

MISSOURI-AMERICAN WATER COMPANY
JOPLIN DISTRICT

PSC STAFF STUDY

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS

FACTOR 1.

ALLOCATION OF COSTS THAT VARY WITH THE AMT OF WATER CONSUMED.

Factors are based on the pro forma test year average daily consumption for each customer classification.

Customer Classification	Average Daily Consumption, Thousand Gallons	Allocation Factor
(1)	(2)	(3)
Residential	3,854	0.3113
Commercial	2,673	0.2159
Industrial	4,571	0.3692
Other Public Authority	312	0.0252
Sales for Resale	873	0.0705
Private Fire Protection	21	0.0017
Public Fire Protection	77	0.0062
Total	12,381	1.0000

FACTOR 2.

**ALLOCATION OF COSTS ASSOCIATED WITH FACILITIES SERVING BASE AND
MAXIMUM DAY EXTRA CAPACITY FUNCTIONS.**

Factors are based on the weighting of the factors for average daily consumption (Factor 1) and the factors derived from maximum day extra capacity demand for each customer classification, as follows:

Customer Classification	Average Daily Consumption		Maximum Day Extra Capacity		Allocation Factor
	Allocation Factor 1	Weighted Factor	Allocation Factor	Weighted Factor	
(1)	(2)	(3)=(2)x 0.6452	(4)	(5)=(4)x 0.3548	(6)=(3)+(5)
Residential	0.3113	0.2008	0.4206	0.1492	0.3500
Commercial	0.2159	0.1393	0.2187	0.0776	0.2169
Industrial	0.3692	0.2382	0.2494	0.0885	0.3267
Other Public Authority	0.0252	0.0163	0.0256	0.0091	0.0254
Sales for Resale	0.0705	0.0455	0.0857	0.0304	0.0759
Private Fire Protection	0.0017	0.0011			0.0011
Public Fire Protection	0.0062	0.0040			0.0040
Total	1.0000	0.6452	1.0000	0.3548	1.0000

The derivation of the maximum day extra capacity factors in column 4 and the basis for the column 3 and 5 weightings are presented on the following page.

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FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

**FACTOR 2. MAX DAY CLASS ALLOCATION AND MAX DAY TO AVERAGE DAY
MAXIMUM DAY EXTRA CAPACITY FUNCTIONS, cont.**

Customer Classification (1)	Average Daily Consumption, Thousand Gal. (2)	Maximum Day Extra Capacity		
		Factor* (3)	Rate of Flow, Thousand Gal. Per Day (4)=(2)x(3)	Allocation Factor (5)
Residential	3,854	1.00	3,854	0.4206
Commercial	2,673	0.75	2,004	0.2187
Industrial	4,571	0.50	2,285	0.2494
Other Public Authority	312	0.75	234	0.0256
Sales for Resale	873	0.90	786	0.0857
Total	12,283		9,164	1.0000

The weighting of the factors is based on the maximum day ratio of 1.55, based on a review of maximum day ratios experienced during the period 1990 through 2002 (see Schedule D).

	Maximum Day Ratio	Weight
Average Day	1.00	0.6452
Maximum Day Extra Capacity	0.55	0.3548
Total	1.55	1.0000

* Ratio of maximum day to average day minus 1.0.

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FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 3.

**ALLOCATION OF COSTS ASSOC. WITH FACILITIES SERVING BASE, MAX DAY EXTRA CAPACITY
AND FIRE PROTECTION FUNCTIONS.**

Factors are based on the weighting of the average daily consumption, the maximum day extra capacity demand, and the fire protection demand for each customer classification.

Customer Classification	Average Daily Consumption		Maximum Day Extra Capacity		Fire Protection		Allocation Factor
	Allocation Factor	Weighted Factor	Allocation Factor	Weighted Factor	Allocation Factor	Weighted Factor	
(1)	(2)	(3)=(2) X 0.6097	(4)	(5)=(4) X 0.3354	(6)	(7)=(6) X 0.0549	(8)=(3)+(5)+(7)
Residential	0.3113	0.1898	0.4206	0.1411			0.3309
Commercial	0.2159	0.1316	0.2187	0.0734			0.2050
Industrial	0.3692	0.2251	0.2494	0.0836			0.3086
Other Public Authority	0.0252	0.0154	0.0256	0.0086			0.0240
Sales for Resale	0.0705	0.0430	0.0857	0.0287			0.0717
Private Fire Protection	0.0017	0.0010			0.2172	0.0119	0.0129
Public Fire Protection	0.0062	0.0038			0.7828	0.0430	0.0468
Total	1.0000	0.6097	1.0000	0.3354	1.0000	0.0549	0.9999

MISSOURI-AMERICAN WATER COMPANY
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FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 3. Continued

**ALLOCATION OF COSTS ASSOC WITH FACILITIES SERVING BASE, MAXIMUM
DAY EXTRA CAPACITY AND FIRE PROTECTION FUNCTIONS, cont.**

The weighting of the factors is based on the potential demand of general and fire protection service. The bases for the potential demand of general service are the maximum day ratio of 1.55 and the average daily system sendout for 2002 of 12.00 MGD. The system demand for fire protection is 6,000 Gallons per minute for 3 hours.

	<u>Ratio</u>	<u>Rate of Flow, (GPD)</u>	<u>Weight</u>
Average Day	1.00	12,000,000	0.6097
Maximum Day			
Extra Capacity	<u>0.55</u>	<u>6,600,000</u>	<u>0.3354</u>
Subtotal	<u><u>1.55</u></u>	18,600,000	0.9451
Fire Protection		<u>1,080,000</u>	<u>0.0549</u>
Total		<u><u>19,680,000</u></u>	<u><u>1.0000</u></u>

The public and private fire protection allocation factors in column 6 on the previous page are based on the relative potential demands (see Schedule E).

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FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 4.

ALLOCATION OF COSTS ASSOC. WITH FACILITIES SERVING BASE AND MAX HOUR EXTRA CAPACITY FUNCT'S.

Factors are based on the weighting of the average daily consumption, the maximum day extra capacity demand, and the fire protection demand for each customer classification.

Customer Classification	Average Hourly Consumption			Maximum Hour Extra Capacity		Fire Protection		Allocation Factor
	Thousand Gallons	Allocation Factor	Weighted Factor	Allocation Factor	Weighted Factor	Allocation Factor	Weighted Factor	
(1)	(2)	(3)	(4)=(3) X 0.2958	(5)	(6)=(5) X 0.4912	(7)	(8)=(7) X 0.2130	(9)=(4)+(6)+(8)
Residential	160.6	0.3845	0.1137	0.5110	0.2510			0.3647
Commercial	111.4	0.2667	0.0789	0.2531	0.1243			0.2032
Industrial	92.1	0.2206	0.0653	0.1005	0.0494			0.1147
Other Public Authority	13.0	0.0312	0.0092	0.0296	0.0145			0.0237
Sales for Resale	36.4	0.0871	0.0258	0.1058	0.0520			0.0778
Private Fire Protection	0.9	0.0021	0.0006			0.2172	0.0463	0.0469
Public Fire Protection	3.2	0.0077	0.0023			0.7828	0.1667	0.1690
Total	417.5	0.9999	0.2958	1.0000	0.4912	1.0000	0.2130	1.0000

The maximum hour extra capacity factors in column 5 are determined as follows:

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FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 4. Continued

**ALLOCATION OF COSTS ASSOCIATED WITH FACILITIES SERVING BASE AND
MAXIMUM HOUR EXTRA CAPACITY FUNCTIONS, cont.**

The weighting of the factors is based on the potential demand of general and fire protection service. The bases for the potential demand of general service are the maximum hour ratio of 2.80 . The system demand for fire protection is 6,000 gallons per minute.

	<u>Ratio</u>	<u>Rate of Flow, (GPM)</u>	<u>Weight</u>
Average Hour	1.00	8,333	0.2958
Maximum Hour Extra Capacity	<u>1.66</u>	<u>13,837</u>	<u>0.4912</u>
Subtotal	<u>2.66</u>	22,170	0.7870
Fire Protection		<u>6,000</u>	<u>0.2130</u>
Total		<u>28,170</u>	<u>1.0000</u>

The maximum hour extra capacity factors in column 5 of the previous page are determined as follows:

Customer Classification	Average Hourly Consumption Thousand Gal.	Maximum Hour Extra Capacity		
		Factor*	1,000 Gallons Per Hour	Allocation Factor
(1)	(2)	(3)	(4)=(2)x(3)	(5)
Residential	160.6	3.5	562.1	0.5110
Commercial	111.4	2.5	278.4	0.2531
Industrial	92.1	1.2	110.5	0.1005
Other Public Authority	13.0	2.5	32.5	0.0296
Sales for Resale	<u>36.4</u>	3.2	<u>116.4</u>	<u>0.1058</u>
Total	<u>413.5</u>		<u>1,100.0</u>	<u>1.0000</u>

* Ratio of Maximum Hour To Average Hour Minus 1.0.

The public and private fire protection allocation factors in column 7 on the previous page are based on the relative potential demands (see Schedule E).

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FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 5.

ALLOCATION OF COSTS ASSOCIATED WITH STORAGE FACILITIES.

Factors are based on the weighting of the average hourly consumption, the maximum hour extra capacity demand, and the fire protection demand for each customer classification.

Customer Classification (1)	Average Hourly Consumption			Maximum Hour Extra Capacity		Fire Protection		Allocation Factor (9)=(4)+(6)+(8)
	Thousand Gallons (2)	Allocation Factor (3)	Weighted Factor (4)=(3) X 0.2857	Allocation Factor (5)	Weighted Factor (6)=(5) X 0.4743	Allocation Factor (7)	Weighted Factor (8)=(7) X 0.2400	
Residential	160.6	0.3113	0.0889	0.4615	0.2189			0.3078
Commercial	111.4	0.2159	0.0617	0.2286	0.1084			0.1701
Industrial	190.4	0.3692	0.1055	0.1876	0.0890			0.1945
Other Public Authority	13.0	0.0252	0.0072	0.0267	0.0127			0.0199
Sales for Resale	36.4	0.0705	0.0201	0.0956	0.0453			0.0654
Private Fire Protection	0.9	0.0017	0.0005			0.2172	0.0521	0.0526
Public Fire Protection	3.2	0.0062	0.0018			0.7828	0.1879	0.1897
Total	515.9	1.0000	0.2857	1.0000	0.4743	1.0000	0.2400	1.0000

The weighting of the factors is based on the ratio of the capacity required for a 3 hour demand of fire flow, as related to total storage capacity. The calculation is shown on the following page.

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FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 5. Continued

ALLOCATION OF COSTS ASSOCIATED WITH STORAGE FACILITIES, cont.

The weighting of the factors is based on the ratio of the capacity required for a 3 hour demand of fire flow, as related to total storage capacity.

$$\text{Fire Protection Weight} = \frac{6,000 \text{ GPM} \times 60 \text{ Min.} \times 3 \text{ Hrs.}}{4,500,000 \text{ Gallons}} = 0.2400$$

$$\text{General Service Weight} = 1.0000 - 0.2400 = 0.7600$$

The weighting of the average hourly consumption and maximum hour extra demand for general service is based on the maximum hour ratio, as follows:

	Maximum Hour Ratio	Percent	Weight
Average Hour	1.00	37.59	0.2857
Extra Capacity Maximum Hour	1.66	62.41	0.4743
Total	2.66	100.00	0.7600

Customer Classification	Average Hourly Consumption Thousand Gal. (2)	Maximum Hour Extra Capacity		
		Factor*	1,000 Gallons Per Hour (4)=(2)x(3)	Allocation Factor (5)
(1)	(2)	(3)	(4)	(5)
Residential	160.6	3.5	562.1	0.4615
Commercial	111.4	2.5	278.4	0.2286
Industrial	190.4	1.2	228.5	0.1876
Other Public Authority	13.0	2.5	32.5	0.0267
Sales for Resale	36.4	3.2	116.4	0.0956
Total	511.8		1,218.0	1.0000

**MISSOURI-AMERICAN WATER COMPANY
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FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 6.

ALLOCATION OF COSTS ASSOCIATED WITH POWER AND PUMPING FACILITIES.

Factors are based on the weighting of the maximum daily consumption, Factor 2, the maximum daily consumption with fire, Factor 3, and the maximum hour consumption, Factor 4, for each customer classification, as follows:

Customer Classification	Maximum Daily Consumption		Maximum Daily w/fire Consumption		Maximum Hourly Consumption		Allocation
	Allocation Factor 2	Weighted Factor	Allocation Factor 3	Weighted Factor	Allocation Factor 4	Weighted Factor	
(1)	(2)	(3)=(2)X 0.9159	(4)	(5)=(4)X 0.0385	(6)	(7)=(6)X 0.0456	(8)=(3)+ (5)+(7)
Residential	0.3500	0.3206	0.3310	0.0127	0.3647	0.0166	0.3499
Commercial	0.2169	0.1987	0.2050	0.0079	0.2032	0.0093	0.2159
Industrial	0.3267	0.2992	0.3086	0.0119	0.1147	0.0052	0.3163
Other Public Authority	0.0254	0.0233	0.0240	0.0009	0.0237	0.0011	0.0253
Sales for Resale	0.0759	0.0695	0.0717	0.0028	0.0778	0.0035	0.0758
Private Fire Protection	0.0011	0.0010	0.0129	0.0005	0.0469	0.0021	0.0036
Public Fire Protection	0.0040	0.0037	0.0468	0.0018	0.1690	0.0077	0.0132
Total	<u>1.0000</u>	<u>0.9160</u>	<u>1.0000</u>	<u>0.0385</u>	<u>1.0000</u>	<u>0.0455</u>	<u>1.0000</u>

The weighting of the factors is based on the horsepower of pumps associated with maximum day facilities, maximum day and fire facilities, and maximum hour facilities, as follows:

	<u>Horsepower of Pumps</u>	<u>Weight</u>
Associated with Maximum Day	3,215	0.9159
Associated with Maximum Day and Fire	135	0.0385
Associated with Maximum Hour	<u>160</u>	<u>0.0456</u>
Total	<u>3,510</u>	<u>1.0000</u>

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FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 7.

ALLOCATION OF COSTS ASSOCIATED WITH TRANSMISSION AND DISTRIBUTION MAINS.

Factors are based on the weighting of the maximum daily consumption with fire, Factor 3, and the maximum hour consumption, Factor 5, for each customer classification, as follows:

Customer Classification	Maximum Daily Consumption		Maximum Hourly Consumption		Allocation
	Allocation Factor 3	Weighted Factor	Allocation Factor 4	Weighted Factor	
(1)	(2)	(3)=(2)X 0.0000	(4)	(5)=(4)X 1.0000	(6)=(3)+(5)
Residential	0.3310	0.0000	0.3647	0.3647	0.3647
Commercial	0.2050	0.0000	0.2032	0.2032	0.2032
Industrial	0.3086	0.0000	0.1147	0.1147	0.1147
Other Public Authority	0.0240	0.0000	0.0237	0.0237	0.0237
Sales for Resale	0.0717	0.0000	0.0778	0.0778	0.0778
Private Fire Protection	0.0129	0.0000	0.0469	0.0469	0.0469
Public Fire Protection	0.0468	0.0000	0.1690	0.1690	0.1690
Total	<u>1.0000</u>	<u>0.0000</u>	<u>1.0000</u>	<u>1.0000</u>	<u>1.0000</u>

	Total Footage of Mains	Weight
Transmission Mains	325,873	0.0000
Distribution Mains	<u>1,607,496</u>	<u>1.0000</u>
Total	<u>1,933,369</u>	1.0000

**MISSOURI-AMERICAN WATER COMPANY
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FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 8.

ALLOCATION OF COSTS ASSOCIATED WITH FIRE HYDRANTS.

Costs are assigned directly to Public Fire Protection.

Customer Classification <u> </u> (1)	Allocation Factor <u> </u> (3)
Public Fire Protection	<u>1.0000</u>
Total	<u><u>1.0000</u></u>

FACTOR 9.

ALLOCATION OF COSTS ASSOCIATED WITH METERS.

Factors are based on the relative cost of meters by size and customer classification, as developed on the following page and summarized below.

Customer Classification <u> </u> (1)	5/8" Dollar Equivalents <u> </u> (2)	Allocation Factor <u> </u> (3)
Residential	20,844	0.7442
Commercial	4,792	0.1711
Industrial	1,095	0.0391
Other Public Authority	919	0.0328
Sales for Resale	358	0.0128
Private Fire	<u>0</u>	<u>0.0000</u>
Total	<u><u>28,008</u></u>	<u><u>1.0000</u></u>

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FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 10.

ALLOCATION OF COSTS ASSOCIATED WITH SERVICES.

Factors are based on the relative cost of services by size and customer classification, as developed on the following page and summarized below.

<u>Customer Classification</u> (1)	<u>3/4" Dollar Equivalents</u> (2)	<u>Allocation Factor</u> (3)
Residential	19,744	0.7867
Commercial	3,349	0.1335
Industrial	186	0.0074
Other Public Authority	243	0.0097
Sales for Resale	45	0.0018
Private Fire Protection	<u>1,528</u>	<u>0.0609</u>
Total	<u><u>25,095</u></u>	<u><u>1.0000</u></u>

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FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 11.

**ALLOCATION OF TRANSMISSION AND DISTRIBUTION OPERATION
SUPERVISION AND ENGINEERING AND MISCELLANEOUS EXPENSES.**

Factors are based on transmission and distribution operation expenses other than those being allocated, as follows:

Customer Classification	Transmission & Distribution Operating Expenses	Allocation Factor
(1)	(2)	(3)
Residential	\$ 140,003	0.5714
Commercial	44,885	0.1832
Industrial	17,767	0.0725
Other Public Authority	6,630	0.0271
Sales for Resale	10,285	0.0420
Private Fire Protection	6,287	0.0257
Public Fire Protection	19,143	0.0781
Total	<u>245,000</u>	<u>1.0000</u>

FACTOR 12.

**ALLOCATION OF TRANS. DISTRIB. MAINTENANCE SUPERVISION
AND ENGINEERING, STRUCTURES AND IMPROVE., AND OTHER EXPENSES.**

Factors are based on transmission and distribution maintenance expenses other than those being allocated, as follows:

Customer Classification	Transmission & Distribution Maintenance Expenses	Allocation Factor
(1)	(2)	(3)
Residential	\$ 55,928	0.4154
Commercial	24,880	0.1848
Industrial	12,605	0.0936
Other Public Authority	2,997	0.0223
Sales for Resale	8,346	0.0620
Private Fire Protection	5,581	0.0414
Public Fire Protection	24,314	0.1806
Total	<u>\$134,650</u>	<u>1.0000</u>

**MISSOURI-AMERICAN WATER COMPANY
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FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 15.

**ALLOCATION OF ADMINISTRATIVE AND GENERAL EXPENSES AND CASH
WORKING CAPITAL.**

Factors are based on the allocation of all other operation and maintenance expenses excluding purchased water, power, chemicals and waste disposal.

<u>Customer Classification</u> (1)	<u>Operation & Maintenance Expenses</u> (2)	<u>Allocation Factor</u> (3)
Residential	\$915,334	0.5773
Commercial	277,127	0.1748
Industrial	199,994	0.1261
Other Public Authority	30,021	0.0189
Sales for Resale	64,915	0.0409
Private Fire Protection	25,484	0.0161
Public Fire Protection	72,637	0.0458
Total	<u>\$1,585,511</u>	<u>1.0000</u>

**MISSOURI-AMERICAN WATER COMPANY
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FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 16.

ALLOCATION OF LABOR RELATED TAXES AND BENEFITS.

Factors are based on the allocation of direct labor expense.

Customer Classification <u>(1)</u>	Direct Labor Expense <u>(2)</u>	Allocation Factor <u>(3)</u>
Residential	\$672,123	0.5270
Commercial	233,764	0.1833
Industrial	189,352	0.1485
Other Public Authority	27,324	0.0214
Sales for Resale	61,348	0.0481
Private Fire Protection	20,881	0.0164
Public Fire Protection	<u>70,620</u>	<u>0.0554</u>
Total	<u><u>\$1,275,411</u></u>	<u><u>1.0000</u></u>

FACTOR 17.

**ALLOCATION OF ORGANIZATION, FRANCHISES AND CONSENTS,
MISC. INTANGIBLE PLANT AND OTHER RATE BASE ELEMENTS.**

Factors are based on the allocation of the original cost less depreciation other than those items being allocated, as follows:

Customer Classification <u>(1)</u>	Original Cost Less Depreciation <u>(2)</u>	Allocation Factor <u>(3)</u>
Residential	\$13,141,348	0.4391
Commercial	5,607,474	0.1874
Industrial	5,341,286	0.1785
Other Public Authority	655,013	0.0219
Sales for Resale	1,716,318	0.0574
Private Fire Protection	862,359	0.0288
Public Fire Protection	<u>2,601,462</u>	<u>0.0869</u>
Total	<u><u>\$29,925,260</u></u>	<u><u>1.0000</u></u>

**MISSOURI-AMERICAN WATER COMPANY
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FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 18.

ALLOCATION OF INCOME TAXES AND INCOME AVAILABLE FOR RETURN.

Factors are based on the allocation of the original cost measure of value rate base as shown on the following pages and summarized below.

Customer Classification	Original Cost Measure of Value	Allocation Factor
(1)	(2)	(3)
Residential	\$8,793,760	0.4400
Commercial	3,743,329	0.1873
Industrial	3,560,981	0.1782
Other Public Authority	436,914	0.0219
Sales for Resale	1,143,859	0.0572
Private Fire Protection	574,988	0.0288
Public Fire Protection	1,733,453	0.0867
Total	<u>\$19,987,285</u>	<u>1.0000</u>

FACTOR 19.

**ALLOCATION OF REG. COMMISSION EXPENSES, ASSESSMENTS AND
OTHER WATER REVENUES.**

The factors are based on the allocation of the total cost of service, excluding those items being allocated.

Customer Classification	Total Cost of Service	Allocation Factor
(1)	(2)	(3)
Residential	\$3,474,919	0.5076
Commercial	1,247,987	0.1823
Industrial	1,133,002	0.1655
Other Public Authority	139,667	0.0204
Sales for Resale	334,112	0.0488
Private Fire Protection	133,599	0.0195
Public Fire Protection	382,413	0.0559
Total	<u>\$6,845,698</u>	<u>1.0000</u>

MISSOURI-AMERICAN WATER COMPANY
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PSC STAFF STUDY
BASIS FOR ALLOCATING METER COSTS TO CUSTOMER CLASSIFICATIONS

Meter Size (1)	5/8" Dollar Equivalent (2)	Residential		Commercial		Industrial		Other Public Authority		Sales for Resale		Total	
		Number of Meters (3)	Weighting (4)=(2)X(3)	Number of Meters (5)	Weighting (6)=(2)X(5)	Number of Meters (7)	Weighting (8)=(2)X(7)	Number of Meters (9)	Weighting (10)=(2)X(9)	Number of Meters (11)	Weighting (12)=(2)X(11)	Number of Meters (13)	Weighting (14)
5/8	1.0	17,357.17	17,357.17	2,110.50	2,110.50	9.00	9.00	37.08	37.08	0.00	0.00	19,513.75	19,513.75
3/4	1.3	16.42	21.34	13.08	17.01	2.00	2.60	2.83	3.68	0.00	0.00	34.33	44.63
1	1.7	1,998.42	3,397.31	502.33	853.97	16.83	28.62	46.58	79.19	1.08	1.84	2,565.25	4,360.93
1-1/2	3.5	1.42	4.96	16.92	59.21	2.00	7.00	3.00	10.50	0.00	0.00	23.33	81.67
2	4.3	14.67	63.07	274.17	1,178.92	35.58	153.01	51.00	219.30	10.75	46.23	386.17	1,660.52
3	19.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	29.3	0.00	0.00	9.17	268.58	16.00	468.80	4.00	117.20	0.17	4.88	29.33	859.47
6	48.4	0.00	0.00	5.50	266.20	6.08	294.43	0.00	0.00	1.83	88.73	13.42	649.37
8	112.9	0.00	0.00	0.33	37.63	1.17	131.72	4.00	451.60	1.92	216.39	7.42	837.34
Total		<u>19,388.08</u>	<u>20,843.84</u>	<u>2,932.00</u>	<u>4,792.02</u>	<u>88.67</u>	<u>1,095.18</u>	<u>148.50</u>	<u>918.56</u>	<u>15.75</u>	<u>358.08</u>	<u>22,573.00</u>	<u>28,007.67</u>

**MISSOURI-AMERICAN WATER COMPANY
JOPLIN DISTRICT
PSC STAFF STUDY
BASIS FOR ALLOCATING SERVICE COSTS TO CUSTOMER CLASSIFICATIONS**

Service Size (1)	3/4" Dollar Equivalent (2)	Residential		Commercial		Industrial		Other Public Authority		Sales for Resale		Private Fire Protection		Total	
		Number of Services (3)	Weighting (4)=(2)X(3)	Number of Services (5)	Weighting (6)=(2)X(5)	Number of Services (7)	Weighting (8)=(2)X(7)	Number of Services (9)	Weighting (10)=(2)X(9)	Number of Services (11)	Weighting (12)=(2)X(11)	Number of Services (13)	Weighting (14)=(2)X(13)	Number of Services (15)	Weighting (16)
3/4	1.00	17,373.58	17,373.58	2,123.58	2,123.58	11.00	11.00	39.92	39.92	0.00	0.00	0.00	0.00	19,548.08	19,548.08
1	1.17	1,998.42	2,338.15	502.33	587.73	16.83	19.70	46.58	54.50	1.08	1.27	0.00	0.00	2,565.25	3,001.34
1-1/2	1.58	1.42	2.24	16.92	26.73	2.00	3.16	3.00	4.74	0.00	0.00	0.00	0.00	23.33	36.87
2	2.04	14.67	29.92	274.17	559.30	35.58	72.59	51.00	104.04	10.75	21.93	5.00	10.20	391.17	797.98
3	2.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	2.73	1.00	2.73
4	2.88	0.00	0.00	9.17	26.40	16.00	46.08	4.00	11.52	0.17	0.48	28.00	80.64	57.33	165.12
6	4.24	0.00	0.00	5.50	23.32	6.08	25.79	0.00	0.00	1.83	7.77	157.00	665.68	170.42	722.57
8	6.98	0.00	0.00	0.33	2.33	1.17	8.14	4.00	27.92	1.92	13.38	102.00	711.96	109.42	763.73
10	9.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.00	57.00	6.00	57.00
12	12.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total		<u>19,388.08</u>	<u>19,743.89</u>	<u>2,932.00</u>	<u>3,349.39</u>	<u>88.67</u>	<u>186.46</u>	<u>148.50</u>	<u>242.64</u>	<u>15.75</u>	<u>44.83</u>	<u>299.00</u>	<u>1,528.21</u>	<u>22,872.00</u>	<u>25,095.42</u>

MISSOURI-AMERICAN WATER COMPANY
JOPLIN DISTRICT

PSC STAFF STUDY

BASIS FOR ALLOCATING DEMAND RELATED COSTS OF FIRE SERVICE
TO PRIVATE AND PUBLIC FIRE PROTECTION CUSTOMER CLASSIFICATIONS

Description (1)	Restrictive Diameters Squared (2)	Quantity (3)	Relative Demand (4)=(2)x(3)	Allocation Factor (5)
<u>PRIVATE FIRE PROTECTION</u>				
Fire Lines				
2 -inch	4.00	5	20	
3 -inch	9.00	0	0	
4 -inch	16.00	28	448	
6 -inch	36.00	157	5,652	
8 -inch	64.00	102	6,528	
10 -inch	100.00	6	600	
12 -inch	144.00	0	0	
Private Hydrants	32.75	3	98	
Total Private Fire Protection		301	13,346	0.2172
<u>PUBLIC FIRE PROTECTION</u>				
Hydrant	Nozzle Sizes			
6" Valve	2- 2-1/2" & 1- 4.5"	32.75	1,469	48,110
6" Valve	2- 2-1/2" & 1- 4"	28.50	0	0
Total Public Fire Protection		1,469	48,110	0.7828
Total Fire Protection		1,770	61,456	1.0000

MISSOURI-AMERICAN WATER COMPANY
MEXICO DISTRICT

PSC STAFF STUDY

COMPARISON OF COST OF SERVICE WITH REVENUES UNDER PRESENT AND PROPOSED RATES
FOR THE TEST YEAR ENDED DECEMBER 31, 2002

Customer Classification (1)	Cost of Service		Revenues, Present Rates		Revenues, Proposed Rates		Proposed Increase	
	Amount (Schedule B) (2)	Percent (3)	Amount (4)	Percent (5)	Amount (6)	Percent (7)	Amount (8)	Percent Increase (9)
Residential	\$ 1,427,738	52.8%	\$ 1,197,432	48.2%	\$ 1,427,738	52.8%	\$ 230,306	19.2%
Commercial	365,187	13.5%	\$ 348,742	14.0%	\$ 365,187	13.5%	16,445	4.7%
Industrial	281,004	10.4%	\$ 301,415	12.1%	\$ 281,004	10.4%	(20,411)	-6.8%
Public Authority	192,472	7.1%	\$ 192,751	7.8%	\$ 192,472	7.1%	(279)	-0.1%
Sales for Resale	378,270	14.0%	\$ 368,933	14.8%	\$ 378,269	14.0%	9,336	2.5%
Private Fire Service	58,220	2.2%	\$ 77,578	3.1%	\$ 58,220	2.2%	(19,358)	-25.0%
Public Fire Service	-	0.0%	-	0.0%	-	0.0%	-	0.0%
Total Sales	2,702,890	<u>100.0%</u>	2,486,851	<u>100.0%</u>	2,702,890	<u>100.0%</u>	216,039	8.7%
Other Revenues	35,720		35,720		35,720		-	0.0%
Total	<u>\$ 2,738,610</u>		<u>\$ 2,522,571</u>		<u>\$ 2,738,610</u>		<u>\$ 216,039</u>	8.6%
True-Up Estimate	\$45,605				\$45,605		\$45,605	
Total w/ True-up	<u>2,784,215</u>				<u>\$ 2,784,215</u>		<u>\$ 261,644</u>	10.4%

Test Year Operating Revenues at Present Rates vs Proposed Rates
12 Month Test Period Ended December 31, 2002

Missouri Public Service Commission
Company: Missouri-American Water Company
District: Mexico

Case No. WR-2003-0500

STAFF - MEXICO

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Line #	Class/ Description	Present Pro Forma Rates		Proposed Pro Forma Rates		Dollar Change	Percentage Change
		Sales ('000 Gal)	Total Revenue	Sales ('000 Gal)	Total Revenue		
1							
2	Monthly Billing:						
3							
4	Residential	241,446	\$1,197,432	241,446	\$1,427,738	\$230,306	19.23%
5	Commercial	102,885	348,742	102,885	365,187	16,445	4.72%
6	Industrial	115,433	301,415	115,433	281,004	(20,411)	-6.77%
7	Other Public Authority	63,028	192,751	63,028	192,472	(279)	-0.14%
8	Other Water Utilities	140,224	368,933	140,224	378,269	9,336	2.53%
9	Miscellaneous	0	0	0	0	0	0.00%
10	Private Fire	0	77,578	0	58,220	(19,358)	-24.95%
11	Public Fire	0	0	0	0	0	0.00%
12	Total	<u>663,016</u>	<u>2,486,851</u>	<u>663,016</u>	<u>2,702,890</u>	<u>\$216,039</u>	<u>8.69%</u>
13							
14							
15	Miscellaneous Revenues:						
16							
17	Reconnect Charges		5,455		5,455	0	0.00%
18	Returned Check Charge		720		720	0	0.00%
19	Application Fee		22,800		22,800	0	0.00%
20	Miscellaneous Other Revenue		6,745		5,835	(910)	-13.50%
21	Rents from Water Property		0		0	0	0.00%
22							
23							
24			<u>\$2,522,571</u>		<u>\$2,737,700</u>	<u>215,129</u>	<u>8.53%</u>
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Test Year Operating Revenues at Present Rates vs Proposed Rates
12 Month Test Period Ended December 31, 2002

Missouri Public Service Commission
Company: Missouri-American Water Company
District: Mexico

Case No. WR-2003-0500

STAFF - MEXICO

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Line #	Class/ Description	Present Pro Forma Rates				Proposed Pro Forma Rates				Dollar Change	Percentage Change
		Customer Meter Billings	Sales (^{'000} Gal)	Current Rate	Total Revenue	Customer Meter Billings	Sales (^{'000} Gal)	Proposed Rate	Total Revenue		
1											
2	Residential:										
3	<u>Minimum Charge:</u>										
4	5/8" Monthly	51,430		\$7.08	\$364,124	51,430		\$ 13.34	\$686,266	\$322,142	88.47%
5	3/4" Monthly	12		9.06	\$109	12		\$ 13.70	\$164	56	51.24%
6	1" Monthly	157		12.84	\$2,016	157		\$ 15.25	\$2,394	378	18.74%
7	1-1/2" Monthly	0		22.33	\$0	0		\$ 19.97	\$0	0	0.00%
8	2" Monthly	12		33.71	\$405	12		\$ 23.81	\$286	(119)	-29.37%
9	3" Monthly	0		60.24	\$0	0		\$ 45.73	\$0	0	0.00%
10	4" Monthly	0		98.15	\$0	0		\$ 58.99	\$0	0	0.00%
11	6" Monthly	0		192.93	\$0	0		\$ 90.37	\$0	0	0.00%
12	8" Monthly	0		306.65	\$0	0		\$ 184.73	\$0	0	0.00%
13	10" Monthly	0		520.92	\$0	0		0.00	\$0	0	0.00%
14	12" Monthly	0		859.27	\$0	0		0.00	\$0	0	0.00%
15											
16											
17	<u>Volumetric Charges:</u>										
18	First Block		226,774	\$3.5671	808,926		226,774	\$3.0592	693,744	(115,182)	-14.24%
19	Second Block		3,773	1.9983	7,540		3,773	3.0592	11,542	4,003	53.09%
20	Third Block		5,947	1.5421	9,171		5,947	3.0592	18,193	9,022	98.38%
21	Fourth Block		4,952	1.0385	5,143		4,952	3.0592	15,149	10,006	194.58%
22											
23											
24	Total		<u>241,446</u>		<u>\$1,197,432</u>		<u>241,446</u>		<u>\$1,427,738</u>	<u>\$230,306</u>	<u>19.23%</u>

Test Year Operating Revenues at Present Rates vs Proposed Rates
12 Month Test Period Ended December 31, 2002

Missouri Public Service Commission
 Company: Missouri-American Water Company
 District: Mexico

Case No. WR-2003-0500

STAFF - MEXICO

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Line #	Class/ Description	Present Pro Forma Rates				Proposed Pro Forma Rates				Dollar Change	Percentage Change
		Customer Meter Billings	Sales ('000 Gal)	Current Rate	Total Revenue	Customer Meter Billings	Sales ('000 Gal)	Proposed Rate	Total Revenue		
1											
2	Commercial:										
3	<u>Minimum Charge:</u>										
4	5/8" Monthly	4,119		\$7.08	\$29,163	4,119		\$ 13.34	\$54,963	\$25,800	88.47%
5	3/4" Monthly	82		9.06	743	82		\$ 13.70	1,124	381	51.28%
6	1" Monthly	917		12.84	11,774	917		\$ 15.25	13,981	2,207	18.74%
7	1-1/2" Monthly	10		22.33	223	10		\$ 19.97	200	(23)	-10.31%
8	2" Monthly	463		33.71	15,608	463		\$ 23.81	11,024	(4,584)	-29.37%
9	3" Monthly	15		60.24	904	15		\$ 45.73	686	(218)	-24.12%
10	4" Monthly	0		98.15	0	0		\$ 58.99	0	0	0.00%
11	6" Monthly	10		192.93	1,929	10		\$ 90.37	904	(1,025)	-53.14%
12	8" Monthly	0		306.65	0	0		\$ 184.73	0	0	0.00%
13	10" Monthly	0		520.92	0	0		0.00	0	0	0.00%
14	12" Monthly	0		859.27	0	0		0.00	0	0	0.00%
15											
16											
17	<u>Volumetric Charges:</u>										
18	First Block		77,884	\$3.1385	244,439		77,884	\$2.7439	213,705	(30,734)	-12.57%
19	Second Block		25,001	1.7583	43,959		25,001	2.7439	68,600	24,641	56.05%
20	Third Block		0	1.3568	0		0	2.7439	0	0	0.00%
21	Fourth Block		0	0.9137	0		0	2.7439	0	0	0.00%
22											
23											
24	Total		<u>102,885</u>		<u>\$348,742</u>		<u>102,885</u>		<u>\$365,187</u>	<u>\$16,445</u>	<u>4.72%</u>
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Test Year Operating Revenues at Present Rates vs Proposed Rates
12 Month Test Period Ended December 31, 2002

Missouri Public Service Commission
Company: Missouri-American Water Company
District: Mexico

Case No. WR-2003-0500

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Line #	Class/ Description	Present Pro Forma Rates				Proposed Pro Forma Rates				Dollar Change	Percentage Change
		Customer Meter Billings	Sales (^{'000} Gal)	Current Rate	Total Revenue	Customer Meter Billings	Sales (^{'000} Gal)	Proposed Rate	Total Revenue		
1											
2	Industrial:										
3	<u>Minimum Charge:</u>										
4	5/8" Monthly	12		\$7.08	\$85	12		\$ 13.34	\$160	\$75	88.24%
5	3/4" Monthly	0		9.06	0	0		\$ 13.70	0	0	0.00%
6	1" Monthly	59		12.84	758	59		\$ 15.25	900	142	18.73%
7	1-1/2" Monthly	0		22.33	0	0		\$ 19.97	0	0	0.00%
8	2" Monthly	72		33.71	2,427	72		\$ 23.81	1,714	(713)	-29.38%
9	3" Monthly	0		60.24	0	0		\$ 45.73	0	0	0.00%
10	4" Monthly	47		98.15	4,613	47		\$ 58.99	2,773	(1,840)	-39.89%
11	6" Monthly	46		192.93	8,875	46		\$ 90.37	4,157	(4,718)	-53.16%
12	8" Monthly	0		306.65	0	0		\$ 184.73	0	0	0.00%
13	10" Monthly	0		520.92	0	0		0.00	0	0	0.00%
14	12" Monthly	0		859.27	0	0		0.00	0	0	0.00%
15											
16											
17	<u>Volumetric Charges:</u>										
18	First Block		10,202	\$4.6869	47,816		10,202	\$2.3503	23,978	(23,838)	-49.85%
19	Second Block		41,719	2.6256	109,537		41,719	\$2.3503	98,051	(11,486)	-10.49%
20	Third Block		61,412	2.0263	124,439		61,412	\$2.3503	144,336	19,897	15.99%
21	Fourth Block		2,100	1.3645	2,865		2,100	\$2.3503	4,935	2,070	72.25%
22											
23											
24	Total		<u>115,433</u>		<u>\$301,415</u>		<u>115,433</u>		<u>\$281,004</u>	<u>(\$20,411)</u>	<u>-6.77%</u>
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Test Year Operating Revenues at Present Rates vs Proposed Rates
12 Month Test Period Ended December 31, 2002

Missouri Public Service Commission
 Company: Missouri-American Water Company
 District: Mexico

Case No. WR-2003-0500

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Line #	Class/ Description	Present Pro Forma Rates				Proposed Pro Forma Rates				Dollar Change	Percentage Change
		Customer Meter Billings	Sales (^{'000} Gal)	Current Rate	Total Revenue	Customer Meter Billings	Sales (^{'000} Gal)	Proposed Rate	Total Revenue		
1											
2	Other Public Authority:										
3	<u>Minimum Charge:</u>										
4	5/8" Monthly	415		\$7.08	\$2,938	415		\$ 13.34	\$5,538	\$2,600	88.50%
5	3/4" Monthly	18		9.06	163	18		\$ 13.70	247	84	51.53%
6	1" Monthly	228		12.84	2,928	228		\$ 15.25	3,476	548	18.72%
7	1-1/2" Monthly	0		22.33	0	0		\$ 19.97	0	0	0.00%
8	2" Monthly	440		33.71	14,832	440		\$ 23.81	10,477	(4,355)	-29.36%
9	3" Monthly	36		60.24	2,169	36		\$ 45.73	1,646	(523)	-24.11%
10	4" Monthly	12		98.15	1,178	12		\$ 58.99	708	(470)	-39.90%
11	6" Monthly	0		192.93	0	0		\$ 90.37	0	0	0.00%
12	8" Monthly	0		306.65	0	0		\$ 184.73	0	0	0.00%
13	10" Monthly	0		520.92	0	0		0.00	0	0	0.00%
14	12" Monthly	0		859.27	0	0		0.00	0	0	0.00%
15											
16											
17	<u>Volumetric Charges:</u>										
18	First Block		32,830	\$3.3880	111,228		32,830	\$2.7033	88,748	(22,480)	-20.21%
19	Second Block		30,198	1.8980	57,315		30,198	\$2.7033	81,632	24,317	42.43%
20	Third Block		0	1.4647	0		0	\$2.7033	0	0	0.00%
21	Fourth Block		0	0.9864	0		0	\$2.7033	0	0	0.00%
22											
23											
24	Total		<u>63,028</u>		<u>\$192,751</u>		<u>63,028</u>		<u>\$192,472</u>	<u>(\$279)</u>	<u>-0.14%</u>
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Test Year Operating Revenues at Present Rates vs Proposed Rates
12 Month Test Period Ended December 31, 2002

Missouri Public Service Commission
Company: Missouri-American Water Company
District: Mexico

Case No. WR-2003-0500

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Line #	Class/ Description	Present Pro Forma Rates				Proposed Pro Forma Rates				Dollar Change	Percentage Change
		Customer Meter Billings	Sales (^{'000} Gal)	Current Rate	Total Revenue	Customer Meter Billings	Sales (^{'000} Gal)	Proposed Rate	Total Revenue		
1											
2	Other Water Utilities:										
3	<u>Minimum Charge:</u>										
4	5/8" Monthly	0		\$7.08	\$0	0		\$ 13.34	\$0	\$0	0.00%
5	3/4" Monthly	0		9.06	0	0		\$ 13.70	0	0	0.00%
6	1" Monthly	0		12.84	0	0		\$ 15.25	0	0	0.00%
7	1-1/2" Monthly	0		22.33	0	0		\$ 19.97	0	0	0.00%
8	2" Monthly	48		33.71	1,618	48		\$ 23.81	1,143	(475)	-29.36%
9	3" Monthly	24		60.24	1,446	24		\$ 45.73	1,097	(349)	-24.14%
10	4" Monthly	0		98.15	0	0		\$ 58.99	0	0	0.00%
11	6" Monthly	0		192.93	0	0		\$ 90.37	0	0	0.00%
12	8" Monthly	0		306.65	0	0		\$ 184.73	0	0	0.00%
13	10" Monthly	0		520.92	0	0		0.00	0	0	0.00%
14	12" Monthly	0		859.27	0	0		0.00	0	0	0.00%
15											
16											
17	<u>Volumetric Charges:</u>										
18	First Block		2,412	\$5.8143	14,024		2,412	\$2.6816	6,468	(7,556)	-53.88%
19	Second Block		45,594	3.2572	148,509		45,594	2.6816	122,266	(26,243)	-17.67%
20	Third Block		57,544	2.5136	144,642		57,544	2.6816	154,311	9,669	6.68%
21	Fourth Block		34,675	1.6927	58,694		34,675	2.6816	92,984	34,290	58.42%
22											
23											
24	Total		<u>140,224</u>		<u>\$368,933</u>		<u>140,224</u>		<u>\$378,269</u>	<u>\$9,336</u>	<u>2.53%</u>

Test Year Operating Revenues at Present Rates vs Proposed Rates
12 Month Test Period Ended December 31, 2002

Missouri Public Service Commission
Company: Missouri-American Water Company
District: Mexico

Case No. WR-2003-0500
STAFF - MEXICO
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Line #	Class/ Description	Present Pro Forma Rates				Proposed Pro Forma Rates				Dollar Change	Percentage Change
		Customer Meter Billings	Sales (⁰⁰⁰ Gal)	Current Rate	Total Revenue	Customer Meter Billings	Sales (⁰⁰⁰ Gal)	Proposed Rate	Total Revenue		
1											
2	Miscellaneous:										
3	<u>Minimum Charge:</u>										
4	5/8" Monthly	0		\$7.08	\$0	0		\$ 13.34	\$0	\$0	0.00%
5	3/4" Monthly	0		9.06	0	0		\$ 13.70	0	0	0.00%
6	1" Monthly	0		12.84	0	0		\$ 15.25	0	0	0.00%
7	1-1/2" Monthly	0		22.33	0	0		\$ 19.97	0	0	0.00%
8	2" Monthly	0		33.71	0	0		\$ 23.81	0	0	0.00%
9	3" Monthly	0		60.24	0	0		\$ 45.73	0	0	0.00%
10	4" Monthly	0		98.15	0	0		\$ 58.99	0	0	0.00%
11	6" Monthly	0		192.93	0	0		\$ 90.37	0	0	0.00%
12	8" Monthly	0		306.65	0	0		\$ 184.73	0	0	0.00%
13	10" Monthly	0		520.92	0	0		0.00	0	0	0.00%
14	12" Monthly	0		859.27	0	0		0.00	0	0	0.00%
15											
16											
17	<u>Volumetric Charges:</u>										
18	First Block		0	\$0.0000	0		0	\$0.0000	0	0	0.00%
19	Second Block		0	0.0000	0		0	0.0000	0	0	0.00%
20	Third Block		0	0.0000	0		0	0.0000	0	0	0.00%
21	Fourth Block		0	0.0000	0		0	0.0000	0	0	0.00%
22											
23											
24	Total		<u>0</u>		<u>\$0</u>		<u>0</u>		<u>\$0</u>	<u>\$0</u>	<u>0.00%</u>
25											
26											
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39											
40											

Test Year Operating Revenues at Present Rates vs Proposed Rates
12 Month Test Period Ended December 31, 2002

Missouri Public Service Commission
 Company: Missouri-American Water Company
 District: Mexico

Case No. WR-2003-0500

STAFF - MEXICO

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Line #	Connection Size	Number of Connections	Present Rates		Proposed Rates		Dollar Change	Percentage Change
			Annual Rate	Total Revenue	Annual Rate	Total Revenue		
1								
2	Private Fire Service:							
3								
4	Private Fire Hydrant	7	\$1,077.24	\$7,541	808.43	\$5,659	(\$1,882)	-24.96%
5								
6	2"	1	154.44	154	115.90	116	(38)	-24.68%
7								
8	3"	0	265.32	0	199.11	0	0	0.00%
9								
10	4"	10	420.84	4,208	315.83	3,158	(1,050)	-24.95%
11								
12	6"	19	863.16	16,400	647.77	12,308	(4,092)	-24.95%
13								
14	8"	11	1,485.36	16,339	1,114.72	12,262	(4,077)	-24.95%
15								
16	10"	13	2,283.12	29,681	1,713.41	22,274	(7,407)	-24.96%
17								
18	12"	1	3,255.36	3,255	2,443.04	2,443	(812)	-24.95%
19								
20								
21								
22	Total	<u>62</u>		<u>\$77,578</u>		<u>\$58,220</u>	<u>(\$19,358)</u>	<u>-24.95%</u>
23								
24								
25								
26	Public Fire Protection:							
27								
28	Public Fire Hydrants	<u>501</u>	0.00	<u>0</u>	0.00	<u>0</u>	<u>0</u>	<u>0.00%</u>
29								
30								

MISSOURI-AMERICAN WATER COMPANY
MEXICO DISTRICT
COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS
PSC STAFF STUDY

Account (1)	Factor Ref. (2)	Cost of Service (3)	Residential (4)	Commercial (5)	Industrial (6)	Public Authorities (7)	Sales for Resale (8)	Fire Protection		
								Private (9)	Public (10)	
OPERATION AND MAINTENANCE EXPENSES										
SOURCE OF SUPPLY EXPENSES										
Super & Eng Oper SS	2	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0.0
Labor & Exp Oper SS	2	40,302	15,452	6,102	6,295	3,736	8,713	0	4	0.0
Labor & Exp Oper SS	2	658	252	100	103	61	142	0	0	0.0
Purchased Water	1	0	0	0	0	0	0	0	0	0.0
TOTAL SS EXPENSE - OPERATION		40,960	15,704	6,201	6,398	3,797	8,856	0	4	0.0
Misc Exp Oper SS	2	47,690	18,284	7,220	7,449	4,421	10,311	0	5	0.0
Misc Exp Oper SS	2	1,013	388	153	158	94	219	0	0	0.0
Rents Oper SS	2	0	0	0	0	0	0	0	0	0.0
Super & Eng Maint SS	2	0	0	0	0	0	0	0	0	0.0
Struct & Improve Maint SS	2	0	0	0	0	0	0	0	0	0.0
Struct & Improve Maint SS	2	28	11	4	4	3	6	0	0	0.0
Collect & Impound Maint SS	2	0	0	0	0	0	0	0	0	0.0
Lake, River & Oth Maint SS	2	0	0	0	0	0	0	0	0	0.0
Lake, River & Oth Maint SS	2	0	0	0	0	0	0	0	0	0.0
Wells & Springs Maint SS	2	0	0	0	0	0	0	0	0	0.0
Wells & Springs Maint SS	2	0	0	0	0	0	0	0	0	0.0
Infiltr Gall & Tunnels Maint SS	2	0	0	0	0	0	0	0	0	0.0
Supply Mains Maint SS	2	0	0	0	0	0	0	0	0	0.0
Misc Plant Maint SS	2	0	0	0	0	0	0	0	0	0.0
Misc Plant Maint SS	2	2,963	1,136	449	463	275	641	0	0	0.0
TOTAL SS EXPENSE - MAINTENANCE		51,694	19,819	7,826	8,075	4,792	11,176	0	5	0.0
TOTAL SS EXPENSE		92,654	35,524	14,028	14,473	8,589	20,032	0	9	0.0
POWER AND PUMPING EXPENSES										
Super & Eng Oper P	6	0	0	0	0	0	0	0	0	0.0
Fuel for Power Prod	1	0	0	0	0	0	0	0	0	0.0
Labor & Exp Oper Pwr Prod	6	1,148	440	174	179	106	248	0	0	0.0
Labor & Exp Oper Pwr Prod	6	0	0	0	0	0	0	0	0	0.0
Purch Fuel/Power for Pump	1	94,868	34,532	14,724	16,517	9,022	20,065	0	9	0.0
Labor & Exp Oper Pump	6	0	0	0	0	0	0	0	0	0.0
Labor & Exp Oper Pump	6	52	20	8	8	5	11	0	0	0.0
Expenses Transferred	6	0	0	0	0	0	0	0	0	0.0
Misc Exp Oper P	6	324	124	49	51	30	70	0	0	0.0
Rents Oper P	6	40	15	6	6	4	9	0	0	0.0
TOTAL PUMPING EXPENSE - OPERATION		96,432	35,132	14,960	16,761	9,167	20,403	0	10	0.0

MISSOURI-AMERICAN WATER COMPANY
MEXICO DISTRICT
COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS
PSC STAFF STUDY

Account (1)	Factor Ref. (2)	Cost of Service (3)	Residential (4)	Commercial (5)	Industrial (6)	Public Authorities (7)	Sales for Resale (8)	Fire Protection		
								Private (9)	Public (10)	
Super & Eng Maint P	6	0	0	0	0	0	0	0	0	0.0
Struct & Improve Maint P	6	0	0	0	0	0	0	0	0	0.0
Power Prod Equip Maint P	6	0	0	0	0	0	0	0	0	0.0
Pump Equip Maint P	6	0	0	0	0	0	0	0	0	0.0
Pump Equip Maint P	6	0	0	0	0	0	0	0	0	0.0
TOTAL PUMPING EXPENSES - MAINTENANCE		0	0	0	0	0	0	0	0	0.0
TOTAL PUMPING EXPENSES		96,432	35,132	14,960	16,761	9,167	20,403	0	10	0.0
WATER TREATMENT										0.0
Super & Eng Oper WT	2	0	0	0	0	0	0	0	0	0.0
Chemicals	1	55,654	20,258	8,638	9,689	5,293	11,771	0	6	0.0
Labor & Exp Oper WT	2	12,898	4,945	1,953	2,015	1,196	2,789	0	1	0.0
Labor & Exp Oper WT	2	345	132	52	54	32	75	0	0	0.0
Misc Exp Oper WT	2	0	0	0	0	0	0	0	0	0.0
Misc Exp Oper WT	1	21,934	7,984	3,404	3,819	2,086	4,639	0	2	0.0
Misc Exp Oper WT	2	14,266	5,470	2,160	2,228	1,322	3,084	0	1	0.0
Rents Oper WT	2	(3)	(1)	(0)	(0)	(0)	(1)	0	(0)	0.0
TOTAL WT EXPENSE - OPERATION		105,094	38,788	16,206	17,805	9,928	22,357	0	11	0.0
Super & Eng Maint WT	2	0	0	0	0	0	0	0	0	0.0
Struct & Improve Maint WT	2	0	0	0	0	0	0	0	0	0.0
Struct & Improve Maint WT	2	0	0	0	0	0	0	0	0	0.0
WT Equip Maint WT	2	0	0	0	0	0	0	0	0	0.0
WT Equip Maint WT	2	11,505	4,411	1,742	1,797	1,067	2,487	0	1	0.0
TOTAL WT EXPENSE - MAINTENANCE		11,505	4,411	1,742	1,797	1,067	2,487	0	1	0.0
TOTAL WT EXPENSE		116,599	43,199	17,948	19,602	10,995	24,844	0	12	0.0
TRANSMISSION AND DISTRIBUTION EXPENSES										0.0
Super & Eng Oper TD	11	0	0	0	0	0	0	0	0	0.0
Storage Facility Exp	5	0	0	0	0	0	0	0	0	0.0
Storage Facility Exp	5	1,314	457	156	119	96	250	48	188	0.0
TD Lines Exp	7	77,048	23,530	8,059	6,141	4,931	12,859	4,384	17,143	0.0
TD Lines Exp	7	5,596	1,709	585	446	358	934	318	1,245	0.0
Meter Expense	9	179	135	22	10	10	2	0	0	0.0
Meter Expense	9	152	114	19	9	8	1	0	0	0.0
Customer Install Exp	10	5,455	4,379	536	47	147	14	332	0	0.0
Customer Install Exp	10	0	0	0	0	0	0	0	0	0.0
Misc Exp Oper TD	11	835	282	87	63	52	131	47	173	0.0
Misc Exp Oper TD	11	225	76	24	17	14	35	13	47	0.0

MISSOURI-AMERICAN WATER COMPANY
MEXICO DISTRICT
COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS
PSC STAFF STUDY

Account (1)	Factor Ref. (2)	Cost of Service (3)	Residential (4)	Commercial (5)	Industrial (6)	Public Authorities (7)	Sales for Resale (8)	Fire Protection Private (9)	Public (10)	
Misc Exp Oper TD	11	1,567	529	164	118	97	246	89	324	0.0
Rents Oper TD	11	851	288	89	64	53	133	48	176	0.0
TOTAL T & D EXPENSE OPERATION		93,222	31,500	9,741	7,035	5,765	14,605	5,280	19,297	0.0
Super & Eng Maint TD	12	1	1	0	0	0	0	0	0	0.0
Struct & Improve Maint TD	12	1,709	1,372	168	15	46	4	104	0	0.0
Struct & Improve Maint TD	12	0	0	0	0	0	0	0	0	0.0
Dist Res Stand Maint TD	5	0	0	0	0	0	0	0	0	0.0
TD Main Maint TD	7	0	0	0	0	0	0	0	0	0.0
TD Main Maint TD	7	0	0	0	0	0	0	0	0	0.0
Fire Main Maint TD	8	0	0	0	0	0	0	0	0	0.0
Services Maint TD	10	4,374	3,511	430	38	118	11	266	0	0.0
Services Maint TD	10	0	0	0	0	0	0	0	0	0.0
Meters Maint TD	9	0	0	0	0	0	0	0	0	0.0
Meters Maint TD	9	0	0	0	0	0	0	0	0	0.0
Hydrants Maint TD	8	0	0	0	0	0	0	0	0	0.0
Hydrants Maint TD	8	0	0	0	0	0	0	0	0	0.0
Misc Plant Maint TD	12	600	482	59	5	16	2	37	0	0.0
Mat and Sup Maint TD	12	126,027	101,174	12,376	1,096	3,390	315	7,675	0	0.0
Misc Maint TD	12	0	0	0	0	0	0	0	0	0.0
Amort Def Maint TD	5	0	0	0	0	0	0	0	0	0.0
TOTAL T & D EXPENSE - MAINTENANCE		132,711	106,540	13,032	1,155	3,570	332	8,082	0	0.0
TOTAL T & D EXPENSE		225,933	138,040	22,773	8,190	9,335	14,936	13,362	19,297	0.0
CUSTOMER ACCOUNTS										0.0
Supervision CA	13	380	330	36	2	7	0	5	0	0.0
Meter Reading Exp CA	14	29,998	26,383	2,871	120	588	36	0	0	0.0
Meter Reading Exp CA	14	493	434	47	2	10	1	0	0	0.0
Meter Reading Exp CA	14	0	0	0	0	0	0	0	0	0.0
Cust Rec & Collection CA	13	11,735	10,192	1,109	47	226	14	147	0	0.0
Cust Rec & Collection CA	13	17,143	14,889	1,620	69	331	21	214	0	0.0
Uncollectible Accts	13	31,492	27,351	2,976	126	608	38	394	0	0.0
Misc Cust Accts Exp CA	13	825	717	78	3	16	1	10	0	0.0
Misc Cust Accts Exp CA	13	0	0	0	0	0	0	0	0	0.0
Misc Cust Accts Exp CA	13	3,519	3,056	333	14	68	4	44	0	0.0
Cust Serv & Info Exp CA	13	36,599	31,786	3,459	146	706	44	457	0	0.0
TOTAL CUSTOMER ACCOUNTING EXPENSE		132,184	115,137	12,528	529	2,560	159	1,271	0	0.0

MISSOURI-AMERICAN WATER COMPANY
MEXICO DISTRICT
COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS
PSC STAFF STUDY

Account (1)	Factor Ref. (2)	Cost of Service (3)	Residential (4)	Commercial (5)	Industrial (6)	Public Authorities (7)	Sales for Resale (8)	Fire Protection Private (9)	Public (10)	
ADMINISTRATIVE AND GENERAL EXPENSES										
Salaries AG	15	143,774	89,039	16,232	8,641	7,088	12,839	4,284	5,650	0.0
Other Supplies & Exp AG	15	1,053	652	119	63	52	94	31	41	0.0
Other Supplies & Exp AG	15	38,010	23,540	4,291	2,284	1,874	3,394	1,133	1,494	0.0
Other Supplies & Exp AG	15	12,152	7,526	1,372	730	599	1,085	362	478	0.0
Mgmt Fees-Corporate/Shared Service Center	15	85,499	52,950	9,653	5,138	4,215	7,635	2,548	3,360	0.0
Mgmt Fees-Call Center	13	46,090	40,029	4,356	184	890	55	576	0	0.0
Mgmt Fees-Belleville Lab	2	22,152	8,493	3,354	3,460	2,053	4,789	0	2	0.0
Mgmt Fees- Financial ITS	15	4,486	2,778	506	270	221	401	134	176	0.0
Mgmt Fees- Customer Billings ITS	13	25,326	21,996	2,393	101	489	30	317	0	0.0
Mgmt Fees-Other ITS	15	285	177	32	17	14	25	8	11	0.0
Outside Services AG	15	28,729	17,792	3,244	1,727	1,416	2,565	856	1,129	0.0
Outside Services AG	15	0	0	0	0	0	0	0	0	0.0
Property Insurance	15	16,384	10,147	1,850	985	808	1,463	488	644	0.0
Ins Gen Liab Oper AG	15	0	0	0	0	0	0	0	0	0.0
Ins Work Comp AG	16	8,723	4,771	999	622	482	992	253	605	0.0
Ins Other Oper AG	15	0	0	0	0	0	0	0	0	0.0
Property Insurance	15	12,527	7,758	1,414	753	618	1,119	373	492	0.0
Injuries & Damages	16	247	135	28	18	14	28	7	17	0.0
Employee Pension & Benefits	16	128,434	70,253	14,706	9,157	7,090	14,603	3,725	8,900	0.0
Employee Pension & Benefits	16	0	0	0	0	0	0	0	0	0.0
Employee Pension & Benefits	16	0	0	0	0	0	0	0	0	0.0
Reg Commision Exp	15	3,026	1,874	342	182	149	270	90	119	0.0
Rents AG	15	13,085	8,091	1,475	785	644	1,167	389	513	0.0
Goodwill Advertising Exp	15	0	0	0	0	0	0	0	0	0.0
Misc Exp AG	15	6,467	4,005	730	389	319	578	193	254	0.0
Research & Development	15	0	0	0	0	0	0	0	0	0.0
TOTAL A & G OPERATIONS		596,429	372,005	67,095	35,507	29,034	53,133	15,768	23,887	0.0
General Plant Maint AG	15	0	0	0	0	0	0	0	0	0.0
General Plant Maint AG	15	2,733	1,693	309	164	135	244	81	107	0.0
TOTAL A & G EXPENSE - MAINTENANCE		2,733	1,693	309	164	135	244	81	107	0.0
TOTAL A & G EXPENSE		599,162	373,698	67,404	35,671	29,168	53,377	15,849	23,994	0.0
Total Operation & Maintenance Expenses		1,262,964	740,730	149,641	95,224	69,814	133,751	30,482	43,321	0.0

MISSOURI-AMERICAN WATER COMPANY
MEXICO DISTRICT
COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS
PSC STAFF STUDY

Account (1)	Factor Ref. (2)	Cost of Service (3)	Residential (4)	Commercial (5)	Industrial (6)	Public Authorities (7)	Sales for Resale (8)	Fire Protection		
								Private (9)	Public (10)	
DEPRECIATION EXPENSE										
Struct & Imp SS	2	1,364	523	207	213	126	295	0	0	0.0
Struct & Imp P	6	608	233	92	95	56	131	0	0	0.0
Struct & Imp WT	2	35,192	13,493	5,328	5,497	3,262	7,609	0	4	0.0
Struct & Imp TD	7	1,261	385	132	101	81	210	72	281	0.0
Struct & Imp Offices	15	3,059	1,894	345	184	151	273	91	120	0.0
Struct & Imp Store,Shop,Gar	15	616	381	70	37	30	55	18	24	0.0
Struct & Imp Misc	15	0	0	0	0	0	0	0	0	0.0
Collect & Impounding	1	2	1	0	0	0	0	0	0	0.0
Lake, River & Other Intakes	2	0	0	0	0	0	0	0	0	0.0
Wells & Springs	2	18,661	7,155	2,825	2,915	1,730	4,035	0	2	0.0
Supply Mains	2	15,114	5,795	2,288	2,361	1,401	3,268	0	2	0.0
Power Generation Equip Othe	6	0	0	0	0	0	0	0	0	0.0
Pump Equip Electric	6	11,609	4,451	1,758	1,813	1,076	2,510	0	1	0.0
Pump Equip Diesel	6	0	0	0	0	0	0	0	0	0.0
Pump Equip Other	6	757	290	115	118	70	164	0	0	0.0
WT Equip Non-Media	2	45,745	17,539	6,926	7,145	4,241	9,890	0	5	0.0
Dist Reservoirs & Standpipe	5	5,624	1,956	669	510	409	1,068	206	806	0.0
Elevated Tanks & Standpipes	5	372	129	44	34	27	71	14	53	0.0
Ground Level Facilities	5	0	0	0	0	0	0	0	0	0.0
TD Mains Not Classified by	4	35,452	10,827	3,708	2,826	2,269	5,917	2,017	7,888	0.0
TD Mains 4 & Less "	4	938	286	98	75	60	157	53	209	0.0
TD Mains 6 to 8" "	4	9,527	2,910	997	759	610	1,590	542	2,120	0.0
TD Mains 10 to 16" "	3	3,564	1,281	506	522	310	722	45	178	0.0
TD Mains 18 & Grtr "	3	0	0	0	0	0	0	0	0	0.0
Fire Mains	8	403	0	0	0	0	0	0	403	0.0
Services	10	24,491	19,661	2,405	213	659	61	1,492	0	0.0
Meters Bronze Case	9	3,405	2,563	425	199	186	33	0	0	0.0
Meters Plastic Case	9	0	0	0	0	0	0	0	0	0.0
Meters Other	9	4,041	3,041	504	236	221	39	0	0	0.0
Meters Other-Rem Rdr Unts	9	0	0	0	0	0	0	0	0	0.0
Meter Installations	9	12,922	9,725	1,611	756	706	124	0	0	0.0
Meter Installation Other	9	0	0	0	0	0	0	0	0	0.0
Hydrants	8	4,491	0	0	0	0	0	0	4,491	0.0
Utility Plant Acquisition Adjustment	17	0	0	0	0	0	0	0	0	0.0
Other P/E WT Res Hand Equip	2	441	169	67	69	41	95	0	0	0.0
Other P/E TD	7	124	38	13	10	8	21	7	28	0.0
Other P/E CPS	15	0	0	0	0	0	0	0	0	0.0
Office Furniture & Equip	15	(86)	(53)	(10)	(5)	(4)	(8)	(3)	(3)	0.0
Comp & Periph Equip	15	2,560	1,585	289	154	126	229	76	101	0.0
Computer Software	15	0	0	0	0	0	0	0	0	0.0

MISSOURI-AMERICAN WATER COMPANY
MEXICO DISTRICT
COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS
PSC STAFF STUDY

Account (1)	Factor Ref. (2)	Cost of Service (3)	Residential (4)	Commercial (5)	Industrial (6)	Public Authorities (7)	Sales for Resale (8)	Fire Protection Private (9)	Public (10)	
Comp Software Personal	15	0	0	0	0	0	0	0	0	0.0
Data Handling Equipment	15	561	347	63	34	28	50	17	22	0.0
Other Office Equipment	15	0	0	0	0	0	0	0	0	0.0
Trans Equip Lt Duty Trks	15	5,463	3,383	617	328	269	488	163	215	0.0
Trans Equip Hvy Duty Trks	15	0	0	0	0	0	0	0	0	0.0
Trans Equip Autos	15	4,727	2,927	534	284	233	422	141	186	0.0
Trans Equip Other	15	0	0	0	0	0	0	0	0	0.0
Stores Equipment	15	251	155	28	15	12	22	7	10	0.0
Tools,Shop,Garage Equip	15	1,675	1,037	189	101	83	150	50	66	0.0
Tools,Shop,Garage Equip Oth	15	0	0	0	0	0	0	0	0	0.0
Laboratory Equipment	2	366	140	55	57	34	79	0	0	0.0
Laboratory Equip Other	2	0	0	0	0	0	0	0	0	0.0
Power Operated Equipment	15	952	590	107	57	47	85	28	37	0.0
Comm Equip Non-Telephone	15	723	448	82	43	36	65	22	28	0.0
Comm Equip Telephone	15	132	82	15	8	7	12	4	5	0.0
Misc Equipment	15	123	76	14	7	6	11	4	5	0.0
Total Depreciation Expense		257,230	115,445	33,115	27,771	18,606	39,942	5,066	17,285	
Amort-Other UP, Depr Ciac,COR	18	112,615	47,163	14,809	13,142	8,581	19,122	2,061	7,737	
Taxes Other Than Income										
Utility Reg Assessment Fee	19	14,985	7,506	1,873	1,442	988	2,071	318	788	
Property Taxes	18	129,752	54,340	17,062	15,142	9,887	22,032	2,374	8,914	
FUTA	16	616	337	71	44	34	70	18	43	0.0
FICA	16	24,874	13,606	2,848	1,774	1,373	2,828	721	1,724	0.0
SUTA	16	0	0	0	0	0	0	0	0	0.0
Other Taxes & Licenses	15	5,047	3,126	570	303	249	451	150	198	0.0
Gross Receipts Tax	19	0	0	0	0	0	0	0	0	0.0
Total Taxes, Other Than Income		175,274	78,915	22,424	18,704	12,530	27,452	3,582	11,667	0.0
Income Taxes	18	205,760	86,172	27,057	24,012	15,679	34,938	3,765	14,136	0.0
Utility Income Available for Return	18	724,767	303,532	95,307	84,580	55,227	123,065	13,263	49,791	
Total Cost of Service		2,738,610	1,371,957	342,354	263,434	180,438	378,270	58,220	143,937	0.0
Less: Other Water Revenues	19	(35,720)	(35,720)	0	0	0	0	0	0	0.0
Revenue Contribution	19	0	0	0	0	0	0	0	0	0.0
Total Other Water Revenues		(35,720)	(35,720)	0	0	0	0	0	0	0.0
Total Cost of Service Related to Sales of Water		\$ 2,702,890	\$ 1,336,237	\$ 342,354	\$ 263,434	\$ 180,438	\$ 378,270	\$ 58,220	\$ 143,937	0.0

MISSOURI-AMERICAN WATER COMPANY
MEXICO DISTRICT
COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS
PSC STAFF STUDY

Account (1)	Factor Ref. (2)	Cost of Service (3)	Residential (4)	Commercial (5)	Industrial (6)	Public Authorities (7)	Sales for Resale (8)	Fire Protection Private (9)	Public (10)	
Reallocation of Public Fire	20	0	91,501	22,833	17,569	12,034	0		(143,937)	0.0
Total		<u>\$ 2,702,890</u>	<u>\$ 1,427,738</u>	<u>\$ 365,187</u>	<u>\$ 281,004</u>	<u>\$ 192,472</u>	<u>\$ 378,270</u>	<u>\$ 58,220</u>	<u>\$ -</u>	0.0
		\$ 35,720	\$ 35,720							
		<u>\$ 2,738,610</u>	<u>\$ 1,463,458</u>							

MISSOURI-AMERICAN WATER COMPANY
MEXICO DISTRICT
COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS
PSC STAFF STUDY

Account (1)	Factor Ref. (2)	Cost of Service (3)	Residential (4)	Commercial (5)	Industrial (6)	Public Authorities (7)	Sales for Resale (8)	Fire Protection Private (9)	Public (10)	
RATE BASE										0.0
Organization	17	\$ 2,303	\$ 964	\$ 303	\$ 269	\$ 175	\$ 391	\$ 42	\$ 158	0.0
Franchises	17	0	0	0	0	0	0	0	0	0.0
Land & Ld Rights SS	2	25,516	9,783	3,863	3,986	2,365	5,517	0	3	0.0
Land & Ld Rights P	6	58,808	22,547	8,904	9,186	5,452	12,714	0	6	0.0
Land & Ld Rights WT	2	13,920	5,337	2,107	2,174	1,290	3,010	0	1	0.0
Land & Ld Rights TD	7	13,336	4,073	1,395	1,063	854	2,226	759	2,967	0.0
Land & Land Rights AG	15	2,057	1,274	232	124	101	184	61	81	0.0
Struct & Imp SS	2	46,367	17,777	7,020	7,243	4,298	10,025	0	5	0.0
Struct & Imp P	6	51,886	19,893	7,856	8,105	4,810	11,218	0	5	0.0
Struct & Imp Pumps (STL)	6	0	0	0	0	0	0	0	0	0.0
Struct & Imp Pump Boosters	6	0	0	0	0	0	0	0	0	0.0
Struct & Imp WT	2	2,883,517	1,105,540	436,564	450,405	267,302	623,416	0	288	0.0
Struct & Imp WT Nth Plt (ST	2	0	0	0	0	0	0	0	0	0.0
Struct & Imp WT Ctrl Plt 1	2	0	0	0	0	0	0	0	0	0.0
Struct & Imp WT Ctrl Plt 3	2	0	0	0	0	0	0	0	0	0.0
Struct & Imp WT Sth Plt (ST	2	0	0	0	0	0	0	0	0	0.0
Struct & Imp WT Meramec (ST	2	0	0	0	0	0	0	0	0	0.0
Struct & Imp TD	7	67,436	20,595	7,054	5,375	4,316	11,255	3,837	15,005	0.0
Struct & Imp TD Spec Cross	7	0	0	0	0	0	0	0	0	0.0
Struct & Imp Offices	15	101,674	62,967	11,479	6,111	5,013	9,079	3,030	3,996	0.0
Struct & Imp Leasehold	15	0	0	0	0	0	0	0	0	0.0
Struct & Imp Leasehold	15	0	0	0	0	0	0	0	0	0.0
Struct & Imp Store,Shop,Gar	15	24,353	15,082	2,749	1,464	1,201	2,175	726	957	0.0
Struct & Imp Misc	15	0	0	0	0	0	0	0	0	0.0
Collect & Impounding	1	50	18	8	9	5	11	0	0	0.0
Lake, River & Other Intakes	2	0	0	0	0	0	0	0	0	0.0
Wells & Springs	2	711,676	272,857	107,748	111,164	65,972	153,864	0	71	0.0
Supply Mains	2	758,274	290,722	114,803	118,442	70,292	183,939	0	76	0.0
Supply Mains Nth Plt (STL)	2	0	0	0	0	0	0	0	0	0.0
Supply Mains Ctrl Plt (STL)	2	0	0	0	0	0	0	0	0	0.0
Supply Mains Sth Plt (STL)	2	0	0	0	0	0	0	0	0	0.0
Supply Mains Meramec Plt (S	2	0	0	0	0	0	0	0	0	0.0
Power Generation Equip Othe	6	0	0	0	0	0	0	0	0	0.0
Boiler Plant Equipment P	6	0	0	0	0	0	0	0	0	0.0
Pump Equip Steam	6	0	0	0	0	0	0	0	0	0.0
Pump Equip Electric	6	843,275	323,312	127,672	131,720	78,172	182,316	0	84	0.0
Pump Equip Elec Pre46 (STL)	6	0	0	0	0	0	0	0	0	0.0
Pump Equip Elec Post46 (STL	6	0	0	0	0	0	0	0	0	0.0
Pump Equip Elec Boosters Po	6	0	0	0	0	0	0	0	0	0.0
Pump Equip Diesel	6	0	0	0	0	0	0	0	0	0.0
Pump Equip Diesel Stratman)	6	0	0	0	0	0	0	0	0	0.0
Pump Equip Diesel Ctrl Plt	6	0	0	0	0	0	0	0	0	0.0
Pump Equip Hydraulic	6	0	0	0	0	0	0	0	0	0.0
Pump Equip Other	6	26,554	10,181	4,020	4,148	2,462	5,741	0	3	0.0
WT Equip Non-Media	2	2,269,540	870,142	343,608	354,502	210,386	490,675	0	227	0.0
WT Equip Non-Med North (STL	2	0	0	0	0	0	0	0	0	0.0
WT Equip Non Media Ctrl 1 &	2	0	0	0	0	0	0	0	0	0.0
WT Equip Non Media Ctrl 3 (	2	0	0	0	0	0	0	0	0	0.0
WT Equip Non Media Sth (STL	2	0	0	0	0	0	0	0	0	0.0
WT Equip Non Media Mer (STL	2	0	0	0	0	0	0	0	0	0.0
WT Equip Filter Media	2	47,417	18,180	7,179	7,407	4,396	10,252	0	5	0.0
Dist Reservoirs & Standpipe	5	215,577	74,978	25,632	19,531	15,694	40,938	7,890	30,914	0.0
Elevated Tanks & Standpipes	5	19,745	6,867	2,348	1,789	1,437	3,750	723	2,831	0.0

MISSOURI-AMERICAN WATER COMPANY
MEXICO DISTRICT
COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS
PSC STAFF STUDY

Account (1)	Factor Ref. (2)	Cost of Service (3)	Residential (4)	Commercial (5)	Industrial (6)	Public Authorities (7)	Sales for Resale (8)	Fire Protection Private (9)	Public (10)	
Ground Level Facilities	5	0	0	0	0	0	0	0	0	0.0
TD Mains Not Classified by	7	1,854,996	566,516	194,033	147,843	118,720	309,599	105,549	412,737	0.0
TD Mains 4 & Less "	4	71,639	21,879	7,493	5,710	4,585	11,957	4,076	15,940	0.0
TD Mains 6 to 8" "	4	726,448	221,857	75,986	57,898	46,493	121,244	41,335	161,635	0.0
TD Mains 10 to 16" "	3	272,166	97,844	38,620	39,845	23,651	55,168	3,457	13,581	0.0
TD Mains 18 & Grtr "	3	0	0	0	0	0	0	0	0	0.0
TD Mains AC 4 (STL) "	4	0	0	0	0	0	0	0	0	0.0
TD Mains CI <10 1900-28 (S"	4	0	0	0	0	0	0	0	0	0.0
TD Mains CI <10 1929-56 (S"	4	0	0	0	0	0	0	0	0	0.0
TD Mains CI <10 1957-93 (S"	4	0	0	0	0	0	0	0	0	0.0
TD Mains CI 12 (STL) "	3	0	0	0	0	0	0	0	0	0.0
TD Mains CI 16 (STL) "	3	0	0	0	0	0	0	0	0	0.0
TD Mains DI 6-8 (STL) "	4	0	0	0	0	0	0	0	0	0.0
TD Mains DI 12 (STL) "	3	0	0	0	0	0	0	0	0	0.0
TD Mains DI 16 & >(STL) "	3	0	0	0	0	0	0	0	0	0.0
TD Mains Galve 1 (STL) "	4	0	0	0	0	0	0	0	0	0.0
TD Mains LJ 20 (STL) "	3	0	0	0	0	0	0	0	0	0.0
Fire Mains	8	24,443	0	0	0	0	0	0	24,443	0.0
Services	10	1,142,709	917,367	112,214	9,942	30,739	2,857	69,591	0	0.0
Meters Bronze Case	9	136,318	102,593	16,999	7,975	7,443	1,309	0	0	0.0
Meters Plastic Case	9	0	0	0	0	0	0	0	0	0.0
Meters Other	9	17,355	13,061	2,164	1,015	948	167	0	0	0.0
Meters Other-Rem Rdr Units	9	0	0	0	0	0	0	0	0	0.0
Meter Installations	9	550,633	414,406	68,664	32,212	30,065	5,286	0	0	0.0
Meter Installation Other	9	0	0	0	0	0	0	0	0	0.0
Hydrants	8	228,249	0	0	0	0	0	0	228,249	0.0
Other P/E Intangible	15	0	0	0	0	0	0	0	0	0.0
Other P/E WT Res Hand Equip	2	23,527	9,020	3,562	3,675	2,181	5,087	0	2	0.0
Other P/E TD	7	6,041	1,845	632	481	387	1,008	344	1,344	0.0
Other P/E CPS	15	(419)	(259)	(47)	(25)	(21)	(37)	(12)	(16)	0.0
Office Furniture & Equip	15	(32,615)	(20,198)	(3,682)	(1,960)	(1,608)	(2,913)	(972)	(1,282)	0.0
Comp & Periph Equip	15	12,089	7,487	1,365	727	596	1,080	360	475	0.0
Computer Software	15	52,079	32,253	5,880	3,130	2,567	4,651	1,552	2,047	0.0
Comp Software Personal	15	1,460	904	165	88	72	130	44	57	0.0
Data Handling Equipment	15	12,369	7,660	1,396	743	610	1,105	369	486	0.0
Other Office Equipment	15	120	74	14	7	6	11	4	5	0.0
Trans Equip Lt Duty Trks	15	20,470	12,677	2,311	1,230	1,009	1,828	610	804	0.0
Trans Equip Hvy Duty Trks	15	0	0	0	0	0	0	0	0	0.0
Trans Equip Autos	15	17,696	10,959	1,998	1,064	872	1,580	527	695	0.0
Trans Equip Other	15	0	0	0	0	0	0	0	0	0.0
Stores Equipment	15	9,475	5,868	1,070	569	467	846	282	372	0.0
Tools,Shop,Garage Equip	15	23,355	14,464	2,637	1,404	1,151	2,086	696	918	0.0
Tools,Shop,Garage Equip Oth	15	0	0	0	0	0	0	0	0	0.0
Laboratory Equipment	2	19,967	7,655	3,023	3,119	1,851	4,317	0	2	0.0
Laboratory Equip Other	2	0	0	0	0	0	0	0	0	0.0
Power Operated Equipment	15	(34)	(21)	(4)	(2)	(2)	(3)	(1)	(1)	0.0
Comm Equip Non-Telephone	15	14,425	8,933	1,629	867	711	1,288	430	567	0.0
Comm Equip Telephone	15	(13,614)	(8,431)	(1,537)	(818)	(671)	(1,216)	(406)	(535)	0.0
Misc Equipment	15	2,493	1,544	281	150	123	223	74	98	0.0
Other Tangible Property	17	0	0	0	0	0	0	0	0	0.0
Total Utility Plant in Service		13,377,121	5,601,044	1,759,409	1,561,101	1,018,937	2,271,349	244,976	920,306	0.0
Other Rate Base Items										0.0

Schedule C-9-SMEX

MISSOURI-AMERICAN WATER COMPANY
MEXICO DISTRICT
COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS
PSC STAFF STUDY

Account (1)	Factor Ref. (2)	Cost of Service (3)	Residential (4)	Commercial (5)	Industrial (6)	Public Authorities (7)	Sales for Resale (8)	Fire Protection Private (9)	Public (10)	
Add:										
Other Utility Plant Adjustments	17	0	0	0	0	0	0	0	0	0.0
Cash Working Capital	15	(3,011)	(1,865)	(340)	(181)	(148)	(269)	(90)	(118)	0.0
Materials and Supplies	15	23,028	14,261	2,600	1,384	1,135	2,056	686	905	0.0
Prepayments	15	18	11	2	1	1	2	1	1	0.0
OPEB's Contributed to External Fund	16	78,837	43,124	9,027	5,621	4,352	8,964	2,286	5,463	0.0
Premature Retirement	17	0	0	0	0	0	0	0	0	0.0
Regulatory Deferrals	17	0	0	0	0	0	0	0	0	0.0
Less:										
Accumulated Deferred ITC (3%)	17	(1,077,606)	(451,194)	(141,705)	(125,757)	(82,114)	(182,977)	(19,720)	(74,139)	0.0
Deferred Income Taxes	17	(1,671,364)	(699,800)	(219,784)	(195,048)	(127,358)	(283,798)	(30,586)	(114,990)	0.0
Pensions	16	(99,942)	(54,868)	(11,443)	(7,126)	(5,517)	(11,363)	(2,898)	(6,926)	0.0
Total Other Rate Base Elements		(2,750,040)	(1,150,130)	(361,644)	(321,105)	(209,649)	(467,386)	(50,321)	(189,804)	0.0
Total Original Cost Measure of Value		\$ 10,627,081	\$ 4,450,913	\$ 1,397,765	\$ 1,239,995	\$ 809,289	\$ 1,803,963	\$ 194,655	\$ 730,501	0.0

T&D OP BASIS FOR FACTOR 11	89,744	30,325	9,378	6,773	5,550	14,060	5,083	18,577	0.0
FACTOR 11		0.3379	0.1045	0.0755	0.0618	0.1567	0.0566	0.2070	1.0000
T&D Mnt BASIS FOR FACTOR 12	4,374	3,511	430	38	118	11	266	0	0.0
FACTOR 12		0.8028	0.0982	0.0087	0.0269	0.0025	0.0609	0.0000	1.0000
A&G BASIS FOR FACTOR 15	491,346	304,258	55,472	29,529	24,245	43,899	14,633	19,310	0.0
FACTOR 15		0.6193	0.1129	0.0601	0.0493	0.0893	0.0298	0.0393	1.0000
LABOR BASIS FOR FACTOR 16	331,261	181,190	37,915	23,622	18,283	37,663	9,617	22,972	0.0
FACTOR 16		0.5470	0.1145	0.0713	0.0552	0.1137	0.0290	0.0693	1.0000
UPIS BASIS FOR FACTOR 17	13,374,818	5,600,079	1,759,106	1,560,832	1,018,762	2,270,958	244,934	920,147	0.0
FACTOR 17		0.4187	0.1315	0.1167	0.0762	0.1698	0.0183	0.0688	1.0000
RATE BASE BASIS FOR FACTOR 18	10,627,081	4,450,913	1,397,765	1,239,995	809,289	1,803,963	194,655	730,501	0.0
FACTOR 18		0.4188	0.1315	0.1167	0.0762	0.1698	0.0183	0.0687	1.0000
TOTAL COS BASIS FOR FACTOR 19	2,720,599	1,362,577	340,139	261,811	179,301	375,928	57,812	143,030	0.0
FACTOR 19		0.5009	0.1250	0.0962	0.0659	0.1382	0.0212	0.0526	1.0000
COS w/o Fire Factor 20	2,158,183	1,371,957	342,354	263,434	180,438				0
FACTOR 20		0.6357	0.1586	0.1221	0.0836				1.0000

Table of Factors - Table Name "FACTORS"

	2 Residential	4 Commercial	6 Industrial	8 Public	10 Resale	12 Private Fire	14 Public Fire	20 Total
1	0.3640	0.1552	0.1741	0.0951	0.2115	-	0.0001	1.0000
2	0.3834	0.1514	0.1562	0.0927	0.2162	-	0.0001	1.0000
3	0.3595	0.1419	0.1464	0.0869	0.2027	0.0127	0.0499	1.0000
4	0.3054	0.1046	0.0797	0.0640	0.1669	0.0569	0.2225	1.0000
5	0.3478	0.1189	0.0906	0.0728	0.1899	0.0366	0.1434	1.0000
6	0.3834	0.1514	0.1562	0.0927	0.2162	-	0.0001	1.0000
7	0.3054	0.1046	0.0797	0.0640	0.1669	0.0569	0.2225	1.0000
8	-	-	-	-	-	-	1.0000	1.0000
9	0.7526	0.1247	0.0585	0.0546	0.0096	-	-	1.0000
10	0.8028	0.0982	0.0087	0.0269	0.0025	0.0609	-	1.0000
11	0.3379	0.1045	0.0755	0.0618	0.1567	0.0566	0.2070	1.0000

MISSOURI-AMERICAN WATER COMPANY
MEXICO DISTRICT
COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS
PSC STAFF STUDY

Account	Factor Ref.	Cost of Service	Residential	Commercial	Industrial	Public Authorities	Sales for Resale	Fire Protection			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	Private (9)	Public (10)		
			12	0.8028	0.0982	0.0087	0.0269	0.0025	0.0609	-	1.0000
			13	0.8685	0.0945	0.0040	0.0193	0.0012	0.0125	-	1.0000
			14	0.8795	0.0957	0.0040	0.0196	0.0012	-	-	1.0000
			15	0.6193	0.1129	0.0601	0.0493	0.0893	0.0298	0.0393	1.0000
			16	0.5470	0.1145	0.0713	0.0552	0.1137	0.0290	0.0693	1.0000
			17	0.4187	0.1315	0.1167	0.0762	0.1698	0.0183	0.0688	1.0000
			18	0.4188	0.1315	0.1167	0.0762	0.1698	0.0183	0.0687	1.0000
			19	0.5009	0.1250	0.0962	0.0659	0.1382	0.0212	0.0526	1.0000
			20	0.6357	0.1586	0.1221	0.0836	-	-	-	1.0000

MISSOURI-AMERICAN WATER COMPANY
MEXICO DISTRICT
COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS
PSC STAFF STUDY

		Base	Max Day	Max Hour	Meters	Services	Billing & Collecting	Fire Service
OPERATION AND MAINTENANCE EXPENSES								
SOURCE OF SUPPLY EXPENSES								
Super & Eng Oper SS	2	0	0	0	0	0	0	0
Labor & Exp Oper SS	2	40,302	29,848	10,450	0	0	0	4
Labor & Exp Oper SS	2	658	487	171	0	0	0	0
Purchased Water	1	0	0	0	0	0	0	0
TOTAL SS EXPENSE - OPERATION		40,960	30,335	10,621	0	0	0	4
Misc Exp Oper SS	2	47,690	35,319	12,366	0	0	0	5
Misc Exp Oper SS	2	1,013	750	263	0	0	0	0
Rents Oper SS	2	0	0	0	0	0	0	0
Super & Eng Maint SS	2	0	0	0	0	0	0	0
Struct & Improve Maint SS	2	0	0	0	0	0	0	0
Struct & Improve Maint SS	2	28	21	7	0	0	0	0
Collect & Impound Maint SS	2	0	0	0	0	0	0	0
Lake, River & Oth Maint SS	2	0	0	0	0	0	0	0
Lake, River & Oth Maint SS	2	0	0	0	0	0	0	0
Wells & Springs Maint SS	2	0	0	0	0	0	0	0
Wells & Springs Maint SS	2	0	0	0	0	0	0	0
Infil Gall & Tunnels Maint SS	2	0	0	0	0	0	0	0
Supply Mains Maint SS	2	0	0	0	0	0	0	0
Misc Plant Maint SS	2	0	0	0	0	0	0	0
Misc Plant Maint SS	2	2,963	2,194	768	0	0	0	0
TOTAL SS EXPENSE - MAINTENANCE		51,694	38,285	13,404	0	0	0	5
TOTAL SS EXPENSE		92,654	68,620	24,025	0	0	0	9
POWER AND PUMPING EXPENSES								
Super & Eng Oper P	6	0	0	0	0	0	0	0
Fuel for Power Prod	1	0	0	0	0	0	0	0
Labor & Exp Oper Pwr Prod	6	1,148	850	298	0	0	0	0
Labor & Exp Oper Pwr Prod	6	0	0	0	0	0	0	0
Purch Fuel/Power for Pump	1	94,868	94,859	0	0	0	0	9
Labor & Exp Oper Pump	6	0	0	0	0	0	0	0
Labor & Exp Oper Pump	6	52	39	13	0	0	0	0
Expenses Transferred	6	0	0	0	0	0	0	0
Misc Exp Oper P	6	324	240	84	0	0	0	0
Rents Oper P	6	40	30	10	0	0	0	0
TOTAL PUMPING EXPENSE - OPERATION		96,432	96,017	406	0	0	0	10

MISSOURI-AMERICAN WATER COMPANY
MEXICO DISTRICT
COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS
PSC STAFF STUDY

			Base	Max Day	Max Hour	Meters	Services	Billing & Collecting	Fire Service
Super & Eng Maint P	6	0	0	0	0	0	0	0	0
Struct & Improve Maint P	6	0	0	0	0	0	0	0	0
Power Prod Equip Maint P	6	0	0	0	0	0	0	0	0
Pump Equip Maint P	6	0	0	0	0	0	0	0	0
Pump Equip Maint P	6	0	0	0	0	0	0	0	0
TOTAL PUMPING EXPENSES - MAINTENANCE		0	0	0	0	0	0	0	0
TOTAL PUMPING EXPENSES		96,432	96,017	406	0	0	0	0	10
WATER TREATMENT									
Super & Eng Oper WT	2	0	0	0	0	0	0	0	0
Chemicals	1	55,654	55,648	0	0	0	0	0	6
Labor & Exp Oper WT	2	12,898	9,552	3,344	0	0	0	0	1
Labor & Exp Oper WT	2	345	256	89	0	0	0	0	0
Misc Exp Oper WT	2	0	0	0	0	0	0	0	0
Misc Exp Oper WT	1	21,934	21,932	0	0	0	0	0	2
Misc Exp Oper WT	2	14,266	10,565	3,699	0	0	0	0	1
Rents Oper WT	2	(3)	(2)	(1)	0	0	0	0	(0)
TOTAL WT EXPENSE - OPERATION		105,094	97,951	7,132	0	0	0	0	11
Super & Eng Maint WT	2	0	0	0	0	0	0	0	0
Struct & Improve Maint WT	2	0	0	0	0	0	0	0	0
Struct & Improve Maint WT	2	0	0	0	0	0	0	0	0
WT Equip Maint WT	2	0	0	0	0	0	0	0	0
WT Equip Maint WT	2	11,505	8,521	2,983	0	0	0	0	1
TOTAL WT EXPENSE - MAINTENANCE		11,505	8,521	2,983	0	0	0	0	1
TOTAL WT EXPENSE		116,599	106,472	10,116	0	0	0	0	12
TRANSMISSION AND DISTRIBUTION EXPENSES									
Super & Eng Oper TD	11	0	0	0	0	0	0	0	0
Storage Facility Exp	5	0	0	0	0	0	0	0	0
Storage Facility Exp	5	1,314	387	0	891	0	0	0	237
TD Lines Exp	7	77,048	19,925	0	35,596	0	0	0	21,527
TD Lines Exp	7	5,596	1,447	0	2,585	0	0	0	1,564
Meter Expense	9	179	0	0	0	179	0	0	0
Meter Expense	9	152	0	0	0	152	0	0	0
Customer Install Exp	10	5,455	0	0	0	0	5,123	0	332
Customer Install Exp	10	0	0	0	0	0	0	0	0
Misc Exp Oper TD	11	835	202	0	362	3	48	0	220
Misc Exp Oper TD	11	225	55	0	97	1	13	0	59

MISSOURI-AMERICAN WATER COMPANY
MEXICO DISTRICT
COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS
PSC STAFF STUDY

			Base	Max Day	Max Hour	Meters	Services	Billing & Collecting	Fire Service
Misc Exp Oper TD	11	1,567	380	0	679	6	89	0	413
Rents Oper TD	11	851	206	0	369	3	49	0	224
TOTAL T & D EXPENSE OPERATION		93,222	22,602	0	40,379	344	5,321	0	24,576
Super & Eng Maint TD	12	1	0	0	0	0	1	0	0
Struct & Improve Maint TD	12	1,709	0	0	0	0	1,605	0	104
Struct & Improve Maint TD	12	0	0	0	0	0	0	0	0
Dist Res Stand Maint TD	5	0	0	0	0	0	0	0	0
TD Main Maint TD	7	0	0	0	0	0	0	0	0
TD Main Maint TD	7	0	0	0	0	0	0	0	0
Fire Main Maint TD	8	0	0	0	0	0	0	0	0
Services Maint TD	10	4,374	0	0	0	0	4,108	0	266
Services Maint TD	10	0	0	0	0	0	0	0	0
Meters Maint TD	9	0	0	0	0	0	0	0	0
Meters Maint TD	9	0	0	0	0	0	0	0	0
Hydrants Maint TD	8	0	0	0	0	0	0	0	0
Hydrants Maint TD	8	0	0	0	0	0	0	0	0
Misc Plant Maint TD	12	600	0	0	0	0	563	0	37
Mat and Sup Maint TD	12	126,027	0	0	0	0	118,352	0	7,675
Misc Maint TD	12	0	0	0	0	0	0	0	0
Amort Def Maint TD	5	0	0	0	0	0	0	0	0
TOTAL T & D EXPENSE - MAINTENANCE		132,711	0	0	0	0	124,629	0	8,082
TOTAL T & D EXPENSE		225,933	22,602	0	40,379	344	129,950	0	32,658
CUSTOMER ACCOUNTS									
Supervision CA	13	380	0	0	0	0	0	375	5
Meter Reading Exp CA	14	29,998	0	0	0	0	0	29,998	0
Meter Reading Exp CA	14	493	0	0	0	0	0	493	0
Meter Reading Exp CA	14	0	0	0	0	0	0	0	0
Cust Rec & Collection CA	13	11,735	0	0	0	0	0	11,588	147
Cust Rec & Collection CA	13	17,143	0	0	0	0	0	16,929	214
Uncollectible Accts	13	31,492	0	0	0	0	0	31,098	394
Misc Cust Accts Exp CA	13	825	0	0	0	0	0	815	10
Misc Cust Accts Exp CA	13	0	0	0	0	0	0	0	0
Misc Cust Accts Exp CA	13	3,519	0	0	0	0	0	3,475	44
Cust Serv & Info Exp CA	13	36,599	0	0	0	0	0	36,142	457
TOTAL CUSTOMER ACCOUNTING EXPENSE		132,184	0	0	0	0	0	130,913	1,271

MISSOURI-AMERICAN WATER COMPANY
MEXICO DISTRICT
COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS
PSC STAFF STUDY

			Base	Max Day	Max Hour	Meters	Services	Billing & Collecting	Fire Service
ADMINISTRATIVE AND GENERAL EXPENSES									
Salaries AG	15	143,774	35,483	10,107	11,818	101	38,028	38,301	9,935
Other Supplies & Exp AG	15	1,053	260	74	87	1	279	281	73
Other Supplies & Exp AG	15	38,010	9,381	2,672	3,124	27	10,054	10,126	2,626
Other Supplies & Exp AG	15	12,152	2,999	854	999	9	3,214	3,237	840
Mgmt Fees-Corporate/Shared Service Center	15	85,499	21,101	6,011	7,028	60	22,614	22,777	5,908
Mgmt Fees-Call Center	13	46,090	0	0	0	0	0	45,514	576
Mgmt Fees-Belleville Lab	2	22,152	16,406	5,744	0	0	0	0	2
Mgmt Fees- Financial ITS	15	4,486	1,107	315	369	3	1,187	1,195	310
Mgmt Fees- Customer Billings ITS	13	25,326	0	0	0	0	0	25,009	317
Mgmt Fees-Other ITS	15	285	70	20	23	0	75	76	20
Outside Services AG	15	28,729	7,090	2,020	2,362	20	7,599	7,653	1,985
Outside Services AG	15	0	0	0	0	0	0	0	0
Property Insurance	15	16,384	4,044	1,152	1,347	11	4,334	4,365	1,132
Ins Gen Liab Oper AG	15	0	0	0	0	0	0	0	0
Ins Work Comp AG	16	8,723	2,524	638	1,258	8	1,303	2,135	858
Ins Other Oper AG	15	0	0	0	0	0	0	0	0
Property Insurance	15	12,527	3,092	881	1,030	9	3,313	3,337	866
Injuries & Damages	16	247	71	18	36	0	37	60	24
Employee Pension & Benefits	16	128,434	37,156	9,389	18,520	116	19,188	31,428	12,638
Employee Pension & Benefits	16	0	0	0	0	0	0	0	0
Employee Pension & Benefits	16	0	0	0	0	0	0	0	0
Reg Commision Exp	15	3,026	747	213	249	2	800	806	209
Rents AG	15	13,065	3,224	918	1,074	9	3,456	3,481	903
Goodwill Advertising Exp	15	0	0	0	0	0	0	0	0
Misc Exp AG	15	6,467	1,596	455	532	5	1,711	1,723	447
Research & Development	15	0	0	0	0	0	0	0	0
TOTAL A & G OPERATIONS		596,429	146,352	41,480	49,854	379	117,192	201,504	39,669
General Plant Maint AG	15	0	0	0	0	0	0	0	0
General Plant Maint AG	15	2,733	675	192	225	2	723	728	189
TOTAL A & G EXPENSE - MAINTENANCE		2,733	675	192	225	2	723	728	189
TOTAL A & G EXPENSE		599,162	147,026	41,672	50,079	381	117,914	202,232	39,857
Total Operation & Maintenance Expenses		1,262,964	440,736	76,218	90,457	725	247,865	333,145	73,817

MISSOURI-AMERICAN WATER COMPANY
MEXICO DISTRICT
COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS
PSC STAFF STUDY

			Base	Max Day	Max Hour	Meters	Services	Billing & Collecting	Fire Service
DEPRECIATION EXPENSE									
Struct & Imp SS	2	1,364	1,010	354	0	0	0	0	0
Struct & Imp P	6	608	450	158	0	0	0	0	0
Struct & Imp WT	2	35,192	26,063	9,125	0	0	0	0	4
Struct & Imp TD	7	1,261	326	0	583	0	0	0	352
Struct & Imp Offices	15	3,059	755	215	251	2	809	815	211
Struct & Imp Store, Shop, Gar	15	616	152	43	51	0	163	164	43
Struct & Imp Misc	15	0	0	0	0	0	0	0	0
Collect & Impounding	1	2	2	0	0	0	0	0	0
Lake, River & Other Intakes	2	0	0	0	0	0	0	0	0
Wells & Springs	2	18,661	13,820	4,839	0	0	0	0	2
Supply Mains	2	15,114	11,193	3,919	0	0	0	0	2
Power Generation Equip Othe	6	0	0	0	0	0	0	0	0
Pump Equip Electric	6	11,609	8,598	3,010	0	0	0	0	1
Pump Equip Diesel	6	0	0	0	0	0	0	0	0
Pump Equip Other	6	757	561	196	0	0	0	0	0
WT Equip Non-Media	2	45,745	33,879	11,862	0	0	0	0	5
Dist Reservoirs & Standpipe	5	5,624	1,655	0	2,957	0	0	0	1,012
Elevated Tanks & Standpipes	5	372	109	0	196	0	0	0	67
Ground Level Facilities	5	0	0	0	0	0	0	0	0
TD Mains Not Classified by	4	35,452	9,171	0	16,375	0	0	0	9,905
TD Mains 4 & Less "	4	938	243	0	433	0	0	0	262
TD Mains 6 to 8" "	4	9,527	2,465	0	4,401	0	0	0	2,662
TD Mains 10 to 16" "	3	3,564	2,474	866	0	0	0	0	223
TD Mains 18 & Grtr "	3	0	0	0	0	0	0	0	0
Fire Mains	8	403	0	0	0	0	0	0	403
Services	10	24,491	0	0	0	0	22,999	0	1,492
Meters Bronze Case	9	3,405	0	0	0	3,405	0	0	0
Meters Plastic Case	9	0	0	0	0	0	0	0	0
Meters Other	9	4,041	0	0	0	4,041	0	0	0
Meters Other-Rem Rdr Units	9	0	0	0	0	0	0	0	0
Meter Installations	9	12,922	0	0	0	12,922	0	0	0
Meter Installation Other	9	0	0	0	0	0	0	0	0
Hydrants	8	4,491	0	0	0	0	0	0	4,491
Utility Plant Acquisition Adjustment	17	0	0	0	0	0	0	0	0
Other P/E WT Res Hand Equip	2	441	327	114	0	0	0	0	0
Other P/E TD	7	124	32	0	57	0	0	0	35
Other P/E CPS	15	0	0	0	0	0	0	0	0
Office Furniture & Equip	15	(86)	(21)	(6)	(7)	(0)	(23)	(23)	(6)
Comp & Periph Equip	15	2,560	632	180	210	2	677	682	177
Computer Software	15	0	0	0	0	0	0	0	0

MISSOURI-AMERICAN WATER COMPANY
MEXICO DISTRICT
COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS
PSC STAFF STUDY

		Base	Max Day	Max Hour	Meters	Services	Billing & Collecting	Fire Service
Comp Software Personal	15	0	0	0	0	0	0	0
Data Handling Equipment	15	561	138	39	46	0	148	39
Other Office Equipment	15	0	0	0	0	0	0	0
Trans Equip Lt Duty Trks	15	5,463	1,348	384	449	4	1,445	377
Trans Equip Hvy Duty Trks	15	0	0	0	0	0	0	0
Trans Equip Autos	15	4,727	1,167	332	389	3	1,250	327
Trans Equip Other	15	0	0	0	0	0	0	0
Stores Equipment	15	251	62	18	21	0	66	17
Tools,Shop,Garage Equip	15	1,675	413	118	138	1	443	116
Tools,Shop,Garage Equip Oth	15	0	0	0	0	0	0	0
Laboratory Equipment	2	366	271	95	0	0	0	0
Laboratory Equip Other	2	0	0	0	0	0	0	0
Power Operated Equipment	15	952	235	67	78	1	252	66
Comm Equip Non-Telephone	15	723	178	51	59	1	191	50
Comm Equip Telephone	15	132	33	9	11	0	35	9
Misc Equipment	15	123	30	9	10	0	33	8
Total Depreciation Expense		<u>257,230</u>	<u>117,773</u>	<u>35,997</u>	<u>26,707</u>	<u>20,383</u>	<u>28,489</u>	<u>22,351</u>
Amort-Other UP	18	112,615	57,163	17,681	11,858	5,935	9,606	9,809
Taxes Other Than Income								
Utility Reg Assessment Fee	19	14,985	6,399	1,644	1,347	457	2,096	1,935
Property Taxes	18	129,752	65,862	20,371	13,663	6,838	11,068	11,301
FUTA	16	616	178	45	89	1	92	61
FICA	16	24,874	7,196	1,818	3,587	22	3,716	2,448
SUTA	16	0	0	0	0	0	0	0
Other Taxes & Licenses	15	5,047	1,246	355	415	4	1,335	349
Gross Receipts Tax	19	0	0	0	0	0	0	0
Total Taxes, Other Than Income		<u>175,274</u>	<u>80,881</u>	<u>24,233</u>	<u>19,101</u>	<u>7,321</u>	<u>18,307</u>	<u>15,266</u>
Income Taxes	18	205,760	104,444	32,304	21,667	10,844	17,551	17,922
Utility Income Available for Return	18	724,767	367,892	113,788	76,318	38,195	61,823	63,127
Total Cost of Service		<u>2,738,610</u>	<u>1,168,888</u>	<u>300,222</u>	<u>246,108</u>	<u>83,403</u>	<u>383,642</u>	<u>202,292</u>
Less: Other Water Revenues	19	(35,720)	(15,252)	(3,918)	(3,211)	(1,089)	(4,997)	(2,640)
Revenue Shift	19	0	0	0	0	0	0	0
Total Other Water Revenues		<u>(35,720)</u>	<u>(15,252)</u>	<u>(3,918)</u>	<u>(3,211)</u>	<u>(1,089)</u>	<u>(4,997)</u>	<u>(2,640)</u>
Total Cost of Service Related to Sales of Water		<u><u>2,702,890</u></u>	<u><u>1,153,636</u></u>	<u><u>296,304</u></u>	<u><u>242,897</u></u>	<u><u>82,313</u></u>	<u><u>378,644</u></u>	<u><u>199,652</u></u>

MISSOURI-AMERICAN WATER COMPANY
MEXICO DISTRICT
COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS
PSC STAFF STUDY

			Base	Max Day	Max Hour	Meters	Services	Biling & Collecting	Fire Service
Reallocation of Public Fire	20	0	98,093	25,189	20,655		0	0	(143,937)
Total		<u>\$ 2,702,890</u>	<u>\$ 1,251,729</u>	<u>\$ 321,493</u>	<u>\$ 263,552</u>	<u>\$ 82,313</u>	<u>\$ 378,644</u>	<u>\$ 349,444</u>	<u>\$ 55,715</u>
			663,016			5,732	5,035	59,428	
			1.888			14.36	75.20		
						1.20	6.27	5.88	
								13.34	

MISSOURI-AMERICAN WATER COMPANY
MEXICO DISTRICT
COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS
PSC STAFF STUDY

			Base	Max Day	Max Hour	Meters	Services	Billing & Collecting	Fire Service
RATE BASE									
Organization	17	2,303	1,169	362	243	121	196	11	201
Franchises	17	0	0	0	0	0	0	0	0
Land & Ld Rights SS	2	25,516	18,897	6,616	0	0	0	0	3
Land & Ld Rights P	6	58,808	43,553	15,249	0	0	0	0	6
Land & Ld Rights WT	2	13,920	10,309	3,609	0	0	0	0	1
Land & Ld Rights TD	7	13,336	3,449	0	6,161	0	0	0	3,726
Land & Land Rights AG	15	2,057	508	145	169	1	544	548	142
Struct & Imp SS	2	46,367	34,339	12,023	0	0	0	0	5
Struct & Imp P	6	51,886	38,427	13,454	0	0	0	0	5
Struct & Imp Pumps (STL)	6	0	0	0	0	0	0	0	0
Struct & Imp Pump Boosters	6	0	0	0	0	0	0	0	0
Struct & Imp WT	2	2,883,517	2,135,533	747,696	0	0	0	0	288
Struct & Imp WT Nth Plt (ST)	2	0	0	0	0	0	0	0	0
Struct & Imp WT Ctrl Plt 1	2	0	0	0	0	0	0	0	0
Struct & Imp WT Ctrl Plt 3	2	0	0	0	0	0	0	0	0
Struct & Imp WT Sth Plt (ST)	2	0	0	0	0	0	0	0	0
Struct & Imp WT Meramec (ST)	2	0	0	0	0	0	0	0	0
Struct & Imp TD	7	67,436	17,439	0	31,155	0	0	0	18,842
Struct & Imp TD Spec Cross	7	0	0	0	0	0	0	0	0
Struct & Imp Offices	15	101,674	25,093	7,148	8,358	71	26,893	27,086	7,026
Struct & Imp Leasehold	15	0	0	0	0	0	0	0	0
Struct & Imp Leasehold	15	0	0	0	0	0	0	0	0
Struct & Imp Store, Shop, Gar	15	24,353	6,010	1,712	2,002	17	6,441	6,488	1,683
Struct & Imp Misc	15	0	0	0	0	0	0	0	0
Collect & Impounding	1	50	50	0	0	0	0	0	0
Lake, River & Other Intakes	2	0	0	0	0	0	0	0	0
Wells & Springs	2	711,676	527,067	184,538	0	0	0	0	71
Supply Mains	2	758,274	561,578	196,620	0	0	0	0	76
Supply Mains Nth Plt (STL)	2	0	0	0	0	0	0	0	0
Supply Mains Ctrl Plt (STL)	2	0	0	0	0	0	0	0	0
Supply Mains Sth Plt (STL)	2	0	0	0	0	0	0	0	0
Supply Mains Meramec Plt (S)	2	0	0	0	0	0	0	0	0
Power Generation Equip Othe	6	0	0	0	0	0	0	0	0
Boiler Plant Equipment P	6	0	0	0	0	0	0	0	0
Pump Equip Steam	6	0	0	0	0	0	0	0	0
Pump Equip Electric	6	843,275	624,529	218,661	0	0	0	0	84
Pump Equip Elec Pre46 (STL)	6	0	0	0	0	0	0	0	0
Pump Equip Elec Post46 (STL)	6	0	0	0	0	0	0	0	0
Pump Equip Elec Boosters Po	6	0	0	0	0	0	0	0	0
Pump Equip Diesel	6	0	0	0	0	0	0	0	0
Pump Equip Diesel Stratman\	6	0	0	0	0	0	0	0	0
Pump Equip Diesel Ctrl Plt	6	0	0	0	0	0	0	0	0
Pump Equip Hydraulic	6	0	0	0	0	0	0	0	0
Pump Equip Other	6	26,554	19,666	6,885	0	0	0	0	3
WT Equip Non-Media	2	2,269,540	1,680,821	588,492	0	0	0	0	227
WT Equip Non-Med North (STL)	2	0	0	0	0	0	0	0	0
WT Equip Non Media Ctrl 1 &	2	0	0	0	0	0	0	0	0
WT Equip Non Media Ctrl 3 (	2	0	0	0	0	0	0	0	0
WT Equip Non Media Sth (STL)	2	0	0	0	0	0	0	0	0
WT Equip Non Media Mer (STL)	2	0	0	0	0	0	0	0	0
WT Equip Filter Media	2	47,417	35,117	12,295	0	0	0	0	5
Dist Reservoirs & Standpipe	5	215,577	63,444	0	113,329	0	0	0	38,804
Elevated Tanks & Standpipes	5	19,745	5,811	0	10,380	0	0	0	3,554

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		Base	Max Day	Max Hour	Meters	Services	Billing & Collecting	Fire Service
Ground Level Facilities	5	0	0	0	0	0	0	0
TD Mains Not Classified by	7	1,854,996	479,702	0	857,008	0	0	518,286
TD Mains 4 & Less "	4	71,639	18,533	0	33,090	0	0	20,016
TD Mains 6 to 8" "	4	726,448	187,932	0	335,546	0	0	202,970
TD Mains 10 to 16" "	3	272,166	188,965	66,164	0	0	0	17,038
TD Mains 18 & Grtr . "	3	0	0	0	0	0	0	0
TD Mains AC 4 (STL) "	4	0	0	0	0	0	0	0
TD Mains CI <10 1900-28 (S"	4	0	0	0	0	0	0	0
TD Mains CI <10 1929-56 (S"	4	0	0	0	0	0	0	0
TD Mains CI <10 1957-93 (S"	4	0	0	0	0	0	0	0
TD Mains CI 12 (STL) "	3	0	0	0	0	0	0	0
TD Mains CI 16 (STL) "	3	0	0	0	0	0	0	0
TD Mains DI 6-8 (STL) "	4	0	0	0	0	0	0	0
TD Mains DI 12 (STL) "	3	0	0	0	0	0	0	0
TD Mains DI 16 & >(STL) "	3	0	0	0	0	0	0	0
TD Mains Galve 1 (STL) "	4	0	0	0	0	0	0	0
TD Mains LJ 20 (STL) "	3	0	0	0	0	0	0	0
Fire Mains	8	24,443	0	0	0	0	0	24,443
Services	10	1,142,709	0	0	0	1,073,118	0	69,591
Meters Bronze Case	9	136,318	0	0	136,318	0	0	0
Meters Plastic Case	9	0	0	0	0	0	0	0
Meters Other	9	17,355	0	0	17,355	0	0	0
Meters Other-Rem Rdr Unts	9	0	0	0	0	0	0	0
Meter Installations	9	550,633	0	0	550,633	0	0	0
Meter Installation Other	9	0	0	0	0	0	0	0
Hydrants	8	228,249	0	0	0	0	0	228,249
Other P/E Intangible	15	0	0	0	0	0	0	0
Other P/E WT Res Hand Equip	2	23,527	17,424	6,101	0	0	0	2
Other P/E TD	7	6,041	1,562	0	2,791	0	0	1,688
Other P/E CPS	15	(419)	(103)	(29)	(34)	(0)	(111)	(29)
Office Furniture & Equip	15	(32,615)	(8,049)	(2,293)	(2,681)	(23)	(8,627)	(2,254)
Comp & Periph Equip	15	12,089	2,984	850	994	8	3,198	835
Computer Software	15	52,079	12,853	3,661	4,281	36	13,775	3,599
Comp Software Personal	15	1,460	360	103	120	1	386	101
Data Handling Equipment	15	12,369	3,053	870	1,017	9	3,272	855
Other Office Equipment	15	120	30	8	10	0	32	8
Trans Equip Lt Duty Trks	15	20,470	5,052	1,439	1,683	14	5,414	1,414
Trans Equip Hvy Duty Trks	15	0	0	0	0	0	0	0
Trans Equip Autos	15	17,696	4,367	1,244	1,455	12	4,681	1,223
Trans Equip Other	15	0	0	0	0	0	0	0
Stores Equipment	15	9,475	2,338	666	779	7	2,506	655
Tools,Shop,Garage Equip	15	23,355	5,764	1,642	1,920	16	6,177	1,614
Tools,Shop,Garage Equip Oth	15	0	0	0	0	0	0	0
Laboratory Equipment	2	19,967	14,788	5,177	0	0	0	2
Laboratory Equip Other	2	0	0	0	0	0	0	0
Power Operated Equipment	15	(34)	(8)	(2)	(3)	(0)	(9)	(2)
Comm Equip Non-Telephone	15	14,425	3,560	1,014	1,186	10	3,815	997
Comm Equip Telephone	15	(13,614)	(3,360)	(957)	(1,119)	(10)	(3,601)	(941)
Misc Equipment	15	2,493	615	175	205	2	659	172
Other Tangible Property	17	0	0	0	0	0	0	0
Total Utility Plant in Service		13,377,121	6,791,171	2,101,337	1,410,043	704,601	1,138,760	1,165,282
Other Rate Base Items								

Schedule C-20-SMEX

MISSOURI-AMERICAN WATER COMPANY
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		Base	Max Day	Max Hour	Meters	Services	Billing & Collecting	Fire Service
Add:								
Other Utility Plant Adjustments	17	0	0	0	0	0	0	0
Cash Working Capital	15	(3,011)	(743)	(212)	(248)	(796)	(802)	(208)
Materials and Supplies	15	23,028	5,683	1,619	1,893	6,091	6,135	1,591
Prepayments	15	18	4	1	1	5	5	1
OPEB's Contributed to External Fund	16	78,837	22,808	5,763	11,368	11,778	19,291	7,758
Premature Retirement	17	0	0	0	0	0	0	0
Regulatory Deferrals	17	0	0	0	0	0	0	0
Less:								
Accumulated Deferred ITC (3%)	17	(1,077,606)	(547,101)	(189,292)	(113,580)	(91,704)	(5,280)	(93,859)
Deferred Income Taxes	17	(1,671,364)	(848,552)	(262,571)	(176,162)	(142,233)	(8,190)	(145,576)
Pensions	16	(99,942)	(28,913)	(7,306)	(14,412)	(14,931)	(24,456)	(9,834)
Total Other Rate Base Elements		(2,750,040)	(1,396,813)	(431,998)	(291,138)	(231,791)	(13,297)	(240,128)
Total Original Cost Measure of Value		\$ 10,627,081	\$ 5,394,358	\$ 1,669,340	\$ 1,118,905	\$ 559,725	\$ 906,969	\$ 52,630
								\$ 925,154

T&D OP BASIS FOR FACTOR 11	89,744	21,758	0	38,872	331	5,123	0	23,659
FACTOR 11		0.2425	0.0000	0.4331	0.0037	0.0571	0.0000	0.2636
T&D Mnt BASIS FOR FACTOR 12	4,374	0	0	0	0	4,108	0	266
FACTOR 12		0.0000	0.0000	0.0000	0.0000	0.9391	0.0000	0.0609
A&G BASIS FOR FACTOR 15	491,346	121,271	34,546	40,379	344	129,950	130,913	33,943
FACTOR 15		0.2468	0.0703	0.0822	0.0007	0.2645	0.2664	0.0691
LABOR BASIS FOR FACTOR 16	331,261	95,861	24,200	47,776	283	49,476	81,078	32,589
FACTOR 16		0.2893	0.0731	0.1442	0.0009	0.1494	0.2447	0.0984
UPIS BASIS FOR FACTOR 17	13,374,818	6,790,002	2,100,975	1,409,800	704,479	1,138,564	65,916	1,165,081
FACTOR 17		0.5077	0.1571	0.1054	0.0527	0.0851	0.0049	0.0871
RATE BASE BASIS FOR FACTOR 18	10,627,081	5,394,358	1,669,340	1,118,905	559,725	906,969	52,630	925,154
FACTOR 18		0.5076	0.1570	0.1053	0.0527	0.0853	0.0050	0.0871
TOTAL COS BASIS FOR FACTOR 19	2,720,599	1,161,743	298,366	244,512	82,944	380,745	351,314	200,976
FACTOR 19		0.4270	0.1097	0.0899	0.0305	0.1399	0.1291	0.0739
TOTAL COS BASIS FOR FACTOR 20	1,692,836	1,153,636	296,304	242,897				
FACTOR 20		0.6815	0.1750	0.1435				

	2	4	6	8	10	12	14
	Base	Max Day	Max Hour	Meters	Services	Billing & Collecting	Fire Service
1	0.9999	-	-	-	-	-	0.0001
2	0.7406	0.2593	-	-	-	-	0.0001
3	0.6943	0.2431	-	-	-	-	0.0626
4	0.2587	-	0.4619	-	-	-	0.2794
5	0.2943	-	0.5257	-	-	-	0.1800
6	0.7406	0.2593	-	-	-	-	0.0001
7	0.2586	-	0.4620	-	-	-	0.2794
8	-	-	-	-	-	-	1.0000
9	-	-	-	1.0000	-	-	-
10	-	-	-	-	0.9391	-	0.0609
11	0.2425	-	0.4331	0.0037	0.0571	-	0.2636

MISSOURI-AMERICAN WATER COMPANY
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	Base	Max Day	Max Hour	Meters	Services	Billing & Collecting	Fire Service
12	-	-	-	-	0.9391	-	0.0609
13	-	-	-	-	-	0.9875	0.0125
14	-	-	-	-	-	1.0000	-
15	0.2468	0.0703	0.0822	0.0007	0.2645	0.2664	0.0691
16	0.2893	0.0731	0.1442	0.0009	0.1494	0.2447	0.0984
17	0.5077	0.1571	0.1054	0.0527	0.0851	0.0049	0.0871
18	0.5076	0.1570	0.1053	0.0527	0.0853	0.0050	0.0871
19	0.4270	0.1097	0.0899	0.0305	0.1399	0.1291	0.0739
20	0.6815	0.1750	0.1435				

**MISSOURI-AMERICAN WATER COMPANY
MEXICO DISTRICT
PSC STAFF STUDY**

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS

FACTOR 1.

ALLOCATION OF COSTS THAT VARY WITH THE AMT OF WATER CONSUMED.

Factors are based on the pro forma test year average daily consumption for each customer classification.

Customer Classification	Average Daily Consumption, Thousand Gallons	Allocation Factor
(1)	(2)	(3)
Residential	661.50	0.3640
Commercial	281.88	0.1552
Industrial	316.25	0.1741
Other Public Authority	172.68	0.0951
Sales for Resale	384.18	0.2115
Private Fire Protection	0.05	0.0000
Public Fire Protection	0.18	0.0001
Total	<u>1,816.71</u>	<u>1.0000</u>

FACTOR 2.

**ALLOCATION OF COSTS ASSOCIATED WITH FACILITIES SERVING BASE AND
MAXIMUM DAY EXTRA CAPACITY FUNCTIONS.**

Factors are based on the weighting of the factors for average daily consumption (Factor 1) and the factors derived from maximum day extra capacity demand for each customer classification, as follows:

Customer Classification	Average Daily Consumption		Maximum Day Extra Capacity		Allocation Factor
	Allocation Factor 1	Weighted Factor	Allocation Factor	Weighted Factor	
(1)	(2)	(3)=(2)x 0.7407	(4)	(5)=(4)x 0.2593	(6)=(3)+(5)
Residential	0.3640	0.2695	0.4392	0.1139	0.3834
Commercial	0.1552	0.1150	0.1403	0.0364	0.1514
Industrial	0.1741	0.1290	0.1050	0.0272	0.1562
Other Public Authority	0.0951	0.0704	0.0860	0.0223	0.0927
Sales for Resale	0.2115	0.1567	0.2295	0.0595	0.2162
Private Fire Protection	0.0000	0.0000			0.0000
Public Fire Protection	0.0001	0.0001			0.0001
Total	<u>1.0000</u>	<u>0.7407</u>	<u>1.0000</u>	<u>0.2593</u>	<u>1.0000</u>

The derivation of the maximum day extra capacity factors in column 4 and the basis for the column 3 and 5 weightings are presented on the following page.

**MISSOURI-AMERICAN WATER COMPANY
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FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

**FACTOR 2. MAX DAY CLASS ALLOCATION AND MAX DAY TO AVERAGE DAY
MAXIMUM DAY EXTRA CAPACITY FUNCTIONS, cont.**

Customer Classification (1)	Average Daily Consumption, Thousand Gal. (2)	Maximum Day Extra Capacity		
		Factor* (3)	Rate of Flow, Thousand Gal. Per Day (4)=(2)x(3)	Allocation Factor (5)
Residential	661	1.00	661	0.4392
Commercial	282	0.75	211	0.1403
Industrial	316	0.50	158	0.1050
Other Public Authority	173	0.75	130	0.0860
Sales for Resale	384	0.90	346	0.2295
Total	1,816		1,506	1.0000

The weighting of the factors is based on the maximum day ratio of 1.35, based on a review of maximum day ratios experienced during the period 1990 through 2002 (see Schedule D).

	Maximum Day Ratio	Weight
Average Day	1.00	0.7407
Maximum Day Extra Capacity	0.35	0.2593
Total	1.35	1.0000

* Ratio of maximum day to average day minus 1.0.

**MISSOURI-AMERICAN WATER COMPANY
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FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 3.

**ALLOCATION OF COSTS ASSOC. WITH FACILITIES SERVING BASE, MAX DAY EXTRA CAPACITY
AND FIRE PROTECTION FUNCTIONS.**

Factors are based on the weighting of the average daily consumption, the maximum day extra capacity demand, and the fire protection demand for each customer classification.

Customer Classification	Average Daily Consumption		Maximum Day Extra Capacity		Fire Protection		Allocation Factor
	Allocation Factor	Weighted Factor	Allocation Factor	Weighted Factor	Allocation Factor	Weighted Factor	
(1)	(2)	(3)=(2) X 0.6944	(4)	(5)=(4) X 0.2431	(6)	(7)=(6) X 0.0625	(8)=(3)+(5)+(7)
Residential	0.3640	0.2528	0.4392	0.1067			0.3595
Commercial	0.1552	0.1078	0.1403	0.0341			0.1419
Industrial	0.1741	0.1209	0.1050	0.0255			0.1464
Other Public Authority	0.0951	0.0660	0.0860	0.0209			0.0869
Sales for Resale	0.2115	0.1469	0.2295	0.0558			0.2027
Private Fire Protection	0.0000	0.0000			0.2035	0.0127	0.0127
Public Fire Protection	0.0001	0.0001			0.7965	0.0498	0.0499
Total	1.0000	0.6945	1.0000	0.2430	1.0000	0.0625	1.0000

MISSOURI-AMERICAN WATER COMPANY
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FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 3. Continued

**ALLOCATION OF COSTS ASSOC WITH FACILITIES SERVING BASE, MAXIMUM
DAY EXTRA CAPACITY AND FIRE PROTECTION FUNCTIONS, cont.**

The weighting of the factors is based on the potential demand of general and fire protection service. The bases for the potential demand of general service are the maximum day ratio of 1.35 and the average daily system sendout for 2002 of 2.00 MGD. The system demand for fire protection is 1,500 Gallons per minute for 2 hours.

	<u>Ratio</u>	<u>Rate of Flow, (GPD)</u>	<u>Weight</u>
Average Day	1.00	2,000,000	0.6944
Maximum Day Extra Capacity	<u>0.35</u>	<u>700,000</u>	<u>0.2431</u>
Subtotal	<u>1.35</u>	2,700,000	0.9375
Fire Protection		<u>180,000</u>	<u>0.0625</u>
Total		<u>2,880,000</u>	<u>1.0000</u>

The public and private fire protection allocation factors in column 6 on the previous page are based on the relative potential demands (see Schedule E).

**MISSOURI-AMERICAN WATER COMPANY
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FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 4.

ALLOCATION OF COSTS ASSOC. WITH FACILITIES SERVING BASE AND MAX HOUR EXTRA CAPACITY FUNCT'S.

Factors are based on the weighting of the average daily consumption, the maximum day extra capacity demand, and the fire protection demand for each customer classification.

Customer Classification	Average Hourly Consumption			Maximum Hour Extra Capacity		Fire Protection		Allocation Factor
	Thousand Gallons	Allocation Factor	Weighted Factor	Allocation Factor	Weighted Factor	Allocation Factor	Weighted Factor	
(1)	(2)	(3)	(4)=(3) X 0.2587	(5)	(6)=(5) X 0.4620	(7)	(8)=(7) X 0.2794	(9)=(4)+(6)+(8)
Residential	27.6	0.3641	0.0942	0.4575	0.2113			0.3055
Commercial	11.7	0.1552	0.0402	0.1393	0.0644			0.1046
Industrial	13.2	0.1741	0.0450	0.0750	0.0347			0.0797
Other Public Authority	7.2	0.0950	0.0246	0.0853	0.0394			0.0640
Sales for Resale	16.0	0.2115	0.0547	0.2429	0.1122			0.1669
Private Fire Protection	0.0	0.0000	0.0000			0.2035	0.0569	0.0569
Public Fire Protection	0.0	0.0001	0.0000			0.7965	0.2225	0.2225
Total	75.7	1.0000	0.2587	1.0000	0.4620	1.0000	0.2794	1.0001

The maximum hour extra capacity factors in column 5 are determined as follows:

**MISSOURI-AMERICAN WATER COMPANY
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FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 4. Continued

**ALLOCATION OF COSTS ASSOCIATED WITH FACILITIES SERVING BASE AND
MAXIMUM HOUR EXTRA CAPACITY FUNCTIONS, cont.**

The weighting of the factors is based on the potential demand of general and fire protection service. The bases for the potential demand of general service are the maximum hour ratio of 2.81. The system demand for fire protection is 1500 gallons per minute.

	<u>Ratio</u>	<u>Rate of Flow, (GPM)</u>	<u>Weight</u>
Average Hour	1.00	1,389	0.2587
Maximum Hour Extra Capacity	<u>1.79</u>	<u>2,480</u>	<u>0.4620</u>
Subtotal	<u>2.79</u>	3,869	0.7207
Fire Protection		<u>1,500</u>	<u>0.2794</u>
Total		<u>5,369</u>	<u>1.0001</u>

The maximum hour extra capacity factors in column 5 of the previous page are determined as follows:

<u>Customer Classification</u> (1)	<u>Average Hourly Consumption Thousand Gal.</u> (2)	<u>Maximum Hour Extra Capacity</u>		
		<u>Factor*</u> (3)	<u>1,000 Gallons Per Hour (4)=(2)x(3)</u>	<u>Allocation Factor (5)</u>
Residential	27.6	3.5	96.5	0.4575
Commercial	11.7	2.5	29.4	0.1393
Industrial	13.2	1.2	15.8	0.0750
Other Public Authority	7.2	2.5	18.0	0.0853
Sales for Resale	<u>16.0</u>	3.2	<u>51.2</u>	<u>0.2429</u>
Total	<u>75.7</u>		<u>210.9</u>	<u>1.0000</u>

* Ratio of Maximum Hour To Average Hour Minus 1.0.

The public and private fire protection allocation factors in column 7 on the previous page are based on the relative potential demands (see Schedule E).

**MISSOURI-AMERICAN WATER COMPANY
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FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 5.

ALLOCATION OF COSTS ASSOCIATED WITH STORAGE FACILITIES.

Factors are based on the weighting of the average hourly consumption, the maximum hour extra capacity demand, and the fire protection demand for each customer classification.

Customer Classification (1)	Average Hourly Consumption			Maximum Hour Extra Capacity		Fire Protection		Allocation Factor (9)=(4)+(6)+(8)
	Thousand Gallons (2)	Allocation Factor (3)	Weighted Factor (4)=(3) X 0.2943	Allocation Factor (5)	Weighted Factor (6)=(5) X 0.5257	Allocation Factor (7)	Weighted Factor (8)=(7) X 0.1800	
Residential	27.562	0.3641	0.1072	0.4575	0.2406			0.3478
Commercial	11.745	0.1552	0.0457	0.1393	0.0732			0.1189
Industrial	13.177	0.1741	0.0512	0.0750	0.0394			0.0906
Other Public Authority	7.195	0.0950	0.0280	0.0853	0.0448			0.0728
Sales for Resale	16.007	0.2115	0.0622	0.2429	0.1277			0.1899
Private Fire Protection	0.002	0.0000	0.0000			0.2035	0.0366	0.0366
Public Fire Protection	0.008	0.0001	0.0000			0.7965	0.1434	0.1434
Total	75.696	1.0000	0.2943	1.0000	0.5257	1.0000	0.1800	1.0000

The weighting of the factors is based on the ratio of the capacity required for a 10 hour demand of fire flow, as related to total storage capacity. The calculation is shown on the following page.

**MISSOURI-AMERICAN WATER COMPANY
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FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 5. Continued

ALLOCATION OF COSTS ASSOCIATED WITH STORAGE FACILITIES, cont.

The weighting of the factors is based on the ratio of the capacity required for a 10 hour demand of fire flow, as related to total storage capacity.

$$\text{Fire Protection Weight} = \frac{1,500 \text{ GPM} \times 60 \text{ Min.} \times 2 \text{ Hrs.}}{1,000,000 \text{ Gallons}} = 0.1800$$

$$\text{General Service Weight} = 1.0000 - 0.1800 = 0.8200$$

The weighting of the average hourly consumption and maximum hour extra demand for general service is based on the maximum hour ratio, as follows:

	Maximum Hour Ratio	Percent	Weight
Average Hour	1.00	35.90	0.2943
Extra Capacity Maximum Hour	<u>1.79</u>	<u>64.10</u>	<u>0.5257</u>
Total	<u><u>2.79</u></u>	<u><u>100.00</u></u>	<u><u>0.8200</u></u>

**MISSOURI-AMERICAN WATER COMPANY
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PSC STAFF STUDY**

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 6.

ALLOCATION OF COSTS ASSOCIATED WITH POWER AND PUMPING FACILITIES.

Factors are based on the weighting of the maximum daily consumption, Factor 2, the maximum daily consumption with fire, Factor 3, and the maximum hour consumption, Factor 4, for each customer classification, as follows:

Customer Classification	Maximum Daily Consumption		Maximum Daily Consumption		Maximum Hourly Consumption		Allocation
	Allocation Factor 2	Weighted Factor	Allocation Factor 3	Weighted Factor	Allocation Factor 4	Weighted Factor	
(1)	(2)	(3)=(2)X 1.0000	(4)	(5)=(4)X 0.0000	(6)	(7)=(6)X 0.0000	(8)=(3)+ (5)+(7)
Residential	0.3834	0.3834	0.3595	0.0000	0.3055	0.0000	0.3834
Commercial	0.1514	0.1514	0.1419	0.0000	0.1046	0.0000	0.1514
Industrial	0.1562	0.1562	0.1464	0.0000	0.0797	0.0000	0.1562
Other Public Authority	0.0927	0.0927	0.0869	0.0000	0.0640	0.0000	0.0927
Sales for Resale	0.2162	0.2162	0.2027	0.0000	0.1669	0.0000	0.2162
Private Fire Protection	0.0000	0.0000	0.0127	0.0000	0.0569	0.0000	0.0000
Public Fire Protection	0.0001	0.0001	0.0499	0.0000	0.2225	0.0000	0.0001
Total	<u>1.0000</u>	<u>1.0000</u>	<u>1.0000</u>	<u>0.0000</u>	<u>1.0001</u>	<u>0.0000</u>	<u>1.0000</u>

The weighting of the factors is based on the horsepower of pumps associated with maximum day facilities, maximum day and fire facilities, and maximum hour facilities, as follows:

	<u>Horsepower of Pumps</u>	<u>Weight</u>
Associated with Maximum Day	1,185	1.0000
Associated with Maximum Day and Fire	0	0.0000
Associated with Maximum Hour	<u>0</u>	<u>0.0000</u>
Total	<u>1,185</u>	<u>1.0000</u>

**MISSOURI-AMERICAN WATER COMPANY
MEXICO DISTRICT
PSC STAFF STUDY**

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 7.

ALLOCATION OF COSTS ASSOCIATED WITH TRANSMISSION AND DISTRIBUTION MAINS.

Factors are based on the weighting of the maximum daily consumption with fire, Factor 3, and the maximum hour consumption, Factor 5, for each customer classification, as follows:

Customer Classification	Maximum Daily Consumption		Maximum Hourly Consumption		Allocation Factor
	Allocation Factor 3	Weighted Factor	Allocation Factor 4	Weighted Factor	
(1)	(2)	(3)=(2)X 0.0000	(4)	(5)=(4)X 1.0000	(6)=(3)+(5)
Residential	0.3595	0.0000	0.3054	0.3054	0.3054
Commercial	0.1419	0.0000	0.1046	0.1046	0.1046
Industrial	0.1464	0.0000	0.0797	0.0797	0.0797
Other Public Authority	0.0869	0.0000	0.0640	0.0640	0.0640
Sales for Resale	0.2027	0.0000	0.1669	0.1669	0.1669
Private Fire Protection	0.0127	0.0000	0.0569	0.0569	0.0569
Public Fire Protection	0.0499	0.0000	0.2225	0.2225	0.2225
Total	<u>1.0000</u>	<u>0.0000</u>	<u>1.0000</u>	<u>1.0000</u>	<u>1.0000</u>

The weighting of the factors is based on the total footage of mains, designated as either transmission mains or distribution mains, as follows:

	Total Footage of Mains	Weight
Transmission Mains	19,677	0.0000
Distribution Mains	<u>442,904</u>	<u>1.0000</u>
Total	<u>462,581</u>	<u>1.0000</u>

**MISSOURI-AMERICAN WATER COMPANY
MEXICO DISTRICT
PSC STAFF STUDY**

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 8.

ALLOCATION OF COSTS ASSOCIATED WITH FIRE HYDRANTS.

Costs are assigned directly to Public Fire Protection.

<u>Customer Classification</u> (1)	<u>Allocation Factor</u> (3)
Public Fire Protection	1.0000
Total	<u>1.0000</u>

FACTOR 9.

ALLOCATION OF COSTS ASSOCIATED WITH METERS.

Factors are based on the relative cost of meters by size and customer classification, as developed on the following page and summarized below.

<u>Customer Classification</u> (1)	<u>5/8" Dollar Equivalents</u> (2)	<u>Allocation Factor</u> (3)
Residential	4,314	0.7526
Commercial	715	0.1247
Industrial	335	0.0585
Other Public Authority	313	0.0546
Sales for Resale	55	0.0096
Private Fire	<u>0</u>	<u>0.0000</u>
Total	<u>5,732</u>	<u>1.0000</u>

MISSOURI-AMERICAN WATER COMPANY
MEXICO DISTRICT
PSC STAFF STUDY

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 10.

ALLOCATION OF COSTS ASSOCIATED WITH SERVICES.

Factors are based on the relative cost of services by size and customer classification, as developed on the following page and summarized below.

<u>Customer Classification</u> (1)	<u>3/4" Dollar Equivalents</u> (2)	<u>Allocation Factor</u> (3)
Residential	4,304	0.8028
Commercial	526	0.0982
Industrial	47	0.0087
Other Public Authority	144	0.0269
Sales for Resale	14	0.0025
Private Fire Protection	<u>327</u>	<u>0.0609</u>
Total	5,362	<u><u>1.0000</u></u>

**MISSOURI-AMERICAN WATER COMPANY
MEXICO DISTRICT
PSC STAFF STUDY**

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 11.

**ALLOCATION OF TRANSMISSION AND DISTRIBUTION OPERATION
SUPERVISION AND ENGINEERING AND MISCELLANEOUS EXPENSES.**

Factors are based on transmission and distribution operation expenses other than those being allocated, as follows:

Customer Classification	Transmission & Distribution Operating Expenses	Allocation Factor
(1)	(2)	(3)
Residential	\$ 30,325	0.3379
Commercial	9,378	0.1045
Industrial	6,773	0.0755
Other Public Authority	5,550	0.0618
Sales for Resale	14,060	0.1567
Private Fire Protection	5,083	0.0566
Public Fire Protection	18,577	0.2070
Total	<u>89,744</u>	<u>1.0000</u>

FACTOR 12.

**ALLOCATION OF TRANS. DISTRIB. MAINTENANCE SUPERVISION
AND ENGINEERING, STRUCTURES AND IMPROVE., AND OTHER EXPENSES.**

Factors are based on transmission and distribution maintenance expenses other than those being allocated, as follows:

Customer Classification	Transmission & Distribution Maintenance Expenses	Allocation Factor
(1)	(2)	(3)
Residential	\$ 3,511	0.8028
Commercial	430	0.0982
Industrial	38	0.0087
Other Public Authority	118	0.0269
Sales for Resale	11	0.0025
Private Fire Protection	266	0.0609
Public Fire Protection	-	0.0000
Total	<u>\$4,374</u>	<u>1.0000</u>

**MISSOURI-AMERICAN WATER COMPANY
MEXICO DISTRICT
PSC STAFF STUDY**

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 13.

ALLOCATION OF BILLING AND COLLECTING COSTS.

Factors are based on the total number of customers.

Customer Classification	Total Customers	Allocation Factor
(1)	(2)	(3)
Residential	4,301	0.8685
Commercial	468	0.0945
Industrial	20	0.0040
Other Public Authority	96	0.0193
Sales for Resale	6	0.0012
Private Fire Protection	62	0.0125
Public Fire Protection	0	0.0000
Total	4,952	1.0000

FACTOR 14.

ALLOCATION OF METER READING COSTS.

Factors are based on the number of metered customers.

Customer Classification	Total Metered Customers	Allocation Factor
(1)	(2)	(3)
Residential	4,301	0.8795
Commercial	468	0.0957
Industrial	20	0.0040
Other Public Authority	96	0.0196
Sales for Resale	6	0.0012
Total	4,890	1.0000

MISSOURI-AMERICAN WATER COMPANY
MEXICO DISTRICT
PSC STAFF STUDY

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 15.

**ALLOCATION OF ADMINISTRATIVE AND GENERAL EXPENSES AND CASH
WORKING CAPITAL.**

Factors are based on the allocation of all other operation and maintenance expenses excluding purchased water, power, chemicals and waste disposal.

Customer Classification	Operation & Maintenance Expenses	Allocation Factor
(1)	(2)	(3)
Residential	\$304,258	0.6193
Commercial	55,472	0.1129
Industrial	29,529	0.0601
Other Public Authority	24,245	0.0493
Sales for Resale	43,899	0.0893
Private Fire Protection	14,633	0.0298
Public Fire Protection	19,310	0.0393
Total	<u>\$491,346</u>	<u>1.0000</u>

**MISSOURI-AMERICAN WATER COMPANY
MEXICO DISTRICT
PSC STAFF STUDY**

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 16.

ALLOCATION OF LABOR RELATED TAXES AND BENEFITS.

Factors are based on the allocation of direct labor expense.

Customer Classification <u>(1)</u>	Direct Labor Expense <u>(2)</u>	Allocation Factor <u>(3)</u>
Residential	\$181,190	0.5470
Commercial	37,915	0.1145
Industrial	23,622	0.0713
Other Public Authority	18,283	0.0552
Sales for Resale	37,663	0.1137
Private Fire Protection	9,617	0.0290
Public Fire Protection	<u>22,972</u>	<u>0.0693</u>
Total	<u><u>\$331,261</u></u>	<u><u>1.0000</u></u>

FACTOR 17.

**ALLOCATION OF ORGANIZATION, FRANCHISES AND CONSENTS,
MISC. INTANGIBLE PLANT AND OTHER RATE BASE ELEMENTS.**

Factors are based on the allocation of the original cost less depreciation other than those items being allocated, as follows:

Customer Classification <u>(1)</u>	Original Cost Less Depreciation <u>(2)</u>	Allocation Factor <u>(3)</u>
Residential	\$5,600,079	0.4187
Commercial	1,759,106	0.1315
Industrial	1,560,832	0.1167
Other Public Authority	1,018,762	0.0762
Sales for Resale	2,270,958	0.1698
Private Fire Protection	244,934	0.0183
Public Fire Protection	<u>920,147</u>	<u>0.0688</u>
Total	<u><u>\$13,374,818</u></u>	<u><u>1.0000</u></u>

**MISSOURI-AMERICAN WATER COMPANY
MEXICO DISTRICT
PSC STAFF STUDY**

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 18.

ALLOCATION OF INCOME TAXES AND INCOME AVAILABLE FOR RETURN.

Factors are based on the allocation of the original cost measure of value rate base as shown on the following pages and summarized below.

Customer Classification	Original Cost Measure of Value	Allocation Factor
(1)	(2)	(3)
Residential	\$4,450,913	0.4188
Commercial	1,397,765	0.1315
Industrial	1,239,995	0.1167
Other Public Authority	809,289	0.0762
Sales for Resale	1,803,963	0.1698
Private Fire Protection	194,655	0.0183
Public Fire Protection	730,501	0.0687
Total	<u>\$10,627,081</u>	<u>1.0000</u>

FACTOR 19.

**ALLOCATION OF REG. COMMISSION EXPENSES, ASSESSMENTS AND
OTHER WATER REVENUES.**

The factors are based on the allocation of the total cost of service, excluding those items being allocated.

Customer Classification	Total Cost of Service	Allocation Factor
(1)	(2)	(3)
Residential	\$1,362,577	0.5008
Commercial	340,139	0.1250
Industrial	261,811	0.0962
Other Public Authority	179,301	0.0659
Sales for Resale	375,928	0.1382
Private Fire Protection	57,812	0.0212
Public Fire Protection	143,030	0.0526
Total	<u>\$2,720,599</u>	<u>0.9999</u>

MISSOURI-AMERICAN WATER COMPANY
MEXICO DISTRICT

PSC STAFF STUDY

BASIS FOR ALLOCATING METER COSTS TO CUSTOMER CLASSIFICATIONS

Meter Size (1)	5/8" Dollar Equivalent (2)	Residential		Commercial		Industrial		Other Public Authority		Sales for Resale		Total	
		Number of Meters (3)	Weighting (4)=(2)X(3)	Number of Meters (5)	Weighting (6)=(2)X(5)	Number of Meters (7)	Weighting (8)=(2)X(7)	Number of Meters (9)	Weighting (10)=(2)X(9)	Number of Meters (11)	Weighting (12)=(2)X(11)	Number of Meters (13)	Weighting (14)
5/8	1.0	4,285.83	4,285.83	343.25	343.25	1.00	1.00	34.58	34.58	0.00	0.00	4,664.67	4,664.67
3/4	1.3	1.00	1.30	6.83	8.88	0.00	0.00	1.50	1.95	0.00	0.00	9.33	12.13
1	1.7	13.08	22.24	76.42	129.91	4.92	8.36	19.00	32.30	0.00	0.00	113.42	192.81
1-1/2	3.5	0.00	0.00	0.83	2.92	0.00	0.00	0.00	0.00	0.00	0.00	0.83	2.92
2	4.3	1.00	4.30	38.58	165.91	6.00	25.80	36.67	157.67	4.00	17.20	86.25	370.88
3	19.0	0.00	0.00	1.25	23.75	0.00	0.00	3.00	57.00	2.00	38.00	6.25	118.75
4	29.3	0.00	0.00	0.00	0.00	3.92	114.76	1.00	29.30	0.00	0.00	4.92	144.06
6	48.4	0.00	0.00	0.83	40.33	3.83	185.53	0.00	0.00	0.00	0.00	4.67	225.87
8	112.9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total		<u>4,300.92</u>	<u>4,313.68</u>	<u>468.00</u>	<u>714.95</u>	<u>19.67</u>	<u>335.45</u>	<u>95.75</u>	<u>312.80</u>	<u>6.00</u>	<u>55.20</u>	<u>4,890.33</u>	<u>5,732.07</u>

**MISSOURI-AMERICAN WATER COMPANY
MEXICO DISTRICT
PSC STAFF STUDY**

BASIS FOR ALLOCATING SERVICE COSTS TO CUSTOMER CLASSIFICATIONS

Service Size (1)	3/4" Dollar Equivalent (2)	Residential		Commercial		Industrial		Other Public Authority		Sales for Resale		Private Fire Protection		Total	
		Number of Services (3)	Weighting (4)=(2)X(3)	Number of Services (5)	Weighting (6)=(2)X(5)	Number of Services (7)	Weighting (8)=(2)X(7)	Number of Services (9)	Weighting (10)=(2)X(9)	Number of Services (11)	Weighting (12)=(2)X(11)	Number of Services (13)	Weighting (14)=(2)X(13)	Number of Services (15)	Weighting (16)
3/4	1.00	4,286.83	4,286.83	350.08	350.08	1.00	1.00	36.08	36.08	0.00	0.00	0.00	0.00	4,674.00	4,674.00
1	1.17	13.08	15.31	76.42	89.41	4.92	5.75	19.00	22.23	0.00	0.00	0.00	0.00	113.42	132.70
1-1/2	1.58	0.00	0.00	0.83	1.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.83	1.32
2	2.04	1.00	2.04	38.58	78.71	6.00	12.24	36.67	74.80	4.00	8.16	1.00	2.04	87.25	177.99
3	2.73	0.00	0.00	1.25	3.41	0.00	0.00	3.00	8.19	2.00	5.46	1.00	2.73	7.25	19.79
4	2.88	0.00	0.00	0.00	0.00	3.92	11.28	1.00	2.88	0.00	0.00	10.00	28.80	14.92	42.96
6	4.24	0.00	0.00	0.83	3.53	3.83	16.25	0.00	0.00	0.00	0.00	19.00	80.56	23.67	100.35
8	6.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.00	76.78	11.00	76.78
10	9.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.00	123.50	13.00	123.50
12	12.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	12.16	1.00	12.16
Total		<u>4,300.92</u>	<u>4,304.18</u>	<u>468.00</u>	<u>526.46</u>	<u>19.67</u>	<u>46.53</u>	<u>95.75</u>	<u>144.18</u>	<u>6.00</u>	<u>13.62</u>	<u>56.00</u>	<u>326.57</u>	<u>4,946.33</u>	<u>5,361.54</u>

MISSOURI-AMERICAN WATER COMPANY
MEXICO DISTRICT

PSC STAFF STUDY

BASIS FOR ALLOCATING DEMAND RELATED COSTS OF FIRE SERVICE
TO PRIVATE AND PUBLIC FIRE PROTECTION CUSTOMER CLASSIFICATIONS

Description (1)	Restrictive Diameters Squared (2)	Quantity (3)	Relative Demand* (4)=(2)x(3)	Allocation Factor (5)
<u>PRIVATE FIRE PROTECTION</u>				
Fire Lines				
2 -inch	4.00	1	4	
3 -inch	9.00	0	0	
4 -inch	16.00	10	160	
6 -inch	36.00	19	684	
8 -inch	64.00	11	704	
10 -inch	100.00	13	1,300	
12 -inch	144.00	1	144	
Private Hydrants	24.75	7	173	
Total Private Fire Protection		62	3,169	0.2035
<u>PUBLIC FIRE PROTECTION</u>				
Hydrant	Nozzle Sizes			
6" Valve	2- 2-1/2" & 1- 3.5"	24.75	501	12,400
6" Valve	2- 2-1/2" & 1- 4"	28.50	0	0
Total Public Fire Protection		501	12,400	0.7965
Total Fire Protection		563	15,569	1.0000

MISSOURI-AMERICAN WATER COMPANY
PARKVILLE WATER DISTRICT

PSC STAFF STUDY

COMPARISON OF COST OF SERVICE WITH REVENUES UNDER PRESENT AND PROPOSED RATES
FOR THE TEST YEAR ENDED DECEMBER 31, 2002

Customer Classification (1)	Cost of Service		Revenues, Present Rates		Revenues, Proposed Rates		Proposed Increase	
	Amount (Schedule B) (2)	Percent (3)	Amount (4)	Percent (5)	Amount (6)	Percent (7)	Amount (8)	Percent Increase (9)
Residential	\$ 1,998,660	73.6%	\$ 2,032,163	71.5%	\$ 1,998,660	73.6%	\$ (33,503)	-1.6%
Commercial	360,210	13.3%	\$ 400,946	14.1%	\$ 360,210	13.3%	(40,736)	-10.2%
Industrial	14,379	0.5%	\$ 14,832	0.5%	\$ 14,379	0.5%	(453)	-3.1%
Public Authority	81,273	3.0%	\$ 96,595	3.4%	\$ 81,273	3.0%	(15,322)	-15.9%
Sales for Resale	212,507	7.8%	\$ 230,613	8.1%	\$ 212,507	7.8%	(18,106)	-7.9%
Private Fire Service	48,318	1.8%	\$ 66,580	2.3%	\$ 48,318	1.8%	(18,262)	-27.4%
Public Fire Service	-	0.0%	-	0.0%	-	0.0%	-	0.0%
Total Sales	2,715,348	<u>100.0%</u>	2,841,729	<u>99.9%</u>	2,715,347	<u>100.0%</u>	(126,382)	-4.4%
Other Revenues	<u>31,464</u>		<u>31,464</u>		<u>31,464</u>		-	0.0%
Total	<u>\$ 2,746,812</u>		<u>\$ 2,873,193</u>		<u>\$ 2,746,811</u>		<u>\$ (126,382)</u>	-4.4%
True-Up Estimate	\$282,983				\$282,983		\$282,983	
Total w/ True-up	<u>3,029,795</u>				<u>\$ 3,029,794</u>		<u>\$ 156,601</u>	5.5%

Test Year Operating Revenues at Present Rates vs Proposed Rates
12 Month Test Period Ended December 31, 2002

Missouri Public Service Commission
Company: Missouri-American Water Company
District: Parkville Water (Platte County)

Case No. WR-2003-0500
STAFF - PARKVILLE WATER
Page 1 of 1

Line #	Class/ Description	Present Pro Forma Rates		Proposed Pro Forma Rates		Dollar Change	Percentage Change
		Sales ('000 Gal)	Total Revenue	Sales ('000 Gal)	Total Revenue		
1							
2	Monthly Billing:						
3							
4	Residential	486,709	\$2,032,163	486,709	\$1,998,660	(\$33,503)	-1.65%
5	Commercial	122,609	400,946	122,609	360,210	(40,736)	-10.16%
6	Industrial	5,989	14,832	5,989	14,379	(453)	-3.05%
7	Other Public Authority	27,373	96,595	27,373	81,273	(15,322)	-15.86%
8	Other Water Utilities	84,324	230,613	84,324	212,507	(18,106)	-7.85%
9	Miscellaneous	0	0	0	0	0	0.00%
10	Private Fire	0	66,580	0	48,318	(18,262)	-27.43%
11	Public Fire	0	0	0	0	0	0.00%
12	Total	<u>727,003</u>	<u>2,841,729</u>	<u>727,003</u>	<u>2,715,347</u>	<u>(\$126,382)</u>	<u>-4.45%</u>
13							
14							
15	Miscellaneous Revenues:						
16							
17	Reconnect Charges		6,820		6,820	0	0.00%
18	Returned Check Charge		636		636	0	0.00%
19	Application Fee		20,340		20,340	0	0.00%
20	Miscellaneous Other Revenue		2,513		1,363	(1,150)	-45.77%
21	Rents from Water Property		1,155		1,155	0	0.00%
22							
23							
24			<u>\$2,873,193</u>		<u>\$2,745,661</u>	<u>(127,532)</u>	<u>-4.44%</u>
25							
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							

Test Year Operating Revenues at Present Rates vs Proposed Rates
12 Month Test Period Ended December 31, 2002

Missouri Public Service Commission
Company: Missouri-American Water Company
District: Parkville Water (Platte County)

Case No. WR-2003-0500
STAFF - PARKVILLE WATER
Page 1 of 7

Line #	Class/ Description	Present Pro Forma Rates				Proposed Pro Forma Rates				Dollar Change	Percentage Change
		Customer Meter Billings	Sales ('000 Gal)	Current Rate	Total Revenue	Customer Meter Billings	Sales ('000 Gal)	Proposed Rate	Total Revenue		
1											
2	Residential:										
3	<u>Minimum Charge:</u>										
4	5/8" Monthly	53,115		\$7.08	\$376,054	53,115		\$ 8.78	\$466,420	\$90,366	24.03%
5	3/4" Monthly	0		9.06	0	0		\$ 9.13	0	0	0.00%
6	1" Monthly	1,958		12.84	25,141	1,958		\$ 9.93	19,436	(5,705)	-22.69%
7	1-1/2" Monthly	441		22.33	9,848	441		\$ 12.82	5,652	(4,196)	-42.61%
8	2" Monthly	92		33.71	3,101	92		\$ 14.65	1,348	(1,753)	-56.53%
9	3" Monthly	13		60.24	783	13		\$ 32.98	429	(354)	-45.21%
10	4" Monthly	13		98.15	1,276	13		\$ 45.15	587	(689)	-54.00%
11	6" Monthly	0		192.93	0	0		\$ 69.88	0	0	0.00%
12	8" Monthly	0		306.65	0	0		\$ 149.70	0	0	0.00%
13	10" Monthly	0		520.92	0	0		0.00	0	0	0.00%
14	12" Monthly	0		859.27	0	0		0.00	0	0	0.00%
15											
16											
17	<u>Volumetric Charges:</u>										
18	First Block		447,899	\$3.4685	1,553,538		447,899	\$3.0918	1,384,797	(168,741)	-10.86%
19	Second Block		23,402	1.9430	45,470		23,402	3.0918	72,353	26,883	59.12%
20	Third Block		2,844	1.4995	4,265		2,844	3.0918	8,793	4,528	106.17%
21	Fourth Block		12,564	1.0098	12,687		12,564	3.0918	38,845	26,158	206.18%
22											
23											
24	Total		<u>486,709</u>		<u>\$2,032,163</u>		<u>486,709</u>		<u>\$1,998,660</u>	<u>(\$33,503)</u>	<u>-1.65%</u>
25											
26											
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40											

**Test Year Operating Revenues at Present Rates vs Proposed Rates
12 Month Test Period Ended December 31, 2002**

**Missouri Public Service Commission
Company: Missouri-American Water Company
District: Parkville Water (Platte County)**

**Case No. WR-2003-0500
STAFF - PARKVILLE WATER
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Line #	Class/ Description	Present Pro Forma Rates				Proposed Pro Forma Rates				Dollar Change	Percentage Change
		Customer Meter Billings	Sales ('000 Gal)	Current Rate	Total Revenue	Customer Meter Billings	Sales ('000 Gal)	Proposed Rate	Total Revenue		
1											
2	Commercial:										
3	<u>Minimum Charge:</u>										
4	5/8" Monthly	2,776		\$7.08	\$19,654	2,776		\$ 8.78	\$24,377	\$4,723	24.03%
5	3/4" Monthly	0		9.06	0	0		\$ 9.13	0	0	0.00%
6	1" Monthly	745		12.84	9,566	745		\$ 9.93	7,395	(2,171)	-22.69%
7	1-1/2" Monthly	146		22.33	3,260	146		\$ 12.82	1,871	(1,389)	-42.61%
8	2" Monthly	400		33.71	13,484	400		\$ 14.65	5,862	(7,622)	-56.53%
9	3" Monthly	75		60.24	4,518	75		\$ 32.98	2,473	(2,045)	-45.26%
10	4" Monthly	0		98.15	0	0		\$ 45.15	0	0	0.00%
11	6" Monthly	46		192.93	8,875	46		\$ 69.88	3,214	(5,661)	-63.79%
12	8" Monthly	0		306.65	0	0		\$ 149.70	0	0	0.00%
13	10" Monthly	0		520.92	0	0		0.00	0	0	0.00%
14	12" Monthly	0		859.27	0	0		0.00	0	0	0.00%
15											
16											
17	<u>Volumetric Charges:</u>										
18	First Block		69,600	\$3.5187	244,902		69,600	\$2.5693	178,823	(66,079)	-26.98%
19	Second Block		41,220	1.9712	81,253		41,220	2.5693	105,906	24,653	30.34%
20	Third Block		6,758	1.5212	10,280		6,758	2.5693	17,363	7,083	68.90%
21	Fourth Block		5,031	1.0244	5,154		5,031	2.5693	12,926	7,772	150.80%
22											
23											
24	Total		<u>122,609</u>		<u>\$400,946</u>		<u>122,609</u>		<u>\$360,210</u>	<u>(\$40,736)</u>	<u>-10.16%</u>

Test Year Operating Revenues at Present Rates vs Proposed Rates
12 Month Test Period Ended December 31, 2002

Missouri Public Service Commission
 Company: Missouri-American Water Company
 District: Parkville Water (Platte County)

Case No. WR-2003-0500
STAFF - PARKVILLE WATER
 Page 3 of 7

Line #	Class/ Description	Present Pro Forma Rates				Proposed Pro Forma Rates				Dollar Change	Percentage Change
		Customer Meter Billings	Sales ('000 Gal)	Current Rate	Total Revenue	Customer Meter Billings	Sales ('000 Gal)	Proposed Rate	Total Revenue		
1											
2	Industrial:										
3	<u>Minimum Charge:</u>										
4	5/8" Monthly	84		\$7.08	\$595	84		\$ 8.78	\$738	\$143	24.03%
5	3/4" Monthly	0		9.06	0	0		\$ 9.13	0	0	0.00%
6	1" Monthly	0		12.84	0	0		\$ 9.93	0	0	0.00%
7	1-1/2" Monthly	24		22.33	536	24		\$ 12.82	308	(228)	-42.54%
8	2" Monthly	36		33.71	1,214	36		\$ 14.65	528	(686)	-56.51%
9	3" Monthly	0		60.24	0	0		\$ 32.98	0	0	0.00%
10	4" Monthly	0		98.15	0	0		\$ 45.15	0	0	0.00%
11	6" Monthly	0		192.93	0	0		\$ 69.88	0	0	0.00%
12	8" Monthly	0		306.65	0	0		\$ 149.70	0	0	0.00%
13	10" Monthly	0		520.92	0	0		0.00	0	0	0.00%
14	12" Monthly	0		859.27	0	0		0.00	0	0	0.00%
15											
16											
17	<u>Volumetric Charges:</u>										
18	First Block		3,940	\$2.4544	9,669		3,940	\$2.1381	8,423	(1,246)	-12.89%
19	Second Block		2,050	1.3749	2,818		2,050	2.1381	4,382	1,564	55.50%
20	Third Block		0	1.0611	0		0	2.1381	0	0	0.00%
21	Fourth Block		0	0.7145	0		0	2.1381	0	0	0.00%
22											
23											
24	Total		<u>5,989</u>		<u>\$14,832</u>		<u>5,989</u>		<u>\$14,379</u>	<u>(\$453)</u>	<u>-3.05%</u>

Test Year Operating Revenues at Present Rates vs Proposed Rates
12 Month Test Period Ended December 31, 2002

Missouri Public Service Commission
 Company: Missouri-American Water Company
 District: Parkville Water (Platte County)

Case No. WR-2003-0500
STAFF - PARKVILLE WATER
 Page 4 of 7

Line #	Class/ Description	Present Pro Forma Rates				Proposed Pro Forma Rates				Dollar Change	Percentage Change
		Customer Meter Billings	Sales (^{'000} Gal)	Current Rate	Total Revenue	Customer Meter Billings	Sales (^{'000} Gal)	Proposed Rate	Total Revenue		
1											
2	Other Public Authority:										
3	<u>Minimum Charge:</u>										
4	5/8" Monthly	351		\$7.08	\$2,485	351		\$ 8.78	\$3,082	\$597	24.02%
5	3/4" Monthly	0		9.06	0	0		\$ 9.13	0	0	0.00%
6	1" Monthly	84		12.84	1,079	84		\$ 9.93	834	(245)	-22.71%
7	1-1/2" Monthly	84		22.33	1,876	84		\$ 12.82	1,077	(799)	-42.59%
8	2" Monthly	213		33.71	7,180	213		\$ 14.65	3,121	(4,059)	-56.53%
9	3" Monthly	0		60.24	0	0		\$ 32.98	0	0	0.00%
10	4" Monthly	3		98.15	294	3		\$ 45.15	135	(159)	-54.08%
11	6" Monthly	12		192.93	2,315	12		\$ 69.88	839	(1,476)	-63.76%
12	8" Monthly	0		306.65	0	0		\$ 149.70	0	0	0.00%
13	10" Monthly	0		520.92	0	0		0.00	0	0	0.00%
14	12" Monthly	0		859.27	0	0		0.00	0	0	0.00%
15											
16											
17	<u>Volumetric Charges:</u>										
18	First Block		10,849	\$4.0469	43,906		10,849	\$2.6371	28,611	(15,295)	-34.84%
19	Second Block		16,523	2.2671	37,460		16,523	2.6371	43,574	6,114	16.32%
20	Third Block		0	1.7495	0		0	2.6371	0	0	0.00%
21	Fourth Block		0	1.1782	0		0	2.6371	0	0	0.00%
22											
23											
24	Total		<u>27,373</u>		<u>\$96,595</u>		<u>27,373</u>		<u>\$81,273</u>	<u>(\$15,322)</u>	<u>-15.86%</u>

Test Year Operating Revenues at Present Rates vs Proposed Rates
12 Month Test Period Ended December 31, 2002

Missouri Public Service Commission
 Company: Missouri-American Water Company
 District: Parkville Water (Platte County)

Case No. WR-2003-0500
STAFF - PARKVILLE WATER
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Line #	Class/ Description	Present Pro Forma Rates				Proposed Pro Forma Rates				Dollar Change	Percentage Change
		Customer Meter Billings	Sales ('000 Gal)	Current Rate	Total Revenue	Customer Meter Billings	Sales ('000 Gal)	Proposed Rate	Total Revenue		
1											
2	Other Water Utilities:										
3	<u>Minimum Charge:</u>										
4	5/8" Monthly	0		\$7.08	\$0	0		\$ 8.78	\$0	\$0	0.00%
5	3/4" Monthly	0		9.06	0	0		\$ 9.13	0	0	0.00%
6	1" Monthly	0		12.84	0	0		\$ 9.93	0	0	0.00%
7	1-1/2" Monthly	0		22.33	0	0		\$ 12.82	0	0	0.00%
8	2" Monthly	0		33.71	0	0		\$ 14.65	0	0	0.00%
9	3" Monthly	36		60.24	2,169	36		\$ 32.98	1,187	(982)	-45.27%
10	4" Monthly	12		98.15	1,178	12		\$ 45.15	542	(636)	-53.99%
11	6" Monthly	0		192.93	0	0		\$ 69.88	0	0	0.00%
12	8" Monthly	0		306.65	0	0		\$ 149.70	0	0	0.00%
13	10" Monthly	0		520.92	0	0		0.00	0	0	0.00%
14	12" Monthly	0		859.27	0	0		0.00	0	0	0.00%
15											
16											
17	<u>Volumetric Charges:</u>										
18	First Block		2,400	\$5.2769	12,665		2,400	\$2.4996	5,999	(6,666)	-52.63%
19	Second Block		45,350	2.9561	134,058		45,350	2.4996	113,357	(20,701)	-15.44%
20	Third Block		32,692	2.2813	74,579		32,692	2.4996	81,717	7,138	9.57%
21	Fourth Block		3,883	1.5362	5,964		3,883	2.4996	9,705	3,741	62.73%
22											
23											
24	Total		<u>84,324</u>		<u>\$230,613</u>		<u>84,324</u>		<u>\$212,507</u>	<u>(\$18,106)</u>	<u>-7.85%</u>

**Test Year Operating Revenues at Present Rates vs Proposed Rates
12 Month Test Period Ended December 31, 2002**

**Missouri Public Service Commission
Company: Missouri-American Water Company
District: Parkville Water (Platte County)**

**Case No. WR-2003-0500
STAFF - PARKVILLE WATER
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Line #	Class/ Description	Present Pro Forma Rates				Proposed Pro Forma Rates				Dollar Change	Percentage Change
		Customer Meter Billings	Sales ('000 Gal)	Current Rate	Total Revenue	Customer Meter Billings	Sales ('000 Gal)	Proposed Rate	Total Revenue		
1											
2	Miscellaneous:										
3	<u>Minimum Charge:</u>										
4	5/8" Monthly	0		\$7.08	\$0	0		\$ 8.78	\$0	\$0	0.00%
5	3/4" Monthly	0		9.06	0	0		\$ 9.13	0	0	0.00%
6	1" Monthly	0		12.84	0	0		\$ 9.93	0	0	0.00%
7	1-1/2" Monthly	0		22.33	0	0		\$ 12.82	0	0	0.00%
8	2" Monthly	0		33.71	0	0		\$ 14.65	0	0	0.00%
9	3" Monthly	0		60.24	0	0		\$ 32.98	0	0	0.00%
10	4" Monthly	0		98.15	0	0		\$ 45.15	0	0	0.00%
11	6" Monthly	0		192.93	0	0		\$ 69.88	0	0	0.00%
12	8" Monthly	0		306.65	0	0		\$ 149.70	0	0	0.00%
13	10" Monthly	0		520.92	0	0		0.00	0	0	0.00%
14	12" Monthly	0		859.27	0	0		0.00	0	0	0.00%
15											
16											
17	<u>Volumetric Charges:</u>										
18	First Block		0	\$0.0000	0		0	\$0.0000	0	0	0.00%
19	Second Block		0	0.0000	0		0	0.0000	0	0	0.00%
20	Third Block		0	0.0000	0		0	0.0000	0	0	0.00%
21	Fourth Block		0	0.0000	0		0	0.0000	0	0	0.00%
22											
23											
24	Total		<u>0</u>		<u>\$0</u>		<u>0</u>		<u>\$0</u>	<u>\$0</u>	<u>0.00%</u>

**Test Year Operating Revenues at Present Rates vs Proposed Rates
12 Month Test Period Ended December 31, 2002**

Missouri Public Service Commission
Company: Missouri-American Water Company
District: Parkville Water (Platte County)

Case No. WR-2003-0500
STAFF - PARKVILLE WATER
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Line #	Connection Size	Number of Connections	Present Rates		Proposed Rates		Dollar Change	Percentage Change
			Annual Rate	Total Revenue	Annual Rate	Total Revenue		
1								
2	Private Fire Service:							
3								
4	Private Fire Hydrant	27	\$980.64	\$26,477	711.66	\$19,215	(\$7,262)	-27.43%
5								
6	2"	1	140.52	141	101.98	102	(39)	-27.66%
7								
8	3"	0	241.44	0	175.22	0	0	0.00%
9								
10	4"	5	383.16	1,916	278.06	1,390	(526)	-27.45%
11								
12	6"	25	785.76	19,644	570.23	14,256	(5,388)	-27.43%
13								
14	8"	9	1,352.04	12,168	981.19	8,831	(3,337)	-27.42%
15								
16	10"	3	2,078.16	6,234	1,508.14	4,524	(1,710)	-27.43%
17								
18	12"	0	2,963.16	0	2,150.39	0	0	0.00%
19								
20								
21								
22	Total	<u>70</u>		<u>\$66,580</u>		<u>\$48,318</u>	<u>(\$18,262)</u>	<u>-27.43%</u>
23								
24								
25								
26	Public Fire Protection:							
27								
28	Public Fire Hydrants	<u>582</u>	0.00	<u>0</u>		<u>0</u>	<u>0</u>	<u>0.00%</u>
29								

**MISSOURI-AMERICAN WATER COMPANY
PARKVILLE WATER DISTRICT**

COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS

PSC STAFF STUDY

Account (1)	Factor Ref. (2)	Cost of Service (3)	Residential (4)	Commercial (5)	Industrial (6)	Public Authorities (7)	Sales for Resale (8)	Fire Protection		
								Private (9)	Public (10)	
OPERATION AND MAINTENANCE EXPENSES										
SOURCE OF SUPPLY EXPENSES										
Super & Eng Oper SS	2	\$ 11,920	\$ 8,245	\$ 1,807	\$ 75	\$ 404	\$ 1,354	\$ 5	\$ 30	0.0
Labor & Exp Oper SS	2	2,147	1,485	325	14	73	244	1	5	0.0
Labor & Exp Oper SS	2	1,520	1,051	230	10	52	173	1	4	0.0
Purchased Water	1	107,353	71,454	17,992	880	4,015	12,378	86	548	0.0
TOTAL SS EXPENSE - OPERATION		122,940	82,236	20,355	978	4,543	14,148	92	586	0.0
Misc Exp Oper SS	2	0	0	0	0	0	0	0	0	0.0
Misc Exp Oper SS	2	999	691	151	6	34	113	0	2	0.0
Rents Oper SS	2	0	0	0	0	0	0	0	0	0.0
Super & Eng Maint SS	2	0	0	0	0	0	0	0	0	0.0
Struct & Improve Maint SS	2	0	0	0	0	0	0	0	0	0.0
Struct & Improve Maint SS	2	29	20	4	0	1	3	0	0	0.0
Collect & Impound Maint SS	2	0	0	0	0	0	0	0	0	0.0
Lake, River & Oth Maint SS	2	0	0	0	0	0	0	0	0	0.0
Lake, River & Oth Maint SS	2	0	0	0	0	0	0	0	0	0.0
Wells & Springs Maint SS	2	982	679	149	6	33	112	0	2	0.0
Wells & Springs Maint SS	2	0	0	0	0	0	0	0	0	0.0
Infil Gall & Tunnels Maint SS	2	0	0	0	0	0	0	0	0	0.0
Supply Mains Maint SS	2	0	0	0	0	0	0	0	0	0.0
Misc Plant Maint SS	2	263	182	40	2	9	30	0	1	0.0
Misc Plant Maint SS	2	4,765	3,296	722	30	162	541	2	12	0.0
TOTAL SS EXPENSE - MAINTENANCE		7,038	4,868	1,067	44	239	800	3	18	0.0
TOTAL SS EXPENSE		129,978	87,104	21,422	1,023	4,782	14,948	95	604	0.0
POWER AND PUMPING EXPENSES										
Super & Eng Oper P	6	0	0	0	0	0	0	0	0	0.0
Fuel for Power Prod	1	0	0	0	0	0	0	0	0	0.0
Labor & Exp Oper Pwr Prod	6	937	625	137	6	31	103	5	31	0.0
Labor & Exp Oper Pwr Prod	6	0	0	0	0	0	0	0	0	0.0
Purch Fuel/Power for Pump	1	98,931	65,848	16,581	811	3,700	11,407	79	505	0.0
Labor & Exp Oper Pump	6	0	0	0	0	0	0	0	0	0.0
Labor & Exp Oper Pump	6	1	1	0	0	0	0	0	0	0.0
Expenses Transferred	6	0	0	0	0	0	0	0	0	0.0
Misc Exp Oper P	6	16	11	2	0	1	2	0	1	0.0
Rents Oper P	6	41	27	6	0	1	4	0	1	0.0
TOTAL PUMPING EXPENSE - OPERATION		99,926	66,513	16,726	817	3,733	11,516	85	537	0.0

**MISSOURI-AMERICAN WATER COMPANY
PARKVILLE WATER DISTRICT**

COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS

PSC STAFF STUDY

Account (1)	Factor Ref. (2)	Cost of Service (3)	Residential (4)	Commercial (5)	Industrial (6)	Public Authorities (7)	Sales for Resale (8)	Fire Protection		
								Private (9)	Public (10)	
Super & Eng Maint P	6	0	0	0	0	0	0	0	0	0.0
Struct & Improve Maint P	6	0	0	0	0	0	0	0	0	0.0
Power Prod Equip Maint P	6	0	0	0	0	0	0	0	0	0.0
Pump Equip Maint P	6	0	0	0	0	0	0	0	0	0.0
Pump Equip Maint P	6	2,421	1,616	354	15	79	265	13	79	0.0
TOTAL PUMPING EXPENSES - MAINTENANCE		2,421	1,616	354	15	79	265	13	79	0.0
TOTAL PUMPING EXPENSES		102,347	68,128	17,080	832	3,812	11,781	98	616	0.0
WATER TREATMENT										0.0
Super & Eng Oper WT	2	11,808	8,168	1,790	74	400	1,341	5	30	0.0
Chemicals	1	85,781	57,096	14,377	703	3,208	9,891	69	437	0.0
Labor & Exp Oper WT	2	35,064	24,254	5,316	221	1,189	3,983	14	88	0.0
Labor & Exp Oper WT	2	13	9	2	0	0	1	0	0	0.0
Misc Exp Oper WT	2	4,913	3,398	745	31	167	558	2	12	0.0
Misc Exp Oper WT	1	0	0	0	0	0	0	0	0	0.0
Misc Exp Oper WT	2	7,426	5,137	1,126	47	252	844	3	19	0.0
Rents Oper WT	2	(4)	(3)	(1)	(0)	(0)	(0)	(0)	(0)	0.0
TOTAL WT EXPENSE - OPERATION		145,001	98,058	23,355	1,076	5,216	16,618	92	586	0.0
Super & Eng Maint WT	2	5,117	3,539	776	32	173	581	2	13	0.0
Struct & Improve Maint WT	2	0	0	0	0	0	0	0	0	0.0
Struct & Improve Maint WT	2	0	0	0	0	0	0	0	0	0.0
WT Equip Maint WT	2	8,582	5,936	1,301	54	291	975	3	21	0.0
WT Equip Maint WT	2	6,313	4,367	957	40	214	717	3	16	0.0
TOTAL WT EXPENSE - MAINTENANCE		20,012	13,842	3,034	126	678	2,273	8	50	0.0
TOTAL WT EXPENSE		165,013	111,901	26,388	1,203	5,894	18,891	100	636	0.0
TRANSMISSION AND DISTRIBUTION EXPENSES										0.0
Super & Eng Oper TD	11	11,995	6,121	1,213	40	273	952	482	2,914	0.0
Storage Facility Exp	5	427	270	54	2	12	44	6	39	0.0
Storage Facility Exp	5	0	0	0	0	0	0	0	0	0.0
TD Lines Exp	7	15,831	7,900	1,586	52	355	1,287	660	3,991	0.0
TD Lines Exp	7	36,859	18,393	3,693	122	826	2,997	1,537	9,292	0.0
Meter Expense	9	965	798	117	4	32	14	0	0	0.0
Meter Expense	9	762	630	92	3	25	11	0	0	0.0
Customer Install Exp	10	0	0	0	0	0	0	0	0	0.0
Customer Install Exp	10	0	0	0	0	0	0	0	0	0.0

MISSOURI-AMERICAN WATER COMPANY
PARKVILLE WATER DISTRICT
COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS

PSC STAFF STUDY

Account (1)	Factor Ref. (2)	Cost of Service (3)	Residential (4)	Commercial (5)	Industrial (6)	Public Authorities (7)	Sales for Resale (8)	Fire Protection		
								Private (9)	Public (10)	
Misc Exp Oper TD	11	15,661	7,992	1,583	52	357	1,243	630	3,804	0.0
Misc Exp Oper TD	11	38,490	19,641	3,891	127	878	3,056	1,547	9,349	0.0
Misc Exp Oper TD	11	9,339	4,766	944	31	213	742	375	2,268	0.0
Rents Oper TD	11	260	133	26	1	6	21	10	63	0.0
TOTAL T & D EXPENSE OPERATION		130,589	66,642	13,201	433	2,977	10,367	5,249	31,720	0.0
Super & Eng Maint TD	12	1	1	0	0	0	0	0	0	0.0
Struct & Improve Maint TD	12	0	0	0	0	0	0	0	0	0.0
Struct & Improve Maint TD	12	0	0	0	0	0	0	0	0	0.0
Dist Res Stand Maint TD	5	0	0	0	0	0	0	0	0	0.0
TD Main Maint TD	7	5,384	2,687	539	18	121	438	225	1,357	0.0
TD Main Maint TD	7	0	0	0	0	0	0	0	0	0.0
Fire Main Maint TD	8	0	0	0	0	0	0	0	0	0.0
Services Maint TD	10	1,280	1,117	84	4	21	3	51	0	0.0
Services Maint TD	10	(36)	(31)	(2)	(0)	(1)	(0)	(1)	0	0.0
Meters Maint TD	9	0	0	0	0	0	0	0	0	0.0
Meters Maint TD	9	0	0	0	0	0	0	0	0	0.0
Hydrants Maint TD	8	0	0	0	0	0	0	0	0	0.0
Hydrants Maint TD	8	107	0	0	0	0	0	0	107	0.0
Misc Plant Maint TD	12	70	39	6	0	1	5	3	15	0.0
Mat and Sup Maint TD	12	88,602	49,617	8,169	284	1,861	5,795	3,615	19,262	0.0
Misc Maint TD	12	0	0	0	0	0	0	0	0	0.0
Amort Def Maint TD	5	0	0	0	0	0	0	0	0	0.0
TOTAL T & D EXPENSE - MAINTENANCE		95,408	53,429	8,796	305	2,004	6,240	3,892	20,742	0.0
TOTAL T & D EXPENSE		225,997	120,071	21,998	739	4,980	16,606	9,141	52,462	0.0
CUSTOMER ACCOUNTS										0.0
Supervision CA	13	392	358	22	1	5	0	5	0	0.0
Meter Reading Exp CA	14	21,977	20,373	1,261	53	273	18	0	0	0.0
Meter Reading Exp CA	14	0	0	0	0	0	0	0	0	0.0
Meter Reading Exp CA	14	3,130	2,902	180	8	39	3	0	0	0.0
Cust Rec & Collection CA	13	35,886	32,803	2,031	86	441	29	495	0	0.0
Cust Rec & Collection CA	13	19,439	17,769	1,100	47	239	16	268	0	0.0
Uncollectible Accts	13	14,932	13,649	845	36	184	12	206	0	0.0
Misc Cust Accts Exp CA	13	883	807	50	2	11	1	12	0	0.0
Misc Cust Accts Exp CA	13	289	264	16	1	4	0	4	0	0.0
Misc Cust Accts Exp CA	13	8,929	8,162	505	21	110	7	123	0	0.0
Cust Serv & Info Exp CA	13	37,366	34,156	2,115	90	460	30	516	0	0.0
TOTAL CUSTOMER ACCOUNTING EXPENSE		143,223	131,244	8,127	344	1,764	115	1,630	0	0.0

MISSOURI-AMERICAN WATER COMPANY
PARKVILLE WATER DISTRICT
COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS

PSC STAFF STUDY

Account	Factor Ref.	Cost of Service	Residential	Commercial	Industrial	Public Authorities	Sales for Resale	Fire Protection		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	Private	Public	(10)
ADMINISTRATIVE AND GENERAL EXPENSES										
Salaries AG	15	89,875	61,385	8,727	333	1,950	5,428	2,049	10,003	0.0
Other Supplies & Exp AG	15	1,513	1,033	147	6	33	91	34	168	0.0
Other Supplies & Exp AG	15	35,352	24,145	3,433	131	767	2,135	806	3,935	0.0
Other Supplies & Exp AG	15	3,795	2,592	368	14	82	229	87	422	0.0
Mgmt Fees-Coporate/Shared Service Center	15	71,609	48,909	6,953	265	1,554	4,325	1,633	7,970	0.0
Mgmt Fees-Call Center	13	38,602	35,286	2,185	93	475	31	533	0	0.0
Mgmt Fees-Belleville Lab	2	60,012	41,510	9,098	378	2,034	6,817	24	150	0.0
Mgmt Fees- Financial ITS	15	3,757	2,566	365	14	82	227	86	418	0.0
Mgmt Fees- Customer Billings ITS	13	21,211	19,389	1,201	51	261	17	293	0	0.0
Mgmt Fees-Other ITS	15	239	163	23	1	5	14	5	27	0.0
Outside Services AG	15	22,043	15,055	2,140	82	478	1,331	503	2,453	0.0
Outside Services AG	15	0	0	0	0	0	0	0	0	0.0
Property Insurance	15	13,722	9,372	1,332	51	298	829	313	1,527	0.0
Ins Gen Liab Oper AG	15	10,492	7,166	1,019	39	228	634	239	1,168	0.0
Ins Work Comp AG	16	7,306	5,155	761	30	170	479	123	588	0.0
Ins Other Oper AG	15	0	0	0	0	0	0	0	0	0.0
Property Insurance	15	0	0	0	0	0	0	0	0	0.0
Injuries & Damages	16	207	146	22	1	5	14	3	17	0.0
Employee Pension & Benefits	16	104,516	73,746	10,891	429	2,435	6,846	1,756	8,414	0.0
Employee Pension & Benefits	16	0	0	0	0	0	0	0	0	0.0
Employee Pension & Benefits	16	0	0	0	0	0	0	0	0	0.0
Reg Commision Exp	15	2,535	1,731	246	9	55	153	58	282	0.0
Rents AG	15	14,055	9,600	1,365	52	305	849	320	1,564	0.0
Goodwill Advertising Exp	15	0	0	0	0	0	0	0	0	0.0
Misc Exp AG	15	(2,175)	(1,486)	(211)	(8)	(47)	(131)	(50)	(242)	0.0
Research & Development	15	0	0	0	0	0	0	0	0	0.0
TOTAL A & G OPERATIONS		498,666	357,466	50,064	1,968	11,170	30,319	8,815	38,865	0.0
General Plant Maint AG	15	0	0	0	0	0	0	0	0	0.0
General Plant Maint AG	15	5,021	3,429	488	19	109	303	114	559	0.0
TOTAL A & G EXPENSE - MAINTENANCE		5,021	3,429	488	19	109	303	114	559	0.0
TOTAL A & G EXPENSE		503,687	360,895	50,552	1,987	11,279	30,622	8,929	39,423	0.0
Total Operation & Maintenance Expenses		1,270,245	879,343	145,567	6,127	32,511	92,963	19,993	93,741	0.0

MISSOURI-AMERICAN WATER COMPANY

PARKVILLE WATER DISTRICT

COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS

PSC STAFF STUDY

Account	Factor Ref.	Cost of Service	Residential	Commercial	Industrial	Public Authorities	Sales for Resale	Fire Protection		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	Private	Public	(10)
DEPRECIATION EXPENSE										
Struct & Imp SS	2	302	209	46	2	10	34	0	1	0.0
Struct & Imp P	6	132	88	19	1	4	14	1	4	0.0
Struct & Imp WT	2	5,221	3,611	792	33	177	593	2	13	0.0
Struct & Imp TD	7	1,887	942	189	6	42	153	79	476	0.0
Struct & Imp Offices	15	1,665	1,137	162	6	36	101	38	185	0.0
Struct & Imp Store,Shop,Gar	15	535	365	52	2	12	32	12	60	0.0
Struct & Imp Misc	15	4,354	2,974	423	16	94	263	99	485	0.0
Collect & Impounding	1	0	0	0	0	0	0	0	0	0.0
Lake, River & Other Intakes	2	0	0	0	0	0	0	0	0	0.0
Wells & Springs	2	3,681	2,546	558	23	125	418	1	9	0.0
Supply Mains	2	2,919	2,019	443	18	99	332	1	7	0.0
Power Generation Equip Other	6	0	0	0	0	0	0	0	0	0.0
Pump Equip Electric	6	13,038	8,702	1,906	80	426	1,429	70	425	0.0
Pump Equip Diesel	6	346	231	51	2	11	38	2	11	0.0
Pump Equip Other	6	643	429	94	4	21	70	3	21	0.0
WT Equip Non-Media	2	40,489	28,006	6,138	255	1,373	4,600	16	101	0.0
WT Equip Filter Media	2	0	0	0	0	0	0	0	0	0.0
Dist Reservoirs & Standpipe	5	19,719	12,458	2,504	83	558	2,027	298	1,790	0.0
Elevated Tanks & Standpipes	5	0	0	0	0	0	0	0	0	0.0
Ground Level Facilities	5	0	0	0	0	0	0	0	0	0.0
TD Mains Not Classified by	7	45,715	22,812	4,581	151	1,024	3,717	1,906	11,525	0.0
TD Mains 4 & Less "	4	2,765	1,380	277	9	62	225	115	697	0.0
TD Mains 6 to 8" "	4	20,786	10,372	2,083	69	466	1,690	867	5,240	0.0
TD Mains 10 to 16" "	3	33,867	22,186	4,863	203	1,087	3,644	268	1,615	0.0
TD Mains 18 & Grtr "	3	0	0	0	0	0	0	0	0	0.0
Fire Mains	8	828	0	0	0	0	0	0	828	0.0
Services	10	23,861	20,821	1,561	72	398	50	959	0	0.0
Meters Bronze Case	9	3,856	3,187	468	17	128	56	0	0	0.0
Meters Plastic Case	9	0	0	0	0	0	0	0	0	0.0
Meters Other	9	2,587	2,138	314	12	86	38	0	0	0.0
Meters Other-Rem Rdr Units	9	0	0	0	0	0	0	0	0	0.0
Meter Installations	9	13,717	11,337	1,664	62	455	199	0	0	0.0
Meter Installation Other	9	0	0	0	0	0	0	0	0	0.0
Hydrants	8	11,406	0	0	0	0	0	0	11,406	0.0
Utility Plant Acquisition Adjustment	17	0	0	0	0	0	0	0	0	0.0
Other P/E WT Res Hand Equip	2	0	0	0	0	0	0	0	0	0.0
Other P/E TD	11	66	34	7	0	2	5	3	16	0.0
Other P/E CPS	15	0	0	0	0	0	0	0	0	0.0
Office Furniture & Equip	15	274	187	27	1	6	17	6	30	0.0
Comp & Periph Equip	15	2,273	1,552	221	8	49	137	52	253	0.0
Computer Software	15	1,123	767	109	4	24	68	26	125	0.0
Comp Software Personal	15	0	0	0	0	0	0	0	0	0.0
Data Handling Equipment	15	7,284	4,975	707	27	158	440	166	811	0.0
Other Office Equipment	15	0	0	0	0	0	0	0	0	0.0
Trans Equip Lt Duty Trks	15	7,187	4,909	698	27	156	434	164	800	0.0
Trans Equip Hvy Duty Trks	15	0	0	0	0	0	0	0	0	0.0
Trans Equip Autos	15	4,402	3,007	427	16	96	266	100	490	0.0
Trans Equip Other	15	0	0	0	0	0	0	0	0	0.0
Stores Equipment	15	100	68	10	0	2	6	2	11	0.0
Tools,Shop,Garage Equip	15	1,555	1,062	151	6	34	94	35	173	0.0
Tools,Shop,Garage Equip Oth	15	0	0	0	0	0	0	0	0	0.0
Laboratory Equipment	2	2,205	1,525	334	14	75	250	1	6	0.0

Schedule C-5-SPRK

MISSOURI-AMERICAN WATER COMPANY
PARKVILLE WATER DISTRICT
COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS

PSC STAFF STUDY

Account (1)	Factor Ref. (2)	Cost of Service (3)	Residential (4)	Commercial (5)	Industrial (6)	Public Authorities (7)	Sales for Resale (8)	Fire Protection		
								Private (9)	Public (10)	
Laboratory Equip Other	2	0	0	0	0	0	0	0	0	0.0
Power Operated Equipment	15	49	33	5	0	1	3	1	5	0.0
Comm Equip Non-Telephone	15	2,244	1,533	218	8	49	136	51	250	0.0
Comm Equip Telephone	15	0	0	0	0	0	0	0	0	0.0
Misc Equipment	15	1,721	1,175	167	6	37	104	39	192	0.0
Other Tangible Property	15	0	0	0	0	0	0	0	0	0.0
Total Depreciation Expense		284,802	178,779	32,266	1,244	7,384	21,683	5,385	38,062	
Amort-Other UP	18	(1,664)	(1,003)	(193)	(7)	(44)	(137)	(32)	(247)	
Taxes Other Than Income										
Utility Reg Assessment Fee	19	17,068	11,060	1,963	79	442	1,321	300	1,903	
Property Taxes	18	400,193	241,236	46,462	1,761	10,565	33,056	7,724	59,389	
FUTA	16	389	274	41	2	9	25	7	31	0.0
FICA	16	20,406	14,398	2,126	84	475	1,337	343	1,643	0.0
SUTA	16	345	243	36	1	8	23	6	28	0.0
Other Taxes & Licenses	15	5,764	3,937	560	21	125	348	131	642	0.0
Gross Receipts Tax	19	0	0	0	0	0	0	0	0	0.0
Total Taxes, Other Than Income		444,165	271,150	51,188	1,947	11,625	36,110	8,511	63,635	0.0
Income Taxes	18	173,901	104,828	20,190	765	4,591	14,364	3,356	25,807	0.0
Utility Income Available for Return	18	575,363	346,829	66,800	2,532	15,190	47,525	11,105	85,384	
Total Cost of Service		2,746,812	1,779,925	315,817	12,607	71,257	212,507	48,318	306,382	0.0
Less: Other Water Revenues	19	(31,464)	(31,464)							0.0
Revenue Contribution										
Total Other Water Revenues		(31,464)	(31,464)	0	0	0	0	0	0	0.0
Total Cost of Service Related to Sales of Water		\$ 2,715,348	\$ 1,748,461	\$ 315,817	\$ 12,607	\$ 71,257	\$ 212,507	\$ 48,318	\$ 306,382	0.0

MISSOURI-AMERICAN WATER COMPANY
PARKVILLE WATER DISTRICT
COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS

PSC STAFF STUDY									
Account	Factor	Cost of	Residential	Commercial	Industrial	Public	Sales for	Fire Protection	
(1)	Ref.	Service	(4)	(5)	(6)	Authorities	Resale	Private	Public
	(2)	(3)				(7)	(8)	(9)	(10)
Reallocation of Public Fire	20		250,200	44,394	1,772	10,016	0	0	(306,382)
Total		<u>\$ 2,715,348</u>	<u>\$ 1,998,660</u>	<u>\$ 360,210</u>	<u>\$ 14,379</u>	<u>\$ 81,273</u>	<u>\$ 212,507</u>	<u>\$ 48,318</u>	<u>\$ -</u>
		\$ 31,464	\$ 31,464						
		<u>\$ 2,746,812</u>	<u>\$ 2,030,124</u>						
		\$ 275							
		\$ 2,747,087							

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MISSOURI-AMERICAN WATER COMPANY
PARKVILLE WATER DISTRICT

COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS

PSC STAFF STUDY

Account (1)	Factor Ref. (2)	Cost of Service (3)	Residential (4)	Commercial (5)	Industrial (6)	Public Authorities (7)	Sales for Resale (8)	Fire Protection Private (9)	Public (10)	
RATE BASE										0.0
Organization	17	\$ 1,929	\$ 1,165	\$ 223	\$ 9	\$ 51	\$ 159	\$ 37	\$ 285	0.0
Franchises	17	13	8	2	0	0	1	0	2	0.0
Land & Ld Rights SS	2	1,735	1,200	263	11	59	197	1	4	0.0
Land & Ld Rights P	6	0	0	0	0	0	0	0	0	0.0
Land & Ld Rights WT	2	432	299	65	3	15	49	0	1	0.0
Land & Ld Rights TD	7	12,956	6,465	1,298	43	290	1,053	540	3,266	0.0
Land & Land Rights AG	15	142	97	14	1	3	9	3	16	0.0
Struct & Imp SS	2	8,531	5,901	1,293	54	289	969	3	21	0.0
Struct & Imp P	6	9,524	6,356	1,392	58	311	1,044	51	310	0.0
Struct & Imp Pumps (STL)	6	0	0	0	0	0	0	0	0	0.0
Struct & Imp Pump Boosters	6	0	0	0	0	0	0	0	0	0.0
Struct & Imp WT	2	347,000	240,020	52,605	2,186	11,763	39,419	139	868	0.0
Struct & Imp WT Nth Plt (ST)	2	0	0	0	0	0	0	0	0	0.0
Struct & Imp WT Ctrl Plt 1	2	0	0	0	0	0	0	0	0	0.0
Struct & Imp WT Ctrl Plt 3	2	0	0	0	0	0	0	0	0	0.0
Struct & Imp WT Sth Plt (ST)	2	0	0	0	0	0	0	0	0	0.0
Struct & Imp WT Meramec (ST)	2	0	0	0	0	0	0	0	0	0.0
Struct & Imp TD	7	98,145	48,974	9,834	324	2,198	7,979	4,093	24,742	0.0
Struct & Imp TD Spec Cross	7	0	0	0	0	0	0	0	0	0.0
Struct & Imp Offices	15	37,074	25,322	3,600	137	805	2,239	845	4,126	0.0
Struct & Imp Leasehold	15	0	0	0	0	0	0	0	0	0.0
Struct & Imp Leasehold	15	0	0	0	0	0	0	0	0	0.0
Struct & Imp Store,Shop,Gar	15	21,151	14,446	2,054	78	459	1,278	482	2,354	0.0
Struct & Imp Misc	15	227,595	155,447	22,099	842	4,939	13,747	5,189	25,331	0.0
Collect & Impounding	1	0	0	0	0	0	0	0	0	0.0
Lake, River & Other Intakes	2	0	0	0	0	0	0	0	0	0.0
Wells & Springs	2	118,672	82,085	17,991	748	4,023	13,481	47	297	0.0
Supply Mains	2	134,849	93,275	20,443	850	4,571	15,319	54	337	0.0
Supply Mains Nth Plt (STL)	2	0	0	0	0	0	0	0	0	0.0
Supply Mains Ctrl Plt (STL)	2	0	0	0	0	0	0	0	0	0.0
Supply Mains Sth Plt (STL)	2	0	0	0	0	0	0	0	0	0.0
Supply Mains Meramec Plt (S	2	0	0	0	0	0	0	0	0	0.0
Power Generation Equip Othe	6	0	0	0	0	0	0	0	0	0.0
Boiler Plant Equipment P	6	0	0	0	0	0	0	0	0	0.0
Pump Equip Steam	6	0	0	0	0	0	0	0	0	0.0
Pump Equip Electric	6	593,372	396,016	86,751	3,620	19,403	65,034	3,204	19,344	0.0
Pump Equip Elec Pre46 (STL)	6	0	0	0	0	0	0	0	0	0.0
Pump Equip Elec Post46 (STL)	6	0	0	0	0	0	0	0	0	0.0
Pump Equip Elec Boosters Po	6	0	0	0	0	0	0	0	0	0.0
Pump Equip Diesel	6	12,677	8,461	1,853	77	415	1,389	68	413	0.0
Pump Equip Diesel Stratman\	6	0	0	0	0	0	0	0	0	0.0
Pump Equip Diesel Ctrl Plt	6	0	0	0	0	0	0	0	0	0.0
Pump Equip Hydraulic	6	81,548	54,425	11,922	497	2,667	8,938	440	2,658	0.0
Pump Equip Other	6	23,560	15,724	3,444	144	770	2,582	127	768	0.0
WT Equip Non-Media	2	1,779,107	1,230,608	269,713	11,208	60,312	202,107	712	4,448	0.0
WT Equip Non-Med North (STL)	2	0	0	0	0	0	0	0	0	0.0
WT Equip Non Media Ctrl 1 &	2	0	0	0	0	0	0	0	0	0.0
WT Equip Non Media Ctrl 3 (	2	0	0	0	0	0	0	0	0	0.0
WT Equip Non Media Sth (STL)	2	0	0	0	0	0	0	0	0	0.0
WT Equip Non Media Mer (STL)	2	0	0	0	0	0	0	0	0	0.0
WT Equip Filter Media	2	0	0	0	0	0	0	0	0	0.0
Dist Reservoirs & Standpipe	5	999,095	631,228	126,885	4,196	28,274	102,707	15,086	90,718	0.0

**MISSOURI-AMERICAN WATER COMPANY
PARKVILLE WATER DISTRICT**

COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS

PSC STAFF STUDY

Account	Factor Ref.	Cost of Service	Residential	Commercial	Industrial	Public Authorities	Sales for Resale	Fire Protection		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	Private	Public	(10)
Elevated Tanks & Standpipes	5	0	0	0	0	0	0	0	0	0.0
Ground Level Facilities	5	0	0	0	0	0	0	0	0	0.0
TD Mains Not Classified by	7	2,350,885	1,173,092	235,559	7,758	52,660	191,127	98,032	592,658	0.0
TD Mains 4 & Less "	4	211,168	105,373	21,159	697	4,730	17,168	8,806	53,235	0.0
TD Mains 6 to 8" "	4	1,586,315	791,571	158,949	5,235	35,533	128,967	66,149	399,910	0.0
TD Mains 10 to 16" "	3	2,586,326	1,694,302	371,396	15,518	83,021	278,289	20,432	123,368	0.0
TD Mains 18 & Grtr "	3	0	0	0	0	0	0	0	0	0.0
TD Mains AC 4 (STL) "	4	0	0	0	0	0	0	0	0	0.0
TD Mains CI <10 1900-28 (S"	4	0	0	0	0	0	0	0	0	0.0
TD Mains CI <10 1929-56 (S"	4	0	0	0	0	0	0	0	0	0.0
TD Mains CI <10 1957-93 (S"	4	0	0	0	0	0	0	0	0	0.0
TD Mains CI 12 (STL) "	3	0	0	0	0	0	0	0	0	0.0
TD Mains CI 16 (STL) "	3	0	0	0	0	0	0	0	0	0.0
TD Mains DI 6-8 (STL) "	4	0	0	0	0	0	0	0	0	0.0
TD Mains DI 12 (STL) "	3	0	0	0	0	0	0	0	0	0.0
TD Mains DI 16 & >(STL) "	3	0	0	0	0	0	0	0	0	0.0
TD Mains Galve 1 (STL) "	4	0	0	0	0	0	0	0	0	0.0
TD Mains LJ 20 (STL) "	3	0	0	0	0	0	0	0	0	0.0
Fire Mains	8	52,890	0	0	0	0	0	0	52,890	0.0
Services	10	855,183	746,233	55,929	2,566	14,282	1,796	34,378	0	0.0
Meters Bronze Case	9	153,787	127,105	18,654	692	5,106	2,230	0	0	0.0
Meters Plastic Case	9	0	0	0	0	0	0	0	0	0.0
Meters Other	9	(2,622)	(2,167)	(318)	(12)	(87)	(38)	0	0	0.0
Meters Other-Rem Rdr Units	9	0	0	0	0	0	0	0	0	0.0
Meter Installations	9	489,188	404,314	59,339	2,201	16,241	7,093	0	0	0.0
Meter Installation Other	9	0	0	0	0	0	0	0	0	0.0
Hydrants	8	595,707	0	0	0	0	0	0	595,707	0.0
Other P/E Intangible	2 ?	(351)	(243)	(53)	(2)	(12)	(40)	(0)	(1)	0.0
Other P/E WT Res Hand Equip	2	0	0	0	0	0	0	0	0	0.0
Other P/E TD	2	3,772	2,609	572	24	128	428	2	9	0.0
Other P/E CPS	2 ?	0	0	0	0	0	0	0	0	0.0
Office Furniture & Equip	15	(42,768)	(29,211)	(4,153)	(158)	(928)	(2,583)	(975)	(4,760)	0.0
Comp & Periph Equip	15	10,986	7,503	1,067	41	238	664	250	1,223	0.0
Computer Software	15	51,134	34,925	4,965	189	1,110	3,088	1,166	5,691	0.0
Comp Software Personal	15	1,223	835	119	5	27	74	28	136	0.0
Data Handling Equipment	15	160,104	109,351	15,546	592	3,474	9,670	3,650	17,820	0.0
Other Office Equipment	15	101	69	10	0	2	6	2	11	0.0
Trans Equip Lt Duty Trks	15	53,515	36,551	5,196	198	1,161	3,232	1,220	5,956	0.0
Trans Equip Hvy Duty Trks	15	0	0	0	0	0	0	0	0	0.0
Trans Equip Autos	15	16,493	11,265	1,601	61	358	996	376	1,836	0.0
Trans Equip Other	15	(17,258)	(11,787)	(1,676)	(64)	(374)	(1,042)	(393)	(1,921)	0.0
Stores Equipment	15	1,923	1,313	187	7	42	116	44	214	0.0
Tools,Shop,Garage Equip	15	19,686	13,446	1,912	73	427	1,189	449	2,191	0.0
Tools,Shop,Garage Equip Oth	15	0	0	0	0	0	0	0	0	0.0
Laboratory Equipment	2	47,824	33,080	7,250	301	1,621	5,433	19	120	0.0
Laboratory Equip Other	2	0	0	0	0	0	0	0	0	0.0
Power Operated Equipment	15	51	35	5	0	1	3	1	6	0.0
Comm Equip Non-Telephone	15	20,304	13,868	1,972	75	441	1,226	463	2,260	0.0
Comm Equip Telephone	15	264	180	26	1	6	16	6	29	0.0
Misc Equipment	15	48,522	33,141	4,711	180	1,053	2,931	1,106	5,400	0.0
Other Tangible Property	17	0	0	0	0	0	0	0	0	0.0
Total Utility Plant in Service		13,763,459	8,314,275	1,593,669	61,262	361,878	1,131,739	266,336	2,034,300	0.0

MISSOURI-AMERICAN WATER COMPANY
PARKVILLE WATER DISTRICT
COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS

PSC STAFF STUDY									
Account	Factor Ref.	Cost of Service	Residential	Commercial	Industrial	Public Authorities	Sales for Resale	Fire Protection	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	Private	Public
								(9)	(10)
Other Rate Base Items									
Add:									
Other Utility Plant Adjustments	17	0	0	0	0	0	0	0	0
Cash Working Capital	15	(154,441)	(105,483)	(14,996)	(571)	(3,351)	(9,328)	(3,521)	(17,189)
Materials and Supplies	15	44,721	30,544	4,342	165	970	2,701	1,020	4,977
Prepayments	15	15	10	1	0	0	1	0	2
OPEB's Contributed to External Fund	16	66,030	46,591	6,880	271	1,538	4,325	1,109	5,315
Premature Retirement	17	0	0	0	0	0	0	0	0
Regulatory Deferrals	17	0	0	0	0	0	0	0	0
Less:									
Accumulated Deferred ITC (3%)	17	(3,970,112)	(2,397,948)	(459,739)	(17,866)	(104,414)	(326,343)	(77,020)	(586,783)
Deferred Income Taxes	17	(1,229,550)	(742,648)	(142,382)	(5,533)	(32,337)	(101,069)	(23,853)	(181,727)
Pensions	16	(83,707)	(59,064)	(8,722)	(343)	(1,950)	(5,483)	(1,406)	(6,738)
Total Other Rate Base Elements		<u>(5,327,044)</u>	<u>(3,227,997)</u>	<u>(614,615)</u>	<u>(23,877)</u>	<u>(139,544)</u>	<u>(435,196)</u>	<u>(103,672)</u>	<u>(782,143)</u>
Total Original Cost Measure of Value		<u>\$ 8,436,415</u>	<u>\$ 5,086,278</u>	<u>\$ 979,054</u>	<u>\$ 37,385</u>	<u>\$ 222,334</u>	<u>\$ 696,543</u>	<u>\$ 162,664</u>	<u>\$ 1,252,157</u>

MISSOURI-AMERICAN WATER COMPANY
PARKVILLE WATER DISTRICT
COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS

PSC STAFF STUDY

Account	Factor Ref.	Cost of Service	Residential	Commercial	Industrial	Public Authorities	Sales for Resale	Fire Protection		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	Private	Public	
T&D OP BASIS FOR FACTOR 11		54,844	27,989	5,543	183	1,250	4,353	2,204	13,322	0.0
FACTOR 11			0.5103	0.1011	0.0033	0.0228	0.0794	0.0402	0.2429	1.0000
T&D Mnt BASIS FOR FACTOR 12		6,735	3,772	621	21	141	440	275	1,464	0.0
FACTOR 12			0.5600	0.0922	0.0032	0.0210	0.0654	0.0408	0.2174	1.0000
A&G BASIS FOR FACTOR 15		474,493	324,049	46,065	1,745	10,309	28,666	10,830	52,828	0.0
FACTOR 15			0.6829	0.0971	0.0037	0.0217	0.0604	0.0228	0.1113	0.9999
LABOR BASIS FOR FACTOR 16		277,447	195,763	28,916	1,130	6,456	18,185	4,655	22,343	0.0
FACTOR 16			0.7056	0.1042	0.0041	0.0233	0.0655	0.0168	0.0805	1.0000
UPIS BASIS FOR FACTOR 17		13,761,517	8,313,102	1,593,444	61,253	361,827	1,131,579	266,298	2,034,013	0.0
FACTOR 17			0.6040	0.1158	0.0045	0.0263	0.0822	0.0194	0.1478	1.0000
RATE BASE BASIS FOR FACTOR 18		8,436,415	5,086,278	979,054	37,385	222,334	696,543	162,664	1,252,157	0.0
FACTOR 18			0.6028	0.1161	0.0044	0.0264	0.0826	0.0193	0.1484	1.0000
TOTAL COS BASIS FOR FACTOR 19		2,727,209	1,767,133	313,608	12,519	70,760	211,033	47,960	304,196	0.0
FACTOR 19			0.6480	0.1150	0.0046	0.0259	0.0774	0.0176	0.1115	1.0000
COS w/o Fire Factor 20		2,179,605	1,779,925	315,817	# 12,607	# 71,257	#			2,179,605
FACTOR 20			0.8166	0.1449	0.0058	0.0327				1.0000

Table of Factors - Table Name "FACTORS"

	2	4	6	8	10	12	14	20
	Residential	Commercial	Industrial	Public	Resale	Private Fire	Public Fire	Total
1	0.6656	0.1676	0.0082	0.0374	0.1153	0.0008	0.0051	1.0000
2	0.6917	0.1516	0.0063	0.0339	0.1136	0.0004	0.0025	1.0000
3	0.6551	0.1436	0.0060	0.0321	0.1076	0.0079	0.0477	1.0000
4	0.4990	0.1002	0.0033	0.0224	0.0813	0.0417	0.2521	1.0000
5	0.6318	0.1270	0.0042	0.0283	0.1028	0.0151	0.0908	1.0000
6	0.6674	0.1462	0.0061	0.0327	0.1096	0.0054	0.0326	1.0000
7	0.4990	0.1002	0.0033	0.0224	0.0813	0.0417	0.2521	1.0000
8	-	-	-	-	-	-	1.0000	1.0000
9	0.8265	0.1213	0.0045	0.0332	0.0145	-	-	1.0000
10	0.8726	0.0654	0.0030	0.0167	0.0021	0.0402	-	1.0000
11	0.5103	0.1011	0.0033	0.0228	0.0794	0.0402	0.2429	1.0000
12	0.5600	0.0922	0.0032	0.0210	0.0654	0.0408	0.2174	1.0000
13	0.9141	0.0566	0.0024	0.0123	0.0008	0.0138	-	1.0000
14	0.9270	0.0574	0.0024	0.0124	0.0008	-	-	1.0000
15	0.6830	0.0971	0.0037	0.0217	0.0604	0.0228	0.1113	1.0000
16	0.7056	0.1042	0.0041	0.0233	0.0655	0.0168	0.0805	1.0000
17	0.6040	0.1158	0.0045	0.0263	0.0822	0.0194	0.1478	1.0000
18	0.6028	0.1161	0.0044	0.0264	0.0826	0.0193	0.1484	1.0000
19	0.6480	0.1150	0.0046	0.0259	0.0774	0.0176	0.1115	1.0000
20	0.8166	0.1449	0.0058	0.0327	-	-	-	1.0000

MISSOURI-AMERICAN WATER COMPANY
PARKVILLE WATER DISTRICT
COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS

PSC STAFF STUDY

			Base	Max Day	Max Hour	Meters	Services	Billing & Collecting	Fire Service
OPERATION AND MAINTENANCE EXPENSES									
SOURCE OF SUPPLY EXPENSES									
Super & Eng Oper SS	2	11,920	5,918	5,967	0	0	0	0	35
Labor & Exp Oper SS	2	2,147	1,066	1,075	0	0	0	0	6
Labor & Exp Oper SS	2	1,520	755	761	0	0	0	0	4
Purchased Water	1	107,353	106,720	0	0	0	0	0	633
TOTAL SS EXPENSE - OPERATION		122,940	114,459	7,803	0	0	0	0	679
Misc Exp Oper SS	2	0	0	0	0	0	0	0	0
Misc Exp Oper SS	2	999	496	500	0	0	0	0	3
Rents Oper SS	2	0	0	0	0	0	0	0	0
Super & Eng Maint SS	2	0	0	0	0	0	0	0	0
Struct & Improve Maint SS	2	0	0	0	0	0	0	0	0
Struct & Improve Maint SS	2	29	14	15	0	0	0	0	0
Collect & Impound Maint SS	2	0	0	0	0	0	0	0	0
Lake, River & Oth Maint SS	2	0	0	0	0	0	0	0	0
Lake, River & Oth Maint SS	2	0	0	0	0	0	0	0	0
Wells & Springs Maint SS	2	982	488	492	0	0	0	0	3
Wells & Springs Maint SS	2	0	0	0	0	0	0	0	0
Infiltr Gall & Tunnels Maint SS	2	0	0	0	0	0	0	0	0
Supply Mains Maint SS	2	0	0	0	0	0	0	0	0
Misc Plant Maint SS	2	263	131	132	0	0	0	0	1
Misc Plant Maint SS	2	4,765	2,366	2,385	0	0	0	0	14
TOTAL SS EXPENSE - MAINTENANCE		7,038	3,494	3,523	0	0	0	0	20
TOTAL SS EXPENSE		129,978	117,953	11,326	0	0	0	0	699
POWER AND PUMPING EXPENSES									
Super & Eng Oper P	6	0	0	0	0	0	0	0	0
Fuel for Power Prod	1	0	0	0	0	0	0	0	0
Labor & Exp Oper Pwr Prod	6	937	449	452	0	0	0	0	36
Labor & Exp Oper Pwr Prod	6	0	0	0	0	0	0	0	0
Purch Fuel/Power for Pump	1	98,931	98,347	0	0	0	0	0	584
Labor & Exp Oper Pump	6	0	0	0	0	0	0	0	0
Labor & Exp Oper Pump	6	1	0	0	0	0	0	0	0
Expenses Transferred	6	0	0	0	0	0	0	0	0
Misc Exp Oper P	6	16	8	8	0	0	0	0	1
Rents Oper P	6	41	20	20	0	0	0	0	2
TOTAL PUMPING EXPENSE - OPERATION		99,926	98,824	480	0	0	0	0	822

MISSOURI-AMERICAN WATER COMPANY
PARKVILLE WATER DISTRICT
COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS

PSC STAFF STUDY

			Base	Max Day	Max Hour	Meters	Services	Billing & Collecting	Fire Service
Super & Eng Maint P	6	0	0	0	0	0	0	0	0
Struct & Improve Maint P	6	0	0	0	0	0	0	0	0
Power Prod Equip Maint P	6	0	0	0	0	0	0	0	0
Pump Equip Maint P	6	0	0	0	0	0	0	0	0
Pump Equip Maint P	6	2,421	1,160	1,169	0	0	0	0	92
TOTAL PUMPING EXPENSES - MAINTENANCE		2,421	1,160	1,169	0	0	0	0	92
TOTAL PUMPING EXPENSES		102,347	99,984	1,650	0	0	0	0	714
WATER TREATMENT									
Super & Eng Oper WT	2	11,808	5,863	5,911	0	0	0	0	34
Chemicals	1	85,781	85,275	0	0	0	0	0	506
Labor & Exp Oper WT	2	35,064	17,409	17,553	0	0	0	0	102
Labor & Exp Oper WT	2	13	6	7	0	0	0	0	0
Misc Exp Oper WT	2	4,913	2,439	2,459	0	0	0	0	14
Misc Exp Oper WT	1	0	0	0	0	0	0	0	0
Misc Exp Oper WT	2	7,426	3,687	3,717	0	0	0	0	22
Rents Oper WT	2	(4)	(2)	(2)	0	0	0	0	(0)
TOTAL WT EXPENSE - OPERATION		145,001	114,678	29,646	0	0	0	0	678
Super & Eng Maint WT	2	5,117	2,541	2,562	0	0	0	0	15
Struct & Improve Maint WT	2	0	0	0	0	0	0	0	0
Struct & Improve Maint WT	2	0	0	0	0	0	0	0	0
WT Equip Maint WT	2	8,582	4,261	4,296	0	0	0	0	25
WT Equip Maint WT	2	6,313	3,134	3,160	0	0	0	0	18
TOTAL WT EXPENSE - MAINTENANCE		20,012	9,936	10,018	0	0	0	0	58
TOTAL WT EXPENSE		165,013	124,614	39,664	0	0	0	0	736
TRANSMISSION AND DISTRIBUTION EXPENSES									
Super & Eng Oper TD	11	11,995	2,527	0	5,694	378	0	0	3,396
Storage Facility Exp	5	427	117	0	264	0	0	0	45
Storage Facility Exp	5	0	0	0	0	0	0	0	0
TD Lines Exp	7	15,831	3,437	0	7,743	0	0	0	4,651
TD Lines Exp	7	36,859	8,002	0	18,028	0	0	0	10,829
Meter Expense	9	965	0	0	0	965	0	0	0
Meter Expense	9	762	0	0	0	762	0	0	0
Customer Install Exp	10	0	0	0	0	0	0	0	0
Customer Install Exp	10	0	0	0	0	0	0	0	0

MISSOURI-AMERICAN WATER COMPANY
PARKVILLE WATER DISTRICT
COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS

PSC STAFF STUDY

			Base	Max Day	Max Hour	Meters	Services	Billing & Collecting	Fire Service
Misc Exp Oper TD	11	15,661	3,300	0	7,434	493	0	0	4,434
Misc Exp Oper TD	11	38,490	8,110	0	18,271	1,212	0	0	10,897
Misc Exp Oper TD	11	9,339	1,968	0	4,433	294	0	0	2,644
Rents Oper TD	11	260	55	0	123	8	0	0	74
TOTAL T & D EXPENSE OPERATION		130,589	27,516	0	61,991	4,113	0	0	36,969
Super & Eng Maint TD	12	1	0	0	0	0	0	0	0
Struct & Improve Maint TD	12	0	0	0	0	0	0	0	0
Struct & Improve Maint TD	12	0	0	0	0	0	0	0	0
Dist Res Stand Maint TD	5	0	0	0	0	0	0	0	0
TD Main Maint TD	7	5,384	1,169	0	2,633	0	0	0	1,582
TD Main Maint TD	7	0	0	0	0	0	0	0	0
Fire Main Maint TD	8	0	0	0	0	0	0	0	0
Services Maint TD	10	1,280	0	0	0	0	1,229	0	51
Services Maint TD	10	(36)	0	0	0	0	(35)	0	(1)
Meters Maint TD	9	0	0	0	0	0	0	0	0
Meters Maint TD	9	0	0	0	0	0	0	0	0
Hydrants Maint TD	8	0	0	0	0	0	0	0	0
Hydrants Maint TD	8	107	0	0	0	0	0	0	107
Misc Plant Maint TD	12	70	12	0	27	0	12	0	18
Mat and Sup Maint TD	12	88,602	15,381	0	34,643	0	15,709	0	22,868
Misc Maint TD	12	0	0	0	0	0	0	0	0
Amort Def Maint TD	5	0	0	0	0	0	0	0	0
TOTAL T & D EXPENSE - MAINTENANCE		95,408	16,562	0	37,304	0	16,916	0	24,625
TOTAL T & D EXPENSE		225,997	44,078	0	99,296	4,113	16,916	0	61,594
CUSTOMER ACCOUNTS									
Supervision CA	13	392	0	0	0	0	0	387	5
Meter Reading Exp CA	14	21,977	0	0	0	0	0	21,977	0
Meter Reading Exp CA	14	0	0	0	0	0	0	0	0
Meter Reading Exp CA	14	3,130	0	0	0	0	0	3,130	0
Cust Rec & Collection CA	13	35,886	0	0	0	0	0	35,391	495
Cust Rec & Collection CA	13	19,439	0	0	0	0	0	19,171	268
Uncollectible Accts	13	14,932	0	0	0	0	0	14,726	206
Misc Cust Accts Exp CA	13	883	0	0	0	0	0	871	12
Misc Cust Accts Exp CA	13	289	0	0	0	0	0	285	4
Misc Cust Accts Exp CA	13	8,929	0	0	0	0	0	8,806	123
Cust Serv & Info Exp CA	13	37,366	0	0	0	0	0	36,850	516
TOTAL CUSTOMER ACCOUNTING EXPENSE		143,223	0	0	0	0	0	141,593	1,630

MISSOURI-AMERICAN WATER COMPANY
PARKVILLE WATER DISTRICT
COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS

PSC STAFF STUDY

			Base	Max Day	Max Hour	Meters	Services	Billing & Collecting	Fire Service
ADMINISTRATIVE AND GENERAL EXPENSES									
Salaries AG	15	89,875	18,236	9,967	18,811	782	3,209	26,819	12,052
Other Supplies & Exp AG	15	1,513	307	168	317	13	54	451	203
Other Supplies & Exp AG	15	35,352	7,173	3,921	7,399	308	1,262	10,549	4,741
Other Supplies & Exp AG	15	3,795	770	421	794	33	135	1,132	509
Mgmt Fees-Corporate/Shared Service Center	15	71,609	14,529	7,941	14,988	623	2,556	21,368	9,603
Mgmt Fees-Call Center	13	38,602	0	0	0	0	0	38,069	533
Mgmt Fees-Belleville Lab	2	60,012	29,796	30,042	0	0	0	0	174
Mgmt Fees- Financial ITS	15	3,757	762	417	786	33	134	1,121	504
Mgmt Fees- Customer Billings ITS	13	21,211	0	0	0	0	0	20,918	293
Mgmt Fees-Other ITS	15	239	48	27	50	2	9	71	32
Outside Services AG	15	22,043	4,473	2,445	4,614	192	787	6,578	2,956
Outside Services AG	15	0	0	0	0	0	0	0	0
Property Insurance	15	13,722	2,784	1,522	2,872	119	490	4,095	1,840
Ins Gen Liab Oper AG	15	10,492	2,129	1,164	2,196	91	375	3,131	1,407
Ins Work Comp AG	16	7,306	1,762	1,275	1,122	69	117	2,250	711
Ins Other Oper AG	15	0	0	0	0	0	0	0	0
Property Insurance	15	0	0	0	0	0	0	0	0
Injuries & Damages	16	207	50	36	32	2	3	64	20
Employee Pension & Benefits	16	104,516	25,209	18,238	16,054	982	1,672	32,191	10,169
Employee Pension & Benefits	16	0	0	0	0	0	0	0	0
Employee Pension & Benefits	16	0	0	0	0	0	0	0	0
Reg Commision Exp	15	2,535	514	281	531	22	90	756	340
Rents AG	15	14,055	2,852	1,559	2,942	122	502	4,194	1,885
Goodwill Advertising Exp	15	0	0	0	0	0	0	0	0
Misc Exp AG	15	(2,175)	(441)	(241)	(455)	(19)	(78)	(649)	(292)
Research & Development	15	0	0	0	0	0	0	0	0
TOTAL A & G OPERATIONS		498,666	110,954	79,181	73,051	3,374	11,318	173,109	47,679
General Plant Maint AG	15	0	0	0	0	0	0	0	0
General Plant Maint AG	15	5,021	1,019	557	1,051	44	179	1,498	673
TOTAL A & G EXPENSE - MAINTENANCE		5,021	1,019	557	1,051	44	179	1,498	673
TOTAL A & G EXPENSE		503,687	111,972	79,737	74,102	3,418	11,497	174,607	48,353
Total Operation & Maintenance Expenses		1,270,245	498,601	132,377	173,398	7,531	28,413	316,200	113,725

MISSOURI-AMERICAN WATER COMPANY
PARKVILLE WATER DISTRICT
COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS

PSC STAFF STUDY

			Base	Max Day	Max Hour	Meters	Services	Billing & Collecting	Fire Service
DEPRECIATION EXPENSE									
Struct & Imp SS	2	302	150	151	0	0	0	0	1
Struct & Imp P	6	132	63	64	0	0	0	0	5
Struct & Imp WT	2	5,221	2,592	2,614	0	0	0	0	15
Struct & Imp TD	7	1,887	410	0	923	0	0	0	554
Struct & Imp Offices	15	1,665	338	185	348	14	59	497	223
Struct & Imp Store, Shop, Gar	15	535	109	59	112	5	19	160	72
Struct & Imp Misc	15	4,354	883	483	911	38	155	1,299	584
Collect & Impounding	1	0	0	0	0	0	0	0	0
Lake, River & Other Intakes	2	0	0	0	0	0	0	0	0
Wells & Springs	2	3,681	1,828	1,843	0	0	0	0	11
Supply Mains	2	2,919	1,449	1,461	0	0	0	0	8
Power Generation Equip Othe	6	0	0	0	0	0	0	0	0
Pump Equip Electric	6	13,038	6,247	6,296	0	0	0	0	495
Pump Equip Diesel	6	346	166	167	0	0	0	0	13
Pump Equip Other	6	643	308	311	0	0	0	0	24
WT Equip Non-Media	2	40,489	20,103	20,269	0	0	0	0	117
WT Equip Filter Media	2	0	0	0	0	0	0	0	0
Dist Reservoirs & Standpipe	5	19,719	5,421	0	12,210	0	0	0	2,088
Elevated Tanks & Standpipes	5	0	0	0	0	0	0	0	0
Ground Level Facilities	5	0	0	0	0	0	0	0	0
TD Mains Not Classified by	7	45,715	9,925	0	22,359	0	0	0	13,431
TD Mains 4 & Less "	4	2,765	600	0	1,352	0	0	0	812
TD Mains 6 to 8" "	4	20,786	4,513	0	10,166	0	0	0	6,107
TD Mains 10 to 16" "	3	33,867	15,928	16,056	0	0	0	0	1,883
TD Mains 18 & Grtr "	3	0	0	0	0	0	0	0	0
Fire Mains	8	828	0	0	0	0	0	0	828
Services	10	23,861	0	0	0	0	22,902	0	959
Meters Bronze Case	9	3,856	0	0	0	3,856	0	0	0
Meters Plastic Case	9	0	0	0	0	0	0	0	0
Meters Other	9	2,587	0	0	0	2,587	0	0	0
Meters Other-Rem Rdr Units	9	0	0	0	0	0	0	0	0
Meter Installations	9	13,717	0	0	0	13,717	0	0	0
Meter Installation Other	9	0	0	0	0	0	0	0	0
Hydrants	8	11,406	0	0	0	0	0	0	11,406
Utility Plant Acquisition Adjustment	17	0	0	0	0	0	0	0	0
Other P/E WT Res Hand Equip	2	0	0	0	0	0	0	0	0
Other P/E TD	11	66	14	0	31	2	0	0	19
Other P/E CPS	15	0	0	0	0	0	0	0	0
Office Furniture & Equip	15	274	56	30	57	2	10	82	37
Comp & Periph Equip	15	2,273	461	252	476	20	81	678	305
Computer Software	15	1,123	228	125	235	10	40	335	151
Comp Software Personal	15	0	0	0	0	0	0	0	0
Data Handling Equipment	15	7,284	1,478	808	1,525	63	260	2,174	977
Other Office Equipment	15	0	0	0	0	0	0	0	0
Trans Equip Lt Duty Trks	15	7,187	1,458	797	1,504	63	257	2,145	964
Trans Equip Hvy Duty Trks	15	0	0	0	0	0	0	0	0
Trans Equip Autos	15	4,402	893	488	921	38	157	1,314	590
Trans Equip Other	15	0	0	0	0	0	0	0	0
Stores Equipment	15	100	20	11	21	1	4	30	13
Tools, Shop, Garage Equip	15	1,555	316	172	325	14	56	464	209
Tools, Shop, Garage Equip Oth	15	0	0	0	0	0	0	0	0
Laboratory Equipment	2	2,205	1,095	1,104	0	0	0	0	6

MISSOURI-AMERICAN WATER COMPANY
PARKVILLE WATER DISTRICT
COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS

PSC STAFF STUDY

		Base	Max Day	Max Hour	Meters	Services	Billing & Collecting	Fire Service
Laboratory Equip Other	2	0	0	0	0	0	0	0
Power Operated Equipment	15	49	10	5	10	0	15	7
Comm Equip Non-Telephone	15	2,244	455	249	470	20	670	301
Comm Equip Telephone	15	0	0	0	0	0	0	0
Misc Equipment	15	1,721	349	191	360	15	514	231
Other Tangible Property	15	0	0	0	0	0	0	0
Total Depreciation Expense		<u>284,802</u>	<u>77,864</u>	<u>54,191</u>	<u>54,319</u>	<u>20,465</u>	<u>10,374</u>	<u>43,447</u>
Amort-Other UP	18	(1,664)	(498)	(349)	(342)	(79)	(103)	(279)
Taxes Other Than Income								
Utility Reg Assessment Fee	19	17,068	5,793	2,698	2,927	517	2,154	2,203
Property Taxes	18	400,193	119,658	83,840	82,320	19,009	3,562	67,112
FUTA	16	389	94	68	60	4	120	38
FICA	16	20,406	4,922	3,561	3,134	192	6,285	1,986
SUTA	16	345	83	60	53	3	106	34
Other Taxes & Licenses	15	5,764	1,170	639	1,206	50	1,720	773
Gross Receipts Tax	19	0	0	0	0	0	0	0
Total Taxes, Other Than Income		<u>444,165</u>	<u>131,719</u>	<u>90,867</u>	<u>89,700</u>	<u>19,775</u>	<u>13,947</u>	<u>72,146</u>
Income Taxes	18	173,901	51,996	36,432	35,771	8,260	1,548	29,163
Utility Income Available for Return	18	575,363	172,034	120,539	118,352	27,330	5,121	96,488
Total Cost of Service		<u>2,746,812</u>	<u>931,716</u>	<u>434,056</u>	<u>471,198</u>	<u>83,282</u>	<u>347,175</u>	<u>354,691</u>
Less: Other Water Revenues	19	(31,464)	(10,679)	(4,974)	(5,396)	(953)	(1,428)	(4,062)
Billing and Collecting Services								
Total Other Water Revenues		<u>(31,464)</u>	<u>(10,679)</u>	<u>(4,974)</u>	<u>(5,396)</u>	<u>(953)</u>	<u>(1,428)</u>	<u>(4,062)</u>
Total Cost of Service Related to Sales of Water		<u>2,715,348</u>	<u>921,037</u>	<u>429,082</u>	<u>465,802</u>	<u>82,328</u>	<u>343,204</u>	<u>350,629</u>

MISSOURI-AMERICAN WATER COMPANY
 PARKVILLE WATER DISTRICT
 COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS

PSC STAFF STUDY

		Base	Max Day	Max Hour	Meters	Services	Billing & Collecting	Fire Service
Reallocation of Public Fire	20	0	155,397	72,398	78,587	0	0	(306,382)
Total		<u>\$ 2,715,348</u>	<u>\$ 1,076,434</u>	<u>\$ 501,480</u>	<u>\$ 544,389</u>	<u>\$ 82,328</u>	<u>\$ 123,265</u>	<u>\$ 343,204</u>
			727,003					
			1.481					
					5,950	5,166	60,854	
					13.84	23.86		
					1.15	1.99	5.64	
							8.78	

MISSOURI-AMERICAN WATER COMPANY
PARKVILLE WATER DISTRICT

COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS

PSC STAFF STUDY

			Base	Max Day	Max Hour	Meters	Services	Billing & Collecting	Fire Service
RATE BASE									
Organization	17	1,929	574	401	397	90	118	25	323
Franchises	17	13	4	3	3	1	1	0	2
Land & Ld Rights SS	2	1,735	861	869	0	0	0	0	5
Land & Ld Rights P	6	0	0	0	0	0	0	0	0
Land & Ld Rights WT	2	432	214	216	0	0	0	0	1
Land & Ld Rights TD	7	12,956	2,813	0	6,337	0	0	0	3,806
Land & Land Rights AG	15	142	29	16	30	1	5	42	19
Struct & Imp SS	2	8,531	4,236	4,271	0	0	0	0	25
Struct & Imp P	6	9,524	4,563	4,599	0	0	0	0	362
Struct & Imp Pumps (STL)	6	0	0	0	0	0	0	0	0
Struct & Imp Pump Boosters	6	0	0	0	0	0	0	0	0
Struct & Imp WT	2	347,000	172,286	173,708	0	0	0	0	1,006
Struct & Imp WT Nth Plt (ST)	2	0	0	0	0	0	0	0	0
Struct & Imp WT Ctrl Plt 1	2	0	0	0	0	0	0	0	0
Struct & Imp WT Ctrl Plt 3	2	0	0	0	0	0	0	0	0
Struct & Imp WT Sth Plt (ST)	2	0	0	0	0	0	0	0	0
Struct & Imp WT Meramec (ST)	2	0	0	0	0	0	0	0	0
Struct & Imp TD	7	98,145	21,307	0	48,003	0	0	0	28,835
Struct & Imp TD Spec Cross	7	0	0	0	0	0	0	0	0
Struct & Imp Offices	15	37,074	7,522	4,112	7,760	323	1,324	11,063	4,972
Struct & Imp Leasehold	15	0	0	0	0	0	0	0	0
Struct & Imp Leasehold	15	0	0	0	0	0	0	0	0
Struct & Imp Store,Shop,Gar	15	21,151	4,292	2,346	4,427	184	755	6,311	2,836
Struct & Imp Misc	15	227,595	46,179	25,240	47,636	1,980	8,125	67,914	30,520
Collect & Impounding	1	0	0	0	0	0	0	0	0
Lake, River & Other Intakes	2	0	0	0	0	0	0	0	0
Wells & Springs	2	118,672	58,921	59,407	0	0	0	0	344
Supply Mains	2	134,849	66,953	67,505	0	0	0	0	391
Supply Mains Nth Plt (STL)	2	0	0	0	0	0	0	0	0
Supply Mains Ctrl Plt (STL)	2	0	0	0	0	0	0	0	0
Supply Mains Sth Plt (STL)	2	0	0	0	0	0	0	0	0
Supply Mains Meramec Plt (S	2	0	0	0	0	0	0	0	0
Power Generation Equip Othe	6	0	0	0	0	0	0	0	0
Boiler Plant Equipment P	6	0	0	0	0	0	0	0	0
Pump Equip Steam	6	0	0	0	0	0	0	0	0
Pump Equip Electric	6	593,372	284,285	286,539	0	0	0	0	22,548
Pump Equip Elec Pre46 (STL)	6	0	0	0	0	0	0	0	0
Pump Equip Elec Post46 (STL)	6	0	0	0	0	0	0	0	0
Pump Equip Elec Boosters Po	6	0	0	0	0	0	0	0	0
Pump Equip Diesel	6	12,677	6,074	6,122	0	0	0	0	482
Pump Equip Diesel Stratman	6	0	0	0	0	0	0	0	0
Pump Equip Diesel Ctrl Plt	6	0	0	0	0	0	0	0	0
Pump Equip Hydraulic	6	81,548	39,070	39,380	0	0	0	0	3,099
Pump Equip Other	6	23,560	11,288	11,377	0	0	0	0	895
WT Equip Non-Media	2	1,779,107	883,327	890,621	0	0	0	0	5,159
WT Equip Non-Med North (STL)	2	0	0	0	0	0	0	0	0
WT Equip Non Media Ctrl 1 &	2	0	0	0	0	0	0	0	0
WT Equip Non Media Ctrl 3 (	2	0	0	0	0	0	0	0	0
WT Equip Non Media Sth (STL)	2	0	0	0	0	0	0	0	0
WT Equip Non Media Mer (STL)	2	0	0	0	0	0	0	0	0
WT Equip Filter Media	2	0	0	0	0	0	0	0	0
Dist Reservoirs & Standpipe	5	999,095	274,651	0	618,640	0	0	0	105,804

MISSOURI-AMERICAN WATER COMPANY

PARKVILLE WATER DISTRICT

COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS

PSC STAFF STUDY

		Base	Max Day	Max Hour	Meters	Services	Billing & Collecting	Fire Service
Elevated Tanks & Standpipes	5	0	0	0	0	0	0	0
Ground Level Facilities	5	0	0	0	0	0	0	0
TD Mains Not Classified by	7	2,350,885	510,377	0	1,149,818	0	0	690,690
TD Mains 4 & Less "	4	211,168	45,845	0	103,282	0	0	62,041
TD Mains 6 to 8" "	4	1,586,315	344,389	0	775,867	0	0	466,059
TD Mains 10 to 16" "	3	2,586,326	1,216,349	1,226,177	0	0	0	143,800
TD Mains 18 & Grtr "	3	0	0	0	0	0	0	0
TD Mains AC 4 (STL) "	4	0	0	0	0	0	0	0
TD Mains CI <10 1900-28 (S"	4	0	0	0	0	0	0	0
TD Mains CI <10 1929-56 (S"	4	0	0	0	0	0	0	0
TD Mains CI <10 1957-93 (S"	4	0	0	0	0	0	0	0
TD Mains CI 12 (STL) "	3	0	0	0	0	0	0	0
TD Mains CI 16 (STL) "	3	0	0	0	0	0	0	0
TD Mains DI 6-8 (STL) "	4	0	0	0	0	0	0	0
TD Mains DI 12 (STL) "	3	0	0	0	0	0	0	0
TD Mains DI 16 & >(STL) "	3	0	0	0	0	0	0	0
TD Mains Galve 1 (STL) "	4	0	0	0	0	0	0	0
TD Mains LJ 20 (STL) "	3	0	0	0	0	0	0	0
Fire Mains	8	52,890	0	0	0	0	0	52,890
Services	10	855,183	0	0	0	820,805	0	34,378
Meters Bronze Case	9	153,787	0	0	153,787	0	0	0
Meters Plastic Case	9	0	0	0	0	0	0	0
Meters Other	9	(2,622)	0	0	(2,622)	0	0	0
Meters Other-Rem Rdr Units	9	0	0	0	0	0	0	0
Meter Installations	9	489,188	0	0	489,188	0	0	0
Meter Installation Other	9	0	0	0	0	0	0	0
Hydrants	8	595,707	0	0	0	0	0	595,707
Other P/E Intangible	2	(351)	(174)	(176)	0	0	0	(1)
Other P/E WT Res Hand Equip	2	0	0	0	0	0	0	0
Other P/E TD	2	3,772	1,873	1,888	0	0	0	11
Other P/E CPS	2	0	0	0	0	0	0	0
Office Furniture & Equip	15	(42,768)	(8,678)	(4,743)	(8,951)	(372)	(1,527)	(5,735)
Comp & Periph Equip	15	10,986	2,229	1,218	2,299	96	392	1,473
Computer Software	15	51,134	10,375	5,671	10,702	445	1,825	6,857
Comp Software Personal	15	1,223	248	136	256	11	44	164
Data Handling Equipment	15	160,104	32,485	17,756	33,510	1,393	5,716	21,470
Other Office Equipment	15	101	20	11	21	1	4	14
Trans Equip Lt Duty Trks	15	53,515	10,858	5,935	11,201	466	1,910	7,178
Trans Equip Hvy Duty Trks	15	0	0	0	0	0	0	0
Trans Equip Autos	15	16,493	3,346	1,829	3,452	143	589	2,212
Trans Equip Other	15	(17,258)	(3,502)	(1,914)	(3,612)	(150)	(616)	(2,314)
Stores Equipment	15	1,923	390	213	402	17	69	258
Tools,Shop,Garage Equip	15	19,686	3,994	2,183	4,120	171	703	2,640
Tools,Shop,Garage Equip Oth	15	0	0	0	0	0	0	0
Laboratory Equipment	2	47,824	23,745	23,941	0	0	0	139
Laboratory Equip Other	2	0	0	0	0	0	0	0
Power Operated Equipment	15	51	10	6	11	0	2	7
Comm Equip Non-Telephone	15	20,304	4,120	2,252	4,250	177	725	2,723
Comm Equip Telephone	15	264	54	29	55	2	9	35
Misc Equipment	15	48,522	9,845	5,381	10,156	422	1,732	6,507
Other Tangible Property	17	0	0	0	0	0	0	0
Total Utility Plant in Service		13,763,459	4,097,646	2,864,524	2,830,069	645,753	842,709	2,300,636

MISSOURI-AMERICAN WATER COMPANY
PARKVILLE WATER DISTRICT
COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS

PSC STAFF STUDY

		Base	Max Day	Max Hour	Meters	Services	Billing & Collecting	Fire Service
Other Rate Base Items								
Add:								
Other Utility Plant Adjustments	17	0	0	0	0	0	0	0
Cash Working Capital	15	(154,441)	(31,336)	(17,128)	(32,325)	(1,344)	(5,514)	(20,711)
Materials and Supplies	15	44,721	9,074	4,960	9,360	389	1,597	5,997
Prepayments	15	15	3	2	3	0	1	2
OPEB's Contributed to External Fund	16	66,030	15,926	11,522	10,142	621	1,056	6,425
Premature Retirement	17	0	0	0	0	0	0	0
Regulatory Deferrals	17	0	0	0	0	0	0	0
Less:								
Accumulated Deferred ITC (3%)	17	(3,970,112)	(1,182,299)	(826,180)	(816,255)	(186,198)	(242,971)	(663,803)
Deferred Income Taxes	17	(1,229,550)	(366,160)	(255,869)	(252,795)	(57,666)	(75,248)	(205,581)
Pensions	16	(83,707)	(20,190)	(14,607)	(12,857)	(787)	(1,339)	(8,145)
Total Other Rate Base Elements		(5,327,044)	(1,574,982)	(1,097,301)	(1,094,727)	(244,985)	(322,419)	(885,815)
Total Original Cost Measure of Value		\$ 8,436,415	\$ 2,522,664	\$ 1,767,224	\$ 1,735,342	\$ 400,768	\$ 520,291	\$ 75,306
								\$ 1,414,821

MISSOURI-AMERICAN WATER COMPANY
PARKVILLE WATER DISTRICT
COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS

PSC STAFF STUDY

		Base	Max Day	Max Hour	Meters	Services	Billing & Collecting	Fire Service
T&D OP BASIS FOR FACTOR 11	54,844	11,556	0	26,035	1,727	0	0	15,526
FACTOR 11		0.2107	0.0000	0.4747	0.0315	0.0000	0.0000	0.2831
T&D Mnt BASIS FOR FACTOR 12	6,735	1,169	0	2,633	0	1,194	0	1,739
FACTOR 12		0.1736	0.0000	0.3910	0.0000	0.1773	0.0000	0.2581
A&G BASIS FOR FACTOR 15	474,493	96,287	52,639	99,296	4,113	16,916	141,593	63,649
FACTOR 15		0.2029	0.1109	0.2093	0.0087	0.0357	0.2984	0.1341
LABOR BASIS FOR FACTOR 16	277,447	66,923	48,407	42,608	2,618	4,450	85,444	26,998
FACTOR 16		0.2412	0.1745	0.1536	0.0094	0.0160	0.3080	0.0973
UPIS BASIS FOR FACTOR 17	13,761,517	4,097,067	2,864,120	2,829,670	645,662	842,590	182,096	2,300,311
FACTOR 17		0.2978	0.2081	0.2056	0.0469	0.0612	0.0132	0.1672
RATE BASE BASIS FOR FACTOR 18	8,436,415	2,522,664	1,767,224	1,735,342	400,768	520,291	75,306	1,414,821
FACTOR 18		0.2990	0.2095	0.2057	0.0475	0.0617	0.0089	0.1677
TOTAL COS BASIS FOR FACTOR 19	2,727,209	925,409	431,077	467,741	82,743	123,828	344,265	352,147
FACTOR 19		0.3394	0.1581	0.1715	0.0303	0.0454	0.1262	0.1291
TOTAL COS BASIS FOR FACTOR 20	1,836,971	931,716	434,056	471,198				
FACTOR 20		0.5072	0.2363	0.2565				

	2	4	6	8	10	12	14
	Base	Max Day	Max Hour	Meters	Services	Billing & Collecting	Fire Service
1	0.9941	-	-	-	-	-	0.0059
2	0.4965	0.5006	-	-	-	-	0.0029
3	0.4703	0.4741	-	-	-	-	0.0556
4	0.2171	-	0.4891	-	-	-	0.2938
5	0.2749	-	0.6192	-	-	-	0.1059
6	0.4791	0.4829	-	-	-	-	0.0380
7	0.2171	-	0.4891	-	-	-	0.2938
8	-	-	-	-	-	-	1.0000
9	-	-	-	1.0000	-	-	-
10	-	-	-	-	0.9598	-	0.0402
11	0.2107	-	0.4747	0.0315	-	-	0.2831
12	0.1736	-	0.3910	-	0.1773	-	0.2581
13	-	-	-	-	-	0.9862	0.0138
14	-	-	-	-	-	1.0000	-
15	0.2029	0.1109	0.2093	0.0087	0.0357	0.2984	0.1341
16	0.2412	0.1745	0.1536	0.0094	0.0160	0.3080	0.0973
17	0.2978	0.2081	0.2056	0.0469	0.0612	0.0132	0.1672
18	0.2990	0.2095	0.2057	0.0475	0.0617	0.0089	0.1677
19	0.3394	0.1581	0.1715	0.0303	0.0454	0.1262	0.1291
20	0.5072	0.2363	0.2565				

**MISSOURI-AMERICAN WATER COMPANY
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FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS

FACTOR 1.

ALLOCATION OF COSTS THAT VARY WITH THE AMT OF WATER CONSUMED.

Factors are based on the pro forma test year average daily consumption for each customer classification.

Customer Classification		Average Daily Consumption, Thousand Gallons	Allocation Factor
(1)		(2)	(3)
486,709	Residential	1,333.45	0.6656
122,609	Commercial	335.92	0.1676
5,989	Industrial	16.41	0.0082
27,373	Other Public Authority	74.99	0.0374
84,324	Sales for Resale	231.02	0.1153
	Private Fire Protection	1.70	0.0008
	Public Fire Protection	10.30	0.0051
727,003	Total	2,004	1.0000

FACTOR 2.

ALLOCATION OF COSTS ASSOCIATED WITH FACILITIES SERVING BASE AND MAXIMUM DAY EXTRA CAPACITY FUNCTIONS.

Factors are based on the weighting of the factors for average daily consumption (Factor 1) and the factors derived from maximum day extra capacity demand for each customer classification, as follows:

Customer Classification	Average Daily Consumption		Maximum Day Extra Capacity		Allocation Factor
	Allocation Factor 1	Weighted Factor	Allocation Factor	Weighted Factor	
(1)	(2)	(3)=(2)x 0.4994	(4)	(5)=(4)x 0.5006	(6)=(3)+(5)
Residential	0.6656	0.3324	0.7179	0.3594	0.6918
Commercial	0.1676	0.0837	0.1356	0.0679	0.1516
Industrial	0.0082	0.0041	0.0044	0.0022	0.0063
Other Public Authority	0.0374	0.0187	0.0303	0.0152	0.0339
Sales for Resale	0.1153	0.0576	0.1119	0.0560	0.1136
Private Fire Protection	0.0008	0.0004			0.0004
Public Fire Protection	0.0051	0.0025			0.0025
Total	1.0000	0.4994	1.0001	0.5007	1.0001

The derivation of the maximum day extra capacity factors in column 4 and the basis for the column 3 and 5 weightings are presented on the following page.

**MISSOURI-AMERICAN WATER COMPANY
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FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

**FACTOR 2. MAX DAY CLASS ALLOCATION AND MAX DAY TO AVERAGE DAY
MAXIMUM DAY EXTRA CAPACITY FUNCTIONS, cont.**

Customer Classification	Average Daily Consumption, Thousand Gal.	Maximum Day Extra Capacity		
		Factor*	Rate of Flow, Thousand Gal. Per Day	Allocation Factor
(1)	(2)	(3)	(4)=(2)x(3)	(5)
Residential	1,333	1.00	1,333	0.7178
Commercial	336	0.75	252	0.1356
Industrial	16	0.50	8	0.0044
Other Public Authority	75	0.75	56	0.0303
Sales for Resale	231	0.90	208	0.1119
Total	1,992		1,858	1.0000

The weighting of the factors is based on the maximum day ratio of 2.00, based on a review of maximum day ratios experienced during the period 1994 through 2002 (see Schedule D).

	Maximum Day Ratio	Weight
Average Day	1.00	0.4994
Maximum Day Extra Capacity	1.00	0.5006
Total	2.00	1.0000

* Ratio of maximum day to average day minus 1.0.

MISSOURI-AMERICAN WATER COMPANY
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FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 3.

**ALLOCATION OF COSTS ASSOC. WITH FACILITIES SERVING BASE, MAX DAY EXTRA CAPACITY
AND FIRE PROTECTION FUNCTIONS.**

Factors are based on the weighting of the average daily consumption, the maximum day extra capacity demand, and the fire protection demand for each customer classification.

Customer Classification	Average Daily Consumption		Maximum Day Extra Capacity		Fire Protection		Allocation Factor
	Allocation Factor	Weighted Factor	Allocation Factor	Weighted Factor	Allocation Factor	Weighted Factor	
(1)	(2)	(3)=(2) X 0.4731	(4)	(5)=(4) X 0.4741	(6)	(7)=(6) X 0.0528	(8)=(3)+(5)+(7)
Residential	0.6656	0.3149	0.7178	0.3402			0.6551
Commercial	0.1676	0.0793	0.1356	0.0643			0.1436
Industrial	0.0082	0.0039	0.0044	0.0021			0.0060
Other Public Authority	0.0374	0.0177	0.0303	0.0144			0.0321
Sales for Resale	0.1153	0.0545	0.1119	0.0531			0.1076
Private Fire Protection	0.0008	0.0004			0.1419	0.0075	0.0079
Public Fire Protection	0.0051	0.0024			0.8581	0.0453	0.0477
Total	1.0000	0.4731	1.0000	0.4741	1.0000	0.0528	1.0000

MISSOURI-AMERICAN WATER COMPANY
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FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 3.

**ALLOCATION OF COSTS ASSOC. WITH FACILITIES SERVING BASE, MAX
DAY EXTRA CAPACITY AND FIRE PROTECTION FUNCTIONS.**

The weighting of the factors is based on the potential demand of general and fire protection service. The bases for the potential demand of general service are the maximum day ratio of 2.00 and the average daily system sendout for 2002 of 2.150 MGD. The system demand for fire protection is 2,000 Gallons per minute for 2 hours.

	<u>Ratio</u>	<u>Rate of Flow, (GPD)</u>	<u>Weight</u>
Average Day	1.00	2,150,000	0.4731
Maximum Day			
Extra Capacity	<u>1.00</u>	<u>2,154,778</u>	<u>0.4741</u>
Subtotal	<u>2.00</u>	<u>4,304,778</u>	<u>0.9472</u>
Fire Protection		<u>240,000</u>	<u>0.0528</u>
Total		<u>4,544,778</u>	<u>1.0000</u>

The public and private fire protection allocation factors in column 6 on the previous page are based on the relative potential demands (see Schedule E).

**MISSOURI-AMERICAN WATER COMPANY
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FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 4.

ALLOCATION OF COSTS ASSOC. WITH FACILITIES SERVING BASE AND MAX HOUR EXTRA CAPACITY FUNCT'S.

Factors are based on the weighting of the average daily consumption, the maximum day extra capacity demand, and the fire protection demand for each customer classification.

Customer Classification	Average Hourly Consumption			Maximum Hour Extra Capacity		Fire Protection		Allocation Factor
	Thousand Gallons	Allocation Factor	Weighted Factor	Allocation Factor	Weighted Factor	Allocation Factor	Weighted Factor	
(1)	(2)	(3)	(4)=(3) X 0.2184	(5)	(6)=(5) X 0.4891	(7)	(8)=(7) X 0.2925	(9)=(4)+(6)+(8)
Residential	55.6	0.6656	0.1453	0.7231	0.3537			0.4990
Commercial	14.0	0.1676	0.0366	0.1301	0.0636			0.1002
Industrial	0.7	0.0082	0.0018	0.0031	0.0015			0.0033
Other Public Authority	3.1	0.0374	0.0082	0.0291	0.0142			0.0224
Sales for Resale	9.6	0.1153	0.0252	0.1146	0.0561			0.0813
Private Fire Protection	0.1	0.0009	0.0002			0.1419	0.0415	0.0417
Public Fire Protection	0.4	0.0051	0.0011			0.8581	0.2510	0.2521
Total	83.5	1.0001	0.2184	1.0000	0.4891	1.0000	0.2925	1.0000

The maximum hour extra capacity factors in column 5 are determined as follows:

MISSOURI-AMERICAN WATER COMPANY
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FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 4.

**ALLOCATION OF COSTS ASSOC. WITH FACILITIES SERVING BASE AND MAX
HOUR EXTRA CAPACITY FUNCT'S.**

The weighting of the factors is based on the potential demand of general and fire protection service. The bases for the potential demand of general service are the maximum hour ratio of 3.23 and the average daily system sendout for 2002 of 2.150 MGD. The system demand for fire protection is 2,000 gallons per minute.

	Ratio	Rate of Flow, (GPM)	Weight
Average Hour	1.00	1,493	0.2184
Maximum Hour			
Extra Capacity	2.24	3,344	0.4891
Subtotal	3.24	4,837	0.7075
Fire Protection		2,000	0.2925
Total		6,837	1.0000

The maximum hour extra capacity factors in column 5 of the previous page are determined as follows:

Customer Classification	Average Hourly Consumption Thousand Gal. (1)	Maximum Hour Extra Capacity		
		Factor*	1,000 Gallons Per Hour (4)=(2)x(3)	Allocation Factor (5)
Residential	55.6	3.50	194.5	0.7231
Commercial	14.0	2.50	35.0	0.1301
Industrial	0.7	1.20	0.8	0.0031
Other Public Authority	3.1	2.50	7.8	0.0291
Sales for Resale	9.6	3.20	30.8	0.1146
Total	83.0		268.9	1.0000

* Ratio of Maximum Hour To Average Hour Minus 1.0.

The public and private fire protection allocation factors in column 7 on the previous page are based on the relative potential demands (see Schedule E).

**MISSOURI-AMERICAN WATER COMPANY
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FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 5.

ALLOCATION OF COSTS ASSOCIATED WITH STORAGE FACILITIES.

Factors are based on the weighting of the average hourly consumption, the maximum hour extra capacity demand, and the fire protection demand for each customer classification.

Customer Classification	Average Hourly Consumption			Maximum Hour Extra Capacity		Fire Protection		Allocation Factor
	Thousand Gallons	Allocation Factor	Weighted Factor	Allocation Factor	Weighted Factor	Allocation Factor	Weighted Factor	
(1)	(2)	(3)	(4)=(3) X 0.2765	(5)	(6)=(5) X 0.6192	(7)	(8)=(7) X 0.1043	(9)=(4)+(6)+(8)
Residential	55.6	0.6659	0.1841	0.7231	0.4477			0.6318
Commercial	14.0	0.1677	0.0464	0.1301	0.0806			0.1270
Industrial	0.7	0.0084	0.0023	0.0031	0.0019			0.0042
Other Public Authority	3.1	0.0371	0.0103	0.0291	0.0180			0.0283
Sales for Resale	9.6	0.1149	0.0318	0.1146	0.0710			0.1028
Private Fire Protection	0.1	0.0012	0.0003			0.1419	0.0148	0.0151
Public Fire Protection	0.4	0.0048	0.0013			0.8581	0.0895	0.0908
Total	83.5	1.0000	0.2765	1.0000	0.6192	1.0000	0.1043	1.0000

The weighting of the factors is based on the ratio of the capacity required for a 10 hour demand of fire flow, as related to total storage capacity. The calculation is shown on the following page.

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FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 5. Continued

ALLOCATION OF COSTS ASSOCIATED WITH STORAGE FACILITIES, cont.

The weighting of the factors is based on the ratio of the capacity required for a 10 hour demand of fire flow, as related to total storage capacity.

$$\text{Fire Protection Weight} = \frac{2,000 \text{ GPM} \times 60 \text{ Min.} \times 2 \text{ Hrs.}}{2,300,000 \text{ Gallons}} = 0.1043$$

$$\text{General Service Weight} = 1.0000 - 0.1043 = 0.8957$$

The weighting of the average hourly consumption and maximum hour extra demand for general service is based on the maximum hour ratio, as follows:

	<u>Maximum Hour Ratio</u>	<u>Percent</u>	<u>Weight</u>
Average Hour	1.00	30.86	0.2765
Extra Capacity Maximum Hour	<u>2.24</u>	<u>69.14</u>	<u>0.6192</u>
Total	3.24	100.00	<u><u>0.8957</u></u>

**MISSOURI-AMERICAN WATER COMPANY
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FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 6.

ALLOCATION OF COSTS ASSOCIATED WITH POWER AND PUMPING FACILITIES.

Factors are based on the weighting of the maximum daily consumption, Factor 2, the maximum daily consumption with fire, Factor 3, and the maximum hour consumption, Factor 4, for each customer classification, as follows:

Customer Classification	Maximum Daily Consumption		Maximum Daily Consumption		Maximum Hourly Consumption		Allocation Factor
	Allocation Factor 2	Weighted Factor	Allocation Factor 3	Weighted Factor	Allocation Factor 4	Weighted Factor	
(1)	(2)	(3)=(2)X 0.3333	(4)	(5)=(4)X 0.6667	(6)	(7)=(6)X 0.0000	(8)=(3)+ (5)+(7)
Residential	0.6918	0.2306	0.6551	0.4368	0.4990	0.0000	0.6674
Commercial	0.1516	0.0505	0.1436	0.0957	0.1002	0.0000	0.1462
Industrial	0.0063	0.0021	0.0060	0.0040	0.0033	0.0000	0.0061
Other Public Authority	0.0339	0.0113	0.0321	0.0214	0.0224	0.0000	0.0327
Sales for Resale	0.1136	0.0379	0.1076	0.0717	0.0813	0.0000	0.1096
Private Fire Protection	0.0004	0.0001	0.0079	0.0053	0.0417	0.0000	0.0054
Public Fire Protection	0.0025	0.0008	0.0477	0.0318	0.2521	0.0000	0.0326
Total	<u>1.0001</u>	<u>0.3333</u>	<u>1.0000</u>	<u>0.6667</u>	<u>1.0000</u>	<u>0.0000</u>	<u>1.0000</u>

The weighting of the factors is based on the horsepower of pumps associated with maximum day facilities, maximum day and fire facilities, and maximum hour facilities, as follows:

	<u>Horsepower of Pumps</u>	<u>Weight</u>
Associated with Maximum Day	165	0.3333
Associated with Maximum Day and Fire	330	0.6667
Associated with Maximum Hour	<u>0</u>	<u>0.0000</u>
Total	<u>495</u>	<u>1.0000</u>

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FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 7.

ALLOCATION OF COSTS ASSOCIATED WITH TRANSMISSION AND DISTRIBUTION MAINS.

Factors are based on the weighting of the maximum daily consumption with fire, Factor 3, and the maximum hour consumption, Factor 4, for each customer classification, as follows:

Customer Classification	Maximum Daily Consumption		Maximum Hourly Consumption		Allocation Factor
	Allocation Factor 3	Weighted Factor	Allocation Factor 4	Weighted Factor	
(1)	(2)	(3)=(2)X 0.0000	(4)	(5)=(4)X 1.0000	(6)=(3)+(5)
Residential	0.6551	0.0000	0.4990	0.4990	0.4990
Commercial	0.1436	0.0000	0.1002	0.1002	0.1002
Industrial	0.0060	0.0000	0.0033	0.0033	0.0033
Other Public Authority	0.0321	0.0000	0.0224	0.0224	0.0224
Sales for Resale	0.1076	0.0000	0.0813	0.0813	0.0813
Private Fire Protection	0.0079	0.0000	0.0417	0.0417	0.0417
Public Fire Protection	0.0477	0.0000	0.2521	0.2521	0.2521
Total	<u>1.0000</u>	<u>0.0000</u>	<u>1.0000</u>	<u>1.0000</u>	<u>1.0000</u>

The weighting of the factors is based on the total footage of mains, designated as either transmission mains or distribution mains, as follows:

	Total Footage of Mains	Weight
Transmission Mains	73,249	0.0000
Distribution Mains	<u>408,720</u>	<u>1.0000</u>
Total	<u>481,969</u>	1.0000

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FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 8.

ALLOCATION OF COSTS ASSOCIATED WITH FIRE HYDRANTS.

Costs are assigned directly to Public Fire Protection.

<u>Customer Classification</u> (1)	<u>Allocation Factor</u> (3)
Public Fire Protection	1.0000
Total	<u>1.0000</u>

FACTOR 9.

ALLOCATION OF COSTS ASSOCIATED WITH METERS.

Factors are based on the relative cost of meters by size and customer classification, as developed on the following page and summarized below.

<u>Customer Classification</u> (1)	<u>5/8" Dollar Equivalents</u> (2)	<u>Allocation Factor</u> (3)
Residential	4,918	0.8265
Commercial	722	0.1213
Industrial	27	0.0045
Other Public Authority	198	0.0332
Sales for Resale	86	0.0145
Private Fire	<u>0</u>	<u>0.0000</u>
Total	<u>5,950</u>	<u>1.0000</u>

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FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 10.

ALLOCATION OF COSTS ASSOCIATED WITH SERVICES.

Factors are based on the relative cost of services by size and customer classification, as developed on the following page and summarized below.

<u>Customer Classification</u> (1)	<u>3/4" Dollar Equivalents</u> (2)	<u>Allocation Factor</u> (3)
Residential	4,697	0.8727
Commercial	352	0.0654
Industrial	16	0.0030
Other Public Authority	90	0.0167
Sales for Resale	11	0.0021
Private Fire Protection	<u>216</u>	<u>0.0402</u>
Total	<u><u>5,382</u></u>	<u><u>1.0001</u></u>

**MISSOURI-AMERICAN WATER COMPANY
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FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 11.

**ALLOCATION OF TRANSMISSION AND DISTRIBUTION OPERATION
SUPERVISION AND ENGINEERING AND MISCELLANEOUS EXPENSES.**

Factors are based on transmission and distribution operation expenses other than those being allocated, as follows:

Customer Classification	Transmission & Distribution Operating Expenses	Allocation Factor
(1)	(2)	(3)
Residential	\$ 27,989	0.5103
Commercial	5,543	0.1011
Industrial	183	0.0033
Other Public Authority	1,250	0.0228
Sales for Resale	4,353	0.0794
Private Fire Protection	2,204	0.0402
Public Fire Protection	13,322	0.2429
Total	54,844	1.0000

FACTOR 12.

**ALLOCATION OF TRANS. DISTRIB. MAINTENANCE SUPERVISION
AND ENGINEERING, STRUCTURES AND IMPROVE., AND OTHER EXPENSES.**

Factors are based on transmission and distribution maintenance expenses other than those being allocated, as follows:

Customer Classification	Transmission & Distribution Maintenance Expenses	Allocation Factor
(1)	(2)	(3)
Residential	\$ 3,772	0.5600
Commercial	621	0.0922
Industrial	21	0.0032
Other Public Authority	141	0.0210
Sales for Resale	440	0.0654
Private Fire Protection	275	0.0408
Public Fire Protection	1,464	0.2174
Total	\$6,735	1.0000

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FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 13.

ALLOCATION OF BILLING AND COLLECTING COSTS.

Factors are based on the total number of customers.

Customer Classification	Total Customers	Allocation Factor
(1)	(2)	(3)
Residential	4,636	0.9141
Commercial	287	0.0566
Industrial	12	0.0024
Other Public Authority	62	0.0123
Sales for Resale	4	0.0008
Private Fire Protection	70	0.0138
Public Fire Protection	0	0.0000
Total	<u>5,071</u>	<u>1.0000</u>

FACTOR 14.

ALLOCATION OF METER READING COSTS.

Factors are based on the number of metered customers.

Customer Classification	Total Metered Customers	Allocation Factor
(1)	(2)	(3)
Residential	4,636	0.9270
Commercial	287	0.0574
Industrial	12	0.0024
Other Public Authority	62	0.0124
Sales for Resale	4	0.0008
Total	<u>5,001</u>	1.0000

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FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 15.

**ALLOCATION OF ADMINISTRATIVE AND GENERAL EXPENSES AND CASH
WORKING CAPITAL.**

Factors are based on the allocation of all other operation and maintenance expenses excluding purchased water, power, chemicals and waste disposal.

<u>Customer Classification</u> (1)	<u>Operation & Maintenance Expenses</u> (2)	<u>Allocation Factor</u> (3)
Residential	\$324,049	0.6830
Commercial	46,065	0.0971
Industrial	1,745	0.0037
Other Public Authority	10,309	0.0217
Sales for Resale	28,666	0.0604
Private Fire Protection	10,830	0.0228
Public Fire Protection	52,828	0.1113
Total	<u>\$474,493</u>	<u>1.0000</u>

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FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 16.

ALLOCATION OF LABOR RELATED TAXES AND BENEFITS.

Factors are based on the allocation of direct labor expense.

Customer Classification <u>(1)</u>	Direct Labor Expense <u>(2)</u>	Allocation Factor <u>(3)</u>
Residential	\$195,763	0.7056
Commercial	28,916	0.1042
Industrial	1,130	0.0041
Other Public Authority	6,456	0.0233
Sales for Resale	18,185	0.0655
Private Fire Protection	4,655	0.0168
Public Fire Protection	22,343	0.0805
Total	<u>\$277,447</u>	<u>1.0000</u>

FACTOR 17.

**ALLOCATION OF ORGANIZATION, FRANCHISES AND CONSENTS,
MISC. INTANGIBLE PLANT AND OTHER RATE BASE ELEMENTS.**

Factors are based on the allocation of the original cost less depreciation other than those items being allocated, as follows:

Customer Classification <u>(1)</u>	Original Cost Less Depreciation <u>(2)</u>	Allocation Factor <u>(3)</u>
Residential	\$8,313,102	0.6040
Commercial	1,593,444	0.1158
Industrial	61,253	0.0045
Other Public Authority	361,827	0.0263
Sales for Resale	1,131,579	0.0822
Private Fire Protection	266,298	0.0194
Public Fire Protection	2,034,013	0.1478
Total	<u>\$13,761,517</u>	<u>1.0000</u>

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FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 18.

ALLOCATION OF INCOME TAXES AND INCOME AVAILABLE FOR RETURN.

Factors are based on the allocation of the original cost measure of value rate base as shown on the following pages and summarized below.

Customer Classification	Original Cost Measure of Value	Allocation Factor
(1)	(2)	(3)
Residential	\$5,086,278	0.6028
Commercial	979,054	0.1161
Industrial	37,385	0.0044
Other Public Authority	222,334	0.0264
Sales for Resale	696,543	0.0826
Private Fire Protection	162,664	0.0193
Public Fire Protection	1,252,157	0.1484
Total	<u>\$8,436,415</u>	<u>1.0000</u>

FACTOR 19.

**ALLOCATION OF REG. COMMISSION EXPENSES, ASSESSMENTS AND
OTHER WATER REVENUES.**

The factors are based on the allocation of the total cost of service, excluding those items being allocated.

Customer Classification	Total Cost of Service	Allocation Factor
(1)	(2)	(3)
Residential	\$1,767,133	0.6480
Commercial	313,608	0.1150
Industrial	12,519	0.0046
Other Public Authority	70,760	0.0259
Sales for Resale	211,033	0.0774
Private Fire Protection	47,960	0.0176
Public Fire Protection	304,196	0.1115
Total	<u>\$2,727,209</u>	<u>1.0000</u>

MISSOURI-AMERICAN WATER COMPANY
PARKVILLE WATER DISTRICT

PSC STAFF STUDY

BASIS FOR ALLOCATING METER COSTS TO CUSTOMER CLASSIFICATIONS

Meter Size (1)	5/8" Dollar Equivalent (2)	Residential		Commercial		Industrial		Other Public Authority		Sales for Resale		Total	
		Number of Meters (3)	Weighting (4)=(2)X(3)	Number of Meters (5)	Weighting (6)=(2)X(5)	Number of Meters (7)	Weighting (8)=(2)X(7)	Number of Meters (9)	Weighting (10)=(2)X(9)	Number of Meters (11)	Weighting (12)=(2)X(11)	Number of Meters (13)	Weighting (14)
5/8	1.0	4,426.25	4,426.25	231.33	231.33	7.00	7.00	29.25	29.25	0.00	0.00	4,693.83	4,693.83
3/4	1.3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1	1.7	163.17	277.38	0.00	0.00	0.00	0.00	7.00	11.90	0.00	0.00	170.17	289.28
1-1/2	3.5	36.75	128.63	12.17	42.58	2.00	7.00	7.00	24.50	0.00	0.00	57.92	202.71
2	4.3	7.67	32.97	33.33	143.33	3.00	12.90	17.75	76.33	0.00	0.00	61.75	265.53
3	19.0	1.08	20.58	6.25	118.75	0.00	0.00	0.00	0.00	3.00	57.00	10.33	196.33
4	29.3	1.08	31.74	0.00	0.00	0.00	0.00	0.25	7.33	1.00	29.30	2.33	68.37
6	48.4	0.00	0.00	3.83	185.53	0.00	0.00	1.00	48.40	0.00	0.00	4.83	233.93
8	112.9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
												5,001.17	
Total		4,636.00	4,917.55	286.92	721.53	12.00	26.90	62.25	197.70	4.00	86.30	5,001.17	5,949.98

**MISSOURI-AMERICAN WATER COMPANY
PARKVILLE WATER DISTRICT
PSC STAFF STUDY**

BASIS FOR ALLOCATING SERVICE COSTS TO CUSTOMER CLASSIFICATIONS

Service Size	3/4" Dollor Equivalent	Residential		Commercial		Industrial		Other Public Authority		Sales for Resale		Private Fire Protection		Total	
		Number of Services	Weighting (4)=(2)X(3)	Number of Services	Weighting (6)=(2)X(5)	Number of Services	Weighting (8)=(2)X(7)	Number of Services	Weighting (10)=(2)X(9)	Number of Services	Weighting (12)=(2)X(11)	Number of Services	Weighting (14)=(2)X(13)	Number of Services	Weighting (16)
(1)	(2)	(3)	(4)=(2)X(3)	(5)	(6)=(2)X(5)	(7)	(8)=(2)X(7)	(9)	(10)=(2)X(9)	(11)	(12)=(2)X(11)	(13)	(14)=(2)X(13)	(15)	(16)
3/4	1.00	4,426.25	4,426.25	231.33	231.33	7.00	7.00	29.25	29.25	0.00	0.00	0.00	0.00	4,693.83	4,693.83
1	1.17	163.17	190.91	0.00	0.00	0.00	0.00	7.00	8.19	0.00	0.00	0.00	0.00	170.17	199.10
1-1/2	1.58	36.75	58.07	12.17	19.22	2.00	3.16	7.00	11.06	0.00	0.00	0.00	0.00	57.92	91.51
2	2.04	7.67	15.64	33.33	68.00	3.00	6.12	17.75	36.21	0.00	0.00	1.00	2.04	62.75	128.01
3	2.73	1.08	2.96	6.25	17.06	0.00	0.00	0.00	0.00	3.00	8.19	1.00	2.73	11.33	30.94
4	2.88	1.08	3.12	0.00	0.00	0.00	0.00	0.25	0.72	1.00	2.88	5.00	14.40	7.33	21.12
6	4.24	0.00	0.00	3.83	16.25	0.00	0.00	1.00	4.24	0.00	0.00	25.00	106.00	29.83	126.49
8	6.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.00	62.82	9.00	62.82
10	9.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.00	28.50	3.00	28.50
12	12.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total		<u>4,636.00</u>	<u>4,696.94</u>	<u>286.92</u>	<u>351.87</u>	<u>12.00</u>	<u>16.28</u>	<u>62.25</u>	<u>89.67</u>	<u>4.00</u>	<u>11.07</u>	<u>44.00</u>	<u>216.49</u>	<u>5,045.17</u>	<u>5,382.32</u>

**MISSOURI-AMERICAN WATER COMPANY
PARKVILLE WATER DISTRICT
PSC STAFF STUDY**

BASIS FOR ALLOCATING DEMAND RELATED COSTS OF FIRE SERVICE
TO PRIVATE AND PUBLIC FIRE PROTECTION CUSTOMER CLASSIFICATIONS

Description (1)	Restrictive Diameters Squared (2)	Quantity (3)	Relative Demand (4)=(2)x(3)	Allocation Factor (5)
<u>PRIVATE FIRE PROTECTION</u>				
Fire Lines				
2 -inch	4.00	1	4	
3 -inch	9.00	0	0	
4 -inch	16.00	5	80	
6 -inch	36.00	25	900	
8 -inch	64.00	9	576	
10 -inch	100.00	3	300	
12 -inch	144.00	0	0	
Private Hydrants	32.75	27	884	
Total Private Fire Protection		70	2,744	0.1419
<u>PUBLIC FIRE PROTECTION</u>				
Hydrant	Nozzle Sizes			
6" Valve	2- 2-1/2" & 1- 4.5"	32.75	0	0
6" Valve	2- 2-1/2" & 1- 4"	28.50	582	16,587
Total Public Fire Protection		582	16,587	0.8581
Total Fire Protection		652	19,331	1.0000

MISSOURI-AMERICAN WATER COMPANY
ST. CHARLES DISTRICT
PSC STAFF STUDY
COMPARISON OF COST OF SERVICE WITH REVENUES UNDER PRESENT AND PROPOSED RATES
FOR THE TEST YEAR ENDED DECEMBER 31, 2002

Customer Classification (1)	Cost of Service		Revenues, Present Rates		Revenues, Proposed Rates		Proposed Increase	
	Amount (Schedule B) (2)	Percent (3)	Amount (4)	Percent (5)	Amount (6)	Percent (7)	Amount (8)	Percent Increase (9)
Residential	\$ 5,972,651	87.2%	\$ 7,312,573	85.5%	\$ 5,972,651	87.2%	\$ (1,339,922)	-18.3%
Commercial	663,045	9.7%	959,209	11.2%	663,045	9.6%	(296,164)	-30.9%
Industrial	2,933	0.0%	4,132	0.0%	2,933	0.0%	(1,199)	-29.0%
Public Authority	97,479	1.4%	159,641	1.9%	97,479	1.4%	(62,162)	-38.9%
Sales for Resale	-	0.0%	-	0.0%	-	0.0%	-	
Private Fire Service	114,876	1.7%	117,006	1.4%	114,875	1.7%	(2,131)	-1.8%
Public Fire Service	-	0.0%	-	0.0%	-	0.0%	-	0.0%
Total Sales	6,850,984	<u>100.0%</u>	8,552,561	<u>100.0%</u>	6,850,983	<u>99.9%</u>	(1,701,578)	-19.9%
Other Revenues	149,175		149,175		149,175		-	0.0%
Total	<u>\$ 7,000,159</u>		<u>\$ 8,701,736</u>		<u>\$ 7,000,158</u>		<u>\$ (1,701,578)</u>	-19.6%
True-Up Estimate	\$397,866				\$397,866		\$397,866	
Total w/ True-up	<u>7,398,025</u>				<u>\$ 7,398,024</u>		<u>\$ (1,303,712)</u>	-15.0%

Test Year Operating Revenues at Present Rates vs Proposed Rates
12 Month Test Period Ended December 31, 2002

Missouri Public Service Commission
 Company: Missouri-American Water Company
 District: St. Charles

Case No. WR-2003-0500
 STAFF - ST CHARLES
 Page 1 of 1

Line #	Class/ Description	Present Pro Forma Rates		Proposed Pro Forma Rates		Dollar Change	Percentage Change
		Sales ('000 Gal)	Total Revenue	Sales ('000 Gal)	Total Revenue		
1							
2	Monthly Billing:						
3							
4	Residential	2,645,435	\$7,312,573	2,645,435	\$5,972,651	(\$1,339,922)	-18.32%
5	Commercial	438,108	959,209	438,108	663,045	(296,164)	-30.88%
6	Industrial	2,429	4,132	2,429	2,933	(1,199)	-29.02%
7	Other Public Authority	62,684	159,641	62,684	97,479	(62,162)	-38.94%
8	Other Water Utilities	0	0	0	0	0	0.00%
9	Miscellaneous	0	0	0	0	0	0.00%
10	Private Fire	0	117,006	0	114,875	(2,131)	-1.82%
11	Public Fire	0	0	0	0	0	0.00%
12	Total	<u>3,148,656</u>	<u>8,552,561</u>	<u>3,148,656</u>	<u>6,850,983</u>	<u>(\$1,701,578)</u>	<u>-19.90%</u>
13							
14							
15	Miscellaneous Revenues:						
16							
17	Reconnect Charges		8,935		8,935	0	0.00%
18	Returned Check Charge		2,086		2,086	0	0.00%
19	Application Fee		64,720		64,720	0	0.00%
20	Miscellaneous Other Revenue		28,105		5,786	(22,319)	-79.41%
21	Rents from Water Property		16,300		16,300	0	0.00%
22	Miscellaneous Unmetered Sales		29,029		29,029		
23							
24			<u>\$8,701,736</u>		<u>\$6,977,839</u>	<u>(1,723,897)</u>	<u>-19.81%</u>
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Test Year Operating Revenues at Present Rates vs Proposed Rates
12 Month Test Period Ended December 31, 2002

Missouri Public Service Commission
 Company: Missouri-American Water Company
 District: St. Charles

Case No. WR-2003-0500
STAFF - ST CHARLES
 Page 1 of 7

Line #	Class/ Description	Present Pro Forma Rates				Proposed Pro Forma Rates				Dollar Change	Percentage Change
		Customer Meter Billings	Sales (^{'000} Gal)	Current Rate	Total Revenue	Customer Meter Billings	Sales (^{'000} Gal)	Proposed Rate	Total Revenue		
1											
2	Residential:										
3	<u>Minimum Charge:</u>										
4	5/8" Monthly	313,829		\$7.08	\$2,221,909	313,829		\$ 5.83	\$1,828,800	(\$393,109)	-17.69%
5	3/4" Monthly	12		9.06	109	12		\$ 6.09	73	(36)	-33.03%
6	1" Monthly	8,478		12.84	108,858	8,478		\$ 6.71	56,848	(52,010)	-47.78%
7	1-1/2" Monthly	188		22.33	4,198	188		\$ 8.92	1,677	(2,521)	-60.05%
8	2" Monthly	53		33.71	1,787	53		\$ 10.34	548	(1,239)	-69.33%
9	3" Monthly	0		60.24	0	0		\$ 24.23	0	0	0.00%
10	4" Monthly	0		98.15	0	0		\$ 33.43	0	0	0.00%
11	6" Monthly	0		192.93	0	0		\$ 52.21	0	0	0.00%
12	8" Monthly	0		306.65	0	0		\$ 112.69	0	0	0.00%
13	10" Monthly	0		520.92	0	0		0.00	0	0	0.00%
14	12" Monthly	0		859.27	0	0		0.00	0	0	0.00%
15											
16											
17	<u>Volumetric Charges:</u>										
18	First Block		2,620,877	\$1.8898	4,952,933		2,620,877	\$1.5441	4,046,786	(906,147)	-18.30%
19	Second Block		16,670	1.0587	17,649		16,670	1.5441	25,739	8,090	45.84%
20	Third Block		2,959	0.8170	2,418		2,959	1.5441	4,569	2,151	88.96%
21	Fourth Block		4,929	0.5502	2,712		4,929	1.5441	7,611	4,899	180.64%
22											
23											
24	Total		<u>2,645,435</u>		<u>\$7,312,573</u>		<u>2,645,435</u>		<u>\$5,972,651</u>	<u>(\$1,339,922)</u>	<u>-18.32%</u>
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Test Year Operating Revenues at Present Rates vs Proposed Rates
12 Month Test Period Ended December 31, 2002

Missouri Public Service Commission
 Company: Missouri-American Water Company
 District: St. Charles

Case No. WR-2003-0500

STAFF - ST CHARLES

Page 2 of 7

Line #	Class/ Description	Present Pro Forma Rates				Proposed Pro Forma Rates				Dollar Change	Percentage Change
		Customer Meter Billings	Sales (^{'000} Gal)	Current Rate	Total Revenue	Customer Meter Billings	Sales (^{'000} Gal)	Proposed Rate	Total Revenue		
1											
2	Commercial:										
3	<u>Minimum Charge:</u>										
4	5/8" Monthly	4,626		\$7.08	\$32,752	4,626		\$ 5.83	\$26,957	(\$5,795)	-17.69%
5	3/4" Monthly	4		9.06	36	4		\$ 6.09	24	(12)	-33.33%
6	1" Monthly	2,452		12.84	31,484	2,452		\$ 6.71	16,442	(15,042)	-47.78%
7	1-1/2" Monthly	2,156		22.33	48,143	2,156		\$ 8.92	19,232	(28,911)	-60.05%
8	2" Monthly	1,915		33.71	64,555	1,915		\$ 10.34	19,808	(44,747)	-69.32%
9	3" Monthly	89		60.24	5,361	89		\$ 24.23	2,157	(3,204)	-59.76%
10	4" Monthly	101		98.15	9,913	101		\$ 33.43	3,377	(6,536)	-65.93%
11	6" Monthly	32		192.93	6,174	32		\$ 52.21	1,671	(4,503)	-72.93%
12	8" Monthly	13		306.65	3,986	13		\$ 112.69	1,465	(2,521)	-63.25%
13	10" Monthly	0		520.92	0	0		0.00	0	0	0.00%
14	12" Monthly	0		859.27	0	0		0.00	0	0	0.00%
15											
16											
17	<u>Volumetric Charges:</u>										
18	First Block		304,927	\$1.9952	608,390		304,927	\$1.3054	398,056	(210,334)	-34.57%
19	Second Block		131,452	1.1177	146,924		131,452	1.3054	171,599	24,675	16.79%
20	Third Block		1,729	0.8625	1,491		1,729	1.3054	2,257	766	51.37%
21	Fourth Block		0	0.5809	0		0	1.3054	0	0	0.00%
22											
23											
24	Total		<u>438,108</u>		<u>\$959,209</u>		<u>438,108</u>		<u>\$663,045</u>	<u>(\$296,164)</u>	<u>-30.88%</u>
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Test Year Operating Revenues at Present Rates vs Proposed Rates
12 Month Test Period Ended December 31, 2002

Missouri Public Service Commission
 Company: Missouri-American Water Company
 District: St. Charles

Case No. WR-2003-0500
 STAFF - ST CHARLES
 Page 3 of 7

Line #	Class/ Description	Present Pro Forma Rates				Proposed Pro Forma Rates				Dollar Change	Percentage Change
		Customer Meter Billings	Sales (^{'000} Gal)	Current Rate	Total Revenue	Customer Meter Billings	Sales (^{'000} Gal)	Proposed Rate	Total Revenue		
1											
2	Industrial:										
3	<u>Minimum Charge:</u>										
4	5/8" Monthly	0		\$7.08	\$0	0		\$ 5.83	\$0	\$0	0.00%
5	3/4" Monthly	0		9.06	0	0		\$ 6.09	0	0	0.00%
6	1" Monthly	0		12.84	0	0		\$ 6.71	0	0	0.00%
7	1-1/2" Monthly	0		22.33	0	0		\$ 8.92	0	0	0.00%
8	2" Monthly	19		33.71	640	19		\$ 10.34	197	(443)	-69.22%
9	3" Monthly	0		60.24	0	0		\$ 24.23	0	0	0.00%
10	4" Monthly	0		98.15	0	0		\$ 33.43	0	0	0.00%
11	6" Monthly	0		192.93	0	0		\$ 52.21	0	0	0.00%
12	8" Monthly	0		306.65	0	0		\$ 112.69	0	0	0.00%
13	10" Monthly	0		520.92	0	0		0.00	0	0	0.00%
14	12" Monthly	0		859.27	0	0		0.00	0	0	0.00%
15											
16											
17	<u>Volumetric Charges:</u>										
18	First Block		1,171	\$1.8612	2,180		1,171	\$1.1262	1,319	(861)	-39.50%
19	Second Block		1,258	1.0427	1,312		1,258	1.1262	1,417	105	8.00%
20	Third Block		0	0.8044	0		0	1.1262	0	0	0.00%
21	Fourth Block		0	0.5419	0		0	1.1262	0	0	0.00%
22											
23											
24	Total		<u>2,429</u>		<u>\$4,132</u>		<u>2,429</u>		<u>\$2,933</u>	<u>(\$1,199)</u>	<u>-29.02%</u>
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Test Year Operating Revenues at Present Rates vs Proposed Rates
12 Month Test Period Ended December 31, 2002

Missouri Public Service Commission
 Company: Missouri-American Water Company
 District: St. Charles

Case No. WR-2003-0500
 STAFF - ST CHARLES
 Page 4 of 7

Line #	Class/ Description	Present Pro Forma Rates				Proposed Pro Forma Rates				Dollar Change	Percentage Change
		Customer Meter Billings	Sales (^{'000} Gal)	Current Rate	Total Revenue	Customer Meter Billings	Sales (^{'000} Gal)	Proposed Rate	Total Revenue		
1											
2	Other Public Authority:										
3	<u>Minimum Charge:</u>										
4	5/8" Monthly	57		\$7.08	\$404	57		\$ 5.83	\$332	(\$72)	-17.82%
5	3/4" Monthly	0		9.06	0	0		\$ 6.09	0	0	0.00%
6	1" Monthly	39		12.84	501	39		\$ 6.71	262	(239)	-47.70%
7	1-1/2" Monthly	60		22.33	1,340	60		\$ 8.92	535	(805)	-60.07%
8	2" Monthly	247		33.71	8,326	247		\$ 10.34	2,555	(5,771)	-69.31%
9	3" Monthly	168		60.24	10,120	168		\$ 24.23	4,071	(6,049)	-59.77%
10	4" Monthly	121		98.15	11,876	121		\$ 33.43	4,045	(7,831)	-65.94%
11	6" Monthly	63		192.93	12,155	63		\$ 52.21	3,289	(8,866)	-72.94%
12	8" Monthly	0		306.65	0	0		\$ 112.69	0	0	0.00%
13	10" Monthly	0		520.92	0	0		0.00	0	0	0.00%
14	12" Monthly	0		859.27	0	0		0.00	0	0	0.00%
15											
16											
17	<u>Volumetric Charges:</u>										
18	First Block		30,031	\$2.3919	71,831		30,031	\$1.3144	39,472	(32,359)	-45.05%
19	Second Block		30,483	1.3399	40,844		30,483	1.3144	40,066	(778)	-1.90%
20	Third Block		2,170	1.0341	2,244		2,170	1.3144	2,852	608	27.09%
21	Fourth Block		0	0.6963	0		0	1.3144	0	0	0.00%
22											
23											
24	Total		<u>62,684</u>		<u>\$159,641</u>		<u>62,684</u>		<u>\$97,479</u>	<u>(\$62,162)</u>	<u>-38.94%</u>
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Test Year Operating Revenues at Present Rates vs Proposed Rates
12 Month Test Period Ended December 31, 2002

Missouri Public Service Commission
 Company: Missouri-American Water Company
 District: St. Charles

Case No. WR-2003-0500
 STAFF - ST CHARLES
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Line #	Class/ Description	Present Pro Forma Rates				Proposed Pro Forma Rates				Dollar Change	Percentage Change
		Customer Meter Billings	Sales (^{'000} Gal)	Current Rate	Total Revenue	Customer Meter Billings	Sales (^{'000} Gal)	Proposed Rate	Total Revenue		
1											
2	Other Water Utilities:										
3	<u>Minimum Charge:</u>										
4	5/8" Monthly	0		\$7.08	\$0	0		\$ 5.83	\$0	\$0	0.00%
5	3/4" Monthly	0		9.06	0	0		\$ 6.09	0	0	0.00%
6	1" Monthly	0		12.84	0	0		\$ 6.71	0	0	0.00%
7	1-1/2" Monthly	0		22.33	0	0		\$ 8.92	0	0	0.00%
8	2" Monthly	0		33.71	0	0		\$ 10.34	0	0	0.00%
9	3" Monthly	0		60.24	0	0		\$ 24.23	0	0	0.00%
10	4" Monthly	0		98.15	0	0		\$ 33.43	0	0	0.00%
11	6" Monthly	0		192.93	0	0		\$ 52.21	0	0	0.00%
12	8" Monthly	0		306.65	0	0		\$ 112.69	0	0	0.00%
13	10" Monthly	0		520.92	0	0		0.00	0	0	0.00%
14	12" Monthly	0		859.27	0	0		0.00	0	0	0.00%
15											
16											
17	<u>Volumetric Charges:</u>										
18	First Block		0	\$1.9548	0		0	\$0.0000	0	0	0.00%
19	Second Block		0	1.0951	0		0	0.0000	0	0	0.00%
20	Third Block		0	0.8451	0		0	0.0000	0	0	0.00%
21	Fourth Block		0	0.5691	0		0	0.0000	0	0	0.00%
22											
23											
24	Total		<u>0</u>		<u>\$0</u>		<u>0</u>		<u>\$0</u>	<u>\$0</u>	<u>0.00%</u>
25											
26											
27											
28											
29											
30											
31											
32											
33											
34											
35											
36											
37											
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40											

Test Year Operating Revenues at Present Rates vs Proposed Rates
12 Month Test Period Ended December 31, 2002

Missouri Public Service Commission
Company: Missouri-American Water Company
District: St. Charles

Case No. WR-2003-0500

STAFF - ST CHARLES

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Line #	Class/ Description	Present Pro Forma Rates				Proposed Pro Forma Rates				Dollar Change	Percentage Change
		Customer Meter Billings	Sales (⁰⁰⁰ Gal)	Current Rate	Total Revenue	Customer Meter Billings	Sales (⁰⁰⁰ Gal)	Proposed Rate	Total Revenue		
1											
2	Miscellaneous:										
3	<u>Minimum Charge:</u>										
4	5/8" Monthly	0		\$7.08	\$0	0		\$ 5.83	\$0	\$0	0.00%
5	3/4" Monthly	0		9.06	0	0		\$ 6.09	0	0	0.00%
6	1" Monthly	0		12.84	0	0		\$ 6.71	0	0	0.00%
7	1-1/2" Monthly	0		22.33	0	0		\$ 8.92	0	0	0.00%
8	2" Monthly	0		33.71	0	0		\$ 10.34	0	0	0.00%
9	3" Monthly	0		60.24	0	0		\$ 24.23	0	0	0.00%
10	4" Monthly	0		98.15	0	0		\$ 33.43	0	0	0.00%
11	6" Monthly	0		192.93	0	0		\$ 52.21	0	0	0.00%
12	8" Monthly	0		306.65	0	0		\$ 112.69	0	0	0.00%
13	10" Monthly	0		520.92	0	0		0.00	0	0	0.00%
14	12" Monthly	0		859.27	0	0		0.00	0	0	0.00%
15											
16											
17	<u>Volumetric Charges:</u>										
18	First Block		0	\$0.0000	0		0	\$0.0000	0	0	0.00%
19	Second Block		0	0.0000	0		0	0.0000	0	0	0.00%
20	Third Block		0	0.0000	0		0	0.0000	0	0	0.00%
21	Fourth Block		0	0.0000	0		0	0.0000	0	0	0.00%
22											
23											
24	Total		<u>0</u>		<u>\$0</u>		<u>0</u>		<u>\$0</u>	<u>\$0</u>	<u>0.00%</u>

Test Year Operating Revenues at Present Rates vs Proposed Rates
12 Month Test Period Ended December 31, 2002

Missouri Public Service Commission
 Company: Missouri-American Water Company
 District: St. Charles

Case No. WR-2003-0500
 STAFF - ST CHARLES
 Page 7 of 7

Line #	Connection Size	Number of Connections	Present Rates		Proposed Rates		Dollar Change	Percentage Change
			Annual Rate	Total Revenue	Annual Rate	Total Revenue		
1								
2	Private Fire Service:							
3								
4	Private Fire Hydrant	18	\$822.12	\$14,798	807.16	\$14,529	(\$269)	-1.82%
5								
6	2"	13	117.84	1,532	115.70	1,504	(28)	-1.83%
7								
8	3"	0	202.44	0	198.76	0	0	0.00%
9								
10	4"	16	321.24	5,140	315.39	5,046	(94)	-1.83%
11								
12	6"	57	658.80	37,552	646.81	36,868	(684)	-1.82%
13								
14	8"	45	1,133.64	51,014	1,113.01	50,085	(929)	-1.82%
15								
16	10"	4	1,742.40	6,970	1,710.69	6,843	(127)	-1.82%
17								
18	12"	0	2,484.36	0	2,439.14	0	0	0.00%
19								
20								
21								
22	Total	<u>153</u>		<u>\$117,006</u>		<u>\$114,875</u>	<u>(\$2,131)</u>	<u>-1.82%</u>
23								
24								
25								
26	Public Fire Protection:							
27								
28	Public Fire Hydrants	<u>2,762</u>	0.00	<u>0</u>	0.00	<u>0</u>	<u>0</u>	<u>0.00%</u>
29								
30								
31								
32								
33								
34								
35								
36								
37								
38								
39								
40								

MISSOURI-AMERICAN WATER COMPANY
ST. CHARLES DISTRICT
COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS

PSC STAFF STUDY

Account (1)	Factor Ref. (2)	Cost of Service (3)	Residential (4)	Commercial (5)	Industrial (6)	Public Authorities (7)	Sales for Resale (8)	Fire Protection		
								Private (9)	Public (10)	
OPERATION AND MAINTENANCE EXPENSES										
SOURCE OF SUPPLY EXPENSES										
Super & Eng Oper SS	2	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0.0
Labor & Exp Oper SS	2	0	0	0	0	0	0	0	0	0.0
Labor & Exp Oper SS	2	(134)	(115)	(16)	(0)	(2)	0	(0)	(0)	0.0
Purchased Water	1	526,058	439,679	72,806	421	10,416	0	421	2,315	0.0
TOTAL SS EXPENSE - OPERATION		525,924	439,564	72,790	421	10,414	0	421	2,314	0.0
Misc Exp Oper SS	2	(18)	(15)	(2)	(0)	(0)	0	(0)	(0)	0.0
Misc Exp Oper SS	2	6	5	1	0	0	0	0	0	0.0
Rents Oper SS	2	0	0	0	0	0	0	0	0	0.0
Super & Eng Maint SS	2	0	0	0	0	0	0	0	0	0.0
Struct & Improve Maint SS	2	0	0	0	0	0	0	0	0	0.0
Struct & Improve Maint SS	2	157	135	19	0	3	0	0	0	0.0
Collect & Impound Maint SS	2	0	0	0	0	0	0	0	0	0.0
Lake, River & Oth Maint SS	2	0	0	0	0	0	0	0	0	0.0
Lake, River & Oth Maint SS	2	0	0	0	0	0	0	0	0	0.0
Wells & Springs Maint SS	2	0	0	0	0	0	0	0	0	0.0
Wells & Springs Maint SS	2	0	0	0	0	0	0	0	0	0.0
Infit Gall & Tunnels Maint SS	2	0	0	0	0	0	0	0	0	0.0
Supply Mains Maint SS	2	0	0	0	0	0	0	0	0	0.0
Misc Plant Maint SS	2	0	0	0	0	0	0	0	0	0.0
Misc Plant Maint SS	2	18,097	15,520	2,206	11	317	0	7	36	0.0
TOTAL SS EXPENSE - MAINTENANCE		18,242	15,644	2,224	11	319	0	7	36	0.0
TOTAL SS EXPENSE		544,166	455,208	75,014	432	10,733	0	428	2,351	0.0
POWER AND PUMPING EXPENSES										
Super & Eng Oper P	6	0	0	0	0	0	0	0	0	0.0
Fuel for Power Prod	1	0	0	0	0	0	0	0	0	0.0
Labor & Exp Oper Pwr Prod	6	0	0	0	0	0	0	0	0	0.0
Labor & Exp Oper Pwr Prod	6	0	0	0	0	0	0	0	0	0.0
Purch Fuel/Power for Pump	1	62,383	52,140	8,634	50	1,235	0	50	274	0.0
Labor & Exp Oper Pump	6	23,459	19,194	2,698	14	389	0	178	985	0.0
Labor & Exp Oper Pump	6	3	2	0	0	0	0	0	0	0.0
Expenses Transferred	6	0	0	0	0	0	0	0	0	0.0
Misc Exp Oper P	6	2	2	0	0	0	0	0	0	0.0
Rents Oper P	6	226	185	26	0	4	0	2	9	0.0
TOTAL PUMPING EXPENSE - OPERATION		86,073	71,523	11,358	64	1,628	0	230	1,269	0.0

MISSOURI-AMERICAN WATER COMPANY
ST. CHARLES DISTRICT
COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS

PSC STAFF STUDY										
Account	Factor Ref.	Cost of Service	Residential	Commercial	Industrial	Public Authorities	Sales for Resale	Fire Protection		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	Private	Public	
								(9)	(10)	
Super & Eng Maint P	6	0	0	0	0	0	0	0	0	0.0
Struct & Improve Maint P	6	2,083	1,704	240	1	35	0	16	87	0.0
Power Prod Equip Maint P	6	6,344	5,191	730	4	105	0	48	266	0.0
Pump Equip Maint P	6	6,006	4,914	891	4	100	0	46	252	0.0
Pump Equip Maint P	6	0	0	0	0	0	0	0	0	0.0
TOTAL PUMPING EXPENSES - MAINTENANCE		14,433	11,809	1,660	9	240	0	110	606	0.0
TOTAL PUMPING EXPENSES		100,506	83,332	13,018	73	1,868	0	340	1,876	0.0
WATER TREATMENT										0.0
Super & Eng Oper WT	2	0	0	0	0	0	0	0	0	0.0
Chemicals	1	(4,642)	(3,880)	(642)	(4)	(92)	0	(4)	(20)	0.0
Labor & Exp Oper WT	2	0	0	0	0	0	0	0	0	0.0
Labor & Exp Oper WT	2	(1)	(1)	(0)	(0)	(0)	0	(0)	(0)	0.0
Misc Exp Oper WT	2	0	0	0	0	0	0	0	0	0.0
Misc Exp Oper WT	1	(5)	(4)	(1)	(0)	(0)	0	(0)	(0)	0.0
Misc Exp Oper WT	2	(1)	(1)	(0)	(0)	(0)	0	(0)	(0)	0.0
Rents Oper WT	2	0	0	0	0	0	0	0	0	0.0
TOTAL WT EXPENSE - OPERATION		(4,649)	(3,886)	(643)	(4)	(92)	0	(4)	(20)	0.0
Super & Eng Maint WT	2	0	0	0	0	0	0	0	0	0.0
Struct & Improve Maint WT	2	0	0	0	0	0	0	0	0	0.0
Struct & Improve Maint WT	2	0	0	0	0	0	0	0	0	0.0
WT Equip Maint WT	2	0	0	0	0	0	0	0	0	0.0
WT Equip Maint WT	2	1	1	0	0	0	0	0	0	0.0
TOTAL WT EXPENSE - MAINTENANCE		1	1	0	0	0	0	0	0	0.0
TOTAL WT EXPENSE		(4,648)	(3,885)	(643)	(4)	(92)	0	(4)	(20)	0.0
TRANSMISSION AND DISTRIBUTION EXPENSES										0.0
Super & Eng Oper TD	11	163	118	14	0	2	0	5	25	0.0
Storage Facility Exp	5	121	78	10	0	1	0	5	26	0.0
Storage Facility Exp	5	5,220	3,367	444	2	64	0	205	1,137	0.0
TD Lines Exp	7	33,850	23,235	3,067	14	440	0	1,087	6,008	0.0
TD Lines Exp	7	208,358	143,017	18,877	83	2,709	0	6,688	36,984	0.0
Meter Expense	9	69	61	6	0	2	0	0	0	0.0
Meter Expense	9	0	0	0	0	0	0	0	0	0.0
Customer Install Exp	10	43,850	40,662	1,951	4	224	0	1,009	0	0.0
Customer Install Exp	10	0	0	0	0	0	0	0	0	0.0
Misc Exp Oper TD	11	25,424	18,351	2,125	10	300	0	788	3,852	0.0

MISSOURI-AMERICAN WATER COMPANY
ST. CHARLES DISTRICT
COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS

PSC STAFF STUDY									
Account	Factor Ref.	Cost of Service	Residential	Commercial	Industrial	Public Authorities	Sales for Resale	Fire Protection	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	Private	Public
Misc Exp Oper TD	11	0	0	0	0	0	0	0	0
Misc Exp Oper TD	11	2,294	1,656	192	1	27	0	71	348
Rents Oper TD	11	1	1	0	0	0	0	0	0
TOTAL T & D EXPENSE OPERATION		319,350	230,545	26,687	115	3,769	0	9,855	48,380
Super & Eng Maint TD	12	4	3	0	0	0	0	0	1
Struct & Improve Maint TD	12	0	0	0	0	0	0	0	0
Struct & Improve Maint TD	12	0	0	0	0	0	0	0	0
Dist Res Stand Maint TD	5	0	0	0	0	0	0	0	0
TD Main Maint TD	7	36,851	25,295	3,339	15	479	0	1,183	6,541
TD Main Maint TD	7	0	0	0	0	0	0	0	0
Fire Main Maint TD	8	0	0	0	0	0	0	0	0
Services Maint TD	10	22,522	20,885	1,002	2	115	0	518	0
Services Maint TD	10	0	0	0	0	0	0	0	0
Meters Maint TD	9	5,827	5,147	504	1	175	0	0	0
Meters Maint TD	9	0	0	0	0	0	0	0	0
Hydrants Maint TD	8	8,722	0	0	0	0	0	0	8,722
Hydrants Maint TD	8	0	0	0	0	0	0	0	0
Misc Plant Maint TD	12	12,861	8,931	842	3	134	0	296	2,658
Mat and Sup Maint TD	12	88,626	61,542	5,805	18	922	0	2,038	18,301
Misc Maint TD	12	0	0	0	0	0	0	0	0
Amort Def Maint TD	5	0	0	0	0	0	0	0	0
TOTAL T & D EXPENSE - MAINTENANCE		175,413	121,802	11,493	38	1,824	0	4,035	36,221
TOTAL T & D EXPENSE		494,763	352,347	38,179	153	5,593	0	13,890	84,601
CUSTOMER ACCOUNTS									
Supervision CA	13	21,943	21,030	742	2	48	0	121	0
Meter Reading Exp CA	14	92,934	89,551	3,160	9	214	0	0	0
Meter Reading Exp CA	14	36	35	1	0	0	0	0	0
Meter Reading Exp CA	14	0	0	0	0	0	0	0	0
Cust Rec & Collection CA	13	83,054	79,599	2,807	8	183	0	457	0
Cust Rec & Collection CA	13	100,213	96,044	3,387	10	220	0	551	0
Uncollectible Accts	13	28,420	27,238	961	3	63	0	156	0
Misc Cust Accts Exp CA	13	9,064	8,687	306	1	20	0	50	0
Misc Cust Accts Exp CA	13	378	362	13	0	1	0	2	0
Misc Cust Accts Exp CA	13	9,253	8,868	313	1	20	0	51	0
Cust Serv & Info Exp CA	13	206,497	197,907	6,980	21	454	0	1,136	0
TOTAL CUSTOMER ACCOUNTING EXPENSE		551,792	529,321	18,669	55	1,223	0	2,524	0
ADMINISTRATIVE AND GENERAL EXPENSES									
Salaries AG	15	173,696	146,235	9,988	35	1,216	0	2,640	13,583
Other Supplies & Exp AG	15	7	6	0	0	0	0	0	1
Other Supplies & Exp AG	15	48,003	40,414	2,760	10	336	0	730	3,754
Other Supplies & Exp AG	15	2,762	2,325	159	1	19	0	42	216
Mgmt Fees-Corporate/Shared Service Center	15	157,143	132,299	9,036	31	1,100	0	2,389	12,289
Mgmt Fees-Call Center	13	84,711	81,187	2,863	8	186	0	466	0
Mgmt Fees-Belleville Lab	2	23,763	20,379	2,897	14	416	0	10	48
Mgmt Fees- Financial ITS	15	8,245	6,941	474	2	58	0	125	645
Mgmt Fees- Customer Billings ITS	13	46,547	44,611	1,573	5	102	0	256	0
Mgmt Fees-Other ITS	15	524	441	30	0	4	0	8	41
Outside Services AG	15	32,581	27,430	1,873	7	228	0	495	2,548

MISSOURI-AMERICAN WATER COMPANY
ST. CHARLES DISTRICT
COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS

PSC STAFF STUDY										
Account	Factor Ref.	Cost of Service	Residential	Commercial	Industrial	Public Authorities	Sales for Resale	Fire Protection		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	Private (9)	Public (10)	
Outside Services AG	15	0	0	0	0	0	0	0	0	0.0
Property Insurance	15	0	0	0	0	0	0	0	0	0.0
Ins Gen Liab Oper AG	15	0	0	0	0	0	0	0	0	0.0
Ins Work Comp AG	16	16,032	13,662	901	3	111	0	223	1,132	0.0
Ins Other Oper AG	15	30,113	25,352	1,731	6	211	0	458	2,355	0.0
Property Insurance	15	23,024	19,384	1,324	5	161	0	350	1,800	0.0
Injuries & Damages	16	1,498	1,277	84	0	10	0	21	106	0.0
Employee Pension & Benefits	16	218,279	186,017	12,267	44	1,506	0	3,034	15,410	0.0
Employee Pension & Benefits	16	0	0	0	0	0	0	0	0	0.0
Employee Pension & Benefits	16	0	0	0	0	0	0	0	0	0.0
Reg Commision Exp	15	5,562	4,683	320	1	39	0	85	435	0.0
Rents AG	15	26,963	22,700	1,550	5	189	0	410	2,109	0.0
	15	0	0	0	0	0	0	0	0	0.0
Misc Exp AG	15	(18,956)	(15,959)	(1,090)	(4)	(133)	0	(288)	(1,482)	0.0
Research & Development	15	0	0	0	0	0	0	0	0	0.0
TOTAL A & G OPERATIONS		880,497	759,384	48,742	172	5,759	0	11,452	54,988	0.0
General Plant Maint AG	15	0	0	0	0	0	0	0	0	0.0
General Plant Maint AG	15	8,148	6,860	469	2	57	0	124	637	0.0
TOTAL A & G EXPENSE - MAINTENANCE		8,148	6,860	469	2	57	0	124	637	0.0
TOTAL A & G EXPENSE		888,645	766,244	49,210	174	5,816	0	11,576	55,625	0.0
										0.0
Total Operation & Maintenance Expenses		2,575,224	2,182,567	193,447	883	25,141	0	28,754	144,432	0.0
										0.0

MISSOURI-AMERICAN WATER COMPANY
ST. CHARLES DISTRICT
COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS

PSC STAFF STUDY										
Account	Factor Ref.	Cost of Service	Residential	Commercial	Industrial	Public Authorities	Sales for Resale	Fire Protection		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	Private	Public	(10)
DEPRECIATION EXPENSE										
Struct & Imp P	6	11,166	9,136	1,284	7	185	0	85	469	0.0
Struct & Imp WT	2	0	0	0	0	0	0	0	0	0.0
Struct & Imp TD	7	9,652	6,625	874	4	125	0	310	1,713	0.0
Struct & Imp Offices	15	7,898	6,649	454	2	55	0	120	618	0.0
Struct & Imp Store,Shop,Gar	15	0	0	0	0	0	0	0	0	0.0
Struct & Imp Misc	15	18	15	1	0	0	0	0	1	0.0
Collect & Impounding	1	0	0	0	0	0	0	0	0	0.0
Lake, River & Other intakes	2	0	0	0	0	0	0	0	0	0.0
Wells & Springs	2	0	0	0	0	0	0	0	0	0.0
Supply Mains	2	0	0	0	0	0	0	0	0	0.0
Power Generation Equip Othe	6	6,765	5,535	778	4	112	0	51	284	0.0
Pump Equip Electric	6	35,778	29,274	4,114	21	594	0	272	1,503	0.0
Pump Equip Other	7	152	104	14	0	2	0	5	27	0.0
WT Equip Non-Media	2	301	258	37	0	5	0	0	1	0.0
Dist Reservoirs & Standpipe	5	29,269	18,881	2,491	12	357	0	1,150	6,378	0.0
Elevated Tanks & Standpipes	5	2,648	1,708	225	1	32	0	104	577	0.0
Ground Level Facilities	5	0	0	0	0	0	0	0	0	0.0
TD Mains Not Classified by	7	219,599	150,733	19,896	88	2,855	0	7,049	38,979	0.0
TD Mains 4 & Less "	4	6,191	4,250	561	2	80	0	199	1,099	0.0
TD Mains 6 to 8" "	4	70,071	48,097	6,348	28	911	0	2,249	12,438	0.0
TD Mains 10 to 16" "	3	158,986	124,581	17,727	79	2,544	0	2,146	11,908	0.0
TD Mains 18 & Grtr "	3	65,614	51,415	7,316	33	1,050	0	886	4,914	0.0
Fire Mains	8	2,963	0	0	0	0	0	0	2,963	0.0
Services	10	104,931	97,303	4,669	10	535	0	2,413	0	0.0
Meters Bronze Case	9	18,408	16,260	1,592	4	552	0	0	0	0.0
Meters Plastic Case	9	0	0	0	0	0	0	0	0	0.0
Meters Other	9	7,885	6,965	682	2	237	0	0	0	0.0
Meters Other-Rem Rdr Unts	9	0	0	0	0	0	0	0	0	0.0
Meter Installations	9	64,261	56,762	5,559	13	1,928	0	0	0	0.0
Meter Installation Other	9	0	0	0	0	0	0	0	0	0.0
Hydrants	8	48,406	0	0	0	0	0	0	48,406	0.0
Utility Plant Acquisition Adjustment	17	0	0	0	0	0	0	0	0	0.0
Other P/E WT Res Hand Equip	2	0	0	0	0	0	0	0	0	0.0
Other P/E TD	7	52	36	5	0	1	0	2	9	0.0
Other P/E CPS	15	0	0	0	0	0	0	0	0	0.0
Office Furniture & Equip	15	262	221	15	0	2	0	4	20	0.0
Comp & Periph Equip	15	4,824	4,061	277	1	34	0	73	377	0.0
Computer Software	15	1,640	1,381	94	0	11	0	25	128	0.0
Comp Software Personal	15	0	0	0	0	0	0	0	0	0.0
Data Handling Equipment	15	0	0	0	0	0	0	0	0	0.0
Other Office Equipment	15	0	0	0	0	0	0	0	0	0.0
Trans Equip Lt Duty Trks	15	22,207	18,696	1,277	4	155	0	338	1,737	0.0
Trans Equip Hvy Duty Trks	15	0	0	0	0	0	0	0	0	0.0
Trans Equip Autos	15	1,140	960	66	0	8	0	17	89	0.0
Trans Equip Other	15	0	0	0	0	0	0	0	0	0.0
Stores Equipment	15	21	18	1	0	0	0	0	2	0.0
Tools,Shop,Garage Equip	15	4,172	3,512	240	1	29	0	63	326	0.0
Tools,Shop,Garage Equip Oth	15	0	0	0	0	0	0	0	0	0.0
Laboratory Equipment	2	175	150	21	0	3	0	0	0	0.0
Laboratory Equip Other	2	0	0	0	0	0	0	0	0	0.0
Power Operated Equipment	15	9,244	7,783	532	2	65	0	141	723	0.0
Comm Equip Non-Telephone	15	993	836	57	0	7	0	15	78	0.0

MISSOURI-AMERICAN WATER COMPANY
ST. CHARLES DISTRICT
COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS

PSC STAFF STUDY										
Account	Factor Ref.	Cost of Service	Residential	Commercial	Industrial	Public Authorities	Sales for Resale	Fire Protection		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	Private (9)	Public (10)	
Comm Equip Telephone	15	333	280	19	0	2	0	5	26	0.0
Misc Equipment	16	2,971	2,532	167	1	20	0	41	210	0.0
Other Tangible Property	15	40,707	34,271	2,341	8	285	0	619	3,183	0.0
Total Depreciation Expense		959,703	709,287	79,735	328	12,784	0	10,384	139,186	
Amort-Other UP,Dep CIAC, CORemoval	18	(76,372)	(54,896)	(6,912)	(31)	(1,069)	0	(1,505)	(11,960)	
Taxes Other Than Income										
Utility Reg Assessment Fee	19	51,693	39,824	4,316	21	636	0	848	6,048	
Property Taxes	18	681,188	489,638	61,648	272	9,537	0	13,419	106,674	
FUTA	16	819	698	46	0	6	0	11	58	0.0
FICA	16	45,765	39,001	2,572	9	316	0	636	3,231	0.0
SUTA	16	(7)	(6)	(0)	(0)	(0)	0	(0)	(0)	0.0
Other Taxes & Licenses	15	18,919	15,928	1,088	4	132	0	288	1,479	0.0
Gross Receipts Tax	19	0	0	0	0	0	0	0	0	0.0
Total Taxes, Other Than Income		798,377	585,083	69,669	306	10,626	0	15,202	117,490	0.0
Income Taxes	18	590,935	424,764	53,480	236	8,273	0	11,641	92,540	
Utility Income Available for Return	18	2,152,292	1,547,067	194,782	861	30,132	0	42,400	337,049	
Total Cost of Service		7,000,159	5,393,873	584,202	2,584	85,887	0	114,876	818,737	0.0
Less: Other Water Revenues	19	149,175	149,175							0.0
Revenue Contribution	19	0	0	0	0	0	0	0	0	0.0
Total Other Water Revenues		149,175	149,175	0	0	0	0	0	0	0.0
Total Cost of Service Related to Sales of Water		\$ 6,850,984	\$ 5,244,698	\$ 584,202	\$ 2,584	\$ 85,887	\$ -	\$ 114,876	\$ 818,737	0.0
Reallocation of Public Fire	20		727,954	78,843	349	11,591	0	0	(818,737)	0.0
Total		\$ 6,850,984	\$ 5,972,651	\$ 663,045	\$ 2,933	\$ 97,479	\$ -	\$ 114,876	\$ -	0.0
		\$ 149,175	\$ 149,175							
		\$ 7,000,159	\$ 6,121,826							
		\$ (727)								
		\$ 6,999,433								

MISSOURI-AMERICAN WATER COMPANY
ST. CHARLES DISTRICT
COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS

PSC STAFF STUDY										
Account	Factor Ref.	Cost of Service	Residential	Commercial	Industrial	Public Authorities	Sales for Resale	Fire Protection		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	Private	Public	(10)
RATE BASE										0.0
Organization	17	\$ 4,234	\$ 3,047	\$ 382	\$ 2	\$ 59	\$ -	\$ 83	\$ 661	0.0
Franchises	17	12,572	9,047	1,135	5	175	0	248	1,962	0.0
Land & Ld Rights SS	2	5,372	4,607	655	3	94	0	2	11	0.0
Land & Ld Rights P	6	1,193	976	137	1	20	0	9	50	0.0
Land & Ld Rights WT	2	5,372	4,607	655	3	94	0	2	11	0.0
Land & Ld Rights TD	7	266,396	182,854	24,135	107	3,463	0	8,551	47,285	0.0
Land & Land Rights AG	15	0	0	0	0	0	0	0	0	0.0
Struct & Imp SS	2	0	0	0	0	0	0	0	0	0.0
Struct & Imp P	6	1,121,645	917,730	128,989	673	18,619	0	8,525	47,109	0.0
Struct & Imp Pumps (STL)	6	0	0	0	0	0	0	0	0	0.0
Struct & Imp Pump Boosters	6	0	0	0	0	0	0	0	0	0.0
Struct & Imp WT	2	0	0	0	0	0	0	0	0	0.0
Struct & Imp WT Nth Plt (ST)	2	0	0	0	0	0	0	0	0	0.0
Struct & Imp WT Ctrl Plt 1	2	0	0	0	0	0	0	0	0	0.0
Struct & Imp WT Ctrl Plt 3	2	0	0	0	0	0	0	0	0	0.0
Struct & Imp WT Sth Plt (ST)	2	0	0	0	0	0	0	0	0	0.0
Struct & Imp WT Meramec (ST)	2	0	0	0	0	0	0	0	0	0.0
Struct & Imp TD	7	261,432	179,447	23,686	105	3,399	0	8,392	46,404	0.0
Struct & Imp TD Spec Cross	7	0	0	0	0	0	0	0	0	0.0
Struct & Imp Offices	15	201,715	169,824	11,599	40	1,412	0	3,066	15,774	0.0
Struct & Imp Leasehold	15	0	0	0	0	0	0	0	0	0.0
Struct & Imp Leasehold	15	0	0	0	0	0	0	0	0	0.0
Struct & Imp Store,Shop,Gar	15	0	0	0	0	0	0	0	0	0.0
Struct & Imp Misc	15	965	812	55	0	7	0	15	75	0.0
Collect & Impounding	1	0	0	0	0	0	0	0	0	0.0
Lake, River & Other Intakes	2	0	0	0	0	0	0	0	0	0.0
Wells & Springs	2	0	0	0	0	0	0	0	0	0.0
Supply Mains	2	0	0	0	0	0	0	0	0	0.0
Supply Mains Nth Plt (STL)	2	0	0	0	0	0	0	0	0	0.0
Supply Mains Ctrl Plt (STL)	2	0	0	0	0	0	0	0	0	0.0
Supply Mains Sth Plt (STL)	2	0	0	0	0	0	0	0	0	0.0
Supply Mains Meramec Plt (S)	2	0	0	0	0	0	0	0	0	0.0
Power Generation Equip Othe	6	218,842	179,057	25,167	131	3,633	0	1,663	9,191	0.0
Boiler Plant Equipment P	6	0	0	0	0	0	0	0	0	0.0
Pump Equip Steam	6	0	0	0	0	0	0	0	0	0.0
Pump Equip Electric	6	1,500,581	1,227,775	172,567	900	24,910	0	11,404	63,024	0.0
Pump Equip Elec Pre46 (STL)	6	0	0	0	0	0	0	0	0	0.0
Pump Equip Elec Post46 (STL)	6	0	0	0	0	0	0	0	0	0.0
Pump Equip Elec Boosters Po	6	0	0	0	0	0	0	0	0	0.0
Pump Equip Diesel	6	0	0	0	0	0	0	0	0	0.0
Pump Equip Diesel Stratman	6	0	0	0	0	0	0	0	0	0.0
Pump Equip Diesel Ctrl Plt	6	0	0	0	0	0	0	0	0	0.0
Pump Equip Hydraulic	6	0	0	0	0	0	0	0	0	0.0
Pump Equip Other	6	825	675	95	0	14	0	6	35	0.0
WT Equip Non-Media	2	13,411	11,501	1,635	8	235	0	5	27	0.0
WT Equip Non-Med North (STL)	2	0	0	0	0	0	0	0	0	0.0
WT Equip Non Media Ctrl 1 &	2	0	0	0	0	0	0	0	0	0.0
WT Equip Non Media Ctrl 3 (	2	0	0	0	0	0	0	0	0	0.0
WT Equip Non Media Sth (STL)	2	0	0	0	0	0	0	0	0	0.0
WT Equip Non Media Mor (STL)	2	0	0	0	0	0	0	0	0	0.0
WT Equip Filter Media	2	0	0	0	0	0	0	0	0	0.0
Dist Reservoirs & Standpipe	5	1,043,277	673,018	88,783	417	12,728	0	41,001	227,330	0.0

MISSOURI-AMERICAN WATER COMPANY
ST. CHARLES DISTRICT
COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS

PSC STAFF STUDY									
Account	Factor Ref.	Cost of Service	Residential	Commercial	Industrial	Public Authorities	Sales for Resale	Fire Protection	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	Private	Public
Elevated Tanks & Standpipes	5	140,395	90,569	11,948	56	1,713	0	5,518	30,592
Ground Level Facilities	5	0	0	0	0	0	0	0	0
TD Mains Not Classified by	7	11,347,666	7,789,038	1,028,099	4,539	147,520	0	364,260	2,014,211
TD Mains 4 & Less	4	472,771	324,510	42,833	189	6,146	0	15,176	83,917
TD Mains 6 to 8"	4	5,348,419	3,671,155	484,567	2,139	69,529	0	171,684	949,344
TD Mains 10 to 16"	3	12,141,525	9,514,099	1,353,780	6,071	194,264	0	163,911	909,400
TD Mains 18 & Grtr	3	5,010,835	3,926,490	558,708	2,505	80,173	0	67,646	375,312
TD Mains AC 4 (STL)	4	0	0	0	0	0	0	0	0
TD Mains CI <10 1900-28 (S"	4	0	0	0	0	0	0	0	0
TD Mains CI <10 1929-56 (S"	4	0	0	0	0	0	0	0	0
TD Mains CI <10 1957-93 (S"	4	0	0	0	0	0	0	0	0
TD Mains CI 12 (STL)	3	0	0	0	0	0	0	0	0
TD Mains CI 16 (STL)	3	0	0	0	0	0	0	0	0
TD Mains DI 6-8 (STL)	4	0	0	0	0	0	0	0	0
TD Mains DI 12 (STL)	3	0	0	0	0	0	0	0	0
TD Mains DI 16 & >(STL)	3	0	0	0	0	0	0	0	0
TD Mains Galve 1 (STL)	4	0	0	0	0	0	0	0	0
TD Mains LJ 20 (STL)	3	0	0	0	0	0	0	0	0
Fire Mains	8	201,812	0	0	0	0	0	0	201,812
Services	10	3,498,015	3,243,709	155,662	350	17,840	0	80,454	0
Meters Bronze Case	9	734,555	648,832	63,539	147	22,037	0	0	0
Meters Plastic Case	9	0	0	0	0	0	0	0	0
Meters Other	9	8,697	7,682	752	2	261	0	0	0
Meters Other-Rem Rdr Units	9	0	0	0	0	0	0	0	0
Meter Installations	9	2,609,414	2,304,895	225,714	522	78,282	0	0	0
Meter Installation Other	9	(388,359)	(343,038)	(33,593)	(78)	(11,651)	0	0	0
Hydrants	8	2,541,659	0	0	0	0	0	0	2,541,659
Other P/E Intangible	15	0	0	0	0	0	0	0	0
Other P/E WT Res Hand Equip	2	0	0	0	0	0	0	0	0
Other P/E TD	7	2,940	2,018	266	1	38	0	94	522
Other P/E CPS	15	(307,356)	(258,763)	(17,673)	(61)	(2,151)	0	(4,672)	(24,035)
Office Furniture & Equip	15	14,112	11,881	811	3	99	0	215	1,104
Comp & Periph Equip	15	23,014	19,375	1,323	5	161	0	350	1,800
Computer Software	15	106,692	89,824	6,135	21	747	0	1,822	8,343
Comp Software Personal	15	106,503	89,665	6,124	21	746	0	1,619	8,329
Data Handling Equipment	15	0	0	0	0	0	0	0	0
Other Office Equipment	15	221	186	13	0	2	0	3	17
Trans Equip Lt Duty Trks	15	101,141	85,151	5,816	20	708	0	1,537	7,909
Trans Equip Hvy Duty Trks	15	0	0	0	0	0	0	0	0
Trans Equip Autos	15	4,021	3,385	231	1	28	0	61	314
Trans Equip Other	15	812	684	47	0	6	0	12	63
Stores Equipment	15	66	56	4	0	0	0	1	5
Tools,Shop,Garage Equip	15	53,782	45,279	3,092	11	376	0	817	4,206
Tools,Shop,Garage Equip Oth	15	0	0	0	0	0	0	0	0
Laboratory Equipment	2	(229)	(196)	(28)	(0)	(4)	0	(0)	(0)
Laboratory Equip Other	2	0	0	0	0	0	0	0	0
Power Operated Equipment	15	74,852	63,018	4,304	15	524	0	1,138	5,853
Comm Equip Non-Telephone	15	19,686	16,574	1,132	4	138	0	299	1,539
Comm Equip Telephone	15	(9,018)	(7,592)	(519)	(2)	(63)	0	(137)	(705)
Misc Equipment	15	78,136	65,783	4,493	16	547	0	1,188	6,110
Other Tangible Property	17	795,683	572,573	71,850	318	11,060	0	15,675	124,206
Total Utility Plant in Service		49,390,294	35,541,819	4,459,105	19,211	687,936	0	971,445	7,710,778

MISSOURI-AMERICAN WATER COMPANY
ST. CHARLES DISTRICT
COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS

PSC STAFF STUDY									
Account	Factor Ref.	Cost of Service	Residential	Commercial	Industrial	Public Authorities	Sales for Resale	Fire Protection Private	Public
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Other Rate Base Items									
Add:									
Other Utility Plant Adjustments	17	0	0	0	0	0	0	0	0
Cash Working Capital	15	(264,691)	(222,843)	(15,220)	(53)	(1,853)	0	(4,023)	(20,699)
Materials and Supplies	15	126,581	106,569	7,278	25	886	0	1,924	9,899
Prepayments	15	34	29	2	0	0	0	1	3
OPEB's Contributed to External Fund	16	144,899	123,483	8,143	29	1,000	0	2,014	10,230
Premature Retirement	17	0	0	0	0	0	0	0	0
Regulatory Deferrals	17	0	0	0	0	0	0	0	0
Less:									
Accumulated Deferred ITC (3%)	17	(15,776,643)	(11,352,872)	(1,424,631)	(6,311)	(219,295)	0	(310,800)	(2,462,734)
Deferred Income Taxes	17	(1,878,250)	(1,351,589)	(169,606)	(751)	(26,108)	0	(37,002)	(293,195)
Pensions	16	(183,690)	(156,541)	(10,323)	(37)	(1,267)	0	(2,553)	(12,969)
Total Other Rate Base Elements		(17,831,760)	(12,853,765)	(1,604,356)	(7,097)	(246,637)	0	(350,439)	(2,769,465)
Total Original Cost Measure of Value		\$ 31,558,534	\$ 22,688,055	\$ 2,854,749	\$ 12,114	\$ 441,298	\$ -	\$ 621,005	\$ 4,941,313

T&D OP BASIS FOR FACTOR 11	291,468	210,420	24,356	103	3,440	0	8,993	44,156	0.0
FACTOR 11		0.7218	0.0836	0.0004	0.0118	0.0000	0.0309	0.1515	1.0000
T&D Mnt BASIS FOR FACTOR 12	73,922	51,326	4,845	18	769	0	1,701	15,263	0.0
FACTOR 12		0.6944	0.0655	0.0002	0.0104	0.0000	0.0230	0.2065	1.0000
A&G BASIS FOR FACTOR 15	1,102,785	928,389	63,440	242	7,766	0	16,711	86,238	0.0
FACTOR 15		0.8419	0.0575	0.0002	0.0070	0.0000	0.0152	0.0782	1.0000
LABOR BASIS FOR FACTOR 16	608,847	518,869	34,221	127	4,181	0	8,443	43,005	0.0
FACTOR 16		0.8522	0.0582	0.0002	0.0069	0.0000	0.0139	0.0706	1.0000
UPIS BASIS FOR FACTOR 17	48,577,805	34,957,152	4,385,738	18,886	676,642	0	955,438	7,583,948	0.0
FACTOR 17		0.7196	0.0903	0.0004	0.0139	0.0000	0.0197	0.1561	1.0000
RATE BASE BASIS FOR FACTOR 18	31,558,534	22,688,055	2,854,749	12,114	441,298	0	621,005	4,941,313	0.0
FACTOR 18		0.7188	0.0905	0.0004	0.0140	0.0000	0.0197	0.1566	1.0000
TOTAL COS BASIS FOR FACTOR 19	6,942,904	5,349,366	579,565	2,562	85,212	0	113,944	812,254	0.0
FACTOR 19		0.7704	0.0835	0.0004	0.0123	0.0000	0.0164	0.1170	1.0000
COS w/o Fire Factor 20	6,066,546	5,393,873	584,202	2,584	85,887	0			6,066,546
FACTOR 20		0.8891	0.0963	0.0004	0.0142	0.0000			1.0000

Table of Factors - Table Name "FACTORS"

	2 Residential	4 Commercial	6 Industrial	8 Public	10 Resale	12 Private Fire	14 Public Fire	20 Total
1	0.8358	0.1384	0.0008	0.0198	-	0.0008	0.0044	1.0000
2	0.8576	0.1219	0.0006	0.0175	-	0.0004	0.0020	1.0000
3	0.7836	0.1115	0.0005	0.0160	-	0.0135	0.0749	1.0000
4	0.6864	0.0906	0.0004	0.0130	-	0.0321	0.1775	1.0000
5	0.6451	0.0851	0.0004	0.0122	-	0.0393	0.2179	1.0000
6	0.8182	0.1150	0.0006	0.0166	-	0.0076	0.0420	1.0000
7	0.6864	0.0906	0.0004	0.0130	-	0.0321	0.1775	1.0000
8	-	-	-	-	-	-	1.0000	1.0000

MISSOURI-AMERICAN WATER COMPANY
ST. CHARLES DISTRICT
COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS

PSC STAFF STUDY										
Account	Factor Ref.	Cost of Service	Residential	Commercial	Industrial	Public Authorities	Sales for Resale	Fire Protection		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	Private (9)	Public (10)	
			9	0.8833	0.0865	0.0002	0.0300	-	-	1.0000
			10	0.9273	0.0445	0.0001	0.0051	-	0.0230	1.0000
			11	0.7218	0.0836	0.0004	0.0118	-	0.0309	1.0000
			12	0.6944	0.0655	0.0002	0.0104	-	0.0230	1.0000
			13	0.9584	0.0338	0.0001	0.0022	-	0.0055	1.0000
			14	0.9636	0.0340	0.0001	0.0023	-	-	1.0000
			15	0.8419	0.0575	0.0002	0.0070	-	0.0152	1.0000
			16	0.8522	0.0562	0.0002	0.0069	-	0.0139	1.0000
			17	0.7196	0.0903	0.0004	0.0139	-	0.0197	1.0000
			18	0.7188	0.0905	0.0004	0.0140	-	0.0197	1.0000
			19	0.7704	0.0835	0.0004	0.0123	-	0.0164	1.0000
			20	0.8891	0.0963	0.0004	0.0142	-	-	1.0000

MISSOURI-AMERICAN WATER COMPANY
ST. CHARLES DISTRICT
COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS

		Base	Max Day	Max Hour	Meters	Services	Billing & Collecting	Fire Service
OPERATION AND MAINTENANCE EXPENSES								
SOURCE OF SUPPLY EXPENSES								
Super & Eng Oper SS	2	0	0	0	0	0	0	0
Labor & Exp Oper SS	2	0	0	0	0	0	0	0
Labor & Exp Oper SS	2	(134)	(60)	(74)	0	0	0	(0)
Purchased Water	1	526,058	523,322	0	0	0	0	2,736
TOTAL SS EXPENSE - OPERATION		525,924	523,263	(74)	0	0	0	2,735
Misc Exp Oper SS	2	(18)	(8)	(10)	0	0	0	(0)
Misc Exp Oper SS	2	6	3	3	0	0	0	0
Rents Oper SS	2	0	0	0	0	0	0	0
Super & Eng Maint SS	2	0	0	0	0	0	0	0
Struct & Improve Maint SS	2	0	0	0	0	0	0	0
Struct & Improve Maint SS	2	157	70	87	0	0	0	0
Collect & Impound Maint SS	2	0	0	0	0	0	0	0
Lake, River & Oth Maint SS	2	0	0	0	0	0	0	0
Lake, River & Oth Maint SS	2	0	0	0	0	0	0	0
Wells & Springs Maint SS	2	0	0	0	0	0	0	0
Wells & Springs Maint SS	2	0	0	0	0	0	0	0
Infil Gall & Tunnels Maint SS	2	0	0	0	0	0	0	0
Supply Mains Maint SS	2	0	0	0	0	0	0	0
Misc Plant Maint SS	2	0	0	0	0	0	0	0
Misc Plant Maint SS	2	18,097	8,057	9,997	0	0	0	43
TOTAL SS EXPENSE - MAINTENANCE		18,242	8,121	10,077	0	0	0	44
TOTAL SS EXPENSE		544,166	531,384	10,003	0	0	0	2,779
POWER AND PUMPING EXPENSES								
Super & Eng Oper P	6	0	0	0	0	0	0	0
Fuel for Power Prod	1	0	0	0	0	0	0	0
Labor & Exp Oper Pwr Prod	6	0	0	0	0	0	0	0
Labor & Exp Oper Pwr Prod	6	0	0	0	0	0	0	0
Purch Fuel/Power for Pump	1	62,383	62,059	0	0	0	0	324
Labor & Exp Oper Pump	6	23,459	9,451	10,474	2,369	0	0	1,165
Labor & Exp Oper Pump	6	3	1	1	0	0	0	0
Expenses Transferred	6	0	0	0	0	0	0	0
Misc Exp Oper P	6	2	1	1	0	0	0	0
Rents Oper P	6	226	91	101	23	0	0	11
TOTAL PUMPING EXPENSE - OPERATION		86,073	71,602	10,578	2,392	0	0	1,501

MISSOURI-AMERICAN WATER COMPANY
ST. CHARLES DISTRICT
COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS

			Base	Max Day	Max Hour	Meters	Services	Billing & Collecting	Fire Service
Super & Eng Maint P	6	0	0	0	0	0	0	0	0
Struct & Improve Maint P	6	2,083	839	930	210	0	0	0	103
Power Prod Equip Maint P	6	6,344	2,556	2,833	641	0	0	0	315
Pump Equip Maint P	6	6,006	2,420	2,682	606	0	0	0	298
Pump Equip Maint P	6	0	0	0	0	0	0	0	0
TOTAL PUMPING EXPENSES - MAINTENANCE		14,433	5,814	6,444	1,457	0	0	0	717
TOTAL PUMPING EXPENSES		100,506	77,417	17,022	3,849	0	0	0	2,218
WATER TREATMENT									
Super & Eng Oper WT	2	0	0	0	0	0	0	0	0
Chemicals	1	(4,642)	(4,618)	0	0	0	0	0	(24)
Labor & Exp Oper WT	2	0	0	0	0	0	0	0	0
Labor & Exp Oper WT	2	(1)	(0)	(1)	0	0	0	0	(0)
Misc Exp Oper WT	2	0	0	0	0	0	0	0	0
Misc Exp Oper WT	1	(5)	(5)	0	0	0	0	0	(0)
Misc Exp Oper WT	2	(1)	(0)	(1)	0	0	0	0	(0)
Rents Oper WT	2	0	0	0	0	0	0	0	0
TOTAL WT EXPENSE - OPERATION		(4,649)	(4,624)	(1)	0	0	0	0	(24)
Super & Eng Maint WT	2	0	0	0	0	0	0	0	0
Struct & Improve Maint WT	2	0	0	0	0	0	0	0	0
Struct & Improve Maint WT	2	0	0	0	0	0	0	0	0
WT Equip Maint WT	2	0	0	0	0	0	0	0	0
WT Equip Maint WT	2	1	0	1	0	0	0	0	0
TOTAL WT EXPENSE - MAINTENANCE		1	0	1	0	0	0	0	0
TOTAL WT EXPENSE		(4,648)	(4,623)	(1)	0	0	0	0	(24)
TRANSMISSION AND DISTRIBUTION EXPENSES									
Super & Eng Oper TD	11	163	33	0	77	0	24	0	30
Storage Facility Exp	5	121	27	0	63	0	0	0	31
Storage Facility Exp	5	5,220	1,157	0	2,721	0	0	0	1,343
TD Lines Exp	7	33,850	7,985	0	18,770	0	0	0	7,095
TD Lines Exp	7	208,358	49,152	0	115,535	0	0	0	43,672
Meter Expense	9	69	0	0	0	69	0	0	0
Meter Expense	9	0	0	0	0	0	0	0	0
Customer Install Exp	10	43,850	0	0	0	0	42,841	0	1,009
Customer Install Exp	10	0	0	0	0	0	0	0	0
Misc Exp Oper TD	11	25,424	5,087	0	11,959	5	3,737	0	4,635

MISSOURI-AMERICAN WATER COMPANY
ST. CHARLES DISTRICT
COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS

			Base	Max Day	Max Hour	Meters	Services	Billing & Collecting	Fire Service
Misc Exp Oper TD	11	0	0	0	0	0	0	0	0
Misc Exp Oper TD	11	2,294	459	0	1,079	0	337	0	418
Rents Oper TD	11	1	0	0	0	0	0	0	0
TOTAL T & D EXPENSE OPERATION		319,350	63,900	0	150,204	75	46,940	0	58,232
Super & Eng Maint TD	12	4	0	0	1	0	1	0	1
Struct & Improve Maint TD	12	0	0	0	0	0	0	0	0
Struct & Improve Maint TD	12	0	0	0	0	0	0	0	0
Dist Res Stand Maint TD	5	0	0	0	0	0	0	0	0
TD Main Maint TD	7	36,851	8,693	0	20,434	0	0	0	7,724
TD Main Maint TD	7	0	0	0	0	0	0	0	0
Fire Main Maint TD	8	0	0	0	0	0	0	0	0
Services Maint TD	10	22,522	0	0	0	0	22,004	0	518
Services Maint TD	10	0	0	0	0	0	0	0	0
Meters Maint TD	9	5,827	0	0	0	5,827	0	0	0
Meters Maint TD	9	0	0	0	0	0	0	0	0
Hydrants Maint TD	8	8,722	0	0	0	0	0	0	8,722
Hydrants Maint TD	8	0	0	0	0	0	0	0	0
Misc Plant Maint TD	12	12,861	1,512	0	3,555	1,013	3,829	0	2,952
Mat and Sup Maint TD	12	88,626	10,422	0	24,496	6,984	26,384	0	20,340
Misc Maint TD	12	0	0	0	0	0	0	0	0
Amort Def Maint TD	5	0	0	0	0	0	0	0	0
TOTAL T & D EXPENSE - MAINTENANCE		175,413	20,628	0	48,486	13,824	52,218	0	40,256
TOTAL T & D EXPENSE		494,763	84,528	0	198,690	13,899	99,158	0	98,488
CUSTOMER ACCOUNTS									
Supervision CA	13	21,943	0	0	0	0	0	21,822	121
Meter Reading Exp CA	14	92,934	0	0	0	0	0	92,934	0
Meter Reading Exp CA	14	36	0	0	0	0	0	36	0
Meter Reading Exp CA	14	0	0	0	0	0	0	0	0
Cust Rec & Collection CA	13	83,054	0	0	0	0	0	82,597	457
Cust Rec & Collection CA	13	100,213	0	0	0	0	0	99,662	551
Uncollectible Accts	13	28,420	0	0	0	0	0	28,264	156
Misc Cust Accts Exp CA	13	9,064	0	0	0	0	0	9,014	50
Misc Cust Accts Exp CA	13	378	0	0	0	0	0	376	2
Misc Cust Accts Exp CA	13	9,253	0	0	0	0	0	9,202	51
Cust Serv & Info Exp CA	13	206,497	0	0	0	0	0	205,361	1,136
TOTAL CUSTOMER ACCOUNTING EXPENSE		551,792	0	0	0	0	0	549,268	2,524
ADMINISTRATIVE AND GENERAL EXPENSES									
Salaries AG	15	173,696	17,005	4,256	31,908	2,189	15,615	86,501	16,223
Other Supplies & Exp AG	15	7	1	0	1	0	1	3	1
Other Supplies & Exp AG	15	48,003	4,699	1,176	8,818	605	4,315	23,905	4,483
Other Supplies & Exp AG	15	2,762	270	68	507	35	248	1,375	258
Mgmt Fees-Coporate/Shared Service Center	15	157,143	15,384	3,850	28,867	1,980	14,127	78,257	14,677
Mgmt Fees-Call Center	13	84,711	0	0	0	0	0	84,245	466
Mgmt Fees-Belleville Lab	2	23,763	10,579	13,127	0	0	0	0	57
Mgmt Fees- Financial ITS	15	8,245	807	202	1,515	104	741	4,106	770
Mgmt Fees- Customer Billings ITS	13	46,547	0	0	0	0	0	46,291	256
Mgmt Fees-Other ITS	15	524	51	13	96	7	47	261	49
Outside Services AG	15	32,581	3,190	798	5,985	411	2,929	16,225	3,043

MISSOURI-AMERICAN WATER COMPANY
ST. CHARLES DISTRICT
COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS

			Base	Max Day	Max Hour	Meters	Services	Billing & Collecting	Fire Service
Outside Services AG	15	0	0	0	0	0	0	0	0
Property Insurance	15	0	0	0	0	0	0	0	0
Ins Gen Liab Oper AG	15	0	0	0	0	0	0	0	0
Ins Work Comp AG	16	16,032	1,464	558	2,386	240	2,318	7,711	1,355
Ins Other Oper AG	15	30,113	2,948	738	5,532	379	2,707	14,996	2,813
Property Insurance	15	23,024	2,254	564	4,230	290	2,070	11,466	2,150
Injuries & Damages	16	1,498	137	52	223	22	217	721	127
Employee Pension & Benefits	16	218,279	19,929	7,596	32,480	3,274	31,563	104,992	18,445
Employee Pension & Benefits	16	0	0	0	0	0	0	0	0
Employee Pension & Benefits	16	0	0	0	0	0	0	0	0
Reg Commision Exp	15	5,562	545	136	1,022	70	500	2,770	519
Rents AG	15	26,963	2,640	661	4,953	340	2,424	13,428	2,518
Goodwill Advertising Exp	15	0	0	0	0	0	0	0	0
Misc Exp AG	15	(18,956)	(1,856)	(464)	(3,482)	(239)	(1,704)	(9,440)	(1,770)
Research & Development	15	0	0	0	0	0	0	0	0
TOTAL A & G OPERATIONS		880,497	80,047	33,330	125,040	9,707	78,119	487,814	66,440
General Plant Maint AG	15	0	0	0	0	0	0	0	0
General Plant Maint AG	15	8,148	798	200	1,497	103	733	4,058	761
TOTAL A & G EXPENSE - MAINTENANCE		8,148	798	200	1,497	103	733	4,058	761
TOTAL A & G EXPENSE		888,645	80,845	33,529	126,537	9,810	78,852	491,872	67,201
Total Operation & Maintenance Expenses		2,575,224	769,550	60,554	329,076	23,709	178,010	1,041,141	173,185

MISSOURI-AMERICAN WATER COMPANY
ST. CHARLES DISTRICT
COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS

			Base	Max Day	Max Hour	Meters	Services	Billing & Collecting	Fire Service
DEPRECIATION EXPENSE									
Struct & Imp P	6	11,166	4,498	4,986	1,127	0	0	0	555
Struct & Imp WT	2	0	0	0	0	0	0	0	0
Struct & Imp TD	7	9,652	2,277	0	5,352	0	0	0	2,023
Struct & Imp Offices	15	7,898	773	194	1,451	100	710	3,933	738
Struct & Imp Store,Shop,Gar	15	0	0	0	0	0	0	0	0
Struct & Imp Misc	15	18	2	0	3	0	2	9	2
Collect & Impounding	1	0	0	0	0	0	0	0	0
Lake, River & Other Intakes	2	0	0	0	0	0	0	0	0
Wells & Springs	2	0	0	0	0	0	0	0	0
Supply Mains	2	0	0	0	0	0	0	0	0
Power Generation Equip Othe	6	6,765	2,725	3,021	683	0	0	0	336
Pump Equip Electric	6	35,778	14,413	15,975	3,613	0	0	0	1,777
Pump Equip Other	7	152	36	0	84	0	0	0	32
WT Equip Non-Media	2	301	134	166	0	0	0	0	1
Dist Reservoirs & Standpipe	5	29,269	6,486	0	15,255	0	0	0	7,528
Elevated Tanks & Standpipes	5	2,648	587	0	1,380	0	0	0	681
Ground Level Facilities	5	0	0	0	0	0	0	0	0
TD Mains Not Classified by	7	219,599	51,803	0	121,768	0	0	0	46,028
TD Mains 4 & Less "	4	6,191	1,460	0	3,433	0	0	0	1,298
TD Mains 6 to 8" "	4	70,071	16,530	0	38,854	0	0	0	14,687
TD Mains 10 to 16" "	3	158,986	64,691	80,240	0	0	0	0	14,054
TD Mains 18 & Grtr "	3	65,614	26,698	33,115	0	0	0	0	5,800
Fire Mains	8	2,963	0	0	0	0	0	0	2,963
Services	10	104,931	0	0	0	0	102,518	0	2,413
Meters Bronze Case	9	18,408	0	0	0	18,408	0	0	0
Meters Plastic Case	9	0	0	0	0	0	0	0	0
Meters Other	9	7,885	0	0	0	7,885	0	0	0
Meters Other-Rem Rdr Unts	9	0	0	0	0	0	0	0	0
Meter Installations	9	64,261	0	0	0	64,261	0	0	0
Meter Installation Other	9	0	0	0	0	0	0	0	0
Hydrants	8	48,406	0	0	0	0	0	0	48,406
Utility Plant Acquisition Adjustment	17	0	0	0	0	0	0	0	0
Other P/E WT Res Hand Equip	2	0	0	0	0	0	0	0	0
Other P/E TD	7	52	12	0	29	0	0	0	11
Other P/E CPS	15	0	0	0	0	0	0	0	0
Office Furniture & Equip	15	262	26	6	48	3	24	130	24
Comp & Periph Equip	15	4,824	472	118	886	61	434	2,402	451
Computer Software	15	1,640	161	40	301	21	147	817	153
Comp Software Personal	15	0	0	0	0	0	0	0	0
Data Handling Equipment	15	0	0	0	0	0	0	0	0
Other Office Equipment	15	0	0	0	0	0	0	0	0
Trans Equip Lt Duty Trks	15	22,207	2,174	544	4,079	280	1,996	11,059	2,074
Trans Equip Hvy Duty Trks	15	0	0	0	0	0	0	0	0
Trans Equip Autos	15	1,140	112	28	209	14	102	568	106
Trans Equip Other	15	0	0	0	0	0	0	0	0
Stores Equipment	15	21	2	1	4	0	2	10	2
Tools,Shop,Garage Equip	15	4,172	408	102	766	53	375	2,078	390
Tools,Shop,Garage Equip Oth	15	0	0	0	0	0	0	0	0
Laboratory Equipment	2	175	78	97	0	0	0	0	0
Laboratory Equip Other	2	0	0	0	0	0	0	0	0
Power Operated Equipment	15	9,244	905	226	1,698	116	831	4,604	863
Comm Equip Non-Telephone	15	993	97	24	182	13	89	495	93

MISSOURI-AMERICAN WATER COMPANY
ST. CHARLES DISTRICT
COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS

			Base	Max Day	Max Hour	Meters	Services	Billing & Collecting	Fire Service
Comm Equip Telephone	15	333	33	8	61	4	30	166	31
Misc Equipment	16	2,971	271	103	442	45	430	1,429	251
Other Tangible Property	15	40,707	3,985	997	7,478	513	3,660	20,272	3,802
Total Depreciation Expense		959,703	201,851	139,993	209,189	91,776	111,349	47,972	157,573
Amort-Other UP	18	(76,372)	(19,895)	(15,725)	(17,008)	(4,689)	(5,430)	(160)	(13,464)
Taxes Other Than Income									
Utility Reg Assessment Fee	19	51,693	13,761	6,643	9,630	2,399	3,986	8,379	6,896
Property Taxes	18	681,188	177,449	140,257	151,701	41,825	48,432	1,430	120,093
FUTA	16	819	75	29	122	12	118	394	69
FICA	16	45,785	4,178	1,593	6,810	686	6,618	22,013	3,867
SUTA	16	(7)	(1)	(0)	(1)	(0)	(1)	(3)	(1)
Other Taxes & Licenses	15	18,919	1,852	464	3,475	238	1,701	9,422	1,767
Gross Receipts Tax	19	0	0	0	0	0	0	0	0
Total Taxes, Other Than Income		798,377	197,315	148,984	171,737	45,161	60,854	41,635	132,692
Income Taxes	18	590,935	153,939	121,674	131,601	36,283	42,015	1,241	104,182
Utility Income Available for Return	18	2,152,292	560,672	443,157	479,315	132,151	153,028	4,520	379,449
Total Cost of Service		7,000,159	1,863,432	898,635	1,303,911	324,390	539,826	1,136,348	933,617
Less: Other Water Revenues	19	149,175	39,710	19,169	27,791	6,922	11,501	24,181	19,900
Billing and Collecting Services	19	0	0	0	0	0	0	0	0
Total Other Water Revenues		149,175	39,710	19,169	27,791	6,922	11,501	24,181	19,900
Total Cost of Service Related to Sales of Water		6,850,984	1,823,722	879,466	1,276,120	317,469	528,325	1,112,166	913,717
Reallocation of Public Fire	20		375,226	180,952	262,559				818,737
Total		\$ 6,850,984	\$ 2,198,948	\$ 1,060,418	\$ 1,538,679	\$ 317,469	\$ 528,325	\$ 1,112,166	\$ 1,732,454
						31,054	28,483	336,558	
						10.22	18.56		
						0.85	1.55	3.30	
								5.70	

MISSOURI-AMERICAN WATER COMPANY
ST. CHARLES DISTRICT
COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS

			Base	Max Day	Max Hour	Meters	Services	Billing & Collecting	Fire Service
RATE BASE									
Organization	17	4,234	1,100	867	942	259	301	20	744
Franchises	17	12,572	3,267	2,575	2,796	768	895	60	2,210
Land & Ld Rights SS	2	5,372	2,392	2,967	0	0	0	0	13
Land & Ld Rights P	6	1,193	481	533	120	0	0	0	59
Land & Ld Rights WT	2	5,372	2,392	2,967	0	0	0	0	13
Land & Ld Rights TD	7	268,396	62,843	0	147,717	0	0	0	55,837
Land & Land Rights AG	15	0	0	0	0	0	0	0	0
Struct & Imp SS	2	0	0	0	0	0	0	0	0
Struct & Imp P	6	1,121,645	451,863	500,814	113,257	0	0	0	55,710
Struct & Imp Pumps (STL)	6	0	0	0	0	0	0	0	0
Struct & Imp Pump Boosters	6	0	0	0	0	0	0	0	0
Struct & Imp WT	2	0	0	0	0	0	0	0	0
Struct & Imp WT Nth Plt (ST)	2	0	0	0	0	0	0	0	0
Struct & Imp WT Ctrl Plt 1	2	0	0	0	0	0	0	0	0
Struct & Imp WT Ctrl Plt 3	2	0	0	0	0	0	0	0	0
Struct & Imp WT Sth Plt (ST)	2	0	0	0	0	0	0	0	0
Struct & Imp WT Meramec (ST)	2	0	0	0	0	0	0	0	0
Struct & Imp TD	7	261,432	61,672	0	144,964	0	0	0	54,796
Struct & Imp TD Spec Cross	7	0	0	0	0	0	0	0	0
Struct & Imp Offices	15	201,715	19,748	4,942	37,055	2,542	18,134	100,454	18,840
Struct & Imp Leasehold	15	0	0	0	0	0	0	0	0
Struct & Imp Leasehold	15	0	0	0	0	0	0	0	0
Struct & Imp Store,Shop,Gar	15	0	0	0	0	0	0	0	0
Struct & Imp Misc	15	965	94	24	177	12	87	481	90
Collect & Impounding	1	0	0	0	0	0	0	0	0
Lake, River & Other Intakes	2	0	0	0	0	0	0	0	0
Wells & Springs	2	0	0	0	0	0	0	0	0
Supply Mains	2	0	0	0	0	0	0	0	0
Supply Mains Nth Plt (STL)	2	0	0	0	0	0	0	0	0
Supply Mains Ctrl Plt (STL)	2	0	0	0	0	0	0	0	0
Supply Mains Sth Plt (STL)	2	0	0	0	0	0	0	0	0
Supply Mains Meramec Plt (S)	2	0	0	0	0	0	0	0	0
Power Generation Equip Othe	6	218,842	88,162	97,713	22,097	0	0	0	10,869
Boiler Plant Equipment P	6	0	0	0	0	0	0	0	0
Pump Equip Steam	6	0	0	0	0	0	0	0	0
Pump Equip Electric	6	1,500,581	604,520	670,009	151,520	0	0	0	74,531
Pump Equip Elec Pre46 (STL)	6	0	0	0	0	0	0	0	0
Pump Equip Elec Post46 (STL)	6	0	0	0	0	0	0	0	0
Pump Equip Elec Boosters Po	6	0	0	0	0	0	0	0	0
Pump Equip Diesel	6	0	0	0	0	0	0	0	0
Pump Equip Diesel Stratmanh	6	0	0	0	0	0	0	0	0
Pump Equip Diesel Ctrl Plt	6	0	0	0	0	0	0	0	0
Pump Equip Hydraulic	6	0	0	0	0	0	0	0	0
Pump Equip Other	6	825	332	368	83	0	0	0	41
WT Equip Non-Media	2	13,411	5,971	7,408	0	0	0	0	32
WT Equip Non-Med North (STL)	2	0	0	0	0	0	0	0	0
WT Equip Non Media Ctrl 1 &	2	0	0	0	0	0	0	0	0
WT Equip Non Media Ctrl 3 (	2	0	0	0	0	0	0	0	0
WT Equip Non Media Sth (STL)	2	0	0	0	0	0	0	0	0
WT Equip Non Media Mer (STL)	2	0	0	0	0	0	0	0	0
WT Equip Filter Media	2	0	0	0	0	0	0	0	0
Dist Reservoirs & Standpipe	5	1,043,277	231,190	0	543,756	0	0	0	268,331

MISSOURI-AMERICAN WATER COMPANY
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COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS

			Base	Max Day	Max Hour	Meters	Services	Billing & Collecting	Fire Service
Elevated Tanks & Standpipes	5	140,395	31,112	0	73,174	0	0	0	36,110
Ground Level Facilities	5	0	0	0	0	0	0	0	0
TD Mains Not Classified by	7	11,347,666	2,676,914	0	6,292,281	0	0	0	2,378,471
TD Mains 4 & Less "	4	472,771	111,527	0	262,152	0	0	0	99,093
TD Mains 6 to 8" "	4	5,348,419	1,261,692	0	2,965,698	0	0	0	1,121,029
TD Mains 10 to 16" "	3	12,141,525	4,940,387	6,127,828	0	0	0	0	1,073,311
TD Mains 18 & Grtr "	3	5,010,835	2,038,909	2,528,968	0	0	0	0	442,958
TD Mains AC 4 (STL) "	4	0	0	0	0	0	0	0	0
TD Mains CI <10 1900-28 (S"	4	0	0	0	0	0	0	0	0
TD Mains CI <10 1929-56 (S"	4	0	0	0	0	0	0	0	0
TD Mains CI <10 1957-83 (S"	4	0	0	0	0	0	0	0	0
TD Mains CI 12 (STL) "	3	0	0	0	0	0	0	0	0
TD Mains CI 16 (STL) "	3	0	0	0	0	0	0	0	0
TD Mains DI 6-8 (STL) "	4	0	0	0	0	0	0	0	0
TD Mains DI 12 (STL) "	3	0	0	0	0	0	0	0	0
TD Mains DI 16 & >(STL) "	3	0	0	0	0	0	0	0	0
TD Mains Galve 1 (STL) "	4	0	0	0	0	0	0	0	0
TD Mains LJ 20 (STL) "	3	0	0	0	0	0	0	0	0
Fire Mains	8	201,812	0	0	0	0	0	0	201,812
Services	10	3,498,015	0	0	0	0	3,417,561	0	80,454
Meters Bronze Case	9	734,555	0	0	0	734,555	0	0	0
Meters Plastic Case	9	0	0	0	0	0	0	0	0
Meters Other	9	8,697	0	0	0	8,697	0	0	0
Meters Other-Rem Rdr Units	9	0	0	0	0	0	0	0	0
Meter Installations	9	2,609,414	0	0	0	2,609,414	0	0	0
Meter Installation Other	9	(388,359)	0	0	0	(388,359)	0	0	0
Hydrants	8	2,541,659	0	0	0	0	0	0	2,541,659
Other P/E Intangible	15	0	0	0	0	0	0	0	0
Other P/E WT Res Hand Equip	2	0	0	0	0	0	0	0	0
Other P/E TD	7	2,940	694	0	1,630	0	0	0	616
Other P/E CPS	15	(307,356)	(30,090)	(7,530)	(56,461)	(3,873)	(27,631)	(153,063)	(28,707)
Office Furniture & Equip	15	14,112	1,382	346	2,592	178	1,269	7,028	1,318
Comp & Periph Equip	15	23,014	2,253	564	4,228	290	2,069	11,461	2,150
Computer Software	15	106,692	10,445	2,614	19,599	1,344	9,592	53,133	9,965
Comp Software Personal	15	106,503	10,427	2,609	19,565	1,342	9,575	53,038	9,947
Data Handling Equipment	15	0	0	0	0	0	0	0	0
Other Office Equipment	15	221	22	5	41	3	20	110	21
Trans Equip Lt Duty Trks	15	101,141	9,902	2,478	18,580	1,274	9,093	50,368	9,447
Trans Equip Hvy Duty Trks	15	0	0	0	0	0	0	0	0
Trans Equip Autos	15	4,021	394	99	739	51	361	2,002	376
Trans Equip Other	15	812	79	20	149	10	73	404	76
Stores Equipment	15	66	6	2	12	1	6	33	6
Tools,Shop,Garage Equip	15	53,782	5,265	1,318	9,880	678	4,835	26,783	5,023
Tools,Shop,Garage Equip Oth	15	0	0	0	0	0	0	0	0
Laboratory Equipment	2	(229)	(102)	(126)	0	0	0	0	(1)
Laboratory Equip Other	2	0	0	0	0	0	0	0	0
Power Operated Equipment	15	74,852	7,328	1,834	13,750	943	6,729	37,276	6,991
Comm Equip Non-Telephone	15	19,686	1,927	482	3,616	248	1,770	9,804	1,839
Comm Equip Telephone	15	(9,018)	(883)	(221)	(1,657)	(114)	(811)	(4,491)	(842)
Misc Equipment	15	78,136	7,650	1,914	14,354	985	7,024	38,912	7,298
Other Tangible Property	17	795,683	206,798	162,956	176,960	48,616	56,653	3,819	139,881
Total Utility Plant in Service		49,390,294	12,830,063	10,117,347	10,985,366	3,019,864	3,517,604	237,633	8,682,416

MISSOURI-AMERICAN WATER COMPANY
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COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS

		Base	Max Day	Max Hour	Meters	Services	Billing & Collecting	Fire Service
Other Rate Base Items								
Add:								
Other Utility Plant Adjustments	17	0	0	0	0	0	0	0
Cash Working Capital	15	(264,691)	(25,913)	(6,485)	(48,624)	(3,335)	(23,796)	(24,722)
Materials and Supplies	15	128,581	12,392	3,101	23,253	1,595	11,380	11,823
Prepayments	15	34	3	1	6	0	3	3
OPEB's Contributed to External Fund	16	144,899	13,229	5,042	21,561	2,173	20,952	12,244
Premature Retirement	17	0	0	0	0	0	0	0
Regulatory Deferrals	17	0	0	0	0	0	0	0
Less:								
Accumulated Deferred ITC (3%)	17	(15,776,643)	(4,100,350)	(3,231,056)	(3,508,725)	(963,953)	(1,123,297)	(2,773,534)
Deferred Income Taxes	17	(1,878,250)	(488,157)	(384,666)	(417,723)	(114,761)	(133,731)	(330,196)
Pensions	16	(183,690)	(16,771)	(6,392)	(27,333)	(2,755)	(26,562)	(15,522)
Total Other Rate Base Elements		(17,831,760)	(4,605,566)	(3,620,455)	(3,957,585)	(1,081,036)	(1,275,051)	(3,119,904)
Total Original Cost Measure of Value		\$ 31,558,534	\$ 8,224,497	\$ 6,496,893	\$ 7,027,782	\$ 1,938,828	\$ 2,242,553	\$ 65,469
								\$ 5,562,512

T&D OP BASIS FOR FACTOR 11	291,468	58,320	0	137,088	69	42,841	0	53,149
FACTOR 11		0.2001	0.0000	0.4704	0.0002	0.1470	0.0000	0.1823
T&D Mnt BASIS FOR FACTOR 12	73,922	8,693	0	20,434	5,827	22,004	0	16,964
FACTOR 12		0.1176	0.0000	0.2764	0.0788	0.2977	0.0000	0.2295
A&G BASIS FOR FACTOR 15	1,102,785	107,947	27,024	202,539	13,899	99,158	549,268	102,949
FACTOR 15		0.0979	0.0245	0.1837	0.0126	0.0899	0.4981	0.0934
LABOR BASIS FOR FACTOR 16	608,847	55,608	21,174	90,593	9,103	88,052	292,868	51,448
FACTOR 16		0.0913	0.0348	0.1488	0.0150	0.1446	0.4810	0.0845
UPIS BASIS FOR FACTOR 17	48,577,805	12,618,897	9,950,950	10,804,669	2,970,221	3,459,755	233,733	8,539,581
FACTOR 17		0.2599	0.2048	0.2224	0.0611	0.0712	0.0048	0.1758
RATE BASE BASIS FOR FACTOR 18	31,558,534	8,224,497	6,496,893	7,027,782	1,938,828	2,242,553	65,469	5,562,512
FACTOR 18		0.2605	0.2059	0.2227	0.0614	0.0711	0.0021	0.1763
TOTAL COS BASIS FOR FACTOR 19	6,942,904	1,849,127	891,856	1,293,259	321,922	535,340	1,125,198	926,202
FACTOR 19		0.2662	0.1285	0.1863	0.0464	0.0771	0.1621	0.1334
CQS w/o Fire Factor 20	4,065,978	1,863,432	898,635	1,303,911				
FACTOR 20		0.4583	0.2210	0.3207				

	2	4	6	8	10	12	14
	Base	Max Day	Max Hour	Meters	Services	Billing & Collecting	Fire Service
1	0.9948	-	-	-	-	-	0.0052
2	0.4452	0.5524	-	-	-	-	0.0024
3	0.4069	0.5047	-	-	-	-	0.0884
4	0.2359	-	0.5545	-	-	-	0.2096
5	0.2216	-	0.5212	-	-	-	0.2572
6	0.4029	0.4465	0.1010	-	-	-	0.0497
7	0.2359	-	0.5545	-	-	-	0.2096
8	-	-	-	-	-	-	1.0000

MISSOURI-AMERICAN WATER COMPANY
ST. CHARLES DISTRICT
COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS

	Base	Max Day	Max Hour	Meters	Services	Billing & Collecting	Fire Service
9	-	-	-	1.0000	-	-	-
10	-	-	-	-	0.9770	-	0.0230
11	0.2001	-	0.4704	0.0002	0.1470	-	0.1823
12	0.1176	-	0.2764	0.0788	0.2977	-	0.2295
13	-	-	-	-	-	0.9945	0.0055
14	-	-	-	-	-	1.0000	-
15	0.0979	0.0245	0.1837	0.0126	0.0899	0.4980	0.0934
16	0.0913	0.0348	0.1488	0.0150	0.1446	0.4810	0.0845
17	0.2599	0.2048	0.2224	0.0611	0.0712	0.0048	0.1758
18	0.2605	0.2059	0.2227	0.0614	0.0711	0.0021	0.1763
19	0.2662	0.1285	0.1863	0.0464	0.0771	0.1621	0.1334
20	0.4583	0.2210	0.3207				

**MISSOURI-AMERICAN WATER COMPANY
ST. CHARLES DISTRICT
PSC STAFF STUDY**

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS

FACTOR 1.

ALLOCATION OF COSTS THAT VARY WITH THE AMT OF WATER CONSUMED.

Factors are based on the pro forma test year average daily consumption for each customer classification.

Customer Classification (1)	Average Daily Consumption, Thousand Gallons (2)	Allocation Factor (3)
Residential	7,247.77	0.8358
Commercial	1,200.30	0.1384
Industrial	6.65	0.0008
Other Public Authority	171.74	0.0198
Sales for Resale	0.00	0.0000
Private Fire Protection	6.88	0.0008
Public Fire Protection	38.12	0.0044
Total	8,671.46	1.0000

FACTOR 2.

**ALLOCATION OF COSTS ASSOCIATED WITH FACILITIES SERVING BASE AND
MAXIMUM DAY EXTRA CAPACITY FUNCTIONS.**

Factors are based on the weighting of the factors for average daily consumption (Factor 1) and the factors derived from maximum day extra capacity demand for each customer classification, as follows:

Customer Classification (1)	Average Daily Consumption		Maximum Day Extra Capacity		Allocation Factor (6)=(3)+(5)
	Allocation Factor 1 (2)	Weighted Factor (3)=(2)x 0.4476	Allocation Factor (4)	Weighted Factor (5)=(4)x 0.5524	
Residential	0.8358	0.3740	0.8753	0.4835	0.8576
Commercial	0.1384	0.0619	0.1087	0.0600	0.1219
Industrial	0.0008	0.0004	0.0004	0.0002	0.0006
Other Public Authority	0.0198	0.0089	0.0156	0.0086	0.0175
Sales for Resale	0.0000	0.0000	0.0000	0.0000	0.0000
Private Fire Protection	0.0008	0.0004			0.0004
Public Fire Protection	0.0044	0.0020			0.0020
Total	1.0000	0.4476	1.0000	0.5523	1.0000

The derivation of the maximum day extra capacity factors in column 4 and the basis for the column 3 and 5 weightings are presented on the following page.

**MISSOURI-AMERICAN WATER COMPANY
ST. CHARLES DISTRICT
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FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

**FACTOR 2. MAX DAY CLASS ALLOCATION AND MAX DAY TO AVERAGE DAY
MAXIMUM DAY EXTRA CAPACITY FUNCTIONS, cont.**

Customer Classification	Average Daily Consumption, Thousand Gal.	Maximum Day Extra Capacity		
		Factor*	Rate of Flow, Thousand Gal. Per Day	Allocation Factor
(1)	(2)	(3)	(4)=(2)x(3)	(5)
Residential	7,248	1.00	7,248	0.8753
Commercial	1,200	0.75	900	0.1087
Industrial	7	0.50	3	0.0004
Other Public Authority	172	0.75	129	0.0156
Sales for Resale	0	0.90	0	0.0000
Total	8,626		8,280	1.0000

The weighting of the factors is based on the maximum day ratio of 2.23, based on a review of maximum day ratios experienced during the period 1994 through 2002 (see Schedule D).

	Maximum Day Ratio	Weight
Average Day	1.00	0.4476
Maximum Day Extra Capacity	1.23	0.5524
Total	2.23	1.0000

* Ratio of maximum day to average day minus 1.0.

**MISSOURI-AMERICAN WATER COMPANY
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FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 3.

**ALLOCATION OF COSTS ASSOC. WITH FACILITIES SERVING BASE, MAX DAY EXTRA CAPACITY
AND FIRE PROTECTION FUNCTIONS.**

Factors are based on the weighting of the average daily consumption, the maximum day extra capacity demand, and the fire protection demand for each customer classification.

Customer Classification	Average Daily Consumption		Maximum Day Extra Capacity		Fire Protection		Allocation Factor
	Allocation Factor	Weighted Factor	Allocation Factor	Weighted Factor	Allocation Factor	Weighted Factor	
(1)	(2)	(3)=(2) X 0.4090	(4)	(5)=(4) X 0.5047	(6)	(7)=(6) X 0.0863	(8)=(3)+(5)+(7)
Residential	0.8358	0.3419	0.8753	0.4417			0.7836
Commercial	0.1384	0.0566	0.1087	0.0549			0.1115
Industrial	0.0008	0.0003	0.0004	0.0002			0.0005
Other Public Authority	0.0198	0.0081	0.0156	0.0079			0.0160
Sales for Resale	0.0000	0.0000	0.0000	0.0000			0.0000
Private Fire Protection	0.0008	0.0003			0.1529	0.0132	0.0135
Public Fire Protection	0.0044	0.0018			0.8471	0.0731	0.0749
Total	1.0000	0.4090	1.0000	0.5047	1.0000	0.0863	1.0000

MISSOURI-AMERICAN WATER COMPANY
ST. CHARLES DISTRICT
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FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 3.

**ALLOCATION OF COSTS ASSOC. WITH FACILITIES SERVING BASE, MAX DAY EXTRA CAPACITY
AND FIRE PROTECTION FUNCTIONS.**

The weighting of the factors is based on the potential demand of general and fire protection service. The bases for the potential demand of general service are the maximum day ratio of 3.34 and the average daily system sendout for 2002 of 9.10 MGD. The system demand for fire protection is 8,000 Gallons per minute for 4 hours.

	<u>Ratio</u>	<u>Rate of Flow, (GPD)</u>	<u>Weight</u>
Average Day	1.00	9,100,000	0.4090
Maximum Day Extra Capacity	<u>1.23</u>	<u>11,229,400</u>	<u>0.5047</u>
Subtotal	<u>2.23</u>	20,329,400	0.9137
Fire Protection		<u>1,920,000</u>	<u>0.0863</u>
Total		<u>22,249,400</u>	<u>1.0000</u>

The public and private fire protection allocation factors in column 6 on the previous page are based on the relative potential demands (see Schedule E).

**MISSOURI-AMERICAN WATER COMPANY
ST. CHARLES DISTRICT
PSC STAFF STUDY**

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 4.

ALLOCATION OF COSTS ASSOC. WITH FACILITIES SERVING BASE AND MAX HOUR EXTRA CAPACITY FUNCT'S.

Factors are based on the weighting of the average daily consumption, the maximum day extra capacity demand, and the fire protection demand for each customer classification.

Customer Classification	Average Hourly Consumption			Maximum Hour Extra Capacity		Fire Protection		Allocation Factor
	Thousand Gallons	Allocation Factor	Weighted Factor	Allocation Factor	Weighted Factor	Allocation Factor	Weighted Factor	
(1)	(2)	(3)	(4)=(3) X 0.2371	(5)	(6)=(5) X 0.5545	(7)	(8)=(7) X 0.2084	(9)=(4)+(6)+(8)
Residential	302.0	0.8358	0.1982	0.8806	0.4882			0.6864
Commercial	50.0	0.1384	0.0328	0.1042	0.0578			0.0906
Industrial	0.3	0.0008	0.0002	0.0003	0.0002			0.0004
Other Public Authority	7.2	0.0198	0.0047	0.0149	0.0083			0.0130
Sales for Resale	0.0	0.0000	0.0000	0.0000	0.0000			0.0000
Private Fire Protection	0.3	0.0008	0.0002			0.1529	0.0319	0.0321
Public Fire Protection	1.6	0.0044	0.0010			0.8471	0.1765	0.1775
Total	361.3	1.0000	0.2371	1.0000	0.5545	1.0000	0.2084	1.0000

The maximum hour extra capacity factors in column 5 are determined as follows:

**MISSOURI-AMERICAN WATER COMPANY
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FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 4.

ALLOCATION OF COSTS ASSOC. WITH FACILITIES SERVING BASE AND MAX HOUR EXTRA CAPACITY FUNCT'S.

The weighting of the factors is based on the potential demand of general and fire protection service. The bases for the potential demand of general service are the maximum hour ratio of 3.34 and the average daily system sendout for 2002 of 9,100 MGD. The system demand for fire protection is 8,000 gallons per minute.

	Ratio	Rate of Flow, (GPM)	Weight
Average Hour	1.00	9,100	0.2371
Maximum Hour			
Extra Capacity	2.34	21,287	0.5545
Subtotal	3.34	30,387	0.7916
Fire Protection		8,000	0.2084
Total		38,387	1.0000

The maximum hour extra capacity factors in column 5 of the previous page are determined as follows:

Customer Classification	Average Hourly Consumption Thousand Gal.	Maximum Hour Extra Capacity		
		Factor*	1,000 Gallons Per Hour	Allocation Factor
(1)	(2)	(3)	(4)=(2)x(3)	(5)
Residential	302.0	3.5	1,057.0	0.8806
Commercial	50.0	2.5	125.0	0.1042
Industrial	0.3	1.2	0.3	0.0003
Other Public Authority	7.2	2.5	17.9	0.0149
Sales for Resale	0.0	3.2	0.0	0.0000
Total	359.4		1,200.2	1.0000

* Ratio of Maximum Hour To Average Hour Minus 1.0.

The public and private fire protection allocation factors in column 7 on the previous page are based on the relative potential demands (see Schedule E).

**MISSOURI-AMERICAN WATER COMPANY
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FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 5.

ALLOCATION OF COSTS ASSOCIATED WITH STORAGE FACILITIES.

Factors are based on the weighting of the average hourly consumption, the maximum hour extra capacity demand, and the fire protection demand for each customer classification.

Customer Classification	Average Hourly Consumption			Maximum Hour Extra Capacity		Fire Protection		Allocation Factor
	Thousand Gallons	Allocation Factor	Weighted Factor	Allocation Factor	Weighted Factor	Allocation Factor	Weighted Factor	
(1)	(2)	(3)	(4)=(3) X 0.2228	(5)	(6)=(5) X 0.5212	(7)	(8)=(7) X 0.2560	(9)=(4)+(6)+(8)
Residential	302.0	0.8358	0.1862	0.8806	0.4589			0.6451
Commercial	50.0	0.1384	0.0308	0.1042	0.0543			0.0851
Industrial	0.3	0.0008	0.0002	0.0003	0.0002			0.0004
Other Public Authority	7.2	0.0198	0.0044	0.0149	0.0078			0.0122
Sales for Resale	0.0	0.0000	0.0000	0.0000	0.0000			0.0000
Private Fire Protection	0.3	0.0008	0.0002			0.1529	0.0391	0.0393
Public Fire Protection	1.6	0.0044	0.0010			0.8471	0.2169	0.2179
Total	361.3	1.0000	0.2228	1.0000	0.5212	1.0000	0.2560	1.0000

The weighting of the factors is based on the ratio of the capacity required for a 4 hour demand of fire flow, as related to total storage capacity. The calculation is shown on the following page.

MISSOURI-AMERICAN WATER COMPANY
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FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 5. Continued

ALLOCATION OF COSTS ASSOCIATED WITH STORAGE FACILITIES, cont.

The weighting of the factors is based on the ratio of the capacity required for a 4 hour demand of fire flow, as related to total storage capacity.

$$\text{Fire Protection Weight} = \frac{8,000 \text{ GPM} \times 60 \text{ Min.} \times 4 \text{ Hrs.}}{7,500,000 \text{ Gallons}} = 0.2560$$

$$\text{General Service Weight} = 1.0000 - 0.2560 = 0.7440$$

The weighting of the average hourly consumption and maximum hour extra demand for general service is based on the maximum hour ratio, as follows:

	Maximum Hour Ratio	Percent	Weight
Average Hour	1.00	29.95	0.2228
Extra Capacity Maximum Hour	<u>2.34</u>	<u>70.05</u>	<u>0.5212</u>
Total	3.34	100.00	<u><u>0.7440</u></u>

**MISSOURI-AMERICAN WATER COMPANY
ST. CHARLES DISTRICT
PSC STAFF STUDY**

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 6.

ALLOCATION OF COSTS ASSOCIATED WITH POWER AND PUMPING FACILITIES.

Factors are based on the weighting of the maximum daily consumption, Factor 2, the maximum daily consumption with fire, Factor 3, and the maximum hour consumption, Factor 4, for each customer classification, as follows:

Customer Classification	Maximum Daily Consumption		Maximum Daily Consumption		Maximum Hourly Consumption		Allocation
	Allocation Factor 2	Weighted Factor	Allocation Factor 3	Weighted Factor	Allocation Factor 4	Weighted Factor	
(1)	(2)	(3)=(2)X 0.7065	(4)	(5)=(4)X 0.1114	(6)	(7)=(6)X 0.1821	(8)=(3)+ (5)+(7)
Residential	0.8576	0.6059	0.7836	0.0873	0.6864	0.1250	0.8182
Commercial	0.1219	0.0861	0.1115	0.0124	0.0906	0.0165	0.1150
Industrial	0.0006	0.0004	0.0005	0.0001	0.0004	0.0001	0.0006
Other Public Authority	0.0175	0.0124	0.0160	0.0018	0.0130	0.0024	0.0166
Sales for Resale	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Private Fire Protection	0.0004	0.0003	0.0135	0.0015	0.0321	0.0058	0.0076
Public Fire Protection	0.0020	0.0014	0.0749	0.0083	0.1775	0.0323	0.0420
Total	1.0000	0.7065	1.0000	0.1114	1.0000	0.1821	1.0000

The weighting of the factors is based on the horsepower of pumps associated with maximum day facilities, maximum day and fire facilities, and maximum hour facilities, as follows:

	Horsepower of Pumps	Weight
Associated with Maximum Day	1,300	0.7065
Associated with Maximum Day and Fire	205	0.1114
Associated with Maximum Hour	335	0.1821
Total	1,840	1.0000

**MISSOURI-AMERICAN WATER COMPANY
ST. CHARLES DISTRICT
PSC STAFF STUDY**

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 7.

ALLOCATION OF COSTS ASSOCIATED WITH TRANSMISSION AND DISTRIBUTION MAINS.

Factors are based on the weighting of the maximum daily consumption with fire, Factor 3, and the maximum hour consumption, Factor 4, for each customer classification, as follows:

Customer Classification	Maximum Daily Consumption		Maximum Hourly Consumption		Allocation Factor
	Allocation Factor 3	Weighted Factor	Allocation Factor 4	Weighted Factor	
	(2)	(3)=(2)X 0.0000	(4)	(5)=(4)X 1.0000	
Residential	0.7836	0.0000	0.6864	0.6864	0.6864
Commercial	0.1115	0.0000	0.0906	0.0906	0.0906
Industrial	0.0005	0.0000	0.0004	0.0004	0.0004
Other Public Authority	0.0160	0.0000	0.0130	0.0130	0.0130
Sales for Resale	0.0000	0.0000	0.0000	0.0000	0.0000
Private Fire Protection	0.0135	0.0000	0.0321	0.0321	0.0321
Public Fire Protection	0.0749	0.0000	0.1775	0.1775	0.1775
Total	<u>1.0000</u>	<u>0.0000</u>	<u>1.0000</u>	<u>1.0000</u>	<u>1.0000</u>

The weighting of the factors is based on the total footage of mains, designated as either transmission mains or distribution mains, as follows:

	Total Footage of Mains	Weight
Transmission Mains	410,796	0.0000
Distribution Mains	<u>2,015,020</u>	<u>1.0000</u>
Total	<u>2,425,816</u>	1.0000

**MISSOURI-AMERICAN WATER COMPANY
ST. CHARLES DISTRICT
PSC STAFF STUDY**

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 8.

ALLOCATION OF COSTS ASSOCIATED WITH FIRE HYDRANTS.

Costs are assigned directly to Public Fire Protection.

Customer Classification <u> </u> (1)	Allocation Factor <u> </u> (3)
Public Fire Protection	<u>1.0000</u>
Total	<u><u>1.0000</u></u>

FACTOR 9.

ALLOCATION OF COSTS ASSOCIATED WITH METERS.

Factors are based on the relative cost of meters by size and customer classification, as developed on the following page and summarized below.

Customer Classification <u> </u> (1)	5/8" Dollar Equivalents <u> </u> (2)	Allocation Factor <u> </u> (3)
Residential	27,429	0.8833
Commercial	2,687	0.0865
Industrial	7	0.0002
Other Public Authority	932	0.0300
Sales for Resale	0	0.0000
Private Fire	<u>0</u>	<u>0.0000</u>
Total	<u><u>31,054</u></u>	<u><u>1.0000</u></u>

MISSOURI-AMERICAN WATER COMPANY
ST. CHARLES DISTRICT
PSC STAFF STUDY

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 10.

ALLOCATION OF COSTS ASSOCIATED WITH SERVICES.

Factors are based on the relative cost of services by size and customer classification, as developed on the following page and summarized below.

<u>Customer Classification</u> (1)	<u>3/4" Dollar Equivalents</u> (2)	<u>Allocation Factor</u> (3)
Residential	27,014	0.9273
Commercial	1,298	0.0445
Industrial	3	0.0001
Other Public Authority	148	0.0051
Sales for Resale	0	0.0000
Private Fire Protection	669	0.0230
Total	29,132	<u>1.0000</u>

**MISSOURI-AMERICAN WATER COMPANY
ST. CHARLES DISTRICT
PSC STAFF STUDY**

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 11.

**ALLOCATION OF TRANSMISSION AND DISTRIBUTION OPERATION
SUPERVISION AND ENGINEERING AND MISCELLANEOUS EXPENSES.**

Factors are based on transmission and distribution operation expenses other than those being allocated, as follows:

Customer Classification	Transmission & Distribution Operating Expenses	Allocation Factor
(1)	(2)	(3)
Residential	\$ 210,420	0.7218
Commercial	24,356	0.0836
Industrial	103	0.0004
Other Public Authority	3,440	0.0118
Sales for Resale	-	0.0000
Private Fire Protection	8,993	0.0309
Public Fire Protection	44,156	0.1515
Total	<u>291,468</u>	<u>1.0000</u>

FACTOR 12.

**ALLOCATION OF TRANS. DISTRIB. MAINTENANCE SUPERVISION
AND ENGINEERING, STRUCTURES AND IMPROVE., AND OTHER EXPENSES.**

Factors are based on transmission and distribution maintenance expenses other than those being allocated, as follows:

Customer Classification	Transmission & Distribution Maintenance Expenses	Allocation Factor
(1)	(2)	(3)
Residential	\$ 51,326	0.6944
Commercial	4,845	0.0655
Industrial	18	0.0002
Other Public Authority	769	0.0104
Sales for Resale	-	0.0000
Private Fire Protection	1,701	0.0230
Public Fire Protection	15,263	0.2065
Total	<u>\$73,922</u>	<u>1.0000</u>

**MISSOURI-AMERICAN WATER COMPANY
ST. CHARLES DISTRICT
PSC STAFF STUDY**

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 13.

ALLOCATION OF BILLING AND COLLECTING COSTS.

Factors are based on the total number of customers.

Customer Classification	Total Customers	Allocation Factor
(1)	(2)	(3)
Residential	26,880	0.9584
Commercial	949	0.0338
Industrial	2	0.0001
Other Public Authority	63	0.0022
Sales for Resale	0	0.0000
Private Fire Protection	153	0.0055
Public Fire Protection	0	0.0000
Total	<u>28,047</u>	<u>1.0000</u>

FACTOR 14.

ALLOCATION OF METER READING COSTS.

Factors are based on the number of metered customers.

Customer Classification	Total Metered Customers	Allocation Factor
(1)	(2)	(3)
Residential	26,880	0.9636
Commercial	949	0.0340
Industrial	2	0.0001
Other Public Authority	63	0.0023
Sales for Resale	0	0.0000
Total	<u>27,894</u>	1.0000

**MISSOURI-AMERICAN WATER COMPANY
ST. CHARLES DISTRICT
PSC STAFF STUDY**

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 15.

**ALLOCATION OF ADMINISTRATIVE AND GENERAL EXPENSES AND CASH
WORKING CAPITAL.**

Factors are based on the allocation of all other operation and maintenance expenses excluding purchased water, power, chemicals and waste disposal.

<u>Customer Classification</u> (1)	<u>Operation & Maintenance Expenses</u> (2)	<u>Allocation Factor</u> (3)
Residential	\$928,389	0.8419
Commercial	63,440	0.0575
Industrial	242	0.0002
Other Public Authority	7,766	0.0070
Sales for Resale	0	0.0000
Private Fire Protection	16,711	0.0152
Public Fire Protection	86,238	0.0782
Total	<u>\$1,102,785</u>	<u>1.0000</u>

**MISSOURI-AMERICAN WATER COMPANY
ST. CHARLES DISTRICT
PSC STAFF STUDY**

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 16.

ALLOCATION OF LABOR RELATED TAXES AND BENEFITS.

Factors are based on the allocation of direct labor expense.

Customer Classification	Direct Labor Expense	Allocation Factor
(1)	(2)	(3)
Residential	\$518,869	0.8522
Commercial	34,221	0.0562
Industrial	127	0.0002
Other Public Authority	4,181	0.0069
Sales for Resale	0	0.0000
Private Fire Protection	8,443	0.0139
Public Fire Protection	43,005	0.0706
Total	<u>\$608,847</u>	<u>1.0000</u>

FACTOR 17.

**ALLOCATION OF ORGANIZATION, FRANCHISES AND CONSENTS,
MISC. INTANGIBLE PLANT AND OTHER RATE BASE ELEMENTS.**

Factors are based on the allocation of the original cost less depreciation other than those items being allocated, as follows:

Customer Classification	Original Cost Less Depreciation	Allocation Factor
(1)	(2)	(3)
Residential	\$34,957,152	0.7196
Commercial	4,385,738	0.0903
Industrial	18,886	0.0004
Other Public Authority	676,642	0.0139
Sales for Resale	0	0.0000
Private Fire Protection	955,438	0.0197
Public Fire Protection	7,583,948	0.1561
Total	<u>\$48,577,805</u>	<u>1.0000</u>

**MISSOURI-AMERICAN WATER COMPANY
ST. CHARLES DISTRICT**

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 18.

ALLOCATION OF INCOME TAXES AND INCOME AVAILABLE FOR RETURN.

Factors are based on the allocation of the original cost measure of value rate base as shown on the following pages and summarized below.

Customer Classification <u>(1)</u>	Original Cost Measure of Value <u>(2)</u>	Allocation Factor <u>(3)</u>
Residential	\$22,688,055	0.7188
Commercial	2,854,749	0.0905
Industrial	12,114	0.0004
Other Public Authority	441,298	0.0140
Sales for Resale	0	0.0000
Private Fire Protection	621,005	0.0197
Public Fire Protection	<u>4,941,313</u>	<u>0.1566</u>
Total	<u><u>\$31,558,534</u></u>	<u><u>1.0000</u></u>

FACTOR 19.

**ALLOCATION OF REG. COMMISSION EXPENSES, ASSESSMENTS AND
OTHER WATER REVENUES.**

The factors are based on the allocation of the total cost of service, excluding those items being allocated.

Customer Classification <u>(1)</u>	Total Cost of Service <u>(2)</u>	Allocation Factor <u>(3)</u>
Residential	\$5,349,366	0.7704
Commercial	579,565	0.0835
Industrial	2,562	0.0004
Other Public Authority	85,212	0.0123
Sales for Resale	0	0.0000
Private Fire Protection	113,944	0.0164
Public Fire Protection	<u>812,254</u>	<u>0.1170</u>
Total	<u><u>\$6,942,904</u></u>	<u><u>1.0000</u></u>

MISSOURI-AMERICAN WATER COMPANY
ST. CHARLES DISTRICT

PSC STAFF STUDY

BASIS FOR ALLOCATING METER COSTS TO CUSTOMER CLASSIFICATIONS

Meter Size	5/8" Dollar Equivalent	Residential		Commercial		Industrial		Other Public Authority		Sales for Resale		Total	
		Number of Meters	Weighting (4)=(2)X(3)	Number of Meters	Weighting (6)=(2)X(5)	Number of Meters	Weighting (8)=(2)X(7)	Number of Meters	Weighting (10)=(2)X(9)	Number of Meters	Weighting (12)=(2)X(11)	Number of Meters	Weighting (14)
(1)	(2)	(3)	(4)=(2)X(3)	(5)	(6)=(2)X(5)	(7)	(8)=(2)X(7)	(9)	(10)=(2)X(9)	(11)	(12)=(2)X(11)	(13)	(14)
5/8	1.0	26,152.42	26,152.42	385.50	385.50	0.00	0.00	4.75	4.75	0.00	0.00	26,542.67	26,542.67
3/4	1.3	1.00	1.30	0.33	0.43	0.00	0.00	0.00	0.00	0.00	0.00	1.33	1.73
1	1.7	706.50	1,201.05	204.33	347.37	0.00	0.00	3.25	5.53	0.00	0.00	914.08	1,553.94
1-1/2	3.5	15.67	54.83	179.67	628.83	0.00	0.00	5.00	17.50	0.00	0.00	200.33	701.17
2	4.3	4.42	18.99	159.58	686.21	1.58	6.81	20.58	88.51	0.00	0.00	186.17	800.52
3	19.0	0.00	0.00	7.42	140.92	0.00	0.00	14.00	266.00	0.00	0.00	21.42	406.92
4	29.3	0.00	0.00	8.42	246.61	0.00	0.00	10.08	295.44	0.00	0.00	18.50	542.05
6	48.4	0.00	0.00	2.67	129.07	0.00	0.00	5.25	254.10	0.00	0.00	7.92	383.17
8	112.9	0.00	0.00	1.08	122.31	0.00	0.00	0.00	0.00	0.00	0.00	1.08	122.31
Total		<u>26,880.00</u>	<u>27,428.59</u>	<u>949.00</u>	<u>2,687.24</u>	<u>1.58</u>	<u>6.81</u>	<u>62.92</u>	<u>931.83</u>	<u>0.00</u>	<u>0.00</u>	<u>27,893.50</u>	<u>31,054.47</u>

MISSOURI-AMERICAN WATER COMPANY
ST. CHARLES DISTRICT

PSC STAFF STUDY

BASIS FOR ALLOCATING SERVICE COSTS TO CUSTOMER CLASSIFICATIONS

Service Size	3/4" Dollar Equivalent	Residential		Commercial		Industrial		Other Public Authority		Sales for Resale		Private Fire Protection		Total	
		Number of Services	Weighting (4)=(2)X(3)	Number of Services	Weighting (6)=(2)X(5)	Number of Services	Weighting (8)=(2)X(7)	Number of Services	Weighting (10)=(2)X(9)	Number of Services	Weighting (12)=(2)X(11)	Number of Services	Weighting (14)=(2)X(13)	Number of Services (15)	Weighting (16)
(1)	(2)	(3)	(4)=(2)X(3)	(5)	(6)=(2)X(5)	(7)	(8)=(2)X(7)	(9)	(10)=(2)X(9)	(11)	(12)=(2)X(11)	(13)	(14)=(2)X(13)	(15)	(16)
3/4	1.00	26,153.42	26,153.42	385.83	385.83	0.00	0.00	4.75	4.75	0.00	0.00	0.00	0.00	26,544.00	26,544.00
1	1.17	706.50	826.61	204.33	239.07	0.00	0.00	3.25	3.80	0.00	0.00	0.00	0.00	914.08	1,069.48
1-1/2	1.58	15.67	24.75	179.67	283.87	0.00	0.00	5.00	7.90	0.00	0.00	0.00	0.00	200.33	316.53
2	2.04	4.42	9.01	159.58	325.55	1.58	3.23	20.58	41.99	0.00	0.00	13.00	26.52	199.17	406.30
3	2.73	0.00	0.00	7.42	20.25	0.00	0.00	14.00	38.22	0.00	0.00	1.00	2.73	22.42	61.20
4	2.88	0.00	0.00	8.42	24.24	0.00	0.00	10.08	29.04	0.00	0.00	16.00	46.08	34.50	99.36
6	4.24	0.00	0.00	2.67	11.31	0.00	0.00	5.25	22.26	0.00	0.00	57.00	241.68	64.92	275.25
8	6.98	0.00	0.00	1.08	7.56	0.00	0.00	0.00	0.00	0.00	0.00	45.00	314.10	46.08	321.66
10	9.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.00	38.00	4.00	38.00
12	12.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total		<u>26,880.00</u>	<u>27,013.79</u>	<u>949.00</u>	<u>1,297.68</u>	<u>1.58</u>	<u>3.23</u>	<u>62.92</u>	<u>147.96</u>	<u>0.00</u>	<u>0.00</u>	<u>136.00</u>	<u>669.11</u>	<u>28,029.50</u>	<u>29,131.77</u>

**MISSOURI-AMERICAN WATER COMPANY
ST. CHARLES DISTRICT
PSC STAFF STUDY**

BASIS FOR ALLOCATING DEMAND RELATED COSTS OF FIRE SERVICE
TO PRIVATE AND PUBLIC FIRE PROTECTION CUSTOMER CLASSIFICATIONS

Description (1)	Restrictive Diameters Squared (2)	Quantity (3)	Relative Demand* (4)=(2)x(3)	Allocation Factor (5)
<u>PRIVATE FIRE PROTECTION</u>				
Fire Lines				
2 -inch	4.00	13	52	
3 -inch	9.00	0	0	
4 -inch	16.00	16	256	
6 -inch	36.00	57	2,052	
8 -inch	64.00	45	2,880	
10 -inch	100.00	4	400	
12 -inch	144.00	0	0	
Private Hydrants	32.75	18	590	
Total Private Fire Protection		153	6,230	0.1529
<u>PUBLIC FIRE PROTECTION</u>				
Hydrant	Nozzle Sizes			
6" Valve	2- 2-1/2" & 1- 4.5"	32.75	0	0
6" Valve	2- 2-1/2"	12.50	2,762	34,525
Total Public Fire Protection		2,762	34,525	0.8471
Total Fire Protection		2,915	40,755	1.0000

MISSOURI-AMERICAN WATER COMPANY
ST. LOUIS COUNTY DISTRICT

PSC STAFF STUDY

COMPARISON OF COST OF SERVICE WITH REVENUES UNDER PRESENT AND PROPOSED RATES
FOR THE TEST YEAR ENDED DECEMBER 31, 2002

Customer Classification (1)	Cost of Service		Revenues, Present Rates		Revenues, Proposed Rates		Proposed Increase	
	Amount (Schedule B) (2)	Percent (3)	Amount (4)	Percent (5)	Amount (6)	Percent (7)	Amount (8)	Percent Increase (9)
Rate A & K	\$ 84,729,205	87.2%	\$ 99,623,363	84.8%	\$ 84,729,205	87.3%	\$ (14,894,158)	-15.0%
Rate B	2,664,295	2.7%	\$ 1,981,833	1.7%	2,664,295	2.7%	682,462	34.4%
Rate D	216,962	0.2%	\$ 183,425	0.2%	216,962	0.2%	33,537	18.3%
Rate F & E	590,205	0.6%	\$ 7,154,925	6.1%	590,205	0.6%	(6,564,720)	-91.8%
Rate H	900,987	0.9%	\$ 900,987	0.8%	900,987	0.9%	-	
Rate J	7,910,900	8.2%	\$ 7,612,017	6.5%	7,910,900	8.2%	298,883	3.9%
Total Sales	97,012,554	<u>99.8%</u>	117,456,550	<u>100.1%</u>	97,012,554	<u>99.9%</u>	(20,443,996)	-17.4%
Other Revenues	<u>1,316,503</u>		<u>1,316,503</u>		<u>1,316,503</u>		-	0.0%
Total	<u>\$ 98,329,057</u>		<u>\$ 118,773,053</u>		<u>\$ 98,329,057</u>		<u>\$ (20,443,996)</u>	-17.2%
True-Up Estimate	\$2,096,026				\$2,096,026		\$2,096,026	
Total w/ True-up	<u>\$100,425,083</u>				<u>\$ 100,425,083</u>		<u>\$ (18,347,970)</u>	-15.4%

Test Year Operating Revenues at Present Rates vs Proposed Rates
12 Month Test Period Ended December 31, 2002

Missouri Public Service Commission
 Company: Missouri-American Water Company
 District: St. Louis

Case No. WR-2003-0500
 STAFF - ST LOUIS COUNTY
 Page 1 of 1

Line #	Class/ Description	Present Pro Forma Rates		Proposed Pro Forma Rates		Dollar Change	Percentage Change
		Sales (CCF)	Total Revenue	Sales (CCF)	Total Revenue		
1							
2							
3							
4	Rate A and K	56,748,523	\$99,623,363	56,748,523	\$84,727,483	(\$14,895,880)	-14.95%
5	Rate B	2,451,853	1,981,833	2,451,853	2,664,298	682,465	34.44%
6	Rate D	241,598	183,425	241,598	216,962	33,537	18.28%
7	Rate F and E	60,059	7,154,925	60,059	590,205	(6,564,720)	-91.75%
8	Rate H	377,167	900,987	377,167	900,987	0	0.00%
9	Rate J	9,946,139	7,612,017	9,946,139	7,910,907	298,890	3.93%
10						0	0.00%
11							
12	Total	<u>69,825,339</u>	<u>117,456,550</u>	<u>69,825,339</u>	<u>97,010,842</u>	<u>(\$20,445,708)</u>	<u>-17.41%</u>
13							
14							
15	Miscellaneous Revenues:						
16							
17	Reconnect Charges		43,661		43,661	0	0.00%
18	Returned Check Charge		28,212		28,212	0	0.00%
19	Application Fee		142,440		142,440	0	0.00%
20	Miscellaneous Other Revenue		665,858		665,858	0	0.00%
21	Rents from Water Property		284,237		284,237	0	0.00%
22	Miscellaneous Sales Unmetered		152,095		152,095		
23							
24			<u>\$118,773,053</u>		<u>\$98,327,345</u>	<u>(20,445,708)</u>	<u>-17.21%</u>
25							
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							

Test Year Operating Revenues at Present Rates vs Proposed Rates
12 Month Test Period Ended December 31, 2002

Missouri Public Service Commission
 Company: Missouri-American Water Company
 District: St. Louis

Case No. WR-2003-0500
 STAFF - ST LOUIS COUNTY
 Page 1 of 8

Line #	Class/ Description	Present Pro Forma Rates				Proposed Pro Forma Rates				Dollar Change	Percentage Change
		Customer Meter Billings	Sales (CCF)	Current Rate	Total Revenue	Customer Meter Billings	Sales (CCF)	Proposed Rate	Total Revenue		
1											
2	Rate A:										
3	Minimum Charge:			12,925,546							
4	<u>Monthly</u>										
5	5/8"	73		\$6.15	\$449	73		\$10.05	\$734	\$285	63.47%
6	3/4"	189		6.87	1,298	190		\$10.23	1,945	647	49.85%
7	1"	433		8.31	3,598	434		\$10.55	4,577	979	27.21%
8	1-1/2"	830		11.90	9,877	831		\$11.81	9,816	(61)	-0.62%
9	2"	2,642		16.20	42,800	2,642		\$12.48	32,970	(9,830)	-22.97%
10	3"	801		27.68	22,172	801		\$21.84	17,493	(4,679)	-21.10%
11	4"	526		40.59	21,350	526		\$28.27	14,871	(6,479)	-30.35%
12	6"	294		76.48	22,485	293		\$40.61	11,897	(10,588)	-47.09%
13	8"	71		119.54	8,487	71		\$81.56	5,791	(2,696)	-31.77%
14	10"	47		176.96	8,317	47		\$122.01	5,734	(2,583)	-31.06%
15	12"	0		234.36	0	0		\$164.05	0	0	0.00%
16		5,906									
17	<u>Quarterly</u>										
18	5/8"	1,219,425		9.01	10,987,019	1,219,425		12.03	14,671,610	3,684,591	33.54%
19	3/4"	70,881		11.17	791,741	70,880		12.59	892,299	100,558	12.70%
20	1"	17,628		15.48	272,881	17,628		13.52	238,361	(34,520)	-12.65%
21	1-1/2"	5,917		26.24	155,262	5,917		17.32	102,502	(52,760)	-33.98%
22	2"	8,345		39.15	326,707	8,345		19.32	161,251	(165,456)	-50.64%
23	3"	532		73.61	39,161	532		47.40	25,217	(13,944)	-35.61%
24	4"	236		112.36	26,517	236		66.70	15,742	(10,775)	-40.63%
25	6"	227		220.01	49,942	227		103.70	23,540	(26,402)	-52.87%
26	8"	276		349.19	96,376	276		226.58	62,535	(33,841)	-35.11%
27	10"	75		521.42	39,107	75		347.91	26,093	(13,014)	-33.28%
28	12"	0		693.66	0	0		474.04	0	0	0.00%
29											
30											
31	<u>Volumetric Charges:</u>										
32	Monthly All Water		3,407,281	1.525300	5,197,126		3,407,281	1.2041	4,102,651	(1,094,475)	-21.06%
33	Quarterly All Water		53,117,687	1.525300	81,020,408		53,117,687	1.2041	63,958,132	(17,062,276)	-21.06%
34											
35											
36											
37											
38	Total		<u>56,524,968</u>		<u>\$99,143,080</u>		<u>56,524,968</u>		<u>\$84,385,761</u>	<u>(\$14,757,319)</u>	<u>-14.88%</u>
39											
40											

Test Year Operating Revenues at Present Rates vs Proposed Rates
12 Month Test Period Ended December 31, 2002

Missouri Public Service Commission
 Company: Missouri-American Water Company
 District: St. Louis

Case No. WR-2003-0500
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Line #	Class/ Description	Present Pro Forma Rates				Proposed Pro Forma Rates				Dollar Change	Percentage Change
		Customer Meter Billings	Sales (CCF)	Current Rate	Total Revenue	Customer Meter Billings	Sales (CCF)	Proposed Rate	Total Revenue		
1											
2	Rate B:										
3	Minimum Charge:										
4	<u>Monthly</u>										
5	5/8"	0		\$0.00	\$0	0		\$0.00	\$0	\$0	0.00%
6	3/4"	0		0.00	0	0		\$0.00	0	0	0.00%
7	1"	0		0.00	0	0		\$0.00	0	0	0.00%
8	1-1/2"	0		0.00	0	0		\$0.00	0	0	0.00%
9	2"	0		0.00	0	0		\$0.00	0	0	0.00%
10	3"	0		0.00	0	0		\$0.00	0	0	0.00%
11	4"	0		0.00	0	0		\$0.00	0	0	0.00%
12	6"	0		0.00	0	0		\$0.00	0	0	0.00%
13	8"	0		0.00	0	0		\$0.00	0	0	0.00%
14	10"	0		0.00	0	0		\$0.00	0	0	0.00%
15	12"	36		0.00	0	36		\$0.00	0	0	0.00%
16											
17	<u>Quarterly</u>										
18	5/8"	0		0.00	0	0		12.03	0	0	0.00%
19	3/4"	0		0.00	0	0		12.59	0	0	0.00%
20	1"	0		0.00	0	0		13.52	0	0	0.00%
21	1-1/2"	0		0.00	0	0		17.32	0	0	0.00%
22	2"	0		0.00	0	0		19.32	0	0	0.00%
23	3"	0		0.00	0	0		47.40	0	0	0.00%
24	4"	0		0.00	0	0		66.70	0	0	0.00%
25	6"	0		0.00	0	0		103.70	0	0	0.00%
26	8"	0		0.00	0	0		226.58	0	0	0.00%
27	10"	0		0.00	0	0		347.91	0	0	0.00%
28	12"	0		0.00	0	0		474.04	0	0	0.00%
29											
30											
31	<u>Volumetric Charges:</u>										
32	Monthly All Water		2,451,853	0.808300	1,981,833		2,451,853	1.0866	2,664,298	682,465	34.44%
33	Quarterly All Water		0	0.808300	0		0	1.0866	0	0	0.00%
34											
35											
36											
37											
38	Total		<u>2,451,853</u>		<u>\$1,981,833</u>		<u>2,451,853</u>		<u>\$2,664,298</u>	<u>\$682,465</u>	<u>34.44%</u>
39											
40											

Test Year Operating Revenues at Present Rates vs Proposed Rates
12 Month Test Period Ended December 31, 2002

Missouri Public Service Commission
 Company: Missouri-American Water Company
 District: St. Louis

Case No. WR-2003-0500
 STAFF - ST LOUIS COUNTY
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Line #	Class/ Description	Present Pro Forma Rates				Proposed Pro Forma Rates				Dollar Change	Percentage Change
		Customer Meter Billings	Sales (CCF)	Current Rate	Total Revenue	Customer Meter Billings	Sales (CCF)	Proposed Rate	Total Revenue		
1											
2	Rate D:										
3	Minimum Charge:										
4	<u>Monthly</u>										
5	5/8"	0		\$6.15	\$0	0		\$10.05	\$0	\$0	0.00%
6	3/4"	0		6.87	0	0		\$10.23	0	0	0.00%
7	1"	0		8.31	0	0		\$10.55	0	0	0.00%
8	1-1/2"	0		11.90	0	0		\$11.81	0	0	0.00%
9	2"	0		16.20	0	0		\$12.48	0	0	0.00%
10	3"	0		27.68	0	0		\$21.84	0	0	0.00%
11	4"	12		40.59	487	12		\$28.27	339	(148)	-30.39%
12	6"	12		76.48	918	12		\$40.61	487	(431)	-46.95%
13	8"	0		119.54	0	0		\$81.56	0	0	0.00%
14	10"	0		176.96	0	0		\$122.01	0	0	0.00%
15	12"	0		234.36	0	0		\$164.05	0	0	0.00%
16											
17	<u>Quarterly</u>										
18	5/8"	0		0.00	0	0		12.03	0	0	0.00%
19	3/4"	0		0.00	0	0		12.59	0	0	0.00%
20	1"	0		0.00	0	0		13.52	0	0	0.00%
21	1-1/2"	0		0.00	0	0		17.32	0	0	0.00%
22	2"	0		0.00	0	0		19.32	0	0	0.00%
23	3"	0		0.00	0	0		47.40	0	0	0.00%
24	4"	0		0.00	0	0		66.70	0	0	0.00%
25	6"	0		0.00	0	0		103.70	0	0	0.00%
26	8"	0		0.00	0	0		226.58	0	0	0.00%
27	10"	0		0.00	0	0		347.91	0	0	0.00%
28	12"	0		0.00	0	0		474.04	0	0	0.00%
29											
30											
31	<u>Volumetric Charges:</u>										
32	Monthly All Water		241,598	0.753400	182,020		241,598	0.894611	216,136	34,116	18.74%
33	Quarterly All Water		0	0.753400	0		0	0.894611	0	0	0.00%
34											
35											
36											
37											
38	Total		<u>241,598</u>		<u>\$183,425</u>		<u>241,598</u>		<u>\$216,962</u>	<u>\$33,537</u>	<u>18.28%</u>
39											
40											

Test Year Operating Revenues at Present Rates vs Proposed Rates
12 Month Test Period Ended December 31, 2002

Missouri Public Service Commission
 Company: Missouri-American Water Company
 District: St. Louis

Case No. WR-2003-0500
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Line #	Class/ Description	Present Pro Forma Rates				Proposed Pro Forma Rates				Dollar Change	Percentage Change
		Customer Meter Billings	Sales (CCF)	Current Rate	Total Revenue	Customer Meter Billings	Sales (CCF)	Proposed Rate	Total Revenue		
1											
2	Rate F:										
3	Minimum Charge:										
4	<u>Monthly</u>										
5	5/8"	601		\$0.00	\$0	601		\$0.00	\$0	\$0	0.00%
6	3/4"	599		0.00	0	559		0.00	0	0	0.00%
7	1"	42		0.00	0	42		0.00	0	0	0.00%
8	1-1/2"	0		0.00	0	0		0.00	0	0	0.00%
9	2"	0		0.00	0	0		0.00	0	0	0.00%
10	3"	0		0.00	0	0		0.00	0	0	0.00%
11	4"	0		0.00	0	0		0.00	0	0	0.00%
12	6"	0		0.00	0	0		0.00	0	0	0.00%
13	8"	0		0.00	0	0		0.00	0	0	0.00%
14	10"	0		0.00	0	0		0.00	0	0	0.00%
15	12"	0		0.00	0	0		0.00	0	0	0.00%
16											
17	<u>Quarterly</u>										
18	5/8"	25		0.00	0	25		0.00	0	0	0.00%
19	3/4"	1,075		0.00	0	1,075		0.00	0	0	0.00%
20	1"	28		0.00	0	28		0.00	0	0	0.00%
21	1-1/2"	1		0.00	0	1		0.00	0	0	0.00%
22	2"	7		0.00	0	7		0.00	0	0	0.00%
23	3"	1		0.00	0	1		0.00	0	0	0.00%
24	4"	1		0.00	0	1		0.00	0	0	0.00%
25	6"	1		0.00	0	1		0.00	0	0	0.00%
26	8"	1		0.00	0	1		0.00	0	0	0.00%
27	10"	1		0.00	0	1		0.00	0	0	0.00%
28	12"	1		0.00	0	1		0.00	0	0	0.00%
29											
30											
31	<u>Volumetric Charges:</u>										
32	Monthly All Water		60,059	1.525300	91,608		60,059	1.204084	72,316	(19,292)	-21.06%
33	Quarterly All Water		0	1.525300	0		0	1.204084	0	0	0.00%
34											
35											
36											
37											
38	Sub-total		<u>60,059</u>		<u>\$91,608</u>		<u>60,059</u>		<u>\$72,316</u>	<u>(\$19,292)</u>	<u>-21.06%</u>
39											
40											

Test Year Operating Revenues at Present Rates vs Proposed Rates
12 Month Test Period Ended December 31, 2002

Missouri Public Service Commission
 Company: Missouri-American Water Company
 District: St. Louis

Case No. WR-2003-0500
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Line #	Class/ Description	Present Pro Forma Rates				Proposed Pro Forma Rates				Dollar Change	Percentage Change
		Customer Meter Billings	Sales (CCF)	Current Rate	Total Revenue	Customer Meter Billings	Sales (CCF)	Proposed Rate	Total Revenue		
1											
2	Rate F:										
3	Detector Check Meters										
4	5/8"	38		\$110.40	\$4,195	38		\$50.39	\$1,915	(\$2,280)	-54.35%
5	3/4"	2,095		119.04	249,389	2,095		\$54.33	113,829	(135,560)	-54.36%
6	1"	30		136.32	4,090	30		\$62.22	1,867	(2,223)	-54.35%
7	1 1/2"	5		179.40	897	5		\$81.88	409	(488)	-54.40%
8	2"	23		231.00	5,313	23		\$105.44	2,425	(2,888)	-54.36%
9	3"	5		368.76	1,844	5		\$168.31	842	(1,002)	-54.34%
10	4"	6		523.68	3,142	6		\$239.02	1,434	(1,708)	-54.36%
11	6"	7		954.36	6,681	7		\$435.60	3,049	(3,632)	-54.36%
12	2,209.00										
13											
14	Tap Size										
15	2" or Less	113		\$21.92	\$2,477	113		\$10.00	1,131	(1,346)	-54.34%
16	4"	463		87.52	40,522	463		\$39.95	18,495	(22,027)	-54.36%
17	6"	1,812		196.92	356,819	1,812		\$89.88	162,864	(193,955)	-54.36%
18	8"	1,099		350.12	384,782	1,099		\$159.81	175,627	(209,155)	-54.36%
19	10"	44		547.08	24,072	44		\$249.70	10,987	(13,085)	-54.36%
20	12"	64		787.88	50,424	64		\$359.61	23,015	(27,409)	-54.36%
21	20"	1		0.00	0	1			0	0	0.00%
22	3,596.00				<u>1,134,647</u>				<u>517,889</u>		
23	Rate E										
24	Public Fire										
25	Annual										
26	# of Hydrants	30,107		196.92	5,928,670	0		288.92	0	(5,928,670)	-100.00%
27											
28	Semi-Annual										
29	# of Hydrants	0		98.46	0	0		144.46	0	0	0.00%
30											
31											
32	Sub-total		<u>0</u>		<u>\$7,063,317</u>		<u>0</u>		<u>\$517,889</u>	<u>(\$6,545,428)</u>	<u>-92.67%</u>
33											
34											
35	Total Rate F and E		<u>60,059</u>		<u>\$7,154,925</u>		<u>60,059</u>		<u>\$590,205</u>	<u>(\$6,564,720)</u>	<u>-91.75%</u>
36											
37											
38											
39											
40											

Test Year Operating Revenues at Present Rates vs Proposed Rates
12 Month Test Period Ended December 31, 2002

Missouri Public Service Commission
 Company: Missouri-American Water Company
 District: St. Louis

Case No. WR-2003-0500
 STAFF - ST LOUIS COUNTY
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Line #	Class/ Description	Present Pro Forma Rates				Proposed Pro Forma Rates				Dollar Change	Percentage Change
		Customer Meter Billings	Sales (CCF)	Current Rate	Total Revenue	Customer Meter Billings	Sales (CCF)	Proposed Rate	Total Revenue		
1											
2	Rate H:										
3	Minimum Charge:										
4	<u>Monthly</u>										
5	5/8"	0		\$0.00	\$0	0		\$10.05	\$0	\$0	0.00%
6	3/4"	0		0.00	0	0		\$10.23	0	0	0.00%
7	1"	0		0.00	0	0		\$10.55	0	0	0.00%
8	1-1/2"	0		0.00	0	0		\$11.81	0	0	0.00%
9	2"	0		0.00	0	0		\$12.48	0	0	0.00%
10	3"	0		0.00	0	0		\$21.84	0	0	0.00%
11	4"	0		0.00	0	0		\$28.27	0	0	0.00%
12	6"	0		0.00	0	0		\$40.61	0	0	0.00%
13	8"	0		0.00	0	0		\$81.56	0	0	0.00%
14	10"	0		0.00	0	0		\$122.01	0	0	0.00%
15	12"	0		0.00	0	0		\$164.05	0	0	0.00%
16											
17	<u>Quarterly</u>										
18	5/8"	0		0.00	0	0		12.03	0	0	0.00%
19	3/4"	0		0.00	0	0		12.59	0	0	0.00%
20	1"	0		0.00	0	0		13.52	0	0	0.00%
21	1-1/2"	0		0.00	0	0		17.32	0	0	0.00%
22	2"	0		0.00	0	0		19.32	0	0	0.00%
23	3"	0		0.00	0	0		47.40	0	0	0.00%
24	4"	0		0.00	0	0		66.70	0	0	0.00%
25	6"	0		0.00	0	0		103.70	0	0	0.00%
26	8"	0		0.00	0	0		226.58	0	0	0.00%
27	10"	0		0.00	0	0		347.91	0	0	0.00%
28	12"	0		0.00	0	0		474.04	0	0	0.00%
29											
30											
31	<u>Volumetric Charges:</u>										
32	Monthly All Water		377,167	0.363200	136,987		377,167	0.363200	136,987	0	0.00%
33	Quarterly All Water		0	0.363200	0		0	0.363200	0	0	0.00%
34											
35											
36	Annual Fixed Charge				764,000				764,000	0	0.00%
37											
38	Total		<u>377,167</u>		<u>\$900,987</u>		<u>377,167</u>		<u>\$900,987</u>	<u>\$0</u>	<u>0.00%</u>
39											
40											

Test Year Operating Revenues at Present Rates vs Proposed Rates
12 Month Test Period Ended December 31, 2002

Missouri Public Service Commission
 Company: Missouri-American Water Company
 District: St. Louis

Case No. WR-2003-0500
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Line #	Class/ Description	Present Pro Forma Rates				Proposed Pro Forma Rates				Dollar Change	Percentage Change
		Customer Meter Billings	Sales (CCF)	Current Rate	Total Revenue	Customer Meter Billings	Sales (CCF)	Proposed Rate	Total Revenue		
1											
2	Rate J:										
3	Minimum Charge:										
4	<u>Monthly</u>										
5	5/8"	63.8		\$6.15	\$392	64		\$10.05	\$643	\$251	64.03%
6	3/4"	20.2		6.87	139	20		\$10.23	205	66	47.48%
7	1"	44.1		8.31	366	44		\$10.55	464	98	26.78%
8	1-1/2"	164.9		11.90	1,962	165		\$11.81	1,949	(13)	-0.66%
9	2"	763.3		16.20	12,365	763		\$12.48	9,522	(2,843)	-22.99%
10	3"	635.3		27.68	17,585	635		\$21.84	13,867	(3,718)	-21.14%
11	4"	809.6		40.59	32,862	810		\$28.27	22,900	(9,962)	-30.31%
12	6"	426.2		76.48	32,596	426		\$40.61	17,298	(15,298)	-46.93%
13	8"	114.7		119.54	13,711	115		\$81.56	9,380	(4,331)	-31.59%
14	10"	37.4		176.96	6,618	37		\$122.01	4,514	(2,104)	-31.79%
15	12"	0.0		234.36	0	0		\$164.05	0	0	0.00%
16	3,080										
17	<u>Quarterly</u>										
18	5/8"	0		0.00	0	0		12.03	0	0	0.00%
19	3/4"	0		0.00	0	0		12.59	0	0	0.00%
20	1"	0		0.00	0	0		13.52	0	0	0.00%
21	1-1/2"	0		0.00	0	0		17.32	0	0	0.00%
22	2"	0		0.00	0	0		19.32	0	0	0.00%
23	3"	0		0.00	0	0		47.40	0	0	0.00%
24	4"	0		0.00	0	0		66.70	0	0	0.00%
25	6"	0		0.00	0	0		103.70	0	0	0.00%
26	8"	0		0.00	0	0		226.58	0	0	0.00%
27	10"	0		0.00	0	0		347.91	0	0	0.00%
28	12"	0		0.00	0	0		474.04	0	0	0.00%
29											
30											
31	<u>Volumetric Charges:</u>										
32	Monthly All Water		9,946,139	0.753400	7,493,421		9,946,139	0.787257	7,830,165	336,744	4.49%
33	Quarterly All Water		0	0.753400	0		0	0.787257	0	0	0.00%
34											
35											
36											
37											
38	Total		<u>9,946,139</u>		<u>\$7,612,017</u>		<u>9,946,139</u>		<u>\$7,910,907</u>	<u>\$298,890</u>	<u>3.93%</u>
39											
40											

Test Year Operating Revenues at Present Rates vs Proposed Rates
12 Month Test Period Ended December 31, 2002

Missouri Public Service Commission
 Company: Missouri-American Water Company
 District: St. Louis

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Line #	Class/ Description	Present Pro Forma Rates				Proposed Pro Forma Rates				Dollar Change	Percentage Change
		Customer Meter Billings	Sales (CCF)	Current Rate	Total Revenue	Customer Meter Billings	Sales (CCF)	Proposed Rate	Total Revenue		
1											
2	Rate K:										
3	Minimum Charge:										
4	<u>Monthly</u>										
5	5/8"	7.0		\$6.15	\$43	7		\$10.05	\$70	\$27	62.79%
6	3/4"	38.0		6.87	261	38		\$10.23	389	128	49.04%
7	1"	0.0		8.31	0	0		\$10.55	0	0	0.00%
8	1-1/2"	0.0		11.90	0	0		\$11.81	0	0	0.00%
9	2"	0.0		16.20	0	0		\$12.48	0	0	0.00%
10	3"	0.0		27.68	0	0		\$21.84	0	0	0.00%
11	4"	0.0		40.59	0	0		\$28.27	0	0	0.00%
12	6"	0.0		76.48	0	0		\$40.61	0	0	0.00%
13	8"	0.0		119.54	0	0		\$81.56	0	0	0.00%
14	10"	0.0		176.96	0	0		\$122.01	0	0	0.00%
15	12"	0.0		234.36	0	0		\$164.05	0	0	0.00%
16											
17	<u>Quarterly</u>										
18	5/8"	1,446.0		19.10	27,619	1,446		12.03	17,398	(10,221)	-37.01%
19	3/4"	1,200.0		21.26	25,512	1,200		12.59	15,107	(10,405)	-40.78%
20	1"	222.0		25.57	5,677	222		13.52	3,002	(2,675)	-47.12%
21	1-1/2"	27.0		36.33	981	27		17.32	468	(513)	-52.29%
22	2"	340.0		49.24	16,742	340		19.32	6,570	(10,172)	-60.76%
23	3"	32.0		83.70	2,678	32		47.40	1,517	(1,161)	-43.35%
24	4"	22.0		122.45	2,694	22		66.70	1,467	(1,227)	-45.55%
25	6"	44.0		230.10	10,124	44		103.70	4,563	(5,561)	-54.93%
26	8"	51.0		359.28	18,323	51		226.58	11,555	(6,768)	-36.94%
27	10"	30.0		531.51	15,945	30		347.91	10,437	(5,508)	-34.54%
28	12"	0.0		703.75	0	0		474.04	0	0	0.00%
29											
30											
31	<u>Volumetric Charges:</u>										
32	Monthly-First 1500 Gallons		59	0.000000	0		59	1.2041	71	71	0.00%
33	Monthly > 1500 Gallons		695	1.681000	1,168		695	1.2041	837	(331)	-28.34%
34	Quarterly-First 4500 Gallons		13,095	0.000000	0		13,095	1.2041	15,767	15,767	0.00%
35	Quarterly > 4500 Gallons		209,706	1.681000	352,516		209,706	1.2041	252,504	(100,012)	-28.37%
36											
37											
38	Total		<u>223,555</u>		<u>\$480,283</u>		<u>223,555</u>		<u>\$341,722</u>	<u>(\$138,561)</u>	<u>-28.85%</u>
39											

MISSOURI-AMERICAN WATER COMPANY
ST. LOUIS COUNTY DISTRICT
COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS
PSC STAFF STUDY

Account (1)	Factor Ref. (2)	Cost of Service (3)	Rate A & K (4)	Rate B (5)	Rate J (6)	Rate D (7)	Other (8)	Fire Protection		
								Rate F (9)	Rate E (10)	
OPERATION AND MAINTENANCE EXPENSES										
SOURCE OF SUPPLY EXPENSES										
Super & Eng Oper SS	2	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0.0
Labor & Exp Oper SS	2	17,652	15,117	590	1,862	48	0	9	26	0.0
Labor & Exp Oper SS	2	79,571	68,145	2,658	8,395	215	0	40	119	0.0
Purchased Water	1	6,302	5,130	222	903	22	0	6	18	0.0
TOTAL SS EXPENSE - OPERATION		103,525	88,392	3,470	11,160	285	0	54	164	0.0
Misc Exp Oper SS	2	0	0	0	0	0	0	0	0	0.0
Misc Exp Oper SS	2	95	81	3	10	0	0	0	0	0.0
Rents Oper SS	2	0	0	0	0	0	0	0	0	0.0
Super & Eng Maint SS	2	0	0	0	0	0	0	0	0	0.0
Struct & Improve Maint SS	2	13,932	11,931	465	1,470	38	0	7	21	0.0
Struct & Improve Maint SS	2	1,881	1,611	63	198	5	0	1	3	0.0
Collect & Impound Maint SS	2	0	0	0	0	0	0	0	0	0.0
Lake, River & Oth Maint SS	2	51,353	43,979	1,715	5,418	139	0	26	77	0.0
Lake, River & Oth Maint SS	2	0	0	0	0	0	0	0	0	0.0
Wells & Springs Maint SS	2	0	0	0	0	0	0	0	0	0.0
Wells & Springs Maint SS	2	0	0	0	0	0	0	0	0	0.0
Infil Gali & Tunnels Maint SS	2	578	495	19	61	2	0	0	1	0.0
Supply Mains Maint SS	2	0	0	0	0	0	0	0	0	0.0
Misc Plant Maint SS	2	33,552	28,734	1,121	3,540	91	0	17	50	0.0
Misc Plant Maint SS	2	197,542	169,175	6,598	20,841	533	0	99	296	0.0
TOTAL SS EXPENSE - MAINTENANCE		298,933	256,006	9,984	31,537	807	0	149	448	0.0
TOTAL SS EXPENSE		402,458	344,398	13,454	42,698	1,092	0	204	613	0.0
POWER AND PUMPING EXPENSES										
Super & Eng Oper P	6	136	115	5	14	0	0	0	1	0.0
Fuel for Power Prod	1	0	0	0	0	0	0	0	0	0.0
Labor & Exp Oper Pwr Prod	6	5,938	5,037	197	621	16	0	12	56	0.0
Labor & Exp Oper Pwr Prod	6	0	0	0	0	0	0	0	0	0.0
Purch Fuel/Power for Pump	1	5,837,892	4,752,628	206,078	836,570	20,433	0	5,254	16,930	0.0
Labor & Exp Oper Pump	6	1,126,897	955,834	37,300	117,761	3,043	0	2,254	10,706	0.0
Labor & Exp Oper Pump	6	121	103	4	13	0	0	0	1	0.0
Expenses Transferred	6	0	0	0	0	0	0	0	0	0.0
Misc Exp Oper P	6	103,046	87,404	3,411	10,768	278	0	206	979	0.0
Rents Oper P	6	31,676	26,868	1,048	3,310	86	0	63	301	0.0
TOTAL PUMPING EXPENSE - OPERATION		7,105,706	5,827,988	248,042	969,056	23,856	0	7,790	28,974	0.0

MISSOURI-AMERICAN WATER COMPANY
ST. LOUIS COUNTY DISTRICT
COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS
PSC STAFF STUDY

Account (1)	Factor Ref. (2)	Cost of Service (3)	Rate A & K (4)	Rate B (5)	Rate J (6)	Rate D (7)	Other (8)	Fire Protection		
								Rate F (9)	Rate E (10)	
Super & Eng Maint P	6	27,600	23,410	914	2,884	75	0	55	262	0.0
Struct & Improve Maint P	6	375,287	318,318	12,422	39,217	1,013	0	751	3,565	0.0
Power Prod Equip Maint P	6	259,577	220,173	8,592	27,126	701	0	519	2,466	0.0
Pump Equip Maint P	6	5,894	4,999	195	616	16	0	12	56	0.0
Pump Equip Maint P	6	16,907	14,341	560	1,767	46	0	34	161	0.0
TOTAL PUMPING EXPENSES - MAINTENANCE		685,265	581,242	22,682	71,610	1,850	0	1,371	6,510	0.0
TOTAL PUMPING EXPENSES		7,790,971	6,409,229	270,725	1,040,667	25,706	0	9,160	35,484	0.0
WATER TREATMENT										0.0
Super & Eng Oper WT	2	370,854	317,599	12,387	39,125	1,001	0	185	556	0.0
Chemicals	1	3,852,144	3,136,030	135,981	552,012	13,483	0	3,467	11,171	0.0
Labor & Exp Oper WT	2	1,557,703	1,334,017	52,027	164,338	4,206	0	779	2,337	0.0
Labor & Exp Oper WT	2	149,654	128,164	4,998	15,788	404	0	75	224	0.0
Misc Exp Oper WT	2	57,672	49,390	1,926	6,084	156	0	29	87	0.0
Misc Exp Oper WT	1	321,888	262,049	11,383	46,127	1,127	0	290	933	0.0
Misc Exp Oper WT	2	50,637	43,366	1,691	5,342	137	0	25	76	0.0
Rents Oper WT	2	107,945	92,444	3,605	11,388	291	0	54	162	0.0
TOTAL WT EXPENSE - OPERATION		6,468,497	5,363,059	223,978	840,205	20,804	0	4,904	15,546	0.0
Super & Eng Maint WT	2	27,286	23,368	911	2,879	74	0	14	41	0.0
Struct & Improve Maint WT	2	84,851	72,666	2,834	8,952	229	0	42	127	0.0
Struct & Improve Maint WT	2	0	0	0	0	0	0	0	0	0.0
WT Equip Maint WT	2	642,629	550,347	21,464	67,797	1,735	0	321	964	0.0
WT Equip Maint WT	2	275,361	235,819	9,197	29,051	743	0	138	413	0.0
TOTAL WT EXPENSE - MAINTENANCE		1,030,127	882,201	34,406	108,678	2,781	0	515	1,545	0.0
TOTAL WT EXPENSE		7,498,624	6,245,260	258,385	948,883	23,586	0	5,419	17,092	0.0
TRANSMISSION AND DISTRIBUTION EXPENSES										0.0
Super & Eng Oper TD	11	1,014,885	872,395	27,503	69,317	2,131	0	10,250	33,288	0.0
Storage Facility Exp	5	10,170	7,939	310	750	23	0	179	969	0.0
Storage Facility Exp	5	941	735	29	69	2	0	17	90	0.0
TD Lines Exp	7	509,114	426,943	16,648	40,271	1,273	0	3,767	20,212	0.0
TD Lines Exp	7	2,656,736	2,227,939	86,875	210,148	6,642	0	19,660	105,472	0.0
Meter Expense	9	445,148	428,722	890	11,974	178	0	3,383	0	0.0
Meter Expense	9	0	0	0	0	0	0	0	0	0.0
Customer Install Exp	10	241,437	229,075	24	483	0	0	11,855	0	0.0
Customer Install Exp	10	0	0	0	0	0	0	0	0	0.0
Misc Exp Oper TD	11	164,982	141,819	4,471	11,268	346	0	1,666	5,411	0.0
Misc Exp Oper TD	11	0	0	0	0	0	0	0	0	0.0
Misc Exp Oper TD	11	333,787	286,923	9,046	22,798	701	0	3,371	10,948	0.0
Rents Oper TD	11	908	781	25	62	2	0	9	30	0.0
TOTAL T & D EXPENSE OPERATION		5,378,108	4,623,270	145,821	367,140	11,299	0	54,158	176,421	0.0

MISSOURI-AMERICAN WATER COMPANY

ST. LOUIS COUNTY DISTRICT

COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS

PSC STAFF STUDY

Account (1)	Factor Ref. (2)	Cost of Service (3)	Rate A & K (4)	Rate B (5)	Rate J (6)	Rate D (7)	Other (8)	Fire Protection		
								Rate F (9)	Rate E (10)	
Super & Eng Maint TD	12	252,720	198,309	6,495	16,199	505	0	2,300	28,911	0.0
Struct & Improve Maint TD	12	28,378	22,268	729	1,819	57	0	258	3,246	0.0
Struct & Improve Maint TD	12	0	0	0	0	0	0	0	0	0.0
Dist Res Stand Maint TD	5	3,043	2,375	93	224	7	0	54	290	0.0
TD Main Maint TD	7	100	84	3	8	0	0	1	4	0.0
TD Main Maint TD	7	3,423,279	2,870,762	111,941	270,781	8,558	0	25,332	135,904	0.0
Fire Main Maint TD	8	42	0	0	0	0	0	0	42	0.0
Services Maint TD	10	240,218	227,919	24	480	0	0	11,795	0	0.0
Services Maint TD	10	2,088	1,981	0	4	0	0	103	0	0.0
Meters Maint TD	9	347,371	334,553	695	9,344	139	0	2,640	0	0.0
Meters Maint TD	9	0	0	0	0	0	0	0	0	0.0
Hydrants Maint TD	8	364,662	0	0	0	0	0	0	364,662	0.0
Hydrants Maint TD	8	63	0	0	0	0	0	0	63	0.0
Misc Plant Maint TD	12	3,268,732	2,564,974	84,006	209,526	6,537	0	29,745	373,943	0.0
Mat and Sup Maint TD	12	1,473,421	1,156,193	37,867	94,446	2,947	0	13,408	168,559	0.0
Misc Maint TD	12	0	0	0	0	0	0	0	0	0.0
Amort Def Maint TD	5	0	0	0	0	0	0	0	0	0.0
Permits TD	12	0	0	0	0	0	0	0	0	0.0
TOTAL T & D EXPENSE - MAINTENANCE		9,404,117	7,379,419	241,854	602,833	18,751	0	85,635	1,075,625	0.0
TOTAL T & D EXPENSE		14,782,225	12,002,689	387,675	969,972	30,050	0	139,793	1,252,046	0.0
CUSTOMER ACCOUNTS										0.0
Supervision CA	13	21,678	21,433	0	17	0	0	228	0	0.0
Meter Reading Exp CA	14	996,555	995,758	0	797	0	0	0	0	0.0
Meter Reading Exp CA	14	603	603	0	0	0	0	0	0	0.0
Meter Reading Exp CA	14	0	0	0	0	0	0	0	0	0.0
Cust Rec & Collection CA	13	210,480	208,102	0	168	0	0	2,210	0	0.0
Cust Rec & Collection CA	13	538,326	532,243	0	431	0	0	5,652	0	0.0
Uncollectible Accts	13	849,447	839,848	0	680	0	0	8,919	0	0.0
Misc Cust Accts Exp CA	13	47,273	46,739	0	38	0	0	496	0	0.0
Misc Cust Accts Exp CA	13	0	0	0	0	0	0	0	0	0.0
Misc Cust Accts Exp CA	13	57,024	56,380	0	46	0	0	599	0	0.0
Cust Serv & Info Exp CA	13	2,458,076	2,430,300	0	1,966	0	0	25,810	0	0.0
TOTAL CUSTOMER ACCOUNTING EXPENSE		5,179,462	5,131,404	0	4,144	0	0	43,914	0	0.0

MISSOURI-AMERICAN WATER COMPANY
ST. LOUIS COUNTY DISTRICT
COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS
PSC STAFF STUDY

Account (1)	Factor Ref. (2)	Cost of Service (3)	Rate A & K (4)	Rate B (5)	Rate J (6)	Rate D (7)	Other (8)	Fire Protection		
								Rate F (9)	Rate E (10)	
ADMINISTRATIVE AND GENERAL EXPENSES										
Salaries AG	15	3,722,614	3,191,025	83,759	228,196	6,701	0	27,547	185,386	0.0
Other Supplies & Exp AG	15	666	571	15	41	1	0	5	33	0.0
Other Supplies & Exp AG	15	849,493	728,185	19,114	52,074	1,529	0	6,286	42,305	0.0
Other Supplies & Exp AG	15	387,969	332,567	8,729	23,782	698	0	2,871	19,321	0.0
Mgmt Fees-Corporate/Shared Service Center	15	1,250,512	1,071,939	28,137	76,656	2,251	0	9,254	62,275	0.0
Mgmt Fees-Call Center	13	2,294,518	2,268,590	0	1,836	0	0	24,092	0	0.0
Mgmt Fees-Belleville Lab	2	87,199	74,677	2,912	9,199	235	0	44	131	0.0
Mgmt Fees- Financial ITS	15	223,319	191,429	5,025	13,689	402	0	1,653	11,121	0.0
Mgmt Fees- Customer Billings ITS	13	1,260,806	1,246,559	0	1,009	0	0	13,238	0	0.0
Mgmt Fees-Other ITS	15	14,186	12,160	319	870	26	0	105	706	0.0
Outside Services AG	15	1,691,585	1,450,027	38,061	103,694	3,045	0	12,518	84,241	0.0
Outside Services AG	15	0	0	0	0	0	0	0	0	0.0
Property Insurance	15	623,620	534,567	14,031	38,228	1,123	0	4,615	31,056	0.0
Ins Gen Liab Oper AG	15	815,662	699,185	18,352	50,000	1,468	0	6,036	40,620	0.0
Ins Work Comp AG	16	434,243	364,590	9,988	28,573	782	0	2,996	27,314	0.0
Ins Other Oper AG	15	0	0	0	0	0	0	0	0	0.0
Property Insurance	15	0	0	0	0	0	0	0	0	0.0
Injuries & Damages	16	37,496	31,482	862	2,467	67	0	259	2,358	0.0
Employee Pension & Benefits	16	5,052,129	4,241,768	116,199	332,430	9,094	0	34,860	317,779	0.0
Employee Pension & Benefits	16	0	0	0	0	0	0	0	0	0.0
Employee Pension & Benefits	16	0	0	0	0	0	0	0	0	0.0
Reg Commision Exp	15	150,666	129,151	3,390	9,236	271	0	1,115	7,503	0.0
Rents AG	15	729,478	625,309	16,413	44,717	1,313	0	5,398	36,328	0.0
	15	(727,119)	(623,286)	(16,360)	(44,572)	(1,309)	0	(5,381)	(36,211)	0.0
Misc Exp AG	15	0	0	0	0	0	0	0	0	0.0
Research & Development	15	0	0	0	0	0	0	0	0	0.0
TOTAL A & G OPERATIONS		18,899,042	16,570,494	348,946	972,126	27,697	0	147,511	832,268	0.0
General Plant Maint AG	15	0	0	0	0	0	0	0	0	0.0
General Plant Maint AG	15	137,450	117,822	3,093	8,426	247	0	1,017	6,845	0.0
TOTAL A & G EXPENSE - MAINTENANCE		137,450	117,822	3,093	8,426	247	0	1,017	6,845	0.0
TOTAL A & G EXPENSE		19,036,492	16,688,316	352,039	980,551	27,945	0	148,528	839,113	0.0
Total Operation & Maintenance Expenses		54,690,232	46,821,297	1,282,277	3,986,915	108,377	0	347,018	2,144,347	0.0

MISSOURI-AMERICAN WATER COMPANY

ST. LOUIS COUNTY DISTRICT

COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS

PSC STAFF STUDY

Account	Factor	Cost of	Rate A & K	Rate B	Rate J	Rate D	Other	Fire Protection		
	Ref.	Service						Rate F	Rate E	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
DEPRECIATION EXPENSE										
Struct & Imp SS	2	115,997	99,340	3,874	12,238	313	0	58	174	0.0
Struct & Imp P	6	1,215	1,031	40	127	3	0	2	12	0.0
Struct & Imp Pumps (STL)	6	39,919	33,859	1,321	4,172	108	0	80	379	0.0
Struct & Imp Pump Boosters	6	15,296	12,974	506	1,598	41	0	31	145	0.0
Struct & Imp WT	2	8,097	6,934	270	854	22	0	4	12	0.0
Struct & Imp WT Nth Plt (ST	2	51,851	44,405	1,732	5,470	140	0	26	78	0.0
Struct & Imp WT Ctrl Plt 1	2	29,083	24,907	971	3,068	79	0	15	44	0.0
Struct & Imp WT Ctrl Plt 3	2	236,015	202,123	7,883	24,900	637	0	118	354	0.0
Struct & Imp WT Sth Plt (ST	2	23,407	20,046	782	2,469	63	0	12	35	0.0
Struct & Imp WT Meramec (ST	2	96,656	84,489	3,295	10,408	266	0	49	148	0.0
Struct & Imp TD	7	83,712	70,201	2,737	6,622	209	0	619	3,323	0.0
Struct & Imp TD Spec Cross	7	26,736	22,421	874	2,115	67	0	198	1,061	0.0
Struct & Imp Offices	15	0	0	0	0	0	0	0	0	0.0
Struct & Imp Leasehold	15	11,149	9,557	251	683	20	0	83	555	0.0
Struct & Imp Leasehold	15	33,973	29,122	764	2,083	61	0	251	1,692	0.0
Struct & Imp Store,Shop,Gar	15	4,362	3,739	98	267	8	0	32	217	0.0
Struct & Imp Misc	15	22,398	19,200	504	1,373	40	0	166	1,115	0.0
Collect & Impounding	1	0	0	0	0	0	0	0	0	0.0
Lake, River & Other Intakes	2	0	0	0	0	0	0	0	0	0.0
Wells & Springs	2	0	0	0	0	0	0	0	0	0.0
Supply Mains	2	0	0	0	0	0	0	0	0	0.0
Supply Mains Nth Plt (STL)	2	4,300	3,683	144	454	12	0	2	6	0.0
Supply Mains Ctrl Plt (STL)	2	68,767	58,892	2,297	7,255	186	0	34	103	0.0
Supply Mains Sth Plt (STL)	2	6,197	5,307	207	654	17	0	3	9	0.0
Supply Mains Meramec Plt (S	2	22,993	19,691	768	2,426	62	0	11	34	0.0
Power Generation Equip Othe	6	0	0	0	0	0	0	0	0	0.0
Boiler Plant Equipment P	6	0	0	0	0	0	0	0	0	0.0
Pump Equip Steam	6	0	0	0	0	0	0	0	0	0.0
Pump Equip Electric	6	0	0	0	0	0	0	0	0	0.0
Pump Equip Elec Pre46 (STL)	6	0	0	0	0	0	0	0	0	0.0
Pump Equip Elec Post46 (STL	6	435,007	368,973	14,399	45,458	1,175	0	870	4,133	0.0
Pump Equip Elec Boosters Po	6	33,222	28,179	1,100	3,472	90	0	66	316	0.0
Pump Equip Diesel	6	0	0	0	0	0	0	0	0	0.0
Pump Equip Diesel Stratman\	6	0	0	0	0	0	0	0	0	0.0
Pump Equip Diesel Ctrl Plt	6	37,202	31,555	1,231	3,888	100	0	74	353	0.0
Pump Equip Hydraulic	6	0	0	0	0	0	0	0	0	0.0
Pump Equip Other	6	0	0	0	0	0	0	0	0	0.0
WT Equip Non-Media	2	5,850	5,010	195	617	16	0	3	9	0.0
WT Equip Non-Med North (STL	2	119,126	102,020	3,979	12,568	322	0	60	179	0.0
WT Equip Non Media Ctrl 1 &	2	43,630	37,365	1,457	4,603	118	0	22	65	0.0
WT Equip Non Media Ctrl 3 (	2	404,162	346,124	13,499	42,639	1,091	0	202	606	0.0
WT Equip Non Media Sth (STL	2	47,250	40,465	1,578	4,985	128	0	24	71	0.0
WT Equip Non Media Mer (STL	2	133,666	114,472	4,464	14,102	361	0	67	200	0.0
WT Equip Filter Media	2	3,779	3,236	126	399	10	0	2	6	0.0
Dist Reservoirs & Standpipe	5	0	0	0	0	0	0	0	0	0.0
Elevated Tanks & Standpipes	5	43,045	33,601	1,313	3,172	99	0	758	4,102	0.0
Ground Level Facilities	5	176,090	137,456	5,371	12,978	405	0	3,099	16,781	0.0
TD Mains Not Classified by	7	0	0	0	0	0	0	0	0	0.0
TD Mains 4 & Less	4	0	0	0	0	0	0	0	0	0.0
TD Mains 6 to 8"	4	10,382	8,706	339	821	26	0	77	412	0.0
TD Mains 10 to 16"	3	0	0	0	0	0	0	0	0	0.0
TD Mains 18 & Grtr	3	0	0	0	0	0	0	0	0	0.0
TD Mains AC 4 (STL)	4	0	0	0	0	0	0	0	0	0.0
TD Mains CI <10 1900-28 (S"	4	21,515	18,042	704	1,702	54	0	159	854	0.0
TD Mains CI <10 1929-56 (S"	4	214,487	179,869	7,014	16,966	536	0	1,587	8,515	0.0
TD Mains CI <10 1957-93 (S"	4	619,214	519,273	20,248	48,980	1,548	0	4,582	24,583	0.0
TD Mains CI 12 (STL)	3	107,254	88,871	3,475	10,961	290	0	590	3,067	0.0

MISSOURI-AMERICAN WATER COMPANY
ST. LOUIS COUNTY DISTRICT
COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS
PSC STAFF STUDY

Account (1)	Factor Ref. (2)	Cost of Service (3)	Rate A & K (4)	Rate B (5)	Rate J (6)	Rate D (7)	Other (8)	Fire Protection		
								Rate F (9)	Rate E (10)	
TD Mains CI 16 (STL) *	3	172,827	143,204	5,600	17,663	467	0	951	4,943	0.0
TD Mains DI 6-8 (STL) *	4	2,631,964	2,207,165	86,065	208,188	6,580	0	19,477	104,489	0.0
TD Mains DI 12 (STL) *	3	583,727	483,676	18,913	59,657	1,576	0	3,210	16,695	0.0
TD Mains DI 16 & > (STL)	3	909,852	753,903	29,479	92,987	2,457	0	5,004	26,022	0.0
TD Mains Galve 1 (STL) *	4	852	714	28	67	2	0	6	34	0.0
TD Mains LJ 20 (STL) *	3	29,989	24,849	972	3,065	81	0	165	858	0.0
Fire Mains	8	0	0	0	0	0	0	0	0	0.0
Services	10	1,397	1,325	0	3	0	0	69	0	0.0
Meters Bronze Case	9	0	0	0	0	0	0	0	0	0.0
Meters Plastic Case	9	0	0	0	0	0	0	0	0	0.0
Meters Other	9	364,510	351,060	729	9,805	146	0	2,770	0	0.0
Meters Other-Rem Rdr Unts	9	80,405	77,438	161	2,163	32	0	611	0	0.0
Meter Installations	9	23,919	23,036	48	643	10	0	182	0	0.0
Meter Installation Other	9	141,209	135,998	282	3,799	56	0	1,073	0	0.0
Hydrants	8	433,592	0	0	0	0	0	0	433,592	0.0
Utility Plant Acquisition Adjustment	17	0	0	0	0	0	0	0	0	0.0
Other P/E WT Res Hand Equip	2	0	0	0	0	0	0	0	0	0.0
Other P/E TD	7	0	0	0	0	0	0	0	0	0.0
Other P/E CPS	15	0	0	0	0	0	0	0	0	0.0
Office Furniture & Equip	15	103,217	88,478	2,322	6,327	186	0	764	5,140	0.0
Comp & Periph Equip	15	663,627	568,861	14,932	40,680	1,195	0	4,911	33,049	0.0
Computer Software	15	7,541	6,464	170	462	14	0	56	376	0.0
Comp Software Personal	15	0	0	0	0	0	0	0	0	0.0
Data Handling Equipment	15	0	0	0	0	0	0	0	0	0.0
Other Office Equipment	15	6,836	5,860	154	419	12	0	51	340	0.0
Trans Equip Lt Duty Trks	15	8,446	7,240	190	518	15	0	63	421	0.0
Trans Equip Hvy Duty Trks	15	700,271	600,272	15,756	42,927	1,260	0	5,182	34,873	0.0
Trans Equip Autos	15	150,298	128,835	3,382	9,213	271	0	1,112	7,485	0.0
Trans Equip Other	15	34	29	1	2	0	0	0	2	0.0
Stores Equipment	15	2,684	2,301	60	165	5	0	20	134	0.0
Tools,Shop,Garage Equip	15	16,810	14,410	378	1,030	30	0	124	837	0.0
Tools,Shop,Garage Equip Oth	15	177,985	152,569	4,005	10,910	320	0	1,317	8,864	0.0
Laboratory Equipment	2	32,072	27,466	1,071	3,384	87	0	16	48	0.0
Laboratory Equip Other	2	5,016	4,296	168	529	14	0	3	8	0.0
Power Operated Equipment	15	67,676	58,012	1,523	4,149	122	0	501	3,370	0.0
Comm Equip Non-Telephone	15	43,344	37,154	975	2,657	78	0	321	2,159	0.0
Comm Equip Telephone	15	0	0	0	0	0	0	0	0	0.0
Misc Equipment	15	9,453	8,103	213	579	17	0	70	471	0.0
Other Tangible Property	17	0	0	0	0	0	0	0	0	0.0
Total Depreciation Expense		10,728,557	8,747,856	297,388	839,538	23,753	0	62,064	757,958	0.0
Amort-Other UP	18	(243,967)	(195,954)	(7,221)	(20,396)	(561)	0	(1,366)	(18,468)	
Taxes Other Than Income										
Utility Reg Assessment Fee	19	705,570	588,869	18,274	54,188	1,482	0	4,304	38,454	0.0
Property Taxes	18	7,016,623	5,635,752	207,692	586,590	16,138	0	39,293	531,158	0.0
FUTA	16	22,501	18,892	518	1,481	41	0	155	1,415	0.0
FICA	16	1,240,526	1,041,546	28,532	81,627	2,233	0	8,560	78,029	0.0
SUTA	16	63	53	1	4	0	0	0	4	0.0
Other Taxes & Licenses	15	181,838	155,872	4,091	11,147	327	0	1,346	9,056	0.0
Gross Receipts Tax	19	0	0	0	0	0	0	0	0	0.0
Total Taxes, Other Than Income		9,167,121	7,440,982	259,109	735,035	20,221	0	53,658	658,116	0.0
Income Taxes	18	5,026,486	4,037,274	148,784	420,214	11,561	0	28,148	380,505	0.0

MISSOURI-AMERICAN WATER COMPANY
ST. LOUIS COUNTY DISTRICT
COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS
PSC STAFF STUDY

Account (1)	Factor Ref. (2)	Cost of Service (3)	Rate A & K (4)	Rate B (5)	Rate J (6)	Rate D (7)	Other (8)	Fire Protection		
								Rate F (9)	Rate E (10)	
Utility Income Available for Return	18	18,960,628	15,229,176	561,235	1,585,109	43,609	0	106,180	1,435,320	0.0
Total Cost of Service		98,329,057	82,080,631	2,541,571	7,546,415	206,960	0	595,701	5,357,778	0.0
										0.0
Less: Other Water Revenues	19	(1,316,503)	(1,316,503)				0			0.0
Contract Sales	19	(900,987)	(751,964)	(23,336)	(69,196)	(1,892)	0	(5,496)	(49,104)	0.0
Revenue Contribution	19									
Total Other Water Revenues		<u>(2,217,490)</u>	<u>(2,068,467)</u>	<u>(23,336)</u>	<u>(69,196)</u>	<u>(1,892)</u>	<u>0</u>	<u>(5,496)</u>	<u>(49,104)</u>	0.0
										0.0
Total Cost of Service Related to Sales of Water		<u>\$ 96,111,567</u>	<u>\$ 80,012,164</u>	<u>\$ 2,518,235</u>	<u>\$ 7,477,219</u>	<u>\$ 205,068</u>	<u>\$ -</u>	<u>\$ 590,205</u>	<u>\$ 5,308,674</u>	0.0
										0.0

MISSOURI-AMERICAN WATER COMPANY
ST. LOUIS COUNTY DISTRICT
COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS
PSC STAFF STUDY

Account (1)	Factor Ref. (2)	Cost of Service (3)	Rate A & K (4)	Rate B (5)	Rate J (6)	Rate D (7)	Other (8)	Fire Protection	
								Rate F (9)	Rate E (10)
Reallocation of Public Fire	20		4,717,040	146,060	433,680	11894			(5,308,674)
Total		<u>\$ 96,111,567</u>	<u>\$ 84,729,205</u>	<u>\$ 2,664,295</u>	<u>\$ 7,910,900</u>	<u>\$ 216,962</u>	<u>\$ -</u>	<u>\$ 590,205</u>	<u>\$ -</u>
		\$ 1,316,503	\$ 1,316,503						30,147
		<u>\$ 97,428,070</u>	<u>\$ 86,045,708</u>	<u>\$ 2,664,295</u>	<u>\$ 7,910,900</u>	<u>\$ 216,962</u>	<u>\$ -</u>	<u>\$ 590,205</u>	<u>\$ 176.09</u>
	19		0	0	0	0	0	0	0
		<u>\$ 97,428,070</u>	<u>\$ 86,045,708</u>	<u>\$ 2,664,295</u>	<u>\$ 7,910,900</u>	<u>\$ 216,962</u>	<u>\$ -</u>	<u>\$ 590,205</u>	

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MISSOURI-AMERICAN WATER COMPANY

ST. LOUIS COUNTY DISTRICT

COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS

PSC STAFF STUDY

Account (1)	Factor Ref. (2)	Cost of Service (3)	Rate A & K (4)	Rate B (5)	Rate J (6)	Rate D (7)	Other (8)	Fire Protection		
								Rate F (9)	Rate E (10)	
RATE BASE										0.0
Organization	17	\$ (121,357)	\$ (97,462)	\$ (3,592)	\$ (10,133)	\$ (291)	\$ -	\$ (680)	\$ (9,199)	0.0
Franchises	17	0	0	0	0	0	0	0	0	0.0
Land & Ld Rights SS	2	91,400	78,275	3,053	9,643	247	0	46	137	0.0
Land & Ld Rights P	6	284,588	241,388	9,420	29,739	768	0	569	2,704	0.0
Land & Ld Rights WT	2	1,279,228	1,095,531	42,726	134,959	3,454	0	640	1,919	0.0
Land & Ld Rights TD	7	3,983,700	3,340,731	130,267	315,111	9,959	0	29,479	158,153	0.0
Land & Land Rights AG	15	0	0	0	0	0	0	0	0	0.0
Struct & Imp SS	2	3,540,612	3,032,180	118,256	373,535	9,560	0	1,770	5,311	0.0
Struct & Imp P	6	100,235	85,019	3,318	10,475	271	0	200	952	0.0
Struct & Imp Pumps (STL)	6	2,644,146	2,242,765	87,521	276,313	7,139	0	5,288	25,119	0.0
Struct & Imp Pump Boosters	6	2,027,906	1,720,070	67,124	211,916	5,475	0	4,056	19,265	0.0
Struct & Imp WT	2	681,002	583,210	22,745	71,846	1,839	0	341	1,022	0.0
Struct & Imp WT Nth Plt (ST	2	2,660,502	2,278,454	88,861	280,683	7,183	0	1,330	3,991	0.0
Struct & Imp WT Ctrl Plt 1	2	614,102	525,917	20,511	64,788	1,658	0	307	921	0.0
Struct & Imp WT Ctrl Plt 3	2	12,229,057	10,472,964	408,451	1,290,166	33,018	0	6,115	18,344	0.0
Struct & Imp WT Sth Plt (ST	2	1,000,010	856,409	33,400	105,501	2,700	0	500	1,500	0.0
Struct & Imp WT Meramec (ST	2	5,313,366	4,550,367	177,466	560,560	14,346	0	2,657	7,970	0.0
Struct & Imp TD	7	2,574,165	2,158,695	84,175	203,616	6,435	0	19,049	102,194	0.0
Struct & Imp TD Spec Cross	7	43,281	36,295	1,415	3,424	108	0	320	1,718	0.0
Struct & Imp Offices	15	(60,288)	(51,679)	(1,356)	(3,696)	(109)	0	(446)	(3,002)	0.0
Struct & Imp Leasehold	15	317,633	272,275	7,147	19,471	572	0	2,350	15,818	0.0
Struct & Imp Leasehold	15	224,304	192,273	5,047	13,750	404	0	1,660	11,170	0.0
Struct & Imp Store,Shop,Gar	15	230,069	197,215	5,177	14,103	414	0	1,703	11,457	0.0
Struct & Imp Misc	15	1,033,359	885,795	23,251	63,345	1,860	0	7,647	51,461	0.0
Collect & Impounding	1	0	0	0	0	0	0	0	0	0.0
Lake, River & Other Intakes	2	0	0	0	0	0	0	0	0	0.0
Wells & Springs	2	0	0	0	0	0	0	0	0	0.0
Supply Mains	2	8,522	7,298	285	899	23	0	4	13	0.0
Supply Mains Nth Plt (STL)	2	100,200	85,811	3,347	10,571	271	0	50	150	0.0
Supply Mains Ctrl Plt (STL)	2	2,332,156	1,997,258	77,894	246,042	6,297	0	1,166	3,498	0.0
Supply Mains Sth Plt (STL)	2	36,840	31,550	1,230	3,887	99	0	18	55	0.0
Supply Mains Meramec Plt (S	2	720,443	616,987	24,063	76,007	1,945	0	360	1,081	0.0
Power Generation Equip Othe	6	266,614	226,142	8,825	27,861	720	0	533	2,533	0.0
Boiler Plant Equipment P	6	0	0	0	0	0	0	0	0	0.0
Pump Equip Steam	6	0	0	0	0	0	0	0	0	0.0
Pump Equip Electric	6	106,739	90,536	3,533	11,154	288	0	213	1,014	0.0
Pump Equip Elec Pre46 (STL)	6	859,327	728,881	28,444	89,800	2,320	0	1,719	8,164	0.0
Pump Equip Elec Post46 (STL)	6	14,177,861	12,025,662	469,287	1,481,586	38,280	0	28,356	134,690	0.0
Pump Equip Elec Boosters Po	6	(238,379)	(202,193)	(7,890)	(24,911)	(644)	0	(477)	(2,265)	0.0
Pump Equip Diesel	6	0	0	0	0	0	0	0	0	0.0
Pump Equip Diesel Stratman\	6	207,946	176,380	6,883	21,730	561	0	416	1,975	0.0
Pump Equip Diesel Ctrl Plt	6	341,645	289,783	11,308	35,702	922	0	683	3,246	0.0
Pump Equip Hydraulic	6	0	0	0	0	0	0	0	0	0.0
Pump Equip Other	6	8,470	7,184	280	885	23	0	17	80	0.0
WT Equip Non-Media	2	305,784	261,873	10,213	32,260	826	0	153	459	0.0
WT Equip Non-Med North (STL)	2	3,200,746	2,741,119	106,905	337,679	8,642	0	1,600	4,801	0.0
WT Equip Non Media Ctrl 1 &	2	57,478	49,224	1,920	6,064	155	0	29	86	0.0
WT Equip Non Media Ctrl 3 (	2	14,121,446	12,093,606	471,656	1,489,813	38,128	0	7,061	21,182	0.0
WT Equip Non Media Sth (STL)	2	821,371	703,422	27,434	86,655	2,218	0	411	1,232	0.0
WT Equip Non Media Mer (STL)	2	3,508,440	3,004,628	117,182	370,140	9,473	0	1,754	5,263	0.0
WT Equip Filter Media	2	204,250	174,920	6,822	21,548	551	0	102	306	0.0
Dist Reservoirs & Standpipe	5	0	0	0	0	0	0	0	0	0.0
Elevated Tanks & Standpipes	5	1,718,727	1,341,638	52,421	126,670	3,953	0	30,250	163,795	0.0
Ground Level Facilities	5	5,316,456	4,150,026	162,152	391,823	12,228	0	93,570	506,658	0.0
TD Mains Not Classified by	7	(6,602)	(5,536)	(216)	(522)	(17)	0	(49)	(262)	0.0
TD Mains 4 & Less	4	0	0	0	0	0	0	0	0	0.0
TD Mains 6 to 8"	4	(348,699)	(292,419)	(11,402)	(27,582)	(872)	0	(2,580)	(13,843)	0.0

Schedule C-9-SSSTL

MISSOURI-AMERICAN WATER COMPANY

ST. LOUIS COUNTY DISTRICT

COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS

PSC STAFF STUDY

Account (1)	Factor Ref. (2)	Cost of Service (3)	Rate A & K (4)	Rate B (5)	Rate J (6)	Rate D (7)	Other (8)	Fire Protection		
								Rate F (9)	Rate E (10)	
TD Mains 10 to 16" "	3	0	0	0	0	0	0	0	0	0.0
TD Mains 18 & Grtr "	3	0	0	0	0	0	0	0	0	0.0
TD Mains AC 4 (STL) "	4	343,078	287,705	11,219	27,137	858	0	2,539	13,620	0.0
TD Mains CI <10 1900-28 (S"	4	1,465,769	1,229,194	47,931	115,942	3,664	0	10,847	58,191	0.0
TD Mains CI <10 1929-56 (S"	4	3,811,778	3,196,557	124,645	301,512	9,529	0	28,207	151,328	0.0
TD Mains CI <10 1957-93 (S"	4	23,623,588	19,810,741	772,491	1,868,626	59,059	0	174,815	937,856	0.0
TD Mains CI 12 (STL) "	3	8,065,538	6,683,105	261,323	824,298	21,777	0	44,360	230,674	0.0
TD Mains CI 16 (STL) "	3	8,825,274	7,312,622	285,939	901,943	23,828	0	48,539	252,403	0.0
TD Mains DI 6-8 (STL) "	4	143,655,778	120,469,735	4,697,544	11,363,172	359,139	0	1,063,053	5,703,134	0.0
TD Mains DI 12 (STL) "	3	36,610,308	30,335,301	1,186,174	3,741,573	98,848	0	201,357	1,047,055	0.0
TD Mains DI 16 & >(STL) "	3	67,843,792	56,215,366	2,198,139	6,933,636	183,178	0	373,141	1,940,332	0.0
TD Mains Galve 1 (STL) "	4	(44,638)	(37,601)	(1,466)	(3,547)	(112)	0	(332)	(1,780)	0.0
TD Mains LJ 20 (STL) "	3	2,669,923	2,212,298	86,506	272,866	7,209	0	14,685	76,360	0.0
Fire Mains	8	0	0	0	0	0	0	0	0	0.0
Services	10	6,727	6,383	1	13	0	0	330	0	0.0
Meters Bronze Case	9	0	0	0	0	0	0	0	0	0.0
Meters Plastic Case	9	0	0	0	0	0	0	0	0	0.0
Meters Other	9	10,461,867	10,075,824	20,924	281,424	4,185	0	79,510	0	0.0
Meters Other-Rem Rdr Unts	9	1,442,929	1,389,685	2,886	38,815	577	0	10,966	0	0.0
Meter Installations	9	1,233,602	1,188,082	2,467	33,184	493	0	9,375	0	0.0
Meter Installation Other	9	2,714,698	2,614,526	5,429	73,025	1,086	0	20,632	0	0.0
Hydrants	8	20,804,694	0	0	0	0	0	0	20,804,694	0.0
Other P/E Intangible	15	(20,846)	(17,869)	(469)	(1,278)	(38)	0	(154)	(1,038)	0.0
Other P/E WT Res Hand Equip	2	0	0	0	0	0	0	0	0	0.0
Other P/E TD	7	0	0	0	0	0	0	0	0	0.0
Other P/E CPS	15	0	0	0	0	0	0	0	0	0.0
Office Furniture & Equip	15	4,500,043	3,857,437	101,251	275,853	8,100	0	33,300	224,102	0.0
Comp & Periph Equip	15	4,042,273	3,465,036	90,951	247,791	7,276	0	29,913	201,305	0.0
Computer Software	15	2,640,738	2,263,641	59,417	161,877	4,753	0	19,541	131,509	0.0
Comp Software Personal	15	72,694	62,313	1,636	4,456	131	0	538	3,620	0.0
Data Handling Equipment	15	0	0	0	0	0	0	0	0	0.0
Other Office Equipment	15	127,330	109,147	2,865	7,805	229	0	942	6,341	0.0
Trans Equip Lt Duty Trks	15	(723,904)	(620,531)	(16,288)	(44,375)	(1,303)	0	(5,357)	(36,050)	0.0
Trans Equip Hvy Duty Trks	15	3,234,228	2,772,380	72,770	198,258	5,822	0	23,933	161,065	0.0
Trans Equip Autos	15	(41,693)	(35,739)	(938)	(2,556)	(75)	0	(309)	(2,076)	0.0
Trans Equip Other	15	0	0	0	0	0	0	0	0	0.0
Stores Equipment	15	429,458	368,131	9,663	26,326	773	0	3,178	21,387	0.0
Tools,Shop, Garage Equip	15	(150,936)	(129,382)	(3,396)	(9,252)	(272)	0	(1,117)	(7,517)	0.0
Tools,Shop, Garage Equip Oth	15	2,414,390	2,069,615	54,324	148,002	4,346	0	17,866	120,237	0.0
Laboratory Equipment	2	484,333	414,783	16,177	51,097	1,308	0	242	726	0.0
Laboratory Equip Other	2	98,234	84,128	3,281	10,364	265	0	49	147	0.0
Power Operated Equipment	15	374,473	320,998	8,426	22,955	674	0	2,771	18,649	0.0
Comm Equip Non-Telephone	15	508,193	435,623	11,434	31,152	915	0	3,761	25,308	0.0
Comm Equip Telephone	15	15,284	13,101	344	937	28	0	113	761	0.0
Misc Equipment	15	258,886	221,917	5,825	15,870	466	0	1,916	12,893	0.0
Other Tangible Property	17	(10,343)	(8,306)	(306)	(864)	(25)	0	(58)	(784)	0.0
Total Utility Plant in Service		440,306,141	353,636,415	13,026,074	36,772,914	1,040,096	0	2,463,354	33,367,289	0.0
Other Rate Base Items										
Add:										
Other Utility Plant Adjustments	17	0	0	0	0	0	0	0	0	0.0
Cash Working Capital	15	716,829	614,466	16,129	43,942	1,290	0	5,305	35,698	0.0
Materials and Supplies	15	2,297,669	1,969,562	51,698	140,847	4,136	0	17,003	114,424	0.0
Prepayments	15	916	785	21	56	2	0	7	46	0.0
OPEB's Contributed to External Fund	16	0	0	0	0	0	0	0	0	0.0
Premature Retirement	17	0	0	0	0	0	0	0	0	0.0
Regulatory Deferrals	17	0	0	0	0	0	0	0	0	0.0

Schedule C-10-SSITL

MISSOURI-AMERICAN WATER COMPANY
ST. LOUIS COUNTY DISTRICT
COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS
PSC STAFF STUDY

Account	Factor Ref.	Cost of Service	Rate A & K	Rate B	Rate J	Rate D	Other	Fire Protection		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	Rate F	Rate E	
								(9)	(10)	
Less: Accumulated Amortization	17	0	0	0	0	0	0	0	0	0.0
Accumulated Deferred ITC (3%)	17	(133,845,360)	(107,491,209)	(3,961,823)	(11,176,088)	(321,229)	0	(749,534)	(10,145,478)	0.0
Deferred Income Taxes	17	(26,485,602)	(21,270,587)	(783,974)	(2,211,548)	(63,565)	0	(148,319)	(2,007,609)	0.0
Pensions	16	(4,975,521)	(4,177,447)	(114,437)	(327,389)	(8,956)	0	(34,331)	(312,960)	0.0
Total Other Rate Base Elements		(162,291,069)	(130,354,430)	(4,782,387)	(13,530,180)	(388,323)	0	(909,870)	(12,315,880)	0.0
Total Original Cost Measure of Value		\$ 278,015,072	\$ 223,281,985	\$ 8,233,687	\$ 23,242,734	\$ 651,773	\$ -	\$ 1,553,483	\$ 21,051,409	0.0

MISSOURI-AMERICAN WATER COMPANY
ST. LOUIS COUNTY DISTRICT
COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS
PSC STAFF STUDY

Account (1)	Factor Ref. (2)	Cost of Service (3)	Rate A & K (4)	Rate B (5)	Rate J (6)	Rate D (7)	Other (8)	Fire Protection		
								Rate F (9)	Rate E (10)	
T&D OP BASIS FOR FACTOR 11		3,863,546	3,321,353	104,777	263,695	8,118	0	38,861	126,743	0.0
FACTOR 11			0.8596	0.0271	0.0683	0.0021	0.0000	0.0101	0.0328	1.0000
T&D Mnt BASIS FOR FACTOR 12		4,380,866	3,437,674	112,756	280,842	8,704	0	39,924	500,965	0.0
FACTOR 12			0.7847	0.0257	0.0641	0.0020	0.0000	0.0091	0.1144	1.0000
A&G BASIS FOR FACTOR 15		25,635,514	21,977,143	576,595	1,570,752	45,369	0	189,474	1,276,181	0.0
FACTOR 15			0.8572	0.0225	0.0613	0.0018	0.0000	0.0074	0.0498	1.0000
LABOR BASIS FOR FACTOR 16		16,491,321	13,846,573	378,808	1,084,561	30,323	0	113,377	1,037,679	0.0
FACTOR 16			0.8396	0.0230	0.0658	0.0018	0.0000	0.0069	0.0629	1.0000
UPIS BASIS FOR FACTOR 17		440,437,841	353,742,183	13,029,972	36,783,911	1,040,412	0	2,464,091	33,377,272	0.0
FACTOR 17			0.8031	0.0296	0.0835	0.0024	0.0000	0.0056	0.0758	1.0000
RATE BASE BASIS FOR FACTOR 18		278,015,072	223,281,985	8,233,687	23,242,734	651,773	0	1,553,483	21,051,409	0.0
FACTOR 18			0.8032	0.0296	0.0836	0.0023	0.0000	0.0056	0.0757	1.0000
TOTAL COS BASIS FOR FACTOR 19		97,472,821	81,362,612	2,519,907	7,482,992	205,208	0	590,283	5,311,821	0.0
FACTOR 19			0.8346	0.0259	0.0768	0.0021	0.0000	0.0061	0.0545	1.0000
COS w/o Fire Factor 20		92,375,578	82,080,631	2,541,571 #	7,546,415 #	206,960 #	0			
FACTOR 20			0.8886	0.0275	0.0817	0.0022	0.0000			1.0000

Table of Factors - Table Name "FACTORS"

	2 Rate A	4 Rate B	6 Rate J	8 Public	10 Resale	12 Private Fire	14 Public Fire	20 Total
1	0.8141	0.0363	0.1433	0.0035	-	0.0009	0.0029	1.0000
2	0.8564	0.0334	0.1055	0.0027	-	0.0005	0.0015	1.0000
3	0.8286	0.0324	0.1022	0.0027	-	0.0055	0.0286	1.0000
4	0.8386	0.0327	0.0791	0.0025	-	0.0074	0.0397	1.0000
5	0.7806	0.0305	0.0737	0.0023	-	0.0176	0.0653	1.0000
6	0.8482	0.0331	0.1045	0.0027	-	0.0020	0.0095	1.0000
7	0.8386	0.0327	0.0791	0.0025	-	0.0074	0.0397	1.0000
8	-	-	-	-	-	-	1.0000	1.0000
9	0.9631	0.0020	0.0269	0.0004	-	0.0076	-	1.0000
10	0.9488	0.0001	0.0020	-	-	0.0491	-	1.0000
11	0.8596	0.0271	0.0683	0.0021	-	0.0101	0.0328	1.0000
12	0.7847	0.0257	0.0641	0.0020	-	0.0091	0.1144	1.0000
13	0.9887	-	0.0008	-	-	0.0105	-	1.0000
14	0.9992	-	0.0008	-	-	-	-	1.0000
15	0.8572	0.0225	0.0613	0.0018	-	0.0074	0.0498	1.0000
16	0.8396	0.0230	0.0658	0.0018	-	0.0069	0.0629	1.0000
17	0.8031	0.0296	0.0835	0.0024	-	0.0056	0.0758	1.0000
18	0.8032	0.0296	0.0836	0.0023	-	0.0056	0.0757	1.0000
19	0.8346	0.0259	0.0768	0.0021	-	0.0061	0.0545	1.0000
20	0.8886	0.0275	0.0817	0.0022	-	-	-	1.0000

MISSOURI-AMERICAN WATER COMPANY

COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO COST FUNCTIONS

Account	Factor Ref.	Cost of Service	Base	Max Day	Max Hour	Meters	Services	Billing & Collecting	Fire Service
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
OPERATION AND MAINTENANCE EXPENSES									
SOURCE OF SUPPLY EXPENSES									
Super & Eng Oper SS	2	0	0	0	0	0	0	0	0
Labor & Exp Oper SS	2	17,652	9,255	8,362	0	0	0	0	35
Labor & Exp Oper SS	2	79,571	41,719	37,693	0	0	0	0	159
Purchased Water	1	6,302	6,278	0	0	0	0	0	24
TOTAL SS EXPENSE - OPERATION		103,525	57,252	46,055	0	0	0	0	218
Misc Exp Oper SS	2	0	0	0	0	0	0	0	0
Misc Exp Oper SS	2	95	50	45	0	0	0	0	0
Rents Oper SS	2	0	0	0	0	0	0	0	0
Super & Eng Maint SS	2	0	0	0	0	0	0	0	0
Struct & Improve Maint SS	2	13,932	7,305	6,600	0	0	0	0	28
Struct & Improve Maint SS	2	1,881	986	891	0	0	0	0	4
Collect & Impound Maint SS	2	0	0	0	0	0	0	0	0
Lake, River & Oth Maint SS	2	51,353	26,924	24,326	0	0	0	0	103
Lake, River & Oth Maint SS	2	0	0	0	0	0	0	0	0
Wells & Springs Maint SS	2	0	0	0	0	0	0	0	0
Wells & Springs Maint SS	2	0	0	0	0	0	0	0	0
Infill Gall & Tunnels Maint SS	2	578	303	274	0	0	0	0	1
Supply Mains Maint SS	2	0	0	0	0	0	0	0	0
Misc Plant Maint SS	2	33,552	17,581	15,894	0	0	0	0	67
Misc Plant Maint SS	2	197,542	103,571	93,576	0	0	0	0	395
TOTAL SS EXPENSE - MAINTENANCE		298,933	156,731	141,605	0	0	0	0	598
TOTAL SS EXPENSE		402,458	213,983	187,659	0	0	0	0	816
POWER AND PUMPING EXPENSES									
Super & Eng Oper P	6	136	71	64	0	0	0	0	2
Fuel for Power Prod	1	0	0	0	0	0	0	0	0
Labor & Exp Oper Pwr Prod	6	5,938	3,084	2,786	0	0	0	0	68
Labor & Exp Oper Pwr Prod	6	0	0	0	0	0	0	0	0
Purch Fuel/Power for Pump	1	5,837,892	5,815,708	0	0	0	0	0	22,184
Labor & Exp Oper Pump	6	1,126,897	585,198	528,740	0	0	0	0	12,959
Labor & Exp Oper Pump	6	121	63	57	0	0	0	0	1
Expenses Transferred	6	0	0	0	0	0	0	0	0
Misc Exp Oper P	6	103,046	53,512	48,349	0	0	0	0	1,185
Rents Oper P	6	31,676	16,449	14,862	0	0	0	0	364
TOTAL PUMPING EXPENSE - OPERATION		7,105,706	6,474,084	594,658	0	0	0	0	38,764

MISSOURI-AMERICAN WATER COMPANY

COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO COST FUNCTIONS

Account	Factor Ref.	Cost of Service	Base	Max Day	Max Hour	Meters	Services	Billing & Collecting	Fire Service
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Super & Eng Maint P	6	27,600	14,333	12,950	0	0	0	0	317
Struct & Improve Maint P	6	375,287	194,887	176,085	0	0	0	0	4,316
Power Prod Equip Maint P	6	259,577	134,798	121,794	0	0	0	0	2,985
Pump Equip Maint P	6	5,894	3,061	2,765	0	0	0	0	68
Pump Equip Maint P	6	16,907	8,780	7,933	0	0	0	0	194
TOTAL PUMPING EXPENSES - MAINTENANCE		685,265	355,858	321,526	0	0	0	0	7,881
TOTAL PUMPING EXPENSES		7,790,971	6,829,942	916,385	0	0	0	0	44,644
WATER TREATMENT									
Super & Eng Oper WT	2	370,854	194,439	175,674	0	0	0	0	742
Chemicals	1	3,852,144	3,837,506	0	0	0	0	0	14,638
Labor & Exp Oper WT	2	1,557,703	816,704	737,884	0	0	0	0	3,115
Labor & Exp Oper WT	2	149,654	78,484	70,891	0	0	0	0	299
Misc Exp Oper WT	2	57,672	30,237	27,319	0	0	0	0	115
Misc Exp Oper WT	1	321,888	320,665	0	0	0	0	0	1,223
Misc Exp Oper WT	2	50,637	26,549	23,987	0	0	0	0	101
Rents Oper WT	2	107,945	56,596	51,134	0	0	0	0	216
TOTAL WT EXPENSE - OPERATION		6,468,497	5,361,159	1,086,888	0	0	0	0	20,450
Super & Eng Maint WT	2	27,286	14,306	12,925	0	0	0	0	55
Struct & Improve Maint WT	2	84,851	44,487	40,194	0	0	0	0	170
Struct & Improve Maint WT	2	0	0	0	0	0	0	0	0
WT Equip Maint WT	2	642,629	336,930	304,413	0	0	0	0	1,285
WT Equip Maint WT	2	275,361	144,372	130,439	0	0	0	0	551
TOTAL WT EXPENSE - MAINTENANCE		1,030,127	540,096	487,971	0	0	0	0	2,060
TOTAL WT EXPENSE		7,498,624	5,901,254	1,574,859	0	0	0	0	22,511
TRANSMISSION AND DISTRIBUTION EXPENSES									
Super & Eng Oper TD	11	1,014,885	251,996	0	543,065	116,001	60,284	0	43,539
Storage Facility Exp	5	10,170	2,860	0	6,162	0	0	0	1,148
Storage Facility Exp	5	941	265	0	570	0	0	0	108
TD Lines Exp	7	509,114	153,752	0	331,382	0	0	0	23,979
TD Lines Exp	7	2,656,736	802,334	0	1,729,269	0	0	0	125,132
Meter Expense	9	445,148	0	0	0	441,765	0	0	3,383
Meter Expense	9	0	0	0	0	0	0	0	0
Customer Install Exp	10	241,437	0	0	0	0	229,582	0	11,855
Customer Install Exp	10	0	0	0	0	0	0	0	0
Misc Exp Oper TD	11	164,982	40,965	0	88,282	18,857	9,800	0	7,078
Misc Exp Oper TD	11	0	0	0	0	0	0	0	0
Misc Exp Oper TD	11	333,787	82,879	0	178,609	38,152	19,827	0	14,319
Rents Oper TD	11	908	225	0	486	104	54	0	39
TOTAL T & D EXPENSE OPERATION		5,378,108	1,335,277	0	2,877,826	614,879	319,547	0	230,578

MISSOURI-AMERICAN WATER COMPANY

COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO COST FUNCTIONS

Account	Factor Ref.	Cost of Service	Base	Max Day	Max Hour	Meters	Services	Billing & Collecting	Fire Service
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Super & Eng Maint TD	12	252,720	59,692	0	128,634	19,889	13,293	0	31,211
Struct & Improve Maint TD	12	28,378	6,703	0	14,444	2,233	1,493	0	3,505
Struct & Improve Maint TD	12	0	0	0	0	0	0	0	0
Dist Res Stand Maint TD	5	3,043	856	0	1,844	0	0	0	344
TD Main Maint TD	7	100	30	0	65	0	0	0	5
TD Main Maint TD	7	3,423,279	1,033,830	0	2,228,212	0	0	0	161,236
Fire Main Maint TD	8	42	0	0	0	0	0	0	42
Services Maint TD	10	240,218	0	0	0	0	228,423	0	11,795
Services Maint TD	10	2,088	0	0	0	0	1,985	0	103
Meters Maint TD	9	347,371	0	0	0	344,731	0	0	2,640
Meters Maint TD	9	0	0	0	0	0	0	0	0
Hydrants Maint TD	8	364,662	0	0	0	0	0	0	364,662
Hydrants Maint TD	8	63	0	0	0	0	0	0	63
Misc Plant Maint TD	12	3,268,732	772,074	0	1,663,785	257,249	171,935	0	403,688
Mat and Sup Maint TD	12	1,473,421	348,022	0	749,971	115,958	77,502	0	181,967
Misc Maint TD	12	0	0	0	0	0	0	0	0
Amort Def Maint TD	5	0	0	0	0	0	0	0	0
Permits TD	12	0	0	0	0	0	0	0	0
TOTAL T & D EXPENSE - MAINTENANCE		9,404,117	2,221,208	0	4,786,956	740,061	494,632	0	1,161,260
TOTAL T & D EXPENSE		14,782,225	3,556,485	0	7,664,782	1,354,940	814,179	0	1,391,839
CUSTOMER ACCOUNTS									
Supervision CA	13	21,678	0	0	0	0	0	21,450	228
Meter Reading Exp CA	14	996,555	0	0	0	0	0	996,555	0
Meter Reading Exp CA	14	603	0	0	0	0	0	603	0
Meter Reading Exp CA	14	0	0	0	0	0	0	0	0
Cust Rec & Collection CA	13	210,480	0	0	0	0	0	208,270	2,210
Cust Rec & Collection CA	13	538,326	0	0	0	0	0	532,674	5,652
Uncollectible Accts	13	849,447	0	0	0	0	0	840,528	8,919
Misc Cust Accts Exp CA	13	47,273	0	0	0	0	0	46,777	496
Misc Cust Accts Exp CA	13	0	0	0	0	0	0	0	0
Misc Cust Accts Exp CA	13	57,024	0	0	0	0	0	56,425	599
Cust Serv & Info Exp CA	13	2,458,076	0	0	0	0	0	2,432,266	25,810
TOTAL CUSTOMER ACCOUNTING EXPENSE		5,179,462	0	0	0	0	0	5,135,548	43,914

MISSOURI-AMERICAN WATER COMPANY

COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO COST FUNCTIONS

Account	Factor Ref.	Cost of Service	Base	Max Day	Max Hour	Meters	Services	Billing & Collecting	Fire Service
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
ADMINISTRATIVE AND GENERAL EXPENSES									
Salaries AG	15	3,722,614	947,033	389,013	1,112,689	196,926	118,379	745,640	212,934
Other Supplies & Exp AG	15	666	169	70	199	35	21	133	38
Other Supplies & Exp AG	15	849,493	216,111	88,772	253,913	44,938	27,014	170,153	48,591
Other Supplies & Exp AG	15	387,969	98,699	40,543	115,964	20,524	12,337	77,710	22,192
Mgmt Fees-Corporate/Shared Service Center	15	1,250,512	318,130	130,679	373,778	66,152	39,766	250,478	71,529
Mgmt Fees-Call Center	13	2,294,518	0	0	0	0	0	2,270,426	24,092
Mgmt Fees-Belleville Lab	2	87,199	45,718	41,306	0	0	0	0	174
Mgmt Fees- Financial ITS	15	223,319	56,812	23,337	66,750	11,814	7,102	44,731	12,774
Mgmt Fees- Customer Billings ITS	13	1,260,806	0	0	0	0	0	1,247,568	13,238
Mgmt Fees-Other ITS	15	14,186	3,609	1,482	4,240	750	451	2,841	811
Outside Services AG	15	1,691,585	430,339	176,771	505,615	89,485	53,792	338,824	96,759
Outside Services AG	15	0	0	0	0	0	0	0	0
Property Insurance	15	623,620	158,649	65,168	186,400	32,989	19,831	124,911	35,671
Ins Gen Liab Oper AG	15	815,662	207,504	85,237	243,801	43,149	25,938	163,377	46,656
Ins Work Comp AG	16	434,243	122,153	67,438	102,438	36,824	21,929	53,151	30,310
Ins Other Oper AG	15	0	0	0	0	0	0	0	0
Property Insurance	15	0	0	0	0	0	0	0	0
Injuries & Damages	16	37,496	10,548	5,823	8,845	3,180	1,894	4,590	2,617
Employee Pension & Benefits	16	5,052,129	1,421,164	784,596	1,191,797	428,421	255,133	618,381	352,639
Employee Pension & Benefits	16	0	0	0	0	0	0	0	0
Employee Pension & Benefits	16	0	0	0	0	0	0	0	0
Reg Commission Exp	15	150,666	38,329	15,745	45,034	7,970	4,791	30,178	8,618
Rents AG	15	729,478	185,579	76,230	218,041	38,589	23,197	146,114	41,726
Goodwill Advertising Exp	15	(727,119)	(184,979)	(75,984)	(217,336)	(38,465)	(23,122)	(145,642)	(41,591)
Misc Exp AG	15	0	0	0	0	0	0	0	0
Research & Development	15	0	0	0	0	0	0	0	0
TOTAL A & G OPERATIONS		18,899,042	4,075,569	1,916,225	4,212,170	983,281	588,454	6,143,565	979,779
General Plant Maint AG	15	0	0	0	0	0	0	0	0
General Plant Maint AG	15	137,450	34,967	14,364	41,084	7,271	4,371	27,531	7,862
TOTAL A & G EXPENSE - MAINTENANCE		137,450	34,967	14,364	41,084	7,271	4,371	27,531	7,862
TOTAL A & G EXPENSE		19,036,492	4,110,536	1,930,588	4,253,254	990,552	592,825	6,171,096	987,641
Total Operation & Maintenance Expenses		54,690,232	20,612,200	4,609,491	11,918,036	2,345,492	1,407,004	11,306,644	2,491,365

MISSOURI-AMERICAN WATER COMPANY

COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO COST FUNCTIONS

Account	Factor Ref.	Cost of Service	Base	Max Day	Max Hour	Meters	Services	Billing & Collecting	Fire Service
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
DEPRECIATION EXPENSE									
Struct & Imp SS	2	115,997	60,817	54,948	0	0	0	0	232
Struct & Imp P	6	1,215	631	570	0	0	0	0	14
Struct & Imp Pumps (STL)	6	39,919	20,730	18,730	0	0	0	0	459
Struct & Imp Pump Boosters	6	15,296	7,943	7,177	0	0	0	0	176
Struct & Imp WT	2	8,097	4,245	3,836	0	0	0	0	16
Struct & Imp WT Nth Plt (ST)	2	51,851	27,185	24,562	0	0	0	0	104
Struct & Imp WT Ctrl Plt 1	2	29,083	15,248	13,777	0	0	0	0	58
Struct & Imp WT Ctrl Plt 3	2	236,015	123,743	111,800	0	0	0	0	472
Struct & Imp WT Sth Plt (ST)	2	23,407	12,272	11,088	0	0	0	0	47
Struct & Imp WT Meramec (ST)	2	98,656	51,725	46,733	0	0	0	0	197
Struct & Imp TD	7	83,712	25,281	0	54,488	0	0	0	3,943
Struct & Imp TD Spec Cross	7	26,736	8,074	0	17,402	0	0	0	1,259
Struct & Imp Offices	15	0	0	0	0	0	0	0	0
Struct & Imp Leasehold	15	11,149	2,836	1,165	3,332	590	355	2,233	638
Struct & Imp Leasehold	15	33,973	8,643	3,550	10,155	1,797	1,080	6,805	1,943
Struct & Imp Store, Shop, Gar	15	4,362	1,110	456	1,304	231	139	874	250
Struct & Imp Misc	15	22,398	5,698	2,341	6,695	1,185	712	4,486	1,281
Collect & Impounding	1	0	0	0	0	0	0	0	0
Lake, River & Other Intakes	2	0	0	0	0	0	0	0	0
Wells & Springs	2	0	0	0	0	0	0	0	0
Supply Mains	2	0	0	0	0	0	0	0	0
Supply Mains Nth Plt (STL)	2	4,300	2,254	2,037	0	0	0	0	9
Supply Mains Ctrl Plt (STL)	2	68,767	36,055	32,575	0	0	0	0	138
Supply Mains Sth Plt (STL)	2	6,197	3,249	2,936	0	0	0	0	12
Supply Mains Meramec Plt (S)	2	22,993	12,055	10,892	0	0	0	0	46
Power Generation Equip Othe	6	0	0	0	0	0	0	0	0
Boiler Plant Equipment P	6	0	0	0	0	0	0	0	0
Pump Equip Steam	6	0	0	0	0	0	0	0	0
Pump Equip Electric	6	0	0	0	0	0	0	0	0
Pump Equip Elec Pre46 (STL)	6	0	0	0	0	0	0	0	0
Pump Equip Elec Post46 (STL)	6	435,007	225,899	204,105	0	0	0	0	5,003
Pump Equip Elec Boosters Po	6	33,222	17,252	15,588	0	0	0	0	382
Pump Equip Diesel	6	0	0	0	0	0	0	0	0
Pump Equip Diesel Stratman\	6	0	0	0	0	0	0	0	0
Pump Equip Diesel Ctrl Plt	6	37,202	19,319	17,455	0	0	0	0	428
Pump Equip Hydraulic	6	0	0	0	0	0	0	0	0
Pump Equip Other	6	0	0	0	0	0	0	0	0
WT Equip Non-Media	2	5,850	3,067	2,771	0	0	0	0	12
WT Equip Non-Med North (STL)	2	119,126	62,458	56,430	0	0	0	0	238
WT Equip Non-Media Ctrl 1 &	2	43,630	22,875	20,668	0	0	0	0	87
WT Equip Non-Media Ctrl 3 {	2	404,162	211,902	191,452	0	0	0	0	808
WT Equip Non-Media Sth (STL)	2	47,250	24,773	22,382	0	0	0	0	95
WT Equip Non-Media Mer (STL)	2	133,666	70,081	63,318	0	0	0	0	267
WT Equip Filter Media	2	3,779	1,981	1,790	0	0	0	0	8
Dist Reservoirs & Standpipe	5	0	0	0	0	0	0	0	0
Elevated Tanks & Standpipes	5	43,045	12,104	0	26,081	0	0	0	4,860
Ground Level Facilities	5	176,090	49,517	0	106,693	0	0	0	19,881
TD Mains Not Classified by	7	0	0	0	0	0	0	0	0
TD Mains 4 & Less	4	0	0	0	0	0	0	0	0
TD Mains 6 to 8"	4	10,382	3,135	0	6,758	0	0	0	489
TD Mains 10 to 16"	3	0	0	0	0	0	0	0	0
TD Mains 18 & Grtr	3	0	0	0	0	0	0	0	0
TD Mains AC 4 (STL)	4	0	0	0	0	0	0	0	0
TD Mains CI <10 1900-28 (S"	4	21,515	6,498	0	14,004	0	0	0	1,013
TD Mains CI <10 1929-56 (S"	4	214,487	64,775	0	139,610	0	0	0	10,102
TD Mains CI <10 1957-93 (S"	4	619,214	187,003	0	403,046	0	0	0	29,165
TD Mains CI 12 (STL)	3	107,254	54,421	49,176	0	0	0	0	3,657

MISSOURI-AMERICAN WATER COMPANY

COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO COST FUNCTIONS

Account	Factor Ref.	Cost of Service	Base	Max Day	Max Hour	Meters	Services	Billing & Collecting	Fire Service
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
TD Mains CI 16 (STL) *	3	172,827	87,692	79,241	0	0	0	0	5,893
TD Mains DI 6-8 (STL) *	4	2,631,964	794,853	0	1,713,145	0	0	0	123,966
TD Mains DI 12 (STL) *	3	583,727	296,183	267,639	0	0	0	0	19,905
TD Mains DI 16 & > (STL) *	3	909,852	461,659	417,167	0	0	0	0	31,026
TD Mains Galve 1 (STL) *	4	852	257	0	555	0	0	0	40
TD Mains LJ 20 (STL) *	3	29,989	15,216	13,750	0	0	0	0	1,023
Fire Mains	8	0	0	0	0	0	0	0	0
Services	10	1,397	0	0	0	0	1,328	0	69
Meters Bronze Case	9	0	0	0	0	0	0	0	0
Meters Plastic Case	9	0	0	0	0	0	0	0	0
Meters Other	9	364,510	0	0	0	361,740	0	0	2,770
Meters Other-Rem Rdr Units	9	80,405	0	0	0	79,794	0	0	611
Meter Installations	9	23,919	0	0	0	23,737	0	0	182
Meter Installation Other	9	141,209	0	0	0	140,136	0	0	1,073
Hydrants	8	433,592	0	0	0	0	0	0	433,592
Utility Plant Acquisition Adjustment	17	0	0	0	0	0	0	0	0
Other P/E WT Res Hand Equip	2	0	0	0	0	0	0	0	0
Other P/E TD	7	0	0	0	0	0	0	0	0
Other P/E CPS	15	0	0	0	0	0	0	0	0
Office Furniture & Equip	15	103,217	26,258	10,786	30,852	5,460	3,282	20,674	5,904
Comp & Periph Equip	15	663,627	168,827	69,349	198,358	35,106	21,103	132,924	37,959
Computer Software	15	7,541	1,918	788	2,254	399	240	1,510	431
Comp Software Personal	15	0	0	0	0	0	0	0	0
Data Handling Equipment	15	0	0	0	0	0	0	0	0
Other Office Equipment	15	6,836	1,739	714	2,043	362	217	1,369	391
Trans Equip Lt Duty Trks	15	8,446	2,149	883	2,525	447	269	1,692	483
Trans Equip Hvy Duty Trks	15	700,271	178,149	73,178	209,311	37,044	22,269	140,264	40,056
Trans Equip Autos	15	150,298	38,236	15,706	44,924	7,951	4,779	30,105	8,597
Trans Equip Other	15	34	9	4	10	2	1	7	2
Stores Equipment	15	2,684	683	280	802	142	85	538	154
Tools,Shop,Garage Equip	15	16,810	4,276	1,757	5,025	889	535	3,367	962
Tools,Shop,Garage Equip Oth	15	177,985	45,279	18,599	53,200	9,415	5,660	35,650	10,181
Laboratory Equipment	2	32,072	16,815	15,193	0	0	0	0	64
Laboratory Equip Other	2	5,016	2,630	2,376	0	0	0	0	10
Power Operated Equipment	15	67,676	17,217	7,072	20,228	3,580	2,152	13,556	3,871
Comm Equip Non-Telephone	15	43,344	11,027	4,529	12,956	2,293	1,378	8,682	2,479
Comm Equip Telephone	15	0	0	0	0	0	0	0	0
Misc Equipment	15	9,453	2,405	988	2,826	500	301	1,893	541
Other Tangible Property	17	0	0	0	0	0	0	0	0
Total Depreciation Expense		10,728,557	3,640,334	1,994,305	3,088,580	712,799	65,886	406,630	820,022
Amort-Other UP	18	(243,967)	(90,195)	(52,014)	(70,409)	(9,124)	(220)	(2,171)	(19,835)

MISSOURI-AMERICAN WATER COMPANY

COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO COST FUNCTIONS

Account (1)	Factor Ref. (2)	Cost of Service (3)	Base (4)	Max Day (5)	Max Hour (6)	Meters (7)	Services (8)	Billing & Collecting (9)	Fire Service (10)
Taxes Other Than Income									
Utility Reg Assessment Fee	19	705,570	260,426	96,734	175,122	31,257	11,360	87,914	42,758
Property Taxes	18	7,016,623	2,594,046	1,495,944	2,024,997	262,422	6,315	62,448	570,451
FUTA	16	22,501	6,330	3,494	5,308	1,908	1,136	2,754	1,571
FICA	16	1,240,526	348,960	192,654	292,640	105,197	62,647	151,840	86,589
SUTA	16	63	18	10	15	5	3	8	4
Other Taxes & Licenses	15	181,838	46,260	19,002	54,351	9,619	5,782	36,422	10,401
Gross Receipts Tax	19	0	0	0	0	0	0	0	0
Total Taxes, Other Than Income		<u>9,167,121</u>	<u>3,256,038</u>	<u>1,807,838</u>	<u>2,552,434</u>	<u>410,408</u>	<u>87,243</u>	<u>341,386</u>	<u>711,774</u>
Income Taxes	18	5,026,486	1,858,292	1,071,647	1,450,644	187,991	4,524	44,736	408,653
Utility Income Available for Return	18	18,960,628	7,009,744	4,042,406	5,472,037	709,127	17,065	168,750	1,541,499
Total Cost of Service		<u>98,329,057</u>	<u>36,286,414</u>	<u>13,473,673</u>	<u>24,411,322</u>	<u>4,356,693</u>	<u>1,581,501</u>	<u>12,265,974</u>	<u>5,953,479</u>
Less: Other Water Revenues	19	(1,316,503)	(1,316,503)	0	0	0	0	0	0
Contract Sales	19	(900,987)	(332,554)	(123,525)	(223,625)	(39,914)	(14,506)	(112,263)	(54,600)
Revenue Shift	19	0	0	0	0	0	0	0	0
Total Other Water Revenues		<u>(2,217,490)</u>	<u>(1,649,057)</u>	<u>(123,525)</u>	<u>(223,625)</u>	<u>(39,914)</u>	<u>(14,506)</u>	<u>(112,263)</u>	<u>(54,600)</u>
Total Cost of Service Related to Sales of Water		<u>96,111,567</u>	<u>34,637,357</u>	<u>13,350,148</u>	<u>24,187,697</u>	<u>4,316,779</u>	<u>1,566,996</u>	<u>12,153,711</u>	<u>5,898,879</u>

MISSOURI-AMERICAN WATER COMPANY

COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO COST FUNCTIONS

Account (1)	Factor Ref. (2)	Cost of Service (3)	Base (4)	Max Day (5)	Max Hour (6)	Meters (7)	Services (8)	Billing & Collecting (9)	Fire Service (10)
Reallocation of Public Fire	20	0	0	0	0		0	0	
Total		<u>\$ 96,111,567</u>	<u>\$ 34,637,357</u>	<u>\$ 13,350,148</u>	<u>\$ 24,187,697</u>	<u>\$ 4,316,779</u>	<u>\$ 1,566,996</u>	<u>\$ 12,153,711</u>	<u>\$ 5,898,879</u>
			69,224,617			580,955	350,832	1,341,852	\$ 590,205
			0.500			7.43	4.47		\$ 5,308,674
		\$ 9,980,157				1.86	1.12	9.06	30,147
		\$ 0.144							176.09 Annu
						0.62	0.37	12.03	Quarterly
								9.06	
								10.05	Monthly

MISSOURI-AMERICAN WATER COMPANY

COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO COST FUNCTIONS

Account	Factor Ref.	Cost of Service	Base	Max Day	Max Hour	Meters	Services	Billing & Collecting	Fire Service
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
RATE BASE									
Organization	17	(121,357)	(44,841)	(25,885)	(34,890)	(4,624)	(170)	(1,068)	(9,878)
Franchises	17	0	0	0	0	0	0	0	0
Land & Ld Rights SS	2	91,400	47,921	43,296	0	0	0	0	183
Land & Ld Rights P	6	284,588	147,787	133,529	0	0	0	0	3,273
Land & Ld Rights WT	2	1,279,228	670,699	605,970	0	0	0	0	2,558
Land & Ld Rights TD	7	3,983,700	1,203,077	0	2,592,990	0	0	0	187,632
Land & Land Rights AG	15	0	0	0	0	0	0	0	0
Struct & Imp SS	2	3,540,612	1,856,343	1,677,188	0	0	0	0	7,081
Struct & Imp P	6	100,235	52,052	47,030	0	0	0	0	1,153
Struct & Imp Pumps (STL)	6	2,644,146	1,373,105	1,240,633	0	0	0	0	30,408
Struct & Imp Pump Boosters	6	2,027,906	1,053,092	951,493	0	0	0	0	23,321
Struct & Imp WT	2	681,002	357,049	322,591	0	0	0	0	1,362
Struct & Imp WT Nth Plt (ST)	2	2,660,502	1,394,901	1,260,280	0	0	0	0	5,321
Struct & Imp WT Ctrl Plt 1	2	614,102	321,974	290,900	0	0	0	0	1,228
Struct & Imp WT Ctrl Plt 3	2	12,229,057	6,411,695	5,792,904	0	0	0	0	24,458
Struct & Imp WT Sth Plt (ST)	2	1,000,010	524,305	473,705	0	0	0	0	2,000
Struct & Imp WT Meramec (ST)	2	5,313,366	2,785,798	2,516,941	0	0	0	0	10,627
Struct & Imp TD	7	2,574,165	777,398	0	1,675,524	0	0	0	121,243
Struct & Imp TD Spec Cross	7	43,281	13,071	0	28,172	0	0	0	2,039
Struct & Imp Offices	15	(60,288)	(15,337)	(6,300)	(18,020)	(3,189)	(1,917)	(12,076)	(3,448)
Struct & Imp Leasehold	15	317,633	80,806	33,193	94,941	16,803	10,101	63,622	18,169
Struct & Imp Leasehold	15	224,304	57,063	23,440	67,044	11,866	7,133	44,928	12,830
Struct & Imp Store, Shop, Gar	15	230,069	58,530	24,042	68,768	12,171	7,316	46,083	13,180
Struct & Imp Misc	15	1,033,359	262,887	107,986	308,871	54,665	32,861	206,982	59,108
Collect & Impounding	1	0	0	0	0	0	0	0	0
Lake, River & Other Intakes	2	0	0	0	0	0	0	0	0
Wells & Springs	2	0	0	0	0	0	0	0	0
Supply Mains	2	8,522	4,468	4,037	0	0	0	0	17
Supply Mains Nth Plt (STL)	2	100,200	52,535	47,465	0	0	0	0	200
Supply Mains Ctrl Plt (STL)	2	2,332,156	1,222,749	1,104,742	0	0	0	0	4,664
Supply Mains Sth Plt (STL)	2	36,840	19,315	17,451	0	0	0	0	74
Supply Mains Meramec Plt (S)	2	720,443	377,728	341,274	0	0	0	0	1,441
Power Generation Equip Othe	6	266,614	138,453	125,095	0	0	0	0	3,066
Boiler Plant Equipment P	6	0	0	0	0	0	0	0	0
Pump Equip Steam	6	0	0	0	0	0	0	0	0
Pump Equip Electric	6	106,739	55,430	50,082	0	0	0	0	1,227
Pump Equip Elec Pre46 (STL)	6	859,327	446,249	403,196	0	0	0	0	9,882
Pump Equip Elec Post46 (STL)	6	14,177,861	7,362,563	6,652,252	0	0	0	0	163,045
Pump Equip Elec Boosters Po	6	(238,379)	(123,790)	(111,847)	0	0	0	0	(2,741)
Pump Equip Diesel	6	0	0	0	0	0	0	0	0
Pump Equip Diesel Stratman\	6	207,946	107,986	97,568	0	0	0	0	2,391
Pump Equip Diesel Ctrl Plt	6	341,645	177,416	160,300	0	0	0	0	3,929
Pump Equip Hydraulic	6	0	0	0	0	0	0	0	0
Pump Equip Other	6	8,470	4,398	3,974	0	0	0	0	97
WT Equip Non-Media	2	305,784	160,323	144,850	0	0	0	0	612
WT Equip Non-Med North (STL)	2	3,200,746	1,678,151	1,516,193	0	0	0	0	6,401
WT Equip Non Media Ctrl 1 &	2	57,478	30,136	27,227	0	0	0	0	115
WT Equip Non Media Ctrl 3 (	2	14,121,446	7,403,874	6,689,329	0	0	0	0	28,243
WT Equip Non Media Sth (STL)	2	821,371	430,645	389,083	0	0	0	0	1,643
WT Equip Non Media Mer (STL)	2	3,508,440	1,839,475	1,661,948	0	0	0	0	7,017
WT Equip Filter Media	2	204,250	107,088	96,753	0	0	0	0	409
Dist Reservoirs & Standpipe	5	0	0	0	0	0	0	0	0
Elevated Tanks & Standpipes	5	1,718,727	483,306	0	1,041,377	0	0	0	194,044
Ground Level Facilities	5	5,316,456	1,494,987	0	3,221,241	0	0	0	600,228
TD Mains Not Classified by	7	(6,602)	(1,994)	0	(4,297)	0	0	0	(311)
TD Mains 4 & Less	4	0	0	0	0	0	0	0	0
TD Mains 6 to 8"	4	(348,699)	(105,307)	0	(226,968)	0	0	0	(16,424)

MISSOURI-AMERICAN WATER COMPANY

COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO COST FUNCTIONS

Account	Factor Ref.	Cost of Service	Base	Max Day	Max Hour	Meters	Services	Billing & Collecting	Fire Service
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
TD Mains 10 to 16"	3	0	0	0	0	0	0	0	0
TD Mains 18 & Grtr	3	0	0	0	0	0	0	0	0
TD Mains AC 4 (STL)	4	343,078	103,610	0	223,309	0	0	0	16,159
TD Mains CI <10 1900-28 (S"	4	1,465,769	442,662	0	954,069	0	0	0	69,038
TD Mains CI <10 1929-56 (S"	4	3,811,778	1,151,157	0	2,481,086	0	0	0	179,535
TD Mains CI <10 1957-93 (S"	4	23,623,588	7,134,324	0	15,376,593	0	0	0	1,112,671
TD Mains CI 12 (STL)	3	8,065,538	4,092,454	3,698,049	0	0	0	0	275,035
TD Mains CI 16 (STL)	3	8,825,274	4,477,944	4,046,388	0	0	0	0	300,942
TD Mains DI 6-8 (STL)	4	143,655,778	43,384,045	0	93,505,546	0	0	0	6,766,187
TD Mains DI 12 (STL)	3	36,610,308	18,576,070	16,785,826	0	0	0	0	1,248,412
TD Mains DI 16 & >(STL)	3	67,843,792	34,423,940	31,106,379	0	0	0	0	2,313,473
TD Mains Galve 1 (STL)	4	(44,838)	(13,541)	0	(29,185)	0	0	0	(2,112)
TD Mains LJ 20 (STL)	3	2,669,923	1,354,719	1,224,160	0	0	0	0	91,044
Fire Mains	8	0	0	0	0	0	0	0	0
Services	10	6,727	0	0	0	0	6,397	0	330
Meters Bronze Case	9	0	0	0	0	0	0	0	0
Meters Plastic Case	9	0	0	0	0	0	0	0	0
Meters Other	9	10,461,867	0	0	0	10,382,357	0	0	79,510
Meters Other-Rom Rdr Unts	9	1,442,929	0	0	0	1,431,963	0	0	10,966
Meter Installations	9	1,233,602	0	0	0	1,224,227	0	0	9,375
Meter Installation Other	9	2,714,698	0	0	0	2,694,066	0	0	20,632
Hydrants	8	20,804,694	0	0	0	0	0	0	20,804,694
Other P/E Intangible	15	(20,848)	(5,303)	(2,178)	(6,231)	(1,103)	(663)	(4,175)	(1,192)
Other P/E WT Res Hand Equip	2	0	0	0	0	0	0	0	0
Other P/E TD	7	0	0	0	0	0	0	0	0
Other P/E CPS	15	0	0	0	0	0	0	0	0
Office Furniture & Equip	15	4,500,043	1,144,811	470,254	1,345,063	238,052	143,101	901,359	257,402
Comp & Periph Equip	15	4,042,273	1,028,354	422,418	1,208,235	213,836	128,544	809,667	231,218
Computer Software	15	2,640,738	671,804	275,957	789,317	139,695	83,975	528,940	151,050
Comp Software Personal	15	72,694	18,493	7,597	21,728	3,846	2,312	14,561	4,158
Data Handling Equipment	15	0	0	0	0	0	0	0	0
Other Office Equipment	15	127,330	32,393	13,306	38,058	6,736	4,049	25,504	7,263
Trans Equip Lt Duty Trks	15	(723,904)	(184,161)	(75,648)	(216,375)	(38,295)	(23,020)	(144,998)	(41,407)
Trans Equip Hvy Duty Trks	15	3,234,228	822,788	337,977	966,711	171,091	102,848	647,816	184,998
Trans Equip Autos	15	(41,693)	(10,607)	(4,357)	(12,462)	(2,206)	(1,326)	(8,351)	(2,385)
Trans Equip Other	15	0	0	0	0	0	0	0	0
Stores Equipment	15	429,458	109,254	44,878	128,365	22,718	13,657	86,020	24,565
Tools,Shop,Garage Equip	15	(150,936)	(38,398)	(15,773)	(45,115)	(7,985)	(4,800)	(30,232)	(8,634)
Tools,Shop,Garage Equip Oth	15	2,414,390	614,221	252,304	721,661	127,721	76,778	483,602	138,103
Laboratory Equipment	2	484,333	253,936	229,429	0	0	0	0	969
Laboratory Equip Other	2	98,234	51,504	46,533	0	0	0	0	196
Power Operated Equipment	15	374,473	95,266	39,132	111,930	19,810	11,908	75,007	21,420
Comm Equip Non-Telephone	15	508,193	129,284	53,106	151,899	26,883	16,161	101,791	29,069
Comm Equip Telephone	15	15,284	3,888	1,597	4,568	809	486	3,061	874
Misc Equipment	15	258,886	65,861	27,054	77,381	13,695	8,233	51,855	14,808
Other Tangible Property	17	(10,343)	(3,822)	(2,206)	(2,974)	(394)	(14)	(91)	(842)
Total Utility Plant in Service		440,306,141	162,682,506	93,916,092	126,607,931	16,755,214	623,949	3,889,806	35,830,643
Other Rate Base Items									
Add:									
Other Utility Plant Adjustments	17	0	0	0	0	0	0	0	0
Cash Working Capital	15	716,829	182,361	74,909	214,260	37,920	22,795	143,581	41,003
Materials and Supplies	15	2,297,669	584,527	240,106	686,773	121,547	73,066	460,223	131,427
Prepayments	15	916	233	96	274	48	29	183	52
OPEB's Contributed to External Fund	16	0	0	0	0	0	0	0	0
Premature Retirement	17	0	0	0	0	0	0	0	0
Regulatory Deferrals	17	0	0	0	0	0	0	0	0

MISSOURI-AMERICAN WATER COMPANY

COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO COST FUNCTIONS

Account (1)	Factor Ref. (2)	Cost of Service (3)	Base (4)	Max Day (5)	Max Hour (6)	Meters (7)	Services (8)	Billing & Collecting (9)	Fire Service (10)
Less: Accumulated Amortization	17	0	0	0	0	0	0	0	0
Accumulated Deferred ITC (3%)	17	(133,845,360)	(49,455,861)	(28,549,215)	(38,480,541)	(5,099,508)	(187,384)	(1,177,839)	(10,895,012)
Deferred Income Taxes	17	(26,485,602)	(9,786,430)	(5,649,379)	(7,614,611)	(1,009,101)	(37,080)	(233,073)	(2,155,928)
Pensions	16	(4,975,521)	(1,399,614)	(772,698)	(1,173,725)	(421,924)	(251,264)	(609,004)	(347,291)
Total Other Rate Base Elements		<u>(162,291,069)</u>	<u>(59,874,783)</u>	<u>(34,656,182)</u>	<u>(46,367,570)</u>	<u>(6,371,018)</u>	<u>(379,837)</u>	<u>(1,415,929)</u>	<u>(13,225,750)</u>
Total Original Cost Measure of Value		<u>\$ 278,015,072</u>	<u>\$ 102,807,723</u>	<u>\$ 59,259,910</u>	<u>\$ 80,240,362</u>	<u>\$ 10,384,195</u>	<u>\$ 244,112</u>	<u>\$ 2,473,878</u>	<u>\$ 22,604,893</u>

MISSOURI-AMERICAN WATER COMPANY

COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO COST FUNCTIONS

Account	Factor Ref.	Cost of Service	Base	Max Day	Max Hour	Meters	Services	Billing & Collecting	Fire Service
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
T&D OP BASIS FOR FACTOR 11		3,863,546	959,211	0	2,067,384	441,765	229,582	0	165,604
FACTOR 11			0.2483	0.0000	0.5351	0.1143	0.0594	0.0000	0.0429
T&D Mnt BASIS FOR FACTOR 12		4,380,866	1,034,716	0	2,230,121	344,731	230,409	0	540,889
FACTOR 12			0.2362	0.0000	0.5090	0.0787	0.0526	0.0000	0.1235
A&G BASIS FOR FACTOR 15		25,835,514	6,521,507	2,678,903	7,664,782	1,354,940	814,179	5,135,548	1,465,655
FACTOR 15			0.2544	0.1045	0.2989	0.0529	0.0318	0.2003	0.0572
LABOR BASIS FOR FACTOR 16		16,491,321	4,639,637	2,560,741	3,890,353	1,397,653	833,190	2,018,692	1,151,056
FACTOR 16			0.2813	0.1553	0.2359	0.0848	0.0505	0.1224	0.0698
UPIS BASIS FOR FACTOR 17		440,437,841	162,731,170	93,944,183	126,645,795	16,760,231	624,134	3,890,965	35,841,363
FACTOR 17			0.3695	0.2133	0.2875	0.0381	0.0014	0.0088	0.0814
RATE BASE BASIS FOR FACTOR 18		278,015,072	102,807,723	59,259,910	80,240,362	10,384,195	244,112	2,473,878	22,604,893
FACTOR 18			0.3697	0.2132	0.2886	0.0374	0.0009	0.0089	0.0813
TOTAL COS BASIS FOR FACTOR 19		97,472,821	35,987,659	13,361,195	24,191,166	4,317,466	1,565,351	12,147,881	5,902,104
FACTOR 19			0.3691	0.1371	0.2482	0.0443	0.0161	0.1246	0.0606
TOTAL COS BASIS FOR FACTOR 20		74,171,410	36,286,414	13,473,673	24,411,322	0	0	0	0
FACTOR 20			0.4892	0.1817	0.3291	0.0000	0.0000	0.0000	0.0000

	2	4	6	8	10	12	14
	Base	Max Day	Max Hour	Meters	Services	Billing & Collecting	Fire Service
1	0.9962	-	-	-	-	-	0.0038
2	0.5243	0.4737	-	-	-	-	0.0020
3	0.5074	0.4585	-	-	-	-	0.0341
4	0.3020	-	0.6509	-	-	-	0.0471
5	0.2812	-	0.6059	-	-	-	0.1129
6	0.5193	0.4692	-	-	-	-	0.0115
7	0.3020	-	0.6509	-	-	-	0.0471
8	-	-	-	-	-	-	1.0000
9	-	-	-	0.9924	-	-	0.0076
10	-	-	-	-	0.9509	-	0.0491
11	0.2483	-	0.5351	0.1143	0.0594	-	0.0429
12	0.2362	-	0.5090	0.0787	0.0526	-	0.1235
13	-	-	-	-	-	0.9895	0.0105
14	-	-	-	-	-	1.0000	-
15	0.2544	0.1045	0.2989	0.0529	0.0318	0.2003	0.0572
16	0.2813	0.1553	0.2359	0.0848	0.0505	0.1224	0.0698
17	0.3695	0.2133	0.2875	0.0381	0.0014	0.0088	0.0814
18	0.3697	0.2132	0.2886	0.0374	0.0009	0.0089	0.0813
19	0.3691	0.1371	0.2482	0.0443	0.0161	0.1246	0.0606
20	0.4892	0.1817	0.3291	-	-	-	-

**MISSOURI-AMERICAN WATER COMPANY
ST. LOUIS COUNTY DISTRICT
PSC STAFF STUDY**

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS

FACTOR 1.

ALLOCATION OF COSTS THAT VARY WITH THE AMT OF WATER CONSUMED.

Factors are based on the pro forma test year average daily consumption for each customer classification.

Customer Classification	Average Daily Consumption, Thousand Gallons	Allocation Factor
(1)	(2)	(3)
Rate A	154,863	0.8141
Rate B	6,717	0.0353
Rate J	27,250	0.1433
Rate D	662	0.0035
Rate H	0	0.0000
Rate F	165	0.0009
Rate E	548	0.0029
Total	190,204	1.0000

FACTOR 2.

**ALLOCATION OF COSTS ASSOCIATED WITH FACILITIES SERVING BASE AND
MAXIMUM DAY EXTRA CAPACITY FUNCTIONS.**

Factors are based on the weighting of the factors for average daily consumption (Factor 1) and the factors derived from maximum day extra capacity demand for each customer classification, as follows:

Customer Classification	Average Daily Consumption		Maximum Day Extra Capacity		Allocation Factor
	Allocation Factor 1	Weighted Factor	Allocation Factor	Weighted Factor	
(1)	(2)	(3)=(2)x 0.5263	(4)	(5)=(4)x 0.4737	(6)=(3)+(5)
Rate A	0.8141	0.4285	0.9032	0.4279	0.8564
Rate B	0.0353	0.0186	0.0313	0.0148	0.0334
Rate J	0.1433	0.0754	0.0636	0.0301	0.1055
Rate D	0.0035	0.0018	0.0019	0.0009	0.0027
Rate H	0.0000	0.0000	0.0000	0.0000	0.0000
Rate F	0.0009	0.0005			0.0005
Rate E	0.0029	0.0015			0.0015
Total	1.0000	0.5263	1.0000	0.4737	1.0000

The derivation of the maximum day extra capacity factors in column 4 and the basis for the column 3 and 5 weightings are presented on the following page.

**MISSOURI-AMERICAN WATER COMPANY
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PSC STAFF STUDY**

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 2. MAX DAY CLASS ALLOCATION AND MAX DAY TO AVERAGE DAY

MAXIMUM DAY EXTRA CAPACITY FUNCTIONS, cont.

MAXIMUM DAY EXTRA CAPACITY FUNCTIONS, cont.

Customer Classification	Average Daily Consumption, Thousand Gal.	Maximum Day Extra Capacity		
		Factor*	Rate of Flow, Thousand Gal. Per Day	Allocation Factor
(1)	(2)	(3)	(4)=(2)x(3)	(5)
Rate A	154,863	1.0	154,863	0.9032
Rate B	6,717	0.8	5,374	0.0313
Rate J	27,250	0.4	10,900	0.0636
Rate D	662	0.5	331	0.0019
Rate H	0	0.5	0	0.0000
Total	189,492		171,468	1.0000

The weighting of the factors is based on the maximum day ratio of 1.80, based on a review of maximum day ratios experienced during the period 1999 through 2002 (see Schedule D).

	Maximum Day Ratio	Weight
Average Day	1.00	0.5263
Maximum Day Extra Capacity	0.90	0.4737
Total	1.90	1.0000

* Ratio of maximum day to average day minus 1.0.

MISSOURI-AMERICAN WATER COMPANY
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PSC STAFF STUDY

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 3.

**ALLOCATION OF COSTS ASSOC. WITH FACILITIES SERVING BASE, MAX DAY EXTRA CAPACITY
AND FIRE PROTECTION FUNCTIONS.**

Factors are based on the weighting of the average daily consumption, the maximum day extra capacity demand, and the fire protection demand for each customer classification.

Customer Classification	Average Daily Consumption		Maximum Day Extra Capacity		Fire Protection		Allocation Factor
	Allocation Factor	Weighted Factor	Allocation Factor	Weighted Factor	Allocation Factor	Weighted Factor	
(1)	(2)	(3)=(2) X 0.5093	(4)	(5)=(4) X 0.4585	(6)	(7)=(6) X 0.0321	(8)=(3)+(5)+(7)
Rate A	0.8141	0.4145	0.9032	0.4140			0.8286
Rate B	0.0353	0.0180	0.0313	0.0144			0.0324
Rate J	0.1433	0.0730	0.0636	0.0292			0.1022
Rate D	0.0035	0.0018	0.0019	0.0009			0.0027
Rate H	0.0000	0.0000	0.0000	0.0000			0.0000
Rate F	0.0009	0.0005			0.1549	0.0050	0.0055
Rate E	0.0029	0.0015			0.8451	0.0271	0.0286
Total	1.0000	0.5093	1.0000	0.4585	1.0000	0.0321	1.0000

MISSOURI-AMERICAN WATER COMPANY
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FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 3.

**ALLOCATION OF COSTS ASSOC. WITH FACILITIES SERVING BASE, MAX DAY EXTRA CAPACITY
AND FIRE PROTECTION FUNCTIONS.**

The weighting of the factors is based on the potential demand of general and fire protection service. The bases for the potential demand of general service are the maximum day ratio of 1.90 and the average daily system sendout for 2002 of 188.8 MGD. The system demand for fire protection is 20,000 Gallons per minute for 10 hours.

	<u>Ratio</u>	<u>Rate of Flow, (GPD)</u>	<u>Weight</u>
Average Day	1.00	190,204,430	0.5093
Maximum Day Extra Capacity	<u>0.90</u>	<u>171,183,987</u>	<u>0.4585</u>
Subtotal	<u>1.90</u>	361,388,417	0.9678
Fire Protection		<u>12,000,000</u>	<u>0.0321</u>
Total		<u>373,388,417</u>	<u>0.9999</u>

The public and private fire protection allocation factors in column 6 on the previous page are based on the relative potential demands (see Schedule E).

MISSOURI-AMERICAN WATER COMPANY
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FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 4.

ALLOCATION OF COSTS ASSOC. WITH FACILITIES SERVING BASE AND MAX HOUR EXTRA CAPACITY FUNCT'S.

Factors are based on the weighting of the average daily consumption, the maximum day extra capacity demand, and the fire protection demand for each customer classification.

Customer Classification	Average Hourly Consumption			Maximum Hour Extra Capacity		Fire Protection		Allocation Factor
	Thousand Gallons	Allocation Factor	Weighted Factor	Allocation Factor	Weighted Factor	Allocation Factor	Weighted Factor	
(1)	(2)	(3)	(4)=(3) X 0.3032	(5)	(6)=(5) X 0.6509	(7)	(8)=(7) X 0.0459	(9)=(4)+(6)+(8)
Rate A	6,452.6	0.8141	0.2468	0.9092	0.5918			0.8386
Rate B	279.9	0.0353	0.0107	0.0338	0.0220			0.0327
Rate J	1,135.4	0.1433	0.0434	0.0548	0.0357			0.0791
Rate D	27.6	0.0035	0.0011	0.0022	0.0014			0.0025
Rate H	0.0	0.0000	0.0000	0.0000	0.0000			0.0000
Rate F	6.9	0.0009	0.0003			0.1549	0.0071	0.0074
Rate E	22.8	0.0029	0.0009			0.8451	0.0388	0.0397
Total	7,925.2	1.0000	0.3032	1.0000	0.6509	1.0000	0.0459	1.0000

The maximum hour extra capacity factors in column 5 are determined as follows:

**MISSOURI-AMERICAN WATER COMPANY
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FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 4.

ALLOCATION OF COSTS ASSOC. WITH FACILITIES SERVING BASE AND MAX HOUR EXTRA CAPACITY FUNCT'S.

The weighting of the factors is based on the potential demand of general and fire protection service. The bases for the potential demand of general service are the maximum hour ratio of 3.14 and the average daily system sendout for 2002 of 188.8 MGD. The system demand for fire protection is 20,000 gallons per minute.

	Ratio	Rate of Flow, (GPM)	Weight
Average Hour	1.00	132,086	0.3032
Maximum Hour			
Extra Capacity	2.15	283,495	0.6509
Subtotal	3.15	415,581	0.9541
Fire Protection		20,000	0.0459
Total		435,581	1.0000

The maximum hour extra capacity factors in column 5 of the previous page are determined as follows:

Customer Classification	Average Hourly Consumption Thousand Gal.	Maximum Hour Extra Capacity		
		Factor*	1,000 Gallons Per Hour	Allocation Factor
(1)	(2)	(3)	(4)=(2)x(3)	(5)
Rate A	6,452.6	3.5	22,584.2	0.9092
Rate B	279.9	3.0	839.7	0.0338
Rate J	1,135.4	1.2	1,362.5	0.0548
Rate D	27.6	2.0	55.2	0.0022
Rate H	0.0	1.5	0.0	0.0000
Total	7,895.5		24,841.5	1.0000

* Ratio of Maximum Hour To Average Hour Minus 1.0.

The public and private fire protection allocation factors in column 7 on the previous page are based on the relative potential demands (see Schedule E).

**MISSOURI-AMERICAN WATER COMPANY
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FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 5.

ALLOCATION OF COSTS ASSOCIATED WITH STORAGE FACILITIES.

Factors are based on the weighting of the average hourly consumption, the maximum hour extra capacity demand, and the fire protection demand for each customer classification.

Customer Classification	Average Hourly Consumption			Maximum Hour Extra Capacity		Fire Protection		Allocation Factor
	Thousand Gallons	Allocation Factor	Weighted Factor	Allocation Factor	Weighted Factor	Allocation Factor	Weighted Factor	
(1)	(2)	(3)	(4)=(3) X 0.2823	(5)	(6)=(5) X 0.6059	(7)	(8)=(7) X 0.1118	(9)=(4)+(6)+(8)
Rate A	6,452.6	0.8141	0.2297	0.9092	0.5509			0.7806
Rate B	279.9	0.0353	0.0100	0.0338	0.0205			0.0305
Rate J	1,135.4	0.1433	0.0405	0.0548	0.0332			0.0737
Rate D	27.6	0.0035	0.0010	0.0022	0.0013			0.0023
Rate H	0.0	0.0000	0.0000	0.0000	0.0000			0.0000
Rate F	6.9	0.0009	0.0003			0.1549	0.0173	0.0176
Rate E	22.8	0.0029	0.0008			0.8451	0.0945	0.0953
Total	7,925.2	1.0000	0.2823	1.0000	0.6059	1.0000	0.1118	1.0000

The weighting of the factors is based on the ratio of the capacity required for a 10 hour demand of fire flow, as related to total storage capacity. The calculation is shown on the following page.

**MISSOURI-AMERICAN WATER COMPANY
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FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 5. Continued

ALLOCATION OF COSTS ASSOCIATED WITH STORAGE FACILITIES, cont.

The weighting of the factors is based on the ratio of the capacity required for a 10 hour demand of fire flow, as related to total storage capacity.

$$\text{Fire Protection Weight} = \frac{20,000 \text{ GPM} \times 60 \text{ Min.} \times 10 \text{ Hrs}}{107,320,000 \text{ Gallons}} = 0.1118$$

$$\text{General Service Weight} = 1.0000 - 0.1118 = 0.8882$$

The weighting of the average hourly consumption and maximum hour extra demand for general service is based on the maximum hour ratio, as follows:

	Maximum Hour Ratio	Percent	Weight
Average Hour	1.00	31.78	0.2823
Extra Capacity Maximum Hour	2.15	68.22	0.6059
Total	3.15	100.00	0.8882

Customer Classification	Average Hourly Consumption Thousand Gal.	Maximum Hour Extra Capacity		Allocation Factor
		Factor*	1,000 Gallons Per Hour	
(1)	(2)	(3)	(4)=(2)x(3)	(5)
Rate A	6,452.6	3.5	22,584.2	0.9092
Rate B	279.9	3.0	839.7	0.0338
Rate J	1,135.4	1.2	1,362.5	0.0548
Rate D	27.6	2.0	55.2	0.0022
Rate H	-	1.5	0.0	0.0000
Total	7,895.5		24,841.5	1.0000

MISSOURI-AMERICAN WATER COMPANY
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FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 6.

ALLOCATION OF COSTS ASSOCIATED WITH POWER AND PUMPING FACILITIES.

Factors are based on the weighting of the maximum daily consumption, Factor 2, the maximum daily consumption with fire, Factor 3, and the maximum hour consumption, Factor 4, for each customer classification, as follows:

Customer Classification	Maximum Daily Consumption		Maximum Daily Consumption		Maximum Hourly Consumption		Allocation
	Allocation Factor 2	Weighted Factor	Allocation Factor 3	Weighted Factor	Allocation Factor 4	Weighted Factor	
(1)	(2)	(3)=(2)X 0.7064	(4)	(5)=(4)X 0.2936	(6)	(7)=(6)X 0.0000	(8)=(3)+ (5)+(7)
Rate A	0.8564	0.6049	0.8286	0.2433	0.8386	0.0000	0.8482
Rate B	0.0334	0.0236	0.0324	0.0095	0.0327	0.0000	0.0331
Rate J	0.1055	0.0745	0.1022	0.0300	0.0791	0.0000	0.1045
Rate D	0.0027	0.0019	0.0027	0.0008	0.0025	0.0000	0.0027
Rate H	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Rate F	0.0005	0.0004	0.0055	0.0016	0.0074	0.0000	0.0020
Rate E	0.0015	0.0011	0.0286	0.0084	0.0397	0.0000	0.0095
Total	<u>1.0000</u>	<u>0.7064</u>	<u>1.0000</u>	<u>0.2936</u>	<u>1.0000</u>	<u>0.0000</u>	<u>1.0000</u>

The weighting of the factors is based on the horsepower of pumps associated with maximum day facilities, maximum day and fire facilities, and maximum hour facilities, as follows:

	<u>Horsepower of Pumps</u>	<u>Weight</u>
Associated with Maximum Day	43,200	0.7064
Associated with Maximum Day and Fire	17,955	0.2936
Associated with Maximum Hour	<u>0</u>	<u>0.0000</u>
Total	<u>61,155</u>	<u>1.0000</u>

MISSOURI-AMERICAN WATER COMPANY
ST. LOUIS COUNTY DISTRICT
PSC STAFF STUDY

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 7.

ALLOCATION OF COSTS ASSOCIATED WITH TRANSMISSION AND DISTRIBUTION MAINS.

Factors are based on the weighting of the maximum daily consumption with fire, Factor 3, and the maximum hour consumption, Factor 4, for each customer classification, as follows:

Customer Classification	Maximum Daily Consumption		Maximum Hourly Consumption		Allocation Factor
	Allocation Factor 3	Weighted Factor	Allocation Factor 4	Weighted Factor	
(1)	(2)	(3)=(2)X 0.0000	(4)	(5)=(4)X 1.0000	(6)=(3)+(5)
Rate A	0.8286	0.0000	0.8386	0.8386	0.8386
Rate B	0.0324	0.0000	0.0327	0.0327	0.0327
Rate J	0.1022	0.0000	0.0791	0.0791	0.0791
Rate D	0.0027	0.0000	0.0025	0.0025	0.0025
Rate H	0.0000	0.0000	0.0000	0.0000	0.0000
Rate F	0.0055	0.0000	0.0074	0.0074	0.0074
Rate E	0.0286	0.0000	0.0397	0.0397	0.0397
Total	<u>1.0000</u>	<u>0.0000</u>	<u>1.0000</u>	<u>1.0000</u>	<u>1.0000</u>

The weighting of the factors is based on the total footage of mains, designated as either transmission mains or distribution mains, as follows:

	Total Footage of Mains	Weight
Transmission Mains	4,219,634	0.0000
Distribution Mains	<u>17,501,698</u>	<u>1.0000</u>
Total	<u>21,721,332</u>	1.0000

MISSOURI-AMERICAN WATER COMPANY
ST. LOUIS COUNTY DISTRICT
PSC STAFF STUDY

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 8.

ALLOCATION OF COSTS ASSOCIATED WITH FIRE HYDRANTS.

Costs are assigned directly to Public Fire.

Customer Classification <u> </u> (1)	Allocation Factor <u> </u> (3)
Public Fire	<u>1.0000</u>
Total	<u><u>1.0000</u></u>

FACTOR 9.

ALLOCATION OF COSTS ASSOCIATED WITH METERS.

Factors are based on the relative cost of meters by size and customer classification, as developed on the following page and summarized below.

Customer Classification <u> </u> (1)	5/8" Dollar Equivalents <u> </u> (2)	Allocation Factor <u> </u> (3)
Rate A	563,799	0.9631
Rate B	1,200	0.0020
Rate J	15,730	0.0269
Rate D	227	0.0004
Rate H	0	0.0000
Rate F	<u>4,474</u>	<u>0.0076</u>
Total	<u><u>585,429</u></u>	<u><u>1.0000</u></u>

MISSOURI-AMERICAN WATER COMPANY
ST. LOUIS COUNTY DISTRICT
PSC STAFF STUDY

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 10.

ALLOCATION OF COSTS ASSOCIATED WITH SERVICES.

Factors are based on the relative cost of services by size and customer classification, as developed on the following page and summarized below.

Customer Classification	3/4" Dollar Equivalents	Allocation Factor
(1)	(2)	(3)
Rate A	350,039	0.9488
Rate B	36	0.0001
Rate J	750	0.0020
Rate D	7	0.0000
Other	0	0.0000
Rate F	18,126	0.0491
Total	368,958	1.0000

**MISSOURI-AMERICAN WATER COMPANY
ST. LOUIS COUNTY DISTRICT
PSC STAFF STUDY**

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 11.

**ALLOCATION OF TRANSMISSION AND DISTRIBUTION OPERATION
SUPERVISION AND ENGINEERING AND MISCELLANEOUS EXPENSES.**

Factors are based on transmission and distribution operation expenses other than those being allocated, as follows:

Customer Classification	Transmission & Distribution Operating Expenses	Allocation Factor
(1)	(2)	(3)
Rate A	\$ 3,321,353	0.8597
Rate B	104,777	0.0271
Rate J	263,695	0.0683
Rate D	8,118	0.0021
Rate H	-	0.0000
Rate F	38,861	0.0101
Rate E	126,743	0.0328
Total	<u>3,863,546</u>	<u>1.0000</u>

FACTOR 12.

**ALLOCATION OF TRANS. DISTRIB. MAINTENANCE SUPERVISION
AND ENGINEERING, STRUCTURES AND IMPROVE., AND OTHER EXPENSES.**

Factors are based on transmission and distribution maintenance expenses other than those being allocated, as follows:

Customer Classification	Transmission & Distribution Maintenance Expenses	Allocation Factor
(1)	(2)	(3)
Rate A	\$ 3,437,674	0.7847
Rate B	112,756	0.0257
Rate J	280,842	0.0641
Rate D	8,704	0.0020
Rate H	-	0.0000
Rate F	39,924	0.0091
Rate E	500,965	0.1144
Total	<u>\$4,380,866</u>	<u>1.0000</u>

MISSOURI-AMERICAN WATER COMPANY
ST. LOUIS COUNTY DISTRICT
PSC STAFF STUDY

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 13.

ALLOCATION OF BILLING AND COLLECTING COSTS.

Factors are based on the total number of customers.

Customer Classification	Total Customers	Allocation Factor
(1)	(2)	(3)
Rate A	337,409	0.9887
Rate B	3	0.0000
Rate J	257	0.0008
Rate D	2	0.0000
Rate H	0	0.0000
Rate F	3,596	0.0105
Rate E	0	0.0000
Total	341,266	1.0000

FACTOR 14.

ALLOCATION OF METER READING COSTS.

Factors are based on the number of metered customers.

Customer Classification	Total Metered Customers	Allocation Factor
(1)	(2)	(3)
Rate A	337,409	0.9992
Rate B	3	0.0000
Rate J	257	0.0008
Rate D	2	0.0000
Rate H	0	0.0000
Total	337,670	1.0000

MISSOURI-AMERICAN WATER COMPANY
ST. LOUIS COUNTY DISTRICT
PSC STAFF STUDY

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 15.

**ALLOCATION OF ADMINISTRATIVE AND GENERAL EXPENSES AND CASH
WORKING CAPITAL.**

Factors are based on the allocation of all other operation and maintenance expenses excluding purchased water, power, chemicals and waste disposal.

Customer Classification	Operation & Maintenance Expenses	Allocation Factor
(1)	(2)	(3)
Rate A	\$21,977,143	0.8573
Rate B	576,595	0.0225
Rate J	1,570,752	0.0613
Rate D	45,369	0.0018
Rate H	0	0.0000
Rate F	189,474	0.0074
Rate E	1,276,181	0.0498
Total	<u>\$25,635,514</u>	<u>1.0000</u>

**MISSOURI-AMERICAN WATER COMPANY
ST. LOUIS COUNTY DISTRICT
PSC STAFF STUDY**

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 16.

ALLOCATION OF LABOR RELATED TAXES AND BENEFITS.

Factors are based on the allocation of direct labor expense.

Customer Classification	Direct Labor Expense	Allocation Factor
(1)	(2)	(3)
Rate A	\$13,846,573	0.8396
Rate B	378,808	0.0230
Rate J	1,084,561	0.0658
Rate D	30,323	0.0018
Rate H	0	0.0000
Rate F	113,377	0.0069
Rate E	1,037,679	0.0629
Total	<u>\$16,491,321</u>	<u>1.0000</u>

FACTOR 17.

**ALLOCATION OF ORGANIZATION, FRANCHISES AND CONSENTS,
MISC. INTANGIBLE PLANT AND OTHER RATE BASE ELEMENTS.**

Factors are based on the allocation of the original cost less depreciation other than those items being allocated, as follows:

Customer Classification	Original Cost Less Depreciation	Allocation Factor
(1)	(2)	(3)
Rate A	\$353,742,183	0.8032
Rate B	13,029,972	0.0296
Rate J	36,783,911	0.0835
Rate D	1,040,412	0.0024
Rate H	0	0.0000
Rate F	2,464,091	0.0056
Rate E	33,377,272	0.0758
Total	<u>\$440,437,841</u>	<u>1.0000</u>

**MISSOURI-AMERICAN WATER COMPANY
ST. LOUIS COUNTY DISTRICT
PSC STAFF STUDY**

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 18.

ALLOCATION OF INCOME TAXES AND INCOME AVAILABLE FOR RETURN.

Factors are based on the allocation of the original cost measure of value rate base as shown on the following pages and summarized below.

Customer Classification <u>(1)</u>	Original Cost Measure of Value <u>(2)</u>	Allocation Factor <u>(3)</u>
Rate A	\$223,281,985	0.8031
Rate B	8,233,687	0.0296
Rate J	23,242,734	0.0836
Rate D	651,773	0.0023
Rate H	0	0.0000
Rate F	1,553,483	0.0056
Rate E	<u>21,051,409</u>	<u>0.0757</u>
Total	<u><u>\$278,015,072</u></u>	<u><u>1.0000</u></u>

FACTOR 19.

**ALLOCATION OF REG. COMMISSION EXPENSES, ASSESSMENTS AND
OTHER WATER REVENUES.**

The factors are based on the allocation of the total cost of service, excluding those items being allocated.

Customer Classification <u>(1)</u>	Total Cost of Service <u>(2)</u>	Allocation Factor <u>(3)</u>
Rate A	\$81,362,612	0.8347
Rate B	2,519,907	0.0259
Rate J	7,482,992	0.0768
Rate D	205,208	0.0021
Rate H	0	0.0000
Rate F	590,283	0.0061
Rate E	<u>5,311,821</u>	<u>0.0545</u>
Total	<u><u>\$97,472,821</u></u>	<u><u>1.0000</u></u>

MISSOURI-AMERICAN WATER COMPANY
ST. LOUIS COUNTY DISTRICT
PSC STAFF STUDY
BASIS FOR ALLOCATING METER COSTS TO CUSTOMER CLASSIFICATIONS

Meter Size (1)	5/8" Dollar Equivalent (2)	305,224 Rate A & K		853.5 Rate B		Rate J		Rate D		Rate H		Rate F		Total	
		Number of Meters (3)	Weighting (4)=(2)X(3)	Number of Meters (5)	Weighting (6)=(2)X(5)	Number of Meters (7)	Weighting (8)=(2)X(7)	Number of Meters (9)	Weighting (10)=(2)X(9)	Number of Meters (11)	Weighting (12)=(2)X(11)	Number of Services (13)	Weighting (14)=(2)X(13)	Number of Meters (15)	Weighting (16)
5/8	1.0	305,224	305,224	0	0	5	5	0	0	0	0	38	38	305,268	305,268
3/4	1.2	18,039	21,647	0	0	2	2	0	0	0	0	2,095	2,514	20,136	24,163
1	1.9	4,896	9,301	0	0	4	7	0	0	0	0	30	57	4,929	9,365
1-1/2	5.0	2,316	11,580	0	0	14	69	0	0	0	0	5	25	2,335	11,674
2	6.5	4,813	31,286	0	0	64	413	0	0	0	0	23	150	4,900	31,849
3	36.6	942	34,477	0	0	53	1,938	0	0	0	0	5	183	1,000	36,598
4	78.8	591	46,531	0	0	67	5,316	1	79	0	0	6	473	665	52,399
6	147.8	362	53,467	0	0	36	5,249	1	148	0	0	7	1,035	405	59,898
8	193.1	153	29,496	0	0	10	1,846	0	0	0	0	0	0	162	31,342
10	283.8	73	20,788	0	0	3	885	0	0	0	0	0	0	76	21,673
12	400.0	0	0	3	1,200	0	0	0	0	0	0	0	0	3	1,200
Total		337,409	563,799	3	1,200	257	15,730	2	227	0	0	2,209	4,474	339,879	585,429

MISSOURI-AMERICAN WATER COMPANY
ST. LOUIS COUNTY DISTRICT
PSC STAFF STUDY

BASIS FOR ALLOCATING DEMAND RELATED COSTS OF FIRE SERVICE
TO PRIVATE AND PUBLIC FIRE PROTECTION CUSTOMER CLASSIFICATIONS

Description (1)	Restrictive Diameters Squared (2)	Quantity (3)	Relative Demand (4)=(2)x(3)	Allocation Factor (5)
<u>PRIVATE FIRE PROTECTION</u>				
Fire Lines				
2 -inch	4.00	113	452	
3 -inch	9.00	-	0	
4 -inch	16.00	463	7,408	
6 -inch	36.00	1,812	65,232	
8 -inch	64.00	1,099	70,336	
10 -inch	100.00	44	4,400	
12 -inch	144.00	64	9,216	
20 -inch	400.00	1	400	
Private Hydrants	32.75	-	0	
Total Rate F		3,596	157,444	0.1549
<u>PUBLIC FIRE PROTECTION</u>				
Hydrant	Nozzle Sizes			
6" Valve	2- 2-1/2" & 1- 4.5"	32.75	0	0
6" Valve	2- 2-1/2" & 1- 4"	28.50	30,147	859,190
Total Rate E		30,147	859,190	0.8451
Total Fire Protection		33,743	1,016,634	1.0000

MISSOURI-AMERICAN WATER COMPANY

ST. JOSEPH DISTRICT

PSC STAFF STUDY

COMPARISON OF COST OF SERVICE WITH REVENUES UNDER PRESENT AND PROPOSED RATES
FOR THE TEST YEAR ENDED DECEMBER 31, 2002

Customer Classification (1)	Cost of Service		Revenues, Present Rates		Revenues, Proposed Rates		Proposed Increase	
	Amount (2)	Percent (3)	Amount (4)	Percent (5)	Amount (6)	Percent (7)	Amount (8)	Percent Increase (9)
Residential	\$ 7,346,368	49.1%	\$ 7,460,181	45.5%	\$ 7,346,368	49.2%	\$ (113,813)	-1.5%
Commercial	2,719,260	18.2%	\$ 3,138,604	19.1%	\$ 2,719,260	18.2%	(419,344)	-13.4%
Industrial	2,538,826	17.0%	\$ 2,931,266	17.9%	\$ 2,538,827	17.0%	(392,439)	-13.4%
Public Authority	573,820	3.8%	\$ 655,164	4.0%	\$ 573,821	3.8%	(81,343)	-12.4%
Sales for Resale	1,659,757	11.1%	\$ 2,054,575	12.5%	\$ 1,659,757	11.1%	(394,818)	-19.2%
Private Fire Service	133,912	0.9%	\$ 154,627	0.9%	\$ 133,913	0.9%	(20,714)	-13.4%
Public Fire Service	-	0.0%	-	0.0%	-	0.0%	-	-
Total Sales	14,971,944	100.1%	16,394,417	99.9%	14,971,946	100.2%	(1,422,471)	-8.7%
Other Revenues	188,014		188,014		188,014		-	0.0%
Total	\$ 15,159,958		\$ 16,582,431		\$ 15,159,960		\$ (1,422,471)	-8.6%
True-Up Estimate	\$244,917				\$244,917		\$244,917	
Total w/ True-up	15,404,875				\$ 15,404,877		\$ (1,177,554)	-7.1%

Test Year Operating Revenues at Present Rates vs Proposed Rates
12 Month Test Period Ended December 31, 2002

Missouri Public Service Commission
 Company: Missouri-American Water Company
 District: St. Joseph

Case No. WR-2003-0500
STAFF - ST JOSEPH
 Page 1 of 1

Line #	Class/ Description	Present Pro Forma Rates		Proposed Pro Forma Rates		Dollar Change	Percentage Change
		Sales ('000 Gal)	Total Revenue	Sales ('000 Gal)	Total Revenue		
1							
2	Monthly Billing:						
3							
4	Residential	1,726,061	\$7,460,181	1,726,061	\$7,346,368	(\$113,813)	-1.53%
5	Commercial	975,717	3,138,604	975,717	2,719,260	(419,344)	-13.36%
6	Industrial	1,108,812	2,931,266	1,108,812	2,538,827	(392,439)	-13.39%
7	Other Public Authority	232,022	655,164	232,022	573,821	(81,343)	-12.42%
8	Other Water Utilities	704,559	2,054,575	704,559	1,659,757	(394,818)	-19.22%
9	Miscellaneous	0	0	0	0	0	0.00%
10	Private Fire	0	154,627	0	133,913	(20,714)	-13.40%
11	Public Fire	0	0	0	0	0	0.00%
12	Total	<u>4,747,171</u>	<u>16,394,417</u>	<u>4,747,171</u>	<u>14,971,946</u>	<u>(\$1,422,471)</u>	<u>-8.68%</u>
13							
14							
15	Miscellaneous Revenues:						
16							
17	Reconnect Charges		32,661		32,661	0	0.00%
18	Returned Check Charge		6,931		6,931	0	0.00%
19	Application Fee		141,480		141,480	0	0.00%
20	Miscellaneous Other Revenue		5,813		(1,364)	(7,177)	-123.46%
21	Rents from Water Property		1,128		1,128	0	0.00%
22							
23							
24			<u>\$16,582,431</u>		<u>\$15,152,783</u>	<u>(1,429,648)</u>	<u>-8.62%</u>
25							
26							
27							
28							
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30							
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34							
35							
36							
37							
38							
39							
40							

Test Year Operating Revenues at Present Rates vs Proposed Rates
12 Month Test Period Ended December 31, 2002

Missouri Public Service Commission
 Company: Missouri-American Water Company
 District: St. Joseph

Case No. WR-2003-0500
 STAFF - ST JOSEPH
 Page 1 of 7

Line #	Class/ Description	Present Pro Forma Rates				Proposed Pro Forma Rates				Dollar Change	Percentage Change
		Customer Meter Billings	Sales ('000 Gal)	Current Rate	Total Revenue	Customer Meter Billings	Sales ('000 Gal)	Proposed Rate	Total Revenue		
2	Residential:										
3	<u>Minimum Charge:</u>										
4	5/8" Monthly	319,602		\$7.08	\$2,262,782	319,602		\$ 7.89	\$2,521,675	\$258,893	11.44%
5	3/4" Monthly	9,681		9.06	87,710	9,681		\$ 8.60	83,226	(4,484)	-5.11%
6	1" Monthly	6,671		12.84	85,656	6,671		\$ 9.73	64,939	(20,717)	-24.19%
7	1-1/2" Monthly	61		22.33	1,362	61		\$ 14.45	881	(481)	-35.32%
8	2" Monthly	153		33.71	5,158	153		\$ 16.86	2,580	(2,578)	-49.98%
9	3" Monthly	12		60.24	723	12		\$ 52.28	627	(96)	-13.28%
10	4" Monthly	0		98.15	0	0		\$ 76.72	0	0	0.00%
11	6" Monthly	0		192.93	0	0		\$ 123.28	0	0	0.00%
12	8" Monthly	0		306.65	0	0		\$ 278.38	0	0	0.00%
13	10" Monthly	0		520.92	0	0		\$ -	0	0	0.00%
14	12" Monthly	0		859.27	0	0		\$ -	0	0	0.00%
17	<u>Volumetric Charges:</u>										
18	First Block		1,617,496	\$2.8793	4,657,256		1,617,496	\$2.8887	4,672,440	15,184	0.33%
19	Second Block		26,275	1.6131	42,384		26,275	2.8887	0	(42,384)	
20	Third Block		19,006	1.2448	23,659		19,006	2.8887	0	(23,659)	
21	Fourth Block		63,284	0.8383	53,051		63,284	2.8887	0	(53,051)	
26	Property tax Surcharge		<u>1,726,061</u>	0.1393	240,440		<u>1,726,061</u>	0.0000	0	(240,440)	-100.00%
28	Total		<u>1,726,061</u>		<u>\$7,460,181</u>		<u>1,726,061</u>		<u>\$7,346,368</u>	<u>(\$113,813)</u>	<u>-1.53%</u>

Test Year Operating Revenues at Present Rates vs Proposed Rates
12 Month Test Period Ended December 31, 2002

Missouri Public Service Commission
 Company: Missouri-American Water Company
 District: St. Joseph

Case No. WR-2003-0500
 STAFF - ST JOSEPH
 Page 2 of 7

Line #	Class/ Description	Present Pro Forma Rates				Proposed Pro Forma Rates				Dollar Change	Percentage Change
		Customer Meter Billings	Sales (^{'000} Gal)	Current Rate	Total Revenue	Customer Meter Billings	Sales (^{'000} Gal)	Proposed Rate	Total Revenue		
1											
2	Commercial:										
3	<u>Minimum Charge:</u>										
4	5/8" Monthly	27,311		\$7.08	\$193,362	27,311		\$ 7.89	\$215,485	\$22,123	11.44%
5	3/4" Monthly	1,865		\$9.06	16,897	1,865		\$ 8.60	16,033	(864)	-5.11%
6	1" Monthly	4,063		\$12.84	52,169	4,063		\$ 9.73	39,552	(12,617)	-24.18%
7	1-1/2" Monthly	1,031		\$22.33	23,022	1,031		\$ 14.45	14,894	(8,128)	-35.31%
8	2" Monthly	2,687		\$33.71	90,579	2,687		\$ 16.86	45,303	(45,276)	-49.99%
9	3" Monthly	72		\$60.24	4,337	72		\$ 52.28	3,764	(573)	-13.21%
10	4" Monthly	135		\$98.15	13,250	135		\$ 76.72	10,357	(2,893)	-21.83%
11	6" Monthly	24		\$192.93	4,630	24		\$ 123.28	2,959	(1,671)	-36.09%
12	8" Monthly	0		\$306.65	0	0		\$ 278.38	0	0	0.00%
13	10" Monthly	0		\$520.92	0	0		\$0.00	0	0	0.00%
14	12" Monthly	0		\$859.27	0	0		\$0.00	0	0	0.00%
15											
16											
17	<u>Volumetric Charges:</u>										
18	First Block		532,377	\$3.3757	1,797,145		532,377	\$2.4299	1,293,633	(503,512)	-28.02%
19	Second Block		380,267	\$1.8911	719,123		380,267	\$2.4299	924,018	204,895	28.49%
20	Third Block		54,930	\$1.4595	80,170		54,930	\$2.4299	133,475	53,305	66.49%
21	Fourth Block		8,143	\$0.9828	8,003		8,143	\$2.4299	19,787	11,784	147.24%
22											
23											
24											
25											
26	Property tax Surcharge		<u>975,717</u>	0.1393	135,917		<u>975,717</u>	0.0000	0	(135,917)	-100.00%
27											
28	Total		<u>975,717</u>		<u>\$3,138,604</u>		<u>975,717</u>		<u>\$2,719,260</u>	<u>(\$419,344)</u>	<u>-13.36%</u>
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Test Year Operating Revenues at Present Rates vs Proposed Rates
12 Month Test Period Ended December 31, 2002

Missouri Public Service Commission
 Company: Missouri-American Water Company
 District: St. Joseph

Case No. WR-2003-0500
 STAFF - ST JOSEPH
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Line #	Class/ Description	Present Pro Forma Rates				Proposed Pro Forma Rates				Dollar Change	Percentage Change
		Customer Meter Billings	Sales (⁰⁰⁰ Gal)	Current Rate	Total Revenue	Customer Meter Billings	Sales (⁰⁰⁰ Gal)	Proposed Rate	Total Revenue		
1											
2	Industrial:										
3	<u>Minimum Charge:</u>										
4	5/8" Monthly	84		\$7.08	\$595	84		\$ 7.89	\$663	\$68	11.43%
5	3/4" Monthly	40		9.06	362	40		\$ 8.60	344	(18)	-4.97%
6	1" Monthly	264		12.84	3,390	264		\$ 9.73	2,570	(820)	-24.19%
7	1-1/2" Monthly	80		22.33	1,786	80		\$ 14.45	1,156	(630)	-35.27%
8	2" Monthly	978		33.71	32,968	978		\$ 16.86	16,489	(16,479)	-49.98%
9	3" Monthly	24		60.24	1,446	24		\$ 52.28	1,255	(191)	-13.21%
10	4" Monthly	173		98.15	16,980	173		\$ 76.72	13,273	(3,707)	-21.83%
11	6" Monthly	48		192.93	9,261	48		\$ 123.28	5,917	(3,344)	-36.11%
12	8" Monthly	0		306.65	0	0		\$ 278.38	0	0	0.00%
13	10" Monthly	0		520.92	0	0		0.00	0	0	0.00%
14	12" Monthly	0		859.27	0	0		0.00	0	0	0.00%
15											
16											
17	<u>Volumetric Charges:</u>										
18	First Block		62,545	\$5.4203	339,013		62,545	\$2.2521	140,858	(198,155)	-58.45%
19	Second Block		386,079	3.0364	1,172,290		386,079	\$2.2521	869,490	(302,800)	-25.83%
20	Third Block		205,070	2.3433	480,541		205,070	\$2.2521	461,839	(18,702)	-3.89%
21	Fourth Block		455,118	1.5780	718,176		455,118	\$2.2521	1,024,973	306,797	42.72%
22											
23											
24											
25											
26	Property tax Surcharge		<u>1,108,812</u>	0.1393	154,458		<u>1,108,812</u>	0.0000	0	(154,458)	-100.00%
27											
28	Total		<u>1,108,812</u>		<u>\$2,931,266</u>		<u>1,108,812</u>		<u>\$2,538,827</u>	<u>(\$392,439)</u>	<u>-13.39%</u>
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Test Year Operating Revenues at Present Rates vs Proposed Rates
12 Month Test Period Ended December 31, 2002

Missouri Public Service Commission
Company: Missouri-American Water Company
District: St. Joseph

Case No. WR-2003-0500
STAFF - ST JOSEPH
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Line #	Class/ Description	Present Pro Forma Rates				Proposed Pro Forma Rates				Dollar Change	Percentage Change
		Customer Meter Billings	Sales (⁰⁰⁰ Gal)	Current Rate	Total Revenue	Customer Meter Billings	Sales (⁰⁰⁰ Gal)	Proposed Rate	Total Revenue		
1											
2	Other Public Authority:										
3	<u>Minimum Charge:</u>										
4	5/8" Monthly	461.50		\$7.08	\$3,267	462		\$ 7.89	\$3,641	\$374	11.45%
5	3/4" Monthly	130.00		9.06	1,178	130		\$ 8.60	1,118	(60)	-5.09%
6	1" Monthly	446.00		12.84	5,727	446		\$ 9.73	4,342	(1,385)	-24.18%
7	1-1/2" Monthly	222.00		22.33	4,957	222		\$ 14.45	3,207	(1,750)	-35.30%
8	2" Monthly	939.00		33.71	31,654	939		\$ 16.86	15,832	(15,822)	-49.98%
9	3" Monthly	26.00		60.24	1,566	26		\$ 52.28	1,359	(207)	-13.22%
10	4" Monthly	62.00		98.15	6,085	62		\$ 76.72	4,757	(1,328)	-21.82%
11	6" Monthly	8.00		192.93	1,543	8		\$ 123.28	986	(557)	-36.10%
12	8" Monthly	0.00		306.65	0	0		\$ 278.38	0	0	0.00%
13	10" Monthly	0.00		520.92	0	0		0.00	0	0	0.00%
14	12" Monthly	0.00		859.27	0	0		0.00	0	0	0.00%
15											
16											
17	<u>Volumetric Charges:</u>										
18	First Block		62,613	\$3.9599	247,941		62,613	\$2.3212	145,340	(102,601)	-41.38%
19	Second Block		93,637	2.2148	207,391		93,637	\$2.3212	217,354	9,963	4.80%
20	Third Block		43,247	1.7120	74,039		43,247	\$2.3212	100,387	26,348	35.59%
21	Fourth Block		32,525	1.1528	37,495		32,525	\$2.3212	75,498	38,003	101.35%
22											
23											
24											
25											
26	Property tax Surcharge	<u>232,022</u>		0.1393	32,321	<u>232,022</u>		0.0000	0	(32,321)	-100.00%
27											
28	Total	<u>232,022</u>			<u>\$655,164</u>	<u>232,022</u>			<u>\$573,821</u>	<u>(\$81,343)</u>	<u>-12.42%</u>
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Test Year Operating Revenues at Present Rates vs Proposed Rates
12 Month Test Period Ended December 31, 2002

Missouri Public Service Commission
 Company: Missouri-American Water Company
 District: St. Joseph

Case No. WR-2003-0500
 STAFF - ST JOSEPH
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Line #	Class/ Description	Present Pro Forma Rates				Proposed Pro Forma Rates				Dollar Change	Percentage Change
		Customer Meter Billings	Sales (^{'000} Gal)	Current Rate	Total Revenue	Customer Meter Billings	Sales (^{'000} Gal)	Proposed Rate	Total Revenue		
1											
2	Other Water Utilities:										
3	<u>Minimum Charge:</u>										
4	5/8" Monthly	2.00		\$7.08	\$14	2		\$ 7.89	\$16	\$2	14.29%
5	3/4" Monthly	0.00		9.06	0	0		\$ 8.60	0	0	0.00%
6	1" Monthly	0.00		12.84	0	0		\$ 9.73	0	0	0.00%
7	1-1/2" Monthly	0.00		22.33	0	0		\$ 14.45	0	0	0.00%
8	2" Monthly	132.00		33.71	4,450	132		\$ 16.86	2,226	(2,224)	-49.98%
9	3" Monthly	0.00		60.24	0	0		\$ 52.28	0	0	0.00%
10	4" Monthly	60.00		98.15	5,889	60		\$ 76.72	4,603	(1,286)	-21.84%
11	6" Monthly	36.00		192.93	6,945	36		\$ 123.28	4,438	(2,507)	-36.10%
12	8" Monthly	12.00		306.65	3,680	12		\$ 278.38	3,341	(339)	-9.21%
13	10" Monthly	0.00		520.92	0	0		0.00	0	0	0.00%
14	12" Monthly	0.00		859.27	0	0		0.00	0	0	0.00%
15											
16											
17	<u>Volumetric Charges:</u>										
18	First Block		10,416	\$6.6267	69,024		10,416	\$2.3350	24,321	(44,703)	-64.76%
19	Second Block		171,110	3.7123	635,212		171,110	2.3350	399,539	(235,673)	-37.10%
20	Third Block		237,448	2.8649	680,265		237,448	2.3350	554,437	(125,828)	-18.50%
21	Fourth Block		285,585	1.9292	550,951		285,585	2.3350	666,836	115,885	21.03%
22											
23											
24											
25											
26	Property tax Surcharge		<u>704,559</u>	0.1393	98,145		<u>704,559</u>	0.0000	0	(98,145)	-100.00%
27											
28	Total		<u>704,559</u>		<u>\$2,054,575</u>		<u>704,559</u>		<u>\$1,659,757</u>	<u>(\$394,818)</u>	<u>-19.22%</u>
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Test Year Operating Revenues at Present Rates vs Proposed Rates
12 Month Test Period Ended December 31, 2002

Missouri Public Service Commission
 Company: Missouri-American Water Company
 District: St. Joseph

Case No. WR-2003-0500
 STAFF - ST JOSEPH
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Line #	Class/ Description	Present Pro Forma Rates				Proposed Pro Forma Rates				Dollar Change	Percentage Change
		Customer Meter Billings	Sales (⁰⁰⁰ Gal)	Current Rate	Total Revenue	Customer Meter Billings	Sales (⁰⁰⁰ Gal)	Proposed Rate	Total Revenue		
1											
2	Miscellaneous:										
3	<u>Minimum Charge:</u>										
4	5/8" Monthly	0		\$7.08	\$0	0		\$ 7.89	\$0	\$0	0.00%
5	3/4" Monthly	0		9.06	0	0		\$ 8.60	0	0	0.00%
6	1" Monthly	0		12.84	0	0		\$ 9.73	0	0	0.00%
7	1-1/2" Monthly	0		22.33	0	0		\$ 14.45	0	0	0.00%
8	2" Monthly	0		33.71	0	0		\$ 16.86	0	0	0.00%
9	3" Monthly	0		60.24	0	0		\$ 52.28	0	0	0.00%
10	4" Monthly	0		98.15	0	0		\$ 76.72	0	0	0.00%
11	6" Monthly	0		192.93	0	0		\$ 123.28	0	0	0.00%
12	8" Monthly	0		306.65	0	0		\$ 278.38	0	0	0.00%
13	10" Monthly	0		520.92	0	0		0.00	0	0	0.00%
14	12" Monthly	0		859.27	0	0		0.00	0	0	0.00%
15											
16											
17	<u>Volumetric Charges:</u>										
18	First Block		0	\$0.0000	0		0	\$0.0000	0	0	0.00%
19	Second Block		0	0.0000	0		0	0.0000	0	0	0.00%
20	Third Block		0	0.0000	0		0	0.0000	0	0	0.00%
21	Fourth Block		0	0.0000	0		0	0.0000	0	0	0.00%
22											
23											
24	Total		<u>0</u>		<u>\$0</u>		<u>0</u>		<u>\$0</u>	<u>\$0</u>	<u>0.00%</u>
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Test Year Operating Revenues at Present Rates vs Proposed Rates
12 Month Test Period Ended December 31, 2002

Missouri Public Service Commission
 Company: Missouri-American Water Company
 District: St. Joseph

Case No. WR-2003-0500
STAFF - ST JOSEPH
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Line #	Connection Size	Number of Connections	Present Rates		Proposed Rates		Dollar Change	Percentage Change
			Annual Rate	Total Revenue	Annual Rate	Total Revenue		
1								
2	Private Fire Service:							
3								
4	Private Fire Hydrant	63.0	\$459.96	\$28,977	398.34	\$25,095	(\$3,882)	-13.40%
5								
6	2"	4.0	66.00	264	57.16	229	(35)	-13.26%
7								
8	3"	1.0	113.28	113	98.10	98	(15)	-13.27%
9								
10	4"	61.0	179.76	10,965	155.68	9,496	(1,469)	-13.40%
11								
12	6"	121.0	368.64	44,605	319.25	38,630	(5,975)	-13.40%
13								
14	8"	77.0	634.20	48,833	549.24	42,291	(6,542)	-13.40%
15								
16	10"	10.0	974.88	9,749	844.28	8,443	(1,306)	-13.40%
17								
18	12"	8.0	1,390.08	11,121	1,203.86	9,631	(1,490)	-13.40%
19								
20								
21								
22	Total	<u>345</u>		<u>\$154,627</u>		<u>\$133,913</u>	<u>(\$20,714)</u>	<u>-13.40%</u>
23								
24								
25								
26	Public Fire Protection:							
27								
28	Public Fire Hydrants	<u>2,888</u>	0.00	<u>0</u>	0.00	<u>0</u>	<u>0</u>	<u>0.00%</u>
29								

MISSOURI-AMERICAN WATER COMPANY

ST. JOSEPH DISTRICT

PSC STAFF STUDY

COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS

Account	Factor	Cost of	Residential	Commercial	Industrial	Public	Sales for	Fire Protection		
(1)	Ref.	Service	(4)	(5)	(6)	Authorities	Resale	Private	Public	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
OPERATION AND MAINTENANCE EXPENSES										
SOURCE OF SUPPLY EXPENSES										
Super & Eng Oper SS	2	0	0	0	0	0	0	0	0	0.0
Labor & Exp Oper SS	2	0								0.0
Labor & Exp Oper SS	2	52,003	20,333	10,229	11,082	2,335	7,483	83	458	0.0
Purchased Water	1	0	0	0	0	0	0	0	0	0.0
TOTAL SS EXPENSE - OPERATION		52,003	20,333	10,229	11,082	2,335	7,483	83	458	0.0
Misc Exp Oper SS	2	0	0	0	0	0	0	0	0	0.0
Misc Exp Oper SS	2	138	54	27	29	6	20	0	1	0.0
Rents Oper SS	2	0	0	0	0	0	0	0	0	0.0
Super & Eng Maint SS	2	0	0	0	0	0	0	0	0	0.0
Struct & Improve Maint SS	2	0	0	0	0	0	0	0	0	0.0
Struct & Improve Maint SS	2	179	70	35	38	8	26	0	2	0.0
Collect & Impound Maint SS	2	0	0	0	0	0	0	0	0	0.0
Lake, River & Oth Maint SS	2	0	0	0	0	0	0	0	0	0.0
Lake, River & Oth Maint SS	2	0	0	0	0	0	0	0	0	0.0
Wells & Springs Maint SS	2	0	0	0	0	0	0	0	0	0.0
Wells & Springs Maint SS	2	0	0	0	0	0	0	0	0	0.0
Infil Gall & Tunnels Maint SS	2	0	0	0	0	0	0	0	0	0.0
Supply Mains Maint SS	2	0	0	0	0	0	0	0	0	0.0
Misc Plant Maint SS	2	0	0	0	0	0	0	0	0	0.0
Misc Plant Maint SS	2	2,217	867	436	472	100	319	4	20	0.0
TOTAL SS EXPENSE - MAINTENANCE		2,534	991	498	540	114	365	4	22	0.0
TOTAL SS EXPENSE		54,537	21,324	10,727	11,622	2,449	7,848	87	480	0.0
POWER AND PUMPING EXPENSES										
Super & Eng Oper P	6	86,335	33,230	16,697	18,070	3,816	12,216	354	1,951	0.0
Fuel for Power Prod	1	0	0	0	0	0	0	0	0	0.0
Labor & Exp Oper Pwr Prod	6	10,955	4,217	2,119	2,293	484	1,550	45	248	0.0
Labor & Exp Oper Pwr Prod	6	0	0	0	0	0	0	0	0	0.0
Purch Fuel/Power for Pump	1	538,512	195,857	107,541	128,220	24,556	74,530	1,185	6,624	0.0
Labor & Exp Oper Pump	6	176,465	67,921	34,128	36,934	7,800	24,970	724	3,988	0.0
Labor & Exp Oper Pump	6	4,256	1,638	823	891	188	602	17	96	0.0
Expenses Transferred	6	0	0	0	0	0	0	0	0	0.0
Misc Exp Oper P	6	2	1	0	0	0	0	0	0	0.0
Rents Oper P	6	256	99	50	54	11	36	1	6	0.0
TOTAL PUMPING EXPENSE - OPERATION		816,781	302,963	161,358	186,461	36,856	113,905	2,326	12,913	0.0

MISSOURI-AMERICAN WATER COMPANY

ST. JOSEPH DISTRICT

PSC STAFF STUDY

COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS

Account	Factor Ref.	Cost of Service	Residential	Commercial	Industrial	Public Authorities	Sales for Resale	Fire Protection		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	Private (9)	Public (10)	
Super & Eng Maint P	6	12,332	4,747	2,385	2,581	545	1,745	51	279	0.0
Struct & Improve Maint P	6	386	149	75	81	17	55	2	9	0.0
Power Prod Equip Maint P	6	0	0	0	0	0	0	0	0	0.0
Pump Equip Maint P	6	0	0	0	0	0	0	0	0	0.0
Pump Equip Maint P	6	0	0	0	0	0	0	0	0	0.0
TOTAL PUMPING EXPENSES - MAINTENANCE		12,718	4,895	2,460	2,662	562	1,800	52	287	0.0
TOTAL PUMPING EXPENSES		829,499	307,858	163,818	189,123	37,418	115,705	2,378	13,200	0.0
WATER TREATMENT										0.0
Super & Eng Oper WT	2	108,483	42,417	21,339	23,118	4,871	15,611	174	955	0.0
Chemicals	1	257,731	93,737	51,469	61,366	11,753	35,670	567	3,170	0.0
Labor & Exp Oper WT	2	152,991	59,819	30,093	32,602	6,869	22,015	245	1,346	0.0
Labor & Exp Oper WT	2	901	352	177	192	40	130	1	8	0.0
Misc Exp Oper WT	2	0	0	0	0	0	0	0	0	0.0
Misc Exp Oper WT	1	80,738	29,364	16,123	19,224	3,682	11,174	178	993	0.0
Misc Exp Oper WT	2	0	0	0	0	0	0	0	0	0.0
Rents Oper WT	2	(13)	(5)	(3)	(3)	(1)	(2)	(0)	(0)	0.0
TOTAL WT EXPENSE - OPERATION		600,831	225,685	119,199	136,499	27,214	84,598	1,164	6,472	0.0
Super & Eng Maint WT	2	34,476	13,480	6,781	7,347	1,548	4,961	55	303	0.0
Struct & Improve Maint WT	2	0	0	0	0	0	0	0	0	0.0
Struct & Improve Maint WT	2	0	0	0	0	0	0	0	0	0.0
WT Equip Maint WT	2	0	0	0	0	0	0	0	0	0.0
WT Equip Maint WT	2	71,120	27,808	13,989	15,156	3,193	10,234	114	626	0.0
TOTAL WT EXPENSE - MAINTENANCE		105,596	41,288	20,771	22,503	4,741	15,195	169	929	0.0
TOTAL WT EXPENSE		706,427	266,973	139,970	159,001	31,956	99,793	1,333	7,401	0.0
TRANSMISSION AND DISTRIBUTION EXPENSES										0.0
Super & Eng Oper TD	11	85,747	41,724	12,322	7,932	2,512	7,529	2,332	11,396	0.0
Storage Facility Exp	5	1,433	545	240	195	55	195	30	172	0.0
Storage Facility Exp	5	3,118	1,185	523	425	119	424	66	375	0.0
TD Lines Exp	7	85,609	29,295	12,918	10,496	2,954	10,467	2,911	16,548	0.0
TD Lines Exp	7	167,884	57,450	25,334	20,583	5,792	20,566	5,708	32,452	0.0
Meter Expense	9	78,803	63,027	10,725	2,427	1,631	993	0	0	0.0
Meter Expense	9	2,669	2,135	363	82	55	34	0	0	0.0
Customer Install Exp	10	33,375	27,858	3,464	277	304	57	1,415	0	0.0
Customer Install Exp	10	20	17	2	0	0	0	1	0	0.0
Misc Exp Oper TD	11	50,123	24,390	7,203	4,636	1,469	4,401	1,363	6,661	0.0

MISSOURI-AMERICAN WATER COMPANY

ST. JOSEPH DISTRICT

PSC STAFF STUDY

COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS

Account	Factor Ref.	Cost of Service	Residential	Commercial	Industrial	Public Authorities	Sales for Resale	Fire Protection		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	Private	Public	(10)
Misc Exp Oper TD	11	0	0	0	0	0	0	0	0	0.0
Misc Exp Oper TD	11	8,155	3,968	1,172	754	239	716	222	1,084	0.0
Rents Oper TD	11	2,656	1,292	382	246	78	233	72	353	0.0
TOTAL T & D EXPENSE OPERATION		519,592	252,886	74,648	48,053	15,208	45,634	14,121	69,042	0.0
Super & Eng Maint TD	12	48,617	23,326	6,447	3,938	1,279	3,700	1,215	8,712	0.0
Struct & Improve Maint TD	12	0	0	0	0	0	0	0	0	0.0
Struct & Improve Maint TD	12	0	0	0	0	0	0	0	0	0.0
Dist Res Stand Maint TD	5	199	76	33	27	8	27	4	24	0.0
TD Main Maint TD	7	84,993	29,085	12,825	10,420	2,932	10,412	2,890	16,429	0.0
TD Main Maint TD	7	0	0	0	0	0	0	0	0	0.0
Fire Main Maint TD	8	86	0	0	0	0	0	0	86	0.0
Services Maint TD	10	16,111	13,448	1,672	134	147	27	683	0	0.0
Services Maint TD	10	0	0	0	0	0	0	0	0	0.0
Meters Maint TD	9	32,457	25,959	4,417	1,000	672	409	0	0	0.0
Meters Maint TD	9	0	0	0	0	0	0	0	0	0.0
Hydrants Maint TD	8	9,080	0	0	0	0	0	0	9,080	0.0
Hydrants Maint TD	8	0	0	0	0	0	0	0	0	0.0
Misc Plant Maint TD	12	161,680	77,574	21,439	13,096	4,252	12,304	4,042	28,973	0.0
Mat and Sup Maint TD	12	0	0	0	0	0	0	0	0	0.0
Misc Maint TD	12	0	0	0	0	0	0	0	0	0.0
Amort Def Maint TD	5	0	0	0	0	0	0	0	0	0.0
TOTAL T & D EXPENSE - MAINTENANCE		353,223	169,468	46,834	28,615	9,289	26,879	8,835	63,304	0.0
TOTAL T & D EXPENSE		872,815	422,354	121,482	76,668	24,497	72,513	22,955	132,346	0.0
CUSTOMER ACCOUNTS										0.0
Supervision CA	13	17,311	15,237	1,695	78	104	10	187	0	0.0
Meter Reading Exp CA	14	225,427	200,585	22,317	1,014	1,375	135	0	0	0.0
Meter Reading Exp CA	14	0	0	0	0	0	0	0	0	0.0
Meter Reading Exp CA	14	27,622	24,578	2,735	124	168	17	0	0	0.0
Cust Rec & Collection CA	13	36,543	32,165	3,578	164	219	22	395	0	0.0
Cust Rec & Collection CA	13	97,949	86,215	9,589	441	588	59	1,058	0	0.0
Uncollectible Accts	13	124,404	109,500	12,179	560	746	75	1,344	0	0.0
Misc Cust Accts Exp CA	13	5,308	4,672	520	24	32	3	57	0	0.0
Misc Cust Accts Exp CA	13	859	756	84	4	5	1	9	0	0.0
Misc Cust Accts Exp CA	13	0	0	0	0	0	0	0	0	0.0
Cust Serv & Info Exp CA	13	233,151	205,220	22,825	1,049	1,399	140	2,518	0	0.0
TOTAL CUSTOMER ACCOUNTING EXPENSE		768,574	678,928	75,522	3,459	4,637	461	5,568	0	0.0

MISSOURI-AMERICAN WATER COMPANY

ST. JOSEPH DISTRICT

PSC STAFF STUDY

COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS

Account	Factor Ref.	Cost of Service	Residential	Commercial	Industrial	Public Authorities	Sales for Resale	Fire Protection		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	Private	Public	(10)
ADMINISTRATIVE AND GENERAL EXPENSES										
Salaries AG	15	304,664	178,350	43,506	29,888	7,891	22,637	3,930	18,463	0.0
Other Supplies & Exp AG	15	79	46	11	8	2	6	1	5	0.0
Other Supplies & Exp AG	15	54,536	31,925	7,788	5,350	1,412	4,052	704	3,305	0.0
Other Supplies & Exp AG	15	123,681	72,403	17,662	12,133	3,203	9,189	1,595	7,495	0.0
Mgmt Fees-Corporate/Shared Service Center	15	438,371	256,622	62,599	43,004	11,354	32,571	5,655	26,565	0.0
Mgmt Fees-Call Center	13	236,312	208,002	23,135	1,063	1,418	142	2,552	0	0.0
Mgmt Fees-Belleville Lab	2	57,999	22,678	11,408	12,360	2,604	8,346	93	510	0.0
Mgmt Fees- Financial ITS	15	23,000	13,464	3,284	2,256	596	1,709	297	1,394	0.0
Mgmt Fees- Customer Billings ITS	13	129,848	114,292	12,712	584	779	78	1,402	0	0.0
Mgmt Fees-Other ITS	15	1,461	855	209	143	38	109	19	89	0.0
Outside Services AG	15	103,691	60,701	14,807	10,172	2,686	7,704	1,338	6,284	0.0
Outside Services AG	15	0	0	0	0	0	0	0	0	0.0
Property Insurance	15	0	0	0	0	0	0	0	0	0.0
Ins Gen Liab Oper AG	15	84,005	49,177	11,996	8,241	2,176	6,242	1,084	5,091	0.0
Ins Work Comp AG	16	44,723	24,370	6,708	5,018	1,292	3,761	555	3,019	0.0
Ins Other Oper AG	15	0	0	0	0	0	0	0	0	0.0
Property Insurance	15	64,226	37,598	9,171	6,301	1,663	4,772	829	3,892	0.0
Injuries & Damages	16	1,265	689	190	142	37	106	16	85	0.0
Employee Pension & Benefits	16	634,911	345,963	95,237	71,237	18,349	53,396	7,873	42,856	0.0
Employee Pension & Benefits	16	0	0	0	0	0	0	0	0	0.0
Employee Pension & Benefits	16	0	0	0	0	0	0	0	0	0.0
Reg Commission Exp	15	15,517	9,084	2,216	1,522	402	1,153	200	940	0.0
Rents AG	15	105,644	61,844	15,086	10,364	2,736	7,849	1,363	6,402	0.0
Goodwill Advertising Exp	15	0	0	0	0	0	0	0	0	0.0
Misc Exp AG	15	(3,638)	(2,130)	(520)	(357)	(94)	(270)	(47)	(220)	0.0
Research & Development	15	0	0	0	0	0	0	0	0	0.0
TOTAL A & G OPERATIONS		2,420,295	1,485,933	337,206	219,429	58,544	163,551	29,457	126,174	0.0
General Plant Maint AG	15	0	0	0	0	0	0	0	0	0.0
General Plant Maint AG	15	22,235	13,016	3,175	2,181	576	1,652	287	1,347	0.0
TOTAL A & G EXPENSE - MAINTENANCE		22,235	13,016	3,175	2,181	576	1,652	287	1,347	0.0
TOTAL A & G EXPENSE		2,442,530	1,498,950	340,381	221,610	59,120	165,204	29,744	127,522	0.0
Total Operation & Maintenance Expenses		5,674,382	3,196,386	851,900	661,483	160,075	461,523	62,065	280,949	0.0

MISSOURI-AMERICAN WATER COMPANY

ST. JOSEPH DISTRICT

PSC STAFF STUDY

COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS

Account	Factor Ref.	Cost of Service	Residential	Commercial	Industrial	Public Authorities	Sales for Resale	Fire Protection		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	Private	Public	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
DEPRECIATION EXPENSE										
Struct & Imp SS	2	0	0	0	0	0	0	0	0	0.0
Struct & Imp P	6	38,137	14,679	7,376	7,982	1,686	5,396	156	862	0.0
Struct & Imp WT	2	229,300	89,656	45,103	48,864	10,296	32,996	367	2,018	0.0
Struct & Imp TD	7	2,515	861	380	308	87	308	86	486	0.0
Struct & Imp Offices	15	0	0	0	0	0	0	0	0	0.0
Struct & Imp Store,Shop,Gar	15	4,457	2,609	636	437	115	331	57	270	0.0
Struct & Imp Misc	15	31,476	18,426	4,495	3,088	815	2,339	406	1,907	0.0
Collect & Impounding	1	0	0	0	0	0	0	0	0	0.0
Lake, River & Other Intakes	2	127	50	25	27	6	18	0	1	0.0
Wells & Springs	2	559	219	110	119	25	80	1	5	0.0
Supply Mains	2	162,723	63,625	32,008	34,676	7,306	23,418	260	1,432	0.0
Pump Equip Electric	6	81,746	31,464	15,810	17,109	3,613	11,567	335	1,847	0.0
WT Equip Non-Media	2	380,547	148,794	74,854	81,095	17,087	54,761	609	3,349	0.0
Dist Reservoirs & Standpipe	5	28,047	10,661	4,703	3,823	1,074	3,817	595	3,374	0.0
Elevated Tanks & Standpipes	5	5,590	2,125	937	762	214	761	119	672	0.0
Ground Level Facilities	5	0	0	0	0	0	0	0	0	0.0
TD Mains 4 & Less	4	8,733	2,988	1,318	1,071	301	1,070	297	1,688	0.0
TD Mains 6 to 8"	4	108,762	37,218	16,412	13,334	3,752	13,323	3,698	21,024	0.0
TD Mains 10 to 16"	3	118,247	42,403	21,332	23,094	4,872	15,585	1,644	9,318	0.0
TD Mains 18 & Grtr	3	62,187	22,300	11,219	12,145	2,562	8,196	864	4,900	0.0
Services	10	37,224	31,071	3,864	309	339	63	1,578	0	0.0
Meters Bronze Case	9	24,087	19,265	3,278	742	499	303	0	0	0.0
Meters Plastic Case	9	1,973	1,578	269	61	41	25	0	0	0.0
Meters Other	9	6,949	5,558	946	214	144	88	0	0	0.0
Meters Other-Rem Rdr Units	9	0	0	0	0	0	0	0	0	0.0
Meter Installations	9	58,787	47,018	8,001	1,811	1,217	741	0	0	0.0
Meter Installation Other	9	0	0	0	0	0	0	0	0	0.0
Hydrants	8	30,980	0	0	0	0	0	0	30,980	0.0
Utility Plant Acquisition Adjustment	17	0	0	0	0	0	0	0	0	0.0
Other P/E WT Res Hand Equip	2	24,780	9,689	4,874	5,281	1,113	3,566	40	218	0.0
Other P/E TD	7	0	0	0	0	0	0	0	0	0.0
Other P/E CPS	15	0	0	0	0	0	0	0	0	0.0
Office Furniture & Equip	15	1,510	884	216	148	39	112	19	92	0.0
Comp & Periph Equip	15	33,582	19,659	4,796	3,294	870	2,495	433	2,035	0.0
Computer Software	15	12,318	7,211	1,759	1,208	319	915	159	746	0.0
Comp Software Personal	15	0	0	0	0	0	0	0	0	0.0
Data Handling Equipment	15	1,082	633	155	106	28	80	14	66	0.0
Other Office Equipment	15	8,327	4,875	1,189	817	216	619	107	505	0.0
Trans Equip Lt Duty Trks	15	49,363	28,897	7,049	4,843	1,279	3,668	637	2,991	0.0
Trans Equip Hvy Duty Trks	15	10,272	6,013	1,467	1,008	266	763	133	622	0.0
Trans Equip Autos	15	16,887	9,886	2,411	1,657	437	1,255	218	1,023	0.0
Trans Equip Other	15	0	0	0	0	0	0	0	0	0.0
Stores Equipment	15	3,935	2,304	562	386	102	292	51	238	0.0
Tools,Shop,Garage Equip	15	27,436	16,061	3,918	2,691	711	2,038	354	1,663	0.0
Tools,Shop,Garage Equip Oth	15	0	0	0	0	0	0	0	0	0.0
Laboratory Equipment	2	10,795	4,221	2,123	2,300	485	1,553	17	95	0.0
Laboratory Equip Other	2	0	0	0	0	0	0	0	0	0.0
Power Operated Equipment	15	25,843	15,128	3,690	2,535	669	1,920	333	1,566	0.0
Comm Equip Non-Telephone	15	5,143	3,011	734	505	133	382	66	312	0.0
Comm Equip Telephone	15	1,328	777	190	130	34	99	17	80	0.0
Misc Equipment	15	3,415	1,999	488	335	88	254	44	207	0.0

MISSOURI-AMERICAN WATER COMPANY

ST. JOSEPH DISTRICT

PSC STAFF STUDY

COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS

Account	Factor Ref.	Cost of Service	Residential	Commercial	Industrial	Public Authorities	Sales for Resale	Fire Protection Private	Public	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
Total Depreciation Expense		1,659,169	723,815	288,695	278,315	62,839	195,197	13,715	96,594	
Amort-Other UP, DepCIAC, Cost Removal	18	15,951	6,388	2,901	2,983	651	2,064	116	847	
Taxes Other Than Income										
Utility Reg Assessment Fee	19	98,508	46,043	16,618	15,525	3,507	10,787	867	5,162	
Property Taxes	18	1,026,140	410,969	186,655	191,888	41,867	132,783	7,491	54,488	0.0
FUTA	16	2,405	1,310	361	270	70	202	30	162	0.0
FICA	16	128,750	70,156	19,313	14,446	3,721	10,828	1,597	8,691	0.0
SUTA	16	(54)	(29)	(8)	(6)	(2)	(5)	(1)	(4)	0.0
Other Taxes & Licenses	15	32,692	19,138	4,668	3,207	847	2,429	422	1,981	0.0
Gross Receipts Tax	19	0	0	0	0	0	0	0	0	0.0
Total Taxes, Other Than Income		1,288,441	547,587	227,607	225,330	50,009	157,024	10,405	70,480	0.0
Income Taxes	18	1,318,086	527,893	239,760	246,482	53,778	170,560	9,622	69,990	0.0
Utility Income Available for Return	18	5,203,929	2,084,174	946,595	973,135	212,320	673,388	37,989	276,329	0.0
Total Cost of Service		15,159,958	7,086,243	2,557,457	2,387,727	539,672	1,659,757	133,912	795,189	0.0
Less: Other Water Revenues	d	(188,014)	(188,014)							0.0
Revenue Contribution	19	0	0	0	0	0	0	0	0	0.0
Total Other Water Revenues		(188,014)	(188,014)	0	0	0	0	0	0	0.0
Total Cost of Service Related to Sales of Water		14,971,944	6,898,229	2,557,457	2,387,727	539,672	1,659,757	133,912	795,189	0.0
Reallocation of Public Fire	20		448,139	161,803	151,099	34,148	0		(795,189)	0.0
Total		\$ 14,971,944	\$ 7,346,368	\$ 2,719,260	\$ 2,538,826	\$ 573,820	\$ 1,659,757	\$ 133,912	\$ -	0.0
Total Cost of Service		15,159,958	7,534,382 #	2,719,260 #	2,538,826 #	573,820 #	1,659,757 #	133,912 #	0	15,159,958.0

MISSOURI-AMERICAN WATER COMPANY

ST. JOSEPH DISTRICT

PSC STAFF STUDY

COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS

Account	Factor Ref.	Cost of Service	Residential	Commercial	Industrial	Public Authorities	Sales for Resale	Fire Protection		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	Private	Public	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
RATE BASE										0.0
Organization	17	\$ 11,810	\$ 4,736	\$ 2,147	\$ 2,206	\$ 481	\$ 1,526	\$ 86	\$ 628	0.0
Franchises	17	0	0	0	0	0	0	0	0	0.0
Land & Ld Rights SS	2	1,414,424	553,040	278,217	301,414	63,508	203,536	2,263	12,447	0.0
Land & Ld Rights P	6	8,921	3,434	1,725	1,867	394	1,262	37	202	0.0
Land & Ld Rights WT	2	0	0	0	0	0	0	0	0	0.0
Land & Ld Rights TD	7	779,350	266,694	117,604	95,548	26,888	95,470	26,498	150,648	0.0
Land & Land Rights AG	15	8,112	4,749	1,158	796	210	603	105	492	0.0
Struct & Imp SS	2	(14,139)	(5,528)	(2,781)	(3,013)	(635)	(2,035)	(23)	(124)	0.0
Struct & Imp P	6	4,557,842	1,754,313	881,487	953,956	201,457	644,935	18,687	103,007	0.0
Struct & Imp Pumps (STL)	6	0	0	0	0	0	0	0	0	0.0
Struct & Imp Pump Boosters	6	0	0	0	0	0	0	0	0	0.0
Struct & Imp WT	2	18,827,760	7,361,654	3,703,420	4,012,196	845,366	2,709,315	30,124	165,684	0.0
Struct & Imp WT Nth Plt (ST	2	0	0	0	0	0	0	0	0	0.0
Struct & Imp WT Ctrl Plt 1	2	0	0	0	0	0	0	0	0	0.0
Struct & Imp WT Ctrl Plt 3	2	0	0	0	0	0	0	0	0	0.0
Struct & Imp WT Sth Plt (ST	2	0	0	0	0	0	0	0	0	0.0
Struct & Imp WT Meramec (ST	2	0	0	0	0	0	0	0	0	0.0
Struct & Imp TD	7	130,676	44,717	19,719	16,021	4,508	16,008	4,443	25,260	0.0
Struct & Imp TD Spec Cross	7	0	0	0	0	0	0	0	0	0.0
Struct & Imp Offices	15	398,646	233,367	56,927	39,107	10,325	29,619	5,143	24,158	0.0
Struct & Imp Leasehold	15	0	0	0	0	0	0	0	0	0.0
Struct & Imp Leasehold	15	0	0	0	0	0	0	0	0	0.0
Struct & Imp Store,Shop,Gar	15	167,184	97,870	23,874	16,401	4,330	12,422	2,157	10,131	0.0
Struct & Imp Misc	15	825,145	483,040	117,831	80,947	21,371	61,308	10,644	50,004	0.0
Collect & Impounding	1	0	0	0	0	0	0	0	0	0.0
Lake, River & Other Intakes	2	686,428	268,393	135,020	146,278	30,821	98,777	1,098	6,041	0.0
Wells & Springs	2	60,110	23,503	11,824	12,809	2,699	8,650	96	529	0.0
Supply Mains	2	8,971,282	3,507,771	1,764,651	1,911,780	402,811	1,290,967	14,354	78,947	0.0
Supply Mains Nth Plt (STL)	2	0	0	0	0	0	0	0	0	0.0
Supply Mains Ctrl Plt (STL)	2	0	0	0	0	0	0	0	0	0.0
Supply Mains Sth Plt (STL)	2	0	0	0	0	0	0	0	0	0.0
Supply Mains Meramec Plt (S	2	0	0	0	0	0	0	0	0	0.0
Power Generation Equip Othe	6	0	0	0	0	0	0	0	0	0.0
Boiler Plant Equipment P	6	0	0	0	0	0	0	0	0	0.0
Pump Equip Steam	6	0	0	0	0	0	0	0	0	0.0
Pump Equip Electric	6	4,436,001	1,707,417	857,923	928,455	196,071	627,694	18,188	100,254	0.0
Pump Equip Elec Pre46 (STL)	6	0	0	0	0	0	0	0	0	0.0
Pump Equip Elec Post46 (STL	6	0	0	0	0	0	0	0	0	0.0
Pump Equip Elec Boosters Po	6	0	0	0	0	0	0	0	0	0.0
Pump Equip Diesel	6	0	0	0	0	0	0	0	0	0.0
Pump Equip Diesel Stratman\	6	0	0	0	0	0	0	0	0	0.0
Pump Equip Diesel Ctrl Plt	6	0	0	0	0	0	0	0	0	0.0
Pump Equip Hydraulic	6	0	0	0	0	0	0	0	0	0.0
Pump Equip Other	6	0	0	0	0	0	0	0	0	0.0
WT Equip Non-Media	2	17,540,049	6,858,159	3,450,128	3,737,784	787,548	2,524,013	28,064	154,352	0.0
WT Equip Non-Med North (STL	2	0	0	0	0	0	0	0	0	0.0
WT Equip Non Media Ctrl 1 &	2	0	0	0	0	0	0	0	0	0.0
WT Equip Non Media Ctrl 3 (	2	0	0	0	0	0	0	0	0	0.0
WT Equip Non Media Sth (STL	2	0	0	0	0	0	0	0	0	0.0
WT Equip Non Media Mer (STL	2	0	0	0	0	0	0	0	0	0.0
WT Equip Filter Media	2	0	0	0	0	0	0	0	0	0.0
Dist Reservoirs & Standpipe	5	775,017	294,584	129,970	105,635	29,683	105,480	16,430	93,235	0.0

MISSOURI-AMERICAN WATER COMPANY

ST. JOSEPH DISTRICT

PSC STAFF STUDY

COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS

Account	Factor Ref.	Cost of Service	Residential	Commercial	Industrial	Public Authorities	Sales for Resale	Fire Protection		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	Private	Public	
Elevated Tanks & Standpipes	5	299,326	113,774	50,197	40,798	11,464	40,738	6,346	36,009	0.0
Ground Level Facilities	5	0	0	0	0	0	0	0	0	0.0
TD Mains Not Classified by	7	(4,297,726)	(1,470,682)	(648,527)	(526,901)	(148,272)	(526,471)	(146,123)	(830,750)	0.0
TD Mains 4 & Less "	4	667,229	228,326	100,685	81,802	23,019	81,736	22,686	128,975	0.0
TD Mains 6 to 8" "	4	8,330,242	2,850,608	1,257,034	1,021,288	287,393	1,020,455	283,228	1,810,236	0.0
TD Mains 10 to 16" "	3	9,037,110	3,240,708	1,630,295	1,764,948	372,329	1,191,091	125,616	712,124	0.0
TD Mains 18 & Gtrr "	3	4,748,942	1,702,971	856,709	927,468	195,656	625,911	66,010	374,217	0.0
TD Mains AC 4 (STL) "	4	0	0	0	0	0	0	0	0	0.0
TD Mains CI <10 1900-28 (S"	4	0	0	0	0	0	0	0	0	0.0
TD Mains CI <10 1929-56 (S"	4	0	0	0	0	0	0	0	0	0.0
TD Mains CI <10 1957-93 (S"	4	0	0	0	0	0	0	0	0	0.0
TD Mains CI 12 (STL) "	3	0	0	0	0	0	0	0	0	0.0
TD Mains CI 16 (STL) "	3	0	0	0	0	0	0	0	0	0.0
TD Mains DI 6-8 (STL) "	4	0	0	0	0	0	0	0	0	0.0
TD Mains DI 12 (STL) "	3	0	0	0	0	0	0	0	0	0.0
TD Mains DI 16 & >(STL) "	3	0	0	0	0	0	0	0	0	0.0
TD Mains Galve 1 (STL) "	4	0	0	0	0	0	0	0	0	0.0
TD Mains LJ 20 (STL) "	3	0	0	0	0	0	0	0	0	0.0
Fire Mains	8	0	0	0	0	0	0	0	0	0.0
Services	10	1,754,134	1,464,176	182,079	14,559	15,963	2,982	74,375	0	0.0
Meters Bronze Case	9	974,191	779,158	132,587	30,005	20,166	12,275	0	0	0.0
Meters Plastic Case	9	78,682	62,930	10,709	2,423	1,829	991	0	0	0.0
Meters Other	9	(759,100)	(607,128)	(103,314)	(23,380)	(15,713)	(9,565)	0	0	0.0
Meters Other-Rem Rdr Unts	9	0	0	0	0	0	0	0	0	0.0
Meter Installations	9	1,832,497	1,465,631	249,403	56,441	37,933	23,089	0	0	0.0
Meter Installation Other	9	0	0	0	0	0	0	0	0	0.0
Hydrants	8	1,503,860	0	0	0	0	0	0	1,503,860	0.0
Other P/E Intangible	15	(2,147)	(1,257)	(307)	(211)	(56)	(160)	(28)	(130)	0.0
Other P/E WT Res Hand Equip	2	1,281,177	500,940	252,008	273,019	57,525	184,361	2,050	11,274	0.0
Other P/E TD	7	0	0	0	0	0	0	0	0	0.0
Other P/E CPS	15	0	0	0	0	0	0	0	0	0.0
Office Furniture & Equip	15	(394,305)	(230,826)	(56,307)	(38,681)	(10,212)	(29,297)	(5,087)	(23,895)	0.0
Comp & Periph Equip	15	198,847	116,405	28,395	19,507	5,150	14,774	2,565	12,050	0.0
Computer Software	15	349,438	204,561	49,900	34,280	9,050	25,963	4,508	21,176	0.0
Comp Software Personal	15	46,626	27,295	6,658	4,574	1,208	3,464	601	2,826	0.0
Data Handling Equipment	15	23,772	13,916	3,395	2,332	616	1,766	307	1,441	0.0
Other Office Equipment	15	183,625	107,494	26,222	18,014	4,756	13,643	2,369	11,128	0.0
Trans Equip Lt Duty Trks	15	368,132	215,504	52,569	36,114	9,535	27,352	4,749	22,309	0.0
Trans Equip Hvy Duty Trks	15	77,580	45,415	11,078	7,611	2,009	5,764	1,031	4,701	0.0
Trans Equip Autos	15	79,912	46,780	11,411	7,839	2,070	5,937	1,031	4,843	0.0
Trans Equip Other	15	(244,943)	(143,390)	(34,978)	(24,029)	(6,344)	(18,199)	(3,160)	(14,844)	0.0
Stores Equipment	15	157,704	92,320	22,520	15,471	4,085	11,717	2,034	9,557	0.0
Tools,Shop,Garage Equip	15	527,252	308,653	75,292	51,723	13,656	39,175	6,802	31,951	0.0
Tools,Shop,Garage Equip Oth	15	0	0	0	0	0	0	0	0	0.0
Laboratory Equipment	2	321,584	125,739	63,256	68,530	14,439	46,276	515	2,830	0.0
Laboratory Equip Other	2	0	0	0	0	0	0	0	0	0.0
Power Operated Equipment	15	170,217	99,645	24,307	16,698	4,409	12,647	2,196	10,315	0.0
Comm Equip Non-Telephone	15	16,122	9,438	2,302	1,582	418	1,198	208	977	0.0
Comm Equip Telephone	15	26,490	15,507	3,783	2,599	686	1,968	342	1,605	0.0
Misc Equipment	15	86,868	50,853	12,405	8,522	2,250	6,454	1,121	5,264	0.0
Other Tangible Property	17	0	0	0	0	0	0	0	0	0.0
Total Utility Plant in Service		87,027,956	34,897,378	15,822,610	16,255,131	3,544,651	11,247,589	634,656	4,625,943	0.0

MISSOURI-AMERICAN WATER COMPANY

ST. JOSEPH DISTRICT

PSC STAFF STUDY

COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS

Account	Factor Ref.	Cost of Service	Residential	Commercial	Industrial	Public Authorities	Sales for Resale	Fire Protection		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	Private	Public	(10)
										0.0
Other Rate Base Items										0.0
Add:										
Other Utility Plant Adjustments	17	(386,255)	(154,888)	(70,221)	(72,152)	(15,721)	(49,904)	(2,820)	(20,549)	0.0
Cash Working Capital	15	(239,426)	(140,160)	(34,190)	(23,488)	(6,201)	(17,789)	(3,089)	(14,509)	0.0
Materials and Supplies	15	142,375	83,346	20,331	13,967	3,688	10,578	1,837	8,628	0.0
Prepayments	15	94	55	13	9	2	7	1	6	0.0
OPEB's Contributed to External Fund	16	404,214	220,256	60,632	45,353	11,682	33,994	5,012	27,284	0.0
Premature Retirement	17	0	0	0	0	0	0	0	0	0.0
Regulatory Deferrals	17	0	0	0	0	0	0	0	0	0.0
Less:										
Accumulated Deferred ITC (3%)	17	(4,623,194)	(1,853,901)	(840,497)	(863,613)	(188,164)	(597,317)	(33,749)	(245,954)	0.0
Deferred Income Taxes	17	(5,509,386)	(2,209,264)	(1,001,606)	(1,029,153)	(224,232)	(711,813)	(40,219)	(293,099)	0.0
Pensions	16	(512,427)	(279,221)	(76,864)	(57,494)	(14,809)	(43,095)	(6,354)	(34,589)	0.0
Total Other Rate Base Elements		(10,724,005)	(4,333,777)	(1,942,402)	(1,986,571)	(433,755)	(1,375,338)	(79,380)	(572,782)	0.0
Total Original Cost Measure of Value		\$ 76,303,951	\$ 30,563,601	\$ 13,880,208	\$ 14,268,559	\$ 3,110,896	\$ 9,872,250	\$ 555,276	\$ 4,053,161	0.0

T&D OP BASIS FOR FACTOR 11	372,911	181,511	53,570	34,485	10,910	32,756	10,131	49,548	0.0
FACTOR 11		0.4866	0.1437	0.0925	0.0293	0.0878	0.0272	0.1329	1.0000
T&D Mnt BASIS FOR FACTOR 12	142,926	68,567	18,949	11,581	3,758	10,875	3,577	25,619	0.0
FACTOR 12		0.4798	0.1326	0.0810	0.0263	0.0761	0.0250	0.1792	1.0000
A&G BASIS FOR FACTOR 15	2,354,871	1,378,478	336,385	231,064	60,965	174,946	30,392	142,640	0.0
FACTOR 15		0.5854	0.1428	0.0981	0.0259	0.0743	0.0129	0.0806	1.0000
LABOR BASIS FOR FACTOR 16	1,859,989	1,013,296	278,939	208,772	53,785	156,470	23,104	125,623	0.0
FACTOR 16		0.5449	0.1500	0.1122	0.0289	0.0841	0.0124	0.0675	1.0000
UPIS BASIS FOR FACTOR 17	87,016,146	34,892,642	15,820,462	16,252,925	3,544,170	11,246,063	634,569	4,625,315	0.0
FACTOR 17		0.4010	0.1818	0.1868	0.0407	0.1292	0.0073	0.0532	1.0000
RATE BASE BASIS FOR FACTOR 18	76,303,951	30,563,601	13,880,208	14,268,559	3,110,896	9,872,250	555,276	4,053,161	0.0
FACTOR 18		0.4005	0.1819	0.1870	0.0408	0.1294	0.0073	0.0531	1.0000
TOTAL COS BASIS FOR FACTOR 19	15,045,933	7,031,117	2,538,623	2,370,680	535,763	1,647,818	132,845	789,087	0.0
FACTOR 19		0.4674	0.1687	0.1576	0.0356	0.1095	0.0088	0.0524	1.0000
COS w/o Fire Factor 20	12,476,183	7,031,117	2,538,623 #	2,370,680 #	535,763 #				0
FACTOR 20		0.5636	0.2035	0.1900	0.0429				1.0000

Table of Factors - Table Name "FACTORS"

	2	4	6	8	10	12	14	20
	Residential	Commercial	Industrial	Public	Resale	Private Fire	Public Fire	Total
1	0.3637	0.1997	0.2381	0.0456	0.1384	0.0022	0.0123	1.0000
2	0.3910	0.1967	0.2131	0.0449	0.1439	0.0016	0.0088	1.0000
3	0.3588	0.1804	0.1953	0.0412	0.1318	0.0139	0.0788	1.0000
4	0.3422	0.1509	0.1226	0.0345	0.1225	0.0340	0.1933	1.0000
5	0.3801	0.1677	0.1363	0.0383	0.1361	0.0212	0.1203	1.0000
6	0.3849	0.1934	0.2093	0.0442	0.1415	0.0041	0.0226	1.0000
7	0.3422	0.1509	0.1226	0.0345	0.1225	0.0340	0.1933	1.0000
8	-	-	-	-	-	-	1.0000	1.0000

MISSOURI-AMERICAN WATER COMPANY

ST. JOSEPH DISTRICT

PSC STAFF STUDY

COST OF SERVICE FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2002, ALLOCATED TO CUSTOMER CLASSIFICATIONS

Account (1)	Factor Ref. (2)	Cost of Service (3)						Fire Protection		
			Residential (4)	Commercial (5)	Industrial (6)	Public Authorities (7)	Sales for Resale (8)	Private (9)	Public (10)	
			9 0.7998	0.1361	0.0308	0.0207	0.0126	-	-	1.0000
			10 0.8347	0.1038	0.0083	0.0091	0.0017	0.0424	-	1.0000
			11 0.4866	0.1437	0.0925	0.0293	0.0878	0.0272	0.1329	1.0000
			12 0.4798	0.1326	0.0810	0.0263	0.0761	0.0250	0.1792	1.0000
			13 0.8802	0.0979	0.0045	0.0060	0.0006	0.0108	-	1.0000
			14 0.8898	0.0990	0.0045	0.0061	0.0006	-	-	1.0000
			15 0.5854	0.1428	0.0981	0.0259	0.0743	0.0129	0.0606	1.0000
			16 0.5449	0.1500	0.1122	0.0289	0.0841	0.0124	0.0675	1.0000
			17 0.4010	0.1818	0.1868	0.0407	0.1292	0.0073	0.0532	1.0000
			18 0.4005	0.1819	0.1870	0.0408	0.1294	0.0073	0.0531	1.0000
			19 0.4674	0.1687	0.1576	0.0356	0.1095	0.0088	0.0524	1.0000
			20 0.5636	0.2035	0.1900	0.0429	-	-	-	1.0000

MISSOURI-AMERICAN WATER COMPANY

ST. JOSEPH DISTRICT

PSC STAFF STUDY

		Base	Max Day	Max Hour	Meters	Services	Billing & Collecting	Fire Service
OPERATION AND MAINTENANCE EXPENSES								
SOURCE OF SUPPLY EXPENSES								
Super & Eng Oper SS	2	0	0	0	0	0	0	0
Labor & Exp Oper SS	2	0	0	0	0	0	0	0
Labor & Exp Oper SS	2	52,003	36,605	14,857	0	0	0	541
Purchased Water	1	0	0	0	0	0	0	0
TOTAL SS EXPENSE - OPERATION		52,003	36,605	14,857	0	0	0	541
MAINTENANCE EXPENSES								
Misc Exp Oper SS	2	0	0	0	0	0	0	0
Misc Exp Oper SS	2	138	97	39	0	0	0	1
Rents Oper SS	2	0	0	0	0	0	0	0
Super & Eng Maint SS	2	0	0	0	0	0	0	0
Struct & Improve Maint SS	2	0	0	0	0	0	0	0
Struct & Improve Maint SS	2	179	126	51	0	0	0	2
Collect & Impound Maint SS	2	0	0	0	0	0	0	0
Lake, River & Oth Maint SS	2	0	0	0	0	0	0	0
Lake, River & Oth Maint SS	2	0	0	0	0	0	0	0
Wells & Springs Maint SS	2	0	0	0	0	0	0	0
Wells & Springs Maint SS	2	0	0	0	0	0	0	0
Infiltr Gall & Tunnels Maint SS	2	0	0	0	0	0	0	0
Supply Mains Maint SS	2	0	0	0	0	0	0	0
Misc Plant Maint SS	2	0	0	0	0	0	0	0
Misc Plant Maint SS	2	2,217	1,561	633	0	0	0	23
TOTAL SS EXPENSE - MAINTENANCE		2,534	1,784	724	0	0	0	26
TOTAL SS EXPENSE		54,537	38,389	15,581	0	0	0	567
POWER AND PUMPING EXPENSES								
Super & Eng Oper P	6	86,335	59,643	24,157	230	0	0	2,306
Fuel for Power Prod	1	0	0	0	0	0	0	0
Labor & Exp Oper Pwr Prod	6	10,955	7,568	3,065	29	0	0	293
Labor & Exp Oper Pwr Prod	6	0	0	0	0	0	0	0
Purch Fuel/Power for Pump	1	538,512	530,704	0	0	0	0	7,808
Labor & Exp Oper Pump	6	176,465	121,907	49,375	470	0	0	4,712
Labor & Exp Oper Pump	6	4,256	2,940	1,191	11	0	0	114
Expenses Transferred	6	0	0	0	0	0	0	0
Misc Exp Oper P	6	2	1	1	0	0	0	0
Rents Oper P	6	256	177	72	1	0	0	7
TOTAL PUMPING EXPENSE - OPERATION		816,781	722,940	77,860	742	0	0	15,240

MISSOURI-AMERICAN WATER COMPANY

ST. JOSEPH DISTRICT

PSC STAFF STUDY

			Base	Max Day	Max Hour	Meters	Services	Billing & Collecting	Fire Service
Super & Eng Maint P	6	12,332	8,519	3,450	33	0	0	0	329
Struct & Improve Maint P	6	386	267	108	1	0	0	0	10
Power Prod Equip Maint P	6	0	0	0	0	0	0	0	0
Pump Equip Maint P	6	0	0	0	0	0	0	0	0
Pump Equip Maint P	6	0	0	0	0	0	0	0	0
TOTAL PUMPING EXPENSES - MAINTENANCE		12,718	8,786	3,558	34	0	0	0	340
TOTAL PUMPING EXPENSES		829,499	731,726	81,418	776	0	0	0	15,579
WATER TREATMENT									
Super & Eng Oper WT	2	108,483	76,361	30,994	0	0	0	0	1,128
Chemicals	1	257,731	253,994	0	0	0	0	0	3,737
Labor & Exp Oper WT	2	152,991	107,690	43,710	0	0	0	0	1,591
Labor & Exp Oper WT	2	901	634	257	0	0	0	0	9
Misc Exp Oper WT	2	0	0	0	0	0	0	0	0
Misc Exp Oper WT	1	80,738	79,567	0	0	0	0	0	1,171
Misc Exp Oper WT	2	0	0	0	0	0	0	0	0
Rents Oper WT	2	(13)	(9)	(4)	0	0	0	0	(0)
TOTAL WT EXPENSE - OPERATION		600,831	518,238	74,957	0	0	0	0	7,636
Super & Eng Maint WT	2	34,476	24,268	9,850	0	0	0	0	359
Struct & Improve Maint WT	2	0	0	0	0	0	0	0	0
Struct & Improve Maint WT	2	0	0	0	0	0	0	0	0
WT Equip Maint WT	2	0	0	0	0	0	0	0	0
WT Equip Maint WT	2	71,120	50,061	20,319	0	0	0	0	740
TOTAL WT EXPENSE - MAINTENANCE		105,596	74,329	30,169	0	0	0	0	1,098
TOTAL WT EXPENSE		706,427	592,567	105,126	0	0	0	0	8,735
TRANSMISSION AND DISTRIBUTION EXPENSES									
Super & Eng Oper TD	11	85,747	17,167	0	28,768	18,736	7,357	0	13,720
Storage Facility Exp	5	1,433	466	0	771	0	0	0	196
Storage Facility Exp	5	3,118	1,014	0	1,677	0	0	0	427
TD Lines Exp	7	85,609	24,707	0	41,443	0	0	0	19,459
TD Lines Exp	7	167,884	48,451	0	81,273	0	0	0	38,160
Meter Expense	9	78,803	0	0	0	78,803	0	0	0
Meter Expense	9	2,669	0	0	0	2,669	0	0	0
Customer Install Exp	10	33,375	0	0	0	0	31,960	0	1,415
Customer Install Exp	10	20	0	0	0	0	19	0	1
Misc Exp Oper TD	11	50,123	10,035	0	16,816	10,952	4,301	0	8,020

MISSOURI-AMERICAN WATER COMPANY

ST. JOSEPH DISTRICT

PSC STAFF STUDY

			Base	Max Day	Max Hour	Meters	Services	Billing & Collecting	Fire Service
Misc Exp Oper TD	11	0	0	0	0	0	0	0	0
Misc Exp Oper TD	11	8,155	1,633	0	2,736	1,782	700	0	1,305
Rents Oper TD	11	2,656	532	0	891	580	228	0	425
TOTAL T & D EXPENSE OPERATION		519,592	104,004	0	174,375	113,522	44,564	0	83,126
Super & Eng Maint TD	12	48,617	8,367	0	14,031	11,041	5,246	0	9,932
Struct & Improve Maint TD	12	0	0	0	0	0	0	0	0
Struct & Improve Maint TD	12	0	0	0	0	0	0	0	0
Dist Res Stand Maint TD	5	199	65	0	107	0	0	0	27
TD Main Maint TD	7	84,993	24,529	0	41,145	0	0	0	19,319
TD Main Maint TD	7	0	0	0	0	0	0	0	0
Fire Main Maint TD	8	86	0	0	0	0	0	0	86
Services Maint TD	10	16,111	0	0	0	0	15,428	0	683
Services Maint TD	10	0	0	0	0	0	0	0	0
Meters Maint TD	9	32,457	0	0	0	32,457	0	0	0
Meters Maint TD	9	0	0	0	0	0	0	0	0
Hydrants Maint TD	8	9,080	0	0	0	0	0	0	9,080
Hydrants Maint TD	8	0	0	0	0	0	0	0	0
Misc Plant Maint TD	12	161,680	27,825	0	46,661	36,718	17,445	0	33,031
Mat and Sup Maint TD	12	0	0	0	0	0	0	0	0
Misc Maint TD	12	0	0	0	0	0	0	0	0
Amort Def Maint TD	5	0	0	0	0	0	0	0	0
TOTAL T & D EXPENSE - MAINTENANCE		353,223	60,786	0	101,944	80,215	38,119	0	72,159
TOTAL T & D EXPENSE		872,815	164,790	0	276,319	193,737	82,683	0	155,285
CUSTOMER ACCOUNTS									
Supervision CA	13	17,311	0	0	0	0	0	17,124	187
Meter Reading Exp CA	14	225,427	0	0	0	0	0	225,427	0
Meter Reading Exp CA	14	0	0	0	0	0	0	0	0
Meter Reading Exp CA	14	27,622	0	0	0	0	0	27,622	0
Cust Rec & Collection CA	13	36,543	0	0	0	0	0	36,148	395
Cust Rec & Collection CA	13	97,949	0	0	0	0	0	96,891	1,058
Uncollectible Accts	13	124,404	0	0	0	0	0	123,060	1,344
Misc Cust Accts Exp CA	13	5,308	0	0	0	0	0	5,251	57
Misc Cust Accts Exp CA	13	859	0	0	0	0	0	850	9
Misc Cust Accts Exp CA	13	0	0	0	0	0	0	0	0
Cust Serv & Info Exp CA	13	233,151	0	0	0	0	0	230,633	2,518
TOTAL CUSTOMER ACCOUNTING EXPENSE		768,574	0	0	0	0	0	763,006	5,568

MISSOURI-AMERICAN WATER COMPANY

ST. JOSEPH DISTRICT

PSC STAFF STUDY

			Base	Max Day	Max Hour	Meters	Services	Billing & Collecting	Fire Service
ADMINISTRATIVE AND GENERAL EXPENSES									
Salaries AG	15	304,664	85,793	26,140	35,859	25,074	10,694	98,711	22,393
Other Supplies & Exp AG	15	79	22	7	9	7	3	26	6
Other Supplies & Exp AG	15	54,536	15,357	4,679	6,419	4,488	1,914	17,670	4,008
Other Supplies & Exp AG	15	123,681	34,829	10,612	14,557	10,179	4,341	40,073	9,091
Mgmt Fees-Coporate/Shared Service Center	15	438,371	123,445	37,612	51,596	36,078	15,387	142,032	32,220
Mgmt Fees-Call Center	13	236,312	0	0	0	0	0	233,760	2,552
Mgmt Fees-Belleville Lab	2	57,999	40,825	16,570	0	0	0	0	603
Mgmt Fees- Financial ITS	15	23,000	6,477	1,973	2,707	1,893	807	7,452	1,691
Mgmt Fees- Customer Billings ITS	13	129,848	0	0	0	0	0	128,446	1,402
Mgmt Fees-Other ITS	15	1,461	411	125	172	120	51	473	107
Outside Services AG	15	103,691	29,199	8,897	12,204	8,534	3,640	33,596	7,621
Outside Services AG	15	0	0	0	0	0	0	0	0
Property Insurance	15	0	0	0	0	0	0	0	0
Ins Gen Liab Oper AG	15	84,005	23,656	7,208	9,887	6,914	2,949	27,218	6,174
Ins Work Comp AG	16	44,723	14,553	4,589	5,443	5,139	2,223	9,200	3,578
Ins Other Oper AG	15	0	0	0	0	0	0	0	0
Property Insurance	15	64,226	18,086	5,511	7,559	5,286	2,254	20,809	4,721
Injuries & Damages	16	1,265	412	130	154	145	63	260	101
Employee Pension & Benefits	16	634,911	206,600	65,142	77,269	72,951	31,555	130,601	50,793
Employee Pension & Benefits	16	0	0	0	0	0	0	0	0
Employee Pension & Benefits	16	0	0	0	0	0	0	0	0
Reg Commision Exp	15	15,517	4,370	1,331	1,826	1,277	545	5,028	1,140
Rents AG	15	105,644	29,749	9,064	12,434	8,695	3,708	34,229	7,765
Goodwill Advertising Exp	15	0	0	0	0	0	0	0	0
Misc Exp AG	15	(3,638)	(1,024)	(312)	(428)	(299)	(128)	(1,179)	(267)
Research & Development	15	0	0	0	0	0	0	0	0
TOTAL A & G OPERATIONS		2,420,295	632,761	199,278	237,669	186,479	80,005	928,403	155,700
General Plant Maint AG	15	0	0	0	0	0	0	0	0
General Plant Maint AG	15	22,235	6,261	1,908	2,617	1,830	780	7,204	1,634
TOTAL A & G EXPENSE - MAINTENANCE		22,235	6,261	1,908	2,617	1,830	780	7,204	1,634
TOTAL A & G EXPENSE		2,442,530	639,022	201,186	240,286	188,309	80,786	935,607	157,334
Total Operation & Maintenance Expenses		5,674,382	2,166,493	403,311	517,381	382,046	163,469	1,698,614	343,068

MISSOURI-AMERICAN WATER COMPANY

ST. JOSEPH DISTRICT

PSC STAFF STUDY

			Base	Max Day	Max Hour	Meters	Services	Billing & Collecting	Fire Service
DEPRECIATION EXPENSE									
Struct & Imp SS	2	0	0	0	0	0	0	0	0
Struct & Imp P	6	38,137	26,346	10,671	102	0	0	0	1,018
Struct & Imp WT	2	229,300	161,404	65,511	0	0	0	0	2,385
Struct & Imp TD	7	2,515	726	0	1,218	0	0	0	572
Struct & Imp Offices	15	0	0	0	0	0	0	0	0
Struct & Imp Store,Shop,Gar	15	4,457	1,255	382	525	367	156	1,444	328
Struct & Imp Misc	15	31,476	8,864	2,701	3,705	2,590	1,105	10,198	2,313
Collect & Impounding	1	0	0	0	0	0	0	0	0
Lake, River & Other Intakes	2	127	89	36	0	0	0	0	1
Wells & Springs	2	559	393	160	0	0	0	0	6
Supply Mains	2	162,723	114,541	46,490	0	0	0	0	1,692
Pump Equip Electric	6	81,746	56,473	22,873	218	0	0	0	2,183
WT Equip Non-Media	2	380,547	267,867	108,722	0	0	0	0	3,958
Dist Reservoirs & Standpipe	5	28,047	9,124	0	15,086	0	0	0	3,837
Elevated Tanks & Standpipes	5	5,590	1,818	0	3,007	0	0	0	765
Ground Level Facilities	5	0	0	0	0	0	0	0	0
TD Mains 4 & Less	4	8,733	2,520	0	4,228	0	0	0	1,985
TD Mains 6 to 8"	4	108,762	31,389	0	52,652	0	0	0	24,722
TD Mains 10 to 16"	3	118,247	76,317	30,969	0	0	0	0	10,961
TD Mains 18 & Grtr	3	62,187	40,135	16,287	0	0	0	0	5,765
Services	10	37,224	0	0	0	0	35,646	0	1,578
Meters Bronze Case	9	24,087	0	0	0	24,087	0	0	0
Meters Plastic Case	9	1,973	0	0	0	1,973	0	0	0
Meters Other	9	6,949	0	0	0	6,949	0	0	0
Meters Other-Rem Rdr Unts	9	0	0	0	0	0	0	0	0
Meter Installations	9	58,787	0	0	0	58,787	0	0	0
Meter Installation Other	9	0	0	0	0	0	0	0	0
Hydrants	8	30,980	0	0	0	0	0	0	30,980
Utility Plant Acquisition Adjustment	17	0	0	0	0	0	0	0	0
Other P/E WT Res Hand Equip	2	24,780	17,443	7,080	0	0	0	0	258
Other P/E TD	7	0	0	0	0	0	0	0	0
Other P/E CPS	15	0	0	0	0	0	0	0	0
Office Furniture & Equip	15	1,510	425	130	178	124	53	489	111
Comp & Periph Equip	15	33,582	9,457	2,881	3,953	2,764	1,179	10,881	2,468
Computer Software	15	12,318	3,469	1,057	1,450	1,014	432	3,991	905
Comp Software Personal	15	0	0	0	0	0	0	0	0
Data Handling Equipment	15	1,082	305	93	127	89	38	351	80
Other Office Equipment	15	8,327	2,345	714	980	685	292	2,698	612
Trans Equip Lt Duty Trks	15	49,363	13,901	4,235	5,810	4,063	1,733	15,994	3,628
Trans Equip Hvy Duty Trks	15	10,272	2,893	881	1,209	845	361	3,328	755
Trans Equip Autos	15	16,887	4,755	1,449	1,988	1,390	593	5,471	1,241
Trans Equip Other	15	0	0	0	0	0	0	0	0
Stores Equipment	15	3,935	1,108	338	463	324	138	1,275	289
Tools,Shop,Garage Equip	15	27,436	7,726	2,354	3,229	2,258	963	8,889	2,017
Tools,Shop,Garage Equip Oth	15	0	0	0	0	0	0	0	0
Laboratory Equipment	2	10,795	7,599	3,084	0	0	0	0	112
Laboratory Equip Other	2	0	0	0	0	0	0	0	0
Power Operated Equipment	15	25,843	7,277	2,217	3,042	2,127	907	8,373	1,899
Comm Equip Non-Telephone	15	5,143	1,448	441	605	423	181	1,666	378
Comm Equip Telephone	15	1,328	374	114	156	109	47	430	98
Misc Equipment	15	3,415	962	293	402	281	120	1,106	251

MISSOURI-AMERICAN WATER COMPANY

ST. JOSEPH DISTRICT

PSC STAFF STUDY

			Base	Max Day	Max Hour	Meters	Services	Billing & Collecting	Fire Service
Total Depreciation Expense		1,659,169	880,747	332,163	104,331	111,250	43,942	76,585	110,151
Amort-Other UP	18	15,951	9,636	3,748	672	434	327	172	962
Taxes Other Than Income									
Utility Reg Assessment Fee	19	98,508	50,170	16,549	6,275	4,689	2,423	12,373	6,029
Property Taxes	18	1,026,140	619,891	241,143	43,200	27,911	21,036	11,082	61,876
FUTA	16	2,405	783	247	293	276	120	495	192
FICA	16	128,750	41,895	13,210	15,869	14,793	6,399	26,484	10,300
SUTA	16	(54)	(18)	(6)	(7)	(6)	(3)	(11)	(4)
Other Taxes & Licenses	15	32,692	9,206	2,805	3,848	2,691	1,147	10,592	2,403
Gross Receipts Tax	19	0	0	0	0	0	0	0	0
Total Taxes, Other Than Income		1,288,441	721,928	273,948	69,278	50,354	31,122	61,015	80,796
Income Taxes	18	1,318,086	796,256	309,750	55,491	35,852	27,021	14,235	79,481
Utility Income Available for Return	18	5,203,929	3,143,694	1,222,923	219,085	141,547	106,681	56,202	313,797
Total Cost of Service		15,159,958	7,718,753	2,545,844	966,238	721,483	372,562	1,906,823	928,254
Less: Other Water Revenues		(188,014)	(188,014)	0	0	0	0	0	0
Revenue Shift	19	0	0	0	0	0	0	0	0
Total Other Water Revenues		(188,014)	(188,014)	0	0	0	0	0	0
Total Cost of Service Related to Sales of Water		14,971,944	7,530,739	2,545,844	966,238	721,483	372,562	1,906,823	928,254
Reallocation of Public Fire	20	0	546,613	180,269	68,307	0	0	0	(795,189)
Total		\$ 14,971,944	\$ 8,077,352	\$ 2,726,113	\$ 1,034,545	\$ 721,483	\$ 372,562	\$ 1,906,823	\$ 133,065
			5,018,526			35,900	32,263	381,917	
			\$ 1.610			20.10	11.55		
						1.67	0.96	4.99	
		876,981	864,265					7.63	
			\$ 0.172						

MISSOURI-AMERICAN WATER COMPANY

ST. JOSEPH DISTRICT

PSC STAFF STUDY

			Base	Max Day	Max Hour	Meters	Services	Billing & Collecting	Fire Service
RATE BASE									
Organization	17	11,810	7,127	2,771	500	322	242	135	713
Franchises	17	0	0	0	0	0	0	0	0
Land & Ld Rights SS	2	1,414,424	995,613	404,101	0	0	0	0	14,710
Land & Ld Rights P	6	8,921	6,163	2,496	24	0	0	0	238
Land & Ld Rights WT	2	0	0	0	0	0	0	0	0
Land & Ld Rights TD	7	779,350	224,920	0	377,283	0	0	0	177,146
Land & Land Rights AG	15	8,112	2,284	696	955	668	285	2,628	596
Struct & Imp SS	2	(14,139)	(9,952)	(4,040)	0	0	0	0	(147)
Struct & Imp P	6	4,557,842	3,148,692	1,275,284	12,150	0	0	0	121,716
Struct & Imp Pumps (STL)	6	0	0	0	0	0	0	0	0
Struct & Imp Pump Boosters	6	0	0	0	0	0	0	0	0
Struct & Imp WT	2	18,827,760	13,252,860	5,379,091	0	0	0	0	195,809
Struct & Imp WT Nth Pit (ST)	2	0	0	0	0	0	0	0	0
Struct & Imp WT Ctrl Pit 1	2	0	0	0	0	0	0	0	0
Struct & Imp WT Ctrl Pit 3	2	0	0	0	0	0	0	0	0
Struct & Imp WT Sth Pit (ST)	2	0	0	0	0	0	0	0	0
Struct & Imp WT Meramec (ST)	2	0	0	0	0	0	0	0	0
Struct & Imp TD	7	130,676	37,713	0	63,260	0	0	0	29,703
Struct & Imp TD Spec Cross	7	0	0	0	0	0	0	0	0
Struct & Imp Offices	15	398,646	112,259	34,204	46,921	32,809	13,992	129,161	29,300
Struct & Imp Leasehold	15	0	0	0	0	0	0	0	0
Struct & Imp Leasehold	15	0	0	0	0	0	0	0	0
Struct & Imp Store,Shop,Gar	15	167,184	47,079	14,344	19,678	13,759	5,868	54,168	12,288
Struct & Imp Misc	15	825,145	232,361	70,797	97,120	67,909	28,963	267,347	60,648
Collect & Impounding	1	0	0	0	0	0	0	0	0
Lake, River & Other Intakes	2	686,428	483,177	196,112	0	0	0	0	7,139
Wells & Springs	2	60,110	42,311	17,173	0	0	0	0	625
Supply Mains	2	8,971,282	6,314,885	2,563,095	0	0	0	0	93,301
Supply Mains Nth Pit (STL)	2	0	0	0	0	0	0	0	0
Supply Mains Ctrl Pit (STL)	2	0	0	0	0	0	0	0	0
Supply Mains Sth Pit (STL)	2	0	0	0	0	0	0	0	0
Supply Mains Meramec Pit (S)	2	0	0	0	0	0	0	0	0
Power Generation Equip Othe	6	0	0	0	0	0	0	0	0
Boiler Plant Equipment P	6	0	0	0	0	0	0	0	0
Pump Equip Steam	6	0	0	0	0	0	0	0	0
Pump Equip Electric	6	4,436,001	3,064,521	1,241,193	11,825	0	0	0	118,462
Pump Equip Elec Pre46 (STL)	6	0	0	0	0	0	0	0	0
Pump Equip Elec Post46 (STL)	6	0	0	0	0	0	0	0	0
Pump Equip Elec Boosters Po	6	0	0	0	0	0	0	0	0
Pump Equip Diesel	6	0	0	0	0	0	0	0	0
Pump Equip Diesel Stratman\	6	0	0	0	0	0	0	0	0
Pump Equip Diesel Ctrl Pit	6	0	0	0	0	0	0	0	0
Pump Equip Hydraulic	6	0	0	0	0	0	0	0	0
Pump Equip Other	6	0	0	0	0	0	0	0	0
WT Equip Non-Media	2	17,540,049	12,346,440	5,011,192	0	0	0	0	182,417
WT Equip Non-Med North (STL)	2	0	0	0	0	0	0	0	0
WT Equip Non Media Ctrl 1 &	2	0	0	0	0	0	0	0	0
WT Equip Non Media Ctrl 3 (	2	0	0	0	0	0	0	0	0
WT Equip Non Media Sth (STL)	2	0	0	0	0	0	0	0	0
WT Equip Non Media Mer (STL)	2	0	0	0	0	0	0	0	0
WT Equip Filter Media	2	0	0	0	0	0	0	0	0
Dist Reservoirs & Standpipe	5	775,017	252,113	0	416,882	0	0	0	106,022

Schedule C-17-SSTJ

MISSOURI-AMERICAN WATER COMPANY

ST. JOSEPH DISTRICT

PSC STAFF STUDY

			Base	Max Day	Max Hour	Meters	Services	Billing & Collecting	Fire Service
Elevated Tanks & Standpipes	5	299,326	97,371	0	161,007	0	0	0	40,948
Ground Level Facilities	5	0	0	0	0	0	0	0	0
TD Mains Not Classified by	7	(4,297,726)	(1,240,324)	0	(2,080,529)	0	0	0	(976,873)
TD Mains 4 & Less "	4	667,229	192,562	0	323,006	0	0	0	151,661
TD Mains 6 to 8" "	4	8,330,242	2,404,108	0	4,032,670	0	0	0	1,893,464
TD Mains 10 to 16" "	3	9,037,110	5,832,551	2,366,819	0	0	0	0	837,740
TD Mains 18 & Grtr "	3	4,748,942	3,064,967	1,243,748	0	0	0	0	440,227
TD Mains AC 4 (STL) "	4	0	0	0	0	0	0	0	0
TD Mains CI <10 1900-28 (S"	4	0	0	0	0	0	0	0	0
TD Mains CI <10 1929-56 (S"	4	0	0	0	0	0	0	0	0
TD Mains CI <10 1957-93 (S"	4	0	0	0	0	0	0	0	0
TD Mains CI 12 (STL) "	3	0	0	0	0	0	0	0	0
TD Mains CI 16 (STL) "	3	0	0	0	0	0	0	0	0
TD Mains DI 6-8 (STL) "	4	0	0	0	0	0	0	0	0
TD Mains DI 12 (STL) "	3	0	0	0	0	0	0	0	0
TD Mains DI 16 & >(STL)	3	0	0	0	0	0	0	0	0
TD Mains Galve 1 (STL) "	4	0	0	0	0	0	0	0	0
TD Mains LJ 20 (STL) "	3	0	0	0	0	0	0	0	0
Fire Mains	8	0	0	0	0	0	0	0	0
Services	10	1,754,134	0	0	0	0	1,679,759	0	74,375
Meters Bronze Case	9	974,191	0	0	0	974,191	0	0	0
Meters Plastic Case	9	78,682	0	0	0	78,682	0	0	0
Meters Other	9	(759,100)	0	0	0	(759,100)	0	0	0
Meters Other-Rem Rdr Units	9	0	0	0	0	0	0	0	0
Meter Installations	9	1,832,497	0	0	0	1,832,497	0	0	0
Meter Installation Other	9	0	0	0	0	0	0	0	0
Hydrants	8	1,503,860	0	0	0	0	0	0	1,503,860
Other P/E Intangible	15	(2,147)	(605)	(184)	(253)	(177)	(75)	(696)	(158)
Other P/E WT Res Hand Equip	2	1,281,177	901,820	366,032	0	0	0	0	13,324
Other P/E TD	7	0	0	0	0	0	0	0	0
Other P/E CPS	15	0	0	0	0	0	0	0	0
Office Furniture & Equip	15	(394,305)	(111,036)	(33,831)	(46,410)	(32,451)	(13,840)	(127,755)	(28,981)
Comp & Periph Equip	15	198,847	55,995	17,061	23,404	16,365	6,980	64,426	14,615
Computer Software	15	349,438	98,402	29,982	41,129	28,759	12,265	113,218	25,684
Comp Software Personal	15	46,626	13,130	4,001	5,488	3,837	1,637	15,107	3,427
Data Handling Equipment	15	23,772	6,694	2,040	2,798	1,956	834	7,702	1,747
Other Office Equipment	15	183,625	51,709	15,755	21,613	15,112	6,445	59,495	13,496
Trans Equip Lt Duty Trks	15	368,132	103,666	31,586	43,329	30,297	12,921	119,275	27,058
Trans Equip Hvy Duty Trks	15	77,580	21,847	6,656	9,131	6,385	2,723	25,136	5,702
Trans Equip Autos	15	79,912	22,503	6,856	9,406	6,577	2,805	25,891	5,874
Trans Equip Other	15	(244,943)	(68,976)	(21,016)	(28,830)	(20,159)	(8,597)	(79,362)	(18,003)
Stores Equipment	15	157,704	44,409	13,531	18,562	12,979	5,535	51,096	11,591
Tools,Shop,Garage Equip	15	527,252	148,474	45,238	62,058	43,393	18,507	170,830	38,753
Tools,Shop,Garage Equip Oth	15	0	0	0	0	0	0	0	0
Laboratory Equipment	2	321,584	226,363	91,877	0	0	0	0	3,344
Laboratory Equip Other	2	0	0	0	0	0	0	0	0
Power Operated Equipment	15	170,217	47,933	14,605	20,035	14,009	5,975	55,150	12,511
Comm Equip Non-Telephone	15	16,122	4,540	1,383	1,898	1,327	566	5,224	1,185
Comm Equip Telephone	15	26,490	7,460	2,273	3,118	2,180	930	8,583	1,947
Misc Equipment	15	86,868	24,462	7,453	10,224	7,149	3,049	28,145	6,385
Other Tangible Property	17	0	0	0	0	0	0	0	0
Total Utility Plant in Service		87,027,956	52,510,593	20,420,375	3,679,449	2,379,276	1,787,768	994,904	5,255,590

Schedule C-18-SSTJ

MISSOURI-AMERICAN WATER COMPANY

ST. JOSEPH DISTRICT

PSC STAFF STUDY

			Base	Max Day	Max Hour	Meters	Services	Billing & Collecting	Fire Service
Other Rate Base Items									
Add:									
Other Utility Plant Adjustments	17	(386,255)	(233,105)	(90,615)	(16,339)	(10,545)	(7,918)	(4,403)	(23,330)
Cash Working Capital	15	(239,426)	(67,422)	(20,543)	(28,180)	(19,705)	(8,404)	(77,574)	(17,598)
Materials and Supplies	15	142,375	40,093	12,216	16,758	11,717	4,997	46,130	10,465
Prepayments	15	94	26	8	11	8	3	30	7
OPEB's Contributed to External Fund	16	404,214	131,531	41,472	49,193	46,444	20,089	83,147	32,337
Premature Retirement	17	0	0	0	0	0	0	0	0
Regulatory Deferrals	17	0	0	0	0	0	0	0	0
Less:									
Accumulated Deferred ITC (3%)	17	(4,623,194)	(2,790,098)	(1,084,601)	(195,561)	(126,213)	(94,775)	(52,704)	(279,241)
Deferred Income Taxes	17	(5,509,386)	(3,324,914)	(1,292,502)	(233,047)	(150,406)	(112,942)	(62,807)	(332,787)
Pensions	16	(512,427)	(166,744)	(52,575)	(62,362)	(58,878)	(25,468)	(105,406)	(40,994)
Total Other Rate Base Elements		<u>(10,724,005)</u>	<u>(6,410,633)</u>	<u>(2,487,140)</u>	<u>(469,528)</u>	<u>(307,577)</u>	<u>(224,417)</u>	<u>(173,588)</u>	<u>(651,121)</u>
Total Original Cost Measure of Value		\$ 76,303,951	\$ 46,099,960	\$ 17,933,235	\$ 3,209,921	\$ 2,071,699	\$ 1,563,350	\$ 821,316	\$ 4,604,469

T&D OP BASIS FOR FACTOR 11	372,911	74,639	0	125,164	81,472	31,979	0	59,657
FACTOR 11		0.2002	0.0000	0.3355	0.2185	0.0858	0.0000	0.1600
T&D Mnt BASIS FOR FACTOR 12	142,926	24,594	0	41,252	32,457	15,428	0	29,195
FACTOR 12		0.1721	0.0000	0.2886	0.2271	0.1079	0.0000	0.2043
A&G BASIS FOR FACTOR 15	2,354,871	663,207	202,125	277,095	193,737	82,683	763,006	173,018
FACTOR 15		0.2816	0.0858	0.1177	0.0823	0.0351	0.3240	0.0735
LABOR BASIS FOR FACTOR 16	1,859,989	605,177	190,848	226,365	213,780	92,430	382,661	148,728
FACTOR 16		0.3254	0.1026	0.1217	0.1149	0.0497	0.2057	0.0800
UPIS BASIS FOR FACTOR 17	87,016,146	52,503,466	20,417,605	3,678,950	2,378,954	1,787,525	994,770	5,254,877
FACTOR 17		0.6035	0.2346	0.0423	0.0273	0.0205	0.0114	0.0604
RATE BASE BASIS FOR FACTOR 18	76,303,951	46,099,960	17,933,235	3,209,921	2,071,699	1,563,350	821,316	4,604,469
FACTOR 18		0.6041	0.2350	0.0421	0.0272	0.0205	0.0108	0.0603
TOTAL COS BASIS FOR FACTOR 19	15,045,933	7,664,214	2,527,963	958,137	715,517	369,594	1,889,423	921,085
FACTOR 19		0.5093	0.1680	0.0637	0.0476	0.0246	0.1256	0.0612
TOTAL COS BASIS FOR FACTOR 20	11,150,314	7,664,214	2,527,963	958,137	0	0	0	0
FACTOR 20		0.6874	0.2267	0.0859	0.0000	0.0000	0.0000	0.0000

	2	4	6	8	10	12	14
	Base	Max Day	Max Hour	Meters	Services	Billing & Collecting	Fire Service
1	0.9855	-	-	-	-	-	0.0145
2	0.7039	0.2857	-	-	-	-	0.0104
3	0.6454	0.2619	-	-	-	-	0.0927
4	0.2886	-	0.4841	-	-	-	0.2273
5	0.3253	-	0.5379	-	-	-	0.1368
6	0.6908	0.2798	0.0027	-	-	-	0.0267
7	0.2886	-	0.4841	-	-	-	0.2273
8	-	-	-	-	-	-	1.0000

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	Base	Max Day	Max Hour	Meters	Services	Billing & Collecting	Fire Service
9	-	-	-	1.0000	-	-	-
10	-	-	-	-	0.9576	-	0.0424
11	0.2002	-	0.3355	0.2185	0.0858	-	0.1600
12	0.1721	-	0.2886	0.2271	0.1079	-	0.2043
13	-	-	-	-	-	0.9892	0.0108
14	-	-	-	-	-	1.0000	-
15	0.2816	0.0858	0.1177	0.0823	0.0351	0.3240	0.0735
16	0.3254	0.1026	0.1217	0.1149	0.0497	0.2057	0.0800
17	0.6035	0.2346	0.0423	0.0273	0.0205	0.0114	0.0604
18	0.6041	0.2350	0.0421	0.0272	0.0205	0.0108	0.0603
19	0.5093	0.1680	0.0637	0.0476	0.0246	0.1256	0.0612
20	0.6874	0.2267	0.0859	-	-	-	-

**MISSOURI-AMERICAN WATER COMPANY
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FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS

FACTOR 1.

ALLOCATION OF COSTS THAT VARY WITH THE AMOUNT OF WATER CONSUMED.

Factors are based on the pro forma test year average daily consumption for each customer classification.

Customer Classification	Average Daily Consumption, Thousand Gallons	Allocation Factor
(1)	(2)	(3)
Residential	5,075	0.3637
Commercial	2,786	0.1997
Industrial	3,322	0.2381
Other Public Authority	636	0.0456
Sales for Resale	1,930	0.1384
Private Fire Protection	30	0.0022
Public Fire Protection	171	0.0123
Total	13,950	1.0000

FACTOR 2.

**ALLOCATION OF COSTS ASSOCIATED WITH FACILITIES SERVING BASE AND
MAXIMUM DAY EXTRA CAPACITY FUNCTIONS.**

Factors are based on the weighting of the factors for average daily consumption (Factor 1) and the factors derived from maximum day extra capacity demand for each customer classification, as follows:

Customer Classification	Average Daily Consumption		Maximum Day Extra Capacity		Allocation Factor
	Allocation Factor 1	Weighted Factor	Allocation Factor	Weighted Factor	
(1)	(2)	(3)=(2)x 0.7143	(4)	(5)=(4)x 0.2857	(6)=(3)+(5)
Residential	0.3637	0.2597	0.4596	0.1313	0.3910
Commercial	0.1997	0.1426	0.1893	0.0541	0.1967
Industrial	0.2381	0.1701	0.1505	0.0430	0.2131
Other Public Authority	0.0456	0.0326	0.0432	0.0123	0.0449
Sales for Resale	0.1384	0.0989	0.1574	0.0450	0.1439
Private Fire Protection	0.0022	0.0016			0.0016
Public Fire Protection	0.0123	0.0088			0.0088
Total	1.0000	0.7143	1.0000	0.2857	1.0000

The derivation of the maximum day extra capacity factors in column 4 and the basis for the column 3 and 5 weightings are presented on the following page.

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FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 2. MAX DAY CLASS ALLOCATION AND MAX DAY TO AVERAGE DAY

ALLOCATION OF COSTS ASSOCIATED WITH FACILITIES SERVING BASE AND
MAXIMUM DAY EXTRA CAPACITY FUNCTIONS, cont.

Customer Classification	Base	Maximum Day- Extra Capacity		
	Average Daily Consumption, Thousand Gal.	Factor*	Rate of Flow, Thousand Gal. Per Day	Allocation Factor
(1)	(2)	(3)	(4)=(2)x(3)	(5)
Residential	5,075	1.000	5,075	0.4596
Commercial	2,786	0.750	2,089	0.1893
Industrial	3,322	0.500	1,661	0.1505
Other Public Authority	636	0.750	477	0.0432
Sales for Resale	1,930	0.900	1,737	0.1574
Total	13,749		11,040	1.0000

The weighting of the factors is based on the maximum day ratio of 1.40, based on a review of maximum day ratios experienced during the period 1990 through 2002 (see Schedule D).

	Maximum Day Ratio	Weight
Average Day	1.00	0.7143
Maximum Day Extra Capacity	0.40	0.2857
Total	1.40	1.0000

* Ratio of maximum day to average day minus 1.0.

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FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 3.

ALLOCATION OF COSTS ASSOCIATED WITH FACILITIES SERVING BASE, MAXIMUM DAY EXTRA CAPACITY
AND FIRE PROTECTION FUNCTIONS.

Factors are based on the weighting of the average daily consumption, the maximum day extra capacity demand, and the fire protection demand for each customer classification.

Customer Classification	Base		Maximum Day Extra Capacity		Fire Protection		Allocation Factor
	Average Daily Consumption						
	Allocation Factor	Weighted Factor	Allocation Factor	Weighted Factor	Allocation Factor	Weighted Factor	
	(1)	(2)	(3)=(2) X 0.6549	(4)	(5)=(4) X 0.2619	(6)	
Residential	0.3637	0.2382	0.4596	0.1204			0.3586
Commercial	0.1997	0.1308	0.1893	0.0496			0.1804
Industrial	0.2381	0.1559	0.1505	0.0394			0.1953
Other Public Authority	0.0456	0.0299	0.0432	0.0113			0.0412
Sales for Resale	0.1384	0.0906	0.1574	0.0412			0.1318
Private Fire Protection	0.0022	0.0014			0.1498	0.0125	0.0139
Public Fire Protection	0.0123	0.0081			0.8502	0.0707	0.0788
Total	1.0000	0.6549	1.0000	0.2619	1.0000	0.0832	1.0000

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FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 4.

ALLOCATION OF COSTS ASSOCIATED WITH FACILITIES SERVING BASE AND MAXIMUM HOUR EXTRA CAPACITY FUNCTIONS.

Factors are based on the weighting of the average hourly consumption, the maximum day extra capacity demand, and the fire protection demand for each customer classification.

Customer Classification	Base			Maximum Hour		Fire Protection		Allocation Factor
	Average Hourly Consumption			Extra Capacity				
	Thousand	Allocation	Weighted	Allocation	Weighted	Allocation	Weighted	
	Gallons	Factor	Factor	Factor	Factor	Factor	Factor	
(1)	(2)	(3)	(4)=(3) X 0.2928	(5)	(6)=(5) X 0.4841	(7)	(8)=(7) X 0.2231	(9)=(4)+(6)+(8)
Residential	211.5	0.3637	0.1065	0.4870	0.2357			0.3422
Commercial	116.1	0.1997	0.0585	0.1909	0.0924			0.1509
Industrial	138.4	0.2381	0.0697	0.1093	0.0529			0.1226
Other Public Authority	26.5	0.0456	0.0134	0.0435	0.0211			0.0345
Sales for Resale	80.4	0.1384	0.0405	0.1693	0.0820			0.1225
Private Fire Protection	1.3	0.0022	0.0006			0.1498	0.0334	0.0340
Public Fire Protection	7.1	0.0123	0.0036			0.8502	0.1897	0.1933
Total	581.3	1.0000	0.2928	1.0000	0.4841	1.0000	0.2231	1.0000

The maximum hour extra capacity factors in column 5 are determined as follows:

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FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 3. Continued

ALLOCATION OF COSTS ASSOCIATED WITH FACILITIES SERVING BASE, MAXIMUM
DAY EXTRA CAPACITY AND FIRE PROTECTION FUNCTIONS, cont.

The weighting of the factors is based on the potential demand of general and fire protection service. The bases for the potential demand of general service are the maximum day ratio of 1.40 and the average daily system sendout for 2002. The system demand for fire protection is 8000 Gallons per minute for 4 hours.

	<u>Ratio</u>	<u>Rate of Flow, (GPD)</u>	<u>Weight</u>
Average Day	1.00	15,117,000	0.6549
Maximum Day			
Extra Capacity	<u>0.40</u>	<u>6,046,800</u>	<u>0.2619</u>
Subtotal	<u><u>1.40</u></u>	21,163,800	0.9168
Fire Protection		<u>1,920,000</u>	<u>0.0832</u>
Total		<u><u>23,083,800</u></u>	<u><u>1.0000</u></u>

The public and private fire protection allocation factors in column 6 on the previous page are based on the deliverability of 8000 gallons per minute for 4 hours.

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FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 4. Continued

ALLOCATION OF COSTS ASSOCIATED WITH FACILITIES SERVING BASE AND
 MAXIMUM HOUR EXTRA CAPACITY FUNCTIONS, cont.

The weighting of the factors is based on the potential demand of general and fire protection service. The bases for the potential demand of general service are the maximum hour ratio of 2.65. The system demand for fire protection is approximately 8000 gallons per minute.

	Ratio	Rate of Flow, (GPM)	Weight
Average Hour	1.00	10,498	0.2928
Maximum Hour Extra Capacity	<u>1.65</u>	<u>17,357</u>	<u>0.4841</u>
Subtotal	<u><u>2.65</u></u>	<u>27,855</u>	<u>0.7769</u>
Fire Protection		<u>8,000</u>	<u>0.2231</u>
Total		<u><u>35,855</u></u>	<u><u>1.0000</u></u>

The maximum hour extra capacity factors in column 5 of the previous page are determined as follows:

Customer Classification	Average Hourly Consumption Thousand Gal.	Maximum Hour Extra Capacity		
		Factor*	1,000 Gallons Per Hour	Allocation Factor
(1)	(2)	(3)	(4)=(2)x(3)	(5)
Residential	211.5	3.5	740.2	0.4870
Commercial	116.1	2.5	290.2	0.1909
Industrial	138.4	1.2	166.1	0.1093
Other Public Authority	26.5	2.5	66.2	0.0435
Sales for Resale	<u>80.4</u>	<u>3.2</u>	<u>257.4</u>	<u>0.1693</u>
Total	<u><u>572.9</u></u>		<u><u>1,520.1</u></u>	<u><u>1.0000</u></u>

* Ratio of Maximum Hour To Average Hour Minus 1.0.

The public and private fire protection allocation factors in column 7 on the previous page are based on the relative potential demands (see Schedule E).

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FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 5.

ALLOCATION OF COSTS ASSOCIATED WITH STORAGE FACILITIES.

Factors are based on the weighting of the average hourly consumption, the maximum hour extra capacity demand, and the fire protection demand for each customer classification.

Customer Classification	BASE Average Hourly Consumption			Maximum Hour Extra Capacity		Fire Protection		Allocation Factor
	Thousand Gallons	Allocation Factor	Weighted Factor	Allocation Factor	Weighted Factor	Allocation Factor	Weighted Factor	
(1)	(2)	(3)	(4)=(3) X 0.3253	(5)	(6)=(5) X 0.5379	(7)	(8)=(7) X 0.1368	(9)=(4)+(6)+(8)
Residential	211.5	0.3637	0.1183	0.4869	0.2619			0.3801
Commercial	116.1	0.1997	0.0650	0.1909	0.1027			0.1677
Industrial	138.4	0.2381	0.0775	0.1093	0.0588			0.1363
Other Public Authority	26.5	0.0456	0.0148	0.0436	0.0235			0.0383
Sales for Resale	80.4	0.1384	0.0450	0.1693	0.0911			0.1361
Private Fire Protection	1.3	0.0022	0.0007			0.1498	0.0205	0.0212
Public Fire Protection	7.1	0.0123	0.0040			0.8502	0.1163	0.1203
Total	581.3	1.0000	0.3253	1.0000	0.5380	1.0000	0.1368	1.0000

The weighting of the factors is based on the ratio of the capacity required for a 4 hour demand of fire flow, as related to total storage capacity. The calculation is shown on the following page.

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FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 5. Continued

ALLOCATION OF COSTS ASSOCIATED WITH STORAGE FACILITIES, cont.

The weighting of the factors is based on the ratio of the capacity required for a 4 hour demand of fire flow, as related to total storage capacity.

$$\text{Fire Protection Weight} = \frac{8,000 \text{ GPM} \times 60 \text{ Min.} \times 4 \text{ Hrs}}{14,040,000 \text{ Gallons}} = 0.1368$$

$$\text{General Service Weight} = 1.0000 - 0.1368 = 0.8632$$

The weighting of the average hourly consumption and maximum hour extra demand for general service is based on the maximum hour ratio, as follows:

	Maximum Hour Ratio	Percent	Weight
Average Hour	1.00	37.69	0.3253
Extra Capacity Maximum Hour	1.65	62.31	0.5379
Total	2.65	100.00	0.8632

Customer Classification	Average Hourly Consumption Thousand Gal. (2)	Factor*	Maximum Hour Extra Capacity	
			1,000 Gallons Per Hour (4)=(2)x(3)	Allocation Factor (5)
(1)	(2)	(3)	(4)	(5)
Residential	211.5	3.5	740.2	0.4869
Commercial	116.1	2.5	290.2	0.1909
Industrial	138.4	1.2	166.1	0.1093
Other Public Authority	26.5	2.5	66.2	0.0436
Sales for Resale	80.4	3.2	257.4	0.1693
Total	572.9		1520.1	1.0000

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FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 6.

ALLOCATION OF COSTS ASSOCIATED WITH POWER AND PUMPING FACILITIES.

Factors are based on the weighting of Maximum Day Factor 2, Maximum Day with Fire Factor 3, and the maximum hour consumption, Factor 4, for each customer classification, as follows:

Customer Classification	Maximum Daily Consumption		Maximum Daily Consumption		Maximum Hourly Consumption		Allocation Factor
	Allocation Factor 2	Weighted Factor	Allocation Factor 3	Weighted Factor	Allocation Factor 4	Weighted Factor	
(1)	(2)	(3)=(2)X 0.8106	(4)	(5)=(4)X 0.1841	(6)	(7)=(6)X 0.0053	(8)=(3)+ (5)+(7)
Residential	0.3910	0.3171	0.3586	0.0659	0.3422	0.0019	0.3849
Commercial	0.1967	0.1594	0.1804	0.0332	0.1509	0.0008	0.1934
Industrial	0.2131	0.1727	0.1953	0.0360	0.1226	0.0006	0.2093
Other Public Authority	0.0449	0.0364	0.0412	0.0076	0.0345	0.0002	0.0442
Sales for Resale	0.1439	0.1166	0.1318	0.0243	0.1225	0.0006	0.1415
Private Fire Protection	0.0016	0.0013	0.0139	0.0026	0.0340	0.0002	0.0041
Public Fire Protection	0.0088	0.0071	0.0788	0.0145	0.1933	0.0010	0.0226
Total	1.0000	0.8106	1.0000	0.1841	1.0000	0.0053	1.0000

The weighting of the factors is based on the horsepower of pumps associated with maximum day facilities, maximum day and fire facilities, and maximum hour facilities, as follows:

	Horsepower of Pumps	Weight
Associated with Maximum Day	4,600	0.8106
Associated with Maximum Day and Fire	1,045	0.1841
Associated with Maximum Hour	30	0.0053
Total	5,675	1.0000

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FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 7.

ALLOCATION OF COSTS ASSOCIATED WITH TRANSMISSION AND DISTRIBUTION MAINS.

Factors are based on the weighting of the maximum daily consumption with fire, Factor 3, and the maximum hour consumption, Factor 4, for each customer classification, as follows:

Customer Classification	Maximum Daily Consumption		Maximum Hourly Consumption		Allocation Factor
	Allocation Factor 3	Weighted Factor	Allocation Factor 4	Weighted Factor	
(1)	(2)	(3)=(2)X 0.0000	(4)	(5)=(4)X 1.0000	(6)=(3)+(5)
Residential	0.3586	0.0000	0.3422	0.3422	0.3422
Commercial	0.1804	0.0000	0.1509	0.1509	0.1509
Industrial	0.1953	0.0000	0.1226	0.1226	0.1226
Other Public Authority	0.0412	0.0000	0.0345	0.0345	0.0345
Sales for Resale	0.1318	0.0000	0.1225	0.1225	0.1225
Private Fire Protection	0.0139	0.0000	0.0340	0.0340	0.0340
Public Fire Protection	0.0788	0.0000	0.1933	0.1933	0.1933
Total	1.0000	0.0000	1.0000	1.0000	1.0000

Assigned 100% to Maximum Hour Function. No Plant functionalization was performed.

	Cost of of Mains	Weight
Transmission Mains	13,919,846	0.6017
Distribution Mains	9,215,518	0.3983
Total	23,135,364	1.0000

NO FUNCTIONALIZATION
ASSIGN ALL TO MAX HOUR

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FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 8.

ALLOCATION OF COSTS ASSOCIATED WITH FIRE HYDRANTS.

Costs are assigned directly to Public Fire Protection.

Customer Classification <u> </u> (1)	Allocation Factor <u> </u> (3)
Public Fire Protection	<u>1.0000</u>
Total	<u><u>1.0000</u></u>

FACTOR 9.

ALLOCATION OF COSTS ASSOCIATED WITH METERS.

Factors are based on the relative cost of meters by size and customer classification, as developed on the following page and summarized below.

Customer Classification <u> </u> (1)	5/8" Dollar Equivalents <u> </u> (2)	Allocation Factor <u> </u> (3)
Residential	28,715	0.7998
Commercial	4,885	0.1361
Industrial	1,106	0.0308
Other Public Authority	742	0.0207
Sales for Resale	452	0.0126
Private Fire	<u>0</u>	<u>0.0000</u>
Total	<u><u>35,900</u></u>	<u><u>1.0000</u></u>

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FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 10.

ALLOCATION OF COSTS ASSOCIATED WITH SERVICES.

Factors are based on the relative cost of services by size and customer classification, as developed on the following page and summarized below.

<u>Customer Classification</u> (1)	<u>3/4" Dollar Equivalents</u> (2)	<u>Allocation Factor</u> (3)
Residential	28,123	0.8347
Commercial	3,498	0.1038
Industrial	280	0.0083
Other Public Authority	305	0.0091
Sales for Resale	57	0.0017
Private Fire Protection	<u>1,429</u>	<u>0.0424</u>
Total	<u><u>33,692</u></u>	<u><u>1.0000</u></u>

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FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 11.

**ALLOCATION OF TRANSMISSION AND DISTRIBUTION OPERATION
SUPERVISION AND ENGINEERING AND MISCELLANEOUS EXPENSES.**

Factors are based on transmission and distribution operation expenses other than those being allocated, as follows:

Customer Classification	Transmission & Distribution Operating Expenses	Allocation Factor
(1)	(2)	(3)
Residential	\$ 181,511	0.4867
Commercial	53,570	0.1437
Industrial	34,485	0.0925
Other Public Authority	10,910	0.0293
Sales for Resale	32,756	0.0878
Private Fire Protection	10,131	0.0272
Public Fire Protection	49,548	0.1329
Total	372,911	1.0000

FACTOR 12.

**ALLOCATION OF TRANS. DISTRIB. MAINTENANCE SUPERVISION
AND ENGINEERING, STRUCTURES AND IMPROVE., AND OTHER EXPENSES.**

Factors are based on transmission and distribution maintenance expenses other than those being allocated, as follows:

Customer Classification	Transmission & Distribution Maintenance Expenses	Allocation Factor
(1)	(2)	(3)
Residential	\$ 68,567	0.4797
Commercial	18,949	0.1326
Industrial	11,581	0.0810
Other Public Authority	3,758	0.0263
Sales for Resale	10,875	0.0761
Private Fire Protection	3,577	0.0250
Public Fire Protection	25,619	0.1792
Total	\$142,926	1.0000

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FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 13.

ALLOCATION OF BILLING AND COLLECTING COSTS.

Factors are based on the total number of customers.

Customer Classification	Total Customers	Allocation Factor
(1)	(2)	(3)
Residential	28,011	0.8802
Commercial	3,117	0.0979
Industrial	142	0.0045
Other Public Authority	191	0.0060
Sales for Resale	20	0.0006
Private Fire Protection	345	0.0108
Public Fire Protection	0	0.0000
Total	31,826	1.0000

FACTOR 14.

ALLOCATION OF METER READING COSTS.

Factors are based on the number of metered customers.

Customer Classification	Total Metered Customers	Allocation Factor
(1)	(2)	(3)
Residential	28,011	0.8898
Commercial	3,117	0.0990
Industrial	142	0.0045
Other Public Authority	191	0.0061
Sales for Resale	20	0.0006
Total	31,481	1.0000

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FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 15.

**ALLOCATION OF ADMINISTRATIVE AND GENERAL EXPENSES AND CASH
WORKING CAPITAL.**

Factors are based on the allocation of all other operation and maintenance expenses excluding purchased water, power, chemicals and waste disposal.

<u>Customer Classification</u> (1)	<u>Operation & Maintenance Expenses</u> (2)	<u>Allocation Factor</u> (3)
Residential	\$1,378,478	0.5854
Commercial	336,385	0.1428
Industrial	231,064	0.0981
Other Public Authority	60,965	0.0259
Sales for Resale	174,946	0.0743
Private Fire Protection	30,392	0.0129
Public Fire Protection	142,640	0.0606
Total	<u>\$2,354,871</u>	<u>1.0000</u>

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FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 16.

ALLOCATION OF LABOR RELATED TAXES AND BENEFITS.

Factors are based on the allocation of direct labor expense.

Customer Classification	Direct Labor Expense	Allocation Factor
(1)	(2)	(3)
Residential	\$1,013,296	0.5448
Commercial	278,939	0.1500
Industrial	208,772	0.1122
Other Public Authority	53,785	0.0289
Sales for Resale	156,470	0.0841
Private Fire Protection	23,104	0.0124
Public Fire Protection	125,623	0.0675
Total	<u>\$1,859,989</u>	<u>1.0000</u>

FACTOR 17.

**ALLOCATION OF ORGANIZATION, FRANCHISES AND CONSENTS,
MISC. INTANGIBLE PLANT AND OTHER RATE BASE ELEMENTS.**

Factors are based on the allocation of the original cost less depreciation other than those items being allocated, as follows:

Customer Classification	Original Cost Less Depreciation	Allocation Factor
(1)	(2)	(3)
Residential	\$34,892,642	0.4010
Commercial	15,820,462	0.1818
Industrial	16,252,925	0.1868
Other Public Authority	3,544,170	0.0407
Sales for Resale	11,246,063	0.1292
Private Fire Protection	634,569	0.0073
Public Fire Protection	4,625,315	0.0532
Total	<u>\$87,016,146</u>	<u>1.0000</u>

**MISSOURI-AMERICAN WATER COMPANY
ST. JOSEPH DISTRICT
PSC STAFF STUDY**

FACTORS FOR ALLOCATING COST OF SERVICE TO CUSTOMER CLASSIFICATIONS, cont.

FACTOR 18.

ALLOCATION OF INCOME TAXES AND INCOME AVAILABLE FOR RETURN.

Factors are based on the allocation of the original cost measure of value rate base as shown on the following pages and summarized below.

Customer Classification (1)	Original Cost Measure of Value (2)	Allocation Factor (3)
Residential	\$30,563,601	0.4006
Commercial	13,880,208	0.1819
Industrial	14,268,559	0.1870
Other Public Authority	3,110,896	0.0408
Sales for Resale	9,872,250	0.1294
Private Fire Protection	555,276	0.0073
Public Fire Protection	<u>4,053,161</u>	<u>0.0531</u>
Total	<u><u>\$76,303,951</u></u>	<u><u>1.0000</u></u>

FACTOR 19.

**ALLOCATION OF REG. COMMISSION EXPENSES, ASSESSMENTS AND
OTHER WATER REVENUES.**

The factors are based on the allocation of the total cost of service, excluding those items being allocated.

Customer Classification (1)	Total Cost of Service (2)	Allocation Factor (3)
Residential	\$7,031,117	0.4673
Commercial	2,538,623	0.1687
Industrial	2,370,680	0.1576
Other Public Authority	535,763	0.0356
Sales for Resale	1,647,818	0.1095
Private Fire Protection	132,845	0.0088
Public Fire Protection	<u>789,087</u>	<u>0.0524</u>
Total	<u><u>\$15,045,933</u></u>	<u><u>1.0000</u></u>

MISSOURI-AMERICAN WATER COMPANY
ST. JOSEPH DISTRICT
PSC STAFF STUDY
BASIS FOR ALLOCATING METER COSTS TO CUSTOMER CLASSIFICATIONS

Meter Size	5/8" Dollar Equivalent	Residential		Commercial		Industrial		Other Public Authority		Sales for Resale		Total	
		Number of Meters	Weighting (4)=(2)X(3)	Number of Meters	Weighting (6)=(2)X(5)	Number of Meters	Weighting (8)=(2)X(7)	Number of Meters	Weighting (10)=(2)X(9)	Number of Meters	Weighting (12)=(2)X(11)	Number of Meters	Weighting (14)
(1)	(2)	(3)	(4)=(2)X(3)	(5)	(6)=(2)X(5)	(7)	(8)=(2)X(7)	(9)	(10)=(2)X(9)	(11)	(12)=(2)X(11)	(13)	(14)
5/8	1.0	26,629.66	26,629.66	2,289.18	2,289.18	7.00	7.00	38.46	38.46	0.17	0.17	28,964.46	28,964.47
3/4	1.3	806.67	1,048.67	156.33	203.23	3.33	4.33	10.83	14.08	0.00	0.00	977.17	1,270.31
1	1.7	555.80	944.86	340.58	578.99	22.00	37.40	37.17	63.18	0.00	0.00	955.55	1,624.43
1-1/2	3.5	5.08	17.79	86.42	302.46	6.67	23.33	18.50	64.75	0.00	0.00	116.67	408.33
2	4.3	12.79	55.00	225.25	968.58	81.50	350.45	78.25	336.48	11.00	47.30	408.79	1,757.81
3	19.0	1.00	19.00	6.00	114.00	2.00	38.00	2.17	41.17	0.00	0.00	11.17	212.17
4	29.3	0.00	0.00	11.33	332.07	15.42	451.71	5.17	151.38	5.00	146.50	36.92	1,081.66
6	48.4	0.00	0.00	2.00	96.80	4.00	193.60	0.67	32.27	3.00	145.20	9.67	467.87
8	112.9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	112.90	1.00	112.90
Total		<u>28,011</u>	<u>28,715</u>	<u>3,117</u>	<u>4,885</u>	<u>142</u>	<u>1,106</u>	<u>191</u>	<u>742</u>	<u>20</u>	<u>452</u>	<u>31,481</u>	<u>35,900</u>

MISSOURI-AMERICAN WATER COMPANY

ST. JOSEPH DISTRICT

PSC STAFF STUDY

BASIS FOR ALLOCATING SERVICE COSTS TO CUSTOMER CLASSIFICATIONS

Service Size	3/4" Dollar Equivalent	Residential		Commercial		Industrial		Other Public Authority		Sales for Resale		Private Fire Protection		Total	
		Number of Services	Weighting (4)=(2)X(3)	Number of Services	Weighting (6)=(2)X(5)	Number of Services	Weighting (8)=(2)X(7)	Number of Services	Weighting (10)=(2)X(9)	Number of Services	Weighting (12)=(2)X(11)	Number of Services	Weighting (14)=(2)X(13)	Number of Services	Weighting (16)
(1)	(2)	(3)	(4)=(2)X(3)	(5)	(6)=(2)X(5)	(7)	(8)=(2)X(7)	(9)	(10)=(2)X(9)	(11)	(12)=(2)X(11)	(13)	(14)=(2)X(13)	(15)	(16)
3/4	1.00	27,436.33	27,436.33	2,445.51	2,445.51	10.33	10.33	49.29	49.29	0.17	0.17	0.00	0.00	29,941.63	29,941.63
1	1.17	555.80	650.29	340.58	398.48	22.00	25.74	37.17	43.49	0.00	0.00	0.00	0.00	955.55	1,118.00
1-1/2	1.58	5.08	8.03	86.42	136.54	6.67	10.53	18.50	29.23	0.00	0.00	0.00	0.00	116.67	184.33
2	2.04	12.79	26.10	225.25	459.51	81.50	166.26	78.25	159.63	11.00	22.44	4.00	8.16	412.79	842.10
3	2.73	1.00	2.73	6.00	16.38	2.00	5.46	2.17	5.92	0.00	0.00	1.00	2.73	12.17	33.22
4	2.88	0.00	0.00	11.33	32.64	15.42	44.40	5.17	14.88	5.00	14.40	61.00	175.68	97.92	282.00
6	4.24	0.00	0.00	2.00	8.48	4.00	16.96	0.67	2.83	3.00	12.72	121.00	513.04	130.67	554.03
8	6.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	6.98	77.00	537.46	78.00	544.44
10	9.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.00	95.00	10.00	95.00
12	12.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	97.28	8.00	97.28
Total		<u>28,011.00</u>	<u>28,123.48</u>	<u>3,117.09</u>	<u>3,497.54</u>	<u>141.92</u>	<u>279.68</u>	<u>191.21</u>	<u>305.27</u>	<u>20.17</u>	<u>56.71</u>	<u>282.00</u>	<u>1,429.35</u>	<u>31,763.38</u>	<u>33,692.03</u>

MISSOURI-AMERICAN WATER COMPANY
ST. JOSEPH DISTRICT
PSC STAFF STUDY

BASIS FOR ALLOCATING DEMAND RELATED COSTS OF FIRE SERVICE
TO PRIVATE AND PUBLIC FIRE PROTECTION CUSTOMER CLASSIFICATIONS

Description (1)	Restrictive Diameters Squared (2)	Quantity (3)	Relative Demand* (4)=(2)x(3)	Allocation Factor (5)
<u>PRIVATE FIRE PROTECTION</u>				
<u>Fire Lines</u>				
2 -inch	4.00	4	16	
3 -inch	9.00	1	9	
4 -inch	16.00	61	976	
6 -inch	36.00	121	4,356	
8 -inch	64.00	77	4,928	
10 -inch	100.00	10	1,000	
12 -inch	144.00	8	1,152	
Private Hydrants	32.75	63	2,063	
Total Private Fire Protection		345	14,500	0.1498
<u>PUBLIC FIRE PROTECTION</u>				
<u>Hydrant</u>	<u>Nozzle Sizes</u>			
6" Valve	2- 2-1/2" & 1- 4.5"	32.75	0	0
6" Valve	2- 2-1/2" & 1- 4"	28.50	2,888	82,308
Total Public Fire Protection		2,888	82,308	0.8502
Total Fire Protection		3,233	96,808	1.0000