MISSOURI-AMERICAN WATER COMPANY

ST. JOSEPH DISTRICT

PSC STAFF STUDY

COMPARISON OF COST OF SERVICE WITH REVENUES UNDER PRESENT AND PROPOSED RATES

FOR THE TEST YEAR ENDED DECEMBER 31, 2002

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

Schedule A-1-SSTJ

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

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

Case No. WR-2003-0500
STAFF - ST JOSEPH

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

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

Missouri Public Service Commission | **Case No. WR-2003-0500**
Company: Missouri-American Water Company | **STAFF - ST JOSEPH**
District: St. Joseph |

		Present Pro Forma Rates				Proposed Pro Forma Rates					
Line # 1	Class/ Description	Customer Meter Billings	Sales ('000 Gal)	Current Rate	Total Revenue	Customer Meter Billings	Sales ('000 Gal)	Proposed Rate	Total Revenue	Dollar Change	Percentage Change
2	**Residential:**										
3	Minimum Charge:										
4	5/8" Monthly	319,602		$7.08	$2,262,782	319,602		$ 7.89	$2,521,675	$258,893	11.44%
5	3/4" Monthly	9,681		9.06	87,710	9,681		$ 8.60	83,226	(4,484)	-5.11%
6	1" Monthly	6,671		12.84	85,656	6,671		$ 9.73	64,939	(20,717)	-24.19%
7	1-1/2" Monthly	61		22.33	1,362	61		$ 14.45	881	(481)	-35.32%
8	2" Monthly	153		33.71	5,158	153		$ 16.86	2,580	(2,578)	-49.98%
9	3" Monthly	12		60.24	723	12		$ 52.28	627	(96)	-13.28%
10	4" Monthly	0		98.15	0	0		$ 76.72	0	0	0.00%
11	6" Monthly	0		192.93	0	0		$ 123.28	0	0	0.00%
12	8" Monthly	0		306.65	0	0		$ 278.38	0	0	0.00%
13	10" Monthly	0		520.92	0	0		$ -	0	0	0.00%
14	12" Monthly	0		859.27	0	0		$ -	0	0	0.00%
15											
16											
17	Volumetric Charges:										
18	First Block		1,617,496	$2.8793	4,657,256		1,617,496	$2.8887	4,672,440	15,184	0.33%
19	Second Block		26,275	1.6131	42,384		26,275	2.8887	0	(42,384)	
20	Third Block		19,006	1.2448	23,659		19,006	2.8887	0	(23,659)	
21	Fourth Block		63,284	0.8383	53,051		63,284	2.8887	0	(53,051)	
22											
23											
24											
25											
26	Property tax Surcharge		1,726,061	0.1393	240,440		1,726,061	0.0000	0	(240,440)	-100.00%
27											
28	Total		1,726,061		$7,460,181		1,726,061		$7,346,368	($113,813)	-1.53%
29											
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Schedule B-2-SSTJ

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

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

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

Case No. WR-2003-0500
STAFF - ST JOSEPH

Line #	Class/ Description	Present Pro Forma Rates: Customer Meter Billings	Sales ('000 Gal)	Current Rate	Total Revenue	Proposed Pro Forma Rates: Customer Meter Billings	Sales ('000 Gal)	Proposed Rate	Total Revenue	Dollar Change	Percentage Change
1											
2	**Industrial:**										
3	Minimum Charge:										
4	5/8" Monthly	84		$7.08	$595	84		$ 7.89	$663	$68	11.43%
5	3/4" Monthly	40		9.06	362	40		$ 8.60	344	(18)	-4.97%
6	1" Monthly	264		12.84	3,390	264		$ 9.73	2,570	(820)	-24.19%
7	1-1/2" Monthly	80		22.33	1,786	80		$ 14.45	1,156	(630)	-35.27%
8	2" Monthly	978		33.71	32,968	978		$ 16.86	16,489	(16,479)	-49.98%
9	3" Monthly	24		60.24	1,446	24		$ 52.28	1,255	(191)	-13.21%
10	4" Monthly	173		98.15	16,980	173		$ 76.72	13,273	(3,707)	-21.83%
11	6" Monthly	48		192.93	9,261	48		$ 123.28	5,917	(3,344)	-36.11%
12	8" Monthly	0		306.65	0	0		$ 278.38	0	0	0.00%
13	10" Monthly	0		520.92	0	0		0.00	0	0	0.00%
14	12" Monthly	0		859.27	0	0		0.00	0	0	0.00%
15											
16											
17	Volumetric Charges:										
18	First Block		62,545	$5.4203	339,013		62,545	$2.2521	140,858	(198,155)	-58.45%
19	Second Block		386,079	3.0364	1,172,290		386,079	$2.2521	869,490	(302,800)	-25.83%
20	Third Block		205,070	2.3433	480,541		205,070	$2.2521	461,839	(18,702)	-3.89%
21	Fourth Block		455,118	1.5780	718,176		455,118	$2.2521	1,024,973	306,797	42.72%
22											
23											
24											
25											
26	Property tax Surcharge		1,108,812	0.1393	154,458		1,108,812	0.0000	0	(154,458)	-100.00%
27											
28	Total		1,108,812		$2,931,266		1,108,812		$2,538,827	($392,439)	-13.39%
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37											
38											
39											
40											

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

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

Case No. WR-2003-0500
STAFF - ST JOSEPH

Line #	Class/ Description	Present Pro Forma Rates: Customer Meter Billings	Present Pro Forma Rates: Sales ('000 Gal)	Present Pro Forma Rates: Current Rate	Present Pro Forma Rates: Total Revenue	Proposed Pro Forma Rates: Customer Meter Billings	Proposed Pro Forma Rates: Sales ('000 Gal)	Proposed Pro Forma Rates: Proposed Rate	Proposed Pro Forma Rates: Total Revenue	Dollar Change	Percentage Change
1											
2	**Other Public Authority:**										
3	Minimum Charge:										
4	5/8" Monthly	461.50		$7.08	$3,267	462		$ 7.89	$3,641	$374	11.45%
5	3/4" Monthly	130.00		9.06	1,178	130		$ 8.60	1,118	(60)	-5.09%
6	1" Monthly	446.00		12.84	5,727	446		$ 9.73	4,342	(1,385)	-24.18%
7	1-1/2" Monthly	222.00		22.33	4,957	222		$ 14.45	3,207	(1,750)	-35.30%
8	2" Monthly	939.00		33.71	31,654	939		$ 16.86	15,832	(15,822)	-49.98%
9	3" Monthly	26.00		60.24	1,566	26		$ 52.28	1,359	(207)	-13.22%
10	4" Monthly	62.00		98.15	6,085	62		$ 76.72	4,757	(1,328)	-21.82%
11	6" Monthly	8.00		192.93	1,543	8		$ 123.28	986	(557)	-36.10%
12	8" Monthly	0.00		306.65	0	0		$ 278.38	0	0	0.00%
13	10" Monthly	0.00		520.92	0	0		0.00	0	0	0.00%
14	12" Monthly	0.00		859.27	0	0		0.00	0	0	0.00%
15											
16											
17	Volumetric Charges:										
18	First Block		62,613	$3.9599	247,941		62,613	$2.3212	145,340	(102,601)	-41.38%
19	Second Block		93,637	2.2148	207,391		93,637	$2.3212	217,354	9,963	4.80%
20	Third Block		43,247	1.7120	74,039		43,247	$2.3212	100,387	26,348	35.59%
21	Fourth Block		32,525	1.1528	37,495		32,525	$2.3212	75,498	38,003	101.35%
22											
23											
24											
25											
26	Property tax Surcharge		232,022	0.1393	32,321		232,022	0.0000	0	(32,321)	-100.00%
27											
28	Total		232,022		$655,164		232,022		$573,821	($81,343)	-12.42%
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39											
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Test Year Operating Revenues at Present Rates vs Proposed Rates
12 Month Test Period Ended December 31, 2002

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

Line #	Class/ Description	Present Pro Forma Rates: Customer Meter Billings	Present Pro Forma Rates: Sales ('000 Gal)	Present Pro Forma Rates: Current Rate	Present Pro Forma Rates: Total Revenue	Proposed Pro Forma Rates: Customer Meter Billings	Proposed Pro Forma Rates: Sales ('000 Gal)	Proposed Pro Forma Rates: Proposed Rate	Proposed Pro Forma Rates: Total Revenue	Dollar Change	Percentage Change
1											
2	**Other Water Utilities:**										
3	Minimum Charge:										
4	5/8" Monthly	2.00		$7.08	$14	2		$ 7.89	$16	$2	14.29%
5	3/4" Monthly	0.00		9.06	0	0		$ 8.60	0	0	0.00%
6	1" Monthly	0.00		12.84	0	0		$ 9.73	0	0	0.00%
7	1-1/2" Monthly	0.00		22.33	0	0		$ 14.45	0	0	0.00%
8	2" Monthly	132.00		33.71	4,450	132		$ 16.86	2,226	(2,224)	-49.98%
9	3" Monthly	0.00		60.24	0	0		$ 52.28	0	0	0.00%
10	4" Monthly	60.00		98.15	5,889	60		$ 76.72	4,603	(1,286)	-21.84%
11	6" Monthly	36.00		192.93	6,945	36		$ 123.28	4,438	(2,507)	-36.10%
12	8" Monthly	12.00		306.65	3,680	12		$ 278.38	3,341	(339)	-9.21%
13	10" Monthly	0.00		520.92	0	0		0.00	0	0	0.00%
14	12" Monthly	0.00		859.27	0	0		0.00	0	0	0.00%
15											
16											
17	Volumetric Charges:					Volumetric Charges:					
18	First Block		10,416	$6.6267	69,024		10,416	$2.3350	24,321	(44,703)	-64.76%
19	Second Block		171,110	3.7123	635,212		171,110	2.3350	399,539	(235,673)	-37.10%
20	Third Block		237,448	2.8649	680,265		237,448	2.3350	554,437	(125,828)	-18.50%
21	Fourth Block		285,585	1.9292	550,951		285,585	2.3350	666,836	115,885	21.03%
22											
23											
24											
25											
26	Property tax Surcharge		704,559	0.1393	98,145		704,559	0.0000	0	(98,145)	-100.00%
27											
28	Total		704,559		$2,054,575		704,559		$1,659,757	($394,818)	-19.22%
29											
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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 | **Case No. WR-2003-0500**
Company: Missouri-American Water Company | **STAFF - ST JOSEPH**
District: St. Joseph |

Line #	Class/ Description	Present Pro Forma Rates: Customer Meter Billings	Sales ('000 Gal)	Current Rate	Total Revenue	Proposed Pro Forma Rates: Customer Meter Billings	Sales ('000 Gal)	Proposed Rate	Total Revenue	Dollar Change	Percentage Change
1											
2	**Miscellaneous:**										
3	Minimum Charge:										
4	5/8" Monthly	0		$7.08	$0	0		$ 7.89	$0	$0	0.00%
5	3/4" Monthly	0		9.06	0	0		$ 8.60	0	0	0.00%
6	1" Monthly	0		12.84	0	0		$ 9.73	0	0	0.00%
7	1-1/2" Monthly	0		22.33	0	0		$ 14.45	0	0	0.00%
8	2" Monthly	0		33.71	0	0		$ 16.86	0	0	0.00%
9	3" Monthly	0		60.24	0	0		$ 52.28	0	0	0.00%
10	4" Monthly	0		98.15	0	0		$ 76.72	0	0	0.00%
11	6" Monthly	0		192.93	0	0		$ 123.28	0	0	0.00%
12	8" Monthly	0		306.65	0	0		$ 278.38	0	0	0.00%
13	10" Monthly	0		520.92	0	0		0.00	0	0	0.00%
14	12" Monthly	0		859.27	0	0		0.00	0	0	0.00%
15											
16											
17	Volumetric Charges:										
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		0		$0		0		$0	$0	0.00%
25											
26											
27											
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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 | **Case No. WR-2003-0500**
Company: Missouri-American Water Company | **STAFF - ST JOSEPH**
District: St. Joseph |

Line #	Connection Size	Number of Connections	Present Rates: Annual Rate	Present Rates: Total Revenue	Proposed Rates: Annual Rate	Proposed Rates: Total Revenue	Dollar Change	Percentage Change
1								
2	**Private Fire Service:**							
3								
4	Private Fire Hydrant	63.0	$459.96	$28,977	398.34	$25,095	($3,882)	-13.40%
5								
6	2"	4.0	66.00	264	57.16	229	(35)	-13.26%
7								
8	3"	1.0	113.28	113	98.10	98	(15)	-13.27%
9								
10	4"	61.0	179.76	10,965	155.68	9,496	(1,469)	-13.40%
11								
12	6"	121.0	368.64	44,605	319.25	38,630	(5,975)	-13.40%
13								
14	8"	77.0	634.20	48,833	549.24	42,291	(6,542)	-13.40%
15								
16	10"	10.0	974.88	9,749	844.28	8,443	(1,306)	-13.40%
17								
18	12"	8.0	1,390.08	11,121	1,203.86	9,631	(1,490)	-13.40%
19								
20								
21								
22	Total	345		$154,627		$133,913	($20,714)	-13.40%
23								
24								
25								
26	**Public Fire Protection:**							
27								
28	Public Fire Hydrants	2,888	0.00	0	0.00	0	0	0.00%
29								

Schedule B-8-SSTJ

MISSOURI-AMERICAN WATER COMPANY

ST. JOSEPH DISTRICT

PSC STAFF STUDY

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

Account	Factor Ref.	Cost of Service	Residential	Commercial	Industrial	Public Authorities	Sales for Resale	Fire Protection Private	Fire Protection Public	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
OPERATION AND MAINTENANCE EXPENSES										
SOURCE OF SUPPLY EXPENSES										
Super & Eng Oper SS	2	0	0	0	0	0	0	0	0	0.0
Labor & Exp Oper SS	2	0								0.0
Labor & Exp Oper SS	2	52,003	20,333	10,229	11,082	2,335	7,483	83	458	0.0
Purchased Water	1	0	0	0	0	0	0	0	0	0.0
TOTAL SS EXPENSE - OPERATION		52,003	20,333	10,229	11,082	2,335	7,483	83	458	0.0
										0.0
Misc Exp Oper SS	2	0	0	0	0	0	0	0	0	0.0
Misc Exp Oper SS	2	138	54	27	29	6	20	0	1	0.0
Rents Oper SS	2	0	0	0	0	0	0	0	0	0.0
Super & Eng Maint SS	2	0	0	0	0	0	0	0	0	0.0
Struct & Improve Maint SS	2	0	0	0	0	0	0	0	0	0.0
Struct & Improve Maint SS	2	179	70	35	38	8	26	0	2	0.0
Collect & Impound Maint SS	2	0	0	0	0	0	0	0	0	0.0
Lake, River & Oth Maint SS	2	0	0	0	0	0	0	0	0	0.0
Lake, River & Oth Maint SS	2	0	0	0	0	0	0	0	0	0.0
Wells & Springs Maint SS	2	0	0	0	0	0	0	0	0	0.0
Wells & Springs Maint SS	2	0	0	0	0	0	0	0	0	0.0
Infilt Gall & Tunnels Maint SS	2	0	0	0	0	0	0	0	0	0.0
Supply Mains Maint SS	2	0	0	0	0	0	0	0	0	0.0
Misc Plant Maint SS	2	0	0	0	0	0	0	0	0	0.0
Misc Plant Maint SS	2	2,217	867	436	472	100	319	4	20	0.0
TOTAL SS EXPENSE - MAINTENANCE		2,534	991	498	540	114	365	4	22	0.0
TOTAL SS EXPENSE		54,537	21,324	10,727	11,622	2,449	7,848	87	480	0.0
										0.0
POWER AND PUMPING EXPENSES										0.0
Super & Eng Oper P	6	86,335	33,230	16,697	18,070	3,816	12,216	354	1,951	0.0
Fuel for Power Prod	1	0	0	0	0	0	0	0	0	0.0
Labor & Exp Oper Pwr Prod	6	10,955	4,217	2,119	2,293	484	1,550	45	248	0.0
Labor & Exp Oper Pwr Prod	6	0	0	0	0	0	0	0	0	0.0
Purch Fuel/Power for Pump	1	538,512	195,857	107,541	128,220	24,556	74,530	1,185	6,624	0.0
Labor & Exp Oper Pump	6	176,465	67,921	34,128	36,934	7,800	24,970	724	3,988	0.0
Labor & Exp Oper Pump	6	4,256	1,638	823	891	188	602	17	96	0.0
Expenses Transferred	6	0	0	0	0	0	0	0	0	0.0
Misc Exp Oper P	6	2	1	0	0	0	0	0	0	0.0
Rents Oper P	6	256	99	50	54	11	36	1	6	0.0
TOTAL PUMPING EXPENSE - OPERATION		816,781	302,963	161,358	186,461	36,856	113,905	2,326	12,913	0.0
										0.0

MISSOURI-AMERICAN WATER COMPANY

ST. JOSEPH DISTRICT

PSC STAFF STUDY

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

Account	Factor Ref.	Cost of Service	Residential	Commercial	Industrial	Public Authorities	Sales for Resale	Fire Protection Private	Fire Protection Public	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
Super & Eng Maint P	6	12,332	4,747	2,385	2,581	545	1,745	51	279	0.0
Struct & Improve Maint P	6	386	149	75	81	17	55	2	9	0.0
Power Prod Equip Maint P	6	0	0	0	0	0	0	0	0	0.0
Pump Equip Maint P	6	0	0	0	0	0	0	0	0	0.0
Pump Equip Maint P	6	0	0	0	0	0	0	0	0	0.0
TOTAL PUMPING EXPENSES - MAINTENANCE		12,718	4,895	2,460	2,662	562	1,800	52	287	0.0
TOTAL PUMPING EXPENSES		829,499	307,858	163,818	189,123	37,418	115,705	2,378	13,200	0.0
										0.0
WATER TREATMENT										0.0
Super & Eng Oper WT	2	108,483	42,417	21,339	23,118	4,871	15,611	174	955	0.0
Chemicals	1	257,731	93,737	51,469	61,366	11,753	35,670	567	3,170	0.0
Labor & Exp Oper WT	2	152,991	59,819	30,093	32,602	6,869	22,015	245	1,346	0.0
Labor & Exp Oper WT	2	901	352	177	192	40	130	1	8	0.0
Misc Exp Oper WT	2	0	0	0	0	0	0	0	0	0.0
Misc Exp Oper WT	1	80,738	29,364	16,123	19,224	3,682	11,174	178	993	0.0
Misc Exp Oper WT	2	0	0	0	0	0	0	0	0	0.0
Rents Oper WT	2	(13)	(5)	(3)	(3)	(1)	(2)	(0)	(0)	0.0
TOTAL WT EXPENSE - OPERATION		600,831	225,685	119,199	136,499	27,214	84,598	1,164	6,472	0.0
										0.0
Super & Eng Maint WT	2	34,476	13,480	6,781	7,347	1,548	4,961	55	303	0.0
Struct & Improve Maint WT	2	0	0	0	0	0	0	0	0	0.0
Struct & Improve Maint WT	2	0	0	0	0	0	0	0	0	0.0
WT Equip Maint WT	2	0	0	0	0	0	0	0	0	0.0
WT Equip Maint WT	2	71,120	27,808	13,989	15,156	3,193	10,234	114	626	0.0
TOTAL WT EXPENSE - MAINTENANCE		105,596	41,288	20,771	22,503	4,741	15,195	169	929	0.0
TOTAL WT EXPENSE		706,427	266,973	139,970	159,001	31,956	99,793	1,333	7,401	0.0
										0.0
TRANSMISSION AND DISTRIBUTION EXPENSES										0.0
Super & Eng Oper TD	11	85,747	41,724	12,322	7,932	2,512	7,529	2,332	11,396	0.0
Storage Facilty Exp	5	1,433	545	240	195	55	195	30	172	0.0
Storage Facilty Exp	5	3,118	1,185	523	425	119	424	66	375	0.0
TD Lines Exp	7	85,609	29,295	12,918	10,496	2,954	10,487	2,911	16,548	0.0
TD Lines Exp	7	167,884	57,450	25,334	20,583	5,792	20,566	5,708	32,452	0.0
Meter Expense	9	78,803	63,027	10,725	2,427	1,631	993	0	0	0.0
Meter Expense	9	2,669	2,135	363	82	55	34	0	0	0.0
Customer Install Exp	10	33,375	27,858	3,464	277	304	57	1,415	0	0.0
Customer Install Exp	10	20	17	2	0	0	0	1	0	0.0
Misc Exp Oper TD	11	50,123	24,390	7,203	4,636	1,469	4,401	1,363	6,661	0.0

MISSOURI-AMERICAN WATER COMPANY

ST. JOSEPH DISTRICT

PSC STAFF STUDY

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

Account	Factor Ref.	Cost of Service	Residential	Commercial	Industrial	Public Authorities	Sales for Resale	Fire Protection Private	Fire Protection Public	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
Misc Exp Oper TD	11	0	0	0	0	0	0	0	0	0.0
Misc Exp Oper TD	11	8,155	3,968	1,172	754	239	716	222	1,084	0.0
Rents Oper TD	11	2,656	1,292	382	246	78	233	72	353	0.0
TOTAL T & D EXPENSE OPERATION		519,592	252,886	74,648	48,053	15,208	45,634	14,121	69,042	0.0
										0.0
Super & Eng Maint TD	12	48,617	23,326	6,447	3,938	1,279	3,700	1,215	8,712	0.0
Struct & Improve Maint TD	12	0	0	0	0	0	0	0	0	0.0
Struct & Improve Maint TD	12	0	0	0	0	0	0	0	0	0.0
Dist Res Stand Maint TD	5	199	76	33	27	8	27	4	24	0.0
TD Main Maint TD	7	84,993	29,085	12,825	10,420	2,932	10,412	2,890	16,429	0.0
TD Main Maint TD	7	0	0	0	0	0	0	0	0	0.0
Fire Main Maint TD	8	86	0	0	0	0	0	0	86	0.0
Services Maint TD	10	16,111	13,448	1,672	134	147	27	683	0	0.0
Services Maint TD	10	0	0	0	0	0	0	0	0	0.0
Meters Maint TD	9	32,457	25,959	4,417	1,000	672	409	0	0	0.0
Meters Maint TD	9	0	0	0	0	0	0	0	0	0.0
Hydrants Maint TD	8	9,080	0	0	0	0	0	0	9,080	0.0
Hydrants Maint TD	8	0	0	0	0	0	0	0	0	0.0
Misc Plant Maint TD	12	161,680	77,574	21,439	13,096	4,252	12,304	4,042	28,973	0.0
Mat and Sup Maint TD	12	0	0	0	0	0	0	0	0	
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	0.0
TOTAL T & D EXPENSE - MAINTENANCE		353,223	169,468	46,834	28,615	9,289	26,879	8,835	63,304	0.0
										0.0
TOTAL T & D EXPENSE		872,815	422,354	121,482	76,668	24,497	72,513	22,955	132,346	0.0
										0.0
CUSTOMER ACCOUNTS										0.0
Supervision CA	13	17,311	15,237	1,695	78	104	10	187	0	0.0
Meter Reading Exp CA	14	225,427	200,585	22,317	1,014	1,375	135	0	0	0.0
Meter Reading Exp CA	14	0	0	0	0	0	0	0	0	0.0
Meter Reading Exp CA	14	27,622	24,578	2,735	124	168	17	0	0	0.0
Cust Rec & Collection CA	13	36,543	32,165	3,578	164	219	22	395	0	0.0
Cust Rec & Collection CA	13	97,949	86,215	9,589	441	588	59	1,058	0	0.0
Uncollectible Accts	13	124,404	109,500	12,179	560	746	75	1,344	0	0.0
Misc Cust Accts Exp CA	13	5,308	4,672	520	24	32	3	57	0	0.0
Misc Cust Accts Exp CA	13	859	756	84	4	5	1	9	0	0.0
Misc Cust Accts Exp CA	13	0	0	0	0	0	0	0	0	0.0
Cust Serv & Info Exp CA	13	233,151	205,220	22,825	1,049	1,399	140	2,518	0	0.0
TOTAL CUSTOMER ACCOUNTING EXPENSE		768,574	678,928	75,522	3,459	4,637	461	5,568	0	0.0
										0.0

Schedule C-3-SSTJ

MISSOURI-AMERICAN WATER COMPANY

ST. JOSEPH DISTRICT

PSC STAFF STUDY

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

Account	Factor Ref.	Cost of Service	Residential	Commercial	Industrial	Public Authorities	Sales for Resale	Fire Protection Private	Fire Protection Public	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
ADMINISTRATIVE AND GENERAL EXPENSES										0.0
Salaries AG	15	304,664	178,350	43,506	29,888	7,891	22,637	3,930	18,463	0.0
Other Supplies & Exp AG	15	79	46	11	8	2	6	1	5	0.0
Other Supplies & Exp AG	15	54,536	31,925	7,788	5,350	1,412	4,052	704	3,305	0.0
Other Supplies & Exp AG	15	123,681	72,403	17,662	12,133	3,203	9,189	1,595	7,495	0.0
Mgmt Fees-Coporate/Shared Service Center	15	438,371	256,622	62,599	43,004	11,354	32,571	5,655	26,565	0.0
Mgmt Fees-Call Center	13	236,312	208,002	23,135	1,063	1,418	142	2,552	0	0.0
Mgmt Fees-Belleville Lab	2	57,999	22,678	11,408	12,360	2,604	8,346	93	510	0.0
Mgmt Fees- Financial ITS	15	23,000	13,464	3,284	2,256	596	1,709	297	1,394	0.0
Mgmt Fees- Customer Billings ITS	13	129,848	114,292	12,712	584	779	78	1,402	0	0.0
Mgmt Fees-Other ITS	15	1,461	855	209	143	38	109	19	89	0.0
Outside Services AG	15	103,691	60,701	14,807	10,172	2,686	7,704	1,338	6,284	0.0
Outside Services AG	15	0	0	0	0	0	0	0	0	0.0
Property Insurance	15	0	0	0	0	0	0	0	0	0.0
Ins Gen Liab Oper AG	15	84,005	49,177	11,996	8,241	2,176	6,242	1,084	5,091	0.0
Ins Work Comp AG	16	44,723	24,370	6,708	5,018	1,292	3,761	555	3,019	0.0
Ins Other Oper AG	15	0	0	0	0	0	0	0	0	0.0
Property Insurance	15	64,226	37,598	9,171	6,301	1,663	4,772	829	3,892	0.0
Injuries & Damages	16	1,265	689	190	142	37	106	16	85	0.0
Employee Pension & Benefits	16	634,911	345,963	95,237	71,237	18,349	53,396	7,873	42,856	0.0
Employee Pension & Benefits	16	0	0	0	0	0	0	0	0	0.0
Employee Pension & Benefits	16	0	0	0	0	0	0	0	0	0.0
Reg Commision Exp	15	15,517	9,084	2,216	1,522	402	1,153	200	940	0.0
Rents AG	15	105,644	61,844	15,086	10,364	2,736	7,849	1,363	6,402	0.0
Goodwill Advertising Exp	15	0	0	0	0	0	0	0	0	0.0
Misc Exp AG	15	(3,638)	(2,130)	(520)	(357)	(94)	(270)	(47)	(220)	0.0
Research & Development	15	0	0	0	0	0	0	0	0	0.0
TOTAL A & G OPERATIONS		2,420,295	1,485,933	337,206	219,429	58,544	163,551	29,457	126,174	0.0
General Plant Maint AG	15	0	0	0	0	0	0	0	0	0.0
General Plant Maint AG	15	22,235	13,016	3,175	2,181	576	1,652	287	1,347	0.0
TOTAL A & G EXPENSE - MAINTENANCE		22,235	13,016	3,175	2,181	576	1,652	287	1,347	0.0
TOTAL A & G EXPENSE		2,442,530	1,498,950	340,381	221,610	59,120	165,204	29,744	127,522	0.0
										0.0
										0.0
Total Operation & Maintenance Expenses		5,674,382	3,196,386	851,900	661,483	160,075	461,523	62,065	280,949	0.0
										0.0

Schedule C-4-SSTJ

MISSOURI-AMERICAN WATER COMPANY

ST. JOSEPH DISTRICT

PSC STAFF STUDY

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

Account	Factor Ref.	Cost of Service	Residential	Commercial	Industrial	Public Authorities	Sales for Resale	Fire Protection Private	Fire Protection Public	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
DEPRECIATION EXPENSE										
Struct & Imp SS	2	0	0	0	0	0	0	0	0	0.0
Struct & Imp P	6	38,137	14,679	7,376	7,982	1,686	5,396	156	862	0.0
Struct & Imp WT	2	229,300	89,656	45,103	48,864	10,296	32,996	367	2,018	0.0
Struct & Imp TD	7	2,515	861	380	308	87	308	86	486	0.0
Struct & Imp Offices	15	0	0	0	0	0	0	0	0	0.0
Struct & Imp Store,Shop,Gar	15	4,457	2,609	636	437	115	331	57	270	0.0
Struct & Imp Misc	15	31,476	18,426	4,495	3,088	815	2,339	406	1,907	0.0
Collect & Impounding	1	0	0	0	0	0	0	0	0	0.0
Lake, River & Other Intakes	2	127	50	25	27	6	18	0	1	0.0
Wells & Springs	2	559	219	110	119	25	80	1	5	0.0
Supply Mains	2	162,723	63,625	32,008	34,676	7,306	23,416	260	1,432	0.0
Pump Equip Electric	6	81,746	31,464	15,810	17,109	3,613	11,567	335	1,847	0.0
WT Equip Non-Media	2	380,547	148,794	74,854	81,095	17,087	54,761	609	3,349	0.0
Dist Reservoirs & Standpipe	5	28,047	10,661	4,703	3,823	1,074	3,817	595	3,374	0.0
Elevated Tanks & Standpipes	5	5,590	2,125	937	762	214	761	119	672	0.0
Ground Level Facilities	5	0	0	0	0	0	0	0	0	0.0
TD Mains 4 & Less "	4	8,733	2,988	1,318	1,071	301	1,070	297	1,688	0.0
TD Mains 6 to 8" "	4	108,762	37,218	16,412	13,334	3,752	13,323	3,698	21,024	0.0
TD Mains 10 to 16" "	3	118,247	42,403	21,332	23,094	4,872	15,585	1,644	9,318	0.0
TD Mains 18 & Grtr "	3	62,187	22,300	11,219	12,145	2,562	8,196	864	4,900	0.0
Services	10	37,224	31,071	3,864	309	339	63	1,578	0	0.0
Meters Bronze Case	9	24,087	19,265	3,278	742	499	303	0	0	0.0
Meters Plastic Case	9	1,973	1,578	269	61	41	25	0	0	0.0
Meters Other	9	6,949	5,558	946	214	144	88	0	0	0.0
Meters Other-Rem Rdr Units	9	0	0	0	0	0	0	0	0	0.0
Meter Installations	9	58,787	47,018	8,001	1,811	1,217	741	0	0	0.0
Meter Installation Other	9	0	0	0	0	0	0	0	0	0.0
Hydrants	8	30,980	0	0	0	0	0	0	30,980	0.0
Utility Plant Acquisition Adjustment	17	0	0	0	0	0	0	0	0	0.0
Other P/E WT Res Hand Equip	2	24,780	9,689	4,874	5,281	1,113	3,566	40	218	0.0
Other P/E TD	7	0	0	0	0	0	0	0	0	0.0
Other P/E CPS	15	0	0	0	0	0	0	0	0	0.0
Office Furniture & Equip	15	1,510	884	216	148	39	112	19	92	0.0
Comp & Periph Equip	15	33,582	19,659	4,796	3,294	870	2,495	433	2,035	0.0
Computer Software	15	12,318	7,211	1,759	1,208	319	915	159	746	0.0
Comp Software Personal	15	0	0	0	0	0	0	0	0	0.0
Data Handling Equipment	15	1,082	633	155	106	28	80	14	66	0.0
Other Office Equipment	15	8,327	4,875	1,189	817	216	619	107	505	0.0
Trans Equip Lt Duty Trks	15	49,363	28,897	7,049	4,843	1,279	3,668	637	2,991	0.0
Trans Equip Hvy Duty Trks	15	10,272	6,013	1,467	1,008	266	763	133	622	0.0
Trans Equip Autos	15	16,887	9,886	2,411	1,657	437	1,255	218	1,023	0.0
Trans Equip Other	15	0	0	0	0	0	0	0	0	0.0
Stores Equipment	15	3,935	2,304	562	386	102	292	51	238	0.0
Tools,Shop,Garage Equip	15	27,436	16,061	3,918	2,691	711	2,038	354	1,663	0.0
Tools,Shop,Garage Equip Oth	15	0	0	0	0	0	0	0	0	0.0
Laboratory Equipment	2	10,795	4,221	2,123	2,300	485	1,553	17	95	0.0
Laboratory Equip Other	2	0	0	0	0	0	0	0	0	0.0
Power Operated Equipment	15	25,843	15,128	3,690	2,535	669	1,920	333	1,566	0.0
Comm Equip Non-Telephone	15	5,143	3,011	734	505	133	382	66	312	0.0
Comm Equip Telephone	15	1,328	777	190	130	34	99	17	80	0.0
Misc Equipment	15	3,415	1,999	488	335	88	254	44	207	0.0

Schedule C-5-SSTJ

MISSOURI-AMERICAN WATER COMPANY

ST. JOSEPH DISTRICT

PSC STAFF STUDY

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

Account	Factor Ref.	Cost of Service	Residential	Commercial	Industrial	Public Authorities	Sales for Resale	Fire Protection Private	Fire Protection Public	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
Total Depreciation Expense		1,659,169	723,815	288,695	278,315	62,839	195,197	13,715	96,594	
Amort-Other UP,DepCIAC,Cost Removal	18	15,951	6,388	2,901	2,983	651	2,064	116	847	
Taxes Other Than Income										
Utility Reg Assessment Fee	19	98,508	46,043	16,618	15,525	3,507	10,787	867	5,162	
Property Taxes	18	1,026,140	410,969	186,655	191,888	41,867	132,783	7,491	54,488	
FUTA	16	2,405	1,310	361	270	70	202	30	162	0.0
FICA	16	128,750	70,156	19,313	14,446	3,721	10,828	1,597	8,691	0.0
SUTA	16	(54)	(29)	(8)	(6)	(2)	(5)	(1)	(4)	0.0
Other Taxes & Licenses	15	32,692	19,138	4,668	3,207	847	2,429	422	1,981	0.0
Gross Receipts Tax	19	0	0	0	0	0	0	0	0	0.0
										0.0
Total Taxes, Other Than Income		1,288,441	547,587	227,607	225,330	50,009	157,024	10,405	70,480	0.0
										0.0
Income Taxes	18	1,318,086	527,893	239,760	246,482	53,778	170,560	9,622	69,990	
Utility Income Available for Return	18	5,203,929	2,084,174	946,595	973,135	212,320	673,388	37,989	276,329	
Total Cost of Service		15,159,958	7,086,243	2,557,457	2,387,727	539,672	1,659,757	133,912	795,189	0.0
										0.0
										0.0
Less: Other Water Revenues	d	(188,014)	(188,014)							0.0
Revenue Contribution	19	0	0	0	0	0	0	0	0	0.0
Total Other Water Revenues		(188,014)	(188,014)	0	0	0	0	0	0	0.0
										0.0
Total Cost of Service Related to Sales of Water		14,971,944	6,898,229	2,557,457	2,387,727	539,672	1,659,757	133,912	795,189	0.0
										0.0
										0.0
Reallocation of Public Fire	20		448,139	161,803	151,099	34,148	0		(795,189)	0.0
										0.0
Total		$ 14,971,944	$ 7,346,368	$ 2,719,260	$ 2,538,826	$ 573,820	$ 1,659,757	$ 133,912	$ -	
Total Cost of Service		15,159,958	7,534,382 #	2,719,260 #	2,538,826 #	573,820 #	1,659,757 #	133,912 #	0	15,159,958.0

Schedule C-6-SSTJ

MISSOURI-AMERICAN WATER COMPANY

ST. JOSEPH DISTRICT

PSC STAFF STUDY

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

Account	Factor Ref.	Cost of Service	Residential	Commercial	Industrial	Public Authorities	Sales for Resale	Fire Protection Private	Fire Protection Public	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
RATE BASE										0.0
Organization	17	$ 11,810	$ 4,736	$ 2,147	$ 2,206	$ 481	$ 1,526	$ 86	$ 628	0.0
Franchises	17	0	0	0	0	0	0	0	0	0.0
Land & Ld Rights SS	2	1,414,424	553,040	278,217	301,414	63,508	203,536	2,263	12,447	0.0
Land & Ld Rights P	6	8,921	3,434	1,725	1,867	394	1,262	37	202	0.0
Land & Ld Rights WT	2	0	0	0	0	0	0	0	0	0.0
Land & Ld Rights TD	7	779,350	266,694	117,604	95,548	26,888	95,470	26,498	150,648	0.0
Land & Land Rights AG	15	8,112	4,749	1,158	796	210	603	105	492	0.0
Struct & Imp SS	2	(14,139)	(5,528)	(2,781)	(3,013)	(635)	(2,035)	(23)	(124)	0.0
Struct & Imp P	6	4,557,842	1,754,313	881,487	953,956	201,457	644,935	18,687	103,007	0.0
Struct & Imp Pumps (STL)	6	0	0	0	0	0	0	0	0	0.0
Struct & Imp Pump Boosters	6	0	0	0	0	0	0	0	0	0.0
Struct & Imp WT	2	18,827,760	7,361,654	3,703,420	4,012,196	845,366	2,709,315	30,124	165,684	0.0
Struct & Imp WT Nth Plt (ST	2	0	0	0	0	0	0	0	0	0.0
Struct & Imp WT Ctrl Plt 1	2	0	0	0	0	0	0	0	0	0.0
Struct & Imp WT Ctrl Plt 3	2	0	0	0	0	0	0	0	0	0.0
Struct & Imp WT Sth Plt (ST	2	0	0	0	0	0	0	0	0	0.0
Struct & Imp WT Meramec (ST	2	0	0	0	0	0	0	0	0	0.0
Struct & Imp TD	7	130,676	44,717	19,719	16,021	4,508	16,008	4,443	25,260	0.0
Struct & Imp TD Spec Cross	7	0	0	0	0	0	0	0	0	0.0
Struct & Imp Offices	15	398,646	233,367	56,927	39,107	10,325	29,619	5,143	24,158	0.0
Struct & Imp Leasehold	15	0	0	0	0	0	0	0	0	0.0
Struct & Imp Leasehold	15	0	0	0	0	0	0	0	0	0.0
Struct & Imp Store,Shop,Gar	15	167,184	97,870	23,874	16,401	4,330	12,422	2,157	10,131	0.0
Struct & Imp Misc	15	825,145	483,040	117,831	80,947	21,371	61,308	10,644	50,004	0.0
Collect & Impounding	1	0	0	0	0	0	0	0	0	0.0
Lake, River & Other Intakes	2	686,428	268,393	135,020	146,278	30,821	98,777	1,098	6,041	0.0
Wells & Springs	2	60,110	23,503	11,824	12,809	2,699	8,650	96	529	0.0
Supply Mains	2	8,971,282	3,507,771	1,764,651	1,911,780	402,811	1,290,967	14,354	78,947	0.0
Supply Mains Nth Plt (STL)	2	0	0	0	0	0	0	0	0	0.0
Supply Mains Ctrl Plt (STL)	2	0	0	0	0	0	0	0	0	0.0
Supply Mains Sth Plt (STL)	2	0	0	0	0	0	0	0	0	0.0
Supply Mains Meramec Plt (S	2	0	0	0	0	0	0	0	0	0.0
Power Generation Equip Othe	6	0	0	0	0	0	0	0	0	0.0
Boiler Plant Equipment P	6	0	0	0	0	0	0	0	0	0.0
Pump Equip Steam	6	0	0	0	0	0	0	0	0	0.0
Pump Equip Electric	6	4,436,001	1,707,417	857,923	928,455	196,071	627,694	18,188	100,254	0.0
Pump Equip Elec Pre46 (STL)	6	0	0	0	0	0	0	0	0	0.0
Pump Equip Elec Post46 (STL	6	0	0	0	0	0	0	0	0	0.0
Pump Equip Elec Boosters Po	6	0	0	0	0	0	0	0	0	0.0
Pump Equip Diesel	6	0	0	0	0	0	0	0	0	0.0
Pump Equip Diesel Stratman\	6	0	0	0	0	0	0	0	0	0.0
Pump Equip Diesel Ctrl Plt	6	0	0	0	0	0	0	0	0	0.0
Pump Equip Hydraulic	6	0	0	0	0	0	0	0	0	0.0
Pump Equip Other	6	0	0	0	0	0	0	0	0	0.0
WT Equip Non-Media	2	17,540,049	6,858,159	3,450,128	3,737,784	787,548	2,524,013	28,064	154,352	0.0
WT Equip Non-Med North (STL	2	0	0	0	0	0	0	0	0	0.0
WT Equip Non Media Ctrl 1 &	2	0	0	0	0	0	0	0	0	0.0
WT Equip Non Media Ctrl 3 (	2	0	0	0	0	0	0	0	0	0.0
WT Equip Non Media Sth (STL	2	0	0	0	0	0	0	0	0	0.0
WT Equip Non Media Mer (STL	2	0	0	0	0	0	0	0	0	0.0
WT Equip Filter Media	2	0	0	0	0	0	0	0	0	0.0
Dist Reservoirs & Standpipe	5	775,017	294,584	129,970	105,635	29,683	105,480	16,430	93,235	0.0

Schedule C-7-SSTJ

MISSOURI-AMERICAN WATER COMPANY

ST. JOSEPH DISTRICT

PSC STAFF STUDY

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

Account	Factor Ref.	Cost of Service	Residential	Commercial	Industrial	Public Authorities	Sales for Resale	Fire Protection Private	Fire Protection Public	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
Elevated Tanks & Standpipes	5	299,326	113,774	50,197	40,798	11,464	40,738	6,346	36,009	0.0
Ground Level Facilities	5	0	0	0	0	0	0	0	0	0.0
TD Mains Not Classified by	7	(4,297,726)	(1,470,682)	(648,527)	(526,901)	(148,272)	(526,471)	(146,123)	(830,750)	0.0
TD Mains 4 & Less "	4	667,229	228,326	100,685	81,802	23,019	81,736	22,686	128,975	0.0
TD Mains 6 to 8" "	4	8,330,242	2,850,609	1,257,034	1,021,288	287,393	1,020,455	283,228	1,610,236	0.0
TD Mains 10 to 16" "	3	9,037,110	3,240,708	1,630,295	1,764,948	372,329	1,191,091	125,616	712,124	0.0
TD Mains 18 & Grtr "	3	4,748,942	1,702,971	856,709	927,468	195,656	625,911	66,010	374,217	0.0
TD Mains AC 4 (STL) "	4	0	0	0	0	0	0	0	0	0.0
TD Mains CI <10 1900-28 (S"	4	0	0	0	0	0	0	0	0	0.0
TD Mains CI <10 1929-56 (S"	4	0	0	0	0	0	0	0	0	0.0
TD Mains CI <10 1957-93 (S"	4	0	0	0	0	0	0	0	0	0.0
TD Mains CI 12 (STL) "	3	0	0	0	0	0	0	0	0	0.0
TD Mains CI 16 (STL) "	3	0	0	0	0	0	0	0	0	0.0
TD Mains DI 6-8 (STL) "	4	0	0	0	0	0	0	0	0	0.0
TD Mains DI 12 (STL) "	3	0	0	0	0	0	0	0	0	0.0
TD Mains DI 16 & >(STL)	3	0	0	0	0	0	0	0	0	0.0
TD Mains Galve 1 (STL) "	4	0	0	0	0	0	0	0	0	0.0
TD Mains LJ 20 (STL) "	3	0	0	0	0	0	0	0	0	0.0
Fire Mains	8	0	0	0	0	0	0	0	0	0.0
Services	10	1,754,134	1,464,176	182,079	14,559	15,963	2,982	74,375	0	0.0
Meters Bronze Case	9	974,191	779,158	132,587	30,005	20,166	12,275	0	0	0.0
Meters Plastic Case	9	78,682	62,930	10,709	2,423	1,629	991	0	0	0.0
Meters Other	9	(759,100)	(607,128)	(103,314)	(23,380)	(15,713)	(9,565)	0	0	0.0
Meters Other-Rem Rdr Unts	9	0	0	0	0	0	0	0	0	0.0
Meter Installations	9	1,832,497	1,465,631	249,403	56,441	37,933	23,089	0	0	0.0
Meter Installation Other	9	0	0	0	0	0	0	0	0	0.0
Hydrants	8	1,503,860	0	0	0	0	0	0	1,503,860	0.0
Other P/E Intangible	15	(2,147)	(1,257)	(307)	(211)	(56)	(160)	(28)	(130)	0.0
Other P/E WT Res Hand Equip	2	1,281,177	500,940	252,008	273,019	57,525	184,361	2,050	11,274	0.0
Other P/E TD	7	0	0	0	0	0	0	0	0	0.0
Other P/E CPS	15	0	0	0	0	0	0	0	0	0.0
Office Furniture & Equip	15	(394,305)	(230,826)	(56,307)	(38,681)	(10,212)	(29,297)	(5,087)	(23,895)	0.0
Comp & Periph Equip	15	198,847	116,405	28,395	19,507	5,150	14,774	2,565	12,050	0.0
Computer Software	15	349,438	204,561	49,900	34,280	9,050	25,963	4,508	21,176	0.0
Comp Software Personal	15	46,626	27,295	6,658	4,574	1,208	3,464	601	2,826	0.0
Data Handling Equipment	15	23,772	13,916	3,395	2,332	616	1,766	307	1,441	0.0
Other Office Equipment	15	183,625	107,494	26,222	18,014	4,756	13,643	2,369	11,128	0.0
Trans Equip Lt Duty Trks	15	368,132	215,504	52,569	36,114	9,535	27,352	4,749	22,309	0.0
Trans Equip Hvy Duty Trks	15	77,580	45,415	11,078	7,611	2,009	5,764	1,001	4,701	0.0
Trans Equip Autos	15	79,912	46,780	11,411	7,839	2,070	5,937	1,031	4,843	0.0
Trans Equip Other	15	(244,943)	(143,390)	(34,978)	(24,029)	(6,344)	(18,199)	(3,160)	(14,844)	0.0
Stores Equipment	15	157,704	92,320	22,520	15,471	4,085	11,717	2,034	9,557	0.0
Tools,Shop,Garage Equip	15	527,252	308,653	75,292	51,723	13,656	39,175	6,802	31,951	0.0
Tools,Shop,Garage Equip Oth	15	0	0	0	0	0	0	0	0	0.0
Laboratory Equipment	2	321,584	125,739	63,256	68,530	14,439	46,276	515	2,830	0.0
Laboratory Equip Other	2	0	0	0	0	0	0	0	0	0.0
Power Operated Equipment	15	170,217	99,645	24,307	16,698	4,409	12,647	2,196	10,315	0.0
Comm Equip Non-Telephone	15	16,122	9,438	2,302	1,582	418	1,198	208	977	0.0
Comm Equip Telephone	15	26,490	15,507	3,783	2,599	686	1,968	342	1,605	0.0
Misc Equipment	15	86,868	50,853	12,405	8,522	2,250	6,454	1,121	5,264	0.0
Other Tangible Property	17	0	0	0	0	0	0	0	0	0.0
										0.0
Total Utility Plant in Service		87,027,956	34,897,378	15,822,610	16,255,131	3,544,651	11,247,589	634,656	4,625,943	0.0

MISSOURI-AMERICAN WATER COMPANY

ST. JOSEPH DISTRICT

PSC STAFF STUDY

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

Account	Factor Ref.	Cost of Service	Residential	Commercial	Industrial	Public Authorities	Sales for Resale	Fire Protection Private	Fire Protection Public	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	0.0
Other Rate Base Items										0.0
Add:										
Other Utility Plant Adjustments	17	(386,255)	(154,888)	(70,221)	(72,152)	(15,721)	(49,904)	(2,820)	(20,549)	0.0
Cash Working Capital	15	(239,426)	(140,160)	(34,190)	(23,488)	(6,201)	(17,789)	(3,089)	(14,509)	0.0
Materials and Supplies	15	142,375	83,346	20,331	13,967	3,688	10,578	1,837	8,628	0.0
Prepayments	15	94	55	13	9	2	7	1	6	0.0
OPEB's Contributed to External Fund	16	404,214	220,256	60,632	45,353	11,682	33,994	5,012	27,284	0.0
Premature Retirement	17	0	0	0	0	0	0	0	0	0.0
Regulatory Deferrals	17	0	0	0	0	0	0	0	0	0.0
Less:										
Accumulated Deferred ITC (3%)	17	(4,623,194)	(1,853,901)	(840,497)	(863,613)	(188,164)	(597,317)	(33,749)	(245,954)	0.0
Deferred Income Taxes	17	(5,509,386)	(2,209,264)	(1,001,606)	(1,029,153)	(224,232)	(711,813)	(40,219)	(293,099)	0.0
Pensions	16	(512,427)	(279,221)	(76,864)	(57,494)	(14,809)	(43,095)	(6,354)	(34,589)	0.0
Total Other Rate Base Elements		(10,724,005)	(4,333,777)	(1,942,402)	(1,986,571)	(433,755)	(1,375,338)	(79,380)	(572,782)	0.0
										0.0
Total Original Cost Measure of Value		$ 76,303,951	$ 30,563,601	$ 13,880,208	$ 14,268,559	$ 3,110,896	$ 9,872,250	$ 555,276	$ 4,053,161	0.0

	Cost of Service	Residential	Commercial	Industrial	Public Authorities	Sales for Resale	Private	Public	
T&D OP BASIS FOR FACTOR 11	372,911	181,511	53,570	34,485	10,910	32,756	10,131	49,548	0.0
FACTOR 11		0.4866	0.1437	0.0925	0.0293	0.0878	0.0272	0.1329	1.0000
T&D Mnt BASIS FOR FACTOR 12	142,926	68,567	18,949	11,581	3,758	10,875	3,577	25,619	0.0
FACTOR 12		0.4798	0.1326	0.0810	0.0263	0.0761	0.0250	0.1792	1.0000
A&G BASIS FOR FACTOR 15	2,354,871	1,378,478	336,385	231,064	60,965	174,946	30,392	142,640	0.0
FACTOR 15		0.5854	0.1428	0.0981	0.0259	0.0743	0.0129	0.0606	1.0000
LABOR BASIS FOR FACTOR 16	1,859,989	1,013,296	278,939	208,772	53,785	156,470	23,104	125,623	0.0
FACTOR 16		0.5449	0.1500	0.1122	0.0289	0.0841	0.0124	0.0675	1.0000
UPIS BASIS FOR FACTOR 17	87,016,146	34,892,642	15,820,462	16,252,925	3,544,170	11,246,063	634,569	4,625,315	0.0
FACTOR 17		0.4010	0.1818	0.1868	0.0407	0.1292	0.0073	0.0532	1.0000
RATE BASE BASIS FOR FACTOR 18	76,303,951	30,563,601	13,880,208	14,268,559	3,110,896	9,872,250	555,276	4,053,161	0.0
FACTOR 18		0.4005	0.1819	0.1870	0.0408	0.1294	0.0073	0.0531	1.0000
TOTAL COS BASIS FOR FACTOR 19	15,045,933	7,031,117	2,538,623	2,370,680	535,763	1,647,818	132,845	789,087	0.0
FACTOR 19		0.4674	0.1687	0.1576	0.0356	0.1095	0.0088	0.0524	1.0000
COS w/o Fire Factor 20	12,476,183	7,031,117	2,538,623 #	2,370,680 #	535,763 #				0
FACTOR 20		0.5636	0.2035	0.1900	0.0429				1.0000

Table of Factors - Table Name "FACTORS"

	2 Residential	4 Commercial	6 Industrial	8 Public	10 Resale	12 Private Fire	14 Public Fire	20 Total
1	0.3637	0.1997	0.2381	0.0456	0.1384	0.0022	0.0123	1.0000
2	0.3910	0.1967	0.2131	0.0449	0.1439	0.0016	0.0088	1.0000
3	0.3586	0.1804	0.1953	0.0412	0.1318	0.0139	0.0788	1.0000
4	0.3422	0.1509	0.1226	0.0345	0.1225	0.0340	0.1933	1.0000
5	0.3801	0.1677	0.1363	0.0383	0.1361	0.0212	0.1203	1.0000
6	0.3849	0.1934	0.2093	0.0442	0.1415	0.0041	0.0226	1.0000
7	0.3422	0.1509	0.1226	0.0345	0.1225	0.0340	0.1933	1.0000
8	-	-	-	-	-	-	1.0000	1.0000

Schedule C-9-SSTJ

MISSOURI-AMERICAN WATER COMPANY

ST. JOSEPH DISTRICT

PSC STAFF STUDY

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

Account	Factor Ref.	Cost of Service		Residential	Commercial	Industrial	Public Authorities	Sales for Resale	Fire Protection Private	Fire Protection Public	
(1)	(2)	(3)		(4)	(5)	(6)	(7)	(8)	(9)	(10)	
			9	0.7998	0.1361	0.0308	0.0207	0.0126	-	-	1.0000
			10	0.8347	0.1038	0.0083	0.0091	0.0017	0.0424	-	1.0000
			11	0.4866	0.1437	0.0925	0.0293	0.0878	0.0272	0.1329	1.0000
			12	0.4798	0.1326	0.0810	0.0263	0.0761	0.0250	0.1792	1.0000
			13	0.8802	0.0979	0.0045	0.0060	0.0006	0.0108	-	1.0000
			14	0.8898	0.0990	0.0045	0.0061	0.0006	-	-	1.0000
			15	0.5854	0.1428	0.0981	0.0259	0.0743	0.0129	0.0606	1.0000
			16	0.5449	0.1500	0.1122	0.0289	0.0841	0.0124	0.0675	1.0000
			17	0.4010	0.1818	0.1868	0.0407	0.1292	0.0073	0.0532	1.0000
			18	0.4005	0.1819	0.1870	0.0408	0.1294	0.0073	0.0531	1.0000
			19	0.4674	0.1687	0.1576	0.0356	0.1095	0.0088	0.0524	1.0000
			20	0.5636	0.2035	0.1900	0.0429	-	-	-	1.0000

MISSOURI-AMERICAN WATER COMPANY

ST. JOSEPH DISTRICT

PSC STAFF STUDY

			Base	Max Day	Max Hour	Meters	Services	Billing & Collecting	Fire Service
OPERATION AND MAINTENANCE EXPENSES									
SOURCE OF SUPPLY EXPENSES									
Super & Eng Oper SS	2	0	0	0	0	0	0	0	0
Labor & Exp Oper SS	2	0	0	0	0	0	0	0	0
Labor & Exp Oper SS	2	52,003	36,605	14,857	0	0	0	0	541
Purchased Water	1	0	0	0	0	0	0	0	0
TOTAL SS EXPENSE - OPERATION		52,003	36,605	14,857	0	0	0	0	541
Misc Exp Oper SS	2	0	0	0	0	0	0	0	0
Misc Exp Oper SS	2	138	97	39	0	0	0	0	1
Rents Oper SS	2	0	0	0	0	0	0	0	0
Super & Eng Maint SS	2	0	0	0	0	0	0	0	0
Struct & Improve Maint SS	2	0	0	0	0	0	0	0	0
Struct & Improve Maint SS	2	179	126	51	0	0	0	0	2
Collect & Impound Maint SS	2	0	0	0	0	0	0	0	0
Lake, River & Oth Maint SS	2	0	0	0	0	0	0	0	0
Lake, River & Oth Maint SS	2	0	0	0	0	0	0	0	0
Wells & Springs Maint SS	2	0	0	0	0	0	0	0	0
Wells & Springs Maint SS	2	0	0	0	0	0	0	0	0
Infilt Gall & Tunnels Maint SS	2	0	0	0	0	0	0	0	0
Supply Mains Maint SS	2	0	0	0	0	0	0	0	0
Misc Plant Maint SS	2	0	0	0	0	0	0	0	0
Misc Plant Maint SS	2	2,217	1,561	633	0	0	0	0	23
TOTAL SS EXPENSE - MAINTENANCE		2,534	1,784	724	0	0	0	0	26
TOTAL SS EXPENSE		54,537	38,389	15,581	0	0	0	0	567
POWER AND PUMPING EXPENSES									
Super & Eng Oper P	6	86,335	59,643	24,157	230	0	0	0	2,306
Fuel for Power Prod	1	0	0	0	0	0	0	0	0
Labor & Exp Oper Pwr Prod	6	10,955	7,568	3,065	29	0	0	0	293
Labor & Exp Oper Pwr Prod	6	0	0	0	0	0	0	0	0
Purch Fuel/Power for Pump	1	538,512	530,704	0	0	0	0	0	7,808
Labor & Exp Oper Pump	6	176,465	121,907	49,375	470	0	0	0	4,712
Labor & Exp Oper Pump	6	4,256	2,940	1,191	11	0	0	0	114
Expenses Transferred	6	0	0	0	0	0	0	0	0
Misc Exp Oper P	6	2	1	1	0	0	0	0	0
Rents Oper P	6	256	177	72	1	0	0	0	7
TOTAL PUMPING EXPENSE - OPERATION		816,781	722,940	77,860	742	0	0	0	15,240

Schedule C-11-SSTJ

MISSOURI-AMERICAN WATER COMPANY

ST. JOSEPH DISTRICT

PSC STAFF STUDY

			Base	Max Day	Max Hour	Meters	Services	Billing & Collecting	Fire Service
Super & Eng Maint P	6	12,332	8,519	3,450	33	0	0	0	329
Struct & Improve Maint P	6	386	267	108	1	0	0	0	10
Power Prod Equip Maint P	6	0	0	0	0	0	0	0	0
Pump Equip Maint P	6	0	0	0	0	0	0	0	0
Pump Equip Maint P	6	0	0	0	0	0	0	0	0
TOTAL PUMPING EXPENSES - MAINTENANCE		12,718	8,786	3,558	34	0	0	0	340
TOTAL PUMPING EXPENSES		829,499	731,726	81,418	776	0	0	0	15,579
WATER TREATMENT									
Super & Eng Oper WT	2	108,483	76,361	30,994	0	0	0	0	1,128
Chemicals	1	257,731	253,994	0	0	0	0	0	3,737
Labor & Exp Oper WT	2	152,991	107,690	43,710	0	0	0	0	1,591
Labor & Exp Oper WT	2	901	634	257	0	0	0	0	9
Misc Exp Oper WT	2	0	0	0	0	0	0	0	0
Misc Exp Oper WT	1	80,738	79,567	0	0	0	0	0	1,171
Misc Exp Oper WT	2	0	0	0	0	0	0	0	0
Rents Oper WT	2	(13)	(9)	(4)	0	0	0	0	(0)
TOTAL WT EXPENSE - OPERATION		600,831	518,238	74,957	0	0	0	0	7,636
Super & Eng Maint WT	2	34,476	24,268	9,850	0	0	0	0	359
Struct & Improve Maint WT	2	0	0	0	0	0	0	0	0
Struct & Improve Maint WT	2	0	0	0	0	0	0	0	0
WT Equip Maint WT	2	0	0	0	0	0	0	0	0
WT Equip Maint WT	2	71,120	50,061	20,319	0	0	0	0	740
TOTAL WT EXPENSE - MAINTENANCE		105,596	74,329	30,169	0	0	0	0	1,098
TOTAL WT EXPENSE		706,427	592,567	105,126	0	0	0	0	8,735
TRANSMISSION AND DISTRIBUTION EXPENSES									
Super & Eng Oper TD	11	85,747	17,167	0	28,768	18,736	7,357	0	13,720
Storage Facilty Exp	5	1,433	466	0	771	0	0	0	196
Storage Facilty Exp	5	3,118	1,014	0	1,677	0	0	0	427
TD Lines Exp	7	85,609	24,707	0	41,443	0	0	0	19,459
TD Lines Exp	7	167,884	48,451	0	81,273	0	0	0	38,160
Meter Expense	9	78,803	0	0	0	78,803	0	0	0
Meter Expense	9	2,669	0	0	0	2,669	0	0	0
Customer Install Exp	10	33,375	0	0	0	0	31,960	0	1,415
Customer Install Exp	10	20	0	0	0	0	19	0	1
Misc Exp Oper TD	11	50,123	10,035	0	16,816	10,952	4,301	0	8,020

MISSOURI-AMERICAN WATER COMPANY

ST. JOSEPH DISTRICT

PSC STAFF STUDY

			Base	Max Day	Max Hour	Meters	Services	Billing & Collecting	Fire Service
Misc Exp Oper TD	11	0	0	0	0	0	0	0	0
Misc Exp Oper TD	11	8,155	1,633	0	2,736	1,782	700	0	1,305
Rents Oper TD	11	2,656	532	0	891	580	228	0	425
TOTAL T & D EXPENSE OPERATION		519,592	104,004	0	174,375	113,522	44,564	0	83,126
Super & Eng Maint TD	12	48,617	8,367	0	14,031	11,041	5,246	0	9,932
Struct & Improve Maint TD	12	0	0	0	0	0	0	0	0
Struct & Improve Maint TD	12	0	0	0	0	0	0	0	0
Dist Res Stand Maint TD	5	199	65	0	107	0	0	0	27
TD Main Maint TD	7	84,993	24,529	0	41,145	0	0	0	19,319
TD Main Maint TD	7	0	0	0	0	0	0	0	0
Fire Main Maint TD	8	86	0	0	0	0	0	0	86
Services Maint TD	10	16,111	0	0	0	0	15,428	0	683
Services Maint TD	10	0	0	0	0	0	0	0	0
Meters Maint TD	9	32,457	0	0	0	32,457	0	0	0
Meters Maint TD	9	0	0	0	0	0	0	0	0
Hydrants Maint TD	8	9,080	0	0	0	0	0	0	9,080
Hydrants Maint TD	8	0	0	0	0	0	0	0	0
Misc Plant Maint TD	12	161,680	27,825	0	46,661	36,718	17,445	0	33,031
Mat and Sup Maint TD	12	0	0	0	0	0	0	0	0
Misc Maint TD	12	0	0	0	0	0	0	0	0
Amort Def Maint TD	5	0	0	0	0	0	0	0	0
TOTAL T & D EXPENSE - MAINTENANCE		353,223	60,786	0	101,944	80,215	38,119	0	72,159
TOTAL T & D EXPENSE		872,815	164,790	0	276,319	193,737	82,683	0	155,285
CUSTOMER ACCOUNTS									
Supervision CA	13	17,311	0	0	0	0	0	17,124	187
Meter Reading Exp CA	14	225,427	0	0	0	0	0	225,427	0
Meter Reading Exp CA	14	0	0	0	0	0	0	0	0
Meter Reading Exp CA	14	27,622	0	0	0	0	0	27,622	0
Cust Rec & Collection CA	13	36,543	0	0	0	0	0	36,148	395
Cust Rec & Collection CA	13	97,949	0	0	0	0	0	96,891	1,058
Uncollectible Accts	13	124,404	0	0	0	0	0	123,060	1,344
Misc Cust Accts Exp CA	13	5,308	0	0	0	0	0	5,251	57
Misc Cust Accts Exp CA	13	859	0	0	0	0	0	850	9
Misc Cust Accts Exp CA	13	0	0	0	0	0	0	0	0
Cust Serv & Info Exp CA	13	233,151	0	0	0	0	0	230,633	2,518
TOTAL CUSTOMER ACCOUNTING EXPENSE		768,574	0	0	0	0	0	763,006	5,568

Schedule C-13-SSTJ

MISSOURI-AMERICAN WATER COMPANY

ST. JOSEPH DISTRICT

PSC STAFF STUDY

			Base	Max Day	Max Hour	Meters	Services	Billing & Collecting	Fire Service
ADMINISTRATIVE AND GENERAL EXPENSES									
Salaries AG	15	304,664	85,793	26,140	35,859	25,074	10,694	98,711	22,393
Other Supplies & Exp AG	15	79	22	7	9	7	3	26	6
Other Supplies & Exp AG	15	54,536	15,357	4,679	6,419	4,488	1,914	17,670	4,008
Other Supplies & Exp AG	15	123,681	34,829	10,612	14,557	10,179	4,341	40,073	9,091
Mgmt Fees-Coporate/Shared Service Center	15	438,371	123,445	37,612	51,596	36,078	15,387	142,032	32,220
Mgmt Fees-Call Center	13	236,312	0	0	0	0	0	233,760	2,552
Mgmt Fees-Belleville Lab	2	57,999	40,825	16,570	0	0	0	0	603
Mgmt Fees- Financial ITS	15	23,000	6,477	1,973	2,707	1,893	807	7,452	1,691
Mgmt Fees- Customer Billings ITS	13	129,848	0	0	0	0	0	128,446	1,402
Mgmt Fees-Other ITS	15	1,461	411	125	172	120	51	473	107
Outside Services AG	15	103,691	29,199	8,897	12,204	8,534	3,640	33,596	7,621
Outside Services AG	15	0	0	0	0	0	0	0	0
Property Insurance	15	0	0	0	0	0	0	0	0
Ins Gen Liab Oper AG	15	84,005	23,656	7,208	9,887	6,914	2,949	27,218	6,174
Ins Work Comp AG	16	44,723	14,553	4,589	5,443	5,139	2,223	9,200	3,578
Ins Other Oper AG	15	0	0	0	0	0	0	0	0
Property Insurance	15	64,226	18,086	5,511	7,559	5,286	2,254	20,809	4,721
Injuries & Damages	16	1,265	412	130	154	145	63	260	101
Employee Pension & Benefits	16	634,911	206,600	65,142	77,269	72,951	31,555	130,601	50,793
Employee Pension & Benefits	16	0	0	0	0	0	0	0	0
Employee Pension & Benefits	16	0	0	0	0	0	0	0	0
Reg Commision Exp	15	15,517	4,370	1,331	1,826	1,277	545	5,028	1,140
Rents AG	15	105,644	29,749	9,064	12,434	8,695	3,708	34,229	7,765
Goodwill Advertising Exp	15	0	0	0	0	0	0	0	0
Misc Exp AG	15	(3,638)	(1,024)	(312)	(428)	(299)	(128)	(1,179)	(267)
Research & Development	15	0	0	0	0	0	0	0	0
TOTAL A & G OPERATIONS		2,420,295	632,761	199,278	237,669	186,479	80,005	928,403	155,700
General Plant Maint AG	15	0	0	0	0	0	0	0	0
General Plant Maint AG	15	22,235	6,261	1,908	2,617	1,830	780	7,204	1,634
TOTAL A & G EXPENSE - MAINTENANCE		22,235	6,261	1,908	2,617	1,830	780	7,204	1,634
TOTAL A & G EXPENSE		2,442,530	639,022	201,186	240,286	188,309	80,786	935,607	157,334
Total Operation & Maintenance Expenses		5,674,382	2,166,493	403,311	517,381	382,046	163,469	1,698,614	343,068

Schedule C-14-SSTJ

MISSOURI-AMERICAN WATER COMPANY

ST. JOSEPH DISTRICT

PSC STAFF STUDY

			Base	Max Day	Max Hour	Meters	Services	Billing & Collecting	Fire Service
DEPRECIATION EXPENSE									
Struct & Imp SS	2	0	0	0	0	0	0	0	0
Struct & Imp P	6	38,137	26,346	10,671	102	0	0	0	1,018
Struct & Imp WT	2	229,300	161,404	65,511	0	0	0	0	2,385
Struct & Imp TD	7	2,515	726	0	1,218	0	0	0	572
Struct & Imp Offices	15	0	0	0	0	0	0	0	0
Struct & Imp Store,Shop,Gar	15	4,457	1,255	382	525	367	156	1,444	328
Struct & Imp Misc	15	31,476	8,864	2,701	3,705	2,590	1,105	10,198	2,313
Collect & Impounding	1	0	0	0	0	0	0	0	0
Lake, River & Other Intakes	2	127	89	36	0	0	0	0	1
Wells & Springs	2	559	393	160	0	0	0	0	6
Supply Mains	2	162,723	114,541	46,490	0	0	0	0	1,692
Pump Equip Electric	6	81,746	56,473	22,873	218	0	0	0	2,183
WT Equip Non-Media	2	380,547	267,867	108,722	0	0	0	0	3,958
Dist Reservoirs & Standpipe	5	28,047	9,124	0	15,086	0	0	0	3,837
Elevated Tanks & Standpipes	5	5,590	1,818	0	3,007	0	0	0	765
Ground Level Facilities	5	0	0	0	0	0	0	0	0
TD Mains 4 & Less "	4	8,733	2,520	0	4,228	0	0	0	1,985
TD Mains 6 to 8" "	4	108,762	31,389	0	52,652	0	0	0	24,722
TD Mains 10 to 16" "	3	118,247	76,317	30,969	0	0	0	0	10,961
TD Mains 18 & Grtr "	3	62,187	40,135	16,287	0	0	0	0	5,765
Services	10	37,224	0	0	0	0	35,646	0	1,578
Meters Bronze Case	9	24,087	0	0	0	24,087	0	0	0
Meters Plastic Case	9	1,973	0	0	0	1,973	0	0	0
Meters Other	9	6,949	0	0	0	6,949	0	0	0
Meters Other-Rem Rdr Unts	9	0	0	0	0	0	0	0	0
Meter Installations	9	58,787	0	0	0	58,787	0	0	0
Meter Installation Other	9	0	0	0	0	0	0	0	0
Hydrants	8	30,980	0	0	0	0	0	0	30,980
Utility Plant Acquisition Adjustment	17	0	0	0	0	0	0	0	0
Other P/E WT Res Hand Equip	2	24,780	17,443	7,080	0	0	0	0	258
Other P/E TD	7	0	0	0	0	0	0	0	0
Other P/E CPS	15	0	0	0	0	0	0	0	0
Office Furniture & Equip	15	1,510	425	130	178	124	53	489	111
Comp & Periph Equip	15	33,582	9,457	2,881	3,953	2,764	1,179	10,881	2,468
Computer Software	15	12,318	3,469	1,057	1,450	1,014	432	3,991	905
Comp Software Personal	15	0	0	0	0	0	0	0	0
Data Handling Equipment	15	1,082	305	93	127	89	38	351	80
Other Office Equipment	15	8,327	2,345	714	980	685	292	2,698	612
Trans Equip Lt Duty Trks	15	49,363	13,901	4,235	5,810	4,063	1,733	15,994	3,628
Trans Equip Hvy Duty Trks	15	10,272	2,893	881	1,209	845	361	3,328	755
Trans Equip Autos	15	16,887	4,755	1,449	1,988	1,390	593	5,471	1,241
Trans Equip Other	15	0	0	0	0	0	0	0	0
Stores Equipment	15	3,935	1,108	338	463	324	138	1,275	289
Tools,Shop,Garage Equip	15	27,436	7,726	2,354	3,229	2,258	963	8,889	2,017
Tools,Shop,Garage Equip Oth	15	0	0	0	0	0	0	0	0
Laboratory Equipment	2	10,795	7,599	3,084	0	0	0	0	112
Laboratory Equip Other	2	0	0	0	0	0	0	0	0
Power Operated Equipment	15	25,843	7,277	2,217	3,042	2,127	907	8,373	1,899
Comm Equip Non-Telephone	15	5,143	1,448	441	605	423	181	1,666	378
Comm Equip Telephone	15	1,328	374	114	156	109	47	430	98
Misc Equipment	15	3,415	962	293	402	281	120	1,106	251

MISSOURI-AMERICAN WATER COMPANY

ST. JOSEPH DISTRICT

PSC STAFF STUDY

			Base	Max Day	Max Hour	Meters	Services	Billing & Collecting	Fire Service
Total Depreciation Expense		1,659,169	880,747	332,163	104,331	111,250	43,942	76,585	110,151
Amort-Other UP	18	15,951	9,636	3,748	672	434	327	172	962
Taxes Other Than Income									
Utility Reg Assessment Fee	19	98,508	50,170	16,549	6,275	4,689	2,423	12,373	6,029
Property Taxes	18	1,026,140	619,891	241,143	43,200	27,911	21,036	11,082	61,876
FUTA	16	2,405	783	247	293	276	120	495	192
FICA	16	128,750	41,895	13,210	15,669	14,793	6,399	26,484	10,300
SUTA	16	(54)	(18)	(6)	(7)	(6)	(3)	(11)	(4)
Other Taxes & Licenses	15	32,692	9,206	2,805	3,848	2,691	1,147	10,592	2,403
Gross Receipts Tax	19	0	0	0	0	0	0	0	0
Total Taxes, Other Than Income		1,288,441	721,928	273,948	69,278	50,354	31,122	61,015	80,796
Income Taxes	18	1,318,086	796,256	309,750	55,491	35,852	27,021	14,235	79,481
Utility Income Available for Return	18	5,203,929	3,143,694	1,222,923	219,085	141,547	106,681	56,202	313,797
Total Cost of Service		15,159,958	7,718,753	2,545,844	966,238	721,483	372,562	1,906,823	928,254
Less: Other Water Revenues		(188,014)	(188,014)	0	0	0	0	0	0
Revenue Shift	19	0	0	0	0	0	0	0	0
Total Other Water Revenues		(188,014)	(188,014)	0	0	0	0	0	0
Total Cost of Service Related to Sales of Water		14,971,944	7,530,739	2,545,844	966,238	721,483	372,562	1,906,823	928,254
Reallocation of Public Fire	20	0	546,613	180,269	68,307	0	0	0	(795,189)
Total		$ 14,971,944	$ 8,077,352	$ 2,726,113	$ 1,034,545	$ 721,483	$ 372,562	$ 1,906,823	$ 133,065
			5,018,526			35,900	32,263	381,917	
			$ 1.610			20.10	11.55		
						1.67	0.96	4.99	
		876,981	864,265					7.63	
			$ 0.172						

Schedule C-16-SSTJ

MISSOURI-AMERICAN WATER COMPANY

ST. JOSEPH DISTRICT

PSC STAFF STUDY

			Base	Max Day	Max Hour	Meters	Services	Billing & Collecting	Fire Service
RATE BASE									
Organization	17	11,810	7,127	2,771	500	322	242	135	713
Franchises	17	0	0	0	0	0	0	0	0
Land & Ld Rights SS	2	1,414,424	995,613	404,101	0	0	0	0	14,710
Land & Ld Rights P	6	8,921	6,163	2,496	24	0	0	0	238
Land & Ld Rights WT	2	0	0	0	0	0	0	0	0
Land & Ld Rights TD	7	779,350	224,920	0	377,283	0	0	0	177,146
Land & Land Rights AG	15	8,112	2,284	696	955	668	285	2,628	596
Struct & Imp SS	2	(14,139)	(9,952)	(4,040)	0	0	0	0	(147)
Struct & Imp P	6	4,557,842	3,148,692	1,275,284	12,150	0	0	0	121,716
Struct & Imp Pumps (STL)	6	0	0	0	0	0	0	0	0
Struct & Imp Pump Boosters	6	0	0	0	0	0	0	0	0
Struct & Imp WT	2	18,827,760	13,252,860	5,379,091	0	0	0	0	195,809
Struct & Imp WT Nth Plt (ST	2	0	0	0	0	0	0	0	0
Struct & Imp WT Ctrl Plt 1	2	0	0	0	0	0	0	0	0
Struct & Imp WT Ctrl Plt 3	2	0	0	0	0	0	0	0	0
Struct & Imp WT Sth Plt (ST	2	0	0	0	0	0	0	0	0
Struct & Imp WT Meramec (ST	2	0	0	0	0	0	0	0	0
Struct & Imp TD	7	130,676	37,713	0	63,260	0	0	0	29,703
Struct & Imp TD Spec Cross	7	0	0	0	0	0	0	0	0
Struct & Imp Offices	15	398,646	112,259	34,204	46,921	32,809	13,992	129,161	29,300
Struct & Imp Leasehold	15	0	0	0	0	0	0	0	0
Struct & Imp Leasehold	15	0	0	0	0	0	0	0	0
Struct & Imp Store,Shop,Gar	15	167,184	47,079	14,344	19,678	13,759	5,868	54,168	12,288
Struct & Imp Misc	15	825,145	232,361	70,797	97,120	67,909	28,963	267,347	60,648
Collect & Impounding	1	0	0	0	0	0	0	0	0
Lake, River & Other Intakes	2	686,428	483,177	196,112	0	0	0	0	7,139
Wells & Springs	2	60,110	42,311	17,173	0	0	0	0	625
Supply Mains	2	8,971,282	6,314,885	2,563,095	0	0	0	0	93,301
Supply Mains Nth Plt (STL)	2	0	0	0	0	0	0	0	0
Supply Mains Ctrl Plt (STL)	2	0	0	0	0	0	0	0	0
Supply Mains Sth Plt (STL)	2	0	0	0	0	0	0	0	0
Supply Mains Meramec Plt (S	2	0	0	0	0	0	0	0	0
Power Generation Equip Othe	6	0	0	0	0	0	0	0	0
Boiler Plant Equipment P	6	0	0	0	0	0	0	0	0
Pump Equip Steam	6	0	0	0	0	0	0	0	0
Pump Equip Electric	6	4,436,001	3,064,521	1,241,193	11,825	0	0	0	118,462
Pump Equip Elec Pre46 (STL)	6	0	0	0	0	0	0	0	0
Pump Equip Elec Post46 (STL	6	0	0	0	0	0	0	0	0
Pump Equip Elec Boosters Po	6	0	0	0	0	0	0	0	0
Pump Equip Diesel	6	0	0	0	0	0	0	0	0
Pump Equip Diesel Stratman\	6	0	0	0	0	0	0	0	0
Pump Equip Diesel Ctrl Plt	6	0	0	0	0	0	0	0	0
Pump Equip Hydraulic	6	0	0	0	0	0	0	0	0
Pump Equip Other	6	0	0	0	0	0	0	0	0
WT Equip Non-Media	2	17,540,049	12,346,440	5,011,192	0	0	0	0	182,417
WT Equip Non-Med North (STL	2	0	0	0	0	0	0	0	0
WT Equip Non Media Ctrl 1 &	2	0	0	0	0	0	0	0	0
WT Equip Non Media Ctrl 3 (	2	0	0	0	0	0	0	0	0
WT Equip Non Media Sth (STL	2	0	0	0	0	0	0	0	0
WT Equip Non Media Mer (STL	2	0	0	0	0	0	0	0	0
WT Equip Filter Media	2	0	0	0	0	0	0	0	0
Dist Reservoirs & Standpipe	5	775,017	252,113	0	416,882	0	0	0	106,022

Schedule C-17-SSTJ

MISSOURI-AMERICAN WATER COMPANY

ST. JOSEPH DISTRICT

PSC STAFF STUDY

			Base	Max Day	Max Hour	Meters	Services	Billing & Collecting	Fire Service
Elevated Tanks & Standpipes	5	299,326	97,371	0	161,007	0	0	0	40,948
Ground Level Facilities	5	0	0	0	0	0	0	0	0
TD Mains Not Classified by	7	(4,297,726)	(1,240,324)	0	(2,080,529)	0	0	0	(976,873)
TD Mains 4 & Less "	4	667,229	192,562	0	323,006	0	0	0	151,661
TD Mains 6 to 8" "	4	8,330,242	2,404,108	0	4,032,670	0	0	0	1,893,464
TD Mains 10 to 16" "	3	9,037,110	5,832,551	2,366,819	0	0	0	0	837,740
TD Mains 18 & Grtr "	3	4,748,942	3,064,967	1,243,748	0	0	0	0	440,227
TD Mains AC 4 (STL) "	4	0	0	0	0	0	0	0	0
TD Mains CI <10 1900-28 (S"	4	0	0	0	0	0	0	0	0
TD Mains CI <10 1929-56 (S"	4	0	0	0	0	0	0	0	0
TD Mains CI <10 1957-93 (S"	4	0	0	0	0	0	0	0	0
TD Mains CI 12 (STL) "	3	0	0	0	0	0	0	0	0
TD Mains CI 16 (STL) "	3	0	0	0	0	0	0	0	0
TD Mains DI 6-8 (STL) "	4	0	0	0	0	0	0	0	0
TD Mains DI 12 (STL) "	3	0	0	0	0	0	0	0	0
TD Mains DI 16 & >(STL)	3	0	0	0	0	0	0	0	0
TD Mains Galve 1 (STL) "	4	0	0	0	0	0	0	0	0
TD Mains LJ 20 (STL) "	3	0	0	0	0	0	0	0	0
Fire Mains	8	0	0	0	0	0	0	0	0
Services	10	1,754,134	0	0	0	0	1,679,759	0	74,375
Meters Bronze Case	9	974,191	0	0	0	974,191	0	0	0
Meters Plastic Case	9	78,682	0	0	0	78,682	0	0	0
Meters Other	9	(759,100)	0	0	0	(759,100)	0	0	0
Meters Other-Rem Rdr Unts	9	0	0	0	0	0	0	0	0
Meter Installations	9	1,832,497	0	0	0	1,832,497	0	0	0
Meter Installation Other	9	0	0	0	0	0	0	0	0
Hydrants	8	1,503,860	0	0	0	0	0	0	1,503,860
Other P/E Intangible	15	(2,147)	(605)	(184)	(253)	(177)	(75)	(696)	(158)
Other P/E WT Res Hand Equip	2	1,281,177	901,820	366,032	0	0	0	0	13,324
Other P/E TD	7	0	0	0	0	0	0	0	0
Other P/E CPS	15	0	0	0	0	0	0	0	0
Office Furniture & Equip	15	(394,305)	(111,036)	(33,831)	(46,410)	(32,451)	(13,840)	(127,755)	(28,981)
Comp & Periph Equip	15	198,847	55,995	17,061	23,404	16,365	6,980	64,426	14,615
Computer Software	15	349,438	98,402	29,982	41,129	28,759	12,265	113,218	25,684
Comp Software Personal	15	46,626	13,130	4,001	5,488	3,837	1,637	15,107	3,427
Data Handling Equipment	15	23,772	6,694	2,040	2,798	1,956	834	7,702	1,747
Other Office Equipment	15	183,625	51,709	15,755	21,613	15,112	6,445	59,495	13,496
Trans Equip Lt Duty Trks	15	368,132	103,666	31,586	43,329	30,297	12,921	119,275	27,058
Trans Equip Hvy Duty Trks	15	77,580	21,847	6,656	9,131	6,385	2,723	25,136	5,702
Trans Equip Autos	15	79,912	22,503	6,856	9,406	6,577	2,805	25,891	5,874
Trans Equip Other	15	(244,943)	(68,976)	(21,016)	(28,830)	(20,159)	(8,597)	(79,362)	(18,003)
Stores Equipment	15	157,704	44,409	13,531	18,562	12,979	5,535	51,096	11,591
Tools,Shop,Garage Equip	15	527,252	148,474	45,238	62,058	43,393	18,507	170,830	38,753
Tools,Shop,Garage Equip Oth	15	0	0	0	0	0	0	0	0
Laboratory Equipment	2	321,584	226,363	91,877	0	0	0	0	3,344
Laboratory Equip Other	2	0	0	0	0	0	0	0	0
Power Operated Equipment	15	170,217	47,933	14,605	20,035	14,009	5,975	55,150	12,511
Comm Equip Non-Telephone	15	16,122	4,540	1,383	1,898	1,327	566	5,224	1,185
Comm Equip Telephone	15	26,490	7,460	2,273	3,118	2,180	930	8,583	1,947
Misc Equipment	15	86,868	24,462	7,453	10,224	7,149	3,049	28,145	6,385
Other Tangible Property	17	0	0	0	0	0	0	0	0
Total Utility Plant in Service		87,027,956	52,510,593	20,420,375	3,679,449	2,379,276	1,787,768	994,904	5,255,590

Schedule C-18-SSTJ

MISSOURI-AMERICAN WATER COMPANY

ST. JOSEPH DISTRICT

PSC STAFF STUDY

			Base	Max Day	Max Hour	Meters	Services	Billing & Collecting	Fire Service
Other Rate Base Items									
Add:									
Other Utility Plant Adjustments	17	(386,255)	(233,105)	(90,615)	(16,339)	(10,545)	(7,918)	(4,403)	(23,330)
Cash Working Capital	15	(239,426)	(67,422)	(20,543)	(28,180)	(19,705)	(8,404)	(77,574)	(17,598)
Materials and Supplies	15	142,375	40,093	12,216	16,758	11,717	4,997	46,130	10,465
Prepayments	15	94	26	8	11	8	3	30	7
OPEB's Contributed to External Fund	16	404,214	131,531	41,472	49,193	46,444	20,089	83,147	32,337
Premature Retirement	17	0	0	0	0	0	0	0	0
Regulatory Deferrals	17	0	0	0	0	0	0	0	0
Less:		0							
Accumulated Deferred ITC (3%)	17	(4,623,194)	(2,790,098)	(1,084,601)	(195,561)	(126,213)	(94,775)	(52,704)	(279,241)
Deferred Income Taxes	17	(5,509,386)	(3,324,914)	(1,292,502)	(233,047)	(150,406)	(112,942)	(62,807)	(332,767)
Pensions	16	(512,427)	(166,744)	(52,575)	(62,362)	(58,878)	(25,468)	(105,406)	(40,994)
Total Other Rate Base Elements		(10,724,005)	(6,410,633)	(2,487,140)	(469,528)	(307,577)	(224,417)	(173,588)	(651,121)
Total Original Cost Measure of Value		$ 76,303,951	$ 46,099,960	$ 17,933,235	$ 3,209,921	$ 2,071,699	$ 1,563,350	$ 821,316	$ 4,604,469

T&D OP BASIS FOR FACTOR 11	372,911	74,639	0	125,164	81,472	31,979	0	59,657
FACTOR 11		0.2002	0.0000	0.3355	0.2185	0.0858	0.0000	0.1600
T&D Mnt BASIS FOR FACTOR 12	142,926	24,594	0	41,252	32,457	15,428	0	29,195
FACTOR 12		0.1721	0.0000	0.2886	0.2271	0.1079	0.0000	0.2043
A&G BASIS FOR FACTOR 15	2,354,871	663,207	202,125	277,095	193,737	82,683	763,006	173,018
FACTOR 15		0.2816	0.0858	0.1177	0.0823	0.0351	0.3240	0.0735
LABOR BASIS FOR FACTOR 16	1,859,989	605,177	190,848	226,365	213,780	92,430	382,661	148,728
FACTOR 16		0.3254	0.1026	0.1217	0.1149	0.0497	0.2057	0.0800
UPIS BASIS FOR FACTOR 17	87,016,146	52,503,466	20,417,605	3,678,950	2,378,954	1,787,525	994,770	5,254,877
FACTOR 17		0.6035	0.2346	0.0423	0.0273	0.0205	0.0114	0.0604
RATE BASE BASIS FOR FACTOR 18	76,303,951	46,099,960	17,933,235	3,209,921	2,071,699	1,563,350	821,316	4,604,469
FACTOR 18		0.6041	0.2350	0.0421	0.0272	0.0205	0.0108	0.0603
TOTAL COS BASIS FOR FACTOR 19	15,045,933	7,664,214	2,527,963	958,137	715,517	369,594	1,889,423	921,085
FACTOR 19		0.5093	0.1680	0.0637	0.0476	0.0246	0.1256	0.0612
TOTAL COS BASIS FOR FACTOR 20	11,150,314	7,664,214	2,527,963	958,137	0	0	0	
FACTOR 20		0.6874	0.2267	0.0859	0.0000	0.0000	0.0000	

	2	4	6	8	10	12	14
	Base	Max Day	Max Hour	Meters	Services	Billing & Collecting	Fire Service
1	0.9855	-	-	-	-	-	0.0145
2	0.7039	0.2857	-	-	-	-	0.0104
3	0.6454	0.2619	-	-	-	-	0.0927
4	0.2886	-	0.4841	-	-	-	0.2273
5	0.3253	-	0.5379	-	-	-	0.1368
6	0.6908	0.2798	0.0027				0.0267
7	0.2886	-	0.4841				0.2273
8	-	-	-	-	-	-	1.0000

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MISSOURI-AMERICAN WATER COMPANY

ST. JOSEPH DISTRICT

PSC STAFF STUDY

	Base	Max Day	Max Hour	Meters	Services	Billing & Collecting	Fire Service
9	-	-	-	1.0000	-	-	-
10	-	-	-	-	0.9576	-	0.0424
11	0.2002	-	0.3355	0.2185	0.0858	-	0.1600
12	0.1721	-	0.2886	0.2271	0.1079	-	0.2043
13	-	-	-	-	-	0.9892	0.0108
14	-	-	-	-	-	1.0000	-
15	0.2816	0.0858	0.1177	0.0823	0.0351	0.3240	0.0735
16	0.3254	0.1026	0.1217	0.1149	0.0497	0.2057	0.0800
17	0.6035	0.2346	0.0423	0.0273	0.0205	0.0114	0.0604
18	0.6041	0.2350	0.0421	0.0272	0.0205	0.0108	0.0603
19	0.5093	0.1680	0.0637	0.0476	0.0246	0.1256	0.0612
20	0.6874	0.2267	0.0859	-	-	-	

MISSOURI-AMERICAN WATER COMPANY

ST. JOSEPH 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	Average Daily Consumption, Thousand Gallons	Allocation Factor
(1)	(2)	(3)
Residential	5,075	0.3637
Commercial	2,786	0.1997
Industrial	3,322	0.2381
Other Public Authority	636	0.0456
Sales for Resale	1,930	0.1384
Private Fire Protection	30	0.0022
Public Fire Protection	171	0.0123
Total	13,950	1.0000

FACTOR 2.

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

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

	Average Daily Consumption		Maximum Day Extra Capacity		
Customer Classification	Allocation Factor 1	Weighted Factor	Allocation Factor	Weighted Factor	Allocation Factor
(1)	(2)	(3)=(2)x 0.7143	(4)	(5)=(4)x 0.2857	(6)=(3)+(5)
Residential	0.3637	0.2597	0.4596	0.1313	0.3910
Commercial	0.1997	0.1426	0.1893	0.0541	0.1967
Industrial	0.2381	0.1701	0.1505	0.0430	0.2131
Other Public Authority	0.0456	0.0326	0.0432	0.0123	0.0449
Sales for Resale	0.1384	0.0989	0.1574	0.0450	0.1439
Private Fire Protection	0.0022	0.0016			0.0016
Public Fire Protection	0.0123	0.0088			0.0088
Total	1.0000	0.7143	1.0000	0.2857	1.0000

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

MISSOURI-AMERICAN WATER COMPANY

ST. JOSEPH 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

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

Customer Classification	Base: 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	5,075	1.000	5,075	0.4596
Commercial	2,786	0.750	2,089	0.1893
Industrial	3,322	0.500	1,661	0.1505
Other Public Authority	636	0.750	477	0.0432
Sales for Resale	1,930	0.900	1,737	0.1574
Total	13,749		11,040	1.0000

The weighting of the factors is based on the maximum day ratio of 1.40, based on a review of maximum day ratios experienced during the period 1990 through 2002 (see Schedule D).

	Maximum Day Ratio	Weight
Average Day	1.00	0.7143
Maximum Day Extra Capacity	0.40	0.2857
Total	1.40	1.0000

* Ratio of maximum day to average day minus 1.0.

MISSOURI-AMERICAN WATER COMPANY

ST. JOSEPH DISTRICT

PSC STAFF STUDY

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

FACTOR 3.

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

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

	Base						
	Average Daily Consumption		Maximum Day Extra Capacity		Fire Protection		
Customer Classification	Allocation Factor	Weighted Factor	Allocation Factor	Weighted Factor	Allocation Factor	Weighted Factor	Allocation Factor
(1)	(2)	(3)=(2) X 0.6549	(4)	(5)=(4) X 0.2619	(6)	(7)=(6) X 0.0832	(8)=(3)+(5)+(7)
Residential	0.3637	0.2382	0.4596	0.1204			0.3586
Commercial	0.1997	0.1308	0.1893	0.0496			0.1804
Industrial	0.2381	0.1559	0.1505	0.0394			0.1953
Other Public Authority	0.0456	0.0299	0.0432	0.0113			0.0412
Sales for Resale	0.1384	0.0906	0.1574	0.0412			0.1318
Private Fire Protection	0.0022	0.0014			0.1498	0.0125	0.0139
Public Fire Protection	0.0123	0.0081			0.8502	0.0707	0.0788
Total	1.0000	0.6549	1.0000	0.2619	1.0000	0.0832	1.0000

MISSOURI-AMERICAN WATER COMPANY

ST. JOSEPH DISTRICT

PSC STAFF STUDY

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

FACTOR 4.

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

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

	Base Average Hourly Consumption			Maximum Hour Extra Capacity		Fire Protection		
Customer Classification	Thousand Gallons	Allocation Factor	Weighted Factor	Allocation Factor	Weighted Factor	Allocation Factor	Weighted Factor	Allocation Factor
(1)	(2)	(3)	(4)=(3) X 0.2928	(5)	(6)=(5) X 0.4841	(7)	(8)=(7) X 0.2231	(9)=(4)+(6)+(8)
Residential	211.5	0.3637	0.1065	0.4870	0.2357			0.3422
Commercial	116.1	0.1997	0.0585	0.1909	0.0924			0.1509
Industrial	138.4	0.2381	0.0697	0.1093	0.0529			0.1226
Other Public Authority	26.5	0.0456	0.0134	0.0435	0.0211			0.0345
Sales for Resale	80.4	0.1384	0.0405	0.1693	0.0820			0.1225
Private Fire Protection	1.3	0.0022	0.0006			0.1498	0.0334	0.0340
Public Fire Protection	7.1	0.0123	0.0036			0.8502	0.1897	0.1933
Total	581.3	1.0000	0.2928	1.0000	0.4841	1.0000	0.2231	1.0000

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

ST. JOSEPH DISTRICT

PSC STAFF STUDY

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

FACTOR 3. Continued

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

The weighting of the factors is based on the potential demand of general and fire protection service. The bases for the potential demand of general service are the maximum day ratio of 1.40 and the average daily system sendout for 2002. The system demand for fire protection is 8000 Gallons per minute for 4 hours.

	Ratio	Rate of Flow, (GPD)	Weight
Average Day	1.00	15,117,000	0.6549
Maximum Day Extra Capacity	0.40	6,046,800	0.2619
Subtotal	1.40	21,163,800	0.9168
Fire Protection		1,920,000	0.0832
Total		23,083,800	1.0000

The public and private fire protection allocation factors in column 6 on the previous page are based on the deliverability of 8000 gallons per minute for 4 hours.

MISSOURI-AMERICAN WATER COMPANY

ST. JOSEPH 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 2.65. The system demand for fire protection is approximately 8000 gallons per minute.

	Ratio	Rate of Flow, (GPM)	Weight
Average Hour	1.00	10,498	0.2928
Maximum Hour Extra Capacity	1.65	17,357	0.4841
Subtotal	2.65	27,855	0.7769
Fire Protection		8,000	0.2231
Total		35,855	1.0000

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

Customer Classification	Average Hourly Consumption Thousand Gal.	Maximum Hour Extra Capacity		
		Factor*	1,000 Gallons Per Hour	Allocation Factor
(1)	(2)	(3)	(4)=(2)x(3)	(5)
Residential	211.5	3.5	740.2	0.4870
Commercial	116.1	2.5	290.2	0.1909
Industrial	138.4	1.2	166.1	0.1093
Other Public Authority	26.5	2.5	66.2	0.0435
Sales for Resale	80.4	3.2	257.4	0.1693
Total	572.9		1,520.1	1.0000

* Ratio of Maximum Hour To Average Hour Minus 1.0.

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

MISSOURI-AMERICAN WATER COMPANY

ST. JOSEPH 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.

	BASE Average Hourly Consumption			Maximum Hour Extra Capacity		Fire Protection		
Customer Classification	Thousand Gallons	Allocation Factor	Weighted Factor	Allocation Factor	Weighted Factor	Allocation Factor	Weighted Factor	Allocation Factor
(1)	(2)	(3)	(4)=(3) X 0.3253	(5)	(6)=(5) X 0.5379	(7)	(8)=(7) X 0.1368	(9)=(4)+(6)+(8)
Residential	211.5	0.3637	0.1183	0.4869	0.2619			0.3801
Commercial	116.1	0.1997	0.0650	0.1909	0.1027			0.1677
Industrial	138.4	0.2381	0.0775	0.1093	0.0588			0.1363
Other Public Authority	26.5	0.0456	0.0148	0.0436	0.0235			0.0383
Sales for Resale	80.4	0.1384	0.0450	0.1693	0.0911			0.1361
Private Fire Protection	1.3	0.0022	0.0007			0.1498	0.0205	0.0212
Public Fire Protection	7.1	0.0123	0.0040			0.8502	0.1163	0.1203
Total	581.3	1.0000	0.3253	1.0000	0.5380	1.0000	0.1368	1.0000

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

MISSOURI-AMERICAN WATER COMPANY

ST. JOSEPH 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 4 hour demand of fire flow, as related to total storage capacity.

$$\text{Fire Protection Weight} = \frac{8{,}000\ \text{GPM X 60 Min. X 4 Hrs}}{14{,}040{,}000\ \text{Gallons}} = 0.1368$$

General Service Weight = 1.0000 - 0.1368 = 0.8632

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

	Maximum Hour Ratio	Percent	Weight
Average Hour	1.00	37.69	0.3253
Extra Capacity Maximum Hour	1.65	62.31	0.5379
Total	2.65	100.00	0.8632

Customer Classification	Average Hourly Consumption Thousand Gal.	Maximum Hour Extra Capacity Factor*	1,000 Gallons Per Hour	Allocation Factor
(1)	(2)	(3)	(4)=(2)x(3)	(5)
Residential	211.5	3.5	740.2	0.4869
Commercial	116.1	2.5	290.2	0.1909
Industrial	138.4	1.2	166.1	0.1093
Other Public Authority	26.5	2.5	66.2	0.0436
Sales for Resale	80.4	3.2	257.4	0.1693
Total	572.9		1520.1	1.0000

MISSOURI-AMERICAN WATER COMPANY

ST. JOSEPH 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 Maximum Day Factor 2, Maximum Day with Fire Factor 3, and the maximum hour consumption, Factor 4, for each customer classification, as follows:

	Maximum Daily Consumption		Maximum Daily Consumption		Maximum Hourly Consumption		
Customer Classification	Allocation Factor 2	Weighted Factor	Allocation Factor 3	Weighted Factor	Allocation Factor 4	Weighted Factor	Allocation Factor
(1)	(2)	(3)=(2)X 0.8106	(4)	(5)=(4)X 0.1841	(6)	(7)=(6)X 0.0053	(8)=(3)+ (5)+(7)
Residential	0.3910	0.3171	0.3586	0.0659	0.3422	0.0019	0.3849
Commercial	0.1967	0.1594	0.1804	0.0332	0.1509	0.0008	0.1934
Industrial	0.2131	0.1727	0.1953	0.0360	0.1226	0.0006	0.2093
Other Public Authority	0.0449	0.0364	0.0412	0.0076	0.0345	0.0002	0.0442
Sales for Resale	0.1439	0.1166	0.1318	0.0243	0.1225	0.0006	0.1415
Private Fire Protection	0.0016	0.0013	0.0139	0.0026	0.0340	0.0002	0.0041
Public Fire Protection	0.0088	0.0071	0.0788	0.0145	0.1933	0.0010	0.0226
Total	1.0000	0.8106	1.0000	0.1841	1.0000	0.0053	1.0000

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

	Horsepower of Pumps	Weight
Associated with Maximum Day	4,600	0.8106
Associated with Maximum Day and Fire	1,045	0.1841
Associated with Maximum Hour	30	0.0053
Total	5,675	1.0000

MISSOURI-AMERICAN WATER COMPANY
ST. JOSEPH DISTRICT

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:

	Maximum Daily Consumption		Maximum Hourly Consumption		
Customer Classification	Allocation Factor 3	Weighted Factor	Allocation Factor 4	Weighted Factor	Allocation Factor
(1)	(2)	(3)=(2)X 0.0000	(4)	(5)=(4)X 1.0000	(6)=(3)+(5)
Residential	0.3586	0.0000	0.3422	0.3422	0.3422
Commercial	0.1804	0.0000	0.1509	0.1509	0.1509
Industrial	0.1953	0.0000	0.1226	0.1226	0.1226
Other Public Authority	0.0412	0.0000	0.0345	0.0345	0.0345
Sales for Resale	0.1318	0.0000	0.1225	0.1225	0.1225
Private Fire Protection	0.0139	0.0000	0.0340	0.0340	0.0340
Public Fire Protection	0.0788	0.0000	0.1933	0.1933	0.1933
Total	1.0000	0.0000	1.0000	1.0000	1.0000

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

	Cost of of Mains	Weight
Transmission Mains	13,919,846	0.6017
Distribution Mains	9,215,518	0.3983
Total	23,135,364	1.0000

NO FUNCTIONALIZATION
ASSIGN ALL TO MAX HOUR

MISSOURI-AMERICAN WATER COMPANY

ST. JOSEPH 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	Allocation Factor
(1)	(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	5/8" Dollar Equivalents	Allocation Factor
(1)	(2)	(3)
Residential	28,715	0.7998
Commercial	4,885	0.1361
Industrial	1,106	0.0308
Other Public Authority	742	0.0207
Sales for Resale	452	0.0126
Private Fire	0	0.0000
Total	35,900	1.0000

MISSOURI-AMERICAN WATER COMPANY

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PSC STAFF STUDY

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

FACTOR 10.

ALLOCATION OF COSTS ASSOCIATED WITH SERVICES.

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

Customer Classification	3/4" Dollar Equivalents	Allocation Factor
(1)	(2)	(3)
Residential	28,123	0.8347
Commercial	3,498	0.1038
Industrial	280	0.0083
Other Public Authority	305	0.0091
Sales for Resale	57	0.0017
Private Fire Protection	1,429	0.0424
Total	33,692	1.0000

MISSOURI-AMERICAN WATER COMPANY

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

FACTOR 11.

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

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

Customer Classification	Transmission & Distribution Operating Expenses	Allocation Factor
(1)	(2)	(3)
Residential	$ 181,511	0.4867
Commercial	53,570	0.1437
Industrial	34,485	0.0925
Other Public Authority	10,910	0.0293
Sales for Resale	32,756	0.0878
Private Fire Protection	10,131	0.0272
Public Fire Protection	49,548	0.1329
Total	372,911	1.0000

FACTOR 12.

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

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

Customer Classification	Transmission & Distribution Maintenance Expenses	Allocation Factor
(1)	(2)	(3)
Residential	$ 68,567	0.4797
Commercial	18,949	0.1326
Industrial	11,581	0.0810
Other Public Authority	3,758	0.0263
Sales for Resale	10,875	0.0761
Private Fire Protection	3,577	0.0250
Public Fire Protection	25,619	0.1792
Total	$142,926	1.0000

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

FACTOR 13.

ALLOCATION OF BILLING AND COLLECTING COSTS.

Factors are based on the total number of customers.

Customer Classification	Total Customers	Allocation Factor
(1)	(2)	(3)
Residential	28,011	0.8802
Commercial	3,117	0.0979
Industrial	142	0.0045
Other Public Authority	191	0.0060
Sales for Resale	20	0.0006
Private Fire Protection	345	0.0108
Public Fire Protection	0	0.0000
Total	31,826	1.0000

FACTOR 14.

ALLOCATION OF METER READING COSTS.

Factors are based on the number of metered customers.

Customer Classification	Total Metered Customers	Allocation Factor
(1)	(2)	(3)
Residential	28,011	0.8898
Commercial	3,117	0.0990
Industrial	142	0.0045
Other Public Authority	191	0.0061
Sales for Resale	20	0.0006
Total	31,481	1.0000

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

FACTOR 15.

ALLOCATION OF ADMINISTRATIVE AND GENERAL EXPENSES AND CASH WORKING CAPITAL.

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

Customer Classification	Operation & Maintenance Expenses	Allocation Factor
(1)	(2)	(3)
Residential	$1,378,478	0.5854
Commercial	336,385	0.1428
Industrial	231,064	0.0981
Other Public Authority	60,965	0.0259
Sales for Resale	174,946	0.0743
Private Fire Protection	30,392	0.0129
Public Fire Protection	142,640	0.0606
Total	$2,354,871	1.0000

MISSOURI-AMERICAN WATER COMPANY

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

FACTOR 16.

ALLOCATION OF LABOR RELATED TAXES AND BENEFITS.

Factors are based on the allocation of direct labor expense.

Customer Classification	Direct Labor Expense	Allocation Factor
(1)	(2)	(3)
Residential	$1,013,296	0.5448
Commercial	278,939	0.1500
Industrial	208,772	0.1122
Other Public Authority	53,785	0.0289
Sales for Resale	156,470	0.0841
Private Fire Protection	23,104	0.0124
Public Fire Protection	125,623	0.0675
Total	$1,859,989	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:

Customer Classification	Original Cost Less Depreciation	Allocation Factor
(1)	(2)	(3)
Residential	$34,892,642	0.4010
Commercial	15,820,462	0.1818
Industrial	16,252,925	0.1868
Other Public Authority	3,544,170	0.0407
Sales for Resale	11,246,063	0.1292
Private Fire Protection	634,569	0.0073
Public Fire Protection	4,625,315	0.0532
Total	$87,016,146	1.0000

MISSOURI-AMERICAN WATER COMPANY

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

FACTOR 18.

ALLOCATION OF INCOME TAXES AND INCOME AVAILABLE FOR RETURN.

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

Customer Classification	Original Cost Measure of Value	Allocation Factor
(1)	(2)	(3)
Residential	$30,563,601	0.4006
Commercial	13,880,208	0.1819
Industrial	14,268,559	0.1870
Other Public Authority	3,110,896	0.0408
Sales for Resale	9,872,250	0.1294
Private Fire Protection	555,276	0.0073
Public Fire Protection	4,053,161	0.0531
Total	$76,303,951	1.0000

FACTOR 19.

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

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

Customer Classification	Total Cost of Service	Allocation Factor
(1)	(2)	(3)
Residential	$7,031,117	0.4673
Commercial	2,538,623	0.1687
Industrial	2,370,680	0.1576
Other Public Authority	535,763	0.0356
Sales for Resale	1,647,818	0.1095
Private Fire Protection	132,845	0.0088
Public Fire Protection	789,087	0.0524
Total	$15,045,933	1.0000

MISSOURI-AMERICAN WATER COMPANY

ST. JOSEPH DISTRICT

PSC STAFF STUDY

BASIS FOR ALLOCATING METER COSTS TO CUSTOMER CLASSIFICATIONS

Meter Size	5/8" Dollar Equivalent	Residential Number of Meters	Residential Weighting	Commercial Number of Meters	Commercial Weighting	Industrial Number of Meters	Industrial Weighting	Other Public Authority Number of Meters	Other Public Authority Weighting	Sales for Resale Number of Meters	Sales for Resale Weighting	Total Number of Meters	Total 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	26,629.66	26,629.66	2,289.18	2,289.18	7.00	7.00	38.46	38.46	0.17	0.17	28,964.46	28,964.47
3/4	1.3	806.67	1,048.67	156.33	203.23	3.33	4.33	10.83	14.08	0.00	0.00	977.17	1,270.31
1	1.7	555.80	944.86	340.58	578.99	22.00	37.40	37.17	63.18	0.00	0.00	955.55	1,624.43
1-1/2	3.5	5.08	17.79	86.42	302.46	6.67	23.33	18.50	64.75	0.00	0.00	116.67	408.33
2	4.3	12.79	55.00	225.25	968.58	81.50	350.45	78.25	336.48	11.00	47.30	408.79	1,757.81
3	19.0	1.00	19.00	6.00	114.00	2.00	38.00	2.17	41.17	0.00	0.00	11.17	212.17
4	29.3	0.00	0.00	11.33	332.07	15.42	451.71	5.17	151.38	5.00	146.50	36.92	1,081.66
6	48.4	0.00	0.00	2.00	96.80	4.00	193.60	0.67	32.27	3.00	145.20	9.67	467.87
8	112.9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	112.90	1.00	112.90
Total		28,011	28,715	3,117	4,885	142	1,106	191	742	20	452	31,481	35,900

Schedule D-1-SSTJ

MISSOURI-AMERICAN WATER COMPANY
ST. JOSEPH DISTRICT
PSC STAFF STUDY
BASIS FOR ALLOCATING SERVICE COSTS TO CUSTOMER CLASSIFICATIONS

	3/4"	Residential		Commercial		Industrial		Other Public Authority		Sales for Resale		Private Fire Protection		Total	
Service Size	Dollar Equivalent	Number of Services	Weighting	Number of Services	Weighting	Number of Services	Weighting	Number of Services	Weighting	Number of Services	Weighting	Number of Services	Weighting	Number of Services	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)=(2)X(11)	(15)	(16)
3/4	1.00	27,436.33	27,436.33	2,445.51	2,445.51	10.33	10.33	49.29	49.29	0.17	0.17	0.00	0.00	29,941.63	29,941.63
1	1.17	555.80	650.29	340.58	398.48	22.00	25.74	37.17	43.49	0.00	0.00	0.00	0.00	955.55	1,118.00
1-1/2	1.58	5.08	8.03	86.42	136.54	6.67	10.53	18.50	29.23	0.00	0.00	0.00	0.00	116.67	184.33
2	2.04	12.79	26.10	225.25	459.51	81.50	166.26	78.25	159.63	11.00	22.44	4.00	8.16	412.79	842.10
3	2.73	1.00	2.73	6.00	16.38	2.00	5.46	2.17	5.92	0.00	0.00	1.00	2.73	12.17	33.22
4	2.88	0.00	0.00	11.33	32.64	15.42	44.40	5.17	14.88	5.00	14.40	61.00	175.68	97.92	282.00
6	4.24	0.00	0.00	2.00	8.48	4.00	16.96	0.67	2.83	3.00	12.72	121.00	513.04	130.67	554.03
8	6.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	6.98	77.00	537.46	78.00	544.44
10	9.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.00	95.00	10.00	95.00
12	12.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	97.28	8.00	97.28
Total		28,011.00	28,123.48	3,117.09	3,497.54	141.92	279.68	191.21	305.27	20.17	56.71	282.00	1,429.35	31,763.38	33,692.03

MISSOURI-AMERICAN WATER COMPANY

ST. JOSEPH DISTRICT

PSC STAFF STUDY

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

Description		Restrictive Diameters Squared	Quantity	Relative Demand*	Allocation Factor
(1)		(2)	(3)	(4)=(2)x(3)	(5)
PRIVATE FIRE PROTECTION					
Fire Lines					
2 -inch		4.00	4	16	
3 -inch		9.00	1	9	
4 -inch		16.00	61	976	
6 -inch		36.00	121	4,356	
8 -inch		64.00	77	4,928	
10 -inch		100.00	10	1,000	
12 -inch		144.00	8	1,152	
Private Hydrants		32.75	63	2,063	
Total Private Fire Protection			345	14,500	0.1498
PUBLIC FIRE PROTECTION					
Hydrant	Nozzle Sizes				
6" Valve	2- 2-1/2" & 1- 4.5"	32.75	0	0	
6" Valve	2- 2-1/2" & 1- 4"	28.50	2,888	82,308	
Total Public Fire Prorection			2,888	82,308	0.8502
Total Fire Protection			3,233	96,808	1.0000