

*Exhibit No.:*  
*Issues:* *True-Up Audit,  
Metering Issue*  
*Witness:* *John P. Cassidy*  
*Sponsoring Party:* *MoPSC Staff*  
*Type of Exhibit:* *Surrebuttal Testimony*  
*Case No.:* *WR-2015-0301*  
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**MISSOURI PUBLIC SERVICE COMMISSION**

**COMMISSION STAFF DIVISION**

**AUDITING DEPARTMENT**

**SURREBUTTAL TESTIMONY**

**OF**

**JOHN P. CASSIDY**

**MISSOURI-AMERICAN WATER COMPANY**

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

*Jefferson City, Missouri*  
*March 2016*

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**TRUE-UP AUDIT RESULTS**

Q. Please provide a summary of Staff's true-up audit results.

A. Based upon final information provided by MAWC through the true-up cutoff date of January 31, 2016, Staff's recommended revenue requirement for MAWC on a total company basis is \$21,536,511 million at Staff's recommended ROE of 9.25%. Staff's recommended revenue requirement for all MAWC water operations is \$21,069,749 and for all sewer operations is \$466,762. The impact of Staff's recommended revenue requirement for each retail rate customer class will be addressed by Staff in true-up rate design testimony that will be filed by March 11, 2016.

Q. Please summarize Staff's true-up audit results by district.

A. The chart shown below provides a summary of Staff's revenue requirement recommendations and annualized customer levels for each of MAWC's 19 water districts and 13 sewer districts that are being addressed in this rate case. MAWC provided true-up data for its Hickory Hills water and sewer systems; therefore, Staff has also addressed those systems as part of its true-up audit:

<b><u>WATER SYSTEMS</u></b>	<b><u>CUSTOMER COUNTS</u></b>	<b><u>REVENUE REQUIREMENT</u></b>
1 St. Louis Metro	366,815	\$21,386,023
2 St. Joseph	32,002	(\$965,744)
3 Joplin	24,481	(\$482,434)
4 Jefferson City	10,902	(\$53,959)
5 Warrensburg	7,611	(\$72,146)
6 Platte County/Parkville	6,216	(\$116,745)
7 Mexico	4,892	\$230,045
8 Tri-States	3,188	\$311,842
9 Maplewood/Riverside/Stonebridge	1,385	\$390,859
10 Ozark Mountain/LTA	492	(\$9,434)
11 Emerald Pointe	443	\$23,212
12 Brunswick	400	\$295,757
13 White-Branch	132	(\$15,171)
14 Spring Valley/LWM	123	\$30,373
15 Anna Meadows	109	\$26,106
16 Saddlebrooke	91	\$65,308
17 Rankin Acres	86	(\$14,576)
18 Hickory Hills	48	\$7,542
19 Redfield	23	\$32,891
<b>Total Water</b>	<b>459,439</b>	<b>\$21,069,749</b>

	<u>WASTEWATER SYSTEMS</u>	<u>CUSTOMER COUNTS</u>	<u>REVENUE REQUIREMENT</u>
3	1 Arnold	6,877	(\$489,959)
4	2 Jefferson City	1,374	\$535,501
5	3 Cedar Hill	751	(\$66,713)
6	4 Stonebridge	650	\$87,597
7	5 Meramec	605	\$154,581
8	6 Warren County	414	\$337,228
9	7 Emerald Pointe	383	(\$74,403)
10	8 Maplewood	368	\$956
11	9 Anna Meadows	109	\$19,965
12	10 Platte County	100	\$28,365
13	11 Saddlebrooke	86	(\$70,681)
14	12 Hickory Hills	47	(\$6,773)
15	13 Ozark Meadows	<u>26</u>	<u>\$11,098</u>
16	<b>Total Wastewater</b>	11,790	\$466,762
17	<b>Total Water and Wastewater</b>	471,229	\$21,536,511

18 Q. With regard to the St. Louis Metro district, does Staff's \$21,386,023  
19 recommended revenue requirement take into account the \$25,892,662 of existing  
20 Infrastructure System Replacement Surcharge (ISRS) collections?

21 A. Yes. Staff's true-up recommendation takes into account all ISRS costs that  
22 are currently being collected through MAWC's ISRS surcharge. The Staff recommends that  
23 the revenue requirement be reflected in MAWC's permanent rates and the ISRS rate should  
24 be reset to zero.

25 Q. Are all customers in MAWC's St. Louis Metro subject to the ISRS surcharge?

26 A. No. Only those customers residing in St. Louis County are subject to the  
27 ISRS rate. The ISRS statute in Section 393.1003, RSMo., states the following:

28 393.1003. 1. Notwithstanding any provisions of chapter 386  
29 and this chapter to the contrary, as of August 28, 2003, a water  
30 corporation providing water service in a county with a charter  
31 form of government and with more than one million  
32 inhabitants may file a petition and proposed rate schedules with  
33 the commission to establish or change ISRS rate schedules that  
34 will allow for the adjustment of the water corporation's rates

1 and charges to provide for the recovery of costs for eligible  
2 infrastructure system replacements made in such county with a  
3 charter form of government and with more than one million  
4 inhabitants; provided that an ISRS, on an annualized basis,  
5 must produce ISRS revenues of at least one million dollars but  
6 not in excess of ten percent of the water corporation's base  
7 revenue level approved by the commission in the water  
8 corporation's most recent general rate proceeding.

9 Approximately 335,909 of the 366,815 customers in the St. Louis Metro district are subject  
10 to the ISRS rate. The majority of the customers in the St. Louis Metro district that are not  
11 subject to the ISRS surcharge reside in St. Charles or Jefferson County. Additionally, special  
12 contract customers of the St. Louis Metro district such as the City of Kirkwood, Missouri, are  
13 not subject to the ISRS surcharge.

14 Q. What factors help to explain why the Staff's recommended revenue  
15 requirement is lower than the current ISRS rate authorized for customers located in St. Louis  
16 County?

17 A. This difference is primarily due to four factors: (1) a lower recommended  
18 ROE in this proceeding than the ROE that was recommended by Staff in the previous  
19 MAWC rate case (Case No. WR-2011-0337); (2) the fact that the American Water Works  
20 Service Company, Inc. ("Service Company") and MAWC have reduced their workforce  
21 significantly since the time of the previous MAWC rate case; (3) the St. Louis Metro district  
22 has experienced customer growth since the time of the last rate case; and (4) the fact that  
23 current St. Louis Metro water district rates contain an embedded shift in costs from other  
24 water and sewer districts of approximately \$1.9 million as a result of the settlement that was  
25 reached in the previous MAWC rate case.

1           In the prior MAWC rate case, the Staff recommended an ROE midpoint of 9.9% in  
2 comparison to Staff's 9.25% recommendation in this case. Similarly MAWC's ROE  
3 recommendation was 11.3% in Case No. WR-2011-0337 compared to 10.7% in this case.

4           Both MAWC and the Service Company have experienced significant workforce  
5 reductions since the December 31, 2011, true-up cutoff date that was established by the  
6 Commission in the previous MAWC rate case. The Service Company has reduced  
7 headcounts by 215 employees and MAWC has reduced headcounts by 71 employees since  
8 the time of the true-up cutoff in the previous MAWC rate case. In the previous rate case,  
9 the level of Service Company labor and benefits that was included in rates is approximately  
10 \$2.3 million higher than the level recommended in the current rate case. Since the St. Louis  
11 Metro district is by far the largest district that MAWC operates, it receives the largest portion  
12 (approximately 79% or \$1.82 million) of the reduced Service Company labor costs.  
13 Similarly, the level of headcounts in the MAWC St. Louis Metro district have declined since  
14 the time of the last rate case and those employee reductions have offset the wage and  
15 salary increase that have occurred since December 31, 2011, true-up cutoff date in the  
16 previous rate case.

17           Since the time of the last rate case, the St. Louis Metro district has added customers  
18 which has led to a higher collection of revenues.

19           The *Nonunanimous Stipulation and Agreement* that was approved by the Commission  
20 in the previous MAWC rate case, Case No. WR-2011-0337, increased water rates by  
21 \$23,275,000 and sewer rates by 725,000 for a total company rate increase of \$24.0 million.  
22 The tariffed rates that were approved in that rate case reflected a shift of approximately  
23 \$856,000 from certain water districts and \$1.5 million from certain sewer districts to the

1 St. Louis Metro, St. Joseph, Joplin and Warrensburg water districts. The St. Louis Metro  
2 water district absorbed approximately \$1.9 million of the \$2.3 million shift that occurred  
3 during the settlement of the prior MAWC rate case.

4 Q. Does Staff have any further comment regarding the revenue requirement that  
5 it is recommending for the St. Louis Metro district?

6 A. Yes. The ISRS legislation has promoted an acceleration of MAWC's  
7 replacement investment in its aging water distribution infrastructure. At the same time, ISRS  
8 provides coverage in between rate cases for a significant portion of the overall capital  
9 expenditures that MAWC incurs. The St. Louis Metro district is the largest district that  
10 MAWC operates and the MAWC places majority of its capital investment in the St. Louis  
11 Metro district. The following chart details the total capital investment and the ISRS eligible  
12 investment that has been place in service in the St. Louis Metro district since the time of  
13 December 31, 2011, true-up cutoff date in MAWC's prior rate case:

	St. Louis Metro Total Capital Investment	St. Louis Metro ISRS Eligible Investment <sup>1</sup>
Year		
2012	\$ 86,827,496	\$ 73,632,494
2013	\$ 69,545,347	\$ 53,242,322
2014	\$ 108,889,901	\$ 85,656,730
2015	\$ 106,212,620	\$ 1,078,181 <sup>2</sup>
Jan 2016	\$ 10,425,517	\$ 0
<b>Total</b>	<b>\$ 381,900,881</b>	<b>\$ 213,609,727</b>

<sup>1</sup> Source: Staff Data Request No. 464.

<sup>2</sup> Amount represents ISRS investment that is included the current MAWC ISRS surcharge. MAWC completed additional ISRS investment during 2015 and 2016 that is not reflected in the current ISRS surcharge because MAWC reached the ISRS "cap" during 2015. During 2015 MAWC completed \$59,173,769 of ISRS eligible investment that is not in the current ISRS surcharge. Also during January 2016, MAWC completed \$6,821,073 of ISRS eligible investment not in the current ISRS surcharge.

1 Given this significant financial protection in rates concerning capital investments made  
2 between rate cases for St. Louis County, MAWC can at times be able to reduce its costs  
3 significantly in other areas and/or experience customer growth. In these situations, and given  
4 that MAWC has a single-issue ratemaking mechanism that ignores changes in all relevant  
5 factors in between rate cases, it is possible for MAWC to collect more in rates through ISRS  
6 at a given time than what permanent rates, that would take into account changes to all  
7 relevant factors, would justify.

8 **FAULTY METERING ISSUE**

9 Q. How did the Staff learn about the metering issue?

10 A. On February 22, 2016, the Staff requested a meeting with MAWC to discuss  
11 an unusually large amount of overtime that was incurred recorded on MAWC's books during  
12 October 2015. MAWC witnesses Philip C. Wood, Jeanne M. Tinsley and Nikole Bowen  
13 were present at this meeting. During the course of this meeting Staff learned for the first  
14 time in this rate case that in early 2015 MAWC had detected a serious and widespread issue  
15 regarding unusually high levels of premature failure rates associated with approximately  
16 97,000 meters that it had acquired from Mueller Systems ("Mueller"). MAWC further  
17 explained that the Service Company purchases water meters for all of the states that  
18 American Water Works Company, Inc. ("AWW"), operates in and by doing so it receives  
19 volume discounts from its supplier.

20 Regarding Missouri, the Mueller water meters were installed in most of MAWC's  
21 water districts over a period of time ranging from 2012 through very early 2015. MAWC  
22 indicated that it had discovered that the Mueller water meters had either a defective  
23 magnetic design or problems with other components of the meter. These problems resulted

1 in many occurrences of either no recorded usage or lower than actual usage meter readings.  
2 In instances where MAWC had no usage information, they billed the customer based upon a  
3 prior year same period usage. MAWC did not attempt to adjust customer bills for meter  
4 readings that produced lower than actual usages due the faulty meter equipment. MAWC  
5 indicated that it estimates that it has replaced approximately 22,000 meters primarily during  
6 the time period spanning August 2015 through January 2016, with the most significant  
7 replacement work occurring during October 2015, which explained the significant amount of  
8 overtime that Staff observed in the October 2015 data. The Staff is also aware the MAWC is  
9 storing a significant number of the Mueller defective meters that have been replaced.

10 Q. Does the Staff have concerns that MAWC did not bring this issue up at  
11 any point in time during the rate case until specifically asked during the meeting on  
12 February 22, 2016?

13 A. Yes. The Staff issued standard data requests in this rate case that specifically  
14 asked MAWC to identify any recent significant, unusual or abnormal events and significant  
15 or unusual changes in operations. MAWC responded to these Staff data requests on  
16 September 14, 2015, and on February 23, 2016, and indicated that, other than the occurrence  
17 of the polar vortex weather phenomenon in early 2014, it was not aware of any such unusual  
18 events or situations. The Staff further contends that the metering issue should have been  
19 described and brought to the Commission's attention as part of MAWC's direct testimony  
20 filing on July 31, 2015.

21 Q. How much has MAWC spent in an effort thus far to replace the prematurely  
22 defective water meters?

1           A.       Based on the data MAWC supplied on February 19, 2016, Staff is able to able  
2 to determine that MAWC recorded approximately \$7.1 million of meter investment total  
3 company wide during January 2016. MAWC explained to the Staff that it batched the meter  
4 replacements into an overall project work order that was not reflected on MAWC's books  
5 and records until January 2016 despite the fact that many of the replacement meters went into  
6 service during October 2015. The impact of this delay would result in less accumulated  
7 depreciation being recorded on a significant portion of the meter assets. Staff may propose  
8 an adjustment to address this concern as part of its true-up audit direct testimony.

9           Staff has asked several data requests seeking specific information that would provide  
10 a narrative timeline of all events surrounding this issue, the number of affected meters,  
11 a quantification of how much cost MAWC has incurred to date to correct this issue, journal  
12 entries to record these transactions, impacts on customer usage data (which affects electricity  
13 and chemical expense), impacts on uncollectible expense, as well as a complete explanation  
14 of what steps MAWC is taking to obtain a refund or an exchange with the manufacturer.  
15 Staff is still waiting for responses to these data requests.

16           Q.       Can the Staff adequately address this issue in the context of this rate case?

17           A.       No. Due to the fact that the Staff was not informed of this situation until  
18 February 22, 2016, the Staff maintains that it is virtually impossible to adequately investigate  
19 and assess the prudence of AWW, the Service Company and MAWC's actions with regard to  
20 this matter through the true-up hearings portion of this rate case. A defective water metering  
21 issue this widespread may have impacts on many areas of a rate case including the following:

- 22                   1. Water Usage and Operating Revenues.
- 23                   2. Uncollectibles.

- 1                   3. Water Losses – Impacts Chemicals and Electricity expenses.
- 2                   4. Overtime and Contract Labor to defective water meters.
- 3                   5. Rationale for the delay in booking the replacement water meter
- 4                   investment until January 2016.
- 5                   6. Customer Service issues with regard to billing and customer
- 6                   complaints.
- 7                   7. Possible legal action to be taken by MAWC, Service Company or
- 8                   AWW.
- 9                   8. Possible receipt of remuneration from the vendor that sold the
- 10                  defective water meters.

11 As part of its true-up audit, Staff has chosen to exclude incorporation of any changes in  
12 residential water usage, water losses, uncollectibles, overtime and contract labor beyond its  
13 original September 30, 2015, “update” period that was utilized and discussed in the Staff’s  
14 Report that was filed on December 23, 2015.

15           Q.       Given the fact that MAWC has experienced no usage and slow meter reading  
16 usages, does Staff believe that this issue should raise serious concerns regarding MAWC’s  
17 Revenue Stabilization Mechanism (RSM) proposal in this rate case?

18           A.       Yes. Staff believes that given these circumstances, implementing a RSM is  
19 inappropriate in the context of this rate case. The Mueller water meters that are in question  
20 have been in service between 2012 through 2015. Certainly, if the Mueller water meters  
21 produced customer water usages at a level that is below the actual customer consumption of  
22 water this would distort the customer usage information that is available at this time and  
23 would make it very difficult to ascertain the merits of a RSM. Staff witness James A. Busch  
24 is responsible for addressing MAWC’s RSM proposal. For a complete discussion of this  
25 issue please refer to the surrebuttal testimony of Staff witness Busch.

Surrebuttal Testimony of  
John P. Cassidy

1           Q.     What is Staff's recommendation given these facts and circumstances  
2 surrounding the metering issue?

3           A.     Staff recommends that the Commission open a separate investigatory docket  
4 that would allow the Staff and other interested parties to conduct a review and examination  
5 of the areas that have been identified above as well any aspects that have not been  
6 contemplated as of the time of this surrebuttal testimony filing. As part of this investigatory  
7 docket Staff can better ascertain all of the facts and circumstances surrounding this metering  
8 issue and file a report to the Commission with regard to its findings.

9           Q.     Does Staff wish to address any other concerns?

10          A.     Yes. Staff would like to point out that if it finds that AWW, the Service  
11 Company or MAWC somehow acted imprudently regarding the faulty meter situation, the  
12 Staff reserves the right to make a prudence adjustment for any imprudent incurrence of  
13 investment or expense in connection with this metering issue in MAWC's next rate  
14 proceeding.

15          Q.     Does this conclude your surrebuttal testimony?

16          A.     Yes, it does.

**BEFORE THE PUBLIC SERVICE COMMISSION**

**OF THE STATE OF MISSOURI**

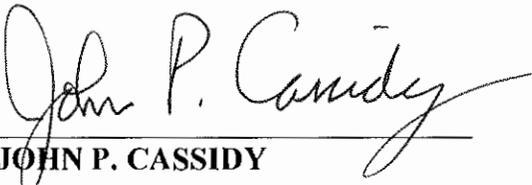
In the Matter of Missouri-American Water )  
Company's Request for Authority to Implement ) Case No. WR-2015-0301  
a General Rate Increase for Water and Sewer )  
Service Provided in Missouri Service Areas )

**AFFIDAVIT OF JOHN P. CASSIDY**

STATE OF MISSOURI )  
 ) ss.  
CITY OF ST. LOUIS )

**COMES NOW JOHN P. CASSIDY** and on his oath declares that he is of sound mind and lawful age; that he contributed to the foregoing **SURREBUTTAL TESTIMONY**; and that the same is true and correct according to his best knowledge and belief.

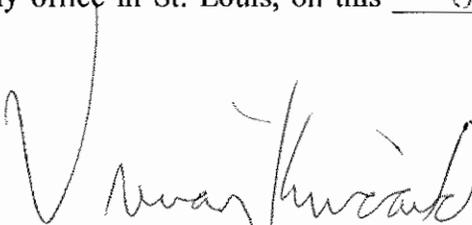
Further the Affiant sayeth not.

  
**JOHN P. CASSIDY**

**JURAT**

Subscribed and sworn before me, a duly constituted and authorized Notary Public, in and for the City of St. Louis, State of Missouri, at my office in St. Louis, on this 3<sup>rd</sup> day of March, 2016.



  
Notary Public