

*Exhibit No.:*

*Issue: Capital Structure,  
Embedded Cost,  
Rate of Return*

*Witness: Roberta A. McKiddy*

*Sponsoring Party: MoPSC Staff*

*Type of Exhibit: True-Up Direct Testimony*

*Case Nos.: WR-2000-281 and  
SR-2000-282*

**FILED**<sup>3</sup>

JUN 15 2000

Missouri Public  
Service Commission

**MISSOURI PUBLIC SERVICE COMMISSION**

**UTILITY SERVICES DIVISION**

**TRUE-UP DIRECT TESTIMONY**

**OF**

**ROBERTA A. McKIDDY**

**MISSOURI-AMERICAN WATER COMPANY**

**CASE NOS. WR-2000-281 AND SR-2000-282**

*Jefferson City, Missouri  
June, 2000*

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**OF**  
**ROBERTA A. MCKIDDY**

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1                                   **TRUE-UP DIRECT TESTIMONY**

2                                   **OF**

3                                   **ROBERTA A. MCKIDDY**

4                                   **MISSOURI-AMERICAN WATER COMPANY**

5                                   **CASE NOS. WR-2000-281 AND SR-2000-282**

6           Q.     Please state your name.

7           A.     My name is Roberta A. McKiddy.

8           Q.     Are you the same Roberta A. McKiddy who filed direct, rebuttal and  
9 surrebuttal testimony in this proceeding on behalf of the Staff of the Missouri Public Service  
10 Commission (Staff)?

11          A.     Yes, I am.

12          Q.     In your direct testimony, did you recommend a fair and reasonable rate of  
13 return for the Missouri jurisdictional water utility ratebase for Missouri-American Water  
14 Company (MAWC)?

15          A.     Yes, I did.

16          Q.     What is the purpose of your true-up direct testimony?

17          A.     The purpose of this true-up testimony is to update MAWC's capital structure  
18 and provide a revised overall rate of return as of April 30, 2000. It is also to update the  
19 embedded costs of long-term debt and preferred stock to reflect the actual costs as of  
20 April 30, 2000.

21       **Capital Structure**

22          Q.     Did you perform an analysis of MAWC's capital structure as of  
23 April 30, 2000?

1 A. Yes, I did.

2 Q. What was the result of your analysis?

3 A. As of April 30, 2000, MAWC's capital structure is as follows: 42.27%  
4 common stock equity; 1.69% preferred stock and 56.05% long-term debt. (see Schedule 1)

5 Q. How does this compare to the capital structure used in your direct testimony  
6 evaluation of MAWC?

7 A. MAWC's capital structure as of April 30, 2000 is only slightly different than  
8 that used for the period ending September 30, 1999, which was as follows: 41.29% common  
9 stock equity; 2.39% preferred stock and 56.32% long-term debt.

10 **Embedded Cost of Preferred Stock**

11 Q. Did you perform an analysis of the embedded cost of preferred stock as of  
12 April 30, 2000?

13 A. Yes, I did.

14 Q. What was the result of your analysis?

15 A. As of April 30, 2000, Staff recommends an embedded cost for preferred stock  
16 of 9.09 percent. (see Schedule 4)

17 Q. How does this compare to the embedded cost of preferred stock used in your  
18 direct testimony evaluation of MAWC?

19 A. MAWC's embedded cost of preferred stock as of April 30, 2000 is only nine  
20 basis points higher than the embedded cost of preferred stock recommended for the period  
21 ending September 30, 1999.

**Embedded Cost of Long-term Debt**

Q. Did you perform an analysis of the embedded cost of long-term debt as of April 30, 2000?

A. Yes, I did.

Q. What was the result of your analysis?

A. As of April 30, 2000, Staff recommends an embedded cost for long-term debt of 6.77 percent. (see Schedules 2 and 3)

Q. How does this compare with the embedded cost of long-term debt recommended for the period ending September 30, 1999.

A. MAWC's embedded cost of long-term debt is 17 basis points lower than the embedded cost of long-term debt recommended for the period ending September 30, 1999. The embedded cost of long-term debt has declined due to the refinancing efforts of MAWC.

**Overall Rate of Return**

Q. How have the changes to capital structure and embedded costs affected the overall rate of return for MAWC?

A. MAWC's overall rate of return as of April 30, 2000 has declined slightly. Staff recommends the following overall rates of return based on a return on equity range of 9.50 percent to 10.75 percent with a midpoint of 10.125 percent. (see Schedule 5)

Return on Equity	9.50%	10.125%	10.75%
Common Stock Equity	4.02%	4.28%	4.54%
Preferred Stock	.15%	.15%	.15%
Long-term Debt	3.80%	3.80%	3.80%
Overall Rate of Return	7.97%	8.23%	8.49%

Q. For comparison purposes, what was the overall rate of return recommended for the period ending September 30, 1999?

- 1           A.     Staff's recommended overall rates of return for MAWC for the period ending  
2     September 30, 1999 based on the above-referenced range for return on equity was as follows:

3	<u>Return on Equity</u>	<u>9.50%</u>	<u>10.125%</u>	<u>10.75%</u>
4	Common Stock Equity	3.92%	4.18%	4.44%
5	Preferred Stock	.21%	.21%	.21%
6	<u>Long-term Debt</u>	<u>3.91%</u>	<u>3.91%</u>	<u>3.91%</u>
7	Overall Rate of Return	8.04%	8.30%	8.56%

- 8  
9           Q.     Does this conclude your prepared true-up direct testimony?

- 10          A.     Yes, it does.

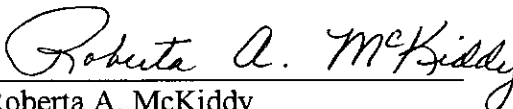
**BEFORE THE PUBLIC SERVICE COMMISSION**  
**OF THE STATE OF MISSOURI**

In the Matter of	)	
Missouri-American Water Company's	)	Case No. WR-2000-281 et al.
Tariff Sheets Designed to Implement	)	
General Rate Increases for Water and	)	
Sewer Service provided to Customers in	)	
the Missouri Service Area of the Company.	)	

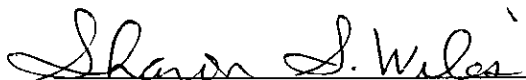
**AFFIDAVIT OF ROBERTA A. McKIDDY**

STATE OF MISSOURI	)	
	)	ss.
COUNTY OF COLE	)	

Roberta A. McKiddy, of lawful age, on her oath states: that she has participated in the preparation of the foregoing True-up Direct Testimony in question and answer form, consisting of 4 pages to be presented in the above case; that the answers in the foregoing True-Up Direct Testimony were given by her; that she has knowledge of the matters set forth in such answers; and that such matters are true and correct to the best of her knowledge and belief.

  
\_\_\_\_\_  
Roberta A. McKiddy

Subscribed and sworn to before me this 14th day of June 2000.

  
\_\_\_\_\_

SHARON S WILES  
NOTARY PUBLIC STATE OF MISSOURI  
COLE COUNTY  
MY COMMISSION EXP. AUG. 23, 2002

**Capital Structure as of April 30, 2000  
for Missouri-American Water Company**

Capital Component	Amount in Dollars	Percentage of Capital
Common Stock Equity	\$67,693,188	42.27%
Preferred Stock	2,702,806	1.69%
Long-Term Debt	89,765,483	56.05%
Short-Term Debt	0	0.00%
<b>Total Capitalization</b>	<b>\$160,161,477</b>	<b>100.00%</b>

**Water Utility Financial Ratio Benchmarks  
Total Debt / Total Capital - Including Preferred Stock**

Standard & Poor's Corporation's Utility Rating Service, Financial Statistics for the 12-months ended June 30, 1999 (median)	Lower Quartile <b>A</b>	Median <b>A</b>	Upper Quartile <b>A</b>
	50%	55%	57%

Note: See updated Schedule 11-1 for the amount of Long-Term Debt at 4/30/00.  
See updated Schedule 12 for the amount of Preferred Stock outstanding at 4/30/00.

For purposes of this analysis, the amount of Short-term Debt outstanding at April 30, 2000 was set at zero.

Source: Missouri-American Water Company's updated response to Staff's Data Information Request No. 3801.

**Embedded Cost of Long-Term Debt as of April 30, 2000  
for Missouri-American Water Company**

	(1)	(2)	(3)
Long-Term Debt	Interest Rate	Principal Amount Outstanding (04/30/00)	Annualized Cost to Company (1 * 2)
<b>General Mortgage Bonds:</b>			
5.85% Series due July 1, 2026	5.850%	\$6,000,000	\$351,000
9.01% Series due February 15, 2005	9.010%	5,700,000	513,570
5.50% Series due January 1, 2023	5.500%	4,950,000	272,250
7.14% Series due March 1, 2034	7.140%	12,500,000	892,500
8.58% Series due March 1, 2025	8.580%	3,000,000	257,400
7.79% Series due June 1, 2027	7.79%	8,000,000	623,200
10.00% Series due October 15, 2002	10.000%	1,360,000	136,000
5.00% Series A due February 1, 2028	5.000%	4,500,000	225,000
5.00% Series B due November 1, 2028	5.000%	19,000,000	950,000
5.90% Series due March 31, 2030	5.900%	29,000,000	1,711,000
Less: Unamortized Debt Issuance Expense		(4,244,517)	
Less: Unamortized Losses on Reacquired Debt		0	
Add: Annual Amortized Debt Issuance Expense			147,423
Add: Annual Amortized Losses on Reacquired Debt Expense			0
Total		<u>\$89,765,483</u>	<u>\$6,079,343</u>
Embedded Cost of Long-Term Debt		=	\$6,079,343
			\$89,765,483
		=	6.77%

**Notes:**

See updated Schedule 11-2 for the amounts of the Unamortized Premium & Debt Discount and the Annual Amortized Debt Discount Expense.  
No Unamortized Losses on Reacquired Debt or Annual Amortized Losses on Reacquired Debt Expense recorded in 1999.

Sources: Missouri-American Water Company's updated response to Staff's Data Information Requests No. 3802.

**Annual Amortization of Net Premium or Discount Expense and Debt Issuance Expense  
as of April 30, 2000 for Missouri-American Water Company**

		(1)	(2)	(3)
	Maturity Date	Number of Months to Maturity (04/30/00)	Unamortized Net Premium or Discount Expense and Debt Issuance Expense (04/30/00)	Annual Amortization of Net Premium or Discount Expense and Debt Issuance Expense
<b>Long-Term Debt</b>				
<b>General Mortgage Bonds:</b>				
5.85% Series due July 1, 2026	(07/01/26)	318.6	\$390,663	\$14,714
9.01% Series due February 15, 2005	(02/01/05)	57.9	16,770	3,474
5.50% Series due January 1, 2023	(01/01/23)	276.0	294,229	12,791
7.14% Series due March 1, 2034	(03/01/34)	411.9	283,263	8,252
8.58% Series due March 1, 2025	(03/01/25)	302.4	64,434	2,557
7.79% Series due June 1, 2027	(06/01/27)	329.8	102,903	3,745
10.00% Series due October 15, 2002	(10/15/02)	29.9	3,385	1,357
5.00% Series A due February 1, 2028	(02/01/28)	337.9	328,302	11,658
5.00% Series B due November 1, 2028	(11/01/28)	347.1	1,196,435	41,367
5.90% Series due March 31, 2030	(03/31/30)	364.2	1,442,001	47,508
7.125% Series (called 2/98)	(02/01/98)	0.0	122,132	0
<b>Total</b>			<b>\$4,244,517</b>	<b>\$147,423</b>

**Notes:**

(1) Column 3 = [( Column 2 / Column 1 ) \* 12].

Source: Missouri-American Water Company's updated response to Staff's Data Request No. 3802

**Embedded Cost of Preferred Stock as of April 30, 2000  
for Missouri-American Water Company**

	(1)	(2)	(3)
Preferred Stock	Dividend Rate	Principal Amount Outstanding (4/30/00)	Annualized Cost to Company (1 * 2)
Not Subject to Mandatory Redemption: Stated Value of \$10 Per Share			
Series A	4.250%	\$14,000	\$595
C.P.S.	9.180%	\$2,500,000	\$229,500
C.P.S.	5.875%	\$228,000	\$13,395
Not Subject to Mandatory Redemption: Stated Value of \$25 Per Share			
Add: Premium			0
Less: Unamortized Issuance Expense		(39,194)	
Add: Annual Amortization (2)			2,120
Total		<u>\$2,702,806</u>	<u>\$245,610</u>
Embedded Cost of Preferred Stock =			<u>\$245,610</u>
			<u>\$2,702,806</u>
			= <b>9.09%</b>

Notes:

- (1) The amount of Preferred Stock includes the amount redeemable within one year.  
(2) Both the 4 1/4% Series and the 9.18% Series have sinking funds which allows for the annual amortization of cost associated in the calculation of the embedded cost of preferred stock. Payout date on the 4 1/4% Series is August 31, 2000 and the payout date on the 9.18% Series is September 30, 2031.

Source: Missouri-American Water Company's updated response to Staff's Data Request 3805.

## Adjusted Weighted Cost of Capital as of April 30, 2000 for Missouri-American Water Company

Capital Component	Percentage of Capital	Embedded Cost	Weighted Cost of Capital Using Common Equity Return of:		
			9.50%	10.125%	10.75%
Common Stock Equity	42.27%	-----	4.02%	4.28%	4.54%
Preferred Stock	1.69%	9.09%	0.15%	0.15%	0.15%
Long-Term Debt	56.05%	6.77%	3.80%	3.80%	3.80%
Short-Term Debt	0.00%	0.00%	0.00%	0.00%	0.00%
	<u>100.00%</u>		<u>7.97%</u>	<u>8.23%</u>	<u>8.49%</u>

**Notes:**

See Updated Schedule 10 for the Capital Structure Ratios.

See Updated Schedule 11-1 for the Embedded Cost of Long-Term Debt.

See Updated Schedule 12 for the Embedded Cost of Preferred Stock.