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Public Counsel  
WR-2015-0301

**SURREBUTTAL TESTIMONY**

**OF**

**LENA M. MANTLE**

Submitted on Behalf of the Office of the Public Counsel

**MISSOURI-AMERICAN WATER COMPANY**

**CASE NO. WR-2015-0301**

March 4, 2016



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**OF**

**LENA M. MANTLE**

**MISSOURI AMERICAN WATER COMPANY**

**CASE NO. WR-2015-0301**

1 **I. INTRODUCTION AND PURPOSE**

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

3 A. My name is Lena M. Mantle and my business address is P.O. Box 2230, Jefferson  
4 City, Missouri 65102. I am a Senior Analyst for the Office of the Public Counsel  
5 (“OPC”).

6 **Q. Are you the same Lena M. Mantle that filed direct and rebuttal testimony in  
7 this case?**

8 A. Yes, I am.

9 **Q. What is the purpose of this surrebuttal testimony?**

10 A. The purpose of this surrebuttal testimony is to respond to the Commission Staff’s  
11 (“Staff’s”) and Missouri Industrial Energy Consumer’s (“MIEC’s”) rebuttal  
12 testimony regarding Missouri American Water Company’s (“MAWC’s”) request for  
13 an Environmental Cost Adjustment Mechanism (“ECAM”). I am also responding to  
14 MAWC witness Gregory Roach’s rebuttal testimony regarding normalization  
15 adjustments to water revenues.

16

1 **II. RESPONSE TO STAFF AND MIEC ECAM TESTIMONY**

2 **Q. What Staff witnesses provided testimony regarding MAWC’s request for an**  
3 **ECAM?**

4 A. Staff witnesses Mark L. Oligschlaeger and Curtis B. Gateley provided rebuttal  
5 testimony regarding MAWC’s request for an ECAM.

6 **Q. What is Staff’s position regarding the Commission granting MAWC an**  
7 **ECAM?**

8 A. Staff does not have a position. It neither supports nor opposes the approval of an  
9 ECAM for MAWC. Staff’s testimony does bring up several points of clarification  
10 regarding ECAMs and the potential problems in applying MAWC’s proposed  
11 ECAM.

12 **Q. Did Staff include testimony regarding an ECAM in its direct case?**

13 A. No, it did not. This is consistent with Staff’s non-position regarding the  
14 Commission approving an ECAM for MAWC in its rebuttal testimony. If Staff  
15 thought an ECAM was necessary for MAWC to earn its return on equity (“ROE”), it  
16 would have included such evidence in its direct case testimony supporting MAWC’s  
17 request for an ECAM.

18 **Q. Does OPC agree with Staff’s description of an ECAM it included in its rebuttal**  
19 **testimony?**

20 A. While Staff makes valid statements about what constitutes an ECAM, OPC is  
21 concerned with the definition of an ECAM provided by Staff witness Oligschlaeger.  
22 On page 3 of his rebuttal testimony, Mr. Oligschlaeger states “(a)n ECAM is a

1 single-issue ratemaking mechanism authorized by the Missouri General Assembly  
2 allowing Missouri utilities companies to obtain recovery of qualifying costs incurred  
3 in order to comply with new environmental laws and regulations outside of general  
4 rate proceedings under certain circumstances.” This definition leaves out an  
5 important consumer protection provided by the Legislature: The statute does not  
6 automatically “allow” utilities to have an ECAM. It gives the Commission the  
7 power to approve, modify, or reject an ECAM.<sup>1</sup> An ECAM should not be granted  
8 by the Commission just because MAWC has asked for it as an option to consider.

9 An ECAM is a single-issue rate-making mechanism allowing rates charged  
10 to customers to change between rate cases without the need for the Commission to  
11 consider all costs incurred and revenues received by the utility. If the Commission  
12 grants an ECAM to a utility, it is shifting risk of increased environmental costs from  
13 MAWC to customers. The Missouri General Assembly realized this shift in risk and  
14 required an ECAM not be granted without substantial consideration. The statute  
15 authorizes the Commission to approve, modify, or reject an ECAM. The statute  
16 further allows the Commission to promulgate rules to govern the structure, content,  
17 and operation of ECAMs and the procedures for the submission, frequency,  
18 examination, hearing, and approval of an ECAM.<sup>2</sup> The Commission rule for an  
19 ECAM requires the Commission to consider the magnitude of costs to be included  
20 in an ECAM, the ability of the utility to manage ECAM costs, and the incentive

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<sup>1</sup> Section 386.266.4 RSMo.

<sup>2</sup> Section 386.266.9 RSMo.

1 provided to the utility as a result of the inclusion of a cost in an ECAM.<sup>3</sup> Both the  
2 statute and the Commission's ECAM rule recognize an ECAM should not be  
3 approved without careful consideration of the impact of the ECAM on both the  
4 utility and the customers.

5 **Q. What is OPC's recommendation regarding MAWC's proposed ECAM?**

6 A. The Commission should not approve an ECAM for MAWC because MAWC has  
7 not shown it expects to incur costs due to environmental laws, statutes, or  
8 regulations. In addition, MAWC did not meet the Commission's ECAM rule  
9 requirements regarding the application for approval of an ECAM. Lastly, the ECAM  
10 proposed by MAWC lacks the details necessary for implementation. More  
11 information regarding OPC's recommendation can be found in my rebuttal  
12 testimony. In addition, OPC witness Charles Hyneman provided rebuttal and  
13 surrebuttal testimony on the harmful impact of single-issue rate mechanisms, such as  
14 the ECAM, on ratepayers.

15 **Q. If MAWC does not expect to incur environmental costs, what is the concern  
16 with the Commission granting MAWC an ECAM?**

17 A. The ECAM proposed by MAWC is very broad and the time and opportunity for  
18 Staff and other parties for oversight is limited, thus increasing the likelihood of  
19 misuse of an ECAM. While I am not alleging abuse of the ECAM will take place if

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<sup>3</sup> 4 CSR 240-50.050(2)(C)

1 the Commission grants MWAC an ECAM, it is my belief the circumstances  
2 presented here increase the likelihood.

3 **Q. Does Staff’s rebuttal testimony add to OPC’s concern about the Commission**  
4 **granting MAWC an ECAM?**

5 A. Yes, it does. On page 4 of his rebuttal testimony, Mr. Oligschlaeger states the  
6 Commission has discretion as to whether or not to allow recovery of a cost in an  
7 ECAM. OPC agrees with this statement. However, neither MAWC nor Staff has  
8 proposed the details as to how this would be accomplished. Mr. Oligschlaeger  
9 seems to suggest this decision would be part of MAWC’s filing to change its ECAM  
10 rate, although the rule does not require information regarding cost recovery in the  
11 ECAM rate be included in the filing to change an ECAM rate.<sup>4</sup>

12 Mr. Oligschlaeger notes the Commission’s rule only allows thirty days for  
13 Staff review after MAWC files its change to its ECAM rate. There is nothing in  
14 MAWC’s ECAM filing stating when these filing will be made. Absent a schedule  
15 for these filings, MAWC gets to determine the timing of the change to the ECAM  
16 rate and, absent filing requirements for ECAM rate filings, MAWC gets to  
17 determine the information provided in the filing.

18 The turnaround time for data requests is twenty days. Assuming MAWC  
19 takes the entire twenty days to respond to data requests, this means to even have five  
20 days to formulate its recommendation, Staff - and other parties - would have to

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<sup>4</sup> 4 CSR 240-50.050(4)

1 determine what data MAWC did not provide in its ECAM rate change filing and  
2 issue data requests within five days of MAWC's filing to change its ECAM rate.  
3 The circumstance would be even worse if the filing was made on a Friday before a  
4 three day weekend. Either Staff has to work the holiday weekend or get its review  
5 done in two days. Since the definition of costs MAWC is proposing to include in  
6 an ECAM is very broad, this short time period to review the costs almost eliminates  
7 an important customer protection: the Commission determining what costs should be  
8 included in the ECAM. It tilts the field in MAWC's favor for getting costs included  
9 that should not be included and the customers paying for costs the Commission,  
10 Staff, and other intervening parties have not had adequate time to scrutinize.

11 In addition, on page 6 of his rebuttal testimony, Mr. Oligschlaeger discusses  
12 the possible inclusion of labor costs and suggests MAWC should present evidence  
13 the expense associated with a new employee is truly an incremental cost to the  
14 utility. This begs the question of whether or not labor costs should be included in an  
15 ECAM. If MAWC wanted labor costs to be included in its ECAM, a more  
16 precisely-defined type of proposed costs should have been included in its ECAM.  
17 Instead, MAWC would have the Commission determine what type of cost would be  
18 included as it goes along in the shortened time period prescribed in the  
19 Commission's rule for an ECAM rate change filing.

20 **Q. On page 7 Mr. Oligschlaeger states that it is "very important that the utility**  
21 **file ECAM rate requests 'right' (seeking only recovery of qualifying costs,**



1           **measured net of associated cost decreases ) the first time.” Would that solve**  
2           **the problems that you describe above?**

3   A.    No, it would not. It takes time to determine if the “right” information has been  
4           provided. MAWC has complete control over the data it would supply. There are no  
5           monthly submissions to Staff, or other parties, regarding the ECAM cost MAWC is  
6           incurring such as the submissions required by the rules for electric companies are  
7           granted an environmental cost recovery mechanism. There has been no definition of  
8           the types of costs that will be included beyond costs associated with environmental  
9           laws. This makes it next to impossible for Staff or any other party to know whether  
10          or not the “right” information was provided.

11 **Q.    Mr. Oligschlaeger states that the rule requires a utility with an ECAM rate**  
12 **to net any decreases in costs previously reflected in the ECAM against any**  
13 **new environmental costs for which the utility seeks recovery. Do you agree**  
14 **with this statement?**

15   A.    Yes, I do. Commission rule 4 CSR 240-50.050(4)(C) states “the periodic adjustment  
16          shall reflect a comprehensive measurement of both increases and decreases to any  
17          ECAM qualifying environmental cost incurred since the previous ECAM filing.”

18 **Q.    Is this reflected in the ECAM proposed by MWAC?**

19   A.    Only to the extent that MWAC’s proposed ECAM tariff sheet states it will be  
20          implemented in accordance with the Commission’s rule 4 CSR 240-50.050.

1 **Q. Does this “net of cost” insert another complication in the ECAM that has not**  
2 **been addressed?**

3 A. Yes, it does. If costs for a new capital addition are included in the ECAM, the rule  
4 requires in the filing for the next ECAM rate the costs for that capital addition be  
5 reduced due to depreciation of the asset. This adds another complexity to the thirty-  
6 day filing for a change of an ECAM rate. Staff and other parties would not only  
7 have to review the costs that MAWC included to be recovered in the ECAM rate are  
8 environmental costs and have met the statutory requirement of being fully  
9 operational and used for service<sup>5</sup> but would also need to make sure the correct  
10 depreciation rate was included for all capital costs.

11 **Q. Would you summarize OPC’s response to Staff’s rebuttal testimony on**  
12 **MAWC’s request for an ECAM?**

13 A. Staff has no position on whether or not the Commission should approve an ECAM  
14 for MAWC. However, its testimony does highlight some of the short-comings of  
15 MAWC’s proposal. Staff recognizes MAWC’s proposal is too broad and its  
16 proposed ECAM tariff sheet is insufficient.<sup>6</sup> Staff’s testimony also illustrates the  
17 difficulty of determining if the costs that MAWC would include in an ECAM rate  
18 were actually costs that should be included but ultimately negate another customer  
19 protection – Commission determination of the actual costs included in the ECAM.

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<sup>5</sup> Section 393.135 RSMo.

<sup>6</sup> Rebuttal testimony of Curtis B. Gately, page 3.

1 **Q. Should the Commission be persuaded by Staff’s testimony to grant MAWC**  
2 **an ECAM?**

3 A. No it should not. Staff did not make a recommendation as to whether or not an  
4 ECAM should be granted. The Commission should adopt the recommendation of  
5 OPC and Missouri Industrial Energy Consumers (“MIEC”) to not grant MAWC an  
6 ECAM.

7 **Q. What MIEC witness provided testimony regarding MAWC’s request for an**  
8 **ECAM?**

9 A. MIEC witness Greg R Meyer provided rebuttal testimony regarding MAWC’s  
10 request for an ECAM.

11 **Q. What is MIEC’s position regarding the Commission granting MAWC an**  
12 **ECAM?**

13 A. MIEC is opposed to MAWC’s request for an ECAM. MIEC gives two reasons for  
14 its opposition to an ECAM:

- 15 1. MAWC failed to identify any ECAM qualifying costs to be incurred; and  
16 2. MAWC failed to demonstrate an ECAM is necessary for it to have a  
17 reasonable opportunity to earn a reasonable rate of return.<sup>7</sup>

18 **Q. Does OPC agree with MIEC’s reasons that an ECAM should not be granted**  
19 **to MAWC?**

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<sup>7</sup> Rebuttal testimony of Greg R. Meyer, page 2

1 A. Yes, it does. I included a discussion in my rebuttal testimony regarding MAWC's  
2 lack of identification of any environmental costs it expects to incur over the next five  
3 years.

4 OPC also agrees with the second reason given by Mr. Meyer. MAWC did  
5 not show this mechanism is necessary for it to earn a reasonable rate of return. OPC  
6 witness Charles R. Hyneman, on page 8 of his rebuttal testimony, provides  
7 MAWC's actual ROE for 2014 was nine percent. He further goes on to explain why  
8 that is a reasonable ROE; this is the ROE that MAWC was earning during the test  
9 year for this case. This shows an ECAM is not necessary for MAWC to earn a  
10 reasonable ROE.

11 **Q. Is this an additional reason why MAWC should not be granted an ECAM?**

12 A. Yes, it is. The ECAM-enabling statute requires the Commission to find an ECAM is  
13 reasonably designed to provide MAWC with a sufficient opportunity to earn a fair  
14 ROE.<sup>8</sup> If the Commission grants the broad ECAM that MAWC requested, it is  
15 likely MAWC will not only earn a fair ROE, but will earn an unfairly high ROE and  
16 its customers will pay higher bills and take on the risk of environmental costs.

17  
18 **III. RESPONSE TO MAWC REBUTTAL ON TEST YEAR CONSUMPTION AND**  
19 **REVENUE**

20 **Q. What MAWC witness provided rebuttal testimony regarding test year**  
21 **consumption and revenues?**

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<sup>8</sup> Section 386.266.4(1)

1 A. MAWC witness Gregory P. Roach provided rebuttal testimony on test year  
2 consumption and revenues.

3 **Q. Would you summarize Mr. Roach’s rebuttal of OPC’s revenue normalization**  
4 **adjustment?**

5 A. Basically, Mr. Roach criticizes OPC’s approach because it did not explicitly take  
6 into account weather and what it sees as a decline in base usage.

7 **Q. Did OPC explicitly take into account weather in its methodology?**

8 A. No, it did not.

9 **Q. Why not?**

10 A. Intuitively, it makes some sense that weather may influence water usage. However,  
11 MAWC has not shown there is a direct correlation between weather and the water  
12 usage of its customers.

13 **Q. On page 9 of his rebuttal testimony, Mr. Roach states that “Where weather**  
14 **influences sales, it is axiomatic that ratemaking should set revenue forecasts**  
15 **based on normal weather.” Do you agree with this statement?**

16 A. I agree where weather influences sales, ratemaking should include a normalization  
17 adjustment of test year revenue for weather. However, if this relationship does exist  
18 and it is a strong relationship, MAWC should be able to model the correlation  
19 between weather and customers’ usage.

20 I do not agree with the second part of his statement that ratemaking should  
21 set revenue forecasts based on normal weather. It has not been the practice in

1           ratemaking in Missouri that revenues used in setting rates should be based on  
2           forecasts of usage because it violates the ratemaking matching principle – costs and  
3           revenues in a set time period should be normalized. Neither the costs nor the  
4           revenues should be projected. For this reason alone, the Commission should not  
5           adopt MAWC’s revenue normalization adjustments.

6 **Q. Did MAWC explicitly take into account weather in its revenue normalization**  
7 **methodology?**

8 A. No, it did not. Despite extensive testimony that weather affects water usage,  
9 MAWC did an analysis very similar to what it criticizes OPC for doing to  
10 “normalize” usage for weather. It used a simple ten-year average of what it  
11 designates as discretionary usage as its normalization for weather of its billing usage.  
12 There is no measure of the impact of actual temperature or rainfall in its analysis.  
13 Therefore, MAWC is not making an adjustment for normal weather in its analysis  
14 either.

15 **Q. Mr. Roach purports to show that the five years that OPC used in its analysis**  
16 **was warmer than an average of 40 years of temperature data<sup>9</sup> and for this**  
17 **reason the Commission should adopt MAWC’s revenue adjustment instead**  
18 **of OPC’s revenue normalization adjustment. Does this show that MAWC’s**  
19 **methodology is superior to OPC’s?**

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<sup>9</sup> Gregory Roach Rebuttal testimony, page 7

1 A. No, it does not. It shows that the average monthly temperature in the 60 months  
2 used in Staff’s analysis was warmer than a 40-year average monthly temperature  
3 calculated by Mr. Roach. He did not include in his analysis of weather any  
4 comparison of the ten years MAWC used in its analysis to the 40-year average  
5 monthly temperature. He also did not show why 40 years of data is the appropriate  
6 time span to determine “normal” weather instead of using 30 years of data.<sup>10</sup>

7 MAWC has not shown its customer usage varies according to weather. It  
8 has not even shown its billing system usage varies according to weather. In  
9 addition, MAWC has not shown temperature is the measure of weather that impacts  
10 usage.

11 OPC chose to use a five year average to determine an adjustment to test year  
12 revenues because of this lack of information on the impact of weather and economic  
13 conditions as well as the problems in the monthly usage information discussed in my  
14 rebuttal testimony and the rate design rebuttal testimony of OPC witness Dr. Geoff  
15 Marke.

16 **Q. What would an appropriate analysis of the impact of weather on usage**  
17 **consist of?**

18 A. The results of an analysis are only as good as the data used in the analysis.  
19 Therefore, the first step in doing an appropriate analysis would be to examine all the

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<sup>10</sup> The Commission Staff has used in other cases the National Oceanic and Atmospheric Administration (“NOAA”) measures of normal weather which uses daily weather recorded at St. Louis Lambert Field Airport from 1981 to 2010 to determine normal weather.

1 data to be used, both usage and temperature, to make sure it is good data. An  
2 analysis that does not correct the bill data for rebills is an analysis of the billing  
3 system, not how the actual customers use water.

4 The usage should be the actual monthly usage of the customers. It should be  
5 corrected for rebills, putting the correct usage in the correct month. If the analysis is  
6 done on a usage per customer basis, the customer numbers need the same careful  
7 examination as the usage data. A higher customer number than the actual number  
8 will result in the usage per customer being too low. Likewise, a customer number  
9 that is too low will result in a usage per customer that is too high. In either of these  
10 cases, inaccurate usage per customer numbers will result in unreliable inputs in the  
11 analysis.

12 Just as important as having good usage data is having good weather data. It  
13 should be daily data weather variable that are consistent throughout the time period  
14 of the analysis<sup>11</sup> and the time period used to determine normal weather used in the  
15 analysis.

16 **Q. Why is it important for the usage data to be on a monthly basis for weather**  
17 **normalization analysis?**

18 A. Because weather fluctuates from day to day, the ideal for measuring the impact of  
19 weather on water usage would be daily usage. Since MAWC does not measure  
20 customer daily usage, the best available level of usage data is monthly. Daily and

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<sup>11</sup> The data may need to be adjusted if the instrument measuring the weather changed or the environment around the measuring equipment changed.



1 monthly impacts of weather are smoothed out if annual usage is used, which Mr.  
2 Roach opines is good enough in his rebuttal testimony.<sup>12</sup> However, it is common  
3 knowledge here in Missouri the weather fluctuates greatly from day to day, week to  
4 week, and month to month. When weather is aggregated over time, valuable  
5 information regarding the impact of weather on usage is lost. For example, if the  
6 weather in July is normal and the weather in August is cooler and wetter than  
7 normal, combining these two months may make it look as if the weather in July and  
8 August was below normal when in fact it was not normal for half the period. In  
9 aggregating the information over an annual time period as done by MAWC,  
10 valuable information as to the impact of weather on usage is lost.

11 It is also important that the weather be aggregated over the same time period  
12 as the usage to determine the response, if any, to weather. For example, if the July  
13 billing cycle is from June 16 through July 15, the weather measure used in the  
14 analysis should be the weather from June 16 through July 15. It would be  
15 inappropriate in any analysis to use the calendar month weather for July, i.e., July 1  
16 to July 31, to try to analyze how the usage from June 16 through July 15 responds to  
17 weather.

18 Only after the data is reviewed, corrections made and data matched over the  
19 correct time period, should any analysis be conducted.

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<sup>12</sup> Roach Rebuttal testimony, page 12

1 **Q. Is weather and usage the only variables that would need to be included in**  
2 **any analysis of usage?**

3 A. Most likely not. Other variables such as economic conditions<sup>13</sup> and a growth in  
4 usage per customer (either positive or negative) should be included in such analysis.

5 **Q. If this analysis was done and it showed that usage was impacted by weather,**  
6 **how should a “weather normalized” usage be determined?**

7 A. An adjustment only should be made to test year usage for the difference between  
8 normal and actual test year weather variables. Because it is impossible to determine  
9 “normal” economic conditions, and in keeping with the ratemaking matching  
10 principle, no adjustments should be made for economic conditions. In addition,  
11 because the Commission uses an historical test year, no adjustment to test year  
12 should be made for changes in customer growth.

13 **Q. What adjustments did MAWC make?**

14 A. MAWC proposes using revenues it projects to be normal for the calendar year of  
15 2016, which includes a decline in base usage as estimated by MAWC and a ten year  
16 average of the discretionary use. In essence, assuming this average is a good  
17 estimate of the economic and weather impacts on usage. From this analysis,  
18 MAWC calculated an adjusted revenue for 2016. As I stated in my rebuttal  
19 testimony and again in this surrebuttal testimony, using normalized revenues for  
20 2016 and normalized costs for 2015 violates the ratemaking matching principle.

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<sup>13</sup> See the Rate Design Rebuttal testimony of OPC witness Dr. Geoff Marke for a discussion on the impact of economic conditions on water usage.

1 **Q. Does MAWC have the resources to perform an analysis that takes into**  
2 **account weather and economic conditions?**

3 A. Yes, it does. However, such an analysis is not a trivial undertaking and would  
4 initially require substantial effort to clean up MAWC's billing data to get accurate  
5 usage and customer information and to develop a methodology that accurately  
6 models the usage per customer for each of its water districts. However, if MAWC is  
7 serious about measuring the impact of weather and economic conditions on its  
8 customers' usage, then this is the type of analysis it needs to do. Its current  
9 methodology of putting a trend-line of its lowest billing usage months over an  
10 indiscriminate number of years and averaging an annual aggregate of the rest of the  
11 customer usage over a time period simply does not provide any useful information  
12 on the weather sensitivity of the usage of its customers or the impact of economic  
13 conditions.

14 **Q. Mr. Roach faults OPC's methodology for not explicitly taking into account**  
15 **what MAWC alleges is a declining base usage. Is his criticism valid?**

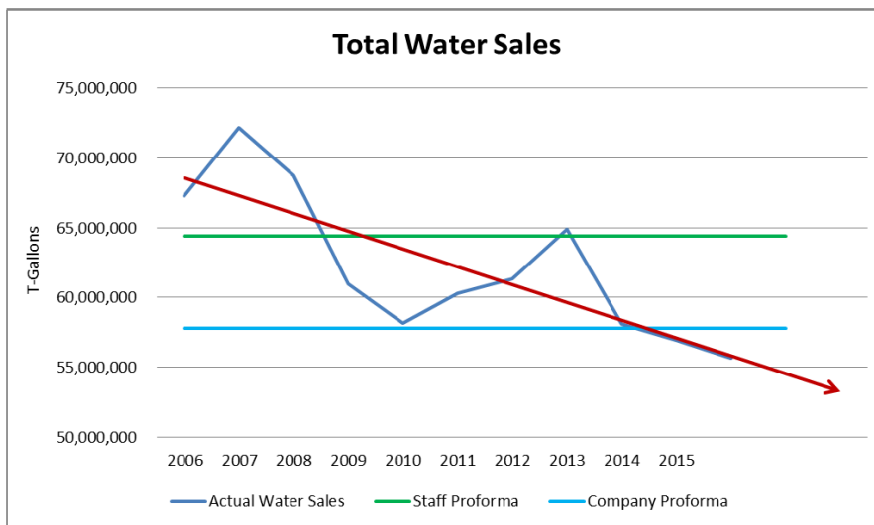
16 A. No, it is not. OPC has not been convinced, and neither should the Commission, by  
17 MAWC's analysis of its billing data and its assertion that its customers' base usage  
18 is declining. OPC witness Dr. Geoff Marke, in his rate design rebuttal testimony  
19 filed on February 19, 2016, goes into great detail about the problems with MAWC's  
20 analysis regarding base usage. In summary, Dr. Marke shows MAWC picked a time  
21 period because of good trend line statistics but did not include in its analysis other

1 relevant factors that have been shown to impact water usage. For example, Dr.  
2 Marke discusses how the time period chosen by MAWC includes the economic  
3 recession of 2008 and the subsequent recovery, but MAWC did not include any  
4 economic variables in its analysis. In addition, Dr. Marke discusses the potential  
5 impact on usage of MAWC's rate increase in 2012 and how MAWC chose not to  
6 include price elasticity in its analysis.

7 This, in addition to discrepancies in the information provided in this case,  
8 casts great doubt on MAWC's analysis of its customers' usage.

9 **Q. Would you summarize MAWC witness Tinsley's rebuttal testimony**  
10 **regarding revenues?**

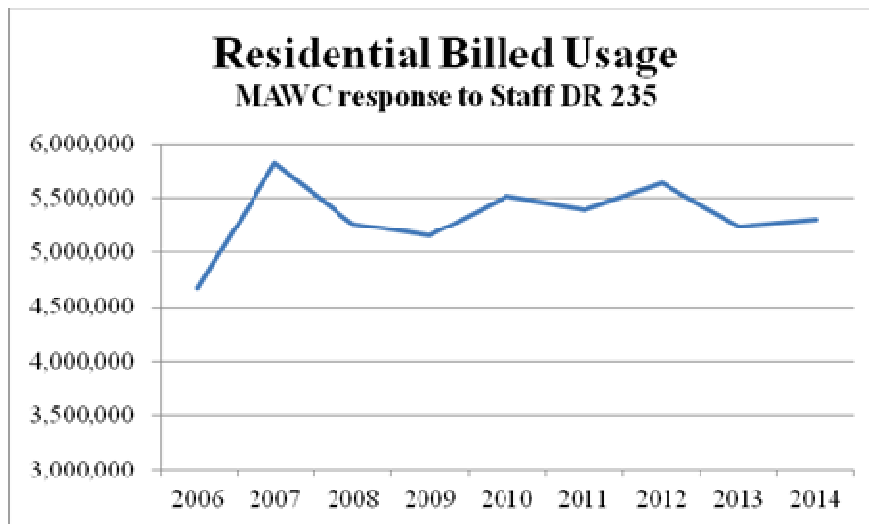
11 A. Yes. Ms. Tinsley's testimony summarizes Mr. Roach's rebuttal testimony regarding  
12 the normalization of revenues. In addition, Ms. Tinsley discusses MAWC's historic  
13 level of sales. In her testimony, she includes a graph that is confusing and is a good  
14 example of the different data issues the parties in this case have to deal with. On  
15 page 6 of her rebuttal testimony, she included the following graph to show how  
16 usage has declined and why MAWC believes OPC's revenue normalization is  
17 inappropriate.



1

2

However, the residential usage that OPC used in its analysis is shown below.



3

4

It is very apparent MAWC is using one data set to try to convince the Commission

5

MAWC's normalization adjustment is correct and necessary while providing

6

another data set for the parties to use to calculate normalization adjustments to

7

revenues.

1 **Q. Would you summarize the reasons that the Commission should not use the**  
2 **residential water revenue normalization proposed by MAWC?**

3 A. Yes, I will.

4 1) MAWC's residential water revenue is forecasted revenue for 2016. It is not  
5 a normalization adjustment. It is predicted revenue for a time period that does not  
6 match the time period that costs were normalized over;

7 2) MAWC did not normalize its customer usage. It normalized its billing  
8 system;

9 3) MAWC did not normalize usage for weather; and

10 4) MAWC's base usage analysis contains many shortcomings that put its  
11 results in doubt.

12 **Q. What is OPC's recommendation for normalization of residential water**  
13 **revenues in this case?**

14 A. OPC's recommendation remains that the test year revenues in this case be increased  
15 by \$8,454,110. This adjustment was calculated using five years of data ending with  
16 the test year. The analysis conducted by OPC is appropriate:

17 1) Due to the unreliable condition of the usage and customer information  
18 provided by MAWC;

19 2) There is very little variation in the lowest monthly usage recorded for each of  
20 these five years;

- 1           3)     A five year average is long enough that no one year of usage data biases the  
2           normalized usage; and  
3           4)     It does not include swings in economic conditions that are included in the  
4           data in MAWC's analysis.

5   **Q.     Does this conclude your surrebuttal testimony?**

6   A.     Yes, it does.