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Rate Base Depreciation

Robinett/Rebuttal

Public Counsel

WR-2017-0285

REBUTTAL TESTIMONY

OF

JOHN A. ROBINETT

Submitted on Behalf of the Office of the Public Counsel

MISSOURI-AMERICAN WATER COMPANY

CASE NO. WR-2017-0285

January 17, 2018

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

In the Matter of Missouri-American Water)
Company's Request for Authority to Implement)
General Rate Increase for Water and Sewer)
Service Provided in Missouri Service Areas.)


Case No. WR-2017-0285

AFFIDAVIT OF JOHN A. ROBINETT

STATE OF MISSOURI)
) ss
COUNTY OF COLE)

John A. Robinett, of lawful age and being first duly sworn, deposes and states:

1. My name is John A. Robinett. I am a Utility Engineering Specialist for the Office of the Public Counsel.
2. Attached hereto and made a part hereof for all purposes is my rebuttal 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.




John A. Robinett
Utility Engineering Specialist

Subscribed and sworn to me this 17th day of January 2018.



JERENE A. BUCKMAN
My Commission Expires
August 23, 2021
Cole County
Commission #13754037



Jerene A. Buckman
Notary Public

My Commission expires August 23, 2021.

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**REBUTTAL TESTIMONY
OF
JOHN A. ROBINETT
MISSOURI AMERICAN WATER COMPANY**

CASE NO. WR-2017-0285

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

2 A. John A. Robinett, PO Box 2230, Jefferson City, Missouri 65102.

3 **Q. By whom are you employed and in what capacity?**

4 A. I am employed by the Missouri Office of the Public Counsel (“OPC”) as a Utility Engineering
5 Specialist.

6 **Q. Are you the same John A. Robinett that filed direct testimony on behalf of the OPC in
7 this proceeding?**

8 A. Yes.

9 **Q. What is the purpose of your rebuttal testimony?**

10 A. In this testimony, I respond to the depreciation rate recommendation of Missouri American
11 Water Company’s (MAWC or Company) for the Business Transformation (BT) System.
12 Additionally, I will discuss the Company’s plan to implement advanced metering
13 infrastructure for the system. I will also discuss the existence on total company and zone
14 level of negative reserves and Staff’s Final Report findings related to faulty meter issue
15 and negative reserves that were issues in Case No. WR-2015-0301.

16 **Business Transformation System Depreciation**

17 **Q. What is MAWC’s request for the BT system depreciation rate?**

18 A. MAWC is asking the Commission to order a 14.3 percent depreciation rate with a 7 year
19 life for the BT system. MAWC’s request is a change from the currently ordered 5 percent
20 depreciation rate with a 20 year life.

21 **Q. Is MAWC’s request appropriate in this case?**

22 A. No.

1 **Q. Why is MAWC's request inappropriate in this case?**

2 A. First, MAWC fails to analyze all of the plant in service accounts for potential changes, both
3 for increasing and decreasing need of depreciation expense in this case. In case number
4 WR-2015-0301, MAWC hired an outside depreciation consultant to perform a depreciation
5 study of all the water and waste water assets. This was the appropriate time to have
6 addressed a change when all accounts were studied.

7 **Q. What is the rationale for depreciation change?**

8 A. In OPC data request 8514, OPC asked for the rationale for a depreciation rate change for
9 account 391.4 BTS Initial Investment when it was not studied as part of the depreciation
10 study supplied in Case No. WR-2015-0301. MAWC's response points to Mr. Brian W.
11 LaGrand's testimony, page 28 line 17 through page 29 line 19. This section of Mr.
12 LaGrand's testimony does not address the question of why the BT system was not studied
13 as part of depreciation study in the last case. Additionally, Mr. LaGrand discusses future
14 SAP software updates and extension of mainstream maintenance until 2025 for the BT
15 applications.

16 **Q. Does Mr. LaGrand's testimony page 28 line 17 through page 29 line 19 cause any
17 concern regarding his depreciation recommendation?**

18 A. Yes. Mr. LaGrand is recommending a depreciation rate as if the asset has an average
19 service life of seven years. Mr. LaGrand's own testimony at page 29 lines 6 through 9
20 states that the BT assets were deployed in August 2012 - May 2013. The BT system
21 components will have been in service for five to six years by end of current case.

22 **Q. If Mr. LaGrand's recommendation is ordered, would MAWC collect more than the
23 original cost of the BT system?**

24 A. Yes. Based on the age of the asset, the 5 percent depreciation rate and 20 year average
25 service life currently applied to the assets, the asset is currently 25 percent accrued. Mr.
26 LaGrand's recommendation of 14.3 percent will fully recover the original cost of the asset
27 over seven years on top of the 25 percent already accrued for the asset.

1 **Q. Is the BT System no longer used and useful at the end of SAP mainstream**
2 **maintenance?**

3 A. No. However, that is the current position taken by MAWC. This 2025 date correlates to
4 the end of SAP mainstream maintenance. The end of maintenance does not mean that the
5 system no longer functions. In fact a review of the SAP website FAQ provides the
6 answers:

7 **3. SAP has committed to mainstream maintenance for SAP Business Suite 7**
8 **core products until 2025. How does this compare to SAP S/4HANA?**

9 The current releases of SAP Business Suite core application products such as SAP
10 ERP, SAP SCM, SAP CRM, and SAP SRM are committed to mainstream
11 maintenance until at least 2025. The same approach – continuous innovation until
12 at least 2025 – will also be provided for SAP S/4HANA through a series of releases.

13 **4. What happens after 2025?**

14 SAP will inform our customers in due time. The current commitment for SAP
15 Business Suite software is comparable with the current cycles for SAP S/4HANA.
16 Both offerings provide security for at least 10 years into the future.

17 **5. What happens after mainstream maintenance?**

18 Once mainstream maintenance of an SAP S/4HANA release ends, customer-
19 specific maintenance applies (for more information, see SAP Note 52505).

20 **10. What happens when the mainstream maintenance of a release of SAP**
21 **S/4HANA ends?**

22 The respective release of SAP S/4HANA will automatically enter a customer-
23 specific maintenance phase. The SAP release and maintenance policy will make
24 sure that at least one new release of SAP S/4HANA is available and in mainstream
25 maintenance at that point in time.¹

26 These FAQs from SAP illustrate that once mainstream maintenance ends, then a
27 customer specific maintenance program applies. Additionally, SAP states that security will
28 be provided for “at least 10 years into the future” beyond the 2025 date.

29 **Q. What is OPC’s recommended treatment for the BT system?**

30 A. Like Staff, OPC recommends continuation of the current ordered depreciation rates that
31 resulted out of a Stipulation and Agreement from Case No. WR-2015-0301. Specifically

¹ <https://help.sap.com/doc/fb3ee8b026b9468890aedd443afb9aae/1511%20000/en-US/ReleaseMainStratS4.pdf>

1 for the BT system account 391.4 a rate of 5 percent representing a 20-year average service
2 life.

3 **Q. Although OPC agrees with Staff’s recommended treatment for the BT system, does**
4 **OPC’s recommended depreciation rates differ from Staff’s in other ways?**

5 A. Yes. One exception is that OPC is recommending a change to the waste-water depreciation
6 schedule due to the fact that MAWC has added leasehold equipment in a waste-water
7 account since its last rate case. In the prior case, the depreciation rate for account 390.9
8 Structures and Improvements – Leasehold was set to zero since MAWC did not have any
9 plant booked to the account at that time. Now that MAWC has booked equipment to that
10 account, the Commission should order a depreciation rate. OPC is recommending a 5%
11 depreciation rate be used for account 390.9 Structures and Improvements – Leasehold. This
12 recommended depreciation rate is consistent with the ordered rate for that MAWC waste-
13 water account in Case No. WR-2011-0337.

14 **Negative Reserves**

15 **Q. Is OPC concerned about negative reserves that existed at the district level in the last**
16 **MAWC case?**

17 A. Yes. I was the depreciation witness for Staff during the last MAWC rate case and raised
18 concern about negative reserves that existed at the district level in Case No. WR-2015-0301.
19 I testified to the following concerns:

20 **“Negative Reserve at District Level**

21 Q. Does MAWC Recommend any district level adjustments for negative
22 reserves at the district level?

23 A. No.

24 Q. Why not?

25 A. MAWC did not analyze reserve on a district level; reserve was only looked
26 at on total Missouri level and no issue is visible due to larger districts being able to
27 mask reserve issue of smaller districts.

28 Q. What adjustments are Staff recommending on a district level?

29 A. Staff recommends the transfer of reserve balances from other accounts
30 within each district to bring the reserve totals on accounts with negative balances
31 back to zero. For most districts, the general plant accounts are able to be adjusted

1 with funds from other general plant accounts, excluding Account 392 and its
2 subaccounts related to Transportation. This is not possible for Ozark Meadows,
3 which is discussed below. For all negative reserves outside of the general plant
4 accounts (for example, pumping equipment, wells, mains, customer meters,
5 customer services, and distribution piping), Staff recommends transferring funds
6 from outside of general plant (source of supply accounts, pumping accounts, or
7 transmission and distribution accounts). The sources of these funds vary by district
8 and are provided in the Staff's Accounting Schedules. The majority of these fund
9 sources are transmission and distribution piping accounts, with a smaller portion
10 from pumping accounts.

11 Q. Are there any districts where these adjustments were not sufficient?

12 A. Yes, in the Ozark Meadows district.

13 Q. What treatment does Staff recommend for Ozark Meadows?

14 A. Ozark Meadows has a negative reserve balance, which means retirements
15 have exceeded the rate of depreciation expense accrual. To correct this issue,
16 because sufficient value is not available in this district to correct the reserve by
17 transferring within the district, Staff recommends a positive \$23,555 reserve
18 adjustment to be applied to NARUC USOA Account 362, Receiving Wells. This
19 reserve adjustment will be a rate base offset.²

20 **Q. Was this issue corrected in true-up from the last case?**

21 A. No. As stated in my surrebuttal testimony in last case on behalf of Staff of the
22 Commission:

23 "Q. Did Mr. Spanos raise any issues with negative rate base or negative
24 reserves?"

25 A. No. Mr. Spanos did not raise an issue with negative rate base or negative
26 reserves because he looked at MAWC water and sewer on a "total company basis."
27 Larger districts like St. Louis Metro, Joplin, or St. Joseph plant and reserves easily
28 covered any negative reserve or negative rate base that may have been occurring at
29 the small water facilities. However, as part of the true-up plant and reserve
30 information received, every water and sewer district has at least one account
31 carrying a negative reserve balance. Accounts 313, 322, 324, 330, 332.4, 346.2,
32 393, and 399 all carry negative balances of reserve when all districts are combined.
33 Mr. Spanos also did not analyze the district specific effects of his recommended
34 retirements, nor did MAWC, as the Company indicated in its response to Staff Data
35 Request No. 0176.³

² Case No. WR-2015-0301 Staff witness Robinett rebuttal testimony page 9 line 5 through page 10 line 10

³ Case No. WR-2015-0301 Staff witness Robinett surrebuttal testimony page 12 line 15 through page 13 line 2

1 **Q. Was an investigatory docket opened as a result of a Stipulation and Agreement in**
2 **Case No. WR-2015-0301 filed on March 16, 2016?**

3 A. Yes. In File No. WO-2017-0012, the Commission ordered an opening of an investigation
4 on July 12, 2016. The issues to be investigated were faulty water meters and the practice
5 of maintaining negative reserve balances.

6 **Q. Did you author any of the Staff report in File No. WO-2017-0012?**

7 A. No. I accepted a job position with the Missouri Office of the Public Counsel with a start date
8 of August 16, 2016. Staff's report was finalized and filed on March 31, 2017. The
9 Memorandum from Mr. Kofi Boateng of the auditing department and Mr. Scott Glasgow from
10 the Consumer and Management Analysis largely focused on the faulty meter issue.

11 **Q. Did Staff analyze the negative reserve issue that existed and was described in its**
12 **testimony in Case No. WR-2015-0301?**

13 A. No. The Staff report failed to look into the causes of the negative reserves on the district
14 level that existed in Case No. WR-2015-0301. Attached to this testimony as Schedule JAR-
15 R-1 is Staff's Final Report from the faulty meter and negative reserve investigation in File
16 No. WO-2017-0012. As indicated on page 12 of the Staff Final Report:

17 “Staff has reviewed all of MAWC depreciation reserve balances related to
18 meter accounts. Even though MAWC retired meter investment very early in the
19 depreciable life of those assets, the recorded retirements have not created negative
20 reserve balances in those metering accounts in aggregate following water district
21 consolidations completed during the last rate case. During MAWC's last rate case,
22 No. WR-2015-0301, Staff observed a number of negative depreciation reserve
23 balances for certain MAWC water districts; however, those negative balances were
24 combined with positive reserve balances that existed in other districts. During the
25 last rate case approximately 19 water districts were combined into three water
26 districts. Staff will continue to monitor depreciation reserve balances for all
27 MAWC property accounts as part of its next rate case and will address any concerns
28 in the context of that proceeding.” (Emphasis added)

29 **Q. Were your concerns addressed?**

30 A. No. This section of the Staff report confirms concerns that I had as a member of Staff. The
31 decision to consolidate into three zones has masked the underlying reserve issues that were
32 occurring at the district level. It appears Staff did not seek any information related to the

1 negative reserve issues from Case No. WR-2015-0301 since “the recorded retirements have
2 not created negative reserve balances in those metering accounts in aggregate following
3 water district consolidations completed during the last rate case.” Staff appears to not have
4 gotten answers as to how the negative reserves were occurring or being created since they
5 do not exist after the consolidation.

6 **Q. Do negative reserves still exist even in a consolidated basis to the three zones for water
7 and two zones for sewer for MAWC?**

8 A. Yes. Based on my review of the Staff Accounting runs filed with the Cost of Service report,
9 negative reserves exist even at the consolidated total water and total sewer levels. Staff’s
10 accounting runs show negative reserve for total water run in account 324 Steam Pumping
11 Equipment, account 393 Stores Equipment, and account 399 Other Tangible Equipment.
12 The “Zone One” Staff accounting run has negative reserves in account 312 Collecting &
13 Impounding Reservoirs, account 327 Hydraulic Pumping Equipment, account 393 Stores
14 Equipment, and account 399 Other Tangible Equipment. “Zone Two” has negative reserves
15 on the Staff accounting schedules for account 313 Lakes, River and Other Intakes, account
16 390.1 Office Structures, account 390.9 Structures & Improvements-Leasehold, account
17 391.26 Personal Computer Software, account 392.1 Transportation Equipment-Light
18 Trucks, account 392.2 Transportation Equipment-Heavy trucks, and account 397.2
19 Telephone Equipment. “Zone 3” has negative reserves on the Staff accounting schedules
20 for account 324 Steam Pumping Equipment, account 326 Diesel Pumping Equipment,
21 account 333 Water Treatment-Other, account 391.2 Computer Hardware & Software, and
22 account 391.3 Other Office Equipment.

23 Staff’s Total Sewer accounting run has negative reserves for account 356 Other
24 Collection Equipment, account 374 Outfall Sewer Lines, account 390.1 Office Structures,
25 and account 390.9 Structures & Improvements- Leasehold. Sewer District A has negative
26 reserve on Staff’s accounting schedules in account 351 Structures & Improvements,
27 account 363 Electric Pumping Equipment, account 390.1 Office Structures, account 390.9
28 Structures & Improvements-Leasehold, and account 397 Communication Equipment.
29 Sewer District B has negative reserve on Staff’s accounting schedules in account 356 Other

1 Collection Equipment, account 374 Outfall Sewer Lines, account 390.1 Office Structures,
2 and account 390.9 Structures & Improvements-Leasehold.

3 **Q. Has OPC issued any discovery related to negative reserves?**

4 A. As of the time of this testimony, OPC has not issued discovery but intends to seek
5 clarification from both Staff and the Company.

6 **Q. Does OPC have a recommendation for the Commission related to the continuance of
7 negative reserves even at the consolidated zone and total company level?**

8 A. I believe that the Commission should issue an order requesting MAWC to file a report
9 related to the ongoing negative reserves that continue even after the consolidation of rate
10 districts. The report should include what the driving cause is, not just a general statement
11 that says company retired more dollars from plant in service than were in plant reserves.
12 The Staff investigation did not yield answers as desired and given that there are negative
13 reserve balances in this case, potentially, the best recommendation would be for an external
14 independent audit to determine what transactions or practices are causing the continued
15 existence of negative reserves.

16 **Q. Did Staff as a result of their investigation determine a cause for the negative reserves?**

17 A. No. The true cause of negative reserves that existed in 2015 are now masked since the
18 consolidation took place. There are no answers on if the allocation process to the multiple
19 districts prior to the consolidation for MAWC caused issues or if the negative reserves were
20 directly tied to certain early asset retirements at each district.

21 **Q. Did Staff examine the depreciation reserves as part of their direct case?**

22 A. In part. Staff discussed at page 49 of Cost of Service report land accounts that had
23 depreciation reserve and recommended removal of reserve for those accounts. However,
24 Staff did not as it stated it would in the Staff Final Report in Case No. WO-2017-0012:
25 Staff will also continue to monitor depreciation reserve balances for negative reserve
26 balance situations and address them as needed.

1 **Q. Why is the negative reserve issue a problem and concern for OPC?**

2 A. Negative reserve is a significant indicator that the depreciation rates applied to specific
3 accounts may not be sufficient. The common drivers of negative reserve are
4 catastrophic/early failure, early retirements of assets, or insufficient depreciation rates.

5 **Q. What MAWC proposal causes OPC concern for reemergence of negative
6 reserves now in the three consolidated zones?**

7 A. First, MAWC is recommending a conversion of their metering system from Advanced
8 Meter Reading (AMR) and manual reads to Advanced Meter Infrastructure (AMI). The
9 second concern relates to MAWC's request in Case No. WU-2017-0296 to replace lead
10 service lines.

11 **Q. Why are these two proposals concerns for OPC?**

12 A. Both of these proposals potentially involve the retirement of assets that may not have
13 reached the vintage equal to the average service life of the respective accounts. Specifically
14 related to the meter conversion based on MAWC's response to OPC data request 8508
15 which discusses the potential for 478,005 meters to be retired prematurely for the
16 conversion to AMI. OPC understands that the conversion will occur over time, but based
17 on the Staff Accounting Schedules filed in their cost of service report plant in service for
18 meters account is \$122,200,695 with a reserve balance of \$11,895,165. This account is
19 only 9.7 percent accrued according to Staff Accounting Schedules, and if a massive
20 replacement program is implemented it is easy to predict that the meter account will
21 quickly show a negative reserve balance.

22 **Q. What is the current plant in service and reserve balance for service lines?**

23 A. Based on Staff Accounting schedules filed with Staff Cost of Service Report, the plant in
24 service value for services is \$47,267,988 with a reserve balance of \$11,933,184.

25 **Q. What is OPC's concern with the lead service line replacement potentially creating
26 negative reserve?**

27 A. OPC's concern is two-fold related to the lead service line replacement program. OPC's first
28 concern is that when retirements are made for the retired service line the potential is present

1 to add additional footage of actual removed material. The concern is that MAWC accumulated
2 depreciation reserve may become understated due to accounting for the retirement more plant
3 than was owned. OPC's second concern is related to the general plan of a potentially
4 expansive replacement of lead service line program that could retire enough original cost of
5 service lines to drive the reserve negative.

6 **Advanced Metering Infrastructure**

7 **Q. Does OPC have any concerns with MAWC's meter upgrade presentation on their**
8 **website?**

9 A. Yes. Attached as Schedule JAR-R-2 is the Overview and Benefits that MAWC portrays
10 to its customers related to the AMI meter change out program. On the website, MAWC
11 claims "There is no direct charge to customers for this meter upgrade."

12 **Q. Will customers be paying for replacement AMI meters?**

13 A. Yes. Although a separate charge for the replacement meter may not be identified on the
14 customer's bill, to the extent that AMI have been prudently placed in service as part of this
15 case, customers will pay for the meters that are in service as part of the revenue
16 requirement.

17 **Q. What are the primary drivers for MAWC's AMI deployment over AMR technology?**

18 A. At page 21 of MAWC witness Mr. Clarkson's testimony, he discusses the transitioning of
19 quarterly billing customers to monthly billing.

20 **Q. Did OPC ask why AMI instead of AMR should be deployed to transition St. Louis**
21 **County customers to monthly billing?**

22 A. Yes. OPC asked data request 8507 to which MAWC responded that both AMR and AMI
23 are capable of switching customers to monthly billing.

24 **Q. Who benefits from the deployment of AMI technology?**

25 A. Based on the testimony of Mr. Clarkson and MAWC's response to OPC data request 8506,
26 the company benefits the most from this deployment. However, MAWC states that the
27 transition from quarterly to monthly billing will make it easier for customers to manage

1 household budgets and then customers could have the option of budget billing. What MAWC
2 fails to state is that the company will in effect receive their money for service faster. At page
3 23 of Mr. Clarkson’s testimony, he explains that the deployment of AMI will virtually
4 eliminate the need for manual meter reading in St. Louis County. The deployment of AMR
5 technology will accomplish the same goal. Rate payers will only receive benefit once
6 reduction in costs are accounted for in a future rate case procedure. Until that time, MAWC
7 will receive the benefits of any reduction of costs from the resultant expenses of this rate case.

8 **Q. Was MAWC able to quantify benefits from the deployment of AMI technology for**
9 **customers?**

10 A. No. As indicated in response to OPC data request 8506, the Company states: Although there
11 is a monetary value to all of these customer benefits, we are not able to specifically quantify
12 the total monetary value of AMI implementation.

13 **Q. In OPC’s opinion, why was MAWC not able to quantify benefits from the deployment**
14 **of AMI technology for customers?**

15 A. The first item that jumps off the page is that there will truly not be a reduction in workforce
16 due to the deployment of AMI. MAWC states that they will be able to redeploy most of
17 the full time equivalent positions to improve other areas of operation, including leak
18 detection, valve operation, hydrant maintenance and flushing, as well as an enhanced
19 training and safety program.⁴ AMI deployment should not create enhanced training and
20 safety programs because those are things that MAWC should already be performing.
21 Another potential savings for a customer that MAWC identified “Monthly billing makes it
22 easier for customers to manage household budgets and detect leaks sooner (potentially
23 reducing high bills and costly damage to customers’ homes).” However, as stated
24 previously, the same could be done with AMR technology already widely used throughout
25 Missouri American Water Company.

⁴ MAWC Witness Clarkson Direct Testimony p. 23 lines 5-8

1 **Q. Does the deployment of AMI technology for customers help identify leaks on MAWC's**
2 **system?**

3 A. OPC understands how water use data could eventually help identify leaks of the customer
4 owned service lines after individual customer base usage is determined. OPC struggles with
5 how AMI technology would identify leaks on MAWC's side of the meters of the Company
6 owned mains and service lines.

7 **Q. Does the deployment of AMI technology build rate base?**

8 A. Yes, if prudently incurred. OPC agrees with the Company that the AMR system, which is
9 currently widely deployed on the MAWC system, is already capable of meeting the needs of
10 the Company to switch St. Louis County residents to monthly billing.

11 **Q. Does OPC support the deployment of AMI technology for MAWC customers?**

12 A. No. OPC is concerned that customers are going to be asked to pay for their existing meter
13 being prematurely retired in favor of MAWC's desire to move to AMI technology and then
14 paying for new AMI that replaced their AMR meter. OPC is concerned that this program may,
15 and likely will, create negative reserve for meter accounts not only at the consolidated zone
16 level but on total company level. The Company provided at very best speculative potential
17 savings for customers that will only be recognized in some future rate case if MAWC truly
18 sees expense reductions caused by the AMI deployment.

19 **Q. Does this conclude your rebuttal testimony?**

20 A. Yes, it does.