

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

In the Matter of an Investigation of	)	
Missouri-American Water Company with	)	File No. WO-2017-0012
Respect to Certain Issues Disclosed During	)	
the Recent Rate Case.	)	

**MISSOURI-AMERICAN WATER COMPANY'S  
RESPONSE TO REPORT OF STAFF'S FINDINGS INTO  
FAULTY METERS AND NEGATIVE RESERVE BALANCES**

Missouri-American Water Company (MAWC or Company) offers the following response to the Report of Staff's Findings Into Faulty Meters and Negative Reserve Balances filed March 31, 2017 (Final Report):

MAWC was given the opportunity and did comment on an earlier draft of Staff's Final Report and, in many instances, MAWC's suggestions and/or comments were incorporated by the Staff. As a result, MAWC believes that the Staff's Final Report is, in large measure, factually correct and the only response MAWC has relates to two summary statements on pages 16 and 17 of the Final Report.

First, Staff states at page 16 of its Final Report that:

“MAWC was aware of certain metering problems at the time it filed its application to increase rates as part of its previous case, Case No. WR-2015-0301, and became aware of the dead/dying meter problems shortly after its filing, but remained silent about the problems in all of its testimony filings in all of its testimony filings from the rate case.”

This statement implies that the problems that MAWC experienced with the Mueller meters prior to August, 2015, were significant enough to warrant special attention. That is not the case. The problems with the Mueller meters known prior to August, 2015, were neither significant nor material such that the Company believed it was necessary to address them in its prepared direct

testimony filed on July 31, 2015. As MAWC explained in its response to Staff Data Request No. 8 in this case:

“In May, 2013, American Water implemented a new business systems software program (SAP) for customer service, billing, and field service activities. This new system allowed us to track meter related data in much more detail than the previous system, but the tools to report and analyze this data were not immediately available. During the period from August 2012 through August 2015, the failure rate of the new Mueller meters being placed into service was only slightly higher than historical experience with Neptune meters.”

However, American Water continued to work with Mueller to improve quality.

It was not until September of 2015, after MAWC filed its last rate case to include its direct testimony (WR-2015-0301), that it and other affiliates of American Water became aware of a higher failure rate for the Mueller meters. As MAWC further explained in its response to Staff Data Request No. 8:

“Also in September, 2015, new data analysis tools became available which allowed American Water to analyze meter reliability in ways that were previously impractical. Analysis done at that time indicated a significantly higher failure rate for Mueller meters purchased in 2012 than for those purchased later and as compared to older Neptune meters. This result was expected and had been seen in Mueller return data but prior to that time could not be supported by American Water data.”

Thus, the significantly higher failure rate for Mueller meters was not known to MAWC until after the filing of its rate case and testimony on July 31, 2015. And, as will be explained below, even taking into account the higher failure rate of the Mueller meters, the impact on customer usage data was not significant.

Second, at page 17 of Staff’s Report, Staff states:

“Finally, this issue has impacted customer usage by some undeterminable amount. Staff points out that during the timeframe

of the defective metering issue, meter problems have reduced actual customer usage amounts by some unknown degree.”

While Staff correctly notes in the Final Report that MAWC disagrees with Staff’s conclusion in this regard, it is important to note that MAWC’s disagreement is based upon an internal analysis of the impact of the defective Mueller meters on its customer usage data in March, 2016, when this issue was first raised in Staff’s surrebuttal testimony. (This analysis was provided to Staff in response to its Data Request No. 1 in this case and further discussed and explained in a meeting with Staff at MAWC’s offices on December 5, 2016.)

The Company analyzed approximately 1,200 Mueller meters that had previously been removed from service and tested in September, 2015. Based upon this analysis, MAWC was able to estimate the meter reading error rate of the sample set during low, medium and high flows. Applying an industry-standard percentage distribution residential usage at each flow rate (i.e., low, medium and high), MAWC estimated the Mueller meter composite meter reading error rate for all flows. Using that distribution, MAWC then estimated the potential weighted residential meter reading error rate for all residential sales volumes due to Mueller meter inaccuracies equal to the ratio of the total number of Mueller meters to all residential meters affected during the years of 2013 through 2015, multiplied by the Mueller meter reading error. MAWC then recalculated the change in declining use by increasing sales volumes for the weighted total potential meter reading error for the years 2013 through 2015. The impact of this re-estimation compared to MAWC’s “filed” case on base, non-weather sensitive usage was an increase of 2.5 gallons per customer, per month; or 23.7 gallons per customer per year. Using a similar analysis to estimate the impact on non-base, weather sensitive usage, MAWC estimated an increase of 46.3 gallons per customer per year.

Overall, MAWC estimated an increase in residential usage of 70 gallons per customer, per year; which amounted to a change in the Company's "filed" residential declining use rate of 0.04% annually, or approximately \$93,000 of water sales revenue during the test year. In other words, had the Mueller meters been reading correctly, MAWC estimated that it would have experienced an increase in its test year revenues of only \$93,000, or one-half of 1% of its total test year residential revenues. Given this analysis, MAWC disagrees with Staff's conclusion that the faulty Mueller meters have impacted customer usage by some indeterminable amount. On the contrary, the impact can be determined, and it is insignificant.

Respectfully submitted,

/s/ William R. England, III

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## **CERTIFICATE OF SERVICE**

The undersigned certifies that a true and correct copy of the foregoing document was sent by electronic mail on May 1, 2017, to the following:

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