum hour peaking factors.

Q. Will you address any of MIEC and MECG's shared concerns?

A. Yes. I will address both MIEC and MECG together when responding to concerns shared by both parties.

Q. Do you have any other comments to preface your responses to MIEC and MECG?

A. Yes. Ms. York appears to use the word Industrial when referring to Rate J throughout her testimony. I will be responding as if any references to Industrial customers are instead references to Rate J customers, which I believe was her intention. To be clear, Rate J is available to Commercial, Industrial, and OPA customers that meet certain requirements.

Q. How do you respond to Ms. York's concerns that the Company has not allocated any

[33] MECG's York DT/RT, pp. 13-14, lines 12-2.
[34] MECG's York DT/RT, pp. 17-19, lines 4-14
[35] MECG's York DT/RT, p. 17, lines 6-8.

costs associated with source of supply or water treatment to the Public Fire class?

A. It would be appropriate to allocate some portion of the fixed costs associated with Source of Supply costs to the Public Fire customer class, although many water cost of services analyses do not do so because Source of Supply costs are largely associated with providing volumes of water over the long-term and not for emergency situations. I do not disagree that costs associated with Source of Supply expenses can be allocated to the Public Fire class; however, I disagree that it is necessary to allocate Water Treatment costs to the Public Fire class.

Q. Why do you believe it is acceptable to not allocate Water Treatment costs to the Public Fire class?

A. Water Treatment costs are incurred primarily to provide potable water service, and potable water is not generally needed for firefighting purposes. As such, it would be appropriate to *not* allocate Water Treatment costs to this class, as this class is not causing the need for water to be potable.

Q. What is Ms. York's rationale for allocating Water Treatment costs to the Public Fire class?

A. Ms. York states that although non-potable water could be used for fire protection service, the Company has not provided evidence showing that non-potable water is being used to serve the fire service classes. Further, because the fire service classes receive an allocation of storage costs, which are also associated with potable water, it would be reasonable to assign a portion of Water Treatment costs to the Public Fire class. She also points out that

the Company's water COSS shows some Water Treatment costs allocated to the Private Fire class.[3637]

Q. Why are there Water Treatment costs allocated to the Private Fire class in the Company's water COSS?

A. The Private Fire class has demonstrated a relatively small, regular level of monthly billed usage that is billed on the Rate A volumetric rate. This usage is included in the class cost of service analyses and is being incorporated consistently with the other classes.

Q. Why does Ms. York advocate for a base-extra allocator for purchased power costs?

A. Ms. York's position is that the use of Factor 1 does not recognize how MAWC incurs purchased power expense. She uses the example that MAWC purchases power from Ameren Missouri, which charges commercial rates that vary based on seasonal and peak and off-peak periods; therefore, the use of an allocator based on annual usage is not appropriate and should be replaced with an allocator that includes components related to average daily and hourly usage and extra daily and hourly capacity.[3839]

Q. Please respond to Ms. York's concerns that the Company has allocated purchased power expense on base usage instead of base and extra-capacity demand.

A. First, it is important to recognize MAWC's customers' peak demands as well as how the Company manages its operational requirements in response to those demands. For instance, MAWC's customers' peak customer demand typically occurs during the summer in the early morning due to irrigation requirements and several other factors. MAWC addresses this peak by pumping twice as much at night to fill tanks during off-peak hours.

[36] MIEC's York DT/RT, p. 9, lines 11-19.
[37] MECG's York DT/RT, p. 9, lines 4-12.
[38] MIEC's York DT/RT, pp. 10-11.
[39] MECG's York DT/RT, pp. 11-12.

Therefore, there is limited, if any, correlation between increases in pumping requirements on the Company's part to meet customer peak demand and increases in purchased power costs. It should be generally noted that as the delivery system moves upstream from the end-user it is designed to meet a diversity of demands that is focused less on hourly peak demands of customers and fire service and more on total daily requirements. It should also be noted that not every commercial electric rate charged to MAWC facilities includes a demand charge.

Q. Please explain Ms. York's recommendation regarding the allocation of Transmission and Distribution Mains.

A. Ms. York recommends moving the majority of depreciation expense and plant investment cost associated with mains sized 10-16-inches from the Transmission function to the Distribution function.

Q. What would be the effect of Ms. York's adjustment?

A. Reclassifying the majority of mains sized 10-16-inches as distribution mains and assigning the associated plant and depreciation expense to the Distribution function would significantly shift the costs associated with those mains from Rate J to the smaller customers' classes which are served off of distribution mains.

Q. For COSS and ratemaking purposes, how has MAWC historically separated Transmission and Distribution mains?

A. For at least the last 17 years MAWC has considered mains 10 inches or larger to serve the Transmission function and mains smaller than 10 inches to serve the Distribution function.

Q. What basis has Ms. York used to support her recommendation?

A. Ms. York explains that the Company's cost of service study reflects footage for

Transmission and Distribution mains based on MAWC's 2023 annual report which classifies mains for St. Louis County under 16-inches as distribution mains.[40]

Q. Was the main footage from MAWC's 2023 annual report used in your COSS?

A. Yes. I did rely on the information in the annual report but believe that classifications in the annual report should be revisited to appropriately match how mains are classified for ratemaking and COSS purposes. The Company should continue to consider mains 10 inches or larger to serve the Transmission function and mains smaller than 10 inches to serve the Distribution function for the purpose of cost allocation through a cost of service study.

Q. How do you respond to MECG Witness York's concerns that the Company's system load factors for the Other MO (non-St. Louis County) water district have increased significantly over time?

A. Ms. York cites district-specific models from a 2015 rate case with a weighted average system load factor of 60.3%.[41] She also states that the 2022 rate case the Company's water COSS for the non-St. Louis County district had a maximum day system load factor of 71.2%.[42] In this rate case, the maximum day system load factor is 71.3%. It is not unreasonable for a load factor to move up or down as the district's system delivery patterns change over time.

Q. How do you respond to Ms. York's concerns that the Company's system load factors are based on an average over a three-year period instead of the highest ratio of maximum day to average day demand over a specified period?

[40] MIEC's York DT/RT, p.25, lines 3-5
[41] MECG's York DT/RT, p. 18.
[42] MECG's York DT/RT, p. 19, lines 10-12.

A. The purpose of the system load factors in this context is to allocate costs in a COSS. It is reasonable to allocate these costs based on what we expect maximum day and average day usage to be. The most likely relationship between maximum day and average day usage going forward is the three-year average calculation that the Company provided and continues to support.

Q. How do you respond to Ms. York's concerns that the Company's system load factors used to assign costs between the base and extra-capacity functions should be modified to be consistent with the customer class load characteristics indicated by class peaking factors?

A. I do not share her concerns. If the maximum daily values by class happen on different days of the year, which is likely, the total system maximum day value will be less than the sum of the individual class values, which will push the system load factor calculation closer to 1.00. Furthermore, system load factor is based on system delivery data. System delivery data includes non-revenue water, which is generally not seasonal and would also serve to push a system load factor calculation closer to 1.00.

Q. MIEC Witness York states that the Company has not shown how it developed a 11% distribution multiplier for St. Louis County's water COSS in this case. Is that correct?

A. Yes. The Rate J distribution multiplier in the Company's direct case showed a value 0.11, but should have reflected the calculated St. Louis County Rate J distribution multiplier of 0.4392. This distribution multiplier was calculated in the same manner as the distribution multipliers for St. Louis County's Rate B, Non-St. Louis County's Rate J, and Non-St. Louis County's Rate B, which were correctly implemented into their respective COSS.

Q. How would costs directionally change if the Company's St. Louis County Rate J

distribution multiplier reflected the calculated value of 0.4392 instead of the inadvertently input value of 0.11?

A. The costs of service for the Residential, Non-Residential, Rate B, Private Fire, and Public Fire classes would decrease. The cost of service for Rate J would increase.

Q. MECG Witness York states that the Company's calculation of the non-St. Louis County Rate J distribution multiplier omits certain customers from the calculation of the Rate J distribution multiplier without explanation.[43] Would you explain the omissions?

A. In MECG Witness York's Schedule JAY-3, she adds three customers to the calculation for the non-St. Louis County Rate J distribution multiplier. Two of those customers are on special contracts and not included in the calculation. However, one of those customers is being proposed to move to Rate J as part of this rate case. It would be appropriate to change the calculations to reflect that prospective change in classification. The third customer does appear to be an inadvertent omission and should have been included. After accounting for these inclusions, the new non-St. Louis County Rate J distribution multiplier is 0.0873.

Q. MIEC Witness York and MECG Witness York criticize the Company's method for developing its distribution multiplier stating that MAWC needs to also consider the length of distribution main serving Rate J customers. Do you agree?

A. No, I do not. The costs of mains in MAWC's COSS are allocated using the Base/Extra capacity allocator which is a usage-based allocator. The distribution multiplier is intended to reflect the amount of Rate J usage to which this usage-based allocator applies. MIEC and MECG are recommending using a percentage of system allocator. Mixing these two

[43] MECG's York DT/RT, pp. 13-14, lines 21-1.

types of allocators together is not reasonable and results in an "apples to oranges" comparison.

Q. Are there additional reasons why you disagree with MIEC Witness York and MECG Witness York's criticism of MAWC's distribution multipliers?

A. Determining the length of distribution main serving these customers does not adequately allocate the "cost" of providing service. There is a different cost associated with each size and type of main. There are different circumstances that drive the amount capitalized as part of each main installed. It is not feasible to conduct an analysis that would accurately capture the myriad of factors that determine this situation and to calculate an individual customer rate. For example, the customers included within the Company's sample accounted for 72% of the Rate J usage for the St. Louis County sale for resale and Rate J rate classes for the time period included in the calculation. Calculating the distribution multiplier based on these customers' utilization of the Company's distribution infrastructure is a reasonable approach to calculating the distribution multiplier.

Q. Has MIEC Witness York provided any analysis or made any recommendations on what she feels the appropriate Rate J distribution multiplier should be for the St. Louis County water district?

A. Yes. Ms. York used a figure for small distribution mains from a 2008 rate case and divided that by the Company's total length of distribution mains in its annual report to derive a 1.17% distribution multiplier.[44]

Q. Is the use of 17-year-old data appropriate for developing the distribution multiplier in this case?

[44] MIEC's York DT/RT, p. 16, lines 16-20.

A. No, it is not. As Ms. York points out there have been changes to the Rate J customer base since 2008.[45] It is entirely possible to think that while the number of Rate J customers overall has decreased since 2008 some customers may have been added increasing the amount of distribution footage serving these customers.

Q. Has MECG Witness York provided any analysis or made any recommendations on what she feels the appropriate Rate J distribution multiplier should be for the non-St. Louis County water district?

A. Yes. Ms. York arrived at a distribution multiplier of 0.065 by attempting to correct the Company's distribution multiplier calculations.[46] As her correction included customers that are correctly not included in the calculations, this suggestion should be dismissed and a distribution multiplier of 0.0873 should be used instead.

Q. Do any other parties have concerns regarding the Company's distribution multipliers?

A. Yes. CCM Witness Palmer states that the Company's COSS may have allocated a lower proportion of distribution level costs to Rates B and J due to both an error and a sampling assumption in the calculation of the distribution multiplier.[47]

Q. Do you agree with Ms. Palmer that the Company used an erroneous distribution multiplier for Rate J customers in the St. Louis County COSS?

A. Yes. This was discussed above. Ms. Palmer states that the results from the filed COSS would assign customers a 47.1 percent increase, whereas the resulted from a COSS with the originally intended distribution multiplier would assign residential customers a 45.8

[45] MIEC's York DT/RT, p. 17, lines 3-4.
[46] MECG's York DT/RT, p. 14, lines 1-2.
[47] Palmer DT/RT, p. 3, lines 6-9.

percent increase.[48] I agree with that assessment.

Q. What is Ms. Palmer's other concerns with the Rate B and Rate J distribution multipliers?

A. Ms. Palmer is concerned that the Company has not used a representative sample of customers with which to calculate its distribution multipliers as the Company analyzes the usage of its top 50 largest quantity users of water instead of the top 50 largest quantity users of water by rate by district.[49]

Q. What is Ms. Palmer's recommendation regarding the Company's distribution multipliers?

A. Ms. Palmer recommends developing distribution multipliers based on the usage characteristics of a larger and more verifiably representative number of Rate J and B customers, ideally all customers in each class.[50]

Q. Do you share Ms. Palmer's concern that the calculated distribution multipliers are not representative of the overall customer class populations?

A. As stated earlier, the customers included within the Company's sample accounted for 72% of the Rate J usage for the St. Louis County sale for resale and Rate J rate classes for the time period included in the calculation. The distribution multipliers are used to assess average hourly usage by class and not applied anywhere else. This seems like a more than reasonable amount of usage to account for. However, while I am not concerned, I think it would be reasonable to include more customers in the distribution multiplier calculations in future rate cases in order to account for more usage.

[48] Palmer DT/RT, p. 5, lines 17-18.
[49] Palmer DT/RT, pp. 5-6, lines 20-4.
[50] Palmer DT/RT, p. 7, lines 9-13.

Q. Are you providing an updated COSS with your Rebuttal/Surrebuttal/Sur-surrebuttal testimony?

A. No. While there are certain aspects of the Company's COSS that are the subject of debate in this case, including correction of the St. Louis County COSS's Rate J distribution multiplier to 0.4392, a full update of the study would produce limited benefits.

Q. Why is that?

A. The Company has provided separate COSSs for its operating districts. There is no question that the results of the COSSs have served to inform the Company's rate design but ultimately the Company's rate design in this case is weighted more towards the objective of achieving further consolidation of rates. In Case No WR-2017-0285, the Commission approved consolidation of rates, and we believe the Commission should support further consolidation in this case.

V. 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 Rate A and Rate B, the monthly meter charges are the same. The meter charges for Rate A and Rate B are lower than those of Rate J. 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	$0.77604	$0.83781	8.0%
Rate J	$0.20012	$0.29572	47.8%
Rate B	$0.27176	$0.27176	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 equalize monthly meter charges across all rate offerings. The Company's proposed volumetric rates for Rate A, B, and J are shown below:

Proposed Volumetric Rates	**St. Louis County**	**Other**	**Percentage Difference**
Rate A	$1.02544	$1.02544	0.0%
Rate J Block 1	$0.68363	$0.68363	0.0%
Rate J Block 2	$0.26583	$0.36049	35.6%
Rate B	$0.40440	$0.40440	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. The proposal also eliminates the difference in volumetric rates for Rate J between St. Louis County and non-St. Louis County customers for all volumes up to and including 450,000 gallons and cuts the percentage difference in Rate J volumetric rates for all volumes above 450,000 gallons by approximately one quarter.

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. 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. Does Staff provide testimony on the Company's proposed continued movement toward single tariff pricing?

A. Yes. Staff Witness Marek states that Staff does not agree with aligning commodity rates closer together. It also states that "Due to the numerous acquisitions of smaller water and sewer systems over the past few years, the Commission has consolidated most of MAWC's service areas. Further consolidation is not warranted at this time as the benefits of consolidation are already taken into account, and there still needs to be some semblance of keeping costs closer to the cost of providing service to the various service territories."[51]

[51] Marek DT/RT pp. 4-5, lines 18-2.

She also states that maintaining the existing rate districts is more reasonable, stating "Having multiple rate districts more closely aligns rates with the actual cost to provide service. Unlike other utilities, such as electricity and natural gas, wastewater and drinking water is not piped across state lines or subject to global market forces. Water and sewer service, and their respective costs, are inherently local and subject to cost variations among locations. An example would be the labor costs for an operator, the contract for which must include time to drive to remote locations, whether a qualified operator lives anywhere near the sewage treatment system or must travel a significant distance, what the expected wages are in a given location, etc. Staff's position is that the current level of consolidation already dilutes cost causation, and further consolidation of rates is not recommended."[52]

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.[53]

Q. What policy issues does MIEC raise regarding single tariff pricing?

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

[52] Marek DT/RT, p.5, lines 4-12.
[53] MIEC's York DT/RT, p. 28, lines 3-4.

other customers which would lead to St. Louis customers paying a significant level of fixed costs for services provided outside of the county.[54]

- 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[55] 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 customers of a lower-cost district to customers of a higher-cost district if these differences in costs are not recognized in rates.
- Unjust cross subsidies created by CTP could erode the efficiency of the water system.[56]
- Economic incentives for customers in high-cost districts to be more efficient in placing demands on the utility would be removed by CTP.[57]
- Management teams in high-cost districts would have disincentives for cost control.[58]
- The Company's incentive to perform due diligence before acquiring new systems would be reduced.[59]

[54] MIEC's York DT/RT, p. 28, line 9–19.
[55] MIEC's York DT/RT, p. 29, lines 14-19.
[56] MIEC's York DT/RT, p. 31, lines 8-9.
[57] MIEC's York DT/RT, p. 31, lines 9-15.
[58] MIEC's York DT/RT, p. 31, lines 20-23.
[59] MIEC's York DT/RT, p. 32, lines 4-10.

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.[60] How do you respond to this argument?

A. This argument is a very common argument against single tariff pricing. The argument comes back to should water customers in different communities completely pay for, and only pay for, 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. As Witness York acknowledges[61], there are currently 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 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

[60] MIEC's York DT/RT, p. 29, lines 14-16.
[61] MIEC's York DT/RT, p. 30, lines 1-6.

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.[62] 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 customers under a CPP pricing structure.[63]

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

[62] York DT/RT, p. 30, lines 16 – 20
[63] York DT/RT, p. 31, lines 4-7.

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 than 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 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 customers would be unfairly paying more fixed costs than smaller customers.[64]

[64] MIEC's York DT/RT, p. 28, lines 14-16.

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.[65] 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?[66]

A. No, I disagree. Over-investment 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 than overspending in systems under single tariff pricing.

[65] MIEC's York DT/RT, p. 31, lines 8-11.
[66] MIEC's York DT/RT, p. 31, lines 20-22.

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?[67]

A. I do not. Customers in communities with under invested-systems are already effectively 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. 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 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. MIEC and MECG raise many of the same concerns regarding the issues of Cost of Service, Revenue Allocation, and Rate Design. Does MECG take a position on the Company's proposed continued movement toward single tariff pricing?

A. MECG does not take a position on continued movement toward single tariff pricing, and so does not take a position on the consolidation of Rate J. This is unexpected as it would be reasonable to consider the consolidation of Rate J as favorable to parties representing the interests of primarily non-St. Louis County customers. The testimony of Ms. York

[67] MIEC's York DT/RT, p. 32, lines 4-5.

assumes the rejection of single tariff pricing without justification for that assumption.[68] MECG's proposed revenue spread differs from the Company's in that the MECG's total proposed increase is much larger than the Company's due to basing rates on the non-St. Louis County COSS. From Table JAY-1, the Company proposes a 39.8% total revenue increase.[69] From Table JAY-2, the MECG proposes a 47.2% total revenue increase.[70]

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

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

[68] MECG's York DT/RT, p. 3, lines 7-8.
[69] MECG's York DT/RT, p. 4.
[70] MECG's York DT/RT, p. 5.

pricing structure in this proceeding.

VI. 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 for all usage above 450,000 gallons are capped at 75% of the overall water revenue increase requested in this case. Increases to Non-St. Louis County Rate J customers for all usage above 450,000 gallons are capped at approximately 50% of the overall revenue increase.
- Increases to Private Fire rates are capped at 125% 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 and Rate J customers by increasing the volumetric rate for Rate A service as well as the volumetric rate for Rate J service for all usage at or below 450,000 gallons. The volumetric rates for Rate A for St. Louis County and non-St. Louis County are set equal to each other. The volumetric rates for Rate J for all usage at or below 450,000 gallons for St. Louis County and non-St. Louis County are set equal to each other at rates approximately 66.7% of the volumetric rate for Rate A.

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

A. Yes. MIEC directly addresses revenue allocation to customer class in Witness York's Direct/Rebuttal Testimony. MECG also directly addresses revenue allocation to customer class in Witness York's Direct/Rebuttal Testimony.

Q. Have you reviewed Ms. York's Direct/Rebuttal Testimony on behalf of MIEC on this issue?

A. I have.

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

A. It is important to note 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 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 and MIEC's position on single tariff pricing which results in a lower revenue increase to St. Louis County customers generally. The table below (values taken from MIEC's York DT-RT Tables JAY-1 and JAY-2[71]) shows a comparison of the revenue increase for St. Louis County customers proposed by the Company and MIEC:

[71] York DT-RT, pp. 4 and 6.

Customer Class	**Company**	**Percentage Increase**	**MIEC**	**Percentage Increase**	**Difference in Percentage Increase**
Residential	$102,303,614	46.7%	$111,741,658	51.0%	4.3%
Non-Residential	$28,497,902	41.6%	$12,635,641	18.4%	-23.2%
Rate J	$6,183,424	54.7%	$3,325,766	29.4%	-25.3%
Rate B	$2,406,715	48.8%	$1,034,324	21.0%	-27.8%
Rate P	$307,721	6.6%	$2,213,218	47.2%	40.6%
Private Fire	$2,644,649	52.9%	$2,661,667	53.3%	0.4%
Total	**$142,344,025**	**45.4%**	**$133,612,274**	**42.6%**	**-2.8%**

Q. Do you agree with MIEC Witness 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. The allocation of revenue increases to St. Louis County Rate J customers should be significantly higher than proposed by MIEC, especially when considering the gap in rates for Rate J customers between St. Louis County and non-St. Louis County customers.

Q. Have you reviewed Ms. York's Direct/Rebuttal Testimony on behalf of MECG on this issue?

A. I have.

Q. Please summarize MECG Witness York's position on revenue allocation to customer class?

A. It is important to note that MECG only takes a position on the allocation of revenues to customer class for non-St. Louis County customers. MECG does not take a position on revenue allocation to customer class for St. Louis County customers, MECG proposes a much smaller revenue increase to Rate J customers than the Company despite the fact that

they have proposed an overall revenue increase 7.4% larger than the Company. It appears that Rate A's residential customers largely shoulder the impact of this as the Residential percentage increase is 16.1% larger than the Company's proposal. The proposed lower percentage increases for the Non-Residential, Rate J, and Rate B classes are driven largely by the cost of service analysis MIEC proposes including their proposed changes to treatment of several costs as well as the rate J distribution multiplier. The Company objects to all of these changes except for a partial reduction to the rate J distribution multiplier. The table below (values taken from MECG Witness York's DT/RT Tables JAY-1 and JAY-2[72]) shows a comparison of the revenue increase for non-St. Louis County customers proposed by the Company and MECG:

Customer Class	**Company**	**Percentage Increase**	**MECG**	**Percentage Increase**	**Change in Percentage Increase**
Residential	$29,517,175	42.9%	$40,574,294	59.0%	16.1%
Non-Residential	$10,707,712	34.5%	$9,460,015	30.5%	-4.0%
Rate J	$3,193,245	30.2%	$1,942,711	18.4%	-11.8%
Rate B	$2,189,493	49.7%	$1,819,888	41.3%	-8.4%
Rate P	$191,616	17.6%	$643,736	59.0%	41.4%
Private Fire	$1,045,705	54.3%	$1,136,051	59.0%	4.7%
Total	**$46,844,946**	**39.8%**	**$55,576,695**	**47.2%**	**7.4%**

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

A. Staff indirectly addresses this issue. Ms. Marek states that Staff recommends an equal percent increase across all rates based on the Auditing Department's proposed revenue requirement increase.[73]

[72] MECG's York DT/RT, pp. 4 and 6.
[73] Marek DT/RT, p. 6, lines 21-22.

Q. Do you agree with Staff's revenue allocation to customer classes?

A. I do not. This approach does not move customer classes closer to their cost of service.

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.

VII. GENERAL RATE DESIGN

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

A. Staff Witness Marek presents Staff's proposed rate design in her Direct/Rebuttal Testimony. CCM Witness Palmer and OPC Witness Marke also address residential customer charges in their direct/rebuttal testimony. MIEC and MECG address the Company's proposed modifications to Rate J.

Q. Have you reviewed Ms. Marek'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 their overall rate design approach, monthly meter charges, and the proposed declining block rate for Rate J customers.

Q. What is Staff's proposed rate design?

A. Ms. Marek states that Staff recommends an equal percent increase across all rates based on the Auditing Department's proposed revenue requirement increase.[74]

Q. Do you agree with Staff's approach to rate design in which essentially all water rates are increased by their district's revenue requirement increase?

A. I do not agree. As stated earlier, Staff is proposing to move backward from the Commission authorized partially consolidated rate design in place to a completely separate pricing structures for St. Louis County and non-St. Louis County customers. It is also important to recognize that Rate J customers in particular are significantly below cost of service in the Company'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 overall increase requested in this case in order to 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. Do you agree with Staff's approach to rate design in which essentially all wastewater rates are increased by their district's revenue requirement increase?

A. I do not agree with Staff's approach. The Company is proposing significant changes to

[74] Marek DT/RT, p. 6, lines 21-22.

Tariff RT 1.1, Tariff RT 2.1, and Tariff RT 3.1.

Q. How does the Company's wastewater rate design differ from the one Staff is proposing?

A. Within its rate design, the Company proposes to charge all Tariff RT 1.1 (City of Arnold and Surrounding Area) residential customers a flat-bill, to consolidate all wastewater customers outside of the City of Arnold and Surrounding Area onto Tariff RT 2.1, and to a implement a new, lower service charge for Tariff RT 2.1 customers that use less than or equal to an average of 2,000 gallons of water during winter months.

Q. What is Staff's proposal for monthly meter charges?

A. Staff is proposing to increase all rates by their districts' respective revenue requirement increase. For St. Louis County customers, this would be an increase in the current customer charge for a 5/8" meter from $10.00 per month to $11.63. For non-St. Louis County water customers, this would be an increase in the current customer charge for a 5/8" meter from $10.00 per month to $11.35. Staff also proposes to maintain different rates for the 5/8" meter and ¾" meters.

Q. Did any other party directly address monthly meter charges?

A. Yes. CCM Witness Palmer and OPC Witness Marke address residential customer charges in their testimony.

Q. How did CCM Witness Palmer address monthly meter charges?

A. CCM Witness Palmer's concerns are that the proposed increases in the customer charges violate the rate design principles of gradualism and efficiency, that higher fixed charges will negatively impact low-usage, low-income customers, and that inclusion of lead service line replacements (LSLR) within the fixed monthly charge would exacerbate rate impacts

on low-usage customers as well as reduce transparency.[75]

Q. Do you agree that the proposed increases in the customer charges violate the rate design principles of gradualism?

A. No. Proposing increases in the customer charges in a manner that results in the reallocation of revenues from volumetric to fixed or vice versa is not necessarily a violation of the rate design principle of gradualism. The average customer bill would be impacted similarly regardless of whether costs are born by a fixed charge or volumetric rate.

Q. Do you agree that the proposed increases in the customer charges violate the rate design principle of efficiency?

A. No. I do not consider aligning rates with costs by either increasing or decreasing customer charges to be a violation of the rate design principle of efficiency. Having rates that are aligned with the cost of service, as the Company is proposing to do, sends customers appropriate price signals.

Q. Do you agree that higher fixed charges will negatively impact low-usage, low-income customers?

A. I agree that any revenue allocated to fixed charges in lieu of volumetric charges would directionally increase bills with lower usage. However, in this case, increasing fixed charges would move each water district closer to their cost of service in terms of collecting fixed costs and variable costs. With respect to low-income customers of any usage level, the Company has performed affordability analyses and is proposing a low-income discount tariff for economically vulnerable customers.

Q. What is Ms. Palmer's rationale for stating that the Company should not include the

[75] Palmer DT/RT, p.8, lines 6-12.

cost of LSLR in its fixed monthly charges?

A. Ms. Palmer states that the Commission has deemed the Company's investments to be extraordinary, public-policy-related costs that are not the result of normal utility policy or practice.[76] She also states that inclusion of LSLR costs in the services revenue requirement and collection of its costs through monthly customer charges contribute to burden and rate shock of higher fixed charges on low-usage, low-income customers.[77]

Q. Do you agree with Ms. Palmer that the costs of LSLR should be collected through volumetric rates?

A. No. I do not see any reason that this cost should be collected volumetrically as I am not aware of any correlation between how much water a customer consumes and the likelihood that that customer will have a lead service line that needs replacement. I am also not aware of any correlation between how much a customer consumes and the cost of replacing that customer's service line.

Q. How did OPC Witness Marke address monthly meter charges?

A. Dr. Marke states that he does not support the Company's proposed increase to the monthly customer charge.[78]

Q. What is Dr. Marke's argument that monthly meter charges should remain the same?

A. Dr. Marke states that raising fixed cost recovery diminishes the ability for customers to control their bills.[79] He also indicates that the Company's deployment of Advanced Metering Infrastructure ("AMI") as well as the Company's continued emphasis on

[76] Palmer DT/RT, p. 11, lines 1-3.
[77] Palmer DT/RT, p. 12, lines 6-8.
[78] Marke DT/RT, p. 23, line 6.
[79] Marke DT/RT, p. 24, lines 10-11.

paperless billing both support a lower monthly customer charge.[80]

Q. What is Dr. Marke's recommendation for monthly meter charges?

A. Dr. Marke recommends maintaining the current monthly meter charges, but is not opposed to the consolidation of 5/8 inch and ¾ inch meters.[81] He also makes a general recommendation to consider customer charges that include the costs of the first 2,500 gallons of monthly water usage in future rate cases.[82]

Q. Do you agree with Staff's recommendation to increase monthly meter charges by the overall revenue increase (resulting in differentiated meter charges for St. Louis County and non-St. Louis County), with Ms. Palmer's recommendation to increase the 5/8" monthly meter charges by $1.00, or with Dr. Marke's recommendation to maintain the current monthly meter charge amounts?

A. I do not agree with any of the three recommendations. With regards to Staff's recommendation, 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. With regards to all three recommendations, 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 $11.63, the highest charge proposed by the other parties.

Q. What is your recommendation for monthly meter charges?

A. The current level of fixed charges was set in Case No. WR-2022-0303, with the 5/8" meter charge for both St. Louis County and non-St. Louis County customers increasing from $9.00 to $10.00. The 5/8" meter charge should continue to be equal for St. Louis County

[80] Marke DT/RT, p. 24, lines 15-21.
[81] Marke DT/RT, p. 24, lines 23-25.
[82] Marke DT/RT, p. 25, lines 2-5.

and non-St. Louis County customers. The Commission should increase the 5/8" monthly meter charge for all customers to a rate not less than $15.00 per month, or a 50% increase, in order to move fixed charges closer to the fixed cost of service.[83] The Commission should also approve the Company's proposal to consolidate the 5/8" and ¾" monthly meter charges.

Q. What is Staff's position on the Company's proposed rate structure for Rate J customers?

A. Staff opposes the use of declining block rates for Rate J customers citing a lack of foreseeable benefit to customers as well as MAWC's Herbert Direct Testimony from WR-2011-0337 that proposed a one-block uniform volumetric rate for Rates A, B, and J.[84] Staff states that the rationale of the MAWC testimony's proposed one-block uniform volumetric rate is that the revenues would be nearly aligned with the indicated cost of service. Staff also states that the one-block uniform volumetric rate was a change from the existing block rate structure that had been in effect.[85]

Q. Do you agree with Staff's position on the use of declining block rates for Rate J customers?

A. I do not agree with Staff's position and maintain that the proposed rate design for Rate J should be accepted.

Q. Do you agree with Staff's assessment that the use of declining block rates for Rate J customers has a lack of foreseeable benefit to customers?

A. I do not agree that the proposed Rate J design's use of declining block rates has a lack of

[83] The Company originally proposed for the 5/8" monthly meter charge to increase from $10.00 to $21.23 per month. The $21.23 was based on a fully allocated fixed cost of service.
[84] Herbert DT, p. 13, lines 5-8.
[85] Marek DT/RT, p. 5, lines 15-20.

foreseeable benefit to customers. The proposed rate design for Rate J customers does have two blocks where there is one rate for all usage up to and including 450,000 gallons with another, lower rate for all usage above 450,000 gallons. However, it is important to note the consumption of not less than 450,000 gallons a month is a requirement that must be met to qualify for Rate J.

Several foreseeable benefits to customers are as follows:

- Avoidance of the risk of unintended customer discrimination between Rate J customers, customers that do not qualify for Rate J, and customers who sometimes qualify for Rate J.
- Reduction of the impacts of customers changing rate classes either voluntarily or non-voluntarily, including customer rate shock after no longer qualifying for Rate J.
- Elimination of a perverse incentive for customers to increase monthly consumption to qualify for Rate J, which has substantially lower volumetric rates than Rate A, resulting in greater efficiency of use.

Q. Do you agree with Staff's interpretation of the MAWC witness Herbert's Direct Testimony from Case No. WR-2011-0337?

A. No. I have reviewed the Herbert Direct Testimony from Case No. WR-2011-0337 and I do not interpret the sentence "the rates were set so that proposed revenues would be nearly aligned with the indicated cost of service" as being the rationale for a one-block uniform volumetric rate. I interpret this as meaning that the rates were set in a manner so that class revenues would approximate their respective class costs of service. This would have likely been the case regardless of rate structure.

Q. Do you agree with Staff's statement that the one-block uniform volumetric rate for

Rate J was a change from the existing declining block rate structure that had been in effect?

A. Yes. There were some Commercial, Industrial, and OPA declining block rates in place at the time of filing of Case No. WR-2011-0337. However, Rate J has never had a declining block rate structure. It would not be appropriate to say that a change in Rate J's rate design from a uniform rate structure to a two-block declining block rate structure would be reverting Rate J to a prior rate structure.

Q. Did any other party directly address MAWC's proposed rate design for Rate J?

A. Yes. MIEC and MECG directly addressed the proposed rate design for Rate J.

Q. What were MIEC and MECG's positions on the Company's proposal to modify the Rate J rate design?

A. MIEC and MECG each testified that they did not oppose the Company's proposed modification to the rate design for Rate J customers.[86][87]

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

A. Yes.

[86] MIEC's York DT/RT, p. 33, lines 11-12.
[87] MECG's York DT/RT, p. 23, lines 17-18.