

Exhibit No.:

Issues: AFUDC, Working Capital,
Pensions, Belleville Lab
Costs, Property Taxes, St.
Joseph Plant Retirement,
AWR Customer Lists,
Security AAO, Credits and
Billing Adjustments, Fuel
and Power and Chemicals,
CAM, Affiliated
Transactions, Lobbying Costs
Interest Synchronization

Witness: Edward J. Grubb

Exhibit Type: Rebuttal Testimony

Sponsoring Party: Missouri-American Water Company

Case No.: WR-2003-0500

Date Filed: November 10, 2003

MISSOURI PUBLIC SERVICE COMMISSION

CASE NO. WR-2003-0500

**SCHEDULES TO ACCOMPANY THE
REBUTTAL TESTIMONY**

OF

EDWARD J. GRUBB

ON BEHALF OF

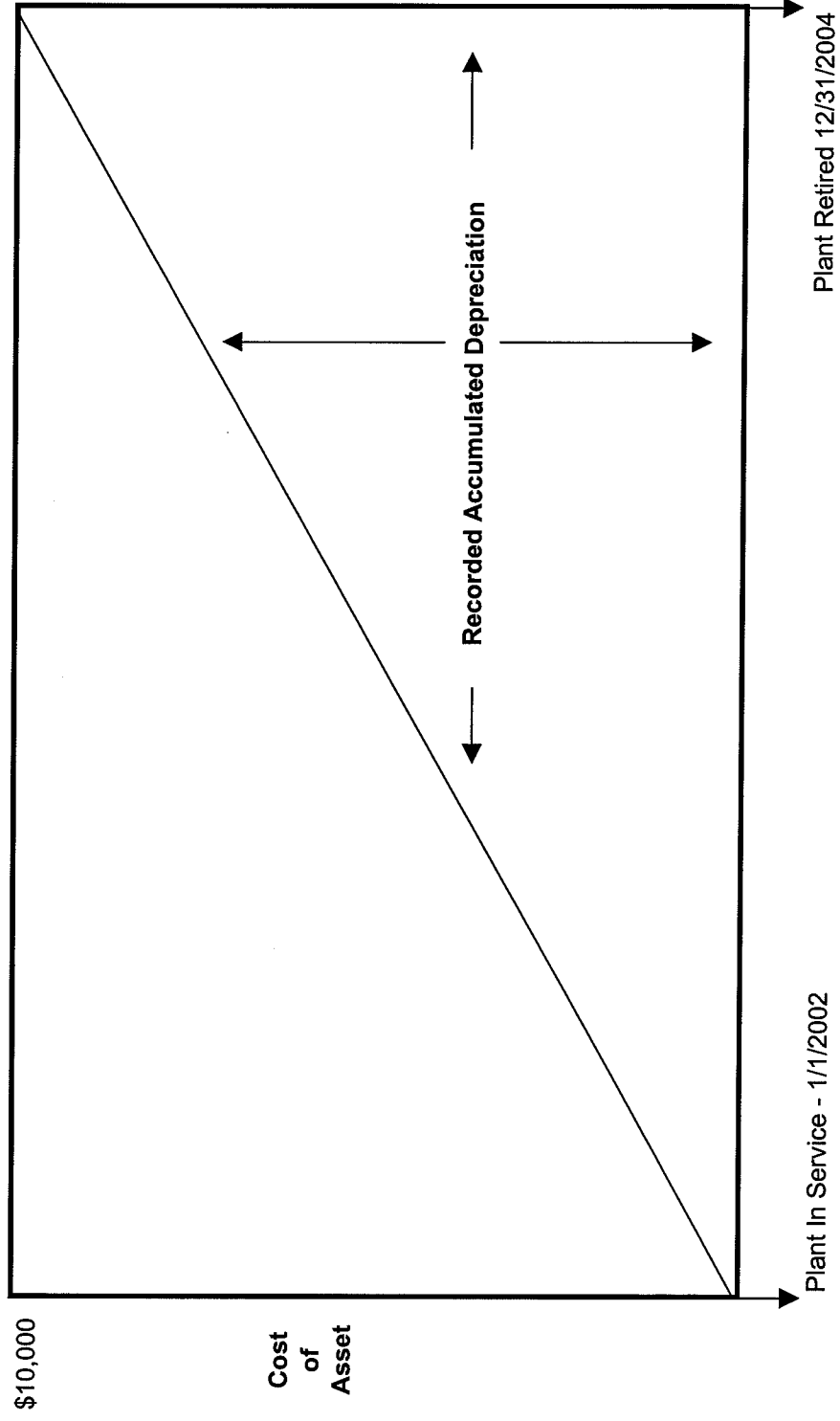
MISSOURI-AMERICAN WATER COMPANY

JEFFERSON CITY, MISSOURI

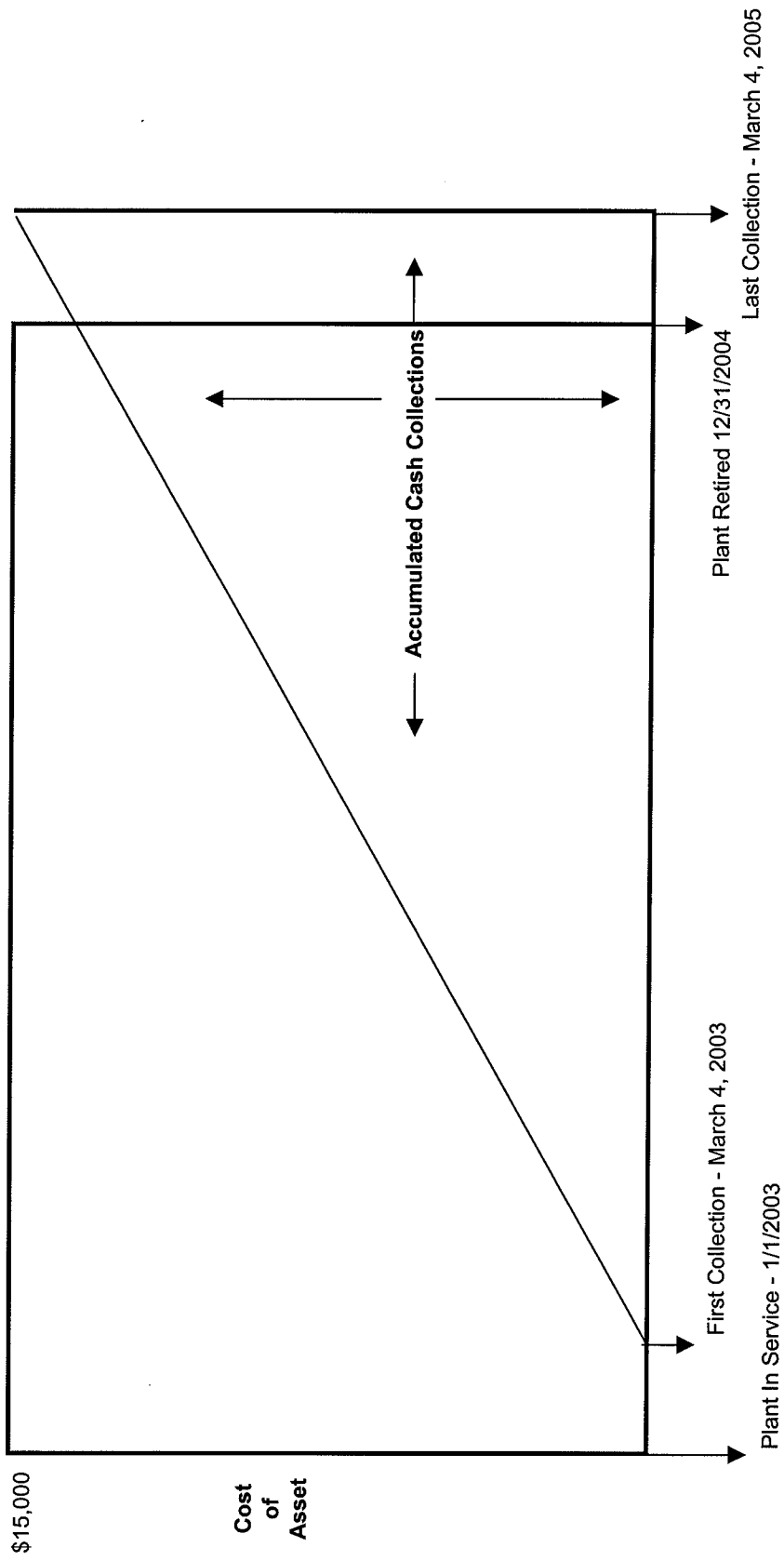
Missouri American Water
Case No. WR-2003-0500
Calculation of Management Fees Expense Lag

For the Month of		Service Period							
Month	Amount	Date Paid	Amount	Total Amount	Beginning	Ending	Avg No. of days	Payment Lag	\$ Days
July 02	1,292,338.73	17-Jul-02	876,709.80	1,292,338.73	6/30/02	7/31/02	15.50	1.50	1,315,064.70
		15-Aug-02	415,628.93		6/30/02	7/31/02	15.50	30.50	12,676,682.37
August	970,461.79	15-Aug-02	970,461.79	970,461.79	7/31/02	8/31/02	15.50	(0.50)	(485,230.90)
September	981,277.00	15-Aug-02	321,876.94	981,277.00	8/31/02	9/30/02	15.00	(31.00)	(9,978,185.14)
		12-Sep-02	648,584.85		8/31/02	9/30/02	15.00	(3.00)	(1,945,754.55)
		08-Oct-02	10,815.21		8/31/02	9/30/02	15.00	23.00	248,749.83
October	1,110,100.43	08-Oct-02	981,277.00	1,110,100.43	9/30/02	10/31/02	15.50	(7.50)	(7,359,577.50)
		08-Nov-02	128,823.43		9/30/02	10/31/02	15.50	23.50	3,027,350.61
November	1,044,691.73	08-Nov-02	1,044,691.73	1,044,691.73	10/31/02	11/30/02	15.00	(7.00)	(7,312,842.11)
December	1,142,107.85	08-Nov-02	65,408.70	1,142,107.85	11/30/02	12/31/02	15.50	(37.50)	(2,452,826.25)
		09-Dec-02	979,283.03		11/30/02	12/31/02	15.50	(6.50)	(6,365,339.70)
		10-Jan-03	97,416.12		11/30/02	12/31/02	15.50	25.50	2,484,111.06
January 03	971,862.28	10-Jan-03	971,862.28	971,862.28	12/31/02	1/24/03	12.00	(2.00)	(1,943,724.56)
February	967,247.92	10-Jan-03	170,245.57	967,247.92	1/24/03	2/21/03	14.00	(28.00)	(4,766,875.96)
		31-Jan-03	797,002.35		1/24/03	2/21/03	14.00	(7.00)	(5,579,016.45)
March	1,233,436.13	31-Jan-03	4,614.36	1,233,436.13	2/21/03	3/28/03	17.50	(38.50)	(177,652.86)
		28-Feb-03	962,633.56		2/21/03	3/28/03	17.50	(10.50)	(10,107,652.38)
		08-Apr-03	266,188.21		2/21/03	3/28/03	17.50	28.50	7,586,363.98
April	1,172,451.30	08-Apr-03	1,172,451.30	1,172,451.30	3/28/03	4/25/03	14.00	(3.00)	(3,517,353.90)
May	854,705.93	08-Apr-03	60,984.83	854,705.93	4/25/03	5/23/03	14.00	(31.00)	(1,890,529.73)
		09-May-03	793,721.10		4/25/03	5/23/03	14.00	-	-
June	1,007,503.92	09-May-03	317,745.37	1,007,503.92	5/23/03	6/27/03	17.50	(31.50)	(10,008,979.16)
		09-Jun-03	536,960.56		5/23/03	6/27/03	17.50	(0.50)	(288,480.28)
		10-Jul-03	152,797.99		5/23/03	6/27/03	17.50	30.50	4,660,338.70
			<u>12,748,185.01</u>						
						Overall Expense Lag			<u><u>(3.31)</u></u>

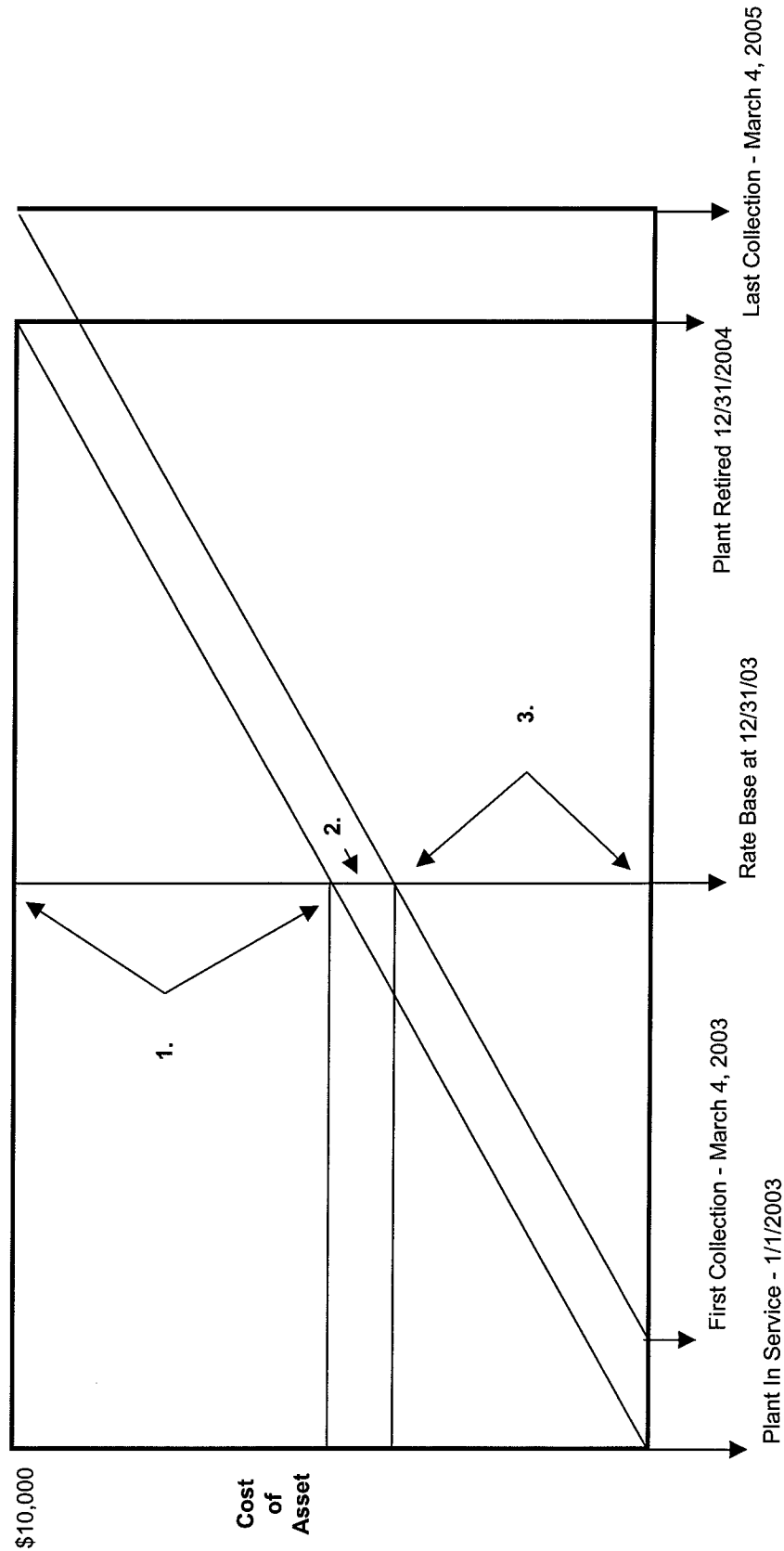
Missouri American Water
Case No. WR-2003-0500



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Note 1: This section of graph represents the amount in rate base of \$5,000 (UPIS less accumulated depreciation)
 Note 2: This section of graph represents the amount of the accumulated depreciation being deducted from base that has yet to be collected from the ratepayers as of the 12/31/03 date. This amount is \$863.
 Note 3: This section of graph represents the amount of rate base deduction that has been collected from ratepayers as of the 12/31/03 date. This amount is \$4,137

MISSOURI AMERICAN WATER COMPANY

CASE NO. WR-2003-0500

COMPARISON OF STAFF PROPOSED PENSION COST IN LAST 3 RATE CASES AND CURRENT CASE

Case WR-95-205 and SR-95-206 1995 Rate Case (1)	Case WR-97-237 and SR-97-238 1997 Rate Case (2)	Case WR-2000-281 and SR-2000-282 2000 Rate Case (3)	Case WR-2003-0500 and WC-2004-168 2003 Rate Case (4)
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AMERICAN SYSTEM

UNRECOGNIZED (GAINS) LOSSES

\$	(562,000)	Not Used by Staff	\$	(4,162,467)
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FAS 87 COSTS

	9,744,625	5,652,084		6,205,643
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UNRECOGNIZED (GAINS) / LOSSES

	(112,400)	Not Used by Staff		(832,493)
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PERCENTAGE OF MISSOURI AMERICAN TO TOTAL COMPANY

	2.90%	2.83%		2.65%
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MISSOURI AMERICAN TOTAL:

FAS 87 COSTS ALLOCATED

\$	282,594	\$	159,954	\$	164,450
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ALLOCATION FROM CORPORATE

			31,861		26,178
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ALLOCATION OF UNRECOGNIZED (GAINS) / LOSSES

	(3,260)		-		(22,061)
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ERISA CALCULATION

					466,177
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TOTAL COST BEFORE OPERATION AND MAINTENANCE RATIO

\$	279,334	\$	191,815	\$	168,567
					466,177

(1) Staff assigned a portion of the unrecognized gain for 1994 to MAWC based on an allocation factor of 2.90%

(2) Staff did not assign any portion of an unrecognized gain to MAWC. Had Staff utilized the same adjustment in the 1997 rate case that was used in the 1995 rate case, the adjustment would have been to increase the pension expense by \$450,081. This was based on an unrecognized loss for 1996 in the amount of \$15,904,000 multiplied by the 2.83% allocation factor for MAWC.

(3) Staff in the 2000 rate case calculated a five year average of the unrecognized gains and then assigned a portion to MAWC. Had Staff utilized the same adjustment in the 2000 rate case that was used in the 1997 case, the pension expense would have been increased by \$22,061 from the Staff recommendation in the 2000 rate case.

(4) Staff in the 2003 rate case is recommending to move to the ERISA calculation and away from the FAS 87 calculation. Had Staff utilized the same adjustment in the 2003 that it proposed in the 2000 rate case, pension expense would have been increased by \$229,334.

Towers Perrin

November 7, 2003

Mr. Edward J. Grubb
Director, Rates and Revenues
Missouri - American Water Company
535 North New Ballas Road
St. Louis, MO 63141

Dear Ed:

AMERICAN WATER – PENSION PROJECTIONS

As requested, we have provided a current five-year projection for the American Water Works Pension Plan including:

- The estimated minimum required cash contributions under ERISA and the Internal Revenue Code
- The estimated accounting costs under FAS 87

Projections of Minimum Required Cash Contributions

The minimum required contribution for plan year 2002 and the estimated minimum required contributions for the next five plan years are shown below:

Plan Years Beginning on July 1 st	Estimated Minimum Required Contributions (\$ in millions)
2002	\$12.4 (actual)
2003	15.1
2004	76.6
2005	73.8
2006	67.1
2007	25.6

As you can see, there is projected to be a large increase in the contribution for the plan year beginning July 1, 2004. This increase is attributable to a change in the interest rate that is allowed to be used under ERISA and the Internal Revenue Code. In simplified terms, current law will require that we (as the Plan's actuary) use a lower interest rate for the 2004 plan year than we have been allowed to use for the 2002 and 2003 plan years. Using a lower interest rate will result in a significantly higher past service obligation

Towers Perrin

(which is roughly the present value of benefits earned to date) for the plan and, therefore, a higher required contribution.

FAS 87 Projections

The accounting costs under FAS 87 for 2003 and for the next five years are shown below:

Fiscal Year	Estimated Pension Cost (\$ in millions)
2003	\$32.6 (actual)
2004	44.4
2005	40.0
2006	35.0
2007	30.7
2008	28.9

Basis of Analysis

Both the expected cash contributions and the expected accounting costs are based on demographic data as of June 30, 2002. This is the most recently available data from American Water.

Both the projected cash contributions and the projected accounting costs are based on actual assets as of January 1, 2003. We developed estimated asset values as of subsequent dates using the following approach:

- We assumed that the investment return was -2% for the period from January 1, 2003 to March 31, 2003. This was our best estimate of the Plan's investment return for this three-month period because this was the actual return for capital markets for this period, reflecting the allocation of Plan assets during this period.
- Beginning April 1, 2003 we assumed an annual return of 8.75% for the remainder of 2003 as well as all of 2004, 2005, 2006 and 2007.

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Both the expected cash contributions and the expected accounting costs reflect our understanding of all plan provisions in effect today, including any substantive changes that will be effective between now and January 1, 2004.

The assumptions and methods used in the projections are summarized below.

For the minimum required cash contribution:

- 9.00% interest rate for determining the Actuarial Accrued Liability
- 5.00% compensation increase rate per year
- Projected unit credit funding method
- 5-year smoothing method (see actuarial report for description)
- Current liability interest rates used for projections are summarized below. They represent estimates of the highest allowable rates that American can use based on no change in the 30-year Treasury bond yield in effect for March 2003 of 4.95%. The interest rates in the below table assume that the current law does not change.

Plan Year Beginning July 1 st	Rate
2002 (actual)	6.80%
2003	6.45%
2004	5.39%
2005	5.25%
2006	5.20%
2007	5.20%

For the FAS 87 pension cost:

- 6.75% discount rate for 2003 and 6% discount rate for fiscal years 2004 through 2008.
- 4.75% compensation increase rate per year
- 8.75% expected return on asset rate
- 1983 GAM mortality

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- Minimum required contributions were assumed to be made quarterly, consistent with current practice.

All other methods and assumptions are the same as those detailed in our actuarial report for the plan year beginning July 1, 2002 and fiscal year 2003.

Please note that actual costs for 2004 and beyond will differ from these projections if any of the following occurs:

- Actual experience differs from assumed experience;
- Plan provisions change (including, for example, mergers or transfers or spinoffs involving other plans);
- Actuarial assumptions and/or methods change;
- The number of active participants changes.

Please do not hesitate to call if you have any questions.

Sincerely,

WJW:nd

**Missouri American Water
Case No. WR-2003-0500**

Year	Actual Property Tax	Utility Plant	Property Tax Ratio	Proforma Property Tax	Under / (Over) Calcalaton (1)	Under / (Over) Calculation (2)
1997	\$ 6,031,145	\$ 602,563,678	0.010740	\$ 6,116,416	\$ (85,271)	\$ 215,696
1998	6,532,733	634,034,666	0.010842	6,471,534	61,199	501,588
1999	6,922,028	671,164,847	0.010917	6,874,204	47,824	389,295
2000	7,302,117	773,629,490	0.010880	7,327,107	(24,990)	380,089
2001	8,780,114	802,627,051	0.011349	8,417,089	363,025	1,477,997
2002	9,290,496	846,372,465	0.011575	9,109,014	181,482	510,381
					<u>\$ 543,269</u>	<u>\$ 3,475,047</u>

(1) This column uses the Company's method for rate recovery.

(2) This column uses the Staff's method for rate recovery.