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Issue(s):
Witness/Type of Exhibit:
Sponsoring Party:
Case No.:

Usage Normalization
Mantle/Supplemental
Public Counsel
WR-2024-0320

SUPPLEMENTAL TESTIMONY

OF

LENA M. MANTLE

Submitted on Behalf of the Office of the Public Counsel

MISSOURI-AMERICAN WATER COMPANY

FILE NO. WR-2024-0320

January 24, 2025

SUPPLEMENTAL TESTIMONY

OF

LENA M. MANTLE, P.E.

MISSOURI AMERICAN WATER COMPANY

CASE NO. WR-2024-0320

1 **Q. Please state your name and business address.**

2 A. My name is Lena M. Mantle. My business address is P.O. Box 2230, Jefferson
3 City, Missouri 65102.

4 **Q. Are you the same Lena M. Mantle who previously submitted Cross-Rebuttal**
5 **in this proceeding?**

6 A. Yes, I am.

7 **Q. What is the purpose of your Supplemental Testimony?**

8 A. The purpose of this Supplemental Testimony is to supplement my Cross-Rebuttal
9 testimony regarding my analysis of the annual average usage of the residential
10 customers of Missouri American Water District's ("MAWC") non-St. Louis district
11 ("District 2").

12 **Q. Why is it necessary to provide this testimony?**

13 A. I relied on Staff witness Jarrod J. Robertson's direct workpapers for my Cross-
14 Rebuttal testimony. In his Cross-Rebuttal testimony, Mr. Robertson testified that,
15 due to an error in how he calculated residential customer usages per day in his direct
16 testimony workpapers, he was revising Staff's normalized residential usage per
17 customer per day. My Cross-Rebuttal testimony centered on analysis of this data.
18 Therefore, it is necessary to provide the impact of his correction on my analysis.

19 **Q. What changes in the data were made by Mr. Robertson for his Cross-Rebuttal**
20 **position?**

21 A. According to Mr. Robertson, the customer numbers for certain systems added
22 during the last fifteen years had less than a year of data the first year after being

1 acquired by MAWC.¹ Instead of annualizing these customer numbers, he
2 calculated a twelve-month average that included months with zero customers
3 resulting in an inappropriately low estimate of the annual usage per customer. He
4 presented the results of his analysis on this “corrected” data in his cross-rebuttal
5 testimony. This only affected the use per residential customer calculation of
6 District 2.

7 **Q. Did you review the annualization of customers in his Cross-Rebuttal**
8 **workpaper?**

9 A. Yes. There was one system, Ozark Mountain, that Mr. Robertson missed in his
10 customer annualization. I annualized the customer numbers in this system.

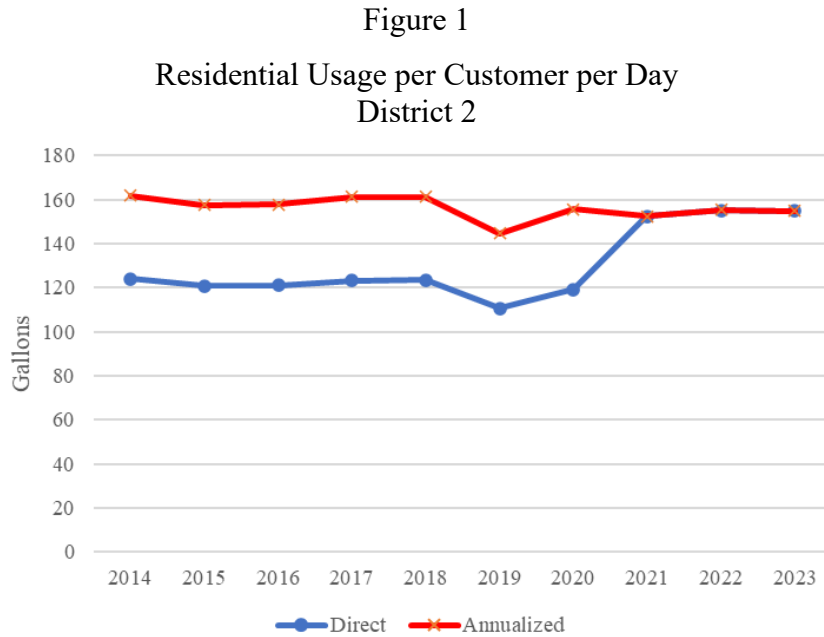
11 **Q. Did you review annualization of the monthly usage in Mr. Robertson’s Cross-**
12 **Rebuttal workpaper?**

13 A. Yes. System usage for partial years was not annualized. To annualize these years,
14 I averaged the monthly usage that was available in each partial year and multiplied
15 that monthly average by twelve to develop an estimate for the year.² A comparison
16 of the annual average usage per customer per day from Mr. Robertson’s direct
17 workpaper and the usage with these annualizations is shown below as Figure 1.

¹ Pages 1 – 2.

² My workpaper showing these calculations is attached to this testimony as Schedule LMM-CR-2S.

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As shown in this graph, the annualization dramatically increased the average usage in the ten years in 2014 through 2020. It had very little impact on the average usage in the data for 2021 through 2023. These were the three years that I used to calculate normalized usage and revenue.

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Q. Given the changes in the data, are there any changes that need to be made to your recommendations in your Cross-Rebuttal testimony?

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A. In part yes and in part no. My recommendation to use an average of the annual usage per day per customer for the years of 2021 through 2023 as the normal usage remains the same. However, since the annualization did change the annual average usage slightly in the last three years, my recommended revenues for usage have changed. Table 1 shows my recommendation in my Cross-Rebuttal testimony, my recommendations with the corrected data and the difference the annualization made in my recommendation.

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Table 1
 Impact on Normalized Revenue

	Cross-Rebuttal	Supplemental	Change
Avg Usage	154.1	154.2	0.1
Annual Usage/Cust	56,263	56286.0	23.1
# of Customers	121,048	121,048	0.0
Rate per 1000 gal	8.3781	8.3781	0.0
Revenue	\$ 57,059,164	\$ 57,082,595	\$ 23,430

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4 **Q. Why is there so little change in the average usage and normalized revenues?**

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A. There was very little annualization done in data for 2021 through 2023 so there was little change in the normalized average usage and revenues.

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Q. Would this annualization change Staff’s five-year average usage also?

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A. Yes. Table 2 contains the change to Staff’s normalized average usage and revenue for that usage.

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Table 1
 Impact on Staff’s Normalized Revenue
 Five-Year Average

	Direct	Cross-Rebuttal	Annualized	Change
Avg Usage	138.5	152.4	152.5	0.1
Annual Usage/Cust	50,573	55,674	55,713	39
# of Customers	121,048	121,048	121,048	0.0
Rate per 1000 gal	8.3781	8.3781	8.3781	0.0
Revenue	\$51,288,995	\$56,461,558	\$56,501,806	\$40,248

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Staff’s normalized revenues jumped significantly when Mr. Robertson annualized customer numbers because there was significant annualization done to the 2019 customer numbers.

1 **Q. What is the significance of the closeness of your three-year normalized revenue**
2 **to Staff’s five-year normalized revenue using the annualized data?**

3 A. The fact that the five-year average is nearly the same as the three-year average
4 signifies that the average usage has been flat over the five-year period.

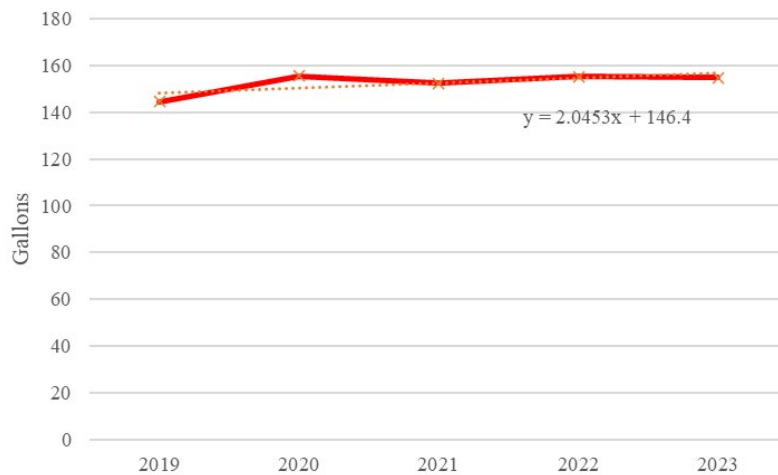
5 **Q. How does the annualization affect your analysis of the trend in usage for**
6 **District 2?**

7 A. The data no longer shows a pronounced jump in average usage in 2021. However,
8 the annualized data still shows that, over the past five years, average usage has held
9 steady with a slight increase.

10 **Q. Then is it still your testimony that the usage in this district is not declining?**

11 A. Yes. While a trend line through the usage data does show that over the ten years
12 of 2014 through 2023 there was a slight decline in usage, a similar trend line
13 through the last 5 years shows that the usage is increasing. Figure 2 below shows
14 the annualized average usage data from 2019 through 2023 and the trendline
15 through that data.

16 Figure 2
17 Residential Usage per Customer per Day
18 District 2



1 Schedule LMM-CR-1S provides graphs of five, ten, and fifteen years of the
2 annualized data along with the trendline equation for the data on each graph.

3 **Q. Do these changes to the data change your comparison between Staff witness**
4 **Mr. Robertson and MAWC witness Mr. McClellan?**

5 A. No, they do not. Given the recent flattening of average usage and a slight increase
6 over the last five years, using a model that estimates declining usage over the five
7 years neither makes logical sense nor represents recent reality – two questions Mr.
8 McClellan said needed to be answered regarding any regression model.

9 **Q. Does this new data change your position regarding the influence of the**
10 **COVID-19 parameter in Mr. McClellan’s regression model?**

11 A. No. The annualizations do not reveal an impact on usage for the COVID-19
12 pandemic on this annual data. Therefore, the inclusion of a COVID-19 parameter
13 would skew a model.

14 **Q. Does this change any portion of your cross-rebuttal testimony regarding the**
15 **mapping of weather to usage in regression modeling?³**

16 A. No. The problems of matching usage with the correct weather still exists for Mr.
17 McClellan’s regression models.

18 **Q. Does this conclude your supplemental testimony?**

19 A. Yes, it does.

³ Pages 11 through 15.

**BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI**

In the Matter of Missouri-American Water)
Company's Request for Authority to Implement)
a General Rate Increase for Water and Sewer) Case No. WR-2024-0320
Service Provided in Missouri Service Areas)

AFFIDAVIT OF LENA M. MANTLE

STATE OF MISSOURI)
) ss
COUNTY OF COLE)

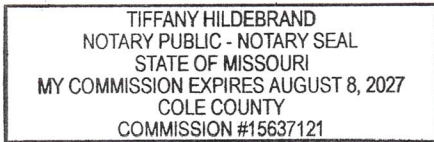
Lena M. Mantle, of lawful age and being first duly sworn, deposes and states:

1. My name is Lena M. Mantle. I am a Senior Analyst for the Office of the Public Counsel.
2. Attached hereto and made a part hereof for all purposes is my supplemental testimony.
3. I hereby swear and affirm that my statements contained in the attached testimony are true and correct to the best of my knowledge and belief.

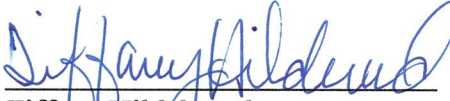


Lena M. Mantle
Senior Analyst

Subscribed and sworn to me this 23rd day of January 2025.



My Commission expires August 8, 2027.



Tiffany Hildebrand
Notary Public