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Aqua Missouri CU-Maplewood and Lake Carmel Water

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Aqua Missouri CU-Maplewood and Lake Carmel Water Proposed Revenue Requirement

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Line No.		
1	Total Rate Base	359,544
2		
3	Weighted Cost of Capital	<u>8.37%</u>
4		
5	Required Return	30,086
6		
7	Test Year net operating income	(8,506)
8		
9	Operating income deficiency	38,592
10		
11	State income tax	3,958
12		
13	Federal income tax	20,780
14		
15	Total Revenue Increase	63,331
16		
17	Percent Increase	<u>49.61%</u>
18		
19	Current Revenue	127,669
20	New annual revenue	191,000
21		
22		
23	Computation of Income Tax Gross-Up Factors:	
24	Operating Income before tax	100.00%
25	State income tax rate	<u>6.25%</u>
26	Operating income after state inc tax	93.75%
27	Times Federal income tax rate	<u>35.00%</u>
28	Federal tax	32.81%
29	Plus state income tax rate	<u>6.25%</u>
30	Effective tax rate	<u>39.06%</u>
31		
32	Reciprocal	<u>60.94%</u>

Aqua Missouri CU-Maplewood-Water Cost of Service

Schedule MAP-W-2 Page 1 of 1

		9/30/07		Adj.	<u>Proforma</u>	Rate Inc.	P <u>roforma</u>
Line No.		Test Year	Adjustments	Ref.	Present	Adjustment	Proposed
1	Operating Revenues	130,359	(2,690)	#10	127,669	63,331	191,000
2							
3	Operations and Maintenance						
4	Salaries and Wages	30,082	6,041	#1	36,123		36,123
5	Employee Pensions and Benefits	8,023	3,243	#2	11,266		11,266
6	Purchased Water	0,020	0,240	n Z	-		11,200
7	Sludge Removal						_
8	Power	7,358	163	#3	7,521		7,521
9	Chemicals	1,705		,, .	1,705		1,705
10	Supplies	11,277			11,277		11,277
11	Engineering	,			-		-
12	Accounting	887			887		887
13	Legal						-
14	Management fees	12,294			12,294		12,294
15	Other Outside Services	5,247			5,247		5,247
16	Leases	1,649			1,649		1,649
17	Transportation	13,414	1,136	#4	14,550		14,550
18	Insurance	3,140			3,140		3,140
19	Other Expenses	17,659			17,659		17,659
20	Bad Debts	629	312	#6	941		941
21	Subtotal O&M Expenses	113,364			124,259		124,259
22	Depreciation Expense	20,131	5,725	#5	25,856		25,856
23	Amortization of CIAC	•	(9,212)	#5	(9,212)		(9,212)
24	Amortization Expense	4,978	, ,		4,978		4,978
25	Taxes Other than Income Taxes	3,382	1,401	#7	4,783		4,783
26	Subtotal-Total exp. before Inc. Tax	141,855			150,664		150,664
27	Income Taxes				(14,488)		10,250
28					(, ,		,
29	Total Cost of Service	141,855			136,175		160,914
30		,					,
31	Operating Income	(11,496)			(8,506)		30,086
32	Operating moonto	(11,100)			(0,000)		00,000
33							
34	Rate Base	359,544					359,544
35	Return on Rate Base	-3.2%					8.37%
36		2.270					3.3.70
37							
38							
39							
40							

Aqua Missouri CU-Maplewood-Water Rate Base Summary

Schedule MAP-W-3 Page 1 of 1

		9/30/07		
Line No.		Actual	<u>Adjustments</u>	<u>Adjusted</u>
1	Rate Base Component			
2	Utility Plant in Service	725,178	29,300	754,478
3	Accumulated Provision for Depreciation	(166,026)		(166,026)
4				-
5	Utility Plant Acquisition Adjustments			
6				
7	Net Utility Plant	559,152	29,300	588,452
8				
9	Less:			
10	Contributions in Aid of Construction	(274,347)		(274,347)
11	Accumulated Amortization of CIAC	54,487		54,487
12	Deferred Income Taxes	(9,048)		(9,048)
13				
14				
15	Total Original Cost Rate Base	330,244	29,300	359,544
16	_			
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				

Aqua Missouri CU-Maplewood-Water Revenue and Proposed Rate Changes

Schedule MAP-W-4 Page 1 of 1

<u>Line No.</u> 1 2 3	F	Customer Classification Residential Commercial	<u>Current</u> 83,757 41,772	<u>Proposed</u> 126,013 62,846	<u>Dollar</u> <u>Change</u> 42,256 21,074	Percent Change 50.45% 50.45%
3 4						
5	ľ	Miscellaneous	2,140	2,140	_	0.00%
6				2,1,0		0.0070
7	٦	FOTAL	127,669	191,000	63,331	49.61%
8				<u>-</u>		
9						
10]	Tariff Changes				
11	Ę	5/8" service charge	4.61	6.94	2.33	50.45%
12	3	3/4" service charge	6.93	10.43	3.50	50.45%
13	1	l" service charge	11.54	17.36	5.82	50.45%
14	^	1 1/2" service charge	23.10	34.75	11.65	50.45%
15		2" service charge	36.95	55.59	18.64	50.45%
16	3	3" service charge	69.28	104.23	34.95	50.45%
17						
18		Residential commodity charge	2.268	3.412	1.14	50.45%
19		Commercial commodity charge non minimums)	3.61	5.43	1.82	50.45%
Cu	ıst. F	Revenue Proof:				
		Residential 5/8" meters	26,277	39,534	13,257	50.45%
-	1 F	Residential 1" meters	138	208	70	50.45%
,	1 (Commercial-5/8"	55	83	28	50.45%
2	2 (Commercial-2"	887	1,334	447	50.45%
,	1 (Commercial-3"	831	1,251	419	50.45%
	F	Residential-25,361,521 gallons	57,520	86,539	29,019	50.45%
	(Commerical-11,079,800 gallons	39,998	60,177	20,179	50.45%
			125,707	189,127	63,420	

Line No.

1	Adjustment #1-Labor:	
2	2008 Budgeted Labor 3	6,123
3	Less: Test year labor(3	0,082)
4	Adjustment	6,041
5		
6	To adjust 9/30/07 test year labor to 2008 budgeted labor due to wage increases and	
7	a full work force	,
8		j
9		

Adjustment #2- Benefits	
2008 Budgeted Benefits	11,266
Less: Test year benefits	(8,023)
Adjustment	3,243
To adjust 9/30/07 test year benefits to 2008 budgeted benefits due to cost	
increases and a full work force	

Adjustment #3-Power	
2008 Budgeted Power	7,521
Less: Test Year Power	(7,358)
Adjustment Needed	163
To adjust 9/30/07 test year power to 2008 budgeted amount	

Adjustment #4- Transportation	
2008 Budgeted Trannsportation	14,550
Less: Test Year Transportation	(13,414)
Adjustment Needed	1,136
To adjust 9/30/07 test year transportation to 2008 budgeted amount due to	
fuel, maintenance and vehicle lease costs	

Revenue per test year

Adjustment needed

To adjust test year revenue to Last Allowed.

127,669 (130,359)

(2,690)

	ment #5-Depreciation and CIAC Amortization	
	ciation Expense as calculated	25,8
	ear depreciation expense	(20,1
	Adjustment	5,7
	•	
CIAC A	Amortization as calculated	(9,2
Test ye	ear CIAC amortization	
	Adjustment	(9,2
	14 4 0/00/07 D 00/17 E 00/10/07 A 17 4F 4	
	ust test year 9/30/07 Depreciation Expense and CIAC Amortization to ciation and Amortization Detail	
Deplet	Salion and Amortization Detail	
Adjust	ment #6- Bad Debt Costs	
	ear Bad Debt Expense	6
Adjustr	ment for Rate Increase (Test Year times rate increase percentage)	3
To adji	ust Bad Debt Expense for the impact of the proposed rate increase	
Adiust	ment #7- Other Taxes	
	Taxes as budgeted	4,7
	Fest Year Other Taxes	(3,3
	Adjustment	1,4
	Adjustmont	
To adju	ust test year 9/30/07 Other Taxes to 2008 budgeted amount due to char	nges in
	ust test year 9/30/07 Other Taxes to 2008 budgeted amount due to char taxes, property taxes, and other assessments	nges in
		nges in
		nges in
payroll	taxes, property taxes, and other assessments	nges in
payroll Adjust		nges in
payroll	taxes, property taxes, and other assessments	nges in
payroll Adjust	taxes, property taxes, and other assessments	nges in
payroll Adjust	taxes, property taxes, and other assessments	ages in
payroll Adjust	taxes, property taxes, and other assessments	nges in
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Adjust None	taxes, property taxes, and other assessments	nges in
Adjust None Adjust None	tment #9- Legal	nges in
Adjust None Adjust None	tment #9- Legal tment #10- Revenue Adjustment	
Adjust None Adjust None	tment #9- Legal	127,

Aqua Missouri CU-Maplewood-Water Income Taxes

30

Page 1 of 1 Proforma **Proforma** Line No. Present SIT FIT Proposed SIT FIT Operating Revenue 191,000 1 127,669 2 3 O&M Expenses 124,259 124,259 4 **Book Depreciation** 25,856 25,856 5 Taxes, Other 4,783 4,783 6 Interest 9,861 9,861 7 Tax depreciation greater than book 8 164,759 164,759 Subtotal 9 State taxable income (37,090)26,240 10 11 State income tax at 6.25% (2,318)(2,318)1,640 1,640 12 13 14 15 24,600 Federal taxable income (34,772)16 17 FIT at 35% 8,610 (12,170)18 19 20 Net Expense (14,488) 10,250 21 22 23 24 25 Interest Expense Calculation: 26 Test Year Rate Base 359,544 359,544 27 28 Times: Weighted cost of debt 2.74% 2.74% 29 9,861 9,861

Schedule MAP-W-6

					<u>Total</u>			<u>De</u> p'n	Depreciation
<u>Line No.</u>					9/30/07	<u>Additions</u>	<u>Proforma</u>	Rate	Expense
1	Acct No	Account Description							
2	204	Intangible Plant					-		
4	301 302	Organization Franchise and Consents			3,517		3,517		
5	303	Miscellaneous Intangible Plant			4,112		4,112		
6	500	Misceraneous intarigible Flam					-		
7		Source of Supply Plant					-		
8	310	Land and Land Rights					-		
9	311	Structures and Improvements			268	4,500	4,768	2.5%	119
10	312	Collecting and Impounding Reservoirs			2.00	1,000	-,,,oo	2.576	-
11	313	Lake, River, and Other Intakes					-		-
12	314	Wells and Springs			30,216	3,500	33,716	2.0%	674
13	315	Infiltration Galleries and Tunnels					-		•
14	316	Supply Mains			126		126	2.0%	3
15	317	Other Water Source Plant					-		-
16 17		Pumping Plant					-		-
18	320	Land and Land Rights					-		-
19	321	Structures and Improvements					-		-
20	322	Boiler Plant Equipment					-		=
21	323	Other Power Production Equipment					-		-
22	324	Steam Pumping Equipment					-		-
23	325	Electric Pumping Equipment			40,143		40,143	10.0%	4,014
24	326	Diesel Pumping Equipment			.0,.,0		-	10.078	4,014
25	327	Hydraulic Pumping Equipment					-		_
26	328	Other Pumping Equipment					_	4.0%	_
27							_		-
28		Water Treatment Plant					-		-
29	330	Land and Land Rights					~		-
30	331	Structures and Improvments			1,826		1,826	2.5%	46
31 32	332	Water Treatment Equipment			10,891		10,891	2.9%	316
		-					-		-
33 34	240	Transmission and Distribution Plant					-		=
34 35	340 341	Land and Land Rights			4,222		4,222		-
36	342	Structures and Improvements Distribution Reservoirs and Standpipes			3,130		3,130	2.5%	78
37	343	Transmission and Distribution Mains			151,598		151,598	2.5%	3,790
38	344	Fire Mains			263,677		263,677	2.0%	5,274
39	345	Services			14,845		14,845	2.5%	274
40	346	Meters			38,435	10,800	49,235	10.0%	371 4,924
41	348	Hydrants			6,421	2,500	8,921	2.0%	178
42	349	Other Transmission and Distribution Pla			-,	_,	-	2.070	-
43							_		_
44		General Plant					-		-
45	389	Land and Land Rights			1,025		1,025		-
46 47	390	Structures and Improvements			97,110		97,110	2.5%	2,428
48	391 392	Office Furniture and Equipment					<u>-</u>	5.0%	-
49	393	Transportation Equipment Stores Equipment			7,010		7,010	13.0%	911
50		Tools, Shop and Garage Equipment			2 242			4.0%	-
51		Laboratory Equipment			3,312 8,422		3,312	5.0%	166
52		Power-operated Equipment			0,422		8,422	5.0% 6.7%	421
53		Communication Equipment					-	6.7%	-
54		Miscellaneous Equipment			3,089	8,000	11,089	5.0%	554
55	399	Other Tangible Property			-1	0,000	-	2.0%	-
56		Total Water Utility Plant In Service			693,395	29,300	722,695	2.070	24,267
		·					722,000		24,207
		Allocation from Administration							
	390	Structures and Improvements	3.043	11.85%	361		361	5.0%	4.0
	391	Office Equipment	265,168		31,422		31,422	5.0% 5.0%	18 1,571
			268,211		31,783		31,783	0.070	
			TTO IT		31,100		31,103		1,589
		Contributions in Aid of Construction			(274,347)		(274,347)		(0.242)
		Accumulated amortization			54,487		54,487		(9,212)
		Net CIAC			(219,860)		(219,860)		
					(2.0,000)		<u>12.10,000)</u>		

Aqua Missouri CU-Maplewood and Carmel City Depreciation Reserve-Water

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<u>Debrec</u>	iation Rese	rve-water	
Line No).		Maplewood Actual 9/30/07
1	Acct No	Account Description	
2	71001110	Intangible Plant	
3	201		
	301	Organization	=
4	302	Franchise and Consents	
5	303	Miscellaneous Intangible Plant	
6			
7		Source of Supply Plant	
8	310	Land and Land Rights	
9	311	Structures and Improvements	(45)
10		<u>•</u>	. (43)
	312	Collecting and Impounding Reservoirs	
11	313	Lake, River, and Other Intakes	
12	314	Wells and Springs	(6,327)
13	315	Infiltration Galleries and Tunnels	
14	316	Supply Mains	(35)
15	317	Other Water Source Plant	` '
16			
17		Pumping Plant	
18	220		
	320	Land and Land Rights	
19	321	Structures and Improvements	
20	322	Boiler Plant Equipment	
21	323	Other Power Production Equipment	
22	324	Steam Pumping Equipment	
23	325	Electric Pumping Equipment	(37,110)
24	326	Diesel Pumping Equipment	(- , ,
25	327	Hydraulic Pumping Equipment	
26	328		
20 27	320	Other Pumping Equipment	
		THE STATE OF THE STATE OF	
28		Water Treatment Plant	
29	330	Land and Land Rights	
30	331	Structures and Improvments	(559)
31	332	Water Treatment Equipment	(1,409)
32			
33		Transmission and Distribution Plant	
34	340	Land and Land Rights	
35	341	Structures and Improvements	(739)
36		Distribution Reservoirs and Standpipes	
	342		(41,637)
37	343	Transmission and Distribution Mains	(38,905)
38	344	Fire Mains	
39	345	Services	(6,366)
40	346	Meters	(18,216)
41	348	Hydrants	(2,427)
42	349	Other Transmission and Distribution Plant	, , ,
43			
44		General Plant	
45	200	Land and Land Rights	
	389	-	(4.440)
46	390	Structures and Improvements	(4,116)
47	391	Office Furniture and Equipment	
48	3 9 2	Transportation Equipment	(6,151)
49	393	Stores Equipment	
50	394	Tools, Shop and Garage Equipment	(639)
51	395	Laboratory Equipment	(828)
52	396	Power-operated Equipment	()
53	397	Communication Equipment	(517)
54	398	Miscellaneous Equipment	(011)
55	399		
	255	Other Tangible Property	
56		Total Water Utility Plant In Service	(166,026)

Aqua Missouri Weighted Cost of Capital September 30, 2007

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		Aqua Missouri	<u>Percent</u>	<u>Cost</u>	<u>Weighted</u>
<u>Line No</u>		<u>9/30/07</u>	of Total	<u>Rates</u>	Cost of Capital
1	Long term debt	1,950,206	48.63%	5.64%	2.74%
2	Short term debt	-	0.00%		0.00%
3	Preferred Equity	-	0.00%		0.00%
4	Common Equity	2,060,041	51.37%	10.95%	<u>5.62%</u>
5					
6					
7	Total Capitalization	4,010,247	<u>100.0%</u>		<u>8.37%</u>
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					