

*Exhibit No.:*  
*Issues:* *Cost of Removal and Salvage*  
*Witness:* *Edward F. Began, CPA*  
*Sponsoring Party:* *MoPSC Staff*  
*Type of Exhibit:* *Surrebuttal Testimony*  
*Case Nos.:* *WR-2003-0500*  
*and WC-2004-0168*  
*(Consolidated)*  
*Date Testimony Prepared:* *December 5, 2003*

**MISSOURI PUBLIC SERVICE COMMISSION**

**UTILITY SERVICES DIVISION**

**SURREBUTTAL TESTIMONY**

**OF**

**EDWARD F. BEGAN, CPA**

**MISSOURI-AMERICAN WATER COMPANY**

**CASE NOS. WR-2003-0500 AND WC-2004-0168**  
**(Consolidated)**

*Jefferson City, Missouri*  
*December 2003*

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**SURREBUTTAL TESTIMONY**  
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**MISSOURI-AMERICAN WATER COMPANY**  
**CASE NOS. WR-2003-0500 AND WC-2004-0168**  
**(Consolidated)**

Q. Please state your name and business address.

A. Edward F. Began, CPA, 1845 Borman Court, Suite 101, St. Louis, Missouri  
63146.

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

A. I am a Regulatory Auditor for the Missouri Public Service Commission  
(MoPSC or Commission).

Q. Are you the same Edward F. Began, CPA, who filed direct testimony on  
behalf of the Staff of the Commission (Staff) in this case?

A. Yes.

Q. What is the purpose of your testimony?

A. The purpose of my surrebuttal testimony is to respond to a portion of the  
rebuttal testimony of Missouri-American Water Company's (MAWC or Company) witness  
John J. Spanos.

Q. What issue will you address?

A. I will address cost of removal and salvage.

Q. In his rebuttal testimony, has Mr. Spanos objected to the amount you have  
calculated for the current ongoing level of cost of removal and salvage?

1           A.     No. Although Mr. Spanos recommends the use of a future accrual method  
2 of determining cost of removal and salvage as part of the depreciation rates, he has not  
3 raised any objections to the amount I have calculated as the current ongoing level of cost of  
4 removal and salvage.

5           Q.     Will Staff conduct any further examination of this amount?

6           A.     Yes. As part of the true-up, the Staff intends to examine the level of cost of  
7 removal and salvage through November 30, 2003, to determine if an update is appropriate.

8           Q.     In his rebuttal testimony on page 5, lines 9 through 15, Mr. Spanos states  
9 that the Staff's method of delaying recovery of cost of removal and salvage until it is  
10 incurred results in a higher present value of revenue requirements than the Company's  
11 method. As a basis for this statement, he relies on a study attached to his testimony as  
12 Schedule JJS-2. Is this statement correct?

13          A.     No. If the calculation is performed correctly, the cost of expensing the  
14 current actual cost of removal net of salvage is equal to or cheaper than the future accrual  
15 method proposed by the Company. In Schedule 1, attached to my surrebuttal testimony, I  
16 show the correct calculation of the cost, on a net present value (NPV) basis, of the Staff's  
17 expensing of the current actual cost of removal net of salvage value and the Company's  
18 future accrual method.

19          Q.     Please explain Schedule 1.

20          A.     On Schedule 1-1 attached to this surrebuttal testimony, I have reproduced  
21 the table, which appears in Schedule JJS-2 - Table D1, attached to Mr. Spanos' rebuttal  
22 testimony. Column 1 shows the Company's estimated annual accrual for future cost of  
23 removal net of salvage, \$16.29. Column 2 shows the actual cost of removal net of salvage,

1 experienced in year 10, as being equal to the total estimated accrual. Column 3 shows the  
2 effect that the future accrual method has on the accumulated depreciation reserve, which is  
3 a deduction from rate base. Column 4 shows the reduction in the revenue requirement  
4 arising from the increase in the accumulated depreciation reserve in Column 3. Column 5  
5 is the revenue requirement associated with the income tax on the annual accrual and the  
6 actual amount incurred in year 10 for cost of removal and salvage. Column 6 shows the  
7 total annual revenue requirement of the future accrual method and is the sum of column 1,  
8 column 4 and column 5.

9 Schedule 1-1 shows that the NPV of the future accrual method is \$22.72. This  
10 example also shows that expensing the actual cost of removal experienced in year 10 has  
11 an NPV of \$75.45.

12 Q. Why is the NPV for the future accrual method shown on Schedule 1-1  
13 incorrect?

14 A. Schedule 1 does not reflect the way revenue requirements are calculated.  
15 Mr. Spanos' calculation does not reflect that the annual accrual is not tax deductible. A tax  
16 deduction will only be realized when the cost of removal net of salvage is actually incurred  
17 in year 10. Therefore, the cost associated with the accrual must be factored-up for taxes to  
18 reflect the non-tax deductibility of the accrual.

19 Q. How have you corrected this flaw in Schedule 1-1?

20 A. On Schedule 1-2, I have correctly completed the column entitled "Tax On  
21 Accrual" (Column 5) to account for the fact that the accrual is not deductible for income  
22 taxes. On Schedule 1-2, using a NPV discount rate of 8%, the expensing method is  
23 essentially equal to the NPV of the future accrual method.

1           Q.     Please explain your previous statement that the expensing method is the  
2 same or cheaper than the future accrual method.

3           A.     Using a discount factor of 8%, as shown on Schedule 1-2, the cost of Staff's  
4 method is equal to the cost of the Company's method. However, if a discount rate of 10%  
5 is used to compute the NPV, as shown on Schedule 1-3, expensing is cheaper than annual  
6 accrual. The 10% discount rate is equal to the utility's cost of capital that has been used in  
7 the study appearing in Mr. Spanos' Schedule JJS-2.

8           Q.     Please summarize your testimony.

9           A.     Once the calculations appearing in Schedule JJS-2—Table D-1 are corrected,  
10 they no longer support Mr. Spanos' claim that the Company's accrual of future cost of  
11 removal and salvage is cheaper than the Staff's method of expensing current cost of  
12 removal and salvage. In fact, Schedules 1-2 and 1-3 attached to my surrebuttal testimony,  
13 show that the cost of the Staff's method is equal to or cheaper than the cost of the  
14 Company's method.

15          Q.     Does this conclude your surrebuttal testimony?

16          A.     Yes.

**Missouri-American Water Company**

**Revenue Requirement Net Present Values Of Costs Of Removal Net Of Salvage Value**

**Actual Expense Versus Future Accrual Methods**

**WR-2003-0500**

Source: J. J. Spanos Rebuttal Schedule JJS-2 - Table D1

|                                   |        |
|-----------------------------------|--------|
| Income Tax Rate                   | 40.00% |
| Rate of Return (Pre-Tax)          | 13.33% |
| Net Present Value Discounted Rate | 8.00%  |

| Year               | Net Salvage       |                           | Effect Upon<br>Rate Base<br>At Beginning<br>Of Year | Reduction In<br>Rate Base<br>Revenue Rqmt.<br>(Pre-Tax) | Tax On<br>Accrual | Revenue<br>Requirement |
|--------------------|-------------------|---------------------------|---|---|-------------------|------------------------|
|                    | Annual<br>Accrual | Actual Loss<br>Experience |   |   |                   |                        |
|                    | Column 1          | Column 2                  | Column 3  | Column 4  | Column 5          | Columns 1+4+5          |
| 1                  | 16.29             | 0                         |   |   |                   | 16.29                  |
| 2                  | 16.29             | 0                         | (16.29)   | (2.17)  |                   | 14.12                  |
| 3                  | 16.29             | 0                         | (32.58)   | (4.34)  |                   | 11.95                  |
| 4                  | 16.29             | 0                         | (48.87)   | (6.51)  |                   | 9.78                   |
| 5                  | 16.29             | 0                         | (65.16)   | (8.69)  |                   | 7.60                   |
| 6                  | 16.29             | 0                         | (81.45)   | (10.86)   |                   | 5.43                   |
| 7                  | 16.29             | 0                         | (97.74)   | (13.03)   |                   | 3.26                   |
| 8                  | 16.29             | 0                         | (114.03)  | (15.20)   |                   | 1.09                   |
| 9                  | 16.29             | 0                         | (130.32)  | (17.37)   |                   | (1.08)                 |
| 10                 | 16.29             | 162.90                    | (146.61)  | (19.54)   | (65.16)           | (68.41)                |
| Total              | 162.90            |                           |   | (97.72)   | (65.16)           | 0.02                   |
| Net Present Values |                   | \$75.45                   |   |   |                   | \$22.72                |

**Missouri-American Water Company**

**Revenue Requirement Net Present Values Of Costs Of Removal Net Of Salvage Value**

**Actual Expense Versus Future Accrual Methods**

**WR-2003-0500**

Same As Schedule 1 - 1 And Corrected for Accrual Being Not Tax Deductible

|                                   |        |
|-----------------------------------|--------|
| Income Tax Rate                   | 40.00% |
| Rate of Return (Pre-Tax)          | 13.33% |
| Net Present Value Discounted Rate | 8.00%  |

| Year               | Net Salvage       |                           | Effect Upon<br>Rate Base<br>At Beginning<br>Of Year | Reduction In<br>Rate Base<br>Revenue Rqmt.<br>(Pre-Tax) | Tax On<br>Accrual | Revenue<br>Requirement |
|--------------------|-------------------|---------------------------|---|---|-------------------|------------------------|
|                    | Annual<br>Accrual | Actual Loss<br>Experience |   |   |                   |                        |
|                    | Column 1          | Column 2                  | Column 3  | Column 4  | Column 5          | Columns 1+4+5          |
| 1                  | 16.29             | 0                         |   |   | 10.86             | 27.15                  |
| 2                  | 16.29             | 0                         | (16.29)   | (2.17)  | 10.86             | 24.98                  |
| 3                  | 16.29             | 0                         | (32.58)   | (4.34)  | 10.86             | 22.81                  |
| 4                  | 16.29             | 0                         | (48.87)   | (6.51)  | 10.86             | 20.64                  |
| 5                  | 16.29             | 0                         | (65.16)   | (8.69)  | 10.86             | 18.46                  |
| 6                  | 16.29             | 0                         | (81.45)   | (10.86)   | 10.86             | 16.29                  |
| 7                  | 16.29             | 0                         | (97.74)   | (13.03)   | 10.86             | 14.12                  |
| 8                  | 16.29             | 0                         | (114.03)  | (15.20)   | 10.86             | 11.95                  |
| 9                  | 16.29             | 0                         | (130.32)  | (17.37)   | 10.86             | 9.78                   |
| 10                 | 16.29             | 162.90                    | (146.61)  | (19.54)   | (97.74)           | (100.99)               |
| Total              | <u>162.90</u>     |                           |   | <u>(97.72)</u>  | <u>0.00</u>       | <u>65.18</u>           |
| Net Present Values |                   | <b>\$75.45</b>            |   |   |                   | <b>\$75.47</b>         |



# Missouri-American Water Company

## Revenue Requirement Net Present Values Of Costs Of Removal Net Of Salvage Value

### Actual Expense Versus Future Accrual Methods

WR-2003-0500

Same as Schedule 1 - 2 With NPV Discount Rate Examined At 10%

|                                   |        |
|-----------------------------------|--------|
| Income Tax Rate                   | 40.00% |
| Rate of Return (Pre-Tax)          | 13.33% |
| Net Present Value Discounted Rate | 10.00% |

| Year               | Net Salvage       |                           | Effect Upon<br>Rate Base<br>At Beginning<br>Of Year | Reduction In<br>Rate Base<br>Revenue Rqmt.<br>(Pre-Tax) | Tax On<br>Accrual | Revenue<br>Requirement |
|--------------------|-------------------|---------------------------|---|---|-------------------|------------------------|
|                    | Annual<br>Accrual | Actual Loss<br>Experience |   |   |                   |                        |
|                    | Column 1          | Column 2                  | Column 3  | Column 4  | Column 5          | Columns 1+4+5          |
| 1                  | 16.29             | 0                         |   |   | 10.86             | 27.15                  |
| 2                  | 16.29             | 0                         | (16.29)   | (2.17)  | 10.86             | 24.98                  |
| 3                  | 16.29             | 0                         | (32.58)   | (4.34)  | 10.86             | 22.81                  |
| 4                  | 16.29             | 0                         | (48.87)   | (6.51)  | 10.86             | 20.64                  |
| 5                  | 16.29             | 0                         | (65.16)   | (8.69)  | 10.86             | 18.46                  |
| 6                  | 16.29             | 0                         | (81.45)   | (10.86)   | 10.86             | 16.29                  |
| 7                  | 16.29             | 0                         | (97.74)   | (13.03)   | 10.86             | 14.12                  |
| 8                  | 16.29             | 0                         | (114.03)  | (15.20)   | 10.86             | 11.95                  |
| 9                  | 16.29             | 0                         | (130.32)  | (17.37)   | 10.86             | 9.78                   |
| 10                 | 16.29             | 162.90                    | (146.61)  | (19.54)   | (97.74)           | (100.99)               |
| Total              | 162.90            |                           |   | (97.72)   | 0.00              | 65.18                  |
| Net Present Values |                   | \$62.81                   |   |   |                   | \$75.25                |