

Exhibit Number: **33**
Issues: Customer Class Cost of Service & Customer Rates
Witness Name: Wendell R. Hubbs
Type of Exhibit: Direct Testimony
Sponsoring Party: MoPSC Staff
Case Number: WR-2003-0500 and WC-2004-0168
Date Testimony Prepared: October 10, 2003

**Missouri Public Service Commission
Utility Operations Division
Water & Sewer Department**

**Direct Testimony
of
Wendell R. Hubbs**

FILED³

JAN 23 2004

Missouri Public
Service Commission

**Case No. WR-2003-0500 and
WC-2004-0168**

Missouri-American Water Company

Case No. WR-2003-0500
Date 12/16/03 Reporter SKM

Jefferson City, Missouri
October 2003

Exhibit No. 33
Case No(s) WR-2003-0500
Date 12/16/03 Rptr SKM

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

In the Matter of the General Rate Increase)
for Water and Sewer Service Provided by)
Missouri-American Water Company)
Case No. WR-2003-0500

Staff of the Missouri Public Service)
Commission, Complainant, v. Missouri-)
American Water Company, Respondent)
Case No. WC-2004-0168

AFFIDAVIT OF WENDELL R. HUBBS

STATE OF MISSOURI)
)
)
) ss
COUNTY OF COLE)

Wendell R. Hubbs, of lawful age, on his oath states: that he has participated in the preparation of the foregoing testimony in question and answer form, consisting of 9 pages of testimony to be presented in the above case, that the answers in the foregoing testimony were given by him; that he has knowledge of the matters set forth in such answers; and that such matters are true to the best of his knowledge and belief.



Wendell R. Hubbs

Subscribed and sworn to before me this 10th day of October, 2003.

Notary Public

My commission expires _____

DAWN L. HAKE
Notary Public - State of Missouri
County of Cole
My Commission Expires Jan 9, 2005

1 **DIRECT TESTIMONY**

2 **OF**

3 **WENDELL R. HUBBS**

4 **CASE No. WR-2003-0500**

5 **MISSOURI - AMERICAN WATER COMPANY**

6 **Q. Please state your name and business address.**

7 A. My name is Wendell R. Hubbs and my business address is Governor
8 Office Building, Suite 500, 200 Madison Street, Jefferson City, Missouri 65101.

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

10 A. I work for the Missouri Public Service Commission (Commission) and my
11 position at the Commission is Rate & Tariff Examination Supervisor in the Water &
12 Sewer Department (W/S Department) of the Utility Operations Division.

13 **Q. What are your educational and experience qualifications?**

14 A. In May 1979, I received a Bachelor of Science degree in Accounting from
15 Lincoln University of Jefferson City, Missouri.

16 From July 1979 to October 1981, I worked in the Accounting Department
17 of the Commission, where my duties were to assist with the audits and examinations of
18 the books and records of public utility companies operating within the State of Missouri.
19 Those audits focused on proposed utility rate increases and determining whether utility
20 books and records were being maintained in compliance with the Uniform System of
21 Accounts.

1 From October 1981 to September 1983, I held the position of Rate
2 Economist II in the Gas Department of the Commission, where my duties consisted of
3 tariff review, allocations and rate design.

4 From September 1983 to November 1990, I held the position of Assistant
5 Manager-Rates in the Gas Department, where my duties consisted of tariff review, rate
6 design, cost of service, accounting and administrative functions.

7 From November 1990 till May 1995, I held the position of Assistant
8 Manager-Rates in the Energy Department, where my duties were expanded to include
9 electric and steam operations.

10 From May 1995 till January 1998, I held the position of Regulatory
11 Auditor IV in the Rates Section of the Energy Department, where my duties consisted of
12 application analysis, tariff review, rate design, cost of service and accounting functions.

13 In January 1998, I assumed my current position in the W/S Department
14 where my duties consist of application analysis, tariff review, rate design, cost of service
15 and accounting functions.

16 **Q. What is the purpose of your direct testimony in this case?**

17 A. The Commission's Staff (Staff) has filed an overall cost-of-service
18 applicable to Missouri-American Water Company (MAWC or Company) providing
19 service to its Missouri customers. That cost of service determination was made on an
20 operating district basis, as well as on a total company basis.

1 My testimony explains how I allocate the Staff's cost-of-service to the
2 Company's various rate classes, and also how I develop the customer rates necessary to
3 recover the costs allocated to each customer class. Both of those functions utilize the
4 Staff's "district specific" cost-of-service computations.

5 **Q. How did you utilize the district cost of service information just**
6 **discussed to allocate costs to each customer class and develop customer rates?**

7 A. I allocated each district's cost-of-service to each class in the district using
8 the "base-extra capacity" method, which involves allocating various cost-of-service
9 components to the customer classes based on data pertaining to operating costs, operating
10 revenues, system capacity and customer usage. The results of such allocations yield the
11 relative cost levels that should be recovered from each customer class. Rates are then
12 designed to recover the costs that are allocated cost to each class.

13 I do need to note, however, that the customer class allocation factors I
14 developed are based on the Staff's district cost-of-service calculations without including
15 the Staff's Auditing Department's "true-up allowance" for the district, and that the
16 customer rates that I developed thus also do not reflect recovery of the true-up allowance
17 for each district.

18 **Q. Please describe the "base-extra capacity" allocation method you used.**

19 A. In the "base-extra capacity" method, costs are generally separated into four
20 primary cost components: (1) base costs; (2) extra capacity costs; (3) customer costs; and
21 (4) direct fire protection costs.

1 "Base costs" tend to vary with water consumption and are allocated to
2 customer classifications on the basis of the amount of water consumed.

3 "Extra capacity costs" are those costs associated with meeting the
4 requirements that are in excess of the average load conditions. They are divided into
5 costs to meet "maximum-day extra demand" and "maximum-hour extra demand."

6 "Customer costs" comprise those costs associated with customers that are
7 irrespective of consumption. They include customer accounting and collection expenses,
8 meter reading expenses and billing expenses. They also include "return on and of plant"
9 related to meters and services.

10 "Fire protection costs" are those costs that can be directly assigned to fire
11 protection functions.

12 **Q. Please describe the development of the class cost of service amounts.**

13 A. Allocation of each cost is accomplished by applying class allocation
14 factors. These class allocation factors are applied to the annualized and normalized
15 expenses, plant, rate base, return of investment, and return on investment to determine the
16 total costs to be recovered from each customer class in each district.

17 **Q. How are customer rates in a district determined?**

18 A. Rates are developed to recover from each customer class in the district, the
19 cost-of-service allocated to each class in the district. The rates generally consist of a
20 fixed customer charge and a usage/commodity charge, which are generally based upon
21 the number of customers in the class and the usage characteristics of those customers.

1 **Q. Are the customer class allocation and rate design methods you are**
2 **using in this case, and the results of those methods, consistent with the methods**
3 **upon which the Company's current customer rates were established?**

4 A. Regarding the class cost of service study, the class cost allocation method
5 I am using in this case is generally consistent with the allocation method used in the
6 previous cases in which the Company's current rates were established. (The "base-extra
7 capacity" method is the basis of the Staff's class cost of service studies in all of the
8 relevant cases).

9 Regarding the calculation of customer rates, the method I am using in this
10 case is not consistent with the method used in the previous cases in which the Company's
11 current rates were established. In this case, the fixed monthly or quarterly customer
12 charge was developed using meter costs, service costs and billing and collection costs
13 pursuant to the "base-extra capacity" method of cost accumulation, which is different
14 from how the current customer charges were developed.

15 An important item to note here is that the Company's current customer
16 rates were established in three different cases before the Commission, all of which took
17 place before the merger of Jefferson City Water Works Company and St. Louis County
18 Water Company with and into Missouri-American Water Company. The fact that
19 existing rates were established for three different companies in three different cases,
20 somewhat complicates the analysis of this subject matter.

1 **Q. You state above that the customer class cost allocation and rate design**
2 **methods you are using in this case are either "generally consistent" or "not**
3 **consistent" with the methods used in the previous cases in which the Company's**
4 **current rates were established. Can you provide examples of any differences that**
5 **exist in the methods you are using in this case, and the results of those methods, as**
6 **compared to the methods used to establish the Company's existing rates?**

7 A. Yes, I can provide several examples of such differences.

8 The first example comes from the decision the Commission issued on rate
9 design in MAWC's last pre-merger rate case (Case No. WR-2000-281). In that case, the
10 Commission adopted the Staff's proposed district-specific pricing methodologies
11 regarding cost-of-service determination, customer class cost of service allocations and
12 rate design, but also directed that the Company's rates be designed to "adhere to the
13 principle that no district would receive a rate decrease" as a result of that case. In
14 essence, that "principle" was a modification to the Staff's proposal in that case, which
15 would have resulted in at least one district receiving a rate decrease based upon the Staff's
16 district-specific pricing methodologies. In this case, as in the previous case, the Staff has
17 determined a cost-of-service for each district, and I am allocating costs and designing
18 rates based on each district's cost-of-service, irrespective of whether a district would
19 receive a rate increase or a rate decrease as a result of this case.

20 A second example has to do with the design of the rates for certain
21 customer classes. The current design pertains to the use of "rate blocks" for recovery of

1 the costs allocated for recovery through the commodity charges applicable to the class.
2 In general, the Company's current rates contain two, three or four commodity rate blocks
3 for each class of customers. The rate design I am proposing in this case eliminates block
4 rates.

5 A third example also has to do with the design of the rates. In this case, I
6 am recommending that the customer charges developed for each district to recover meter
7 costs, service costs and billing and collection costs, be those adopted by the Commission.
8 As mentioned previously, this is different from how current customer charges were
9 developed.

10 A fourth example is that I am recommending that the St. Louis County
11 District's charge for public fire protection be changed from a separate charge for each
12 customer to be recovered in the commodity charges for each customer class. This would
13 make the recovery of the private fire protection costs consistent with the other operating
14 districts and be more equitable based on use. This would eliminate Rate E in the St.
15 Louis County District tariff.

16 **Q. Have you completed your class cost-of-service studies and rate design**
17 **calculations for each district?**

18 A. Yes, I have, and they are being filed with this testimony and are consistent
19 with the Staff's accounting schedules filed in this case. I do note, again, however, that
20 the customer class allocation factors and customer rates that I developed are based on the

1 Staff's cost of service calculations for each district without including the Staff's "true-up
2 allowance" for the districts.

3 **Q. Are you proposing a different treatment for any district contrary to**
4 **the results of your class cost of service studies and rate design calculations?**

5 A. Yes, I am. As has been the case for many years, the cost-of-service for the
6 Brunswick District is extremely high, yielding rates that are twice what is currently being
7 charged. I am of the opinion that movement to full cost-of-service for Brunswick is
8 unreasonable. I recommend that some other party besides the Brunswick ratepayers be
9 made responsible for some of this district's costs-of-service.

10 **Q. What are you recommending that the Commission do with regard to**
11 **the resulting cost-of-service rates for the Brunswick District?**

12 A. I recommend that the Commission establish rates for the Brunswick
13 District customers equivalent to the highest related rates for each class's customer
14 charges and commodity charges from the District that has the second highest rates. This
15 action would have the effect of shifting revenue responsibility from the Brunswick
16 District customers to other parties (subsidization). In this case, either some customers in
17 other Districts or the Company will be made responsible for the shortfall in recovery of
18 the cost-of-service for the Brunswick District.

19 **Q. Please briefly describe the customer class cost of service allocation**
20 **and rate design schedules that accompany this testimony.**

1 A. Schedule A to each district's study shows the cost-of-service allocations
2 for each class in the first two numbered columns. The next two numbered columns show
3 the Staff's present annualized and normalized revenues by class, priced at the currently
4 effective rates. The next two numbered columns show the revenues generated by the
5 rates that I am proposing using the same annualized and normalized billing determinants.

6 Schedule B to each district's class cost-of-service study shows the allocation of all
7 of the Staff's Auditing Department's costs-of-service, first to each of the customer classes
8 and then to the functions of base use, max day use, max hour use, meter cost, services
9 cost, billing and collection cost and fire service cost.

10 Schedule C to each district's class cost-of-service study shows the development of
11 the allocation factors used to allocate costs to the classes and functions in Schedule B's
12 allocations.

13 Schedule D to each district's cost-of-service study shows the meter numbers and
14 service numbers for each district with cost weighting for each size.

15 Schedule E shows the basis of allocation to public and private fire service costs in
16 proportion to the relative potential demands on each system by public fire hydrants and
17 private fire services.

18 **Q. Does this conclude your prefiled direct testimony in this case?**

19 A. Yes, it does.

MISSOURI-AMERICAN WATER COMPANY
BRUNSWICK 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	\$ 220,470	53.7%	\$ 100,478	49.5%	\$ 220,470	53.7%	\$ 119,992	119.4%
Commercial	56,130	13.7%	\$ 27,974	13.9%	\$ 56,130	13.7%	28,156	100.7%
Industrial	1,085	0.3%	\$ 744	0.4%	\$ 1,085	0.3%	341	45.8%
Public Authority	6,828	1.7%	\$ 3,553	1.8%	\$ 6,828	1.7%	3,275	92.2%
Sales for Resale	120,777	29.4%	\$ 64,973	32.0%	\$ 120,777	29.4%	55,804	85.9%
Private Fire Service	5,637	1.4%	\$ 5,071	2.5%	\$ 5,637	1.4%	566	11.2%
Public Fire Service	-	0.0%	-	0.0%	-	0.0%	-	0.0%
Total Sales	410,927	<u>100.2%</u>	202,793	<u>100.1%</u>	410,927	<u>100.2%</u>	208,134	102.6%
Other Revenues	9,574		9,574		9,574		-	0.0%
Total	<u>\$ 420,501</u>		<u>\$ 212,367</u>		<u>\$ 420,501</u>		<u>\$ 208,134</u>	98.0%

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: Brunswick

Case No. WR-2003-0500
 STAFF - BRUNSWICK
 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	17,819	\$100,478	17,819	\$220,470	\$119,992	119.42%
5	Commercial	5,290	27,974	5,290	56,130	28,156	100.65%
6	Industrial	92	744	92	1,085	341	45.83%
7	Other Public Authority	674	3,553	674	6,828	3,275	92.18%
8	Other Water Utilities	15,842	64,973	15,842	120,777	55,804	85.89%
9	Miscellaneous	0	0	0	0	0	0.00%
10	Private Fire	0	5,071	0	5,637	566	11.16%
11	Public Fire	0	0	0	0	0	0.00%
12	Total	<u>39,716</u>	<u>202,793</u>	<u>39,716</u>	<u>410,927</u>	<u>\$208,134</u>	<u>102.63%</u>
13							
14							
15	Miscellaneous Revenues:						
16							
17	Reconnect Charges		200		200	0	0.00%
18	Returned Check Charge		60		60	0	0.00%
19	Application Fee		2,000		2,000	0	0.00%
20	Miscellaneous Other Revenue		7,334		7,334	0	0.00%
21	Rents from Water Property		0		0	0	0.00%
22							
23							
24			<u>\$212,387</u>		<u>\$420,521</u>	<u>208,134</u>	<u>98.00%</u>
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Schedule B-1-SBRU

**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: Brunswick

Case No. WR-2003-0500
STAFF - BRUNSWICK
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	4,627		\$7.08	\$32,759	4,627		\$ 15.28	\$70,683	\$37,924	115.77%
5	3/4" Monthly	0		9.06	0	0		\$ 17.04	0	0	0.00%
6	1" Monthly	4		12.84	50	4		\$ 19.64	77	27	54.00%
7	1-1/2" Monthly	0		22.33	0	0		\$ 30.82	0	0	0.00%
8	2" Monthly	36		33.71	1,214	36		\$ 36.21	1,304	90	7.41%
9	3" Monthly	0		60.24	0	0		\$ 123.53	0	0	0.00%
10	4" Monthly	0		98.15	0	0		\$ 184.20	0	0	0.00%
11	6" Monthly	0		192.93	0	0		\$ 298.35	0	0	0.00%
12	8" Monthly	0		306.65	0	0		\$ 681.02	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		4,667									
16											
17	<u>Volumetric Charges:</u>										
18	First Block		17,777	\$3.7333	66,367		17,777	\$8.3285	148,056	81,689	123.09%
19	Second Block		42	2.0914	88		42	\$8.3285	350	262	297.73%
20	Third Block		0	1.6140	0		0	\$8.3285	0	0	0.00%
21	Fourth Block		0	1.0869	0		0	\$8.3285	0	0	0.00%
22											
23											
24	Total		<u>17,819</u>		<u>\$100,478</u>		<u>17,819</u>		<u>\$220,470</u>	<u>\$119,992</u>	<u>119.42%</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: Brunswick

Case No. WR-2003-0500
STAFF - BRUNSWICK
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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	656		\$7.08	\$4,644	656		\$ 15.28	\$10,021	\$5,377	115.78%
5	3/4" Monthly	4		9.06	36	4		\$ 17.04	68	32	88.89%
6	1" Monthly	156		12.84	2,003	156		\$ 19.64	3,064	1,061	52.97%
7	1-1/2" Monthly	5		22.33	112	5		\$ 30.82	154	42	37.50%
8	2" Monthly	85		33.71	2,865	85		\$ 36.21	3,078	213	7.43%
9	3" Monthly	0		60.24	0	0		\$ 123.53	0	0	0.00%
10	4" Monthly	3		98.15	294	3		\$ 184.20	553	259	88.10%
11	6" Monthly	2		192.93	386	2		\$ 298.35	597	211	54.66%
12	8" Monthly	0		306.65	0	0		\$ 681.02	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		4,895	\$3.4466	16,871		4,895	\$7.2958	35,713	18,842	111.68%
19	Second Block		395	1.9308	763		395	\$7.2958	2,882	2,119	277.72%
20	Third Block		0	1.4901	0		0	7.2958	0	0	0.00%
21	Fourth Block		0	1.0034	0		0	7.2958	0	0	0.00%
22											
23											
24	Total		<u>5,290</u>		<u>\$27,974</u>		<u>5,290</u>		<u>\$56,130</u>	<u>\$28,156</u>	<u>100.65%</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: Brunswick

Case No. WR-2003-0500
STAFF - BRUNSWICK
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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		\$ 15.28	\$183	\$98	115.29%
5	3/4" Monthly	0		9.06	0	0		\$ 17.04	0	0	0.00%
6	1" Monthly	12		12.84	154	12		\$ 19.64	236	82	53.25%
7	1-1/2" Monthly	0		22.33	0	0		\$ 30.82	0	0	0.00%
8	2" Monthly	0		33.71	0	0		\$ 36.21	0	0	0.00%
9	3" Monthly	0		60.24	0	0		\$ 123.53	0	0	0.00%
10	4" Monthly	0		98.15	0	0		\$ 184.20	0	0	0.00%
11	6" Monthly	0		192.93	0	0		\$ 298.35	0	0	0.00%
12	8" Monthly	0		306.65	0	0		\$ 681.02	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		91.5	\$5.5215	505		91.5	\$7.2831	666	161	31.88%
19	Second Block		0	3.0931	0		0	7.2831	0	0	0.00%
20	Third Block		0	2.3870	0		0	7.2831	0	0	0.00%
21	Fourth Block		0	1.6075	0		0	7.2831	0	0	0.00%
22											
23											
24	Total		<u>92</u>		<u>\$744</u>		<u>92</u>		<u>\$1,085</u>	<u>\$341</u>	<u>45.83%</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: Brunswick

Case No. WR-2003-0500
STAFF - BRUNSWICK
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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	60		\$7.08	\$425	60		\$ 15.28	\$917	\$492	115.76%
5	3/4" Monthly	0		9.06	0	0		\$ 17.04	0	0	0.00%
6	1" Monthly	0		12.84	0	0		\$ 19.64	0	0	0.00%
7	1-1/2" Monthly	0		22.33	0	0		\$ 30.82	0	0	0.00%
8	2" Monthly	12		33.71	405	12		\$ 36.21	435	30	7.41%
9	3" Monthly	0		60.24	0	0		\$ 123.53	0	0	0.00%
10	4" Monthly	0		98.15	0	0		\$ 184.20	0	0	0.00%
11	6" Monthly	0		192.93	0	0		\$ 298.35	0	0	0.00%
12	8" Monthly	0		306.65	0	0		\$ 681.02	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		673.9	\$4.0402	2,723		673.9	\$8.1260	5,476	2,753	101.10%
19	Second Block		0	2.2633	0		0	8.1260	0	0	0.00%
20	Third Block		0	1.7467	0		0	8.1260	0	0	0.00%
21	Fourth Block		0	1.1762	0		0	8.1260	0	0	0.00%
22											
23											
24	Total		<u>674</u>		<u>\$3,553</u>		<u>674</u>		<u>\$6,828</u>	<u>\$3,275</u>	<u>92.18%</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: Brunswick**

**Case No. WR-2003-0500
STAFF - BRUNSWICK
Page 5 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 Water Utilities:									
3	<u>Minimum Charge:</u>									
4	5/8" Monthly	12		\$7.08	\$85	12	\$ 15.28	\$183	\$98	115.29%
5	3/4" Monthly	0		9.06	0	0	\$ 17.04	0	0	0.00%
6	1" Monthly	12		12.84	154	12	\$ 19.64	236	82	53.25%
7	1-1/2" Monthly	0		22.33	0	0	\$ 30.82	0	0	0.00%
8	2" Monthly	36		33.71	1,214	36	\$ 36.21	1,304	90	7.41%
9	3" Monthly	0		60.24	0	0	\$ 123.53	0	0	0.00%
10	4" Monthly	0		98.15	0	0	\$ 184.20	0	0	0.00%
11	6" Monthly	0		192.93	0	0	\$ 298.35	0	0	0.00%
12	8" Monthly	0		306.65	0	0	\$ 681.02	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		1,200.0	\$6.7558	8,107	1,200	\$7.51516	9,018	911	11.24%
19	Second Block		14,641.8	3.7846	55,413	14,642	\$7.51516	110,036	54,623	98.57%
20	Third Block		0	2.9207	0	0	7.5152	0	0	0.00%
21	Fourth Block		0	1.9668	0	0	7.5152	0	0	0.00%
22										
23										
24	Total		<u>15,842</u>		<u>\$64,973</u>		<u>15,842</u>	<u>\$120,777</u>	<u>\$55,804</u>	<u>85.89%</u>
25										
26										
27										
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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: Brunswick

Case No. WR-2003-0500
STAFF - BRUNSWICK
Page 6 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	Miscellaneous:										
3	<u>Minimum Charge:</u>										
4	5/8" Monthly	0		\$7.08	\$0	0		\$ 15.28	\$0	\$0	0.00%
5	3/4" Monthly	0		9.06	0	0		\$ 17.04	0	0	0.00%
6	1" Monthly	0		12.84	0	0		\$ 19.64	0	0	0.00%
7	1-1/2" Monthly	0		22.33	0	0		\$ 30.82	0	0	0.00%
8	2" Monthly	0		33.71	0	0		\$ 36.21	0	0	0.00%
9	3" Monthly	0		60.24	0	0		\$ 123.53	0	0	0.00%
10	4" Monthly	0		98.15	0	0		\$ 184.20	0	0	0.00%
11	6" Monthly	0		192.93	0	0		\$ 298.35	0	0	0.00%
12	8" Monthly	0		306.65	0	0		\$ 681.02	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											
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36											
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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: Brunswick

Case No. WR-2003-0500
STAFF - BRUNSWICK
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	3.00	\$1,252.68	\$3,758	1,392.45	\$4,177	\$419	11.15%
5								
6	2"	0.00	179.52	0	199.55	0	0	0.00%
7								
8	3"	0.00	308.52	0	342.94	0	0	0.00%
9								
10	4"	0.00	489.48	0	544.09	0	0	0.00%
11								
12	6"	1.31	1,003.80	1,313	1,115.80	1,460	147	11.20%
13								
14	8"	0.00	1,727.16	0	1,919.87	0	0	0.00%
15								
16	10"	0.00	2,654.88	0	2,951.09	0	0	0.00%
17								
18	12"	0.00	3,785.40	0	4,207.75	0	0	0.00%
19								
20								
21								
22	Total	<u>4.31</u>		<u>\$5,071</u>		<u>\$5,637</u>	<u>\$566</u>	<u>11.16%</u>
23								
24								
25								
26	Public Fire Protection:							
27								
28	Public Fire Hydrants	<u>58</u>	0.00	<u>0</u>	58.00	<u>0</u>	<u>0</u>	<u>0.00%</u>
29								

MISSOURI-AMERICAN WATER COMPANY

BRUNSWICK 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	\$ 4,351	\$ 1,978	\$ 524	\$ 8	\$ 70	\$ 1,746	\$ 4	\$ 22	0.0
Labor & Exp Oper SS	2	0								0.0
Labor & Exp Oper SS	2	(2)	(1)	(0)	(0)	(0)	(1)	(0)	(0)	0.0
Purchased Water	1	0	0	0	0	0	0	0	0	0.0
TOTAL SS EXPENSE - OPERATION		4,349	1,977	524	8	70	1,745	4	22	0.0
Misc Exp Oper SS	2	3,661	1,664	441	7	59	1,469	3	18	0.0
Misc Exp Oper SS	2	107	49	13	0	2	43	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	3	1	0	0	0	1	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	121	55	15	0	2	49	0	1	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	12,324	5,601	1,485	23	197	4,944	11	62	0.0
TOTAL SS EXPENSE - MAINTENANCE		16,216	7,370	1,954	31	259	6,506	15	81	0.0
TOTAL SS EXPENSE		20,565	9,347	2,478	39	329	8,251	19	103	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	990	435	115	2	15	384	6	32	0.0
Labor & Exp Oper Pwr Prod	6	0	0	0	0	0	0	0	0	0.0
Purch Fuel/Power for Pump	1	5,850	2,572	752	13	100	2,358	8	46	0.0
Labor & Exp Oper Pump	6	0	0	0	0	0	0	0	0	0.0
Labor & Exp Oper Pump	6	0	0	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	0	0	0	0	0	0	0	0	0.0
Rents Oper P	6	4	2	0	0	0	2	0	0	0.0
TOTAL PUMPING EXPENSE - OPERATION		6,844	3,009	868	15	115	2,744	14	78	0.0

MISSOURI-AMERICAN WATER COMPANY

BRUNSWICK 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	19	8	2	0	0	7	0	1	0.0
TOTAL PUMPING EXPENSES - MAINTENANCE		19	8	2	0	0	7	0	1	0.0
TOTAL PUMPING EXPENSES		6,863	3,017	870	15	116	2,751	14	79	0.0
WATER TREATMENT										0.0
Super & Eng Oper WT	2	20,303	9,228	2,447	39	325	8,146	18	102	0.0
Chemicals	1	6,567	2,888	845	15	112	2,647	9	51	0.0
Labor & Exp Oper WT	2	15,358	6,980	1,851	29	246	6,162	14	77	0.0
Labor & Exp Oper WT	2	3,370	1,532	406	6	54	1,352	3	17	0.0
Misc Exp Oper WT	2	1,181	537	142	2	19	474	1	6	0.0
Misc Exp Oper WT	1	2,625	1,154	338	6	45	1,058	4	20	0.0
Misc Exp Oper WT	2	1,757	799	212	3	28	705	2	9	0.0
Rents Oper WT	2	0	0	0	0	0	0	0	0	0.0
TOTAL WT EXPENSE - OPERATION		51,161	23,117	6,239	101	829	20,543	51	282	0.0
Super & Eng Maint WT	2	17,403	7,910	2,097	33	278	6,982	16	87	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	6,287	2,857	758	12	101	2,522	6	31	0.0
TOTAL WT EXPENSE - MAINTENANCE		23,690	10,767	2,855	45	379	9,504	21	118	0.0
TOTAL WT EXPENSE		74,851	33,884	9,094	146	1,208	30,048	72	400	0.0
TRANSMISSION AND DISTRIBUTION EXPENSES										0.0
Super & Eng Oper TD	11	1,450	321	75	1	10	277	120	647	0.0
Storage Facility Exp	5	0	0	0	0	0	0	0	0	0.0
Storage Facility Exp	5	0	0	0	0	0	0	0	0	0.0
TD Lines Exp	7	12,312	2,727	635	7	85	2,348	1,016	5,494	0.0
TD Lines Exp	7	208	46	11	0	1	40	17	93	0.0
Meter Expense	9	0	0	0	0	0	0	0	0	0.0
Meter Expense	9	0	0	0	0	0	0	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
Misc Exp Oper TD	11	0	0	0	0	0	0	0	0	0.0

Schedule C-2-SBRU

MISSOURI-AMERICAN WATER COMPANY

BRUNSWICK 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	286	63	15	0	2	55	24	128	0.0
Misc Exp Oper TD	11	410	91	21	0	3	78	34	183	0.0
Rents Oper TD	11	3	1	0	0	0	1	0	1	0.0
TOTAL T & D EXPENSE OPERATION		14,669	3,249	757	9	101	2,797	1,210	6,545	0.0
Super & Eng Maint TD	12	1,450	1,123	248	8	27	46	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	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	0	0	0	0	0	0	0	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	41	32	7	0	1	1	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	0	0	0	0	0	0	0	0	0.0
Misc Plant Maint TD	12	14,208	11,004	2,413	77	267	448	0	0	0.0
		0								
		0								
TOTAL T & D EXPENSE - MAINTENANCE		15,699	12,159	2,666	85	295	495	0	0	0.0
TOTAL T & D EXPENSE		30,368	15,408	3,423	94	396	3,292	1,210	6,545	0.0
CUSTOMER ACCOUNTS										0.0
Supervision CA	13	1,487	1,196	237	6	19	16	13	0	0.0
Meter Reading Exp CA	14	0	0	0	0	0	0	0	0	0.0
Meter Reading Exp CA	14	269	218	43	1	3	3	0	0	0.0
Meter Reading Exp CA	14	0	0	0	0	0	0	0	0	0.0
Cust Rec & Collection CA	13	77	62	12	0	1	1	1	0	0.0
Cust Rec & Collection CA	13	4,343	3,493	691	19	56	47	37	0	0.0
Uncollectible Accts	13	2,059	1,656	328	9	27	22	18	0	0.0
Misc Cust Accts Exp CA	13	60	64	13	0	1	1	1	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	1,746	1,404	278	8	23	19	15	0	0.0
Cust Serv & Info Exp CA	13	3,517	2,828	560	15	45	38	30	0	0.0
TOTAL CUSTOMER ACCOUNTING EXPENSE		13,578	10,921	2,162	58	175	147	114	0	0.0

MISSOURI-AMERICAN WATER COMPANY

BRUNSWICK 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	15,388	7,739	1,888	37	231	4,507	165	822	0.0
Other Supplies & Exp AG	15	4	2	0	0	0	1	0	0	0.0
Other Supplies & Exp AG	15	4,266	2,145	523	10	64	1,250	46	226	0.0
Other Supplies & Exp AG	15	7,814	3,930	959	19	117	2,289	84	417	0.0
Mgmt Fees-Coporate/Shared Service Center	15	23,397	11,766	2,871	56	351	6,853	250	1,249	0.0
Mgmt Fees-Call Center	13	12,612	10,143	2,008	54	163	136	108	0	0.0
Mgmt Fees-Belleville Lab	2	16,513	7,505	1,990	31	264	6,625	15	83	0.0
Mgmt Fees- Financial ITS	15	1,228	618	151	3	18	360	13	66	0.0
Mgmt Fees- Customer Billings ITS	13	6,930	5,573	1,103	30	89	75	60	0	0.0
Mgmt Fees-Other ITS	15	78	39	10	0	1	23	1	4	0.0
Outside Services AG	15	0	0	0	0	0	0	0	0	0.0
Outside Services AG	15	4,851	2,440	595	12	73	1,421	52	259	0.0
Property Insurance	15	3,428	1,724	421	8	51	1,004	37	183	0.0
Ins Gen Liab Oper AG	15	2,387	1,200	293	6	36	699	26	127	0.0
Ins Work Comp AG	16	87	29	7	0	1	23	1	5	0.0
Ins Other Oper AG	15	4,483	2,255	550	11	67	1,313	48	239	0.0
Property Insurance	15	0	0	0	0	0	0	0	0	0.0
Injuries & Damages	16	0	0	0	0	0	0	0	0	0.0
Employee Pension & Benefits	16	31,844	13,970	3,563	61	459	10,754	481	2,557	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	828	416	102	2	12	243	9	44	0.0
Rents AG	15	3,465	1,743	425	8	52	1,015	37	185	0.0
Goodwill Advertising Exp	15	0	0	0	0	0	0	0	0	0.0
Misc Exp AG	15	1,866	938	229	4	28	547	20	100	0.0
Research & Development	15	0	0	0	0	0	0	0	0	0.0
TOTAL A & G OPERATIONS		141,449	74,175	17,688	352	2,078	39,136	1,451	6,569	0.0
General Plant Maint AG	15	0	0	0	0	0	0	0	0	0.0
General Plant Maint AG	15	1,431	720	176	3	21	419	15	76	0.0
TOTAL A & G EXPENSE - MAINTENANCE		1,431	720	176	3	21	419	15	76	0.0
TOTAL A & G EXPENSE		142,880	74,894	17,864	356	2,100	39,555	1,466	6,645	0.0
Total Operation & Maintenance Expenses		289,105	147,472	35,891	708	4,324	84,043	2,896	13,772	0.0

MISSOURI-AMERICAN WATER COMPANY

BRUNSWICK 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	440	200	53	1	7	177	0	2	0.0
Struct & Imp P	6	326	143	38	1	5	127	2	11	0.0
Struct & Imp WT	2	2,568	1,167	309	5	41	1,030	2	13	0.0
Struct & Imp TD	7	477	106	25	0	3	91	39	213	0.0
Struct & Imp Offices	15	107	54	13	0	2	31	1	6	0.0
Struct & Imp Store, Shop, Gar	15	0	0	0	0	0	0	0	0	0.0
Struct & Imp Misc	15	0	0	0	0	0	0	0	0	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	2,832	1,287	341	5	45	1,136	3	14	0.0
Supply Mains	2	1,404	638	169	3	22	563	1	7	0.0
Power Generation Equip Othe	6	40	18	5	0	1	16	0	1	0.0
Pump Equip Electric	6	1,723	757	201	3	27	669	10	58	0.0
Pump Equip Other	6	229	101	27	0	4	89	1	7	0.0
WT Equip Non-Media	2	3,631	1,650	438	7	58	1,457	3	18	0.0
Dist Reservoirs & Standpipe	5	1,093	328	76	1	10	282	62	334	0.0
Elevated Tanks & Standpipes	5	331	99	23	0	3	85	19	101	0.0
Ground Level Facilities	5	0	0	0	0	0	0	0	0	0.0
TD Mains Not Classified by	4	3,538	784	183	2	24	675	292	1,579	0.0
TD Mains 4 & Less	4	417	92	22	0	3	80	34	186	0.0
TD Mains 6 to 8"	4	408	90	21	0	3	78	34	182	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
Services	10	1,902	1,499	306	9	28	33	28	0	0.0
Meters Bronze Case	9	347	269	59	2	7	11	0	0	0.0
Meters Plastic Case	9	0	0	0	0	0	0	0	0	0.0
Meters Other	9	392	304	67	2	7	12	0	0	0.0
Meters Other-Rem Rdr Unts	9	0	0	0	0	0	0	0	0	0.0
Meter Installations	9	1,087	842	185	6	20	34	0	0	0.0
Meter Installation Other	9	0	0	0	0	0	0	0	0	0.0
Hydrants	8	1,005	0	0	0	0	0	0	1,005	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	(153)	(77)	(19)	(0)	(2)	(45)	(2)	(8)	0.0
Comp & Periph Equip	15	486	244	60	1	7	142	5	26	0.0
Computer Software	15	0	0	0	0	0	0	0	0	0.0
Comp Software Personal	15	0	0	0	0	0	0	0	0	0.0
Data Handling Equipment	15	766	385	94	2	11	224	8	41	0.0

Schedule C-5-SBRU

MISSOURI-AMERICAN WATER COMPANY

BRUNSWICK 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)	
Other Office Equipment	15	133	67	16	0	2	39	1	7	0.0
Trans Equip Lt Duty Trks	15	4,245	2,135	521	10	64	1,243	45	227	0.0
Trans Equip Hvy Duty Trks	15	0	0	0	0	0	0	0	0	0.0
Trans Equip Autos	15	170	85	21	0	3	50	2	9	0.0
Trans Equip Other	15	0	0	0	0	0	0	0	0	0.0
Stores Equipment	15	246	124	30	1	4	72	3	13	0.0
Tools,Shop,Garage Equip	15	1,493	751	183	4	22	437	16	80	0.0
Tools,Shop,Garage Equip Oth	15	0	0	0	0	0	0	0	0	0.0
Laboratory Equipment	2	754	343	91	1	12	303	1	4	0.0
Laboratory Equip Other	2	0	0	0	0	0	0	0	0	0.0
Power Operated Equipment	15	0	0	0	0	0	0	0	0	0.0
Comm Equip Non-Telephone	15	122	61	15	0	2	36	1	7	0.0
Comm Equip Telephone	15	0	0	0	0	0	0	0	0	0.0
Misc Equipment	15	1,856	933	228	4	28	544	20	99	0.0
Other Tangible Property	15	1,126	566	138	3	17	330	12	60	0.0
Total Depreciation Expense		35,541	16,046	3,937	74	490	10,050	645	4,299	
Amort-Other UP	18	4,176	1,780	436	8	54	1,142	94	662	
Taxes Other Than Income										
Utility Reg Assessment Fee	19	1,262	614	150	3	18	362	17	98	
Property Taxes	18	12,003	5,116	1,253	23	156	3,282	271	1,902	
FUTA	16	140	61	16	0	2	47	2	11	0.0
FICA	16	6,842	3,002	766	13	99	2,311	103	549	0.0
SUTA	16	0	0	0	0	0	0	0	0	0.0
Other Taxes & Licenses	15	526	265	65	1	8	154	6	28	0.0
Gross Receipts Tax	19	0	0	0	0	0	0	0	0	0.0
Total Taxes, Other Than Income		20,773	9,057	2,249	40	283	6,156	399	2,589	0.0
Income Taxes	18	18,166	7,742	1,897	35	236	4,967	411	2,879	
Utility Income Available for Return	18	52,740	22,478	5,506	100	686	14,419	1,192	8,359	
Total Cost of Service		420,501	204,574	49,915	965	6,072	120,777	5,637	32,560	0.0
Less: Other Water Revenues	19	(9,574)	(9,574)	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		(9,574)	(9,574)	0	0	0	0	0	0	0.0
Total Cost of Service Related to Sales of Water		\$ 410,927	\$ 195,000	\$ 49,915	\$ 965	\$ 6,072	\$ 120,777	\$ 5,637	\$ 32,560	0.0
Reallocation of Public Fire	20		25,470	6,214	120	756			(32,560)	0.0
Total		\$ 410,927	\$ 220,470	\$ 56,130	\$ 1,085	\$ 6,828	\$ 120,777	\$ 5,637	\$ -	0.0
			\$ 9,574						58	
			\$ 230,044							0.0
True - up allowance		\$ 17,642								0.0
		\$ 428,569								0.0

Schedule C-6-SBRU

MISSOURI-AMERICAN WATER COMPANY

BRUNSWICK 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	\$ 630	\$ 268	\$ 66	\$ 1	\$ 8	\$ 172	\$ 14	\$ 101	0.0
Franchises	17	3,271	1,390	341	6	43	895	75	523	0.0
Land & Ld Rights SS	2	11,981	5,445	1,444	23	192	4,807	11	60	0.0
Land & Ld Rights P	6	0	0	0	0	0	0	0	0	0.0
Land & Ld Rights WT	2	1,468	667	177	3	23	589	1	7	0.0
Land & Ld Rights TD	7	591	131	30	0	4	113	49	264	0.0
Land & Land Rights AG	15	0	0	0	0	0	0	0	0	0.0
Struct & Imp SS	2	20,903	9,500	2,519	40	334	8,386	19	105	0.0
Struct & Imp P	6	36,601	16,086	4,268	66	567	14,209	216	1,190	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	112,087	50,944	13,506	213	1,793	44,969	101	560	0.0
Struct & Imp WT Nth Pit (ST	2	0	0	0	0	0	0	0	0	0.0
Struct & Imp WT Ctrl Pit 1	2	0	0	0	0	0	0	0	0	0.0
Struct & Imp WT Ctrl Pit 3	2	0	0	0	0	0	0	0	0	0.0
Struct & Imp WT Sth Pit (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	24,844	5,503	1,282	15	171	4,738	2,050	11,085	0.0
Struct & Imp TD Spec Cross	7	0	0	0	0	0	0	0	0	0.0
Struct & Imp Offices	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 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	0	0	0	0	0	0	0	0	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	90,043	40,925	10,850	171	1,441	36,125	81	450	0.0
Supply Mains	2	54,874	24,940	6,612	104	878	22,015	49	274	0.0
Supply Mains Nth Pit (STL)	2	0	0	0	0	0	0	0	0	0.0
Supply Mains Ctrl Pit (STL)	2	0	0	0	0	0	0	0	0	0.0
Supply Mains Sth Pit (STL)	2	0	0	0	0	0	0	0	0	0.0
Supply Mains Meramec Pit (S	2	0	0	0	0	0	0	0	0	0.0
Power Generation Equip Othe	6	852	374	99	2	13	331	5	28	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	74,885	32,912	8,732	135	1,161	29,070	442	2,434	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 Pit	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	8,275	3,637	965	15	128	3,212	49	269	0.0
WT Equip Non-Media	2	114,111	51,863	13,750	217	1,826	45,781	103	571	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	5	0	0	0	0	0	0	0	0	0.0
Dist Reservoirs & Standpipe	5	38,958	11,684	2,723	35	362	10,059	2,201	11,894	0.0
Elevated Tanks & Standpipes	5	17,570	5,269	1,228	16	163	4,537	993	5,364	0.0
Ground Level Facilities	5	0	0	0	0	0	0	0	0	0.0
TD Mains Not Classified by	7	140,892	31,208	7,270	85	972	26,868	11,624	62,866	0.0

Schedule C-7-SBRU

MISSOURI-AMERICAN WATER COMPANY

BRUNSWICK 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)	
TD Mains 4 & Less	4	31,841	7,053	1,643	19	220	6,072	2,627	14,207	0.0
TD Mains 6 to 8"	4	30,785	6,819	1,589	18	212	5,871	2,540	13,736	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	0	0	0	0	0	0	0	0	0.0
TD Mains CI <10 1929-58 (S*	4	0	0	0	0	0	0	0	0	0.0
TD Mains CI <10 1957-83 (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	87,478	68,833	14,075	394	1,286	1,513	1,277	0	0.0
Meters Bronze Case	9	13,821	10,704	2,347	75	260	435	0	0	0.0
Meters Plastic Case	9	0	0	0	0	0	0	0	0	0.0
Meters Other	9	208	161	35	1	4	7	0	0	0.0
Meters Other-Rem Rdr Unts	9	0	0	0	0	0	0	0	0	0.0
Meter Installations	9	44,619	34,557	7,576	241	839	1,405	0	0	0.0
Meter Installation Other	9	0	0	0	0	0	0	0	0	0.0
Hydrants	8	48,168	0	0	0	0	0	0	48,168	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	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	4,619	2,323	567	11	89	1,353	49	247	0.0
Office Furniture & Equip	15	(11,418)	(5,742)	(1,401)	(27)	(171)	(3,344)	(122)	(610)	0.0
Comp & Periph Equip	15	1,876	943	230	5	28	549	20	100	0.0
Computer Software	15	14,251	7,167	1,749	34	214	4,174	152	761	0.0
Comp Software Personal	15	400	201	49	1	6	117	4	21	0.0
Data Handling Equipment	15	16,824	8,461	2,064	40	262	4,928	180	898	0.0
Other Office Equipment	15	2,947	1,482	362	7	44	863	32	157	0.0
Trans Equip Lt Duty Trks	15	31,808	15,996	3,903	76	477	9,317	340	1,699	0.0
Trans Equip Hvy Duty Trks	15	0	0	0	0	0	0	0	0	0.0
Trans Equip Autos	15	599	301	73	1	9	175	6	32	0.0
Trans Equip Other	15	(12,484)	(6,278)	(1,532)	(30)	(187)	(3,657)	(134)	(667)	0.0
Stores Equipment	15	10,416	5,238	1,278	25	156	3,051	111	556	0.0
Tools,Shop,Garage Equip	15	25,108	12,627	3,081	60	377	7,354	269	1,341	0.0
Tools,Shop,Garage Equip Oth	15	0	0	0	0	0	0	0	0	0.0
Laboratory Equipment	2	17,017	7,734	2,051	32	272	6,827	15	85	0.0
Laboratory Equip Other	2	0	0	0	0	0	0	0	0	0.0
Power Operated Equipment	15	0	0	0	0	0	0	0	0	0.0
Comm Equip Non-Telephone	15	2,401	1,207	295	6	36	703	26	128	0.0
Comm Equip Telephone	15	(2,965)	(1,491)	(364)	(7)	(44)	(868)	(32)	(158)	0.0
Misc Equipment	15	11,617	5,842	1,425	28	174	3,403	124	620	0.0
Other Tangible Property	17	23,187	9,850	2,416	44	301	6,342	529	3,705	0.0
Total Utility Plant in Service		1,145,959	486,835	119,373	2,200	14,915	313,467	26,096	183,072	0.0
Other Rate Base Items										0.0
Add:										
Other Utility Plant Adjustments	17	0	0	0	0	0	0	0	0	0.0
Cash Working Capital	15	8,301	4,175	1,019	20	125	2,431	89	443	0.0
Materials and Supplies	15	5,287	2,659	649	13	79	1,549	57	282	0.0

Schedule C-8-SBRU

MISSOURI-AMERICAN WATER COMPANY

BRUNSWICK 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)	
Prepayments	15	5	3	1	0	0	1	0	0	0.0
OPEB's Contributed to External Fund	16	21,574	9,465	2,414	41	311	7,286	326	1,732	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	(163,562)	(69,481)	(17,043)	(311)	(2,126)	(44,734)	(3,729)	(26,137)	0.0
Deferred Income Taxes	17	(216,918)	(92,147)	(22,603)	(412)	(2,820)	(59,327)	(4,946)	(34,663)	0.0
Pensions	16	(27,349)	(11,998)	(3,060)	(52)	(394)	(9,236)	(413)	(2,196)	0.0
Total Other Rate Base Elements		<u>(372,662)</u>	<u>(157,325)</u>	<u>(38,624)</u>	<u>(701)</u>	<u>(4,826)</u>	<u>(102,030)</u>	<u>(8,617)</u>	<u>(60,539)</u>	0.0
Total Original Cost Measure of Value		<u>\$ 773,297</u>	<u>\$ 329,509</u>	<u>\$ 80,749</u>	<u>\$ 1,499</u>	<u>\$ 10,080</u>	<u>\$ 211,437</u>	<u>\$ 17,480</u>	<u>\$ 122,534</u>	0.0

T&D OP BASIS FOR FACTOR 11		12,520	2,773	646	8	86	2,388	1,033	5,586	0.0
FACTOR 11			0.2215	0.0516	0.0006	0.0069	0.1907	0.0825	0.4462	1.0000
T&D Mnt BASIS FOR FACTOR 12		41	32	7	0	1	1	0	0	0.0
FACTOR 12			0.7745	0.1698	0.0054	0.0188	0.0315	0.0000	0.0000	1.0000
A&G BASIS FOR FACTOR 15		131,183	65,963	16,093	318	1,967	38,425	1,408	7,009	0.0
FACTOR 15			0.5029	0.1227	0.0024	0.0150	0.2929	0.0107	0.0534	1.0000
LABOR BASIS FOR FACTOR 16		90,649	39,762	10,140	171	1,308	30,614	1,372	7,282	0.0
FACTOR 16			0.4387	0.1119	0.0019	0.0144	0.3377	0.0151	0.0803	1.0000
UPIS BASIS FOR FACTOR 17		1,118,871	475,328	116,551	2,149	14,563	306,058	25,479	178,744	0.0
FACTOR 17			0.4248	0.1042	0.0019	0.0130	0.2735	0.0228	0.1598	1.0000
RATE BASE BASIS FOR FACTOR 18		773,297	329,509	80,749	1,499	10,090	211,437	17,480	122,534	0.0
FACTOR 18			0.4262	0.1044	0.0019	0.0130	0.2734	0.0226	0.1585	1.0000
TOTAL COS BASIS FOR FACTOR 19		418,411	203,544	49,664	960	6,042	120,172	5,611	32,418	0.0
FACTOR 19			0.4865	0.1187	0.0023	0.0144	0.2872	0.0134	0.0775	1.0000
COS w/o Fire Factor 20		261,527	204,574	49,915	965	6,072				0
FACTOR 20			0.7822	0.1909	0.0037	0.0232				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	0.4397	0.1286	0.0023	0.0171	0.4031	0.0014	0.0078	1.0000
2	0.4545	0.1205	0.0019	0.0160	0.4012	0.0009	0.0050	1.0000
3	0.3808	0.1010	0.0015	0.0134	0.3361	0.0261	0.1411	1.0000
4	0.2215	0.0516	0.0006	0.0069	0.1907	0.0825	0.4462	1.0000
5	0.2999	0.0699	0.0009	0.0093	0.2582	0.0565	0.3053	1.0000
6	0.4395	0.1166	0.0018	0.0155	0.3882	0.0059	0.0325	1.0000
7	0.2215	0.0516	0.0006	0.0069	0.1907	0.0825	0.4462	1.0000
8	-	-	-	-	-	-	1.0000	1.0000
9	0.7745	0.1698	0.0054	0.0188	0.0315	-	-	1.0000
10	0.7880	0.1609	0.0045	0.0147	0.0173	0.0146	-	1.0000
11	0.2215	0.0516	0.0006	0.0069	0.1907	0.0825	0.4462	1.0000
12	0.7745	0.1698	0.0054	0.0188	0.0315	-	-	1.0000
13	0.8042	0.1592	0.0043	0.0129	0.0108	0.0086	-	1.0000
14	0.8113	0.1606	0.0043	0.0130	0.0108	-	-	1.0000
15	0.5029	0.1227	0.0024	0.0150	0.2929	0.0107	0.0534	1.0000
16	0.4387	0.1119	0.0019	0.0144	0.3377	0.0151	0.0803	1.0000

MISSOURI-AMERICAN WATER COMPANY

BRUNSWICK 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)		
			17	0.4248	0.1042	0.0019	0.0130	0.2735	0.0228	0.1598	1.0000
			18	0.4262	0.1044	0.0019	0.0130	0.2734	0.0226	0.1585	1.0000
			19	0.4865	0.1187	0.0023	0.0144	0.2872	0.0134	0.0775	1.0000
			20	0.7822	0.1909	0.0037	0.0232		-	-	1.0000

MISSOURI-AMERICAN WATER COMPANY

BRUNSWICK 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	4,351	2,782	1,544	0	0	0	26
Labor & Exp Oper SS	2	0	0	0	0	0	0	0
Labor & Exp Oper SS	2	(2)	(1)	(1)	0	0	0	(0)
Purchased Water	1	0	0	0	0	0	0	0
TOTAL SS EXPENSE - OPERATION		4,349	2,780	1,543	0	0	0	26
Misc Exp Oper SS	2	3,681	2,340	1,299	0	0	0	22
Misc Exp Oper SS	2	107	68	38	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	3	2	1	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	121	77	43	0	0	0	1
Infil Gall & Tunnets 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	12,324	7,879	4,373	0	0	0	73
TOTAL SS EXPENSE - MAINTENANCE		16,216	10,367	5,753	0	0	0	96
TOTAL SS EXPENSE		20,565	13,147	7,296	0	0	0	121
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	990	611	339	2	0	0	38
Labor & Exp Oper Pwr Prod	6	0	0	0	0	0	0	0
Purch Fuel/Power for Pump	1	5,850	5,796	0	0	0	0	54
Labor & Exp Oper Pump	6	0	0	0	0	0	0	0
Labor & Exp Oper Pump	6	0	0	0	0	0	0	0
Expenses Transferred	6	0	0	0	0	0	0	0
Misc Exp Oper P	6	0	0	0	0	0	0	0
Rents Oper P	6	4	2	1	0	0	0	0
TOTAL PUMPING EXPENSE - OPERATION		6,844	6,410	340	2	0	0	92

Schedule C-11-SBRU

MISSOURI-AMERICAN WATER COMPANY

BRUNSWICK 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
Struct & Improve Maint P	6	0	0	0	0	0	0	0
Power Prod Equip Maint P	6	0	0	0	0	0	0	0
Pump Equip Maint P	6	0	0	0	0	0	0	0
Pump Equip Maint P	6	19	12	7	0	0	0	1
TOTAL PUMPING EXPENSES - MAINTENANCE		19	12	7	0	0	0	1
TOTAL PUMPING EXPENSES		6,663	6,422	347	2	0	0	93
WATER TREATMENT								
Super & Eng Oper WT	2	20,303	12,980	7,204	0	0	0	120
Chemicals	1	6,567	6,507	0	0	0	0	60
Labor & Exp Oper WT	2	15,358	9,818	5,449	0	0	0	91
Labor & Exp Oper WT	2	3,370	2,154	1,196	0	0	0	20
Misc Exp Oper WT	2	1,181	755	419	0	0	0	7
Misc Exp Oper WT	1	2,625	2,601	0	0	0	0	24
Misc Exp Oper WT	2	1,757	1,123	623	0	0	0	10
Rents Oper WT	2	0	0	0	0	0	0	0
TOTAL WT EXPENSE - OPERATION		51,161	35,938	14,891	0	0	0	332
Super & Eng Maint WT	2	17,403	11,126	6,175	0	0	0	103
Struct & Improve Maint WT	2	0	0	0	0	0	0	0
Struct & Improve Maint WT	2	0	0	0	0	0	0	0
WT Equip Maint WT	2	0	0	0	0	0	0	0
WT Equip Maint WT	2	6,287	4,019	2,231	0	0	0	37
TOTAL WT EXPENSE - MAINTENANCE		23,690	15,145	8,405	0	0	0	140
TOTAL WT EXPENSE		74,851	51,083	23,296	0	0	0	472
TRANSMISSION AND DISTRIBUTION EXPENSES								
Super & Eng Oper TD	11	1,450	211	0	473	0	0	767
Storage Facility Exp	5	0	0	0	0	0	0	0
Storage Facility Exp	5	0	0	0	0	0	0	0
TD Lines Exp	7	12,312	1,788	0	4,015	0	0	8,509
TD Lines Exp	7	208	30	0	68	0	0	110
Meter Expense	9	0	0	0	0	0	0	0
Meter Expense	9	0	0	0	0	0	0	0
Customer Install Exp	10	0	0	0	0	0	0	0
Customer Install Exp	10	0	0	0	0	0	0	0
Misc Exp Oper TD	11	0	0	0	0	0	0	0

MISSOURI-AMERICAN WATER COMPANY

BRUNSWICK 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	288	42	0	93	0	0	151
Misc Exp Oper TD	11	410	60	0	134	0	0	217
Rents Oper TD	11	3	0	0	1	0	0	2
TOTAL T & D EXPENSE OPERATION		14,669	2,130	0	4,784	0	0	7,756
Super & Eng Maint TD	12	1,450	0	0	0	1,450	0	0
Struct & Improve Maint TD	12	0	0	0	0	0	0	0
Struct & Improve Maint TD	12	0	0	0	0	0	0	0
Dist Res Stand Maint TD	5	0	0	0	0	0	0	0
TD Main Maint TD	7	0	0	0	0	0	0	0
TD Main Maint TD	7	0	0	0	0	0	0	0
Fire Main Maint TD	8	0	0	0	0	0	0	0
Services Maint TD	10	0	0	0	0	0	0	0
Services Maint TD	10	0	0	0	0	0	0	0
Meters Maint TD	9	0	0	0	0	0	0	0
Meters Maint TD	9	41	0	0	0	41	0	0
Hydrants Maint TD	8	0	0	0	0	0	0	0
Hydrants Maint TD	8	0	0	0	0	0	0	0
Misc Plant Maint TD	12	0	0	0	0	0	0	0
Mat and Sup Maint TD	12	14,208	0	0	0	14,208	0	0
Misc Maint TD	0	0	0	0	0	0	0	0
Amort Def Maint TD	0	0	0	0	0	0	0	0
TOTAL T & D EXPENSE - MAINTENANCE		15,699	0	0	0	15,699	0	0
TOTAL T & D EXPENSE		30,368	2,130	0	4,784	15,699	0	7,756
CUSTOMER ACCOUNTS								
Supervision CA	13	1,487	0	0	0	0	1,474	13
Meter Reading Exp CA	14	0	0	0	0	0	0	0
Meter Reading Exp CA	14	269	0	0	0	0	269	0
Meter Reading Exp CA	14	0	0	0	0	0	0	0
Cust Rec & Collection CA	13	77	0	0	0	0	76	1
Cust Rec & Collection CA	13	4,343	0	0	0	0	4,306	37
Uncollectible Accts	13	2,059	0	0	0	0	2,041	18
Misc Cust Accts Exp CA	13	80	0	0	0	0	79	1
Misc Cust Accts Exp CA	13	0	0	0	0	0	0	0
Misc Cust Accts Exp CA	13	1,746	0	0	0	0	1,731	15
Cust Serv & Info Exp CA	13	3,517	0	0	0	0	3,487	30
TOTAL CUSTOMER ACCOUNTING EXPENSE		13,578	0	0	0	0	13,464	114

MISSOURI-AMERICAN WATER COMPANY

BRUNSWICK 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	15,388	6,789	3,628	562	1,842	0	1,579	988
Other Supplies & Exp AG	15	4	2	1	0	0	0	0	0
Other Supplies & Exp AG	15	4,266	1,882	1,006	156	511	0	438	274
Other Supplies & Exp AG	15	7,814	3,448	1,843	285	935	0	802	502
Mgmt Fees-Coporate/Shared Service Center	15	23,397	10,323	5,517	854	2,801	0	2,401	1,502
Mgmt Fees-Call Center	13	12,612	0	0	0	0	0	12,504	108
Mgmt Fees-Belleville Lab	2	16,513	10,557	5,859	0	0	0	0	97
Mgmt Fees- Financial ITS	15	1,228	542	280	45	147	0	126	79
Mgmt Fees- Customer Billings ITS	13	6,930	0	0	0	0	0	6,870	60
Mgmt Fees-Other ITS	15	78	34	18	3	9	0	8	5
Outside Services AG	15	0	0	0	0	0	0	0	0
Outside Services AG	15	4,851	2,140	1,144	177	581	0	498	311
Property Insurance	15	3,428	1,512	808	125	410	0	352	220
Ins Gen Liab Oper AG	15	2,387	1,053	563	87	286	0	245	153
Ins Work Comp AG	16	67	34	18	4	2	0	2	6
Ins Other Oper AG	15	4,483	1,978	1,057	164	537	0	460	288
Property Insurance	15	0	0	0	0	0	0	0	0
Injuries & Damages	16	0	0	0	0	0	0	0	0
Employee Pension & Benefits	16	31,844	16,196	8,550	1,774	1,156	0	1,127	3,041
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	828	365	195	30	99	0	85	53
Rents AG	15	3,465	1,529	817	126	415	0	356	222
Goodwill Advertising Exp	15	0	0	0	0	0	0	0	0
Misc Exp AG	15	1,866	823	440	68	223	0	191	120
Research & Development	15	0	0	0	0	0	0	0	0
TOTAL A & G OPERATIONS		141,449	59,207	31,754	4,460	9,954	0	28,043	8,031
General Plant Maint AG	15	0	0	0	0	0	0	0	0
General Plant Maint AG	15	1,431	631	337	52	171	0	147	92
TOTAL A & G EXPENSE - MAINTENANCE		1,431	631	337	52	171	0	147	92
TOTAL A & G EXPENSE		142,880	59,839	32,092	4,512	10,126	0	28,190	8,122
Total Operation & Maintenance Expenses		289,105	132,621	63,031	9,297	25,825	0	41,653	16,678

MISSOURI-AMERICAN WATER COMPANY

BRUNSWICK 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	440	281	156	0	0	0	3
Struct & Imp P	6	326	201	112	1	0	0	13
Struct & Imp WT	2	2,568	1,642	911	0	0	0	15
Struct & Imp TD	7	477	69	0	156	0	0	252
Struct & Imp Offices	15	107	47	25	4	13	11	7
Struct & Imp Store,Shop,Gar	15	0	0	0	0	0	0	0
Struct & Imp Misc	15	0	0	0	0	0	0	0
Collect & Impounding	1	0	0	0	0	0	0	0
Lake, River & Other Intakes	2	0	0	0	0	0	0	0
Wells & Springs	2	2,832	1,810	1,005	0	0	0	17
Supply Mains	2	1,404	898	498	0	0	0	8
Power Generation Equip Othe	6	40	25	14	0	0	0	2
Pump Equip Electric	6	1,723	1,064	590	3	0	0	66
Pump Equip Other	6	229	141	78	0	0	0	9
WT Equip Non-Media	2	3,631	2,321	1,288	0	0	0	21
Dist Reservoirs & Standpipe	5	1,093	215	0	483	0	0	395
Elevated Tanks & Standpipes	5	331	65	0	148	0	0	120
Ground Level Facilities	5	0	0	0	0	0	0	0
TD Mains Not Classified by	4	3,638	514	0	1,154	0	0	1,871
TD Mains 4 & Less	4	417	61	0	136	0	0	220
TD Mains 6 to 8"	4	408	59	0	133	0	0	216
TD Mains 10 to 16"	3	0	0	0	0	0	0	0
TD Mains 18 & Grtr	3	0	0	0	0	0	0	0
Services	10	1,902	0	0	0	1,874	0	28
Meters Bronze Case	9	347	0	0	0	347	0	0
Meters Plastic Case	9	0	0	0	0	0	0	0
Meters Other	9	392	0	0	0	392	0	0
Meters Other-Rem Rdr Unts	9	0	0	0	0	0	0	0
Meter Installations	9	1,087	0	0	0	1,087	0	0
Meter Installation Other	9	0	0	0	0	0	0	0
Hydrants	8	1,005	0	0	0	0	0	1,005
Utility Plant Acquisition Adjustment	17	0	0	0	0	0	0	0
Other P/E WT Res Hand Equip	2	0	0	0	0	0	0	0
Other P/E TD	7	0	0	0	0	0	0	0
Other P/E CPS	15	0	0	0	0	0	0	0
Office Furniture & Equip	15	(153)	(68)	(36)	(6)	(18)	(16)	(10)
Comp & Periph Equip	15	486	214	115	18	58	50	31
Computer Software	15	0	0	0	0	0	0	0
Comp Software Personal	15	0	0	0	0	0	0	0
Data Handling Equipment	15	766	338	181	28	92	79	49

MISSOURI-AMERICAN WATER COMPANY

BRUNSWICK 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 Office Equipment	15	133	59	31	5	16	0	14	9
Trans Equip Lt Duty Trks	15	4,245	1,873	1,001	165	508	0	438	273
Trans Equip Hvy Duty Trks	15	0	0	0	0	0	0	0	0
Trans Equip Autos	15	170	75	40	6	20	0	17	11
Trans Equip Other	15	0	0	0	0	0	0	0	0
Stores Equipment	15	246	109	59	9	29	0	25	16
Tools,Shop,Garage Equip	15	1,483	659	352	54	179	0	153	96
Tools,Shop,Garage Equip Oth	15	0	0	0	0	0	0	0	0
Laboratory Equipment	2	754	482	268	0	0	0	0	4
Laboratory Equip Other	2	0	0	0	0	0	0	0	0
Power Operated Equipment	15	0	0	0	0	0	0	0	0
Comm Equip Non-Telephone	15	122	54	29	4	15	0	13	8
Comm Equip Telephone	15	0	0	0	0	0	0	0	0
Misc Equipment	15	1,856	819	438	68	222	0	190	119
Other Tangible Property	15	1,126	497	266	41	135	0	116	72
Total Depreciation Expense		35,541	14,524	7,418	2,598	3,094	1,874	1,087	4,945
Amort-Other UP	18	4,176	1,610	799	383	287	319	43	756
Taxes Other Than Income									
Utility Reg Assessment Fee	19	1,282	555	268	61	105	26	132	115
Property Taxes	18	12,003	4,627	2,296	1,099	767	916	124	2,174
FUTA	16	140	71	38	8	5	0	5	13
FICA	16	6,842	3,480	1,837	381	248	0	242	653
SUTA	16	0	0	0	0	0	0	0	0
Other Taxes & Licenses	15	526	232	124	19	63	0	54	34
Gross Receipts Tax	19	0	0	0	0	0	0	0	0
Total Taxes, Other Than Income		20,773	8,966	4,563	1,569	1,188	942	557	2,989
Income Taxes	18	18,166	7,003	3,475	1,664	1,161	1,386	167	3,290
Utility Income Available for Return	18	52,740	20,331	10,089	4,831	3,370	4,024	543	9,551
Total Cost of Service		420,501	185,055	89,375	20,341	34,905	8,545	44,071	38,210
Less: Other Water Revenues	19	(9,574)	(9,574)	0	0	0	0	0	0
Revenue Shift	19	0	0	0	0	0	0	0	0
Total Other Water Revenues		(9,574)	(9,574)	0	0	0	0	0	0
Total Cost of Service Related to Sales of Water		410,927	175,481	89,375	20,341	34,905	8,545	44,071	38,210
Reallocation of Public Fire	20	0	20,441	9,872	2,247	0	0	0	(32,560)
Total		\$ 410,927	\$ 195,922	\$ 99,247	\$ 22,588	\$ 34,905	\$ 8,545	\$ 44,071	\$ 5,649
			38,938			496	472	5,580	
			5.032			70.43	18.12		
					5.87	1.51	7.90		
							15.28		

MISSOURI-AMERICAN WATER COMPANY

BRUNSWICK 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	630	243	120	58	40	49	6	115
Franchises	17	3,271	1,261	625	302	205	252	29	597
Land & Ld Rights SS	2	11,981	7,659	4,251	0	0	0	0	71
Land & Ld Rights P	6	0	0	0	0	0	0	0	0
Land & Ld Rights WT	2	1,468	938	521	0	0	0	0	9
Land & Ld Rights TD	7	591	86	0	193	0	0	0	312
Land & Land Rights AG	15	0	0	0	0	0	0	0	0
Struct & Imp SS	2	20,903	13,363	7,416	0	0	0	0	123
Struct & Imp P	6	36,601	22,604	12,529	63	0	0	0	1,406
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	112,087	71,657	39,768	0	0	0	0	661
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	24,844	3,607	0	8,102	0	0	0	13,135
Struct & Imp TD Spec Cross	7	0	0	0	0	0	0	0	0
Struct & Imp Offices	15	0	0	0	0	0	0	0	0
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	0	0	0	0	0	0	0	0
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	90,043	57,584	31,947	0	0	0	0	531
Supply Mains	2	54,874	35,081	19,469	0	0	0	0	324
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	852	526	292	1	0	0	0	33
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	74,885	46,247	25,633	129	0	0	0	2,676
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	8,275	5,110	2,833	14	0	0	0	318
WT Equip Non-Media	2	114,111	72,951	40,487	0	0	0	0	673
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	5	0	0	0	0	0	0	0	0
Dist Reservoirs & Standpipe	5	38,958	7,659	0	17,204	0	0	0	14,095
Elevated Tanks & Standpipes	5	17,570	3,454	0	7,759	0	0	0	6,357
Ground Level Facilities	5	0	0	0	0	0	0	0	0
TD Mains Not Classified by	7	140,892	20,458	0	45,945	0	0	0	74,490

Schedule C-17-SBRU

MISSOURI-AMERICAN WATER COMPANY

BRUNSWICK 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	
TD Mains 4 & Less	4	31,841	4,623	0	10,383	0	0	16,834	
TD Mains 6 to 8"	4	30,785	4,470	0	10,039	0	0	16,276	
TD Mains 10 to 16"	3	0	0	0	0	0	0	0	
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	0	0	0	0	0	0	0	
Services	10	87,478	0	0	0	86,201	0	1,277	
Meters Bronze Case	9	13,821	0	0	0	13,821	0	0	
Meters Plastic Case	9	0	0	0	0	0	0	0	
Meters Other	9	208	0	0	0	208	0	0	
Meters Other-Rem Rdr Unts	9	0	0	0	0	0	0	0	
Meter Installations	9	44,619	0	0	0	44,619	0	0	
Meter Installation Other	9	0	0	0	0	0	0	0	
Hydrants	8	48,168	0	0	0	0	0	48,168	
Other P/E Intangible	15	0	0	0	0	0	0	0	
Other P/E WT Res Hand Equip	2	0	0	0	0	0	0	0	
Other P/E TD	7	0	0	0	0	0	0	0	
Other P/E CPS	15	4,619	2,038	1,089	169	553	474	297	
Office Furniture & Equip	15	(11,418)	(5,038)	(2,692)	(417)	(1,367)	(1,171)	(733)	
Comp & Periph Equip	15	1,876	828	442	68	225	0	192	
Computer Software	15	14,251	6,288	3,360	520	1,708	1,462	915	
Comp Software Personal	15	400	176	94	15	48	41	26	
Data Handling Equipment	15	16,824	7,423	3,967	814	2,014	1,726	1,080	
Other Office Equipment	15	2,947	1,300	695	108	353	302	189	
Trans Equip Lt Duty Trks	15	31,808	14,034	7,500	1,161	3,807	3,264	2,042	
Trans Equip Hvy Duty Trks	15	0	0	0	0	0	0	0	
Trans Equip Autos	15	599	264	141	22	72	61	38	
Trans Equip Other	15	(12,484)	(5,508)	(2,944)	(456)	(1,494)	(1,281)	(801)	
Stores Equipment	15	10,416	4,596	2,456	380	1,247	1,069	669	
Tools,Shop,Garage Equip	15	25,108	11,078	5,920	916	3,005	2,576	1,612	
Tools,Shop,Garage Equip Oth	15	0	0	0	0	0	0	0	
Laboratory Equipment	2	17,017	10,879	6,038	0	0	0	100	
Laboratory Equip Other	2	0	0	0	0	0	0	0	
Power Operated Equipment	15	0	0	0	0	0	0	0	
Comm Equip Non-Telephone	15	2,401	1,059	566	88	287	246	154	
Comm Equip Telephone	15	(2,965)	(1,308)	(699)	(108)	(355)	(304)	(190)	
Misc Equipment	15	11,617	5,125	2,739	424	1,391	1,192	746	
Other Tangible Property	17	23,187	8,939	4,431	2,142	1,454	204	4,232	
Total Utility Plant in Service		1,145,959	441,736	218,996	105,840	71,837	88,287	10,088	209,176
Other Rate Base Items									
Add:									
Other Utility Plant Adjustments	17	0	0	0	0	0	0	0	
Cash Working Capital	15	8,301	3,662	1,957	303	994	852	533	
Materials and Supplies	15	5,287	2,333	1,247	193	633	542	339	

Schedule C-18-SBRU

MISSOURI-AMERICAN WATER COMPANY

BRUNSWICK 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
Prepayments	15	5	2	1	0	1	0	0
OPEB's Contributed to External Fund	16	21,574	10,973	5,793	1,202	783	0	764
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	(183,562)	(63,053)	(31,257)	(15,113)	(10,255)	(12,594)	(1,439)
Deferred Income Taxes	17	(216,918)	(83,822)	(41,453)	(20,043)	(13,801)	(16,703)	(1,909)
Pensions	16	(27,349)	(13,910)	(7,343)	(1,523)	(993)	0	(968)
Total Other Rate Base Elements		<u>(372,662)</u>	<u>(143,815)</u>	<u>(71,055)</u>	<u>(34,982)</u>	<u>(22,439)</u>	<u>(29,297)</u>	<u>(2,158)</u>
Total Original Cost Measure of Value		<u>\$ 773,297</u>	<u>\$ 298,121</u>	<u>\$ 147,941</u>	<u>\$ 70,858</u>	<u>\$ 49,399</u>	<u>\$ 58,990</u>	<u>\$ 7,930</u>

T&D OP BASIS FOR FACTOR 11	12,520	1,818	0	4,083	0	0	0	6,619
FACTOR 11		0.1452	0.0000	0.3261	0.0000	0.0000	0.0000	0.5287
T&D Mnt BASIS FOR FACTOR 12	41	0	0	0	41	0	0	0
FACTOR 12		0.0000	0.0000	0.0000	1.0000	0.0000	0.0000	0.0000
A&G BASIS FOR FACTOR 15	131,183	57,879	30,939	4,785	15,699	0	13,464	8,418
FACTOR 15		0.4412	0.2358	0.0365	0.1197	0.0000	0.1028	0.0642
LABOR BASIS FOR FACTOR 16	90,649	46,104	24,338	5,051	3,292	0	3,209	8,655
FACTOR 16		0.5086	0.2685	0.0557	0.0363	0.0000	0.0354	0.0955
UPIS BASIS FOR FACTOR 17	1,118,871	431,293	213,820	103,337	70,139	86,201	9,849	204,232
FACTOR 17		0.3855	0.1911	0.0924	0.0627	0.0770	0.0088	0.1825
RATE BASE BASIS FOR FACTOR 18	773,297	298,121	147,941	70,858	49,399	58,990	7,930	140,059
FACTOR 18		0.3856	0.1913	0.0916	0.0639	0.0763	0.0103	0.1811
TOTAL COS BASIS FOR FACTOR 19	418,411	184,134	88,912	20,250	34,701	8,519	43,854	38,042
FACTOR 19		0.4401	0.2125	0.0484	0.0829	0.0204	0.1048	0.0909
TOTAL COS BASIS FOR FACTOR 20	294,771	185,055	89,375	20,341				
FACTOR 20		0.6278	0.3032	0.0690				

	2	4	6	8	10	12	14
	Base	Max Day	Max Hour	Meters	Services	Billing & Collecting	Fire Service
1	0.9908	-	-	-	-	-	0.0092
2	0.6393	0.3548	-	-	-	-	0.0059
3	0.5355	0.2973	-	-	-	-	0.1672
4	0.1452	-	0.3261	-	-	-	0.5287
5	0.1966	-	0.4416	-	-	-	0.3618
6	0.6176	0.3423	0.0017	-	-	-	0.0384
7	0.1452	-	0.3261	-	-	-	0.5287
8	-	-	-	-	-	-	1.0000
9	-	-	-	1.0000	-	-	-
10	-	-	-	-	0.9854	-	0.0146
11	0.1452	-	0.3261	-	-	-	0.5287
12	-	-	-	1.0000	-	-	-
13	-	-	-	-	-	0.9914	0.0086
14	-	-	-	-	-	1.0000	-
15	0.4412	0.2358	0.0365	0.1197	-	0.1026	0.0642
16	0.5086	0.2685	0.0557	0.0363	-	0.0354	0.0955

MISSOURI-AMERICAN WATER COMPANY
BRUNSWICK 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
17	0.3855	0.1911	0.0924	0.0627	0.0770	0.0088	0.1825
18	0.3855	0.1913	0.0916	0.0639	0.0763	0.0103	0.1811
19	0.4401	0.2125	0.0484	0.0829	0.0204	0.1048	0.0909
20	0.6278	0.3032	0.0690	-	-	-	-

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

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 (1)	Average Daily Consumption, Thousand Gallons (2)	Allocation Factor (3)
Residential	47.3	0.4397
Commercial	13.8	0.1286
Industrial	0.3	0.0023
Other Public Authority	1.8	0.0171
Sales for Resale	43.4	0.4031
Private Fire Protection	0.2	0.0014
Public Fire Protection	0.8	0.0078
Total	107.7	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 0.6452	Allocation Factor (4)	Weighted Factor (5)=(4)x 0.3548	
Residential	0.4397	0.2837	0.4812	0.1708	0.4545
Commercial	0.1286	0.0830	0.1058	0.0375	0.1205
Industrial	0.0023	0.0015	0.0010	0.0004	0.0019
Other Public Authority	0.0171	0.0110	0.0142	0.0050	0.0160
Sales for Resale	0.4031	0.2601	0.3978	0.1411	0.4012
Private Fire Protection	0.0014	0.0009			0.0009
Public Fire Protection	0.0078	0.0050			0.0050
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.

MISSOURI-AMERICAN WATER COMPANY
BRUNSWICK DISTRICT
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.**

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	47.3	1.00	47.3	0.4812
Commercial	13.8	0.75	10.4	0.1058
Industrial	0.3	0.50	0.1	0.0010
Other Public Authority	1.8	0.75	1.4	0.0142
Sales for Resale	43.4	0.90	39.1	0.3978
Total	106.7		98.3	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.

**MISSOURI-AMERICAN WATER COMPANY
BRUNSWICK DISTRICT
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 0.5405	(4)	(5)=(4) X 0.2973	(6)	(7)=(6) X 0.1622	(8)=(3)+(5)+(7)
Residential	0.4397	0.2377	0.4812	0.1430			0.3808
Commercial	0.1286	0.0695	0.1058	0.0315			0.1010
Industrial	0.0023	0.0012	0.0010	0.0003			0.0015
Other Public Authority	0.0171	0.0092	0.0142	0.0042			0.0134
Sales for Resale	0.4031	0.2179	0.3978	0.1183			0.3361
Private Fire Protection	0.0014	0.0008			0.1560	0.0253	0.0261
Public Fire Protection	0.0078	0.0042			0.8440	0.1369	0.1411
Total	1.0000	0.5405	1.0000	0.2973	1.0000	0.1622	1.0000

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

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. The system demand for fire protection is 300 Gallons per minute for 2 hours.

	<u>Ratio</u>	<u>Rate of Flow, (GPD)</u>	<u>Weight</u>
Average Day	1.00	120,000	0.5405
Maximum Day Extra Capacity	<u>0.55</u>	<u>66,000</u>	<u>0.2973</u>
Subtotal	<u>1.55</u>	186,000	0.8378
Fire Protection		<u>36,000</u>	<u>0.1622</u>
Total		<u>222,000</u>	<u>1.0000</u>

The public and private fire protection allocation factors in column 6 on the previous page are based on the deliverability of 300 gallons per minute for 2 hours.

**MISSOURI-AMERICAN WATER COMPANY
BRUNSWICK 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 0.1465	(5)	(6)=(5) X 0.3261	(7)	(8)=(7) X 0.5274	(9)=(4)+(6)+(8)
Residential	1.97	0.4397	0.0645	0.4815	0.1570			0.2215
Commercial	0.58	0.1286	0.0188	0.1006	0.0328			0.0516
Industrial	0.01	0.0023	0.0003	0.0009	0.0003			0.0006
Other Public Authority	0.08	0.0171	0.0025	0.0134	0.0044			0.0069
Sales for Resale	1.81	0.4031	0.0591	0.4036	0.1316			0.1907
Private Fire Protection	0.01	0.0014	0.0002			0.1560	0.0823	0.0825
Public Fire Protection	0.04	0.0078	0.0011			0.8440	0.4451	0.4462
Total	4.49	1.0000	0.1465	1.0000	0.3261	1.0000	0.5274	1.0000

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

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

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 3.23 and the average daily system sendout for 2002 of 0.120 MGD. The system demand for fire protection is 300 gallons per minute.

	Ratio	Rate of Flow, (GPM)	Weight
Average Hour	1.00	83.3	0.1465
Maximum Hour Extra Capacity	2.23	185	0.3261
Subtotal	<u>3.23</u>	269	0.4726
Fire Protection		<u>300</u>	<u>0.5274</u>
Total		<u>569</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	1.97	3.5	6.90	0.4815
Commercial	0.58	2.5	1.44	0.1006
Industrial	0.01	1.2	0.01	0.0009
Other Public Authority	0.08	2.5	0.19	0.0134
Sales for Resale	1.81	3.2	5.79	0.4036
Total	<u>4.44</u>		<u>14.34</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
BRUNSWICK DISTRICT
PSC STAFF STUDY**

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 0.1984	(5)	(6)=(5) X 0.4416	(7)	(8)=(7) X 0.3600	(9)=(4)+(6)+(8)
Residential	1.972	0.4397	0.0872	0.4815	0.2127			0.2999
Commercial	0.577	0.1286	0.0255	0.1006	0.0444			0.0699
Industrial	0.010	0.0023	0.0005	0.0009	0.0004			0.0009
Other Public Authority	0.077	0.0171	0.0034	0.0134	0.0059			0.0093
Sales for Resale	1.808	0.4031	0.0800	0.4036	0.1782			0.2582
Private Fire Protection	0.007	0.0014	0.0003			0.1560	0.0562	0.0565
Public Fire Protection	0.035	0.0078	0.0015			0.8440	0.3038	0.3053
Total	4.487	1.0000	0.1984	1.0000	0.4416	1.0000	0.3600	1.0000

The weighting of the factors is based on the ratio of the capacity required for a 2 hour demand of fire flow, as related to total storage capacity. The calculation is shown on the following page.

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

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 2 hour demand of fire flow, as related to total storage capacity.

$$\text{Fire Protection Weight} = \frac{300 \text{ GPM} \times 60 \text{ Min.} \times 2 \text{ Hrs.}}{100,000 \text{ Gallons}} = 0.3600$$

$$\text{General Service Weight} = 1.0000 - 0.3600 = 0.6400$$

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	31.00	0.1984
Extra Capacity Maximum Hour	<u>2.23</u>	<u>69.00</u>	<u>0.4416</u>
Total	<u><u>3.23</u></u>	<u><u>100.00</u></u>	<u><u>0.6400</u></u>

**MISSOURI-AMERICAN WATER COMPANY
BRUNSWICK 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 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	0.4545	0.3684	0.3808	0.0700	0.2215	0.0012	0.4395
Commercial	0.1205	0.0977	0.1010	0.0186	0.0516	0.0003	0.1166
Industrial	0.0019	0.0015	0.0015	0.0003	0.0006	0.0000	0.0018
Other Public Authority	0.0160	0.0130	0.0134	0.0025	0.0069	0.0000	0.0155
Sales for Resale	0.4012	0.3252	0.3361	0.0619	0.1907	0.0010	0.3882
Private Fire Protection	0.0009	0.0007	0.0261	0.0048	0.0825	0.0004	0.0059
Public Fire Protection	0.0050	0.0041	0.1411	0.0260	0.4462	0.0024	0.0325
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

**MISSOURI-AMERICAN WATER COMPANY
BRUNSWICK 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)
Residential	0.3808	0.0000	0.2215	0.2215	0.2215
Commercial	0.1010	0.0000	0.0516	0.0516	0.0516
Industrial	0.0015	0.0000	0.0006	0.0006	0.0006
Other Public Authority	0.0134	0.0000	0.0069	0.0069	0.0069
Sales for Resale	0.3361	0.0000	0.1907	0.1907	0.1907
Private Fire Protection	0.0261	0.0000	0.0825	0.0825	0.0825
Public Fire Protection	0.1411	0.0000	0.4462	0.4462	0.4462
Total	1.0000	0.0000	1.0000	1.0000	1.0000

Assigned 100% to Maximum Hour Function. No Plant functionalization was performed.

	Total Footage of Mains	Weight
Transmission Mains	630,263	0.1937
Distribution Mains	2,624,076	0.8063
Total	3,254,339	1.0000

**MISSOURI-AMERICAN WATER COMPANY
BRUNSWICK 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 (1)	Allocation Factor (3)
Public Fire Protection	1.0000
Total	1.0000

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 (1)	5/8" Dollar Equivalents (2)	Allocation Factor (3)
Residential	384	0.7745
Commercial	84	0.1698
Industrial	3	0.0054
Other Public Authority	9	0.0188
Sales for Resale	16	0.0315
Private Fire	0	0.0000
Total	496	1.0000

MISSOURI-AMERICAN WATER COMPANY
BRUNSWICK 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	377	0.7880
Commercial	77	0.1609
Industrial	2	0.0045
Other Public Authority	7	0.0147
Sales for Resale	8	0.0173
Private Fire Protection	<u>7</u>	<u>0.0146</u>
 Total	 <u><u>479</u></u>	 <u><u>1.0000</u></u>

**MISSOURI-AMERICAN WATER COMPANY
BRUNSWICK 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	\$ 2,773	0.2215
Commercial	646	0.0516
Industrial	8	0.0006
Other Public Authority	86	0.0069
Sales for Resale	2,388	0.1907
Private Fire Protection	1,033	0.0825
Public Fire Protection	5,586	0.4462
Total	12,520	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	\$ 32	0.7745
Commercial	7	0.1698
Industrial	0	0.0054
Other Public Authority	1	0.0188
Sales for Resale	1	0.0315
Private Fire Protection	-	0.0000
Public Fire Protection	-	0.0000
Total	\$41	1.0000

**MISSOURI-AMERICAN WATER COMPANY
BRUNSWICK 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.

<u>Customer Classification</u> (1)	<u>Total Customers</u> (2)	<u>Allocation Factor</u> (3)
Residential	374	0.8042
Commercial	74	0.1592
Industrial	2	0.0043
Other Public Authority	6	0.0129
Sales for Resale	5	0.0108
Private Fire Protection	4	0.0086
Public Fire Protection	0	0.0000
 Total	 <u>465</u>	 <u>1.0000</u>

FACTOR 14.

ALLOCATION OF METER READING COSTS.

Factors are based on the number of metered customers.

<u>Customer Classification</u> (1)	<u>Total Metered Customers</u> (2)	<u>Allocation Factor</u> (3)
Residential	374	0.8113
Commercial	74	0.1606
Industrial	2	0.0043
Other Public Authority	6	0.0130
Sales for Resale	5	0.0108
 Total	 <u>461</u>	 <u>1.0000</u>

**MISSOURI-AMERICAN WATER COMPANY
BRUNSWICK 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	\$65,963	0.5029
Commercial	16,093	0.1227
Industrial	318	0.0024
Other Public Authority	1,967	0.0150
Sales for Resale	38,425	0.2929
Private Fire Protection	1,408	0.0107
Public Fire Protection	<u>7,009</u>	<u>0.0534</u>
 Total	 <u><u>\$131,183</u></u>	 <u><u>1.0000</u></u>

**MISSOURI-AMERICAN WATER COMPANY
BRUNSWICK 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.

<u>Customer Classification</u> (1)	<u>Direct Labor Expense</u> (2)	<u>Allocation Factor</u> (3)
Residential	\$39,762	0.4387
Commercial	10,140	0.1119
Industrial	171	0.0019
Other Public Authority	1,308	0.0144
Sales for Resale	30,614	0.3377
Private Fire Protection	1,372	0.0151
Public Fire Protection	7,282	0.0803
Total	\$90,649	1.0000

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:

<u>Customer Classification</u> (1)	<u>Original Cost Less Depreciation</u> (2)	<u>Allocation Factor</u> (3)
Residential	\$475,328	0.4248
Commercial	116,551	0.1042
Industrial	2,149	0.0019
Other Public Authority	14,563	0.0130
Sales for Resale	306,058	0.2735
Private Fire Protection	25,479	0.0228
Public Fire Protection	178,744	0.1598
Total	\$1,118,871	1.0000

**MISSOURI-AMERICAN WATER COMPANY
BRUNSWICK 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.

<u>Customer Classification</u> (1)	<u>Original Cost Measure of Value</u> (2)	<u>Allocation Factor</u> (3)
Residential	\$329,509	0.4262
Commercial	80,749	0.1044
Industrial	1,499	0.0019
Other Public Authority	10,090	0.0130
Sales for Resale	211,437	0.2734
Private Fire Protection	17,480	0.0226
Public Fire Protection	<u>122,534</u>	<u>0.1585</u>
Total	<u><u>\$773,297</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.

<u>Customer Classification</u> (1)	<u>Total Cost of Service</u> (2)	<u>Allocation Factor</u> (3)
Residential	\$203,544	0.4866
Commercial	49,664	0.1187
Industrial	960	0.0023
Other Public Authority	6,042	0.0144
Sales for Resale	120,172	0.2872
Private Fire Protection	5,611	0.0134
Public Fire Protection	<u>32,418</u>	<u>0.0775</u>
Total	<u><u>\$418,411</u></u>	<u><u>1.0001</u></u>

MISSOURI-AMERICAN WATER COMPANY
 BRUNSWICK 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	370.76	370.76	67.28	67.28	1.00	1.00	5.00	5.00	1.00	1.00	445.04	445.04
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	0.33	0.55	4.67	7.93	1.00	1.70	0.00	0.00	1.00	1.70	6.99	11.89
1-1/2	3.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	4.3	2.92	12.54	2.08	8.96	0.00	0.00	1.00	4.30	3.00	12.90	9.00	38.70
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	48.4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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>374.00</u>	<u>383.85</u>	<u>74.03</u>	<u>84.17</u>	<u>2.00</u>	<u>2.70</u>	<u>6.00</u>	<u>9.30</u>	<u>5.00</u>	<u>15.60</u>	<u>461.03</u>	<u>495.63</u>

**MISSOURI-AMERICAN WATER COMPANY
BRUNSWICK 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	370.76	370.76	67.28	67.28	1.00	1.00	5.00	5.00	1.00	1.00	0.00	0.00	445.04	445.04
1	1.17	0.33	0.38	4.67	5.46	1.00	1.17	0.00	0.00	1.00	1.17	0.00	0.00	6.99	8.18
1-1/2	1.58	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
2	2.04	2.92	5.95	2.08	4.25	0.00	0.00	1.00	2.04	3.00	6.12	0.00	0.00	9.00	18.36
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	4.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	4.24	1.00	4.24
8	6.98	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
10	9.50	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
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>374.00</u>	<u>377.09</u>	<u>74.03</u>	<u>76.99</u>	<u>2.00</u>	<u>2.17</u>	<u>6.00</u>	<u>7.04</u>	<u>5.00</u>	<u>8.29</u>	<u>2.00</u>	<u>6.97</u>	<u>463.03</u>	<u>478.55</u>

**MISSOURI-AMERICAN WATER COMPANY
BRUNSWICK 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	0	0	
3 -inch	9.00	0	0	
4 -inch	16.00	0	0	
6 -inch	36.00	1	36	
8 -inch	64.00	0	0	
10 -inch	100.00	0	0	
12 -inch	144.00	0	0	
Private Hydrants	32.75	3	98	
Total Private Fire Protection		<u>4</u>	<u>134</u>	0.1560
<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	58	725
Total Public Fire Protection		<u>58</u>	<u>725</u>	<u>0.8440</u>
Total Fire Protection		<u><u>62</u></u>	<u><u>859</u></u>	<u><u>1.0000</u></u>

MISSOURI-AMERICAN WATER COMPANY
JEFFERSON CITY 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	\$ 2,387,555	62.1%	\$ 1,693,760	59.1%	\$ 2,387,555	62.2%	\$ 693,795	41.0%
Commercial	1,188,560	31.0%	821,804	28.7%	1,188,560	31.0%	366,756	44.6%
Industrial	170,998	4.5%	183,869	6.5%	170,998	4.5%	(12,871)	-7.0%
Public Authority	49,930	1.3%	53,371	1.9%	49,930	1.3%	(3,441)	-6.4%
Sales for Resale	-	0.0%	-	0.0%	-	0.0%	-	0.0%
Private Fire Service	43,048	1.1%	112,489	3.9%	43,047	1.1%	(69,442)	-61.7%
Public Fire Service	-	0.0%	-	0.0%	-	0.0%	-	0.0%
Total Sales	3,840,091	<u>100.0%</u>	2,865,293	<u>100.1%</u>	3,840,090	<u>100.1%</u>	974,797	34.0%
Other Revenues	<u>26,568</u>		<u>26,568</u>		<u>26,568</u>		-	0.0%
Total	<u>\$ 3,866,659</u>		<u>\$ 2,891,861</u>		<u>\$ 3,866,658</u>		<u>\$ 974,797</u>	33.7%
True-Up Estimate	\$113,934				\$113,934		\$113,934	
Total w/ True-up	<u>3,980,593</u>				<u>\$ 3,980,592</u>		<u>\$ 1,088,731</u>	37.6%

**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: Jefferson City

Case No. WR-2003-0500
STAFF - JEFFERSON CITY
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	541,574	\$1,693,760	541,574	\$2,387,555	\$693,795	40.96%
5	Commercial & Interruptible	478,029	821,804	478,029	1,188,560	366,756	44.63%
6	Industrial	99,737	183,869	99,737	170,998	(12,871)	-7.00%
7	Other Public Authority	20,590	53,371	20,590	49,930	(3,441)	-6.45%
8	Other Water Utilities	0	0	0	0	0	0.00%
9	Miscellaneous	0	0	0	0	0	0.00%
10	Private Fire	0	112,489	0	43,047	(69,442)	-61.73%
11	Public Fire	0	0	0	0	0	0.00%
12	Total	<u>1,139,930</u>	<u>2,865,293</u>	<u>1,139,930</u>	<u>3,840,090</u>	<u>\$974,797</u>	<u>34.02%</u>
13							
14							
15	Miscellaneous Revenues:						
16							
17	Reconnect Charges		13,220		13,220	0	0.00%
18	Returned Check Charge		4,582		4,582	0	0.00%
19	Application Fee		0		0	0	0.00%
20	Miscellaneous Other Revenue		8,623		6,205	(2,418)	-28.04%
21	Rents from Water Property		0		0	0	0.00%
22	Miscellaneous Unmetered Sales		144		144	0	0.00%
23							
24			<u>\$2,891,861</u>		<u>\$3,864,240</u>	<u>972,379</u>	<u>33.62%</u>
25							
26							
27							
28							
29							
30							
31							
32							
33							
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35							
36							
37							
38							
39							
40							

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

Case No. WR-2003-0500
STAFF - JEFFERSON CITY
Page 1 of 8

Missouri Public Service Commission
Company: Missouri-American Water Company
District: Jefferson City

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	105,015		\$7.76	\$814,916	105,015		\$ 9.87	\$1,036,891	\$221,975	27.24%
5	3/4" Monthly	12		8.49	102	12		\$ 10.08	121	19	18.63%
6	1" Monthly	1,114		9.96	11,095	1,114		\$ 10.93	12,173	1,078	9.72%
7	1-1/2" Monthly	31		13.63	423	31		\$ 13.55	420	(3)	-0.71%
8	2" Monthly	64		18.02	1,153	64		\$ 15.64	1,001	(152)	-13.18%
9	3" Monthly	0		28.30	0	0		\$ 28.16	0	0	0.00%
10	4" Monthly	0		42.97	0	0		\$ 35.83	0	0	0.00%
11	6" Monthly	0		79.63	0	0		\$ 53.65	0	0	0.00%
12	8" Monthly	0		0.00	0	0		\$ 107.65	0	0	0.00%
13	10" Monthly	0		0.00	0	0		0.00	0	0	0.00%
14	12" Monthly	0		0.00	0	0		0.00	0	0	0.00%
15											
16											
17	<u>Volumetric Charges:</u>										
18	First Block		79,465	\$0.0000	0		79,465	\$2.4686	196,170	196,170	0.00%
19	Second Block		67,746	2.8324	191,884		67,746	2.4686	167,240	(24,644)	-12.84%
20	Third Block		393,847	1.7118	674,187		393,847	2.4686	972,265	298,078	44.21%
21	Fourth Block		516	0.0000	0		516	2.4686	1,274	1,274	0.00%
22											
23											
24	Total		<u>541,574</u>		<u>\$1,693,760</u>		<u>541,574</u>		<u>\$2,387,555</u>	<u>\$693,795</u>	<u>40.96%</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: Jefferson City

Case No. WR-2003-0500
STAFF - JEFFERSON CITY
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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	10,634		\$7.76	\$82,520	10,634		\$ 9.87	\$104,997	\$22,477	27.24%
5	3/4" Monthly	0		8.49	0	0		\$ 10.08	0	0	0.00%
6	1" Monthly	3,577		9.96	35,627	3,577		\$ 10.93	39,088	3,461	9.71%
7	1-1/2" Monthly	1,074		13.63	14,639	1,074		\$ 13.55	14,549	(90)	-0.61%
8	2" Monthly	2,148		18.02	38,707	2,148		\$ 15.64	33,589	(5,118)	-13.22%
9	3" Monthly	195		28.30	5,519	195		\$ 28.16	5,492	(27)	-0.49%
10	4" Monthly	84		42.97	3,609	84		\$ 35.83	3,009	(600)	-16.63%
11	6" Monthly	0		79.63	0	0		\$ 53.65	0	0	0.00%
12	8" Monthly	0		0.00	0	0		\$ 107.65	0	0	0.00%
13	10" Monthly	0		0.00	0	0		0.00	0	0	0.00%
14	12" Monthly	0		0.00	0	0		0.00	0	0	0.00%
15											
16											
17	<u>Volumetric Charges:</u>										
18	First Block		13,249	\$0.0000	0		13,249	\$2.0647	27,355	27,355	0.00%
19	Second Block		12,698	2.8324	35,966		12,698	2.0647	26,217	(9,749)	-27.11%
20	Third Block		343,735	1.7118	588,406		343,735	2.0647	709,702	121,296	20.61%
21	Fourth Block		102,469	0.0000	0		102,469	2.0647	211,566	211,566	0.00%
22											
23											
24	Total		<u>472,151</u>		<u>\$804,993</u>		<u>472,151</u>		<u>\$1,175,564</u>	<u>\$370,571</u>	<u>46.03%</u>
25											
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Schedule B-3-SJFC

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: Jefferson City

Case No. WR-2003-0500
 STAFF - JEFFERSON CITY
 Page 3 of 8

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	State Penitentiary (Interruptible Rate):										
3	<u>Minimum Charge:</u>										
4	5/8" Monthly	0		\$7.76	\$0	0		\$ 9.87	\$0	\$0	0.00%
5	3/4" Monthly	0		8.49	0	0		\$ 10.08	0	0	0.00%
6	1" Monthly	0		9.96	0	0		\$ 10.93	0	0	0.00%
7	1-1/2" Monthly	0		13.63	0	0		\$ 13.55	0	0	0.00%
8	2" Monthly	0		18.02	0	0		\$ 15.64	0	0	0.00%
9	3" Monthly	0		28.30	0	0		\$ 28.16	0	0	0.00%
10	4" Monthly	12		42.97	516	12		\$ 35.83	430	(86)	-16.67%
11	6" Monthly	0		79.63	0	0		\$ 53.65	0	0	0.00%
12	8" Monthly	0		0.00	0	0		\$ 107.65	0	0	0.00%
13						0					
14	<u>Volumetric Charges:</u>										
15	First Block		1,355	\$3.0133	4,084		1,355	\$2.0647	2,798	(1,286)	-31.49%
16	Second Block		1,046	1.7200	1,798		1,046	2.0647	2,159	361	20.08%
17											
18											
19	Total		<u>2,401</u>		<u>\$6,398</u>		<u>2,401</u>		<u>\$5,387</u>	<u>(\$1,011)</u>	<u>-15.80%</u>
20											
21	Capital Complex (Interruptible Rate):										
22	<u>Minimum Charge:</u>										
23	5/8" Monthly	0		\$7.76	\$0	0		\$ 9.87	\$0	\$0	0.00%
24	3/4" Monthly	0		8.49	0	0		\$ 10.08	0	0	0.00%
25	1" Monthly	0		9.96	0	0		\$ 10.93	0	0	0.00%
26	1-1/2" Monthly	0		13.63	0	0		\$ 13.55	0	0	0.00%
27	2" Monthly	0		18.02	0	0		\$ 15.64	0	0	0.00%
28	3" Monthly	0		28.30	0	0		\$ 28.16	0	0	0.00%
29	4" Monthly	12		42.97	516	12		\$ 35.83	430	(86)	-16.67%
30	6" Monthly	0		79.63	0	0		\$ 53.65	0	0	0.00%
31	8" Monthly	0		0.00	0	0		\$ 107.65	0	0	0.00%
32						0					
33	<u>Volumetric Charges:</u>										
34	First Block		1,530	\$3.4670	5,305		1,530	\$2.0647	3,159	(2,146)	-40.45%
35	Second Block		1,124	\$2.8267	3,176		1,124	\$2.0647	2,320	(856)	-26.95%
36	Third block		824	\$1.7200	1,416		824	\$2.0647	1,700	284	20.06%
37							0				
38											
39	Total		<u>3,477</u>		<u>\$10,413</u>		<u>3,477</u>		<u>\$7,609</u>	<u>(\$2,804)</u>	<u>-26.93%</u>
40											

Schedule B-4-SJFC

**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: Jefferson City

Case No. WR-2003-0500
STAFF - JEFFERSON CITY
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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	36		\$7.76	\$279	36		\$ 9.87	\$355	\$76	27.24%
5	3/4" Monthly	0		8.49	\$0	0		\$ 10.08	0	0	0.00%
6	1" Monthly	24		9.96	\$239	24		\$ 10.93	262	23	9.62%
7	1-1/2" Monthly	0		13.63	\$0	0		\$ 13.55	0	0	0.00%
8	2" Monthly	36		18.02	\$649	36		\$ 15.64	563	(86)	-13.25%
9	3" Monthly	36		28.30	\$1,019	36		\$ 28.16	1,014	(5)	-0.49%
10	4" Monthly	12		42.97	\$516	12		\$ 35.83	430	(86)	-16.67%
11	6" Monthly	0		79.63	\$0	0		\$ 53.65	0	0	0.00%
12	8" Monthly	0		0.00	\$0	0		\$ 107.65	0	0	0.00%
13	10" Monthly	0		0.00	0	0		0.00	0	0	0.00%
14	12" Monthly	0		0.00	0	0		0.00	0	0	0.00%
15											
16	<u>Volumetric Charges:</u>										
17	First Block		85	\$0.0000	0		85	2.1974	186	186	0.00%
18	Second Block		8,824	2.8324	24,993		8,824	2.1974	19,390	(5,603)	-22.42%
19	Third Block		6,069	1.7118	10,389		6,069	2.1974	13,336	2,947	28.37%
20	Fourth Block		0	0.0000	0		0	2.1974	0	0	0.00%
21											
22											
23	Total		<u>14,978</u>		<u>\$38,084</u>		<u>14,978</u>		<u>\$35,536</u>	<u>(\$2,548)</u>	<u>-6.69%</u>
24											
25	Large Industrial:										
26	<u>Minimum Charge:</u>										
27	2" Monthly	12		\$787.01	\$9,444	12		\$731.92	\$8,783	(\$661)	-7.00%
28	3" Monthly	0		797.29	0	0		\$741.48	0	0	0.00%
29	4" Monthly	12		811.96	9,744	12		\$755.12	9,061	(683)	-7.01%
30	6" Monthly	0		848.63	0	0		\$789.23	0	0	0.00%
31											
32	<u>Volumetric Charges:</u>										
33	First Block		10,800	0.00	0		10,800	0.0000	0	0	0.00%
34	Second Block		73,960	1.71	126,597		73,960	1.5903	117,618	(8,979)	-7.09%
35											
36											
37	Total		<u>84,760</u>		<u>145,785</u>		<u>84,760</u>		<u>135,462</u>	<u>(10,323)</u>	<u>-7.08%</u>
38											
39											
40											

Schedule B-5-SJFC

**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: Jefferson City**

**Case No. WR-2003-0500
STAFF - JEFFERSON CITY
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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	120		\$7.76	\$931	120		\$ 9.87	\$1,185	\$254	27.28%
5	3/4" Monthly	0		8.49	0	0		\$ 10.08	0	0	0.00%
6	1" Monthly	72		9.96	717	72		\$ 10.93	787	70	9.76%
7	1-1/2" Monthly	48		13.63	654	48		\$ 13.55	650	(4)	-0.61%
8	2" Monthly	224		18.02	4,036	224		\$ 15.64	3,503	(533)	-13.21%
9	3" Monthly	20		28.30	566	20		\$ 28.16	563	(3)	-0.53%
10	4" Monthly	12		42.97	516	12		\$ 35.83	430	(86)	-16.67%
11	6" Monthly	0		79.63	0	0		\$ 53.65	0	0	0.00%
12	8" Monthly	0		0.00	0	0		\$ 107.65	0	0	0.00%
13	10" Monthly	0		0.00	0	0		0.00	0	0	0.00%
14	12" Monthly	0		0.00	0	0		0.00	0	0	0.00%
15											
16											
17	<u>Volumetric Charges:</u>										
18	First Block		882	\$0.0000	0		882	\$2.0793	1,834	1,834	0.00%
19	Second Block		10,900	2.8324	30,873		10,900	2.0793	22,664	(8,209)	-26.59%
20	Third Block		8,808	1.7118	15,078		8,808	2.0793	18,314	3,236	21.46%
21	Fourth Block		0	0.0000	0		0	2.0793	0	0	0.00%
22											
23											
24	Total		<u>20,590</u>		<u>\$53,371</u>		<u>20,590</u>		<u>\$49,930</u>	<u>(\$3,441)</u>	<u>-6.45%</u>
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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: Jefferson City

Case No. WR-2003-0500
STAFF - JEFFERSON CITY
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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 Utility:										
3	<u>Minimum Charge:</u>										
4	5/8" Monthly	0		\$7.76	\$0	0		\$ 9.87	\$0	\$0	0.00%
5	3/4" Monthly	0		8.49	0	0		\$ 10.08	0	0	0.00%
6	1" Monthly	0		9.96	0	0		\$ 10.93	0	0	0.00%
7	1-1/2" Monthly	0		13.63	0	0		\$ 13.55	0	0	0.00%
8	2" Monthly	0		18.02	0	0		\$ 15.64	0	0	0.00%
9	3" Monthly	0		28.30	0	0		\$ 28.16	0	0	0.00%
10	4" Monthly	0		42.97	0	0		\$ 35.83	0	0	0.00%
11	6" Monthly	0		79.63	0	0		\$ 53.65	0	0	0.00%
12	8" Monthly	0		0.00	0	0		\$ 107.65	0	0	0.00%
13	10" Monthly	0		0.00	0	0		0.00	0	0	0.00%
14	12" Monthly	0		0.00	0	0		0.00	0	0	0.00%
15											
16											
17	<u>Volumetric Charges:</u>										
18	First Block		0	\$0.0000	0		0	\$2.4780	0	0	0.00%
19	Second Block		0	2.8324	0		0	2.4780	0	0	0.00%
20	Third Block		0	1.7118	0		0	2.1000	0	0	0.00%
21	Fourth Block		0	0.0000	0		0	2.1000	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											

Schedule B-7-SJFC

**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: Jefferson City**

**Case No. WR-2003-0500
STAFF - JEFFERSON CITY
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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		\$7.76	\$0	0		\$ 9.87	\$0	\$0	0.00%
5	3/4" Monthly	0		8.49	0	0		\$ 10.08	0	0	0.00%
6	1" Monthly	0		9.96	0	0		\$ 10.93	0	0	0.00%
7	1-1/2" Monthly	0		13.63	0	0		\$ 13.55	0	0	0.00%
8	2" Monthly	0		18.02	0	0		\$ 15.64	0	0	0.00%
9	3" Monthly	0		28.30	0	0		\$ 28.16	0	0	0.00%
10	4" Monthly	0		42.97	0	0		\$ 35.83	0	0	0.00%
11	6" Monthly	0		79.63	0	0		\$ 53.65	0	0	0.00%
12	8" Monthly	0		0.00	0	0		\$ 107.65	0	0	0.00%
13	10" Monthly	0		0.00	0	0		0.00	0	0	0.00%
14	12" Monthly	0		0.00	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</u>	<u>0.00%</u>
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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: Jefferson City

Case No. WR-2003-0500
STAFF - JEFFERSON CITY
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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	38	\$786.49	\$29,887	\$300.98	\$11,437	(\$18,450)	-61.73%
5								
6	2"	14	87.35	1,223	\$33.43	468	(755)	-61.73%
7								
8	3"	1	196.66	197	\$75.26	75	(122)	-61.93%
9								
10	4"	24	349.57	8,739	\$133.78	3,344	(5,395)	-61.73%
11								
12	6"	48	786.49	37,752	\$300.98	14,447	(23,305)	-61.73%
13								
14	8" 17	17	1,398.11	23,768	\$535.04	9,096	(14,672)	-61.73%
15								
16	10" 5	5	2,184.60	10,923	\$836.01	4,180	(6,743)	-61.73%
17								
18	12" 0	0	0.00	0	\$0.00	0	0	0.00%
19								
20								
21								
22	Total	<u>148</u>		<u>\$112,489</u>		<u>\$43,047</u>	<u>(\$69,442)</u>	<u>-61.73%</u>
23								
24								
25								
26	Public Fire Protection:							
27								
28	Public Fire Hydrants	<u>777</u>	0.00	<u>0</u>	0.00	<u>0</u>	<u>0</u>	<u>0.00%</u>
29								

MISSOURI-AMERICAN WATER COMPANY
JEFFERSON CITY 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	111	58	43	8	2	0	0	0	0.0
Labor & Exp Oper SS	2	31,828	16,579	12,429	2,187	541	0	10	83	0.0
Purchased Water	1	0	0	0	0	0	0	0	0	0.0
TOTAL SS EXPENSE - OPERATION		31,939	16,637	12,472	2,194	543	0	10	83	0.0
Misc Exp Oper SS	2	22,651	11,799	8,845	1,556	385	0	7	59	0.0
Misc Exp Oper SS	2	2,297	1,197	897	158	39	0	1	6	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	60	31	23	4	1	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	1,346	701	526	92	23	0	0	3	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	1,411	735	551	97	24	0	0	4	0.0
Misc Plant Maint SS	2	2,332	1,215	911	160	40	0	1	6	0.0
TOTAL SS EXPENSE - MAINTENANCE		30,097	15,678	11,753	2,068	512	0	9	78	0.0
TOTAL SS EXPENSE		62,036	32,315	24,225	4,262	1,055	0	19	161	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	207,189	97,835	86,356	18,025	3,729	0	124	1,119	0.0
Labor & Exp Oper Pump	6	17,417	8,954	6,709	1,179	293	0	31	251	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	20	10	8	1	0	0	0	0	0.0
Rents Oper P	6	87	45	34	6	1	0	0	1	0.0
TOTAL PUMPING EXPENSE - OPERATION		224,714	106,844	93,107	19,212	4,024	0	156	1,371	0.0

MISSOURI-AMERICAN WATER COMPANY
JEFFERSON CITY 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	11	6	4	1	0	0	0	0	0.0
TOTAL PUMPING EXPENSES - MAINTENANCE		11	6	4	1	0	0	0	0	0.0
TOTAL PUMPING EXPENSES		224,725	106,850	93,111	19,213	4,024	0	156	1,371	0.0
WATER TREATMENT										0.0
Super & Eng Oper WT	2	11,048	5,755	4,314	759	188	0	3	29	0.0
Chemicals	1	171,374	80,923	71,429	14,910	3,085	0	103	925	0.0
Labor & Exp Oper WT	2	192,368	100,204	75,120	13,216	3,270	0	58	500	0.0
Labor & Exp Oper WT	2	858	447	335	59	15	0	0	2	0.0
Misc Exp Oper WT	2	0	0	0	0	0	0	0	0	0.0
Misc Exp Oper WT	1	0	0	0	0	0	0	0	0	0.0
Misc Exp Oper WT	2	17,655	9,196	6,894	1,213	300	0	5	46	0.0
Rents Oper WT	2	(9)	(5)	(4)	(1)	(0)	0	(0)	(0)	0.0
TOTAL WT EXPENSE - OPERATION		393,294	196,521	158,088	30,155	6,857	0	169	1,502	0.0
Super & Eng Maint WT	2	35,429	18,455	13,835	2,434	602	0	11	92	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	37,741	19,659	14,738	2,593	642	0	11	98	0.0
TOTAL WT EXPENSE - MAINTENANCE		73,170	38,114	28,573	5,027	1,244	0	22	190	0.0
TOTAL WT EXPENSE		466,464	234,635	186,661	35,182	8,101	0	191	1,693	0.0
TRANSMISSION AND DISTRIBUTION EXPENSES										0.0
Super & Eng Oper TD	11	9,441	4,994	2,568	262	124	0	173	1,320	0.0
Storage Facility Exp	5	0	0	0	0	0	0	0	0	0.0
Storage Facility Exp	5	0	0	0	0	0	0	0	0	0.0
TD Lines Exp	7	1,871	789	533	71	23	0	53	402	0.0
TD Lines Exp	7	22,493	9,483	6,406	852	279	0	634	4,838	0.0
Meter Expense	9	13,129	9,563	3,260	118	188	0	0	0	0.0
Meter Expense	9	6	4	1	0	0	0	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
Misc Exp Oper TD	11	449	238	122	12	6	0	8	63	0.0
Misc Exp Oper TD	11	0	0	0	0	0	0	0	0	0.0

MISSOURI-AMERICAN WATER COMPANY
JEFFERSON CITY 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			Commercial		Industrial (6)	Public Authorities (7)	Sales for Resale (8)	Fire Protection		
			(4)	(5)			Private (9)				Public (10)		
Misc Exp Oper TD	11	(24,616)	(13,022)	(6,696)	(684)	(322)	0	(450)	(3,441)	0.0			
Rents Oper TD	11	17,777	9,404	4,835	494	233	0	325	2,485	0.0			
TOTAL T & D EXPENSE OPERATION		40,550	21,453	11,030	1,126	530	0	743	5,667	0.0			
Super & Eng Maint TD	12	8,517	6,336	1,508	57	59	0	324	233	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	11,321	4,773	3,224	429	140	0	319	2,435	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	77,750	61,485	12,549	171	474	0	3,071	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	5,660	4,210	1,002	38	39	0	216	155	0.0			
Mat and Sup Maint TD	12	116,248	86,477	20,588	779	802	0	4,429	3,174	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		219,496	163,281	38,871	1,474	1,515	0	8,360	5,996	0.0			
TOTAL T & D EXPENSE		260,046	184,734	49,901	2,600	2,045	0	9,102	11,663	0.0			
CUSTOMER ACCOUNTS													
Supervision CA	13	7,918	6,688	1,116	10	31	0	74	0	0.0			
Meter Reading Exp CA	14	41,320	35,221	5,880	54	165	0	0	0	0.0			
Meter Reading Exp CA	14	0	0	0	0	0	0	0	0	0.0			
Meter Reading Exp CA	14	3,315	2,826	472	4	13	0	0	0	0.0			
Cust Rec & Collection CA	13	62,550	52,830	8,820	75	244	0	582	0	0.0			
Cust Rec & Collection CA	13	33,166	28,012	4,676	40	129	0	308	0	0.0			
Uncollectible Accts	13	37,545	31,711	5,294	45	146	0	349	0	0.0			
Misc Cust Accts Exp CA	13	(1,454)	(1,228)	(205)	(2)	(6)	0	(14)	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	2,062	1,742	291	2	8	0	19	0	0.0			
Cust Serv & Info Exp CA	13	78,768	66,527	11,106	95	307	0	733	0	0.0			
TOTAL CUSTOMER ACCOUNTING EXPENSE		265,190	224,328	37,450	323	1,039	0	2,051	0	0.0			

MISSOURI-AMERICAN WATER COMPANY
JEFFERSON CITY 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	200,950	134,918	52,147	6,390	2,110	0	2,512	2,874	0.0
Other Supplies & Exp AG	15	32	21	8	1	0	0	0	0	0.0
Other Supplies & Exp AG	15	90,535	60,785	23,494	2,879	951	0	1,132	1,295	0.0
Other Supplies & Exp AG	15	57,679	38,726	14,968	1,834	606	0	721	825	0.0
Mgmt Fees-Coporate/Shared Service Center	15	180,297	121,051	46,787	5,733	1,893	0	2,254	2,578	0.0
Mgmt Fees-Call Center	13	97,192	82,088	13,704	117	379	0	904	0	0.0
Mgmt Fees-Belleville Lab	2	31,215	16,260	12,189	2,144	531	0	9	81	0.0
Mgmt Fees- Financial ITS	15	9,459	6,351	2,455	301	99	0	118	135	0.0
Mgmt Fees- Customer Billings ITS	13	53,406	45,107	7,530	64	208	0	497	0	0.0
Mgmt Fees-Other ITS	15	601	404	156	19	6	0	8	9	0.0
Outside Services AG	15	41,802	28,066	10,848	1,329	439	0	523	598	0.0
Outside Services AG	15	(1,135)	(762)	(295)	(36)	(12)	0	(14)	(16)	0.0
Property Insurance	15	26,416	17,736	6,855	840	277	0	330	378	0.0
Ins Gen Liab Oper AG	15	0	0	0	0	0	0	0	0	0.0
Ins Work Comp AG	16	18,394	11,997	5,099	671	212	0	195	221	0.0
Ins Other Oper AG	15	34,550	23,197	8,966	1,099	363	0	432	494	0.0
Property Insurance	15	0	0	0	0	0	0	0	0	0.0
Injuries & Damages	16	520	339	144	19	6	0	6	6	0.0
Employee Pension & Benefits	16	246,666	160,876	68,376	9,003	2,837	0	2,615	2,960	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	6,382	4,285	1,656	203	67	0	80	91	0.0
Rents AG	15	26,988	18,120	7,003	858	283	0	337	386	0.0
Goodwill Advertising Exp	15	0	0	0	0	0	0	0	0	0.0
Misc Exp AG	15	26,132	17,545	6,781	831	274	0	327	374	0.0
Research & Development	15	0	0	0	0	0	0	0	0	0.0
TOTAL A & G OPERATIONS		1,148,081	787,108	288,871	34,301	11,529	0	12,984	13,288	0.0
General Plant Maint AG	15	0	0	0	0	0	0	0	0	0.0
General Plant Maint AG	15	3,858	2,590	1,001	123	41	0	48	55	0.0
TOTAL A & G EXPENSE - MAINTENANCE		3,858	2,590	1,001	123	41	0	48	55	0.0
TOTAL A & G EXPENSE		1,151,939	789,698	289,872	34,423	11,570	0	13,032	13,343	0.0
Total Operation & Maintenance Expenses		2,430,400	1,572,560	681,221	96,003	27,833	0	24,551	28,231	0.0

MISSOURI-AMERICAN WATER COMPANY
JEFFERSON CITY 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)	Customer Classifications				Fire Protection			
			Residential (4)	Commercial (5)	Industrial (6)	Public Authorities (7)	Sales for Resale (8)	Private (9)		Public (10)
DEPRECIATION EXPENSE										
Struct & Imp SS	2	75	39	29	5	1	0	0	0	0.0
Struct & Imp P	6	5,141	2,643	1,980	348	86	0	9	74	0.0
Struct & Imp WT	2	21,304	11,097	8,319	1,464	362	0	6	55	0.0
Struct & Imp TD	7	714	301	203	27	9	0	20	154	0.0
Struct & Imp Offices	15	5,620	3,773	1,458	179	59	0	70	80	0.0
Struct & Imp Store,Shop,Gar	15	0	0	0	0	0	0	0	0	0.0
Struct & Imp Misc	15	0	0	0	0	0	0	0	0	0.0
Collect & Impounding	1	0	0	0	0	0	0	0	0	0.0
Lake, River & Other Intakes	2	1,709	890	667	117	29	0	1	4	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	0	0	0	0	0	0	0	0	0.0
Pump Equip Electric	6	19,194	9,868	7,394	1,299	322	0	35	276	0.0
Pump Equip Diesel	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	51,859	27,013	20,251	3,563	882	0	16	135	0.0
Dist Reservoirs & Standpipe	5	0	0	0	0	0	0	0	0	0.0
Elevated Tanks & Standpipes	5	0	0	0	0	0	0	0	0	0.0
Ground Level Facilities	5	17,660	8,383	5,662	752	249	0	302	2,312	0.0
TD Mains Not Classified by	7	79,306	33,435	22,586	3,006	983	0	2,236	17,059	0.0
TD Mains 4 & Less	4	150	63	43	6	2	0	4	32	0.0
TD Mains 6 to 8"	4	1,712	722	488	65	21	0	48	368	0.0
TD Mains 10 to 16"	3	11,886	5,767	4,324	761	189	0	97	748	0.0
TD Mains 18 & Grtr	3	0	0	0	0	0	0	0	0	0.0
Services	10	0	0	0	0	0	0	0	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	18,286	13,320	4,540	165	261	0	0	0	0.0
Meters Other-Rem Rdr Units	9	0	0	0	0	0	0	0	0	0.0
Meter Installations	9	0	0	0	0	0	0	0	0	0.0
Meter Installation Other	9	0	0	0	0	0	0	0	0	0.0
Hydrants	8	12,581	0	0	0	0	0	0	12,581	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	(1,089)	(731)	(283)	(35)	(11)	0	(14)	(16)	0.0
Comp & Periph Equip	15	49,534	33,257	12,854	1,575	520	0	619	708	0.0
Computer Software	15	0	0	0	0	0	0	0	0	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	9,862	6,621	2,559	314	104	0	123	141	0.0
Trans Equip Hvy Duty Trks	15	0	0	0	0	0	0	0	0	0.0
Trans Equip Autos	15	6,429	4,316	1,668	204	68	0	80	92	0.0
Trans Equip Other	15	0	0	0	0	0	0	0	0	0.0
Stores Equipment	15	35	23	9	1	0	0	0	1	0.0
Tools,Shop,Garage Equip	15	5,824	3,910	1,511	185	61	0	73	83	0.0
Tools,Shop,Garage Equip Oth	15	0	0	0	0	0	0	0	0	0.0
Laboratory Equipment	2	1,401	730	547	96	24	0	0	4	0.0

Schedule C-5-SJFC

MISSOURI-AMERICAN WATER COMPANY
JEFFERSON CITY 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)	PSC Staff Study				Fire Protection			
			Residential (4)	Commercial (5)	Industrial (6)	Public Authorities (7)	Sales for Resale (8)	Private (9)		Public (10)
Laboratory Equip Other	2	0	0	0	0	0	0	0	0	0.0
Power Operated Equipment	15	9,449	6,344	2,452	300	99	0	118	135	0.0
Comm Equip Non-Telephone	15	2,952	1,982	766	94	31	0	37	42	0.0
Comm Equip Telephone	15	0	0	0	0	0	0	0	0	0.0
Misc Equipment	15	1,459	980	379	46	15	0	18	21	0.0
Total Depreciation Expense		333,053	174,748	100,409	14,538	4,367	0	3,901	35,090	
Amort-Other UP & CIAC Depr, CORemoval	18	20,696	9,816	6,445	969	284	0	277	2,906	
Taxes Other Than Income										
Utility Reg Assessment Fee	19	17,179	10,134	4,990	718	210	0	191	936	
Property Taxes	18	208,916	99,089	65,056	9,777	2,862	0	2,799	29,332	
FUTA	16	973	635	270	36	11	0	10	12	0.0
FICA	16	53,372	34,809	14,795	1,948	614	0	566	640	0.0
SUTA	16	1	1	0	0	0	0	0	0	0.0
Other Taxes & Licenses	15	(4,467)	(2,999)	(1,159)	(142)	(47)	0	(56)	(64)	0.0
Gross Receipts Tax	19	0	0	0	0	0	0	0	0	0.0
Total Taxes, Other Than Income		275,974	141,668	83,952	12,337	3,650	0	3,510	30,856	0.0
Income Taxes	18	174,436	82,735	54,319	8,164	2,390	0	2,337	24,491	
Utility Income Available for Return	18	632,100	299,805	196,836	29,582	8,660	0	8,470	88,747	
Total Cost of Service		3,866,659	2,281,332	1,123,182	161,593	47,183	0	43,048	210,321	0.0
Less: Other Water Revenues		26,568	26,568				0			0.0
Revenue Contribution	19	0	0	0	0	0	0	0	0	0.0
Total Other Water Revenues		26,568	26,568	0	0	0	0	0	0	0.0
Total Cost of Service Related to Sales of Water		\$ 3,840,091	\$ 2,254,764	\$ 1,123,182	\$ 161,593	\$ 47,183	\$ -	\$ 43,048	\$ 210,321	0.0

MISSOURI-AMERICAN WATER COMPANY
 JEFFERSON CITY 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		132,791	65,378	9,406	2,746	0	0	(210,321)
Total		<u>\$ 3,840,091</u>	<u>\$ 2,387,555</u>	<u>\$ 1,188,560</u>	<u>\$ 170,998</u>	<u>\$ 49,930</u>	<u>\$ -</u>	<u>\$ 43,048</u>	<u>\$ -</u>
		\$ 26,568	\$ 26,568						
		<u>\$ 3,866,659</u>	<u>\$ 2,414,123</u>						

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MISSOURI-AMERICAN WATER COMPANY
JEFFERSON CITY 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	\$ 5,629	\$ 2,679	\$ 1,752	\$ 263	\$ 77	\$ -	\$ 75	\$ 782	0.0
Franchises	17	0	0	0	0	0	0	0	0	0.0
Land & Ld Rights SS	2	0	0	0	0	0	0	0	0	0.0
Land & Ld Rights P	6	944	485	364	64	16	0	2	14	0.0
Land & Ld Rights WT	2	50,762	26,442	19,823	3,487	863	0	15	132	0.0
Land & Ld Rights TD	7	45,514	19,189	12,962	1,725	564	0	1,283	9,790	0.0
Land & Land Rights AG	15	7,181	4,821	1,863	228	75	0	90	103	0.0
Struct & Imp SS	2	1,303	679	509	90	22	0	0	3	0.0
Struct & Imp P	6	566,719	291,350	218,300	38,367	9,521	0	1,020	8,161	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	1,650,977	859,994	644,707	113,422	28,067	0	495	4,293	0.0
Struct & Imp WT Nth Pit (ST	2	0	0	0	0	0	0	0	0	0.0
Struct & Imp WT Ctrl Pit 1	2	0	0	0	0	0	0	0	0	0.0
Struct & Imp WT Ctrl Pit 3	2	0	0	0	0	0	0	0	0	0.0
Struct & Imp WT Sth Pit (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	36,051	15,199	10,267	1,366	447	0	1,017	7,755	0.0
Struct & Imp TD Spec Cross	7	0	0	0	0	0	0	0	0	0.0
Struct & Imp Offices	15	143,114	96,087	37,138	4,551	1,503	0	1,789	2,047	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	0	0	0	0	0	0	0	0	0.0
Collect & Impounding	1	0	0	0	0	0	0	0	0	0.0
Lake, River & Other Intakes	2	55,399	28,857	21,633	3,806	942	0	17	144	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 Pit (STL)	2	0	0	0	0	0	0	0	0	0.0
Supply Mains Ctrl Pit (STL)	2	0	0	0	0	0	0	0	0	0.0
Supply Mains Sth Pit (STL)	2	0	0	0	0	0	0	0	0	0.0
Supply Mains Meramec Pit (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	821,371	422,267	316,392	55,607	13,799	0	1,478	11,828	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 Pit	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	1,765,269	919,529	689,338	121,274	30,010	0	530	4,590	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

Schedule C-8-SJFC

MISSOURI-AMERICAN WATER COMPANY
JEFFERSON CITY 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)	Customer Classification				Fire Protection			
			Residential (4)	Commercial (5)	Industrial (6)	Public Authorities (7)	Sales for Resale (8)	Private (9)		Public (10)
WT Equip Filter Media	2	0	0	0	0	0	0	0	0	0.0
Dist Reservoirs & Standpipe	5	0	0	0	0	0	0	0	0	0.0
Elevated Tanks & Standpipes	5	0	0	0	0	0	0	0	0	0.0
Ground Level Facilities	5	954,615	453,156	306,050	40,667	13,460	0	16,324	124,959	0.0
TD Mains Not Classified by	7	4,805,578	2,026,032	1,368,629	182,131	59,589	0	135,517	1,033,680	0.0
TD Mains 4 & Less	4	11,451	4,828	3,261	434	142	0	323	2,463	0.0
TD Mains 6 to 8"	4	128,080	53,999	36,477	4,854	1,588	0	3,612	27,550	0.0
TD Mains 10 to 16"	3	907,683	440,408	330,215	58,092	14,432	0	7,443	57,093	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	0	0	0	0	0	0	0	0	0.0
Services	10	249,815	197,554	40,320	550	1,524	0	9,868	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	634,956	462,502	157,660	5,715	9,080	0	0	0	0.0
Meters Other-Rem Rdr Units	9	0	0	0	0	0	0	0	0	0.0
Meter Installations	9	1,435	1,045	356	13	21	0	0	0	0.0
Meter Installation Other	9	0	0	0	0	0	0	0	0	0.0
Hydrants	8	639,682	0	0	0	0	0	0	639,682	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	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	(883)	(593)	(229)	(28)	(9)	0	(11)	(13)	0.0
Office Furniture & Equip	15	(151,589)	(101,777)	(39,337)	(4,821)	(1,592)	0	(1,895)	(2,168)	0.0
Comp & Periph Equip	15	318,004	213,508	82,522	10,113	3,339	0	3,975	4,547	0.0
Computer Software	15	109,823	73,735	28,499	3,492	1,153	0	1,373	1,570	0.0
Comp Software Personal	15	3,079	2,067	799	98	32	0	38	44	0.0
Data Handling Equipment	15	0	0	0	0	0	0	0	0	0.0
Other Office Equipment	15	254	171	66	8	3	0	3	4	0.0
Trans Equip Lt Duty Trks	15	48,433	32,518	12,568	1,540	509	0	605	693	0.0
Trans Equip Hvy Duty Trks	15	0	0	0	0	0	0	0	0	0.0
Trans Equip Autos	15	24,322	16,330	6,312	773	255	0	304	348	0.0
Trans Equip Other	15	0	0	0	0	0	0	0	0	0.0
Stores Equipment	15	1,053	707	273	33	11	0	13	15	0.0
Tools,Shop,Garage Equip	15	53,959	36,228	14,002	1,716	567	0	674	772	0.0
Tools,Shop,Garage Equip Oth	15	0	0	0	0	0	0	0	0	0.0
Laboratory Equipment	2	32,922	17,149	12,856	2,262	560	0	10	86	0.0
Laboratory Equip Other	2	0	0	0	0	0	0	0	0	0.0
Power Operated Equipment	15	(18,804)	(12,625)	(4,880)	(598)	(197)	0	(235)	(269)	0.0
Comm Equip Non-Telephone	15	31,479	21,135	8,169	1,001	331	0	393	450	0.0
Comm Equip Telephone	15	664	446	172	21	7	0	8	9	0.0

Schedule C-9-SJFC

MISSOURI-AMERICAN WATER COMPANY
JEFFERSON CITY 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)	Customer Classifications					Fire Protection		
			Residential (4)	Commercial (5)	Industrial (6)	Public Authorities (7)	Sales for Resale (8)	Private (9)	Public (10)	
Misc Equipment	15	38,967	26,162	10,112	1,239	409	0	487	557	0.0
Other Tangible Property	17	0	0	0	0	0	0	0	0	0.0
Total Utility Plant in Service		13,975,211	6,652,261	4,349,920	653,556	191,118	0	186,643	1,941,713	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	(87,624)	(58,831)	(22,738)	(2,786)	(920)	0	(1,095)	(1,253)	0.0
Materials and Supplies	15	196,676	132,048	51,037	6,254	2,065	0	2,458	2,812	0.0
Prepayments	15	39	26	10	1	0	0	0	1	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
Less:										
Accumulated Deferred ITC (3%)	17	(2,425,741)	(1,154,410)	(755,133)	(113,525)	(33,233)	0	(32,505)	(336,935)	0.0
Deferred Income Taxes	17	(2,179,473)	(1,037,211)	(678,470)	(101,999)	(29,859)	0	(29,205)	(302,729)	0.0
Pensions	16	(210,755)	(137,454)	(58,421)	(7,693)	(2,424)	0	(2,234)	(2,529)	0.0
Total Other Rate Base Elements		(4,706,878)	(2,255,832)	(1,463,715)	(219,747)	(64,370)	0	(62,580)	(640,633)	0.0
Total Original Cost Measure of Value		\$ 9,268,333	\$ 4,396,429	\$ 2,886,205	\$ 433,809	\$ 126,748	\$ -	\$ 124,062	\$ 1,301,079	0.0

T&D OP BASIS FOR FACTOR 11	37,499	19,839	10,200	1,042	490	0	687	5,241	0.0
FACTOR 11		0.5290	0.2720	0.0278	0.0131	0.0000	0.0183	0.1398	1.0000
T&D Mnt BASIS FOR FACTOR 12	89,071	66,258	15,773	600	615	0	3,390	2,435	0.0
FACTOR 12		0.7439	0.1771	0.0067	0.0069	0.0000	0.0381	0.0273	1.0000
A&G BASIS FOR FACTOR 15	899,898	604,104	233,564	28,645	9,449	0	11,292	12,844	0.0
FACTOR 15		0.6714	0.2595	0.0318	0.0105	0.0000	0.0125	0.0143	1.0000
LABOR BASIS FOR FACTOR 16	698,552	455,678	193,622	25,471	7,999	0	7,422	8,360	0.0
FACTOR 16		0.6522	0.2772	0.0365	0.0115	0.0000	0.0106	0.0120	1.0000
UPIS BASIS FOR FACTOR 17	13,969,582	6,649,582	4,348,168	653,293	191,041	0	186,567	1,940,931	0.0
FACTOR 17		0.4759	0.3113	0.0468	0.0137	0.0000	0.0134	0.1389	1.0000
RATE BASE BASIS FOR FACTOR 18	9,268,333	4,396,429	2,886,205	433,809	126,748	0	124,062	1,301,079	0.0
FACTOR 18		0.4743	0.3114	0.0468	0.0137	0.0000	0.0134	0.1404	1.0000
TOTAL COS BASIS FOR FACTOR 19	3,843,098	2,266,913	1,116,536	160,671	46,907	0	42,777	209,294	0.0
FACTOR 19		0.5899	0.2905	0.0418	0.0122	0.0000	0.0111	0.0545	1.0000
COS w/o Fire Factor 20	3,613,290	2,281,332	1,123,182	161,593	47,183	0			3,613,290
FACTOR 20		0.6314	0.3108	0.0447	0.0131	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	0.4722	0.4168	0.0870	0.0180	-	0.0006	0.0054	1.0000
2	0.5209	0.3905	0.0687	0.0170	-	0.0003	0.0026	1.0000

MISSOURI-AMERICAN WATER COMPANY
 JEFFERSON CITY 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)	PSC STAFF STUDY				Fire Protection				
			Residential (4)	Commercial (5)	Industrial (6)	Public Authorities (7)	Sales for Resale (8)	Private (9)		Public (10)	
			3	0.4852	0.3638	0.0640	0.0159	-	0.0082	0.0629	1.0000
			4	0.4216	0.2848	0.0379	0.0124	-	0.0282	0.2151	1.0000
			5	0.4747	0.3206	0.0426	0.0141	-	0.0171	0.1309	1.0000
			6	0.5141	0.3852	0.0677	0.0168	-	0.0018	0.0144	1.0000
			7	0.4216	0.2848	0.0379	0.0124	-	0.0282	0.2151	1.0000
			8	-	-	-	-	-	-	1.0000	1.0000
			9	0.7284	0.2483	0.0090	0.0143	-	-	-	1.0000
			10	0.7908	0.1614	0.0022	0.0061	-	0.0395	-	1.0000
			11	0.5290	0.2720	0.0278	0.0131	-	0.0183	0.1398	1.0000
			12	0.7439	0.1771	0.0067	0.0069	-	0.0381	0.0273	1.0000
			13	0.8446	0.1410	0.0012	0.0039	-	0.0093	-	1.0000
			14	0.8524	0.1423	0.0013	0.0040	-	-	-	1.0000
			15	0.6714	0.2595	0.0318	0.0105	-	0.0125	0.0143	1.0000
			16	0.6522	0.2772	0.0365	0.0115	-	0.0106	0.0120	1.0000
			17	0.4759	0.3113	0.0468	0.0137	-	0.0134	0.1389	1.0000
			18	0.4743	0.3114	0.0468	0.0137	-	0.0134	0.1404	1.0000
			19	0.5899	0.2905	0.0418	0.0122	-	0.0111	0.0545	1.0000
			20	0.6314	0.3108	0.0447	0.0131	-	-	-	1.0000

MISSOURI-AMERICAN WATER COMPANY
JEFFERSON CITY 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	111	53	58	0	0	0	0
Labor & Exp Oper SS	2	31,828	15,064	16,672	0	0	0	92
Purchased Water	1	0	0	0	0	0	0	0
TOTAL SS EXPENSE - OPERATION		31,939	15,117	16,730	0	0	0	93
Misc Exp Oper SS	2	22,651	10,721	11,865	0	0	0	66
Misc Exp Oper SS	2	2,297	1,087	1,203	0	0	0	7
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	60	28	31	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	1,346	637	705	0	0	0	4
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	1,411	668	739	0	0	0	4
Misc Plant Maint SS	2	2,332	1,104	1,222	0	0	0	7
TOTAL SS EXPENSE - MAINTENANCE		30,097	14,245	15,765	0	0	0	87
TOTAL SS EXPENSE		62,036	29,362	32,494	0	0	0	180
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	207,189	205,946	0	0	0	0	1,243
Labor & Exp Oper Pump	6	17,417	8,134	9,001	0	0	0	282
Labor & Exp Oper Pump	6	1	0	1	0	0	0	0
Expenses Transferred	6	0	0	0	0	0	0	0
Misc Exp Oper P	6	20	9	10	0	0	0	0
Rents Oper P	6	87	41	45	0	0	0	1
TOTAL PUMPING EXPENSE - OPERATION		224,714	214,130	9,057	0	0	0	1,527

MISSOURI-AMERICAN WATER COMPANY
JEFFERSON CITY 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
Struct & Improve Maint P	6	0	0	0	0	0	0	0
Power Prod Equip Maint P	6	0	0	0	0	0	0	0
Pump Equip Maint P	6	0	0	0	0	0	0	0
Pump Equip Maint P	6	11	5	6	0	0	0	0
TOTAL PUMPING EXPENSES - MAINTENANCE		11	5	6	0	0	0	0
TOTAL PUMPING EXPENSES		224,725	214,135	9,063	0	0	0	1,527
WATER TREATMENT								
Super & Eng Oper WT	2	11,048	5,229	5,787	0	0	0	32
Chemicals	1	171,374	170,346	0	0	0	0	1,028
Labor & Exp Oper WT	2	192,368	91,048	100,762	0	0	0	558
Labor & Exp Oper WT	2	858	406	449	0	0	0	2
Misc Exp Oper WT	2	0	0	0	0	0	0	0
Misc Exp Oper WT	1	0	0	0	0	0	0	0
Misc Exp Oper WT	2	17,655	8,356	9,248	0	0	0	51
Rents Oper WT	2	(9)	(4)	(5)	0	0	0	(0)
TOTAL WT EXPENSE - OPERATION		393,294	275,380	116,242	0	0	0	1,672
Super & Eng Maint WT	2	35,429	16,769	18,558	0	0	0	103
Struct & Improve Maint WT	2	0	0	0	0	0	0	0
Struct & Improve Maint WT	2	0	0	0	0	0	0	0
WT Equip Maint WT	2	0	0	0	0	0	0	0
WT Equip Maint WT	2	37,741	17,863	19,769	0	0	0	109
TOTAL WT EXPENSE - MAINTENANCE		73,170	34,631	38,326	0	0	0	212
TOTAL WT EXPENSE		466,464	310,012	154,568	0	0	0	1,884
TRANSMISSION AND DISTRIBUTION EXPENSES								
Super & Eng Oper TD	11	9,441	1,195	0	3,445	3,308	0	1,493
Storage Facility Exp	5	0	0	0	0	0	0	0
Storage Facility Exp	5	0	0	0	0	0	0	0
TD Lines Exp	7	1,871	365	0	1,051	0	0	455
TD Lines Exp	7	22,493	4,386	0	12,634	0	0	5,473
Meter Expense	9	13,129	0	0	0	13,129	0	0
Meter Expense	9	6	0	0	0	6	0	0
Customer Install Exp	10	0	0	0	0	0	0	0
Customer Install Exp	10	0	0	0	0	0	0	0
Misc Exp Oper TD	11	449	57	0	164	157	0	71
Misc Exp Oper TD	11	0	0	0	0	0	0	0

MISSOURI-AMERICAN WATER COMPANY
JEFFERSON CITY 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	(24,616)	(3,116)	0	(8,982)	(8,625)	0	0	(3,892)
Rents Oper TD	11	17,777	2,251	0	6,487	6,229	0	0	2,811
TOTAL T & D EXPENSE OPERATION		40,550	5,137	0	14,799	14,204	0	0	6,410
Super & Eng Maint TD	12	8,517	211	0	608	0	7,141	0	557
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	11,321	2,208	0	6,359	0	0	0	2,754
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	77,750	0	0	0	0	74,679	0	3,071
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	5,660	140	0	404	0	4,745	0	370
Mat and Sup Maint TD	12	116,248	2,883	0	8,300	0	97,462	0	7,603
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		219,496	5,442	0	15,671	0	184,027	0	14,355
TOTAL T & D EXPENSE		260,046	10,579	0	30,470	14,204	184,027	0	20,765
CUSTOMER ACCOUNTS									
Supervision CA	13	7,918	0	0	0	0	0	7,844	74
Meter Reading Exp CA	14	41,320	0	0	0	0	0	41,320	0
Meter Reading Exp CA	14	0	0	0	0	0	0	0	0
Meter Reading Exp CA	14	3,315	0	0	0	0	0	3,315	0
Cust Rec & Collection CA	13	62,550	0	0	0	0	0	61,968	582
Cust Rec & Collection CA	13	33,166	0	0	0	0	0	32,858	308
Uncollectible Accts	13	37,545	0	0	0	0	0	37,196	349
Misc Cust Accts Exp CA	13	(1,454)	0	0	0	0	0	(1,440)	(14)
Misc Cust Accts Exp CA	13	0	0	0	0	0	0	0	0
Misc Cust Accts Exp CA	13	2,062	0	0	0	0	0	2,043	19
Cust Serv & Info Exp CA	13	78,768	0	0	0	0	0	78,035	733
TOTAL CUSTOMER ACCOUNTING EXPENSE		265,190	0	0	0	0	0	263,139	2,051

MISSOURI-AMERICAN WATER COMPANY
JEFFERSON CITY 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	200,950	41,958	43,767	6,812	3,175	41,094	58,758	5,385
Other Supplies & Exp AG	15	32	7	7	1	1	7	9	1
Other Supplies & Exp AG	15	90,535	18,904	19,719	3,069	1,430	18,514	26,472	2,426
Other Supplies & Exp AG	15	57,679	12,043	12,562	1,955	911	11,795	16,865	1,546
Mgmt Fees-Coporate/Shared Service Center	15	180,297	37,646	39,269	6,112	2,849	36,871	52,719	4,832
Mgmt Fees-Call Center	13	97,192	0	0	0	0	0	96,288	904
Mgmt Fees-Belleville Lab	2	31,215	14,774	16,350	0	0	0	0	91
Mgmt Fees- Financial ITS	15	9,459	1,975	2,060	321	149	1,934	2,766	254
Mgmt Fees- Customer Billings ITS	13	53,406	0	0	0	0	0	52,909	497
Mgmt Fees-Other ITS	15	601	125	131	20	9	123	176	16
Outside Services AG	15	41,802	8,728	9,104	1,417	660	8,549	12,223	1,120
Outside Services AG	15	(1,135)	(237)	(247)	(38)	(18)	(232)	(332)	(30)
Property Insurance	15	26,416	5,516	5,753	896	417	5,402	7,724	708
Ins Gen Liab Oper AG	15	0	0	0	0	0	0	0	0
Ins Work Comp AG	16	18,394	4,442	4,724	497	521	3,361	4,435	416
Ins Other Oper AG	15	34,550	7,214	7,525	1,171	546	7,065	10,102	926
Property Insurance	15	0	0	0	0	0	0	0	0
Injuries & Damages	16	520	126	134	14	15	95	125	12
Employee Pension & Benefits	16	246,666	59,570	63,344	6,660	6,981	45,066	59,471	5,575
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	6,382	1,333	1,390	216	101	1,305	1,866	171
Rents AG	15	26,988	5,635	5,878	915	426	5,519	7,891	723
Goodwill Advertising Exp	15	0	0	0	0	0	0	0	0
Misc Exp AG	15	26,132	5,456	5,692	886	413	5,344	7,641	700
Research & Development	15	0	0	0	0	0	0	0	0
TOTAL A & G OPERATIONS		1,148,081	225,215	237,161	30,924	18,587	191,812	418,110	26,272
General Plant Maint AG	15	0	0	0	0	0	0	0	0
General Plant Maint AG	15	3,858	806	840	131	61	789	1,128	103
TOTAL A & G EXPENSE - MAINTENANCE		3,858	806	840	131	61	789	1,128	103
TOTAL A & G EXPENSE		1,151,939	226,021	238,001	31,055	18,648	192,601	419,238	26,375
Total Operation & Maintenance Expenses		2,430,400	790,109	434,127	61,525	32,852	376,628	682,377	52,783

MISSOURI-AMERICAN WATER COMPANY
JEFFERSON CITY 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	75	35	39	0	0	0	0
Struct & Imp P	6	5,141	2,401	2,657	0	0	0	83
Struct & Imp WT	2	21,304	10,083	11,159	0	0	0	62
Struct & Imp TD	7	714	139	0	401	0	0	174
Struct & Imp Offices	15	5,620	1,173	1,224	191	89	1,149	151
Struct & Imp Store,Shop,Gar	15	0	0	0	0	0	0	0
Struct & Imp Misc	15	0	0	0	0	0	0	0
Collect & Impounding	1	0	0	0	0	0	0	0
Lake, River & Other Intakes	2	1,709	809	895	0	0	0	5
Wells & Springs	2	0	0	0	0	0	0	0
Supply Mains	2	0	0	0	0	0	0	0
Power Generation Equip Othe	6	0	0	0	0	0	0	0
Pump Equip Electric	6	19,194	8,964	9,919	0	0	0	311
Pump Equip Diesel	6	0	0	0	0	0	0	0
Pump Equip Other	6	0	0	0	0	0	0	0
WT Equip Non-Media	2	51,859	24,545	27,164	0	0	0	150
Dist Reservoirs & Standpipe	5	0	0	0	0	0	0	0
Elevated Tanks & Standpipes	5	0	0	0	0	0	0	0
Ground Level Facilities	5	17,660	3,876	0	11,170	0	0	2,614
TD Mains Not Classified by	7	79,306	15,465	0	44,546	0	0	19,295
TD Mains 4 & Less	4	150	29	0	84	0	0	36
TD Mains 6 to 8"	4	1,712	334	0	962	0	0	417
TD Mains 10 to 16"	3	11,886	5,241	5,800	0	0	0	845
TD Mains 18 & Gtr	3	0	0	0	0	0	0	0
Services	10	0	0	0	0	0	0	0
Meters Bronze Case	9	0	0	0	0	0	0	0
Meters Plastic Case	9	0	0	0	0	0	0	0
Meters Other	9	18,286	0	0	0	18,286	0	0
Meters Other-Rem Rdr Unts	9	0	0	0	0	0	0	0
Meter Installations	9	0	0	0	0	0	0	0
Meter Installation Other	9	0	0	0	0	0	0	0
Hydrants	8	12,581	0	0	0	0	0	12,581
Utility Plant Acquisition Adjustment	17	0	0	0	0	0	0	0
Other P/E WT Res Hand Equip	2	0	0	0	0	0	0	0
Other P/E TD	7	0	0	0	0	0	0	0
Other P/E CPS	15	0	0	0	0	0	0	0
Office Furniture & Equip	15	(1,089)	(227)	(237)	(37)	(17)	(223)	(318)
Comp & Periph Equip	15	49,534	10,343	10,789	1,679	783	10,130	14,484
Computer Software	15	0	0	0	0	0	0	0
Comp Software Personal	15	0	0	0	0	0	0	0
Data Handling Equipment	15	0	0	0	0	0	0	0
Other Office Equipment	15	0	0	0	0	0	0	0
Trans Equip Lt Duty Trks	15	9,862	2,059	2,148	334	156	2,017	2,884
Trans Equip Hvy Duty Trks	15	0	0	0	0	0	0	0
Trans Equip Autos	15	6,429	1,342	1,400	218	102	1,315	1,880
Trans Equip Other	15	0	0	0	0	0	0	0
Stores Equipment	15	35	7	8	1	1	7	10
Tools,Shop,Garage Equip	15	5,824	1,216	1,268	197	92	1,191	1,703
Tools,Shop,Garage Equip Oth	15	0	0	0	0	0	0	0
Laboratory Equipment	2	1,401	663	734	0	0	0	4

Schedule C-16-SJFC

MISSOURI-AMERICAN WATER COMPANY
JEFFERSON CITY 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	9,449	1,973	2,058	320	149	1,932	2,763	253
Comm Equip Non-Telephone	15	2,952	616	643	100	47	604	863	79
Comm Equip Telephone	15	0	0	0	0	0	0	0	0
Misc Equipment	15	1,459	305	318	49	23	298	427	39
Total Depreciation Expense		<u>333,053</u>	<u>91,391</u>	<u>77,986</u>	<u>60,217</u>	<u>19,709</u>	<u>18,420</u>	<u>26,338</u>	<u>38,991</u>
Amort-Other UP	18	20,696	6,000	4,661	5,160	958	509	226	3,183
Taxes Other Than Income									
Utility Reg Assessment Fee	19	17,179	5,332	3,384	1,704	455	1,914	3,262	1,127
Property Taxes	18	208,916	60,565	47,048	52,083	9,673	5,139	2,277	32,131
FUTA	16	973	235	250	26	28	178	235	22
FICA	16	53,372	12,889	13,706	1,441	1,510	9,751	12,868	1,206
SUTA	16	1	0	0	0	0	0	0	0
Other Taxes & Licenses	15	(4,467)	(933)	(973)	(151)	(71)	(914)	(1,306)	(120)
Gross Receipts Tax	19	0	0	0	0	0	0	0	0
Total Taxes, Other Than Income		<u>275,974</u>	<u>78,089</u>	<u>63,415</u>	<u>55,103</u>	<u>11,595</u>	<u>16,069</u>	<u>17,336</u>	<u>34,367</u>
Income Taxes	18	174,436	50,569	39,283	43,487	8,076	4,291	1,901	26,828
Utility Income Available for Return	18	632,100	183,246	142,349	157,583	29,266	15,550	6,890	97,217
Total Cost of Service		<u>3,866,659</u>	<u>1,199,404</u>	<u>761,821</u>	<u>383,073</u>	<u>102,457</u>	<u>431,467</u>	<u>735,068</u>	<u>253,369</u>
Less: Other Water Revenues	0	26,568	26,568	0	0	0	0	0	0
Billing and Collecting Services	19	0	0	0	0	0	0	0	0
Total Other Water Revenues		<u>26,568</u>	<u>26,568</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Cost of Service Related to Sales of Water		<u>3,840,091</u>	<u>1,172,836</u>	<u>761,821</u>	<u>383,073</u>	<u>102,457</u>	<u>431,467</u>	<u>735,068</u>	<u>253,369</u>

MISSOURI-AMERICAN WATER COMPANY
 JEFFERSON CITY 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	107,621	68,312	34,388	0	0	(210,321)	
Total		<u>\$ 3,840,091</u>	<u>\$ 1,280,457</u>	<u>\$ 830,133</u>	<u>\$ 417,461</u>	<u>\$ 102,457</u>	<u>\$ 431,467</u>	<u>\$ 735,068</u>	<u>\$ 43,048</u>
			1,139,930			12,276	10,781	125,800	
			1.123			8.35	40.02		
						0.70	3.34	5.84	
								9.87	

MISSOURI-AMERICAN WATER COMPANY
JEFFERSON CITY 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	5,629	1,632	1,272	1,389	260	147	71	857
Franchises	17	0	0	0	0	0	0	0	0
Land & Ld Rights SS	2	0	0	0	0	0	0	0	0
Land & Ld Rights P	6	944	441	488	0	0	0	0	15
Land & Ld Rights WT	2	50,762	24,026	26,589	0	0	0	0	147
Land & Ld Rights TD	7	45,514	8,875	0	25,565	0	0	0	11,074
Land & Land Rights AG	15	7,181	1,499	1,564	243	113	1,469	2,100	192
Struct & Imp SS	2	1,303	617	683	0	0	0	0	4
Struct & Imp P	6	566,719	264,658	292,880	0	0	0	0	9,181
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	1,650,977	781,407	864,782	0	0	0	0	4,788
Struct & Imp WT Nth Pkt (ST)	2	0	0	0	0	0	0	0	0
Struct & Imp WT Ctr Pkt 1	2	0	0	0	0	0	0	0	0
Struct & Imp WT Ctr Pkt 3	2	0	0	0	0	0	0	0	0
Struct & Imp WT Sth Pkt (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	36,051	7,030	0	20,250	0	0	0	8,771
Struct & Imp TD Spec Cross	7	0	0	0	0	0	0	0	0
Struct & Imp Offices	15	143,114	29,882	31,170	4,852	2,261	29,267	41,847	3,835
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	0	0	0	0	0	0	0	0
Collect & Impounding	1	0	0	0	0	0	0	0	0
Lake, River & Other Intakes	2	55,399	26,220	29,018	0	0	0	0	161
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 Pkt (STL)	2	0	0	0	0	0	0	0	0
Supply Mains Ctr Pkt (STL)	2	0	0	0	0	0	0	0	0
Supply Mains Sth Pkt (STL)	2	0	0	0	0	0	0	0	0
Supply Mains Meramec Pkt (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	821,371	383,580	424,485	0	0	0	0	13,306
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 Ctr Pkt	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	1,765,269	835,502	924,648	0	0	0	0	5,119
WT Equip Non-Med North (STL)	2	0	0	0	0	0	0	0	0
WT Equip Non Media Ctr 1 &	2	0	0	0	0	0	0	0	0
WT Equip Non Media Ctr 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

MISSOURI-AMERICAN WATER COMPANY
JEFFERSON CITY 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
WT Equip Filter Media	2	0	0	0	0	0	0	0	0
Dist Reservoirs & Standpipe	5	0	0	0	0	0	0	0	0
Elevated Tanks & Standpipes	5	0	0	0	0	0	0	0	0
Ground Level Facilities	5	954,615	209,538	0	603,794	0	0	0	141,283
TD Mains Not Classified by	7	4,805,578	937,088	0	2,699,293	0	0	0	1,169,197
TD Mains 4 & Less "	4	11,451	2,232	0	6,433	0	0	0	2,786
TD Mains 6 to 8" "	4	128,080	24,963	0	71,955	0	0	0	31,162
TD Mains 10 to 16" "	3	907,683	400,197	442,949	0	0	0	0	64,536
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	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	249,815	0	0	0	0	239,947	0	9,868
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	634,956	0	0	0	634,956	0	0	0
Meters Other-Rem Rdr Units	9	0	0	0	0	0	0	0	0
Meter Installations	9	1,435	0	0	0	1,435	0	0	0
Meter Installation Other	9	0	0	0	0	0	0	0	0
Hydrants	8	639,682	0	0	0	0	0	0	639,682
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	0	0	0	0	0	0	0	0
Other P/E CPS	15	(883)	(184)	(192)	(30)	(14)	(181)	(258)	(24)
Office Furniture & Equip	15	(151,589)	(31,652)	(33,016)	(5,139)	(2,395)	(31,000)	(44,325)	(4,063)
Comp & Periph Equip	15	318,004	66,399	69,261	10,780	5,024	65,032	92,984	8,523
Computer Software	15	109,823	22,931	23,919	3,723	1,735	22,459	32,112	2,943
Comp Software Personal	15	3,079	643	671	104	49	630	900	83
Data Handling Equipment	15	0	0	0	0	0	0	0	0
Other Office Equipment	15	254	53	55	9	4	52	74	7
Trans Equip Lt Duty Trks	15	48,433	10,113	10,549	1,642	765	9,905	14,162	1,298
Trans Equip Hvy Duty Trks	15	0	0	0	0	0	0	0	0
Trans Equip Autos	15	24,322	5,078	5,297	825	384	4,974	7,112	652
Trans Equip Other	15	0	0	0	0	0	0	0	0
Stores Equipment	15	1,053	220	229	36	17	215	308	28
Tools,Shop,Garage Equip	15	53,959	11,267	11,752	1,829	853	11,035	15,778	1,446
Tools,Shop,Garage Equip Oth	15	0	0	0	0	0	0	0	0
Laboratory Equipment	2	32,922	15,582	17,245	0	0	0	0	95
Laboratory Equip Other	2	0	0	0	0	0	0	0	0
Power Operated Equipment	15	(18,804)	(3,926)	(4,096)	(637)	(297)	(3,845)	(5,498)	(504)
Comm Equip Non-Telephone	15	31,479	6,573	6,856	1,067	497	6,437	9,204	844
Comm Equip Telephone	15	664	139	145	23	10	136	194	18

Schedule C-20-SJFC

MISSOURI-AMERICAN WATER COMPANY
JEFFERSON CITY 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 Equipment	15	38,967	8,136	8,487	1,321	616	7,969	11,394	1,044
Other Tangible Property	17	0	0	0	0	0	0	0	0
Total Utility Plant in Service		13,975,211	4,050,759	3,157,690	3,449,327	646,274	364,646	178,159	2,128,355
Other Rate Base Items									
Add:									
Other Utility Plant Adjustments	17	0	0	0	0	0	0	0	0
Cash Working Capital	15	(87,624)	(18,296)	(19,085)	(2,970)	(1,384)	(17,919)	(25,621)	(2,348)
Materials and Supplies	15	196,676	41,066	42,836	6,667	3,107	40,220	57,508	5,271
Prepayments	15	39	8	8	1	1	8	11	1
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
Less:									
Accumulated Deferred ITC (3%)	17	(2,425,741)	(703,465)	(547,975)	(598,673)	(112,069)	(63,312)	(30,807)	(369,440)
Deferred Income Taxes	17	(2,179,473)	(632,047)	(492,343)	(537,894)	(100,692)	(56,884)	(27,679)	(331,934)
Pensions	16	(210,755)	(50,897)	(54,122)	(5,690)	(5,964)	(38,505)	(50,813)	(4,763)
Total Other Rate Base Elements		(4,706,878)	(1,363,631)	(1,070,680)	(1,138,559)	(217,002)	(136,392)	(77,401)	(703,214)
Total Original Cost Measure of Value		\$ 9,268,333	\$ 2,687,128	\$ 2,087,010	\$ 2,310,768	\$ 429,273	\$ 228,254	\$ 100,758	\$ 1,425,142

T&D OP BASIS FOR FACTOR 11	37,499	4,751	0	13,685	13,135	0	0	5,928
FACTOR 11		0.1266	0.0000	0.3649	0.3504	0.0000	0.0000	0.1581
T&D Mnt BASIS FOR FACTOR 12	89,071	2,208	0	6,359	0	74,679	0	5,826
FACTOR 12		0.0248	0.0000	0.0714	0.0000	0.8384	0.0000	0.0654
A&G BASIS FOR FACTOR 15	899,898	187,796	196,125	30,470	14,204	184,027	263,139	24,136
FACTOR 15		0.2088	0.2178	0.0339	0.0158	0.2045	0.2924	0.0268
LABOR BASIS FOR FACTOR 16	698,552	168,671	179,377	18,843	19,769	127,659	168,450	15,782
FACTOR 16		0.2415	0.2568	0.0270	0.0283	0.1827	0.2411	0.0226
UPIS BASIS FOR FACTOR 17	13,969,582	4,049,127	3,156,418	3,447,938	646,014	364,499	178,088	2,127,498
FACTOR 17		0.2900	0.2259	0.2468	0.0462	0.0261	0.0127	0.1523
RATE BASE BASIS FOR FACTOR 18	9,268,333	2,687,128	2,087,010	2,310,768	429,273	228,254	100,758	1,425,142
FACTOR 18		0.2899	0.2252	0.2493	0.0463	0.0246	0.0109	0.1538
TOTAL COS BASIS FOR FACTOR 19	3,843,098	1,192,739	757,046	381,153	101,901	428,248	729,939	252,071
FACTOR 19		0.3104	0.1970	0.0992	0.0265	0.1114	0.1899	0.0656
TOTAL COS BASIS FOR FACTOR 20	2,330,938	1,192,739	757,046	381,153	0	0	0	0
FACTOR 20		0.5117	0.3248	0.1635	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	0.9940	-	-	-	-	-	0.0060
2	0.4733	0.5238	-	-	-	-	0.0029

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	Base	Max Day	Max Hour	Meters	Services	Billing & Collecting	Fire Service
3	0.4409	0.4880	-	-	-	-	0.0711
4	0.1949	-	0.5618	-	-	-	0.2433
5	0.2195	-	0.6325	-	-	-	0.1480
6	0.4670	0.5168	-	-	-	-	0.0162
7	0.1950	-	0.5617	-	-	-	0.2433
8	-	-	-	-	-	-	1.0000
9	-	-	-	1.0000	-	-	-
10	-	-	-	-	0.9605	-	0.0395
11	0.1266	-	0.3649	0.3504	-	-	0.1581
12	0.0248	-	0.0714	-	0.8384	-	0.0654
13	-	-	-	-	-	0.9907	0.0093
14	-	-	-	-	-	1.0000	-
15	0.2088	0.2178	0.0339	0.0158	0.2045	0.2924	0.0268
16	0.2415	0.2568	0.0270	0.0283	0.1827	0.2411	0.0226
17	0.2900	0.2259	0.2468	0.0462	0.0261	0.0127	0.1523
18	0.2899	0.2252	0.2493	0.0463	0.0246	0.0109	0.1538
19	0.3104	0.1970	0.0992	0.0265	0.1114	0.1899	0.0656
20	0.5117	0.3248	0.1635	-	-	-	-

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 (1)	Average Daily Consumption, Thousand Gallons (2)	Allocation Factor (3)
Residential	1,484	0.4722
Commercial	1,310	0.4168
Industrial	273	0.0870
Other Public Authority	56	0.0180
Sales for Resale	0	0.0000
Private Fire Protection	2	0.0006
Public Fire Protection	17	0.0054
Total	3,142	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 0.4762	Allocation Factor (4)	Weighted Factor (5)=(4)x 0.5238	
Residential	0.4722	0.2249	0.5653	0.2960	0.5209
Commercial	0.4168	0.1985	0.3665	0.1920	0.3905
Industrial	0.0870	0.0414	0.0521	0.0273	0.0687
Other Public Authority	0.0180	0.0086	0.0161	0.0084	0.0170
Sales for Resale	0.0000	0.0000	0.0000	0.0000	0.0000
Private Fire Protection	0.0006	0.0003			0.0003
Public Fire Protection	0.0054	0.0026			0.0026
Total	1.0000	0.4763	1.0000	0.5237	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	Average Daily Consumption, Thousand Gal.	Maximum Day Extra Capacity		
		Factor*	Rate of Flow, Thousand Gal. Per Day (4)=(2)x(3)	Allocation Factor (5)
(1)	(2)	(3)	(4)	(5)
Residential	1,484	1.00	1,484	0.5653
Commercial	1,282	0.75	962	0.3665
Industrial	273	0.50	137	0.0521
Other Public Authority	56	0.75	42	0.0161
Sales for Resale	0	0.90	0	0.0000
Total	3,096		2,624	1.0000

The weighting of the factors is based on the maximum day ratio of 2.10, 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	0.4762
Maximum Day Extra Capacity	1.10	0.5238
Total	2.10	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 0.4436	(4)	(5)=(4) X 0.4880	(6)	(7)=(6) X 0.0684	(8)=(3)+(5)+(7)
Residential	0.4722	0.2094	0.5653	0.2758			0.4852
Commercial	0.4168	0.1849	0.3665	0.1789			0.3638
Industrial	0.0870	0.0386	0.0521	0.0254			0.0640
Other Public Authority	0.0180	0.0080	0.0161	0.0079			0.0159
Sales for Resale	0.0000	0.0000	0.0000	0.0000			0.0000
Private Fire Protection	0.0006	0.0003			0.1160	0.0079	0.0082
Public Fire Protection	0.0054	0.0024			0.8840	0.0605	0.0629
Total	<u>1.0000</u>	<u>0.4436</u>	<u>1.0000</u>	<u>0.4880</u>	<u>1.0000</u>	<u>0.0684</u>	<u>1.0000</u>

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 2.10 and the average daily system sendout for 2002 of 3.5 MGD. The system demand for fire protection is 3,000 Gallons per minute for 3 hours.

	<u>Ratio</u>	<u>Rate of Flow, (GPD)</u>	<u>Weight</u>
Average Day	1.00	3,500,000	0.4436
Maximum Day Extra Capacity	<u>1.10</u>	<u>3,850,000</u>	<u>0.4880</u>
Subtotal	<u>2.10</u>	7,350,000	0.9316
Fire Protection		<u>540,000</u>	<u>0.0684</u>
Total		<u>7,890,000</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).

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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 0.1961	(5)	(6)=(5) X 0.5617	(7)	(8)=(7) X 0.2421	(9)=(4)+(6)+(8)
Residential	61.8	0.4722	0.0926	0.5855	0.3289			0.4216
Commercial	54.6	0.4168	0.0817	0.3615	0.2031			0.2848
Industrial	11.4	0.0870	0.0171	0.0370	0.0208			0.0379
Other Public Authority	2.4	0.0180	0.0035	0.0159	0.0089			0.0124
Sales for Resale	0.0	0.0000	0.0000	0.0000	0.0000			0.0000
Private Fire Protection	0.1	0.0006	0.0001			0.1160	0.0281	0.0282
Public Fire Protection	0.7	0.0054	0.0011			0.8840	0.2140	0.2151
Total	130.9	1.0000	0.1961	0.9999	0.5617	1.0000	0.2421	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.

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 2.840 and the average daily system sendout for 2002 of 3,500 MGD. The system demand for fire protection is 3,000 gallons per minute.

	Ratio	Rate of Flow, (GPM)	Weight
Average Hour	1.00	2,431	0.1961
Maximum Hour			
Extra Capacity	<u>2.86</u>	<u>6,962</u>	<u>0.5617</u>
Subtotal	<u>3.86</u>	9,393	0.7578
Fire Protection		<u>3,000</u>	<u>0.2421</u>
Total		<u>12,393</u>	<u>0.9999</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	61.8	3.5	216.4	0.5855
Commercial	53.4	2.5	133.6	0.3615
Industrial	11.4	1.2	13.7	0.0370
Other Public Authority	2.4	2.5	5.9	0.0159
Sales for Resale	<u>0.0</u>	3.2	<u>0.0</u>	<u>0.0000</u>
Total	<u>129.0</u>		<u>369.5</u>	<u>0.9999</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	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	(5)	(6)=(5) X	(7)	(8)=(7) X	(9)=(4)+(6)+(8)
			0.2208		0.6325		0.1467	
Residential	61.8	0.4722	0.1043	0.5855	0.3704			0.4747
Commercial	54.6	0.4168	0.0920	0.3615	0.2286			0.3206
Industrial	11.4	0.0870	0.0192	0.0370	0.0234			0.0426
Other Public Authority	2.4	0.0180	0.0040	0.0159	0.0101			0.0141
Sales for Resale	0.0	0.0000	0.0000	0.0000	0.0000			0.0000
Private Fire Protection	0.1	0.0006	0.0001			0.1160	0.0170	0.0171
Public Fire Protection	0.7	0.0054	0.0012			0.8840	0.1297	0.1309
Total	130.9	1.0000	0.2208	0.9999	0.6325	1.0000	0.1467	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.

$$\text{Fire Protection Weight} = \frac{3,000 \text{ GPM} \times 60 \text{ Min.} \times 3 \text{ Hrs.}}{3,680,000 \text{ Gallons}} = 0.1467$$

$$\text{General Service Weight} = 1.0000 - 0.1467 = 0.8533$$

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	25.88	0.2208
Extra Capacity Maximum Hour	<u>2.86</u>	<u>74.12</u>	<u>0.6325</u>
Total	3.86	100.00	<u><u>0.8533</u></u>

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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 (3)=(2)X	Allocation Factor 3	Weighted Factor (5)=(4)X	Allocation Factor 4	Weighted Factor (7)=(6)X	
(1)	(2)	(3)=(2)X	(4)	(5)=(4)X	(6)	(7)=(6)X	(8)=(3)+(5)+(7)
		0.8042		0.1958		0.0000	
Residential	0.5209	0.4190	0.4852	0.0951	0.4216	0.0000	0.5141
Commercial	0.3905	0.3140	0.3638	0.0712	0.2848	0.0000	0.3852
Industrial	0.0687	0.0552	0.0640	0.0125	0.0379	0.0000	0.0677
Other Public Authority	0.0170	0.0137	0.0159	0.0031	0.0124	0.0000	0.0168
Sales for Resale	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Private Fire Protection	0.0003	0.0002	0.0082	0.0016	0.0282	0.0000	0.0018
Public Fire Protection	0.0026	0.0021	0.0629	0.0123	0.2151	0.0000	0.0144
Total	1.0000	0.8042	1.0000	0.1958	1.0000	0.0000	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	1,160	0.8042
Associated with Maximum Day and Fire	283	0.1958
Associated with Maximum Hour	0	0.0000
Total	1,443	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	0.4853	0.0000	0.4216	0.4216	0.4216
Commercial	0.3638	0.0000	0.2848	0.2848	0.2848
Industrial	0.0640	0.0000	0.0379	0.0379	0.0379
Other Public Authority	0.0159	0.0000	0.0124	0.0124	0.0124
Sales for Resale	0.0000	0.0000	0.0000	0.0000	0.0000
Private Fire Protection	0.0082	0.0000	0.0282	0.0282	0.0282
Public Fire Protection	0.0629	0.0000	0.2151	0.2151	0.2151
Total	1.0001	0.0000	1.0000	1.0000	1.0000

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	114,360	0.0000
Distribution Mains	644,570	0.0000
Total	758,930	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.

Customer Classification (1)	Allocation Factor (3)
Public Fire Protection	1.0000
Total	1.0000

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 (1)	5/8" Dollar Equivalents (2)	Allocation Factor (3)
Residential	8,942	0.7284
Commercial	3,048	0.2483
Industrial	110	0.0090
Other Public Authority	175	0.0143
Sales for Resale	0	0.0000
Private Fire	0	0.0000
Total	12,276	1.0000

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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	8,876	0.7908
Commercial	1,812	0.1614
Industrial	25	0.0022
Other Public Authority	69	0.0061
Sales for Resale	0	0.0000
Private Fire Protection	<u>444</u>	<u>0.0395</u>
Total	11,225	<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 <u>(1)</u>	Transmission & Distribution Operating Expenses <u>(2)</u>	Allocation Factor <u>(3)</u>
Residential	\$ 19,839	0.5291
Commercial	10,200	0.2720
Industrial	1,042	0.0278
Other Public Authority	490	0.0131
Sales for Resale	-	0.0000
Private Fire Protection	687	0.0183
Public Fire Protection	5,241	0.1398
Total	<u>37,499</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 <u>(1)</u>	Transmission & Distribution Maintenance Expenses <u>(2)</u>	Allocation Factor <u>(3)</u>
Residential	\$ 66,258	0.7439
Commercial	15,773	0.1771
Industrial	600	0.0067
Other Public Authority	615	0.0069
Sales for Resale	-	0.0000
Private Fire Protection	3,390	0.0381
Public Fire Protection	2,435	0.0273
Total	<u>\$89,071</u>	<u>1.0000</u>

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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 <u> </u> (1)	Total Customers <u> </u> (2)	Allocation Factor <u> </u> (3)
Residential	8,853	0.8446
Commercial	1,478	0.1410
Industrial	13	0.0012
Other Public Authority	41	0.0039
Sales for Resale	0	0.0000
Private Fire Protection	98	0.0093
Public Fire Protection	<u>0</u>	<u>0.0000</u>
 Total	 <u><u>10,483</u></u>	 <u><u>1.0000</u></u>

FACTOR 14.

ALLOCATION OF METER READING COSTS.

Factors are based on the number of metered customers.

Customer Classification <u> </u> (1)	Total Metered Customers <u> </u> (2)	Allocation Factor <u> </u> (3)
Residential	8,853	0.8524
Commercial	1,478	0.1423
Industrial	13	0.0013
Other Public Authority	41	0.0040
Sales for Resale	<u>0</u>	<u>0.0000</u>
 Total	 <u><u>10,385</u></u>	 <u><u>1.0000</u></u>

MISSOURI-AMERICAN WATER COMPANY
JEFFERSON CITY 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	\$604,104	0.6714
Commercial	233,564	0.2595
Industrial	28,645	0.0318
Other Public Authority	9,449	0.0105
Sales for Resale	0	0.0000
Private Fire Protection	11,292	0.0125
Public Fire Protection	12,844	0.0143
 Total	 \$899,898	 1.0000

**MISSOURI-AMERICAN WATER COMPANY
JEFFERSON CITY 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.

<u>Customer Classification</u> (1)	<u>Direct Labor Expense</u> (2)	<u>Allocation Factor</u> (3)
Residential	\$455,678	0.6522
Commercial	193,622	0.2772
Industrial	25,471	0.0365
Other Public Authority	7,999	0.0115
Sales for Resale	0	0.0000
Private Fire Protection	7,422	0.0106
Public Fire Protection	8,360	0.0120
Total	\$698,552	1.0000

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:

<u>Customer Classification</u> (1)	<u>Original Cost Less Depreciation</u> (2)	<u>Allocation Factor</u> (3)
Residential	\$6,649,582	0.4759
Commercial	4,348,168	0.3113
Industrial	653,293	0.0468
Other Public Authority	191,041	0.0137
Sales for Resale	0	0.0000
Private Fire Protection	186,567	0.0134
Public Fire Protection	1,940,931	0.1389
Total	\$13,969,582	1.0000

**MISSOURI-AMERICAN WATER COMPANY
JEFFERSON CITY 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 <hr/> (1)	Original Cost Measure of Value <hr/> (2)	Allocation Factor <hr/> (3)
Residential	\$4,396,429	0.4743
Commercial	2,886,205	0.3114
Industrial	433,809	0.0468
Other Public Authority	126,748	0.0137
Sales for Resale	0	0.0000
Private Fire Protection	124,062	0.0134
Public Fire Protection	<u>1,301,079</u>	<u>0.1404</u>
Total	<u><u>\$9,268,333</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 <hr/> (1)	Total Cost of Service <hr/> (2)	Allocation Factor <hr/> (3)
Residential	\$2,266,913	0.5900
Commercial	1,116,536	0.2905
Industrial	160,671	0.0418
Other Public Authority	46,907	0.0122
Sales for Resale	0	0.0000
Private Fire Protection	42,777	0.0111
Public Fire Protection	<u>209,294</u>	<u>0.0545</u>
Total	<u><u>\$3,843,098</u></u>	<u><u>1.0001</u></u>

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

Meter Size	5/8" Dollar Equivalent	Residential		Commercial		Industrial		Other Public Authority		Interruptible		Total	
		Number of Meters	Weighting	Number of Meters	Weighting	Number of Meters	Weighting	Number of Meters	Weighting	Number of Meters	Weighting	Number of Meters	Weighting
(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	8,751.25	8,751.25	886.17	886.17	3.00	3.00	10.00	10.00	0.00	0.00	9,650.42	9,650.42
3/4	1.3	1.00	1.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	1.30
1	1.7	92.83	157.82	298.08	506.74	2.00	3.40	6.00	10.20	0.00	0.00	398.92	678.16
1-1/2	3.5	2.58	9.04	89.50	313.25	0.00	0.00	4.00	14.00	0.00	0.00	96.08	336.29
2	4.3	5.33	22.93	179.00	769.70	4.00	17.20	18.67	80.27	0.00	0.00	207.00	890.10
3	19.0	0.00	0.00	16.25	308.75	3.00	57.00	1.67	31.67	0.00	0.00	20.92	397.42
4	29.3	0.00	0.00	9.00	263.70	1.00	29.30	1.00	29.30	0.00	0.00	11.00	322.30
6	48.4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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>8,853.00</u>	<u>8,942.34</u>	<u>1,478.00</u>	<u>3,048.31</u>	<u>13.00</u>	<u>109.90</u>	<u>41.33</u>	<u>175.43</u>	<u>0.00</u>	<u>0.00</u>	<u>10,385.33</u>	<u>12,275.98</u>

**MISSOURI-AMERICAN WATER COMPANY
JEFFERSON CITY 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	8,752.25	8,752.25	886.17	886.17	3.00	3.00	10.00	10.00	0.00	0.00	0.00	0.00	9,651.42	9,651.42
1	1.17	92.83	108.62	298.08	348.76	2.00	2.34	6.00	7.02	0.00	0.00	0.00	0.00	398.92	466.73
1-1/2	1.58	2.58	4.08	89.50	141.41	0.00	0.00	4.00	6.32	0.00	0.00	0.00	0.00	96.08	151.81
2	2.04	5.33	10.88	179.00	365.16	4.00	8.16	18.67	38.08	0.00	0.00	1.00	2.04	208.00	424.32
3	2.73	0.00	0.00	16.25	44.36	3.00	8.19	1.67	4.55	0.00	0.00	1.00	2.73	21.92	59.83
4	2.88	0.00	0.00	9.00	25.92	1.00	2.88	1.00	2.88	0.00	0.00	24.00	69.12	35.00	100.80
6	4.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	48.00	203.52	48.00	203.52
8	6.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.00	118.66	17.00	118.66
10	9.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.00	47.50	5.00	47.50
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>8,853.00</u>	<u>8,875.83</u>	<u>1,478.00</u>	<u>1,811.78</u>	<u>13.00</u>	<u>24.57</u>	<u>41.33</u>	<u>68.85</u>	<u>0.00</u>	<u>0.00</u>	<u>96.00</u>	<u>443.57</u>	<u>10,481.33</u>	<u>11,224.59</u>

MISSOURI-AMERICAN WATER COMPANY
JEFFERSON CITY 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	1	9	
4 -inch	16.00	24	384	
6 -inch	36.00	48	1,728	
8 -inch	64.00	17	1,088	
10 -inch	100.00	5	500	
12 -inch	144.00	0	0	
Private Hydrants	32.75	2	66	
Total Private Fire Protection		98	3,779	0.1160
<u>PUBLIC FIRE PROTECTION</u>				
Hydrant	Nozzle Sizes			
6" Valve	2- 2-1/2" & 1- 4.5"	32.75	877	28,722
2 -inch Fire Line		4.00	13	52
4 -inch Fire Line		16.00	1	16
Total Public Fire Protection		891	28,790	0.8840
Total Fire Protection		989	32,569	1.0000

MISSOURI-AMERICAN WATER COMPANY
 JOPLIN 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	\$ 3,558,583	52.8%	\$ 4,183,872	51.9%	\$ 3,558,582	52.8%	\$ (625,290)	-14.9%
Commercial	1,339,069	19.8%	\$ 1,647,603	20.4%	\$ 1,339,069	19.9%	(308,534)	-18.7%
Industrial	1,215,316	18.0%	\$ 1,410,520	17.5%	\$ 1,215,316	18.0%	(195,204)	-13.8%
Public Authority	149,852	2.2%	\$ 207,180	2.6%	\$ 149,853	2.2%	(57,327)	-27.7%
Sales for Resale	336,944	5.0%	\$ 423,521	5.2%	\$ 336,944	5.0%	(86,577)	-20.4%
Private Fire Service	134,728	2.0%	\$ 196,627	2.4%	\$ 134,729	1.9%	(61,898)	-31.5%
Public Fire Service	-	0.0%	-	0.0%	-	0.0%	-	-
Total Sales	6,734,492	<u>99.8%</u>	8,069,323	<u>100.0%</u>	6,734,493	<u>99.8%</u>	(1,334,830)	-16.5%
Other Revenues	170,992		170,992		170,992		-	0.0%
Total	<u>\$ 6,905,484</u>		<u>\$ 8,240,315</u>		<u>\$ 6,905,485</u>		<u>\$ (1,334,830)</u>	-16.2%
True-Up Estimate	\$520,589				\$520,589		\$520,589	
Total w/ True-up	<u>7,426,073</u>				<u>\$ 7,426,074</u>		<u>\$ (814,241)</u>	-9.9%

Schedule A-1-STOP

**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: Joplin

Case No. WR-2003-0500
STAFF - JOPLIN
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	1,406,832	\$4,183,872	1,406,832	\$3,558,582	(\$625,290)	-14.95%
5	Commercial	975,470	1,647,603	975,470	1,339,069	(308,534)	-18.73%
6	Industrial	1,668,258	1,410,520	1,668,258	1,215,316	(195,204)	-13.84%
7	Other Public Authority	114,029	207,180	114,029	149,853	(57,327)	-27.67%
8	Other Water Utilities	318,678	423,521	318,678	336,944	(86,577)	-20.44%
9	Miscellaneous	0	0	0	0	0	0.00%
10	Private Fire	0	196,627	0	134,729	(61,898)	-31.48%
11	Public Fire	0	0	0	0	0	0.00%
12	Total	<u>4,483,266</u>	<u>8,069,323</u>	<u>4,483,266</u>	<u>6,734,493</u>	<u>(\$1,334,830)</u>	<u>-16.54%</u>
13							
14							
15	Miscellaneous Revenues:						
16							
17	Reconnect Charges		12,720		12,720	0	0.00%
18	Returned Check Charge		4,683		4,683	0	0.00%
19	Application Fee		148,840		148,840	0	0.00%
20	Miscellaneous Other Revenue		4,749		4,749	0	0.00%
21	Rents from Water Property		0		0	0	0.00%
22							
23							
24			<u>\$8,240,315</u>		<u>\$6,905,485</u>	<u>(1,334,830)</u>	<u>-16.20%</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: Joplin

Case No. WR-2003-0500
STAFF - JOPLIN
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	208,286		\$7.08	\$1,474,665	208,286		\$ 8.14	\$1,694,710	\$220,045	14.92%
5	3/4" Monthly	197		9.06	1,785	197		\$ 8.68	1,710	(75)	-4.20%
6	1" Monthly	23,981		12.84	307,916	23,981		\$ 9.69	232,312	(75,604)	-24.55%
7	1-1/2" Monthly	17		22.33	380	17		\$ 13.63	232	(148)	-38.95%
8	2" Monthly	176		33.71	5,933	176		\$ 15.84	2,788	(3,145)	-53.01%
9	3" Monthly	0		60.24	0	0		\$ 43.66	0	0	0.00%
10	4" Monthly	0		98.15	0	0		\$ 62.61	0	0	0.00%
11	6" Monthly	0		192.93	0	0		\$ 99.52	0	0	0.00%
12	8" Monthly	0		306.65	0	0		\$ 221.11	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		1,403,493	\$1.7029	2,390,008		1,403,493	\$1.1564	1,622,969	(767,039)	-32.09%
19	Second Block		3,339	0.9540	3,185		3,339	1.1564	3,861	676	21.22%
20	Third Block		0	0.7363	0		0	1.1564	0	0	0.00%
21	Fourth Block		0	0.4957	0		0	1.1564	0	0	0.00%
22											
23											
24	Total		<u>1,406,832</u>		<u>\$4,183,872</u>		<u>1,406,832</u>		<u>\$3,558,582</u>	<u>(\$625,290)</u>	<u>-14.95%</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: Joplin

Case No. WR-2003-0500
STAFF - JOPLIN
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	25,326		\$7.08	\$179,308	25,326		\$ 8.14	\$206,064	\$26,756	14.92%
5	3/4" Monthly	157		9.06	1,422	157		\$ 8.68	1,363	(59)	-4.15%
6	1" Monthly	6,028		12.84	77,400	6,028		\$ 9.69	58,395	(19,005)	-24.55%
7	1-1/2" Monthly	203		22.33	4,533	203		\$ 13.63	2,767	(1,766)	-38.96%
8	2" Monthly	3,290		33.71	110,906	3,290		\$ 15.84	52,117	(58,789)	-53.01%
9	3" Monthly	0		60.24	0	0		\$ 43.66	0	0	0.00%
10	4" Monthly	110		98.15	10,797	110		\$ 62.61	6,887	(3,910)	-36.21%
11	6" Monthly	66		192.93	12,733	66		\$ 99.52	6,568	(6,165)	-48.42%
12	8" Monthly	4		306.65	1,227	4		\$ 221.11	884	(343)	-27.95%
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		483,167	\$1.6931	818,050		483,167	\$1.0293	497,310	(320,740)	-39.21%
19	Second Block		390,065	0.9485	369,977		390,065	1.0293	401,483	31,506	8.52%
20	Third Block		45,407	0.7320	33,238		45,407	1.0293	46,736	13,498	40.61%
21	Fourth Block		56,831	0.4929	28,012		56,831	1.0293	58,495	30,483	108.82%
22											
23											
24	Total		<u>975,470</u>		<u>\$1,647,603</u>		<u>975,470</u>		<u>\$1,339,069</u>	<u>(\$308,534)</u>	<u>-18.73%</u>
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Schedule B-3-SJOP

**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: Joplin

Case No. WR-2003-0500
STAFF - JOPLIN
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	108		\$7.08	\$765	108		\$ 8.14	\$879	\$114	14.90%
5	3/4" Monthly	24		9.06	217	24		\$ 8.68	208	(9)	-4.15%
6	1" Monthly	202		12.84	2,594	202		\$ 9.69	1,957	(637)	-24.56%
7	1-1/2" Monthly	24		22.33	536	24		\$ 13.63	327	(209)	-38.99%
8	2" Monthly	427		33.71	14,394	427		\$ 15.84	6,764	(7,630)	-53.01%
9	3" Monthly	0		60.24	0	0		\$ 43.66	0	0	0.00%
10	4" Monthly	192		98.15	18,845	192		\$ 62.61	12,020	(6,825)	-36.22%
11	6" Monthly	73		192.93	14,084	73		\$ 99.52	7,265	(6,819)	-48.42%
12	8" Monthly	14		306.65	4,293	14		\$ 221.11	3,096	(1,197)	-27.88%
13	10" Monthly	0		520.92	0	0		0.00	0	0	0.00%
14	12" Monthly	1		859.27	859	1		0.00	0	(859)	-100.00%
15											
16											
17	<u>Volumetric Charges:</u>										
18	First Block		47,541	\$2.1352	101,510		47,541	\$0.7090	33,707	(67,803)	-66.79%
19	Second Block		327,504	1.1961	391,728		327,504	0.7090	232,201	(159,527)	-40.72%
20	Third Block		188,503	0.9231	174,007		188,503	0.7090	133,649	(40,358)	-23.19%
21	Fourth Block		1,104,710	0.6216	686,688		1,104,710	0.7090	783,243	96,555	14.06%
22											
23											
24	Total		<u>1,668,258</u>		<u>\$1,410,520</u>		<u>1,668,258</u>		<u>\$1,215,316</u>	<u>(\$195,204)</u>	<u>-13.84%</u>
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Schedule B-4-SOP

**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: Joplin

Case No. WR-2003-0500
STAFF - JOPLIN
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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	445		\$7.08	\$3,151	445		\$ 8.14	\$3,621	\$470	14.92%
5	3/4" Monthly	34		9.06	308	34		\$ 8.68	295	(13)	-4.22%
6	1" Monthly	559		12.84	7,178	559		\$ 9.69	5,415	(1,763)	-24.56%
7	1-1/2" Monthly	36		22.33	804	36		\$ 13.63	491	(313)	-38.93%
8	2" Monthly	612		33.71	20,631	612		\$ 15.84	9,695	(10,936)	-53.01%
9	3" Monthly	0		60.24	0	0		\$ 43.66	0	0	0.00%
10	4" Monthly	48		98.15	4,711	48		\$ 62.61	3,005	(1,706)	-36.21%
11	6" Monthly	0		192.93	0	0		\$ 99.52	0	0	0.00%
12	8" Monthly	48		306.65	14,719	48		\$ 221.11	10,613	(4,106)	-27.90%
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		45,806	\$1.8663	85,487		45,806	\$1.0236	46,886	(38,601)	-45.15%
19	Second Block		64,368	1.0455	67,297		64,368	1.0236	65,886	(1,411)	-2.10%
20	Third Block		3,036	0.8068	2,449		3,036	1.0236	3,108	659	26.91%
21	Fourth Block		819	0.5433	445		819	1.0236	838	393	88.31%
22											
23											
24	Total		<u>114,029</u>		<u>\$207,180</u>		<u>114,029</u>		<u>\$149,853</u>	<u>(\$57,327)</u>	<u>-27.67%</u>
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Schedule B-5-SJOP

**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: Joplin

Case No. WR-2003-0500
STAFF - JOPLIN
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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		\$ 8.14	\$0	\$0	0.00%
5	3/4" Monthly	0		9.06	0	0		\$ 8.68	0	0	0.00%
6	1" Monthly	13		12.84	167	13		\$ 9.69	126	(41)	-24.55%
7	1-1/2" Monthly	0		22.33	0	0		\$ 13.63	0	0	0.00%
8	2" Monthly	129		33.71	4,349	129		\$ 15.84	2,043	(2,306)	-53.02%
9	3" Monthly	0		60.24	0	0		\$ 43.66	0	0	0.00%
10	4" Monthly	2		98.15	196	2		\$ 62.61	125	(71)	-36.22%
11	6" Monthly	22		192.93	4,244	22		\$ 99.52	2,189	(2,055)	-48.42%
12	8" Monthly	23		306.65	7,053	23		\$ 221.11	5,086	(1,967)	-27.89%
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		16,074	\$2.6169	42,064		16,074	\$1.0273	16,513	(25,551)	-60.74%
19	Second Block		143,115	1.4660	209,807		143,115	1.0273	147,021	(62,786)	-29.93%
20	Third Block		92,383	1.1313	104,513		92,383	1.0273	94,904	(9,609)	-9.19%
21	Fourth Block		67,106	0.7619	51,128		67,106	1.0273	68,937	17,809	34.83%
22											
23											
24	Total		<u>318,678</u>		<u>\$423,521</u>		<u>318,678</u>		<u>\$336,944</u>	<u>(\$86,577)</u>	<u>-20.44%</u>
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Schedule B-6-SJOP

**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: Joplin

Case No. WR-2003-0500
STAFF - JOPLIN
Page 6 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	Miscellaneous:										
3	<u>Minimum Charge:</u>										
4	5/8" Monthly	0		\$7.08	\$0	0		\$ 8.14	\$0	\$0	0.00%
5	3/4" Monthly	0		9.06	0	0		\$ 8.68	0	0	0.00%
6	1" Monthly	0		12.84	0	0		\$ 9.69	0	0	0.00%
7	1-1/2" Monthly	0		22.33	0	0		\$ 13.63	0	0	0.00%
8	2" Monthly	0		33.71	0	0		\$ 15.84	0	0	0.00%
9	3" Monthly	0		60.24	0	0		\$ 43.66	0	0	0.00%
10	4" Monthly	0		98.15	0	0		\$ 62.61	0	0	0.00%
11	6" Monthly	0		192.93	0	0		\$ 99.52	0	0	0.00%
12	8" Monthly	0		306.65	0	0		\$ 221.11	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</u>	<u>0.00%</u>
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Schedule B-7-SJOP

**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: Joplin

Case No. WR-2003-0500
STAFF - JOPLIN
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	3	\$669.24	\$2,008	458.56	\$1,376	(\$632)	-31.47%
5								
6	2"	5	95.88	479	65.70	328	(151)	-31.52%
7								
8	3"	0	164.76	0	112.89	0	0	0.00%
9								
10	4"	28	261.48	7,321	179.17	5,017	(2,304)	-31.47%
11								
12	6"	157	536.28	84,196	367.46	57,691	(26,505)	-31.48%
13								
14	8"	102	922.68	94,113	632.22	64,486	(29,627)	-31.48%
15								
16	10"	6	1,418.28	8,510	971.80	5,831	(2,679)	-31.48%
17								
18	12"	0	2,022.24	0	1,385.63	0	0	0.00%
19								
20								
21								
22	Total	<u>301</u>		<u>\$196,627</u>		<u>\$134,729</u>	<u>(\$61,898)</u>	<u>-31.48%</u>
23								
24								
25								
26	Public Fire Protection:							
27								
28	Public Fire Hydrants	<u>1,469</u>	0.00	<u>0</u>	0.00	<u>0</u>	<u>0</u>	<u>0.00%</u>
29								

MISSOURI-AMERICAN WATER COMPANY
 JOPLIN 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	0.0
Labor & Exp Oper SS	2	14,837	5,193	3,218	4,847	377	1,126	16	59	0	0.0
Purchased Water	1	0	0	0	0	0	0	0	0	0	0.0
TOTAL SS EXPENSE - OPERATION		14,837	5,193	3,218	4,847	377	1,126	16	59	0	0.0
Misc Exp Oper SS	2	0	0	0	0	0	0	0	0	0	0.0
Misc Exp Oper SS	2	3,374	1,181	732	1,102	86	256	4	13	0	0.0
Rents Oper SS	2	5,705	1,997	1,237	1,864	145	433	6	23	0	0.0
Super & Eng Maint SS	2	0	0	0	0	0	0	0	0	0	0.0
Struct & Improve Maint SS	2	0	0	0	0	0	0	0	0	0	0.0
Struct & Improve Maint SS	2	128	45	28	42	3	10	0	1	0	0.0
Collect & Impound Maint SS	2	0	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	0.0
Lake, River & Oth Maint SS	2	0	0	0	0	0	0	0	0	0	0.0
Wells & Springs Maint SS	2	0	0	0	0	0	0	0	0	0	0.0
Wells & Springs Maint SS	2	0	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	0.0
Supply Mains Maint SS	2	0	0	0	0	0	0	0	0	0	0.0
Misc Plant Maint SS	2	9,812	3,434	2,128	3,206	249	745	11	39	0	0.0
Misc Plant Maint SS	2	10,795	3,778	2,341	3,527	274	819	12	43	0	0.0
TOTAL SS EXPENSE - MAINTENANCE		29,814	10,435	6,467	9,740	757	2,263	33	119	0	0.0
TOTAL SS EXPENSE		44,651	15,628	9,685	14,587	1,134	3,389	49	179	0	0.0
POWER AND PUMPING EXPENSES											
Super & Eng Oper P	6	34,524	12,080	7,454	10,920	873	2,617	124	456	0	0.0
Fuel for Power Prod	1	0	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	0.0
Labor & Exp Oper Pwr Prod	6	0	0	0	0	0	0	0	0	0	0.0
Purch Fuel/Power for Pump	1	512,038	159,397	110,549	189,044	12,903	36,099	870	3,175	0	0.0
Labor & Exp Oper Pump	6	154,137	53,933	33,278	48,754	3,900	11,684	555	2,035	0	0.0
Labor & Exp Oper Pump	6	144	50	31	46	4	11	1	2	0	0.0
Expenses Transferred	6	0	0	0	0	0	0	0	0	0	0.0
Misc Exp Oper P	6	6,376	2,231	1,377	2,017	161	483	23	84	0	0.0
Rents Oper P	6	206	72	44	65	5	16	1	3	0	0.0
TOTAL PUMPING EXPENSE - OPERATION		707,425	227,763	152,733	250,845	17,847	50,909	1,574	5,754	0	0.0

Schedule C-1-S/OP

MISSOURI-AMERICAN WATER COMPANY
 JOPLIN 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	21,080	7,376	4,551	6,668	533	1,598	76	278	0.0
Struct & Improve Maint P	6	782	274	169	247	20	59	3	10	0.0
Power Prod Equip Maint P	6	2,784	974	601	881	70	211	10	37	0.0
Pump Equip Maint P	6	13,180	4,612	2,846	4,169	333	999	47	174	0.0
Pump Equip Maint P	6	657	230	142	208	17	50	2	9	0.0
TOTAL PUMPING EXPENSES - MAINTENANCE		38,483	13,465	8,308	12,172	974	2,917	139	508	0.0
TOTAL PUMPING EXPENSES		745,908	241,229	161,042	263,018	18,820	53,826	1,712	6,262	0.0
WATER TREATMENT										0.0
Super & Eng Oper WT	2	25,452	8,908	5,521	8,315	646	1,932	28	102	0.0
Chemicals	1	95,163	29,624	20,546	35,134	2,398	6,709	162	590	0.0
Labor & Exp Oper WT	2	78,907	27,617	17,115	25,779	2,004	5,989	87	316	0.0
Labor & Exp Oper WT	2	3,172	1,110	688	1,036	81	241	3	13	0.0
Misc Exp Oper WT	2	0	0	0	0	0	0	0	0	0.0
Misc Exp Oper WT	1	4,256	1,325	919	1,571	107	300	7	26	0.0
Misc Exp Oper WT	2	37,793	13,228	8,197	12,347	960	2,868	42	151	0.0
Rents Oper WT	2	(5)	(2)	(1)	(2)	(0)	(0)	(0)	(0)	0.0
TOTAL WT EXPENSE - OPERATION		244,738	81,811	52,984	84,181	6,196	18,039	329	1,198	0.0
Super & Eng Maint WT	2	22,106	7,737	4,795	7,222	561	1,678	24	88	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	23,789	8,326	5,160	7,772	604	1,806	26	95	0.0
TOTAL WT EXPENSE - MAINTENANCE		45,895	16,063	9,955	14,994	1,166	3,483	50	184	0.0
TOTAL WT EXPENSE		290,633	97,874	62,939	99,175	7,362	21,522	379	1,381	0.0
TRANSMISSION AND DISTRIBUTION EXPENSES										0.0
Super & Eng Oper TD	11	79,578	45,471	14,579	5,769	2,157	3,342	2,045	6,215	0.0
Storage Facility Exp	5	0	0	0	0	0	0	0	0	0.0
Storage Facility Exp	5	1,864	574	317	363	37	122	98	354	0.0
TD Lines Exp	7	32,115	11,712	6,526	3,684	761	2,499	1,506	5,427	0.0
TD Lines Exp	7	79,066	28,835	16,066	9,069	1,874	6,151	3,708	13,362	0.0
Meter Expense	9	99,416	73,985	17,010	3,887	3,261	1,273	0	0	0.0
Meter Expense	9	16,534	12,305	2,829	646	542	212	0	0	0.0
Customer Install Exp	10	15,982	12,573	2,134	118	155	29	973	0	0.0
Customer Install Exp	10	23	18	3	0	0	0	1	0	0.0
Misc Exp Oper TD	11	13,762	7,864	2,521	998	373	578	354	1,075	0.0

Schedule C-2-SJOP

MISSOURI-AMERICAN WATER COMPANY
JOPLIN 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)	Customer Classifications							Fire Protection		
			Residential (4)	Commercial (5)	Industrial (6)	Public Authorities (7)	Sales for Resale (8)	Private (9)	Public (10)			
Misc Exp Oper TD	11	0	0	0	0	0	0	0	0	0	0	0.0
Misc Exp Oper TD	11	14,972	8,555	2,743	1,085	406	629	385	1,169			0.0
Rents Oper TD	11	51	29	9	4	1	2	1	4			0.0
TOTAL T & D EXPENSE OPERATION		353,363	201,921	64,737	25,623	9,567	14,836	9,072	27,606			0.0
Super & Eng Maint TD	12	1,419	589	262	133	32	88	59	256			0.0
Struct & Improve Maint TD	12	0	0	0	0	0	0	0	0			0.0
Struct & Improve Maint TD	12	102	42	19	10	2	6	4	18			0.0
Dist Res Stand Maint TD	5	0	0	0	0	0	0	0	0			0.0
TD Main Maint TD	7	105,003	38,295	21,337	12,044	2,489	8,169	4,925	17,746			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	10,780	8,481	1,439	80	105	19	657	0			0.0
Services Maint TD	10	0	0	0	0	0	0	0	0			0.0
Meters Maint TD	9	5,580	4,153	955	218	183	71	0	0			0.0
Meters Maint TD	9	6,719	5,000	1,150	263	220	86	0	0			0.0
Hydrants Maint TD	8	6,568	0	0	0	0	0	0	6,568			0.0
Hydrants Maint TD	8	0	0	0	0	0	0	0	0			0.0
Misc Plant Maint TD	12	90,162	37,444	16,662	8,439	2,011	5,590	3,733	16,283			0.0
Mat and Sup Maint TD	12	0	0	0	0	0	0	0	0			0.0
Misc Maint TD	12	710	295	131	66	16	44	29	128			0.0
Amort Def Maint TD	5	0	0	0	0	0	0	0	0			0.0
TOTAL T & D EXPENSE - MAINTENANCE		227,043	94,299	41,954	21,252	5,057	14,074	9,406	41,000			0.0
TOTAL T & D EXPENSE		580,406	296,220	106,691	46,876	14,624	28,910	18,478	68,606			0.0
CUSTOMER ACCOUNTS												0.0
Supervision CA	13	47,491	40,249	6,088	185	309	33	627	0			0.0
Meter Reading Exp CA	14	87,952	75,542	11,425	343	580	62	0	0			0.0
Meter Reading Exp CA	14	96	82	12	0	1	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	10,711	9,078	1,373	42	70	7	141	0			0.0
Cust Rec & Collection CA	13	85,455	72,423	10,955	333	555	60	1,128	0			0.0
Uncollectible Accts	13	112,794	95,593	14,460	440	733	79	1,489	0			0.0
Misc Cust Accts Exp CA	13	11,051	9,366	1,417	43	72	8	146	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	12,638	10,711	1,620	49	82	9	167	0			0.0
Cust Serv & Info Exp CA	13	167,182	141,687	21,433	652	1,087	117	2,207	0			0.0
TOTAL CUSTOMER ACCOUNTING EXPENSE		535,370	454,730	68,784	2,088	3,489	375	5,905	0			0.0
ADMINISTRATIVE AND GENERAL EXPENSES												0.0
Salaries AG	15	295,077	170,377	51,579	37,209	5,577	12,069	4,751	13,515			0.0
Other Supplies & Exp AG	15	55	32	10	7	1	2	1	3			0.0
Other Supplies & Exp AG	15	111,056	64,124	19,413	14,004	2,099	4,542	1,788	5,086			0.0
Other Supplies & Exp AG	15	55,302	31,931	9,667	6,974	1,045	2,262	890	2,533			0.0
Mgmt Fees-Coporate/Shared Service Center	15	306,096	176,740	53,506	38,599	5,785	12,519	4,928	14,019			0.0
Mgmt Fees-Call Center	13	165,006	139,843	21,154	644	1,073	116	2,178	0			0.0
Mgmt Fees-Belleville Lab	2	46,922	16,423	10,177	15,329	1,192	3,561	52	188			0.0
Mgmt Fees- Financial ITS	15	16,060	9,273	2,807	2,025	304	657	259	736			0.0
Mgmt Fees- Customer Billings ITS	13	90,669	76,842	11,624	354	589	63	1,197	0			0.0

Schedule C-3-SJOP

MISSOURI-AMERICAN WATER COMPANY
 JOPLIN 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)	Customer Classifications							0.0
			Residential (4)	Commercial (5)	Industrial (6)	Public Authorities (7)	Sales for Resale (8)	Fire Protection		
								Private (9)	Public (10)	
Mgmt Fees-Other ITS	15	1,020	589	178	129	19	42	16	47	0.0
Outside Services AG	15	79,884	46,125	13,964	10,073	1,510	3,267	1,286	3,659	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	44,847	25,895	7,839	5,655	848	1,834	722	2,054	0.0
Ins Work Comp AG	16	31,228	16,454	5,724	4,637	668	1,502	512	1,730	0.0
Ins Other Oper AG	15	0	0	0	0	0	0	0	0	0.0
Property Insurance	15	58,657	33,869	10,253	7,397	1,109	2,399	944	2,686	0.0
Injuries & Damages	16	1,174	619	215	174	25	56	19	65	0.0
Employee Pension & Benefits	16	408,834	215,415	74,939	60,712	8,749	19,665	6,705	22,649	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	10,835	6,256	1,894	1,366	205	443	174	496	0.0
Rents AG	15	69,142	39,923	12,086	8,719	1,307	2,828	1,113	3,167	0.0
Goodwill Advertising Exp	15	0	0	0	0	0	0	0	0	0.0
Misc Exp AG	15	11,335	6,545	1,981	1,429	214	464	182	519	0.0
Research & Development	15	0	0	0	0	0	0	0	0	0.0
TOTAL A & G OPERATIONS		1,803,199	1,077,272	309,011	215,436	32,318	68,292	27,719	73,151	0.0
General Plant Maint AG	15	0	0	0	0	0	0	0	0	0.0
General Plant Maint AG	15	9,012	5,204	1,575	1,136	170	369	145	413	0.0
TOTAL A & G EXPENSE - MAINTENANCE		9,012	5,204	1,575	1,136	170	369	145	413	0.0
TOTAL A & G EXPENSE		1,812,211	1,082,476	310,586	216,573	32,489	68,660	27,864	73,564	0.0
Total Operation & Maintenance Expenses		4,009,179	2,188,156	719,726	642,317	77,918	176,683	54,387	149,991	0.0

Schedule C-4-STOP

MISSOURI-AMERICAN WATER COMPANY
JOPLIN 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	358	125	78	117	9	27	0	1	0.0	
Struct & Imp P	6	4,149	1,452	896	1,312	105	314	15	55	0.0	
Struct & Imp WT	2	2,854	999	619	932	72	217	3	11	0.0	
Struct & Imp TD	7	6,424	2,343	1,305	737	152	500	301	1,086	0.0	
Struct & Imp Offices	15	342	197	60	43	6	14	6	16	0.0	
Struct & Imp Store,Shop,Gar	15	732	423	128	92	14	30	12	34	0.0	
Struct & Imp Misc	15	1,533	885	268	193	29	63	25	70	0.0	
Collect & Impounding	1	1,109	345	239	409	28	78	2	7	0.0	
Lake, River & Other Intakes	2	1,053	369	228	344	27	80	1	4	0.0	
Wells & Springs	2	38,084	13,329	8,260	12,442	967	2,891	42	152	0.0	
Supply Mains	2	6,003	2,101	1,302	1,961	152	456	7	24	0.0	
Power Generation Equip Othe	6	1,778	622	384	562	45	135	6	23	0.0	
Boiler Plant Equipment P	6	0	0	0	0	0	0	0	0	0.0	
Pump Equip Electric	6	37,132	12,992	8,017	11,745	939	2,815	134	490	0.0	
Pump Equip Diesel	6	3,569	1,249	771	1,129	90	271	13	47	0.0	
Pump Equip Other	6	6,050	2,117	1,306	1,914	153	459	22	80	0.0	
WT Equip Non-Media	2	46,852	16,398	10,162	15,307	1,190	3,556	52	187	0.0	
WT Equip Filter Media	2	156	55	34	51	4	12	0	1	0.0	
Dist Reservoirs & Standpipe	5	45,366	13,964	7,717	8,824	903	2,967	2,386	8,606	0.0	
Elevated Tanks & Standpipes	5	2,691	828	458	523	54	176	142	510	0.0	
Ground Level Facilities	5	0	0	0	0	0	0	0	0	0.0	
TD Mains 4 & Less	4	8,297	3,026	1,686	952	197	646	389	1,402	0.0	
TD Mains 6 to 8"	4	137,914	50,297	28,024	15,819	3,269	10,730	6,468	23,307	0.0	
TD Mains 10 to 16"	3	75,643	25,038	15,507	23,343	1,815	5,424	976	3,540	0.0	
TD Mains 18 & Grtr	3	7,588	2,512	1,556	2,342	182	544	98	355	0.0	
Services	10	114,645	90,191	15,305	848	1,112	206	6,982	0	0.0	
Meters Bronze Case	9	15,054	11,203	2,576	589	494	193	0	0	0.0	
Meters Plastic Case	9	341	254	58	13	11	4	0	0	0.0	
Meters Other	9	4,335	3,226	742	169	142	55	0	0	0.0	
Meters Other-Rem Rdr Unts	9	0	0	0	0	0	0	0	0	0.0	
Meter Installations	9	45,519	33,875	7,788	1,780	1,493	583	0	0	0.0	
Meter Installation Other	9	0	0	0	0	0	0	0	0	0.0	
Hydrants	8	8,116	0	0	0	0	0	0	8,116	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	(2,144)	(1,238)	(375)	(270)	(41)	(88)	(35)	(98)	0.0	
Comp & Periph Equip	15	25,194	14,547	4,404	3,177	476	1,030	406	1,154	0.0	
Computer Software	15	0	0	0	0	0	0	0	0	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	1,194	689	209	151	23	49	19	55	0.0	
Trans Equip Lt Duty Trks	15	36,183	20,892	6,325	4,563	684	1,480	583	1,657	0.0	
Trans Equip Hvy Duty Trks	15	1,778	1,027	311	224	34	73	29	81	0.0	
Trans Equip Autos	15	11,155	6,441	1,950	1,407	211	456	180	511	0.0	
Trans Equip Other	15	0	0	0	0	0	0	0	0	0.0	
Stores Equipment	15	169	98	30	21	3	7	3	8	0.0	
Tools,Shop,Garage Equip	15	12,141	7,010	2,122	1,531	229	497	195	556	0.0	
Tools,Shop,Garage Equip Oth	15	0	0	0	0	0	0	0	0	0.0	

Schedule C-5-STOP

MISSOURI-AMERICAN WATER COMPANY
 JOPLIN 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			Commercial		Industrial (6)	Public Authorities (7)	Sales for Resale (8)	Fire Protection		
			(4)	(5)	(5)	(5)	Private (9)				Public (10)		
Laboratory Equipment	2	2,184	764	474	714	55	166	2	9	0.0			
Laboratory Equip Other	2	0	0	0	0	0	0	0	0	0.0			
Power Operated Equipment	15	19,716	11,384	3,446	2,486	373	806	317	903	0.0			
Comm Equip Non-Telephone	15	2,396	1,383	419	302	45	98	39	110	0.0			
Comm Equip Telephone	15	0	0	0	0	0	0	0	0	0.0			
Misc Equipment	15	1,594	920	279	201	30	65	26	73	0.0			
Total Depreciation Expense		735,247	354,334	135,066	118,999	15,778	38,082	19,844	53,144				
Amort-Other UP	18	5,216	2,295	977	929	114	298	150	452				
Taxes Other Than Income													
Utility Reg Assessment Fee	19	48,951	24,848	8,924	8,101	999	2,389	955	2,736				
Property Taxes	18	302,339	132,999	56,628	53,877	6,621	17,294	8,707	26,213				
FUTA	16	1,707	899	313	253	37	82	28	95	0.0			
FICA	16	90,458	47,662	16,581	13,433	1,936	4,351	1,484	5,011	0.0			
SUTA	16	2	1	0	0	0	0	0	0	0.0			
Other Taxes & Licenses	15	11,275	6,510	1,971	1,422	213	461	182	516	0.0			
Gross Receipts Tax	19	0	0	0	0	0	0	0	0	0.0			
Total Taxes, Other Than Income		454,732	212,919	84,417	77,087	9,805	24,577	11,355	34,572	0.0			
Income Taxes	18	337,977	148,676	63,303	60,228	7,402	19,332	9,734	29,303	0.0			
Utility Income Available for Return	18	1,363,133	599,642	255,315	242,910	29,853	77,971	39,258	118,184	0.0			
Total Cost of Service		6,905,484	3,506,022	1,258,804	1,142,470	140,870	336,944	134,728	385,646	0.0			
Less: Other Water Revenues	19	170,992	170,992	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		170,992	170,992	0	0	0	0	0	0	0.0			
Total Cost of Service Related to Sales of Water		\$ 6,734,492	\$ 3,335,030	\$ 1,258,804	\$ 1,142,470	\$ 140,870	\$ 336,944	\$ 134,728	\$ 385,646	0.0			
Reallocation of Public Fire	20	0	223,552	80,264	72,847	8,982	0		(385,646)	0.0			
Total		\$ 6,734,492	\$ 3,558,583	\$ 1,339,069	\$ 1,215,316	\$ 149,852	\$ 336,944	\$ 134,728	\$ -	0.0			
		\$ 170,992	\$ 170,992						1,469	0.0			
		\$ 6,905,484	\$ 3,729,575						\$ -	0.0			

Schedule C-6-SIOP

MISSOURI-AMERICAN WATER COMPANY
JOPLIN 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			Commercial		Industrial	Public Authorities	Sales for Resale	Fire Protection		
			(4)	(5)	(6)	(7)	(8)	Private	Public	(9)	(10)		
RATE BASE													0.0
Organization	17	\$ 8,246	\$ 3,621	\$ 1,545	\$ 1,472	\$ 181	\$ 473	\$ 237	\$ 717				0.0
Franchises	17	19,241	8,449	3,606	3,435	421	1,104	554	1,672				0.0
Land & Ld Rights SS	2	96,342	33,720	20,897	31,475	2,447	7,312	106	385				0.0
Land & Ld Rights P	6	12,561	4,395	2,712	3,973	318	952	45	166				0.0
Land & Ld Rights WT	2	11,715	4,100	2,541	3,827	298	889	13	47				0.0
Land & Ld Rights TD	7	27,039	9,861	5,494	3,101	641	2,104	1,268	4,570				0.0
Land & Land Rights AG	15	717	414	125	90	14	29	12	33				0.0
Struct & Imp SS	2	14,279	4,998	3,097	4,665	363	1,084	16	57				0.0
Struct & Imp P	6	330,676	115,704	71,393	104,593	8,366	25,065	1,190	4,365				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	108,587	38,005	23,553	35,475	2,758	8,242	119	434				0.0
Struct & Imp WT Nth Pkt (ST)	2	0	0	0	0	0	0	0	0				0.0
Struct & Imp WT Ctrl Pkt 1	2	0	0	0	0	0	0	0	0				0.0
Struct & Imp WT Ctrl Pkt 3	2	0	0	0	0	0	0	0	0				0.0
Struct & Imp WT Sth Pkt (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	341,262	124,458	69,344	39,143	8,088	26,550	16,005	57,673				0.0
Struct & Imp TD Spec Cross	7	0	0	0	0	0	0	0	0				0.0
Struct & Imp Offices	15	(187)	(108)	(33)	(24)	(4)	(8)	(3)	(9)				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	28,927	16,702	5,056	3,648	547	1,183	466	1,325				0.0
Struct & Imp Misc	15	80,090	46,244	14,000	10,099	1,514	3,276	1,289	3,668				0.0
Collect & Impounding	1	32,438	10,098	7,003	11,976	817	2,287	55	201				0.0
Lake, River & Other Intakes	2	19,628	6,870	4,257	6,412	499	1,490	22	79				0.0
Wells & Springs	2	1,715,906	600,567	372,180	560,586	43,584	130,237	1,887	6,864				0.0
Supply Mains	2	113,493	39,723	24,617	37,078	2,883	8,614	125	454				0.0
Supply Mains Nth Pkt (STL)	2	0	0	0	0	0	0	0	0				0.0
Supply Mains Ctrl Pkt (STL)	2	0	0	0	0	0	0	0	0				0.0
Supply Mains Sth Pkt (STL)	2	0	0	0	0	0	0	0	0				0.0
Supply Mains Meramec Pkt (S)	2	0	0	0	0	0	0	0	0				0.0
Power Generation Equip Othe	6	65,167	22,802	14,070	20,612	1,649	4,940	235	860				0.0
Boiler Plant Equipment P	6	348	122	75	110	9	26	1	5				0.0
Pump Equip Steam	6	6,907	2,417	1,491	2,185	175	524	25	91				0.0
Pump Equip Electric	8	1,360,446	476,020	293,720	430,309	34,419	103,122	4,898	17,958				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	103,368	36,168	22,317	32,695	2,615	7,835	372	1,364				0.0
Pump Equip Diesel Stratman\	6	0	0	0	0	0	0	0	0				0.0
Pump Equip Diesel Ctrl Pkt	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	121,074	42,364	26,140	38,296	3,063	9,177	436	1,598				0.0
WT Equip Non-Media	2	1,528,567	534,998	331,546	499,383	38,826	116,018	1,681	6,114				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	8,326	2,914	1,806	2,720	211	632	9	33				0.0

Schedule C-7-SJOP

MISSOURI-AMERICAN WATER COMPANY
JOPLIN 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)	Customer Classifications							Fire Protection		
			Residential (4)	Commercial (5)	Industrial (6)	Public Authorities (7)	Sales for Resale (8)	Private (9)	Public (10)	Private (9)	Public (10)	
WT Equip Filter Media	2	3,030	1,061	657	990	77	230	3	12	0.0		
Dist Reservoirs & Standpipe	5	1,903,111	585,778	323,719	370,155	37,872	124,463	100,104	361,020	0.0		
Elevated Tanks & Standpipes	5	142,724	43,930	24,277	27,760	2,840	9,334	7,507	27,075	0.0		
Ground Level Facilities	5	0	0	0	0	0	0	0	0	0.0		
TD Mains Not Classified by	7	(3,457,486)	(1,260,945)	(702,561)	(396,574)	(81,942)	(268,992)	(162,156)	(584,315)	0.0		
TD Mains 4 & Less	4	634,077	231,248	128,844	72,729	15,028	49,331	29,738	107,159	0.0		
TD Mains 6 to 8"	4	10,543,506	3,845,217	2,142,440	1,209,340	249,881	820,285	494,490	1,781,853	0.0		
TD Mains 10 to 16"	3	5,782,424	1,913,982	1,185,397	1,784,456	138,778	414,600	74,593	270,617	0.0		
TD Mains 18 & Grtr	3	579,446	191,797	118,786	178,817	13,907	41,546	7,475	27,118	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	4,447,619	3,498,942	593,757	32,912	43,142	8,006	270,860	0	0.0		
Meters Bronze Case	9	599,782	446,358	102,623	23,451	19,673	7,677	0	0	0.0		
Meters Plastic Case	9	13,614	10,132	2,329	532	447	174	0	0	0.0		
Meters Other	9	59,041	43,938	10,102	2,309	1,937	756	0	0	0.0		
Meters Other-Rem Rdr Units	9	0	0	0	0	0	0	0	0	0.0		
Meter Installations	9	1,416,078	1,053,845	242,291	55,369	46,447	18,126	0	0	0.0		
Meter Installation Other	9	0	0	0	0	0	0	0	0	0.0		
Hydrants	8	475,613	0	0	0	0	0	0	475,613	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	0	0	0	0	0	0	0	0	0.0		
Other P/E TD	7	(868)	(317)	(176)	(100)	(21)	(68)	(41)	(147)	0.0		
Other P/E CPS	15	0	0	0	0	0	0	0	0	0.0		
Office Furniture & Equip	15	(169,749)	(98,013)	(29,672)	(21,405)	(3,208)	(6,943)	(2,733)	(7,775)	0.0		
Comp & Periph Equip	15	150,523	86,912	26,311	18,981	2,845	6,156	2,423	6,894	0.0		
Computer Software	15	186,450	107,656	32,591	23,511	3,524	7,626	3,002	8,539	0.0		
Comp Software Personal	15	10,626	6,135	1,857	1,340	201	435	171	487	0.0		
Data Handling Equipment	15	0	0	0	0	0	0	0	0	0.0		
Other Office Equipment	15	26,678	15,404	4,663	3,364	504	1,091	430	1,222	0.0		
Trans Equip Lt Duty Trks	15	(28,914)	(16,695)	(5,054)	(3,646)	(546)	(1,183)	(466)	(1,324)	0.0		
Trans Equip Hvy Duty Trks	15	13,425	7,752	2,347	1,693	254	549	216	615	0.0		
Trans Equip Autos	15	41,571	24,003	7,267	5,242	786	1,700	669	1,904	0.0		
Trans Equip Other	15	60,175	34,745	10,519	7,588	1,137	2,461	969	2,756	0.0		
Stores Equipment	15	(1,310)	(756)	(229)	(165)	(25)	(54)	(21)	(60)	0.0		
Tools,Shop,Garage Equip	15	148,150	85,542	25,897	18,682	2,800	6,059	2,385	6,785	0.0		
Tools,Shop,Garage Equip Oth	15	0	0	0	0	0	0	0	0	0.0		
Laboratory Equipment	2	69,810	24,434	15,142	22,807	1,773	5,299	77	279	0.0		
Laboratory Equip Other	2	0	0	0	0	0	0	0	0	0.0		
Power Operated Equipment	15	96,206	55,549	16,817	12,132	1,818	3,935	1,549	4,406	0.0		
Comm Equip Non-Telephone	15	47,719	27,553	8,341	6,017	902	1,952	768	2,186	0.0		
Comm Equip Telephone	15	(31,463)	(18,167)	(5,500)	(3,967)	(595)	(1,287)	(507)	(1,441)	0.0		

Schedule C-8-STOP

MISSOURI-AMERICAN WATER COMPANY
JOPLIN 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			Commercial			Industrial			Public Authorities (7)	Sales for Resale (8)	Fire Protection		
			(4)	(5)	(6)	(7)	(8)	(9)	(10)							
Misc Equipment	15	35,976	20,773	6,289	4,537	680	1,471	579	1,648	0.0						
Accum Amortization Reserve	17	(71,296)	(31,306)	(13,361)	(12,726)	(1,561)	(4,092)	(2,053)	(6,196)	0.0						
Total Utility Plant in Service		29,881,451	13,122,111	5,599,265	5,333,466	654,053	1,713,803	861,098	2,597,655	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	(45,684)	(26,378)	(7,986)	(5,761)	(863)	(1,868)	(736)	(2,092)	0.0						
Materials and Supplies	15	210,562	121,578	36,806	26,552	3,980	8,612	3,390	9,644	0.0						
Prepayments	15	66	38	12	8	1	3	1	3	0.0						
OPEB's Contributed to External Fund	16	282,245	148,715	51,736	41,913	6,040	13,576	4,629	15,636	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	(5,635,112)	(2,474,378)	(1,056,020)	(1,005,867)	(123,409)	(323,455)	(162,291)	(489,691)	0.0						
Deferred Income Taxes	17	(4,348,437)	(1,909,399)	(814,897)	(776,196)	(95,231)	(249,600)	(125,235)	(377,879)	0.0						
Pensions	16	(357,806)	(188,528)	(65,586)	(53,134)	(7,657)	(17,210)	(5,868)	(19,822)	0.0						
Total Other Rate Base Elements		(9,894,166)	(4,328,351)	(1,855,935)	(1,772,485)	(217,139)	(569,944)	(286,110)	(864,202)	0.0						
Total Original Cost Measure of Value		\$ 19,987,285	\$ 8,793,760	\$ 3,743,329	\$ 3,560,981	\$ 436,914	\$ 1,143,859	\$ 574,988	\$ 1,733,453	0.0						

T&D OP BASIS FOR FACTOR 11	245,000	140,003	44,885	17,767	6,630	10,285	6,287	19,143	0.0
FACTOR 11		0.5714	0.1832	0.0725	0.0271	0.0420	0.0257	0.0781	1.0000
T&D Mnt BASIS FOR FACTOR 12	134,650	55,928	24,880	12,605	2,997	8,346	5,581	24,314	0.0
FACTOR 12		0.4153	0.1848	0.0936	0.0223	0.0620	0.0414	0.1806	1.0000
A&G BASIS FOR FACTOR 15	1,585,511	915,334	277,127	199,994	30,021	64,915	25,484	72,637	0.0
FACTOR 15		0.5774	0.1748	0.1261	0.0189	0.0409	0.0161	0.0458	1.0000
LABOR BASIS FOR FACTOR 16	1,275,411	672,123	233,764	189,352	27,324	61,348	20,881	70,620	0.0
FACTOR 16		0.5269	0.1833	0.1485	0.0214	0.0481	0.0164	0.0554	1.0000
UPIS BASIS FOR FACTOR 17	29,925,260	13,141,348	5,607,474	5,341,286	655,013	1,716,318	862,359	2,601,462	0.0
FACTOR 17		0.4391	0.1874	0.1785	0.0219	0.0574	0.0288	0.0869	1.0000
RATE BASE BASIS FOR FACTOR 18	19,987,285	8,793,760	3,743,329	3,560,981	436,914	1,143,859	574,988	1,733,453	0.0
FACTOR 18		0.4399	0.1873	0.1782	0.0219	0.0572	0.0288	0.0867	1.0000
TOTAL COS BASIS FOR FACTOR 19	6,845,698	3,474,919	1,247,987	1,133,002	139,667	334,112	133,599	382,413	0.0
FACTOR 19		0.5076	0.1823	0.1655	0.0204	0.0488	0.0195	0.0559	1.0000
COS w/o Fire Factor 20	6,048,166	3,506,022	1,258,804 #	1,142,470 #	140,870 #				0.0
FACTOR 20		0.5797	0.2081	0.1889	0.0233				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	0.3113	0.2159	0.3692	0.0252	0.0705	0.0017	0.0062	1.0000
2	0.3500	0.2169	0.3267	0.0254	0.0759	0.0011	0.0040	1.0000

MISSOURI-AMERICAN WATER COMPANY
 JOPLIN 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)		
			3	0.3310	0.2050	0.3086	0.0240	0.0717	0.0129	0.0468	1.0000
			4	0.3647	0.2032	0.1147	0.0237	0.0778	0.0469	0.1690	1.0000
			5	0.3078	0.1701	0.1945	0.0199	0.0654	0.0526	0.1897	1.0000
			6	0.3499	0.2159	0.3163	0.0253	0.0758	0.0036	0.0132	1.0000
			7	0.3647	0.2032	0.1147	0.0237	0.0778	0.0469	0.1690	1.0000
			8	-	-	-	-	-	-	1.0000	1.0000
			9	0.7442	0.1711	0.0391	0.0328	0.0128	-	-	1.0000
			10	0.7867	0.1335	0.0074	0.0097	0.0018	0.0609	-	1.0000
			11	0.5714	0.1832	0.0725	0.0271	0.0420	0.0257	0.0781	1.0000
			12	0.4153	0.1848	0.0936	0.0223	0.0620	0.0414	0.1806	1.0000
			13	0.8475	0.1282	0.0039	0.0065	0.0007	0.0132	-	1.0000
			14	0.8589	0.1299	0.0039	0.0066	0.0007	-	-	1.0000
			15	0.5774	0.1748	0.1261	0.0189	0.0409	0.0161	0.0458	1.0000
			16	0.5269	0.1833	0.1485	0.0214	0.0481	0.0164	0.0554	1.0000
			17	0.4391	0.1874	0.1785	0.0219	0.0574	0.0288	0.0869	1.0000
			18	0.4399	0.1873	0.1782	0.0219	0.0572	0.0288	0.0867	1.0000
			19	0.5076	0.1823	0.1655	0.0204	0.0488	0.0195	0.0559	1.0000
			20	0.5797	0.2081	0.1889	0.0233	-	-	-	1.0000